CHILDREN IN THERAPY: EVALUATION OF UNIVERSITY-BASED PLAY THERAPY

CLINICAL SERVICES

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There is a dearth of research available on child services in the community mental health setting in the fields of psychology and counseling. The purpose of this study was to conduct an experimental evaluation of university-based play therapy clinical services with children aged 3 to 10 years old and to explore dimensions of the effectiveness of child-centered play therapy (CCPT) with children. This study examined real-life clinical services to the largest number of child participants in decades of mental health research, especially in the field of play therapy. Archival data from cases of 364 children served through a university-based play therapy clinic in the southwestern United States was examined.

The effectiveness of child-centered play therapy (CCPT) was measured by a decrease in a child’s behavioral problems perceived by a parent/guardian measured by scores of the Internalizing Problems, Externalizing Problems and Total Problems on the Child Behavioral Checklist (CBCL) and a reduction of parent-child relationship stress manifested in the Child Domain, Parent Domain and Total Stress Score on the Parenting Stress Index (PSI). Data from pretest and posttest was gathered for use in the analysis. Independent samples $t$-test, repeated measures analysis of variance, and ordinary least squares regression, including effect sizes, were utilized to detect the differences between groups and the treatment effects.

After receiving individual CCPT, results of this study demonstrated statistically significant differences on overall CBCL and PSI measures, with the exception on Parent
Domain. Additionally, findings highlighted the effectiveness of individual CCPT through demonstrated moderate to large effects over time (partial $\eta^2 = .097$ to .201). Individual CCPT also revealed very large effects ($\eta^2 = .26$ to .37) when specifically examined with participants who completed play therapy treatment. Further, statistically significant predictions were found on CBCL and PSI measures, with the exception on Total Problems. Termination and family relationship concern variables were found as strong contributors on predicting greater improvement. Based on the statistical, practical, and clinical significances, the primary contribution of this study is the fully exploration of child characteristics and effectiveness of play therapy for children who seek mental health services.
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CHAPTER 1
INTRODUCTION

Child and adolescent mental health services have evolved in remarkable ways worldwide in the past few decades (Remschmidt & Belfer, 2005). According to the U.S. Department of Health and Human Services (1999), 1 out of 5 children and adolescents shows the signs and symptoms of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 1994, 4th ed.). In addition, at least 1 in 10, or about 6 million children and adolescents in the United States, experiences a serious emotional disturbance or behavioral difficulties. However, an estimated two thirds of all young people with mental health problems are not getting the help they need (SAMHSA’s National Mental Health Information Center, 2003) or fewer than 1 in 5 of these children receive the mental health services they need (U.S. Surgeon General’s Report, 2000). Children and adolescents who suffer serious emotional disturbance or behavioral difficulties may severely disrupt daily functioning at home or school or in their community. In terms of the burden of suffering experienced by children and adolescents and their families with mental health needs, the Surgeon General’s report (2000) referred to it as “a health crisis in this country” (p. 1).

Mental health is a critical component of children’s and adolescents’ learning and general health. It is a national priority to foster social and emotional health in children and adolescents as a part of healthy development. Children and adolescents who suffer from mental problems have a much greater risk of dropping out of school and having lower functioning skills in life (U.S. Public Health Service, 2000). Taking care of a child with a mental health concern affects a parent’s financial well-being more than any other
health care issue. Parents of children with mental health disorders have a tendency to quit work, to cut work hours, and to spend more time arranging for their child’s care (Busch & Barry, 2007). Lack of treatment for children with mental health problems has been shown to interfere not only with children’s current well-being, but also with educational attainment, future work performance, and future psychosocial and economic well-being (Fergusson & Horwood, 1998; Zimmerman, 2005). In addition, untreated mental health problems can lead to suicide, which is the sixth leading cause of death for 5- to 14-year-olds (SAMHSA’s National Mental Health Information Center, 2003). The New Freedom Commission on Mental Health (2003) reported that children’s untreated mental health disorders may increase the risk of their coming into contact with the juvenile justice system. Studies show that 66% of boys and 75% of girls in juvenile detention have at least one mental disorder. The New Freedom Commission further proposed the need for empirical-based mental health intervention for children. Therefore, how to promote the mental health of children and adolescents and provide effective treatment become major public health goals (U.S. Public Health Service, 2000).

Kataoka, Zhang, and Wells (2002) reported that the rate of mental health services use by children aged 3-17 varied from 6.0% to 7.5%. The authors noted that 2%-3% of children aged 3-5 and 6%-9% of children and adolescents aged 6-17 used mental health services. However, once the parent/guardian and child are willing to enter into treatment, maintaining children and families in treatment is a significant challenge (Kazdin & Weisz, 2003). Premature termination of treatment is often considered as a significant obstacle to delivering effective mental health services (Kazdin & Weisz, 2003; Wierzbici & Rekarik, 1993). Wierzbici and Rekarik (1993) conducted a meta-analysis of
16 child psychotherapy dropout studies. Results indicated that the mean dropout rate was 46.81% of those entering treatment. Campbell, Baker, and Bratton (2000) conducted a study assessing child, family, and therapist variables to investigate the number of children who dropped out of play therapy and reported a 64% dropout rate.

Knowledge of child development is a critical component of selecting appropriate mental health interventions for children. Researchers have developed models of child development that emphasize the importance of play in children’s cognitive, affective, social, and emotional development (Erikson, 1964; Piaget, 1962; Vygotsky, 1967). Furthermore, play has been recognized by the United Nations High Commission for Human Rights as a right of every child. The commission advocates that engaging in play appropriate to the child’s age is a key to enable every child to fully develop his/her personality, talents, and mental and physical ability to his/her fullest potential (United Nations Human Rights, 2004). The Association for Childhood Education International (ACEI) not only recognized the need for children to play across age, but also affirmed the significant role of play in children’s development (Isenberg & Quisenberry, 2002).

Developmentalists including Erikson (1964), Piaget (1962), and Vygotsky (1967) identified the importance of play and development, recognizing the lack of language development in young children. Early psychoanalysts were also aware of the limitations of utilizing words to analyze children. In order to provide developmentally appropriate treatment for children, Landreth (2002) proposed that traditional talk therapies requiring an ability to use language as the primary form of expression were recognized as not being appropriate for young children.
Landreth (2002) stated that the essential role of play in children’s lives has long been recognized. For nearly 100 years, play therapy has provided children an alternative therapeutic treatment to talk therapy. Hermine Hug-Hellmuth (1921), Melanie Klein (1955), and Anna Freud (1946) incorporated play into the therapeutic process with children. Building on Axline’s effort and work, Moustakas (1953), Guerney (1983) and Landreth (2002) have contributed significantly to the mental health practice of what is now commonly referred to as child-centered play therapy (CCPT; Landreth, 2002). The fundamental principle of child-centered play therapy lies in a therapist’s belief in children’s inherent tendency, which is internally motivated, to self-direct toward adjustment, mental health, autonomy, and self-actualization (Landreth, 2002).

Play therapy has continued to develop as a therapeutic intervention with children. Empirical research and studies have shown the effectiveness of play therapy with a variety of childhood behavioral and emotional concerns. Bratton, Ray, Rhine, and Jones (2005) conducted a meta-analysis of 93 treatment control comparison play therapy studies from 1953-2000. Results revealed that play therapy is an effective therapeutic intervention with children across age and gender, various settings, and with a variety of emotional and behavioral difficulties. Results indicated that children receiving play therapy intervention were functioning 0.80 standard deviations better than children who did not receive treatment. The effect of parental involvement and the number of sessions were shown to strengthen the play therapy outcome. The authors further reported that optimal play treatment effects were obtained in 35-40 sessions.

Results of the meta-analysis conducted by Bratton et al. (2005) were stronger than previous meta-analytic child psychotherapy studies (Casey & Berman, 1985;
LeBlanc & Ritchie, 1999). Bratton et al. reported that play therapy is effective regardless of theoretical orientation. The humanistic /nondirective intervention indicated a large effect size (ES = 0.92), whereas the nonhumanistic/directive intervention indicated a moderate effect size (ES = 0.71). As the evidence provided by previous studies has shown, nondirective play therapy is an effective intervention and a developmentally appropriate treatment for children.

Statement of the Problem

In summary, the current mental health situation for children and adolescents has become a serious concern worldwide. Children and adolescents who suffer from mental problems have a much greater risk for dropping out of school and have lower functioning skills in life (U.S. Public Health Service, 2000). About 1 in 10 children and adolescents experience emotional disturbance or behavioral difficulties. However, an estimated two thirds of all young people with mental health problems are not getting the help they need. Untreated mental health problems can lead to suicide, which is the sixth leading cause of death for 5- to 14-year olds (SAMHSA’s National Mental Health Information Center, 2003).

In order to fill in the gaps of children’s mental health service needs, more demands have been put on community-based service providers. Research focusing on identifying evidence-based mental health treatment which can effectively treat children's and adolescent’s problems is needed and has became prominent in child and adolescents’ mental health professional services (Glied & Cuellar, 2003). The theme of the 3rd National Children’s Mental Health Awareness Day was defined as “Thriving in the Community” to support SAMHSA’s vision of “Life in the Community for everyone”
(SAMHSA’s Systems of Care, 2008). Therefore, providing professional services at a local level for children and youth with serious mental health needs now plays a significant role in the child and adolescent mental health field.

One university-based counseling program has sponsored an established mental health training clinic for the last 40 years that provides educational training to hundreds of students and delivers play therapy services to numerous community residents. However, no thorough analysis of the child client services has been performed. There is a dearth of research available on child services in the community mental health setting in the fields of psychology and counseling.

Purpose of the Study

The purposes of this study are to conduct an experimental evaluation of a university-based counseling clinic with children between the ages of 3 and 10 and to explore dimensions of effectiveness of child-centered play therapy treatment with children between the ages of 3 and 10. Archival data from cases of 364 children served through the university-based counseling program clinical services in the southwestern United States were examined to reveal the characteristics of children who received play therapy clinical services and the effectiveness of individual child-centered play therapy on children. In addition, archival data were investigated to discover the related characteristics of children who prematurely terminated from clinical play therapy services. This study examined real-life clinical services to the largest number of child participants in decades of mental health research. Through examination, this study explored the relationship between child variables and the effectiveness of play therapy, among other descriptive data that inform the counseling field regarding child therapy.
Literature Review

The literature review synthesizes related research regarding the following areas: (a) University-Based Clinical Services; (b) Characteristics of Mental Health Care and Services for Children; (c) The Role of Play in Development; (d) History and Development of Child-Centered Play Therapy; and (e) Rationale for Using Child-Centered Play Therapy for Children.

*University-Based Clinical Services*

A mental health clinic operated by the educational training institution provides the opportunity for students to conduct clinical practice with close supervision and advice. In such a university-based clinic, students have the chance to develop the skills of clinical practice. Students also have the opportunity to practice their therapy skills under supervision (Murrell, Steel, Gaston, & Proudfoot, 2002).

A mental health department clinic could facilitate the integration of research opportunities and clinical experiences to faculty members and students when it initiates empirical examinations (Serafica & Harway, 1980). Harway and Serafica (1977) conducted a survey of American Psychological Association (APA) approved graduate programs in clinical psychology and evaluation of psychology clinics. The authors indicated that evaluation research on university-based clinics is viewed as a type of programmatic research. Such research provides the identity and consistency of the clinic as an organization and increases its viability. The authors further indicated that (a) the organization’s structure and functional characteristics set limits to the application of particular evaluation strategies, (b) goal-attainment, decision-theoretic, and systems approaches can profitably be combined for the purpose of understanding the departmental clinic, and (c) self-evaluation by the participants of the program rather than evaluation by an external, independent team may be the most productive approach. (p. 656)
Serafica and Harway (1980) conducted a survey research of 63 psychology department clinics in the United States. Results revealed that only 54% of department clinics had conducted clinic evaluations in the past, and much of this was informal. Results also indicated that 60% of department clinics had undertaken an ongoing evaluation of their clinics. To reach the goals of training, service, and research in an integrated education program, the authors pointed out the importance of research on university-based clinic evaluation and yielded data regarding the effectiveness (p. 747).

Stevenson and Norcross (1985) conducted a national survey of American psychology training clinics regarding clinical training and client treatment. Results revealed that 68% of clinics conducted quantitative evaluation of client treatment and 61% of clinics conducted quantitative evaluation of clinical training. Of the 50 clinical sites (68%) which conducted client treatment evaluation periodically, 15 clinics (30%) reported using the Child Behavior Checklist or the Walker Behavior Problem Checklist on outcome measures for children. Furthermore, Stevenson and Norcross pointed out the obstacles in maintaining an ongoing evaluation of mental health training clinics. They included (a) the difficulties of evaluations generated by respondents, (b) the heterogeneity of clients, (c) the inadequate methods and measures, (d) training clinic faculty and staff’s resistance on conducting evaluation and its utilization in policy-making, and (e) the correlates of policy impact (p. 37).

Characteristics of Mental Health Care and Services for Children

Prevalence of Mental Health Service Use and Needs of Children

Interview Survey, the National Survey of American Families, and the Community Tracking Survey. Kataoka, et al. reported that the rate of mental health service use by children aged 3-17 varied from 6.0% to 7.5%. They also stated that 2%-3% of children aged 3-5 and 6%-9% of children and adolescents aged 6-17 used mental health services. Across three data sets, the results indicated that a higher percentage of children with public insurance used mental health services (9%-13%) than did the uninsured (4%-5%) and privately insured (5%-7%) children. Male children showed higher rates of mental health service use than did female children across all three data sets (Kataoka, et al. 2002).

According to Kataoka et al. (2002) research on the National Health Interview Survey, 8.5% of children 4-5 years old were estimated to experience mental health problems, but only 6.0% used any mental health services in the preceding year. Results on the National Health Interview Survey and the National Survey of American Families indicated that the estimated rate of 6-17-year-olds with mental health problems varied from 15.2%-20.8%. Among children aged 6-17, the estimated rate of children who had mental health problems and had not received services was 75% and 79% in the National Health Interview Survey and National Survey of American Families, respectively. They reported that only 21% of children who needed mental health help received services. These results suggest that about 7.5 million children in the United States have an unmet need for mental health services (Kataoka et al., 2002). In addition, Zimmerman (2005) used the National Longitudinal Survey of Youth and the Child/Young Adult Supplement (NLSY-C/YA) among a nationally representative sample of 7-14-year-old children to estimate the probability of seeking professional help for child mental
health concerns. The author reported that children’s mental health problems are undertreated, with fewer than half and as few as 11% of children who screened positive for some kind of disorder actually receiving treatment. As indicated from previous studies, understanding the factors influencing the mental health services received by children and adolescents is crucially important.

Factors

In most cases, children and adolescents do not seek treatment on their own or identify themselves, of their own free will, as having stress, symptoms, or problems (Kazdin & Weisz, 2003; Zimmerman, 2005). Children, like adults, function in their physical and social contexts. The context in which children function includes interpersonal relationships (e.g., with parents, siblings, and peers), systems (e.g., family and school), and settings (e.g., neighborhood and community) (Lerner, 1991). Contextual influences play an important role in attending to and participating in children’s mental health services (Kazdin & Weisz, 2003; Zimmerman, 2005).

Gender. Flisher et al. (1997) analyzed the data obtained from 1285 parent/youth pairs interviewed at four sites in the USA and Puerto Rico in the Methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA) to investigate the factors of unmet needs for mental health services by children and adolescents. Findings indicated that a child’s gender was not found to be correlated with seeking mental health services. Cunningham and Freiman (1996) analyzed a multivariate model of the 1987 National Medical Expenditure Survey to examine mental health-related services by children aged 6-17. There were about 41.6 million participants in the study. Findings indicated a statistical significance of a child’s gender on receiving mental health
services. Further, Bussing, Zima, Gary, and Garvan (2003) used a random sample of 1,615 elementary school students screened for attention deficit hyperactivity disorder (ADHD) risk to examine the barriers to detection, help-seeking, and service use for children with ADHS symptoms. Results indicated significant effects of a child’s gender on seeking mental health services, specifically for treatment of attention deficit hyperactivity disorder. As mentioned earlier concerning Zimmerman’s (2005) study, findings indicated that girls are less likely to receive treatment in general, and particularly much less for externalizing behavior disorders than boys.

**Age.** As noted above, findings in Cunningham and Freiman’s (1996) study indicated no statistical significance of a child’s age on seeking mental health services. Similar results were found in the Flisher et al. (1997) study. The authors reported that a child’s age was not found to be associated with seeking mental health services.

**Ethnicity.** Compared to African American youth, Caucasian children are more likely to self-help for the treatment of attention deficit hyperactivity disorder (Bussing et al., 2003). Similarly, Flisher et al. (1997) stated that being an African American child was significantly associated with unmet mental health service needs when compared with Caucasian youth. Cunningham and Freiman (1996) used the 1987 National Medical Expenditure Survey to investigate the use of mental health-related services by children aged 6-17. Findings indicated that mental health-related use was strongly associated with ethnicity. In other words, African American children and other minority groups were less likely than Caucasian children to have made a mental health outpatient visit.
Income (Socioeconomic). As noted earlier, results from Cunningham and Freiman's (1996) study indicated that the interaction of the mental health index with income was statistically significant related to the likelihood of use. The authors reported that children with severe mental health in high-income families were more than three times as likely to have a mental health-related visit than children with severe mental health in low-income families. In addition, income has been shown as a factor in seeking treatment for children’s mental health concerns independently in the past studies (Bussing et al., 2003; Cohen & Hesselbart, 1993; Farmer, Stangl, Burns, Costello, & Angold, 1999). Cohen and Hesselbart (1993) analyzed data obtained from the Children in the Community Study, a longitudinal study of a random sample, to investigate demographic factors related to the use of children’s mental health services. The authors selected 760 youth aged 12-20 in the study. Data were collected by interviewing the participants and their mothers. Findings revealed that children from families with income over $50,000 were more likely to receive mental health intervention than were middle-income children. There was no statistical significance on receiving treatment for low-income children and middle-income children. Moreover, Farmer et al. (1999) analyzed data obtained from the Great Smoky Mountains Study (GSMS), which was a longitudinal epidemiologic study of the southeastern U.S. A total of 1,007 participants aged 9, 11, and 13 were selected in the study. Each participant and a parent were interviewed at baseline and annually thereafter. The authors reported that living in poverty was associated with initial children’s mental health-related services use. Further, poverty had a stronger effect on consistence than it did on use.
Presenting problem behavior. Zahner and Daskalakis (1997) selected 2,519 children aged 6-11 from two cross-sectional Connecticut surveys in the 1980s to examine factors impacting child psychopathology mental health service use. Results indicated that the factor that was most strongly related to service seeking was the parent’s report that the child needed help on the Child Behavior Checklist. In other words, a child’s problem behavior (both internalizing and externalizing) is associated with mental health services use. Moreover, results from the Farmer et al. (1999) analysis on the Great Smoky Mountains Study (GSMS) revealed that children with more extensive symptomatology have a higher tendency to use services.

Family impact. As mentioned earlier, results of Zahner and Daskalakis’ (1997) research revealed that family stress was a factor in seeking treatment for children’s mental health services when the child’s illness and parental attitudinal measure were controlled in the analysis. Findings from Farmer et al. (1999) indicated that parents of children with a higher level of education were seen as being more likely to use services. Findings also revealed that a child who has a primary parent with a history of psychopathology was associated initially with service use. Similar to the Farmer et al. findings, parental psychopathology has been shown to be a factor in seeking treatment for child mental health concerns in other studies, including Farmer et al. and Flisher et al. (1997).

Demographic characteristics of the child and household. As described above, Zimmerman’s (2005) study found that middle (birth order) children aged 7-14-years-old are less likely to receive needed treatment than are the oldest, youngest, or only children. However, a child’s birth order indicated no effect on mental health service use
for children between 6 to 11 years old (Zahner & Daskalakis, 1997). Results of
Zimmerman’s study indicated that the number of adults in the household affects the
seeking of mental health services. The author reported that children in mother-only
families were more likely to have a mental health-related visit than children in other
family types. However, when controlling for the number of adults, the presence of the
father inhibits the likelihood for children receiving treatment. When receiving treatment
for depression, children who attend private schools are more likely to seek services than
are children who attend public schools. In addition, children of employed mothers are
more likely to receive treatment overall, particularly for depression.

**Attitudes and expectations toward mental health services.** When parents
perceive their children as needing mental health help, the probability of seeking mental
health services is higher (Zahner & Daskalakis, 1997). Richardson (2001) investigated
parents’ expectations about seeking mental health care using the Expectations of
Mental Health Care Survey and conducted interviews with 235 parents with children
aged 5 and 19. The findings suggest that parents’ attitudes and expectations might
affect their decisions to seek mental health services for their child. Results revealed that
29% of the parents reported that their family members would not agree if they sought
mental health service for their child. In addition, 43.9% of the parents reported that their
child would not want to see a mental health professional, and 14.2% of the parents
indicated having difficulty with their child over receiving mental health care. Moreover,
27.5% of the parents indicated that they would be worried if people found out their child
was receiving mental health care.
**Insurance.** Studies indicated that having government insurance (Zimmerman, 2005) or public health care coverage (Cunningham & Freiman, 1996) was associated with a higher probability of receiving treatment for behavior problems. Children not covered by health insurance (Flisher et al., 1997) or private parental insurance (Zimmerman, 2005) were less likely to seek mental health services.

**Premature dropout within child mental health services.** Once the parent/guardian and child are willing to enter into treatment, maintaining children and families in treatment is a significant challenge (Kazdin & Weisz, 2003). Premature termination of treatment is often considered to be a significant obstacle to delivering effective mental health services (Kazdin & Weisz, 2003; Wierzbici & Rekarik, 1993). In a historical review, Baekeland and Lundwall (1975) comprehensively reviewed 362 articles from literature on mental health treatment and reported 74 dropout studies of outpatient psychotherapy. However, only 5 out of the 74 dropout studies focused on child treatment. Forty percent, 2 out of the 5, of the studies found no significant differences between remainders and dropouts (Levitt, 1957; Williams & Pollack, 1964). The results of 2 other studies indicated that the parent of a dropout had a tendency for the following: disagree with the therapist’s assessment, cooperate poorly with therapist during the interview, want to see change in the child rather than in him/herself, submitted to institutional pressure in bringing his/her child for treatment, not be in treatment him/herself (Lake & Levinger, 1960), and had a tendency toward being unwilling to be in therapy himself (Ross & Lacey, 1961). Hunt’s (1962) study showed that children who dropped out from therapy were more likely to be from a lower socioeconomic class. It
would be hard to interpret whether or not these older studies would be generalizable to today’s mental health culture.

Wierzbici and Rekarik (1993) conducted a meta-analysis of 125 studies on psychotherapy dropout. Sixteen out of 125 studies specifically focused on the population of children. Thirty-two variables were contained in the analyses and were categorized into one of four divisions: study, demographic, psychological, and therapist. Results revealed that the mean dropout rate was 46.86% across all 125 studies. Similarly, the mean dropout rate was 46.81% of children who entered therapy from 16 studies. Findings from effect size indicated that age was greater in adults ($M = .34$) than in children ($M = -.04$). In other words, older children dropped out of treatment more often than did younger children. Further, effect size for marital status was positive for adults ($M = .06$) but negative for children ($M = -.068$). That is, child clients whose parents were married dropped out of therapy more often than did other children. However, the authors specifically indicated that meta-analysis of effect size for marital status on the child population was based on only one study and should not be considered as a stable estimate. Moreover, effect size for sex was less excessive for adults ($M = -.14$) than for children ($M = -.52$). In other words, female children dropped out of treatment more often than did male children.

Kazdin and Mazurick (1994) investigated child, parent, and family factors to examine early and late terminators in psychotherapy for the treatment of oppositional, aggressive, and antisocial behavior among children aged 4-13 from a university-based clinic setting. In the study, early and late dropouts were defined as fewer than 6 sessions and between 7 to 14 sessions, respectively. A total of 257 children, 201 male
and 56 female, participated in the study. The ethnic groups were Caucasian (60%), African American (35%), Hispanic (3.5%), or Asia (0.8%). The child diagnoses included conduct disorder (47.4%), oppositional defiant disorder (33.1%), major depressive disorder (12.4%), attention-deficit hyperactivity disorder (4.4%), other disorders (<1%), and no diagnosable Axis I disorder (2.4%). In addition, more than 70% of participants met criteria for more than one disorder.

Results indicated that the dropout rate was 47.5% of those who entered therapy. When comparing completers versus early terminators, findings revealed that younger mothers, single parents, greater stressed parents, severe child impairment in relation to conduct disorder and delinquency, child academic dysfunction, social behavior, and minority status were highly associated with early dropout. In contrast, when comparing completers versus late terminators, younger mothers, child antisocial history, child IQ, nonbiological head of household, and poor adaptive functioning at school were associated with late dropout. Furthermore, when comparing early versus late terminators, six variables yielded a statistical significance: minority status, family income, poor living accommodations, adverse family child-rearing practices, child contact with antisocial peers, and poor adaptive functioning at school. However, no effects were found with variables of treatment conditions, therapists, or age and gender of the child among completers, early, or late terminators (Kazdin & Mazurick, 1994).

Kazdin (1996) investigated risk factors on dropping out of treatment among conduct-problem children aged 3-13 at a university-based outpatient clinic in order to identify factors that predict dropping out. An approximate 50% of the participants were diagnosed with Conduct Disorder, and 70% of the participants met the criteria for more
than one disorder. Most participants in the study were boys (75%). The ethnic groups were Caucasian (60%), African American (30%), or Hispanic American (5%). In addition, 40% of the participants came from single-parent families. Many participants were from lower or lower middle socioeconomic classes. As estimated, 20-30% of participants’ families received funds provided by the state. Results revealed that the greater risk factors were socioeconomic disadvantages such as lower income, dependency on public assistance, living in a dangerous neighborhood, younger mothers, single-parent family, minority-group membership, high perceived parental stress, mother reported history of antisocial behavior when she was a child, duration and severity of antisocial behavior in the child’s past, greater number of conduct disorder symptoms present in the child, greater number of parent-rated symptoms, child below normal intelligence, child’s poor functioning at school, and child contacts with deviant peers.

Studies specifically focused on premature dropout rates in play therapy were rare. Campbell, Baker, and Bratton (2000) conducted a study assessing child, family, and therapist variables to investigate the dropout rate from play therapy. A total of 54 participants were in the study: 19 participants completed play therapy, and 35 participants did not complete treatment. The mean numbers of sessions attended were 13.11 and 10.09 for completion and non-completion groups, respectively. Campbell et al. reported a 64% (n = 35) dropout rate in the study. Findings revealed that children who prematurely terminated their treatment were more likely from a single-parent family. Results indicated that education and maternal age were higher in the completers groups. Children who failed to complete play therapy reported slightly higher levels of child behavior problems and parenting stress as well. The authors further indicated that
children with externalizing behavior problems were more likely to fail to complete
treatment. Moreover, Campbell et al. pointed out that there are fewer differences than
similarities between completion and non-completion groups of play therapy. The authors
also stated that factors associated with completion or premature termination of play
therapy are more related to demographic characteristics and family life situation than to
the type of intervention utilized.

*The Role of Play in Development*

In addition to recognizing the characteristics of mental health care and services
of children, knowledge of child development is essential in selecting appropriate mental
health treatment for children. The role of play is the key in understanding children’s
development. Play has been recognized by the United Nations High Commission for
Human Rights as a right of every child. The committee advocates that engaging in play
appropriate to the child’s age is a key to enabling every child to fully develop his/her
personality, talents, and mental and physical ability to his/her fullest potential (United
Nations Human Rights, 2004). The Association for Childhood Education International
(ACEI) not only recognized the need to play for children across age, but also affirmed
the significant role of play in children’s development (Isenberg & Quisenberry, 2002).
Moreover, the 1988 ACEI position proposed play as a “necessity for all children.” ACEI
suggested that play is a dynamic, active, and constructive behavior that enhances
learning and development for children across ages, cultures, and domains and is a
powerful and natural behavior contributing to children’s learning and development.
According to ACEI, play needs to be understood in the context of age-related play
behavior (Isenberg & Quisenberry, 1998).
Researchers have demonstrated play as the primary and natural medium of communication for children (Erikson, 2000; Landreth, 2002; Piaget, 1962; Vygotsky, 1967). Various descriptions of play in development are found in the literature. Piaget (1962) defined six criteria of play: (a) play is an end in itself; (b) play is spontaneous; (c) play is pleasurable; (d) play is relative lack of organization; (e) play is free from conflict; and (f) play is symbolic (pp. 147-150). Erikson (2000) considered play as “a function of the ego, an attempt to synchronize the bodily and social processes with the self” (p. 103). Landreth (2002) described play as “spontaneous, enjoyable, and nongoal-directed. . . . Play is intrinsically complete and assimilates the world to match the child’s concepts” (p. 10). Landreth further defined toys and play: “Toys are used like words by children, and play is their language” (p. 16).

Researchers have indicated the important relationship between play and child development. Ginsburg (2007) concluded that play is vital to child development and contributes to the cognitive, physical, social, and emotional well-being of children. The author also pointed out that play is an advantageous chance for parents to fully engage with their children. Gmitrova and Gmitrov (2004) found that child-directed pretend play was positively and significantly associated with their cognitive and affective behavior. The authors also stated that including child-directed pretend play in the preschool curriculum appears to be inevitable for children to develop academic readiness. Moreover, Fisher (1992) conducted a meta-analysis of 46 studies between 1974 and 1987 that focused on the impact of play on children’s development. Half of the studies (26) surveyed the areas related to cognitive development, namely, logical problem solving or creativity. The remaining studies (20) investigated the effect of play on
language mastery and the power of play in improving awareness of social roles and interpersonal skills. Effect size findings revealed that play results in moderately large to noteworthy improvement in children’s development. Results also indicated that play results in enhancing performances in both cognitive-linguistic and social affective domains. Play, especially sociodramatic play, was effective in promoting problem-solving abilities.

*Play in Cognitive Development*

Studies have shown a strong relationship between play and cognitive development (Bergen, 2002). According to Piaget, two basic processes in a child’s development are assimilation and accommodation (Piaget & Inhelder, 1969). Assimilation refers to the process by which a child filters new information through pre-existing patterns of understanding. In other words, all new established data are integrated into an existing schematism. Accommodation refers to the subsequent process by which a child alters existing patterns to fit into new information (pp. 5-6).

Piaget (1962) distinguished three developmental levels of play in his *Play, Dreams and Imitation in Childhood*: sensori-motor play, symbolic play, and games with rules. Sensori-motor play, the most primitive form of play, usually contains repeating previously learned behavior, apparently to have pleasure instead of to attain a particular goal. Sensori-motor play usually occurs in children between birth and 2 years of age (Garwood, 1982). Symbolic play parallels the preoperational developmental stage, and games with rules parallels the concrete operational developmental stage (Piaget, 1962; Piaget & Inhelder, 1969). Preoperational development and concrete operational development are described as follows.
Preoperational development. At this cognitive level, children demonstrate the ability to think forward from the beginning to the end of a process, but they are unable to reason in reverse. Children also acquire the ability to represent an object or event by a differentiated symbol (Piaget, 1962). Piaget and Inhelder (1969) provided five behavior patterns in order to distinguish preoperational development from sensori-motor development: (a) deferred imitation of previous events, (b) symbolic play or pretend play, (c) drawing or graphic image, (d) mental image or internalized imitation, and (e) verbal evocation (pp. 53-54).

Piaget and Inhelder (1969) described symbolic play as the apogee of children’s play, which occurs in children between the ages of 3 and 7. The authors further proposed that symbolic play is an egocentric and solitary activity which involves personal symbols. With the development of pretend play, the child can symbolically assimilate the external reality to the ego. Bergen (2002) expressed similar opinions, noting that pretend play demands a child’s ability to transform objects and actions symbolically. The author also addressed that pretend play involves role taking, script knowledge, and creativeness. In addition, Garwood (1982) indicated that symbolic play demands the child to either animate or inanimate as well as to bring past experience for present use. Therefore, symbolic play serves to achieve fantasy satisfactions through compensation and wish-fulfillment (Nicolopoulou, 1993).

Lev Vygotsky (1986) viewed social interaction as a necessity for children in the development of thought and language. Through interaction, children are able to gain higher levels of cognition than through isolation. Vygotsky (1967) also perceived play is a key aspect of a child’s affective and cognitive development. He considered play as a
social and symbolic activity as well. According to Vygotsky (1967), play is the source of development and creates the zone of proximal development in the child. Vygotsky (1978) stated that a child follows an adult’s guidance and gradually develops the ability to do things without assistance. He named the difference between what a child can do with help and what one can do with help in the zone of proximal development. In other words, the zone of proximal development characterizes those functions that children have not yet matured into but are in the process of maturation. The zone of proximal development offers adults a tool through which the internal course of development of children can be understood; it also allows adults to delineate a child’s dynamic developmental state (Vygotsky, 1978).

Moreover, Vygotsky (1967) believed that children explore their worlds through play:

In play a child is always above his average age, above his daily behavior; in play it is as though he were a head taller than himself. As in the focus of a magnifying glass, play contains all developmental tendencies in a condensed form; in play it is as though the child were trying to jump above the level of his normal behavior. (p. 16)

*Concrete operational development.* Children at the concrete operational stage begin to think logically. Concrete operations allow children to demonstrate the ability to perform multiple classification tasks, to order objects in a logical sequence, and to comprehend the principle of conservation (Piaget & Inhelder, 1969). According to Piaget (1962), when children between the age of 7 and 11 enter into the third developmental level of play, games with rules. At this stage, play shifts from an egocentric to a socialized form, and symbols are substituted by rules (Piaget, 1962).
Piaget focused on spontaneous games with rules, with spontaneous games representing the outcome of socialization. He also viewed games with rules as a subtle equilibrium between assimilation to the ego and social life (Nicolopoulou, 1993). Piaget and Inhelder (1969) described games with rules as “transmitted socially from child to child and thus increase in importance with the enlargement of the child’s social life” (p. 59).

Garwood (1982) stated that rule-based cooperative and competitive games are prominent during school years. Schaefer and O’Connor (1983) viewed games with rules as being different from the standard definition of play because games have implied tasks. Games are viewed as “an intermediate phase between the unregulated play of children and the often overregulated play of adults” (p. 4). The shift from symbolic play to socialized rule-based games illustrates how changes in play behavior reflect changes in children development.

**Play in Social and Emotional Development**

Researchers have emphasized the need and role of play in social and emotional development of children (Axline, 1947; Erikson, 2000; Garvey, 1974; Isenberg & Quisenberry, 2002; Piaget, 1962; Vygotsky; 1967). Johnson, Christie and Yawkey (1999) highlighted that play is complicately involved in the socialization process and is a main activity in childhood. Children need to acquire skills such as cooperation, sharing, helping, and problem solving through the development of socialization. Play also acts as an essential component for children to gain social skills and social knowledge. At the same time, the social environment influences children’s play. Further, Isenberg and Quisenberry (2002) indicated that play enables children to feel comfortable and
confident by allowing the expression of unacceptable feelings in acceptable ways as well as by providing the opportunity to work through conflicting feelings.

Studies by Vygotsky (1967) and Garvey (1974) have provided descriptions of the social abilities underlying group play. Vygotsky asserted that children of all ages follow social rules in their play. He pointed out that even when children play alone, their play behaviors still displayed a sociocultural component. In this context, play could always be viewed as a social activity. Garvey described all social play as rule governed. The author pointed out that rules for role play are established by the players during the course of the play. The operation of rules provides a chance for children to examine the nature of rules and rule making (Johnson et al., 1999). Garvey (1974) also addressed children’s abilities to construct and vary the theme of the play activity together. In order for children to successfully engage in sociodramatic play, they need to first agree on who will take which role and on the make-believe identities of objects and actions. In this joint planning activity, children cooperate, and the cooperation is rewarded by inclusion in a successful sociodramatic play.

Hatch (1987) indicated that peer interactions provide opportunities for children to develop a sense of social expectations and to learn to regulate their emotions. The author also revealed that children who interact positively with their peers are more likely to be popular and to have continuing access to situations where their social competence is rewarded by peers. In addition, Gagnon and Nagle’s (2004) study on the relationship between peer interactive play and social competence indicated that children who are competent players also demonstrate strong social-emotional skills. The authors also
observed that the development of social competence is an important task for children to successfully function at the school environment.

Sutton-Smith (1997) emphasized studies on play and relation to the self. He addressed the way role reversal in play can develop children’s sense of control and autonomy. He also believed that play is a medium that is self-enabling. Through play, children acquire opportunities to feel powerful and to master the circumstances.

According to Erik Erikson (1964), the adaptive resolution of each stage of psychosocial development contains the successful integration of biological and social functions. Through play, children create model situations that help them master the demands of reality. He also addressed that children reflected their psychological conflicts in the spatial configuration of their play with toys. Erikson (1977) acknowledged that “play creates a model situation in which aspects of the past are relived, the present represented and renewed, and the future anticipated” (p.44). Further, Erikson (2000) indicated that solitary play provides an opportunity for children to cope with emotional difficulties resulting form social interactions. He also noted that “the fact a child can be counted upon to bring into the solitary play arranged for him whatever aspect of his ego has been ruffled most, forms the fundamental condition for our diagnostic reliance on ‘play therapy’” (p. 112). According to Erikson, modern play therapy is based on the observation that a child expresses anxiety or insecurity in play and that a child could regain some play peace by receiving understanding from an adult. Grandmothers may have played that role in the past, whereas today the professional provider is the play therapist. Erikson stressed that “‘play it out’ is the most natural self-healing measure childhood affords” (p.113).
History and Development of Child-Centered Play Therapy

The essential role of play in children’s lives has long been recognized. Landreth (2002) stated that as early as the 18th century, philosopher Jean-Jacques Rousseau recommended the importance of observing play in order to learn about children and understand their world. In the early 20th century, Froebel (1903) demonstrated how to channel child’s play and integrate it into the development of intelligence and social skills. He also explained the vital inner connection between the child’s mind and the subject of study. In his 1903 *The Education of Man*, Froebel stated the following:

“In play the child ascertains what he can do, discovers his possibilities of will and thought by exerting his power spontaneously... In play he reveals his own original power. . . . Play is the highest development in childhood, for it alone is the free expression of what is in the child’s soul...Children’s play is not mere sport. It is full of meaning and import”. (p. 22)

The origins of play therapy can be traced back to the inception of psychoanalytic therapy itself. Sigmund Freud’s (1955) report in 1909 of a 5-year-old boy with a phobia, Little Hans, is now considered as the first case to use play as a therapeutic intervention in working with a child. Following Freud’s work with Little Hans, Hermine Hug-Hellmuth (1921) stated the importance of play in child analysis and the need to provide play materials for children to express their feelings in therapy. She also emphasized the difficulty of applying adult treatment methods to children. Analysts found that children were not able to express their anxieties verbally, not interested in exploring their past or discussing their developmental stages, and often refused free association (Landreth, 2002).

Melanie Klein (1955) and Anna Freud (1946) were two pioneers who applied analytic techniques to their work with children. In 1919, Klein reported starting her first
case of psychoanalysis with a 5-year-old boy. She conducted the sessions in the child’s house with his own toys. According to Klein, this analysis was the beginning of the psychoanalytic play technique, because the boy expressed fantasies, anxieties, and defenses mainly by play. Klein reported that she consistently interpreted its preconscious and unconscious meaning to the boy. The free association and symbolic language of play were foundational to Klein’s theory (p. 223). Furthermore, she indicated that “play analysis had shown that the capacity to use symbols enables the child to transfer not only interests but also fantasies, anxieties, and guilt to objects other than people” (Klein, 1982, p. 88).

According to Anna Freud (1946), children are not inclined to enter into free association. The use of play served as a substitute technique in the analysis of children (p. 33). Freud believed that children do not form a transference neurosis. She pointed out that working with children depended upon knowing the people in their environment and the extent of their reactions to the child (p. 42). Freud believed that the need for direct interpretation of play was minimal and that a child’s play may not be symbolic of everything (Landreth, 2002). When working with children, Freud also noted that a therapist must always first establish a definite emotional relationship with a child. This emotional relationship is utilized to gain access to the child’s inner world (p. 45).

David Levy (1939) used release therapy as a structured approach for children who have experienced specific stressful events. He described free play as a child’s own selection of play materials and actions, and control situation as a therapist’s selection of materials and depiction of the plot. In other words, a therapist supplied the main actors and the dramatic situation, whereas a child was encouraged to work with the plot
selected and keep the play going (p. 717). Levy indicated three forms of activities of release therapy in the playroom:

1. Simple release aggressive behavior by throwing objects or release of infantile pleasures in sucking a nursing bottle.
2. Release of feelings in standardized situations such as sibling rivalry.
3. Release of feelings by setting up a particular play situation similar to child's life experience. (pp. 719-720)

Gove Hambidge (1955) developed structured play therapy as an extension of Levy’s release play therapy. The structured play situation is utilized as a stimulus to facilitate the independent creative free play of the child in treatment. During sessions, the child is encouraged to show what happened. In order for the child not to precipitate overwhelming anxiety, the child should have developed enough security in the relationship with the therapist (p. 606). Hambidge indicated three major sequences for the conduct of treatment:

1. Structured play to free play.
2. Structured play to free play to repeat same structured play.
3. Structured play to free play to new structured play. (p. 609)

Virginia Axline (1947), a student of Carl Rogers, applied person-centered therapy principles to children in play therapy and developed nondirective play therapy. Carl Rogers (1951), the founder of person-centered therapy, believed that each individual is capable of self-actualization and naturally strives toward growth. The three core therapeutic conditions, empathy, genuineness, and unconditional positive regard, facilitate the innate tendency of human beings (Carmichael, 2006; Rogers, 1951).
Person-centered therapy forms the foundation for child-centered play therapy. Person-centered therapy requires a safe and therapeutic environment so as to provide feedback to the client by reflecting underlying feelings. These tenets of person-centered approach were incorporated by Axline into child therapy through play therapy (Carmichael, 2006).

Axline’s work, as well as her books *Play Therapy* (1947, 1969) and *Dibs: In Search of Self* (1964), enhanced knowledge in the play therapy field. Axline (1947) defined play therapy as “based on the fact that play is the child’s natural medium of self-expression” (p. 9). The focus of nondirective play therapy is self-awareness and self-direction by the child. When children’s feelings are expressed, identified, and accepted, they can accept and deal with them. Nondirective play therapy was later referred to as client-centered play therapy and then as child-centered play therapy (Landreth, 2002).

Axline (1947) proposed eight basic principles to guide therapists in developing a safe and therapeutic environment for children in play therapy. Those principles are as follows:

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

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

3. The therapist establishes a feeling of permissiveness so that child feels free to express feelings completely.

4. The therapist recognizes and reflects feelings (of a child) so that the child can gain insight into his/her behaviors.

5. The therapist respects the child’s ability to make choices and solve his/her problems.
6. The child leads and the therapist follows.

7. The therapist recognizes that therapy is a gradual process and is not to be hurried.

8. The therapist sets only the limits that are necessary to anchor the therapy to the real world and to enhance the child’s awareness for his/her responsibility in the relationship. (pp. 73-74)

Building on Axline’s effort and work, Clark Moustakas (1953), Louise Guerney (1983), and Garry Landreth (2002) have contributed significantly to the mental health practice of what is now commonly referred to as child-centered play therapy (CCPT, Landreth, 2002). The fundamental principle of child-centered play therapy lies in a therapist’s belief in children’s inherent tendency, which is internally motivated, to self-direct toward adjustment, mental health, autonomy, and self-actualization (Landreth, 2002). Landreth proposed that this inherent push toward discovery, development, and growth is readily observable in the developmental stages of infants and young children (pp. 65-66). West (1996) used description from Association of Play Therapy (UK) stating,

Play therapy is the dynamic process between child and play therapist in which the child explores, at his or her own pace and with his or her own agenda, those issues past and current, conscious, and unconscious, that are affecting the child’s life in the present. (p. xi) (Ray, 2008)

The philosophy of child-centered play therapy is based on deep beliefs about children and their innate capacity of growth (Landreth, 1993). Child-centered play therapy emphasizes the child’s phenomenal field, which is everything the child experiences internally and externally, and serves as the basis of internal reference for viewing life (Landreth, 2002). A child’s behavior needs to be understood by looking through a child’s eyes. This is important because how children feel about themselves
makes a significant difference in their behavior. Landreth (2002) stated that child-centered play therapy is a philosophical stance that serves as an orientation to life beyond the playroom. Landreth agrees with Guerney (2001) that the purpose of the playroom is to provide an environment where the child expresses feelings and experiences (Carmichael, 2006). Play sessions are conducted in a specially equipped playroom with a variety of selected toys. According to Landreth, the recommendations of toys include the following three categories: real-life toys, acting-out aggressive-release toys, and toys for creative expression and emotional release (pp. 141-142). Therefore, child-centered play therapy allows the child to lead and to take the current playroom experience to where the child needs to be (pp. 62-63).

In child-centered play therapy, the relationship a child experiences with a play therapist is an essential component of the change process. Based on the nature of interaction between the play therapy and the child in Axline’s (1947) eight basic principles approach, the child, not the problem, is the main focus in play session (Guerney, 2001). Diagnosis is not necessary due to the non-prescriptive approach (Landreth, 1993). The child-centered play therapist offers safety and opportunity for children to explore the playroom and themselves in relation to the play therapist (Axline, 1947, 1969; Landreth, 2002). Child-centered play therapy respects the child’s language of play and provides an environment where the child can truly communicate with the play therapist through their natural language, play. The goal of the therapist is to create an environment that promotes the child’s inner directional, constructive, creative, and self-healing power (Landreth & Sweeney, 1997). Landreth and Bratton (2006) stated that the focus on the child’s innate tendency to move toward maturity and growth and a
deep belief in the child’s ability to self-direct himself or herself are the essential principles that set child-centered play therapy apart from other models of play therapy.

Landreth (2002) pointed out the importance of the therapeutic relationship by asserting that change is possible only when a child feels free not to change. This freedom is established through the therapist’s communication of unconditional acceptance of the child. A child-centered play therapist’s responsibility in the relationship to communicate with a child in the entire play session can be summarized in the following four healing messages: I am here, I hear you, I understand, and I care (pp. 205-206).

*Rationale for Using Child-Centered Play Therapy for Children*

In order to provide more professional and developmentally appropriate services for children and youth, all interventions for mental health in children and adolescents should follow four principles: specificity, age and developmentally appropriate approach, variability and practicability, and evaluation and assessment of effectiveness (Remschmidt & Belfer, 2005).

Numerous studies have investigated the efficacy of play therapy. Bratton and Ray (2000) compiled a comprehensive literature review of 82 experimental research studies on play therapy conducted from 1942-2000. The results indicated the efficacy of play therapy with a variety of emotional and behavioral concerns, including aggression, social maladjustment, school behavior, anxiety, self-concept, emotional maladjustment, and so forth. The authors also pointed out that, historically, play therapy research developed from intelligence and school achievement in the 1940s to the 1960s, to social adjustment and self-concept issues in the 1970s and 1980s. In the 1990s, play therapy
studies emphasized societal ills such as domestic violence, divorce, drug abuse, and sexual abuse as well as diagnoses such as attention deficit hyperactivity disorder, depression, and conduct disorder.

Bratton, Ray, Rhine, and Jones (2005) used a meta-analysis of 93 treatment control comparison play therapy studies conducted from 1953-2000. Results indicated that children receiving play therapy intervention were functioning 0.80 standard deviations better than children who did not receive treatment. Similar meta-analysis findings investigated the effectiveness of treatment using play techniques revealed the average standardized effect sizes were 0.66 for 42 play therapy studies (LeBlanc & Ritchie, 1999), and 0.65 for 20 play therapy studies (Casey & Berman, 1985). In addition, Bratton et al. reported that play therapy seemed equally effective across age, gender, presenting issues, setting, and theoretical orientation of the play therapists. Effect of parental involvement and the number of sessions have been shown to be related to the play therapy outcome. The authors reported that optimal play treatment effects were obtained in 35-40 sessions. In other studies, similar findings were reported, showing that maximum play therapy effects were obtained in 30-35 sessions (LeBlanc & Ritchie, 1999, 2001).

Results from Bratton et al. (2005) were stronger than previous meta-analytic child psychotherapy studies. In addition, Bratton et al. reported that play therapy is effective regardless of theoretical orientation. The humanistic /nondirective intervention indicated a large effect size (ES = 0.92), whereas the nonhumanistic/directive intervention indicated a moderate effect size (ES = 0.71). As the evidence provided by previous
studies suggests, nondirective play therapy is an effective intervention and a developmentally appropriate treatment for children.

Specifically in a clinic setting, several individual studies revealed the effectiveness of child-centered play therapy on children. Brandt (1999) used a quasi-experimental design to investigate the effectiveness of child-centered play therapy with young children exhibiting emotional and behavioral problems. A total of 29 children aged 4-6 participated in this study: 15 children in an experimental group from a clinic setting and 14 children in a control group from an elementary school. Participants in the experimental group received play therapy once per week for 7 to 10 weeks. Results indicated that children receiving individual play therapy exhibited at least moderate improvement in adjustment difficulties. Results also provided evidence that play therapy is an effective intervention with young children experiencing emotional and behavioral difficulties, particularly for children who experience internalizing behavior problems.

Zion (1999) examined the impact of individual child-centered play therapy on sexually-abused children’s mood, self-concept, and social competence. A total of 26 sexually-abused participants aged 3-9 were in the study. Each child received weekly individual child-centered play therapy for 12 weeks. In addition, all participants and parents completed an outcome battery including the Joseph Preschool and Primary Self-Concept Screening Test, the Behavior Assessment System for Children-Parent form, and the Abuse Behavior Checklist. All instruments were administered before and after play therapy as well as 2 months following treatment. Although findings revealed no statistical significance on pre- to post-play therapy group improvement, 8 children showed reliable clinical improvement.
Dougherty (2006) examined the impact of child-centered play therapy on children in Piaget’s preoperational and concrete operations developmental stages. A total of 24 children aged 3-8 participated in the study in a university-based clinic setting. Each preoperational and operational development treatment group included 12 children who received 19-23 sessions of child-centered play therapy. Results indicated a statistically significant difference in the impact of child-centered play therapy on children of different developmental stages.

Brown (2007) used a single case design to examine the relationship between individual child-centered play therapy on children with developmental delay. Three children aged 3-6 at a university-based clinic participated in the study. These children met the criteria of performance of at least 6 months below chronological age on the Gesell Developmental Observation. All of the participants received weekly individual child-centered play therapy for 8 weeks. Results revealed improvement of all 3 participants on the Gesell Developmental Observation after receiving child-centered play therapy treatment.

Summary of Literature

As indicated previously, the need to provide a developmentally appropriate and effective psychological intervention for children with emotional and behavioral difficulties is great. Piaget’s, Vygotsky’s, and Erikson’s theories have provided a theoretical foundation regarding the essential role of play in children’s cognitive, affective, social, and emotional development. Landreth (2002) asserted that play provides a developmentally appropriate form of expression for children. In addition, Bratton et al. (2005) addressed the effectiveness of play therapy for children and reported that play
therapy seemed equally effective across age, gender, presenting issues, setting, and theoretical orientation of the play therapists. The effects of parental involvement and the number of sessions have been shown to be related to the play therapy outcome.

In order to fill in the gaps of children’s mental health service needs, community-based treatment has became prominent in child mental health professional services (Glied & Cuellar, 2003). Since a university-based counseling program clinical service in the southwestern United States was established, the clinic has provided educational training to hundreds of students and delivered play therapy services to numerous community residents. However, no thorough analysis of the child client services has been performed.

The study proposed herein involves a thorough evaluation of the play therapy clinical services for children aged between 3 and 10. The primary contribution of this study is to investigate the effectiveness of child-centered play therapy on children as well as the characteristics of children who seek and receive university-based play therapy clinical services.
CHAPTER 2

METHODS AND PROCEDURES

The purpose of this study was to conduct an experimental evaluation of a university-based counseling clinic with children between the ages of 3 and 10 and to explore the dimensions of effectiveness of child-centered play therapy treatment with children between the ages of 3 and 10. Archival data from cases of over 350 children served through the university-based counseling program clinical services in the southwestern United States were examined to reveal the characteristics of children who sought and received play therapy clinical services and the effectiveness of individual child-centered play therapy on children. In addition, archival data were investigated to discover the related characteristics of children who prematurely terminated from clinical play therapy services. This study examined real-life clinical services to the largest number of child participants in decades of mental health research. This chapter includes the research questions, assumptions, definition of terms, instrumentation, selection of participants, data collection, and treatment of this study.

Research Questions

This study analyzed child data files from university-based counseling program clinical services in the southwestern United States for the purpose of conducting an experimental evaluation of a university-based counseling clinic and exploring the effectiveness of child-centered play therapy treatment with children. This study was designed to answer the following questions:

1. What were the characteristics (i.e., age, gender, ethnicity, receiving special education, presenting concerns, current household living status, household
income, parent education level, parent marital status, and length in play therapy) of children whose parents sought university-based play therapy clinical services?

2. What were the clinical versus nonclinical ranges of children whose parents sought university-based play therapy clinical services?

3. What effect did individual child-centered play therapy have on children who received university-based play therapy clinical services based on examining archival data?

4. What variables were significantly correlated to change for children receiving child-centered play therapy?

5. What were the characteristics (i.e., age, gender, ethnicity, receiving special education, presenting concerns, current household living status, household income, parent education level, parent marital status, and length in play therapy) related to premature termination of play therapy?

Definitions of Terms

Child-centered play therapy: For the purposes of this study, Landreth’s (2002) definition was used:

Play therapy is defined as a dynamic interpersonal relationship between a child and a therapist trained in play therapy procedures who provides selected play materials and facilitates the development of a safe relationship for the child. To fully express and explore self (feelings, thoughts, experiences, and behaviors) through play, the child's natural medium of communication, for optimal growth and development. (p. 16)

Parent consultation: Parent consultations refer to play therapists communicate with caregivers throughout the play therapy process to enhance treatment effect
(Landreth, 2002). For the purpose of this study, Gates, Paone, Packman, and Margolis’ (2006) description was utilized:

Through the use of attending skills and reflective listening, the therapist can use the consultations to empathize with the caregivers, give updates on the child’s progress in play therapy, inquire about the child’s behaviors, modify treatment goals, provide education, encourage advocacy, and facilitate appropriate closure of the therapeutic relationship with the child and the caregivers. (p. 96)

**Parent-child relationship stress:** Parent-child relationship stress was defined by the Total score and two domains of the Parenting Stress Index (PSI): the Parent Domain and the Child Domain. The Parent Domain measures stress related to a parent’s functioning. The Child Domain assesses the child’s characteristics that contribute to stress in the parent-child system. Abidin (1995) defined High scores on the PSI as scores at or above the 85th percentile.

**Internalizing behaviors:** Internalizing behaviors refer to behaviors that are symptomatic of an attempt to cope with internal conflicts as an inward expression of experience, such as being withdrawn or depressed. For the purpose of this study, the Internalizing Behavior subscale of the Child Behavior Checklist (CBCL) operationally defined internal behaviors.

**Externalizing behaviors:** Externalizing behaviors refer to behaviors that express inner conflict or internal problems outwardly. For the purpose of this study, the Externalizing Behaviors subscale of the Child Behavior Checklist (CBCL) operationally defined externalizing behaviors.

**Instruments**

Two instruments were utilized in the collection of archival data for this study to ensure accuracy and consistency in the interpretation of results by assessing the same
These instruments were the Parenting Stress Index (PSI, Abidin, 1995) and the Child Behavior Checklist (CBCL, Achenbach & Rescorla, 2000, 2001). The Child/Adolescent Background Information Form (CABIF) was also used to provide demographic/background information.

The Parenting Stress Index

The Parenting Stress Index (PSI), originally developed by Abidin in 1983, is currently in its third edition (Abidin, 1995). The PSI is a self-report instrument designed to identify “parent-child systems that were under stress and at risk for the development of dysfunctional parenting behaviors or behavior problems in the child involved” (Abidin, 1995, p.6). The PSI includes an eight-page item booklet and a hand-scorable answer sheet that consists of 120 Likert scale items. The PSI is a standardized instrument and could be used with parents of children ranging from 1 month to 12 years. The PSI includes Child Domain, Parent Domain, Life Stress, Total Stress, and Defensive Responding. Clinical scores are determined at or above the 85th percentile.

The Child Domain includes 47 items and yields six subscales. The Child Domain reflects a parent’s perceptions of a child’s characteristics and behaviors that might affect the parent-child relationship. According to Abidin (1995), “High scores on the Child Domain may be associated with children who display qualities that make it difficult for parents to fulfill their parenting role” (p. 8). High scores on the Child Domain indicate that intervention may need to focus on the behaviors of the child rather than the other domains that affect the parent-child relationship. Internal consistency for the overall Child Domain is .90 and ranges from .70 - .83 for the Child Domain subscales. Test-retest reliability coefficients are .63 with a 1- to 3- month interval (Abidin, 1995), .77 with
a 3-month interval (Zakreski, 1983), and .55 with a 1-year interval (Hamilton, 1980). These significant ($p < .001$) and relatively high reliability coefficients on the Child Domain provide support for the stability of the scores across the time intervals. Abidin (1995) defined the six subscales of the Child Domain as (pp. 8-9):

**Distractibility/ Hyperactivity.** High scores on this subscale appear to be associated with (a) children who display behaviors associated with ADHD; (b) parent lacks the energy to keep up with a normal child; (c) older parents with a formerly stable life pattern are having difficulty adjusting to the child; or (d) unreasonable parental expectations for mature, adult-like behavior.

**Adaptability.** High scores on this subscale are associated with the child’s inability to adjust to changes in his or her social environment.

**Reinforces Parent.** High scores on this subscale indicate that the parent does not experience his or her child as a source of positive reinforcement.

**Demandingness.** High scores on this subscale indicates the parent experiences the child as placing many demands upon him or her such as crying, physically hanging on the parent, frequently requesting help, or having a high frequency of minor problem behaviors.

**Mood.** High scores on this subscale are associated with children whose affective functioning shows evidence of dysfunction. These children may frequently cry and display few signs of happiness.

**Acceptability.** High scores are produced in this area when the child possesses physical, intellectual, and emotional characteristics that do not match the expectations the parent had for the child.
The Parent Domain includes 54 items and yields seven subscales. The Parent Domain reflects a parent’s perceptions of their functioning as parents. Abidin (1995) stated that "high scores on the Parent Domain suggest that the sources of stress and potential dysfunction of the parent-child relationship system may be related to dimensions of the parent’s functioning" (p. 9). High scores on the Parent Domain indicate that intervention may need focus on the parent. Internal consistency for the overall Parent Domain is .93 and ranges from .70 - .84 for the Parent Domain subscales. Test-retest reliability coefficients are .91 with a 1- to 3- month interval (Abidin, 1995), .69 with a 3-month interval (Zakreski, 1983), and .70 with a 1-year interval (Hamilton, 1980). These significant ($p < .001$) and relatively high reliability coefficients on the Parent Domain provide support for the stability of the scores across the time intervals. Abidin (1995) defined the seven subscales of the Parent Domain as follows (pp. 10-12):

**Competence.** High scores on this subscale may be produced by a number of factors (e.g., young parents of an only child, parents who are lacking practical child development knowledge, and parents who do not find the role of parent as reinforcing as expected). High scores are also associated with a lack of acceptance and criticism from the child’s other parent.

**Isolation.** Parents who score high in this area are under considerable stress. Parents are often socially isolated from their peers, relatives, and emotional support systems. In many instances, the relationships with spouses are distant and lacking in support for their efforts as parents.

**Attachment.** The presence of high scores on this subscale suggests two possible sources of dysfunction: (a) the parent does not feel a sense of emotional closeness to
the child and/or (b) the parent’s real or perceived inability to observe and understand the child’s feelings and/or needs accurately.

**Health.** High scores are suggestive of deterioration in parental health that may be the result of either parenting stress or an additional independent stress in the parent-child system.

**Role Restriction.** High scores on this subscale suggest that the parent experiences the parental role as restricting his or her freedom and frustrates attempts to maintain their own identity.

**Depression.** High scores are suggestive of the presence of significant depression in the parent.

**Spouse.** Parents who earn high scores on this subscale are those who are lacking the emotional and active support of the other parent in the area of child management.

The Child and Parent Domain are combined to represent an overall Total Stress Score. The Total Stress Score reflects the underlying assumption of this instrument that “sources of stress are additive” (Abidin, 1995, p. 1). Internal consistency for the Total Stress is .95. Test-retest reliability coefficients are .96 with, a 1- to 3- month interval (Abidin, 1995), .88 with a 3-month interval (Zakreski, 1983), and .65 with a 1-year interval (Hamilton, 1980).

The Life Stress includes 19 items and measures the amount of stress that a parent is currently experiencing outside of the parent-child relationship. High Life Stress scores are indicative of parents who find themselves in stressful situations frequently beyond their control (e.g., death of a relative or unemployment). Abidin (1995) stated
that the total stress that a parent experiences may be intensified by the Life Stress scores. He recommended that parents who earn the Total Stress raw score in the 250 range and a Life Stress raw score at 17 or above should be referred for professional assistance (p. 12).

Investigating the Defensive Responding score is required prior to interpreting the results of the PSI. A Defensive Responding score of 24 or less indicates that a parent who fills out the PSI is likely to respond in a defensive manner, resulting in scores that do not correctly reflect the stress level of the parent. Abidin (1995) pointed out that sometimes “very low Defensive Responding scores will be found in situations where it is obvious that the parent is very competent and that the parent-child relationship exists within a supportive social situation that is economically advantaged” (p. 6).

The PSI manual includes 16 pages of abstracts of research studies supporting the validity for PSI scores in the areas of developmental issues, behavioral problems, disabilities and illnesses, at-risk studies, cross-cultural studies, parent characteristics, family transitions, marital relations, and correlational studies with other measures (Abidin, 1995, pp. 36-51). Overall, the internal consistency and test-retest reliability on the PSI provide support for the stability of the scores across the time intervals. Henson (2001) stated that these reliability estimates are substantial. In this study, the PSI was utilized to measure the level of parent-child relationship stress during pretesting and following CCPT intervention in order to measure the change in relationship stress.

*The Child Behavior Checklist*

The Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2000; Achenbach & Rescorla, 2001) is an instrument that measures parents’ reports of children’s
competencies and behavioral/emotional problems based on children's activities, social relationships, and school performance. The CBCL was originally developed by Achenbach and Edelbrock in 1983. The most current version of the CBCL includes two age-specific versions: CBCL for children ages 1½ -5 (Achenbach & Rescorla, 2000) and CBCL for children ages 6-18 (Achenbach & Rescorla, 2001). Achenbach and Rescorla (2000, 2001) ensured the comparability of the two different age versions by summarizing that T scores of Internalizing, Externalizing, and Total Problems scales between the instruments could be used in terms of differentiation.

**CBCL/6-18.** In the CBCL/6-18, the first section includes 20 competency items providing information regarding parent/guardian’s view of their child’s activities, social relations, and school performance. The second section consists of 118 items that describe specific behavioral and emotional problems, and two open-ended questions for reporting additional problems. Parents rate their child on how true each item is now or within the past 6 months using the following scale: 0 = not true (as far as you know); 1 = somewhat or sometimes true; 2 = very true or often true (Achenbach & Rescorla, 2001).

The scoring profile for the CBCL/6-18 includes (a) Competence Scales; (b) Syndrome Scales; (c) Internalizing, Externalizing, Total Problems Scales; and (d) DSM-Oriented Scales. The competence scales were established in order to assess the favorable characteristics that distinguish children who display adaptive functioning from those deemed to have maladaptive functioning. In order to reflect different aspects of competence, the 20 items that measure competence are grouped into four scales designated as Activities, Social, School, and Total Competence. The Total Competence score is calculated by summing up the raw scores of the Activities, Social, and School
scales. In the competence scale, T scores between 31 and 35 are considered in the borderline range and T scores at or below 30 are considered in the clinical range (Achenbach & Rescorla, 2001).

The Syndrome Scale identifies the syndromes of co-occurring problems, which provide information to mental health professionals to evaluate children's patterns of problems. Achenbach and Rescorla (2001) defined the eight subscales of the Syndrome Scale as Anxious/Depressed, Withdrawn/Depressed, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Aggressive Behavior, and Rule-Breaking Behavior. T scores between 65 and 69 are considered in the borderline clinical range, and T scores at or above 70 are considered in the clinical range.

Achenbach and Rescorla (2001) reported clinical behaviors related to three domains of Internalizing, Externalizing, and Total Behavior Problems. Internalizing Problems represents problems within the self, such as anxiety, depression, somatic complaints, and withdrawal from social interactions. Externalizing Problems reflect child behavior that conflicts with other people and with the parent's expectations for their children's behavior. The Anxious/Depressed, Withdrawn/Depressed, and Somatic Complaints scales are grouped under Internalizing Problems, whereas the Aggressive Behavior and Rule-Breaking Behavior scales are grouped under Externalizing Problems. Achenbach and Rescorla further reported that distinguishing between children whose reported problems stem mainly from internalizing or externalizing groupings may be clinically useful for selecting approaches to interventions as well as testing hypotheses about etiology, comorbidity, responsiveness to particular treatments, reasons for relations among syndromes, and long-term outcomes. In addition, the authors provided
general guidelines to classify children as having primarily internalizing or externalizing problems only if (a) their Total Problem T score is at or more than 60, and (b) the difference between their Internalizing and Externalizing T scores is at least 10 points on one of the school-age forms or at least 5 points on two of the three forms (p. 97). On the Internalizing and Externalizing scales, T scores of 60 through 63 are considered in the borderline clinical range, and scores of 64 or above are considered in the clinical range.

The DSM-oriented scales were constructed to view children’s problems from the perspective of a formal diagnostic system. Achenbach and Rescorla (2001) formed the DSM-oriented scales into the following six scales: Affective Problems (consistent with Dysthymia and Major Depressive Disorder); Anxiety Problems (consistent with Generalized Anxiety Disorder, Separation Anxiety Disorder, and Specific Phobia); Somatic Problems (consistent with Somatization Disorder and Somatoform Disorder); Attention-Deficit/Hyperactivity Problems (consistent with Inattentive and Hyperactive-Impulsive types of ADHD); Oppositional-Defiant Problems; and Conduct Problems. In the DSM-oriented scale, T scores of 65 through 69 are considered in the borderline clinical range, and T scores at or above 70 are defined in the clinical range (Achenbach & Rescorla, 2001).

Reliability of the CBCL/6-18 was calculated using the intraclass correlation coefficient (ICC) from one-way analyses of variance. The overall ICC yielded 1.00 for the 20 competence scales and .95 for the 118 specific behavior problem items (both p < .001) on the test-retest reliability. Cronbach’s alpha was computed to estimate the internal consistency of scales. Achenbach and Rescorla (2001) reported Cronbach’s
alpha coefficient of .63 - .79 for Competence Scales, 78 - .94 for Syndrome Scales, .90 for Internalizing Problems Scale, .94 for Externalizing Problems Scale, .97 for Total Problems Scale, and .72 - .91 for DSM-Oriented Scales, indicating high reliability for this instrument.

Achenbach and Rescorla (2001) reported that the content validity as well as the criterion-related validity of the CBCL/6-18 have discriminated significantly (p<.01) between demographically matched referred and nonreferred children. The authors also reported that the construct validity of the scales has been supported by evidence for significant relationships with analogous scales of other instruments and with DSM criteria, by cross-cultural replications of ASEBA syndromes, by biochemical and genetic findings, and by predictions of long-term outcomes. As a conclusion, strong validity evidence on the CBCL indicates the accuracy with which the scales are supposed to assess.

Due to the archival nature of this study, both the Achenbach (1991) and the revised Achenbach and Rescorla (2001) versions were utilized in data collection. Achenbach and Rescorla reported Pearson r correlations of .96 - .99 for Competence Scales, .87 - .99 for Syndrome Scales, .98 for Internalizing Problems Scale, .99 for Externalizing Problems Scale, 1.00 for Total Problems Scale, and .78 - .96 for DSM-Oriented Scales between the two CBCL versions. The author also concluded that most children would obtain approximately the same percentiles and T scores on most scales on the two versions.

CBCL/1½-5. Achenbach and Rescorla (2000) reported that the Child Behavior Checklist 1½-5 (CBCL/1½-5) is a revision of the Child Behavior Checklist/2-3 (CBCL/2-
3). Parents rate their child on 99 problem items on how true each item is now or within the past 2 months using the following scale: 0 = *not true* (as far as you know); 1 = *somewhat or sometimes true*; 2 = *very true or often true* (Achenbach & Rescorla, 2000).

The scoring profile of the CBCL/1½-5 includes (a) Syndrome Scale, (b) Internalizing, Externalizing, and Total Problem Scale, and (c) DSM-oriented Scale. Achenbach and Rescorla (2000) defined the seven subscales of the Syndrome Scale as Emotionally Reactive, Anxious/Depressed, Somatic Complaints, Withdrawn, Sleep Problems, Attention Problems, and Aggressive Behavior. T scores between 65 and 69 are defined as borderline clinical range, and T scores at or above 70 are considered to be in the clinical range (Achenbach & Rescorla, 2000).

Achenbach and Rescorla (2000) reported that the CBCL/1½-5 utilizes the same definition of the Internalizing and Externalizing problems as the CBCL/6-18. The Emotionally Reactive, Anxious/Depressed, Somatic Complaints, and Withdrawn scales are grouped under Internalizing Problems, whereas the Attention Problems and Aggressive Behavior are grouped under Externalizing Problems. The same holds true for the CBCL/6-18; T scores of 60 through 63 are considered in the borderline clinical range, and scores of 64 or above are considered in the clinical range (Achenbach & Rescorla, 2000).

Achenbach and Rescorla (2000) formed the DSM-oriented scales on the CBCL/1½-5 into the following five scales: Affective Problems (consistent with Dysthymia and Major Depressive Disorder); Anxiety Problems (consistent with Generalized Anxiety Disorder, Separation Anxiety Disorder, and Specific Phobia); Pervasive Developmental Problems (consistent with Asperger’s and Autistic Disorders);
Attention Deficit/Hyperactivity Problems (consistent with Inattentive and Hyperactive-Impulsive types of ADHD); and Oppositional Defiant Problems. T scores of 65 through 69 are considered in the borderline clinical range, and the clinical range is at or above T scores of 70 (Achenbach & Rescorla, 2000).

The test-retest reliability of the CBCL/1½-5 was computed by test-retest Pearson correlations (rs). Achenbach and Rescorla (2000) reported test-retest r of .68 - .92 for Syndrome Scales, .90 for Internalizing Problems Scale, .87 for Externalizing Problems Scale, .90 for Total Problems Scale, and .74 - .87 for DSM- Oriented Scales, indicating high reliability for this instrument.

Achenbach and Rescorla (2000) reported that the content validity as well as the criterion-related validity of problems scales on the CBCL/1½-5 was supported by findings that almost all items discriminated between referred and nonreferred children. The authors also reported that the construct validity of the problem scales has been supported by concurrent and predictive associations with other measures and by evidence for substantial genetic components.

Due to the archival nature of this study, both the Achenbach (1992) and the revised Achenbach and Rescorla (2000) versions were utilized. Achenbach and Rescorla reported Pearson r correlations of .79 – 1.00 for Syndrome Scales, .86 for Internalizing Problems Scale, .93 for Externalizing Problems Scale, 1.00 for Total Problems Scale, and .79 - .89 for DSM- Oriented Scales between the two CBCL versions. The author also stated that children would obtain similar rank orders on the old and revised scales.
Child/Adolescent Background Information Form

The Child/Adolescent Background Information Form (CABIF) was designed for use at a clinic in the southwestern United States. A parent or guardian for each minor who receives counseling services at the two university-based clinics completed this form during the initial intake. Information obtained from the CABIF included questions related to the child and parent’s biological and environmental histories and current physical and psychological stressors. A complete CABIF is included in the Appendix at the end of this study.

Purposes and Characteristics of the Clinic

The university-based counseling clinic from which data for this study were collected is an instructional and training facility within the College of Education in the southwestern United States. The CACREP-accredited Counselor Education Program utilizes the clinic as a training site for master’s and doctoral students in their respective programs. The clinic provides counseling services for children, adolescents, adults, and families with learning, emotional, and adjustment difficulty. The clinic’s purpose is twofold: to provide professional, competent training for graduate students and to provide professional and responsible services to community clients who request them.

The graduate students at the university-based clinic provide short-term and long-term counseling services for residents of local and surrounding counties on a sliding scale fee. The services are designed to be responsive to the needs of the clinic clients. All professional counseling activity at the clinic conforms to the American Counseling Association (ACA) Code of Ethics and Standard of Practice (2005). Clients at the clinic are usually referred by schools, physicians, and various agencies of local and
surrounding counties. The mission of the clinic is comprised of the following: (a) to train counselors and speech and hearing specialists how to work in an interdisciplinary approach in the assessment and remediation of learning, emotional, and adjustment problems; (b) to provide appraisal and counseling services to families located in the local and surrounding areas; and (c) to conduct ongoing research programs in the areas of counseling and education.

The university-based clinic serves about 150-200 active clients weekly. Clients range in ages from typically 3 years old to those in their elderly years. Over 60% of clients are below the age of 12 years old. Children who are brought for university-based play therapy clinical services by their parents or guardians are typically referred due to concerns related to the child’s behavioral and/or emotional problems.

The clinic operates 12 counseling rooms: 3 adult rooms, 2 small play rooms, 2 large play rooms, 2 activity rooms, 1 sandtray room, and 2 assessment rooms. The use of the counseling rooms at the clinic follows a developmental perspective. The adult rooms are dedicated to adult therapy and provide little stimulus so that adults can verbally project needed emotions in a non-inhibitive environment. The play rooms are designed specifically for the needs of young children and provide materials for children to express themselves nonverbally. Further, the play rooms are fairly indestructible, which allows for the impulsivity and extra space needed by young children. Activity rooms are designed for the child who has reached at least a concrete level of developmental operations. Activity rooms are also for children/preadolescents who have conquered issues of frequent impulsivity. In addition, the sandtray room provides a variety of miniatures and is designed for the client to fully explore and express self. The
sandtray room is used for adolescents, adults, and families. The assessment rooms are designed to conduct the assessment and remediation of learning, emotional, and adjustment problems of children and adolescents. The assessment rooms can also be used for parent consultations, if needed.

Counseling interns are graduate students in the counseling program who are in the internship phase of their curriculum. Master’s level interns are in the final 6 hours of a 48-hour graduate program. Doctoral interns are in their 2nd year of doctoral study and have completed a master’s or equivalent in an accredited counseling program. The majority of counselor interns are at the doctoral level.

Participant Selection From the Clinic Focused on Children

Over time, the university-based play therapy clinic has used multiple instruments to collect data on client progress, including the Behavior Assessment System for Children (BASC, Reynolds & Kamphaus, 1992), the CBCL, and the PSI, to evaluate the behaviors and self-perceptions of the children. In the early 2000s, the clinic decided to administer only two instruments to assess children, one for behavior, the Child Behavior Checklist (CBCL), and the other for parent relationship stress, the Parenting Stress Index (PSI). The purpose of deciding upon one behavior instrument was to offer consistency in data collection. In order to use consistent instruments for assessment of treatment, data from community child clients between the ages of 3 and 10 who received university-based play therapy clinical services between June 2000 and October 2008 were analyzed for this study. Instruments were administered at termination of counseling or at the end of each semester, depending on which occurred
first. In 2006, the clinic instituted the policy of administering instruments every 10 sessions to avoid a lack of instruments resulting from premature termination.

Data from child clients meeting the following criteria were included in the study:

1. Children between the age of 3 and 10 at the initiation of treatment.

2. The parents or guardians must have completed at least a pretest of the Parenting Stress Index (PSI) and a Child Behavior Check List (CBCL) prior to the child receiving treatment.

3. Parents or guardians must have received a copy of the Notice of Privacy Practice and Informed Consent informing them of the use of mental health information in research and training and signed a Confirmation of Receipt of Privacy Notice and Informed Consent during their initial counseling intake appointment. These two forms were included in the Appendix at the end of this study.

Data Collection

Data were obtained from archived clinical files of child clients (3-10 years old) who requested child services at a university-based clinic to conduct an experimental evaluation on the clinic and to examine play therapy treatment outcome. The parents or guardians of children who were brought for university-based play therapy clinical services were usually referred due to concerns related to the child’s behavioral and emotional problems. Upon arriving at the clinic, parents or guardians completed a Child and Adolescent Background Information Form (CABIF), a Parenting Stress Index (PSI), and a Child Behavior Check List (CBCL) prior to a clinical intake with a master’s or doctoral counseling intern. After the intake was conducted, the assigned play therapist provided the parents/guardians with the assigned play therapist’s professional
disclosure and an informed consent regarding treatment procedures. The assigned play therapist also informed the parents/guardians regarding data collection procedures which the clinic would request upon the completion of instruments on a semester basis in order to measure treatment progress. Parents/guardians were informed that those instruments might be used for research purposes.

The participants’ demographic information, including age, gender, ethnicity, special education service, household annual income, current household living status, and presenting concerns, were available from the CABIF. Presenting concerns are categorized into six groups: problems related to abuse, academic/school problems, mood-related concerns, family relationship concerns, rule-breaking/behavior problems, and other behavioral concerns. Each category contains three to nine related concerns. In addition to the six categorized groups, specific behaviors are listed when parents or guardians view those behaviors as unusual and they did not belong to the above six groups. A complete CABIF is included in the Appendix at the end of this study. The six presenting concerns categories are shown in Table 1.

Pre- and post- PSI and CBCL completed by parents or guardians were collected. Scores from the CBCL included Internalizing, Externalizing, and Total Problems Scales as well as scores from the PSI contained Child Domain, Parent Domain, and Total Stress. Because the data in this study were collected from archival child files, there was no control for time of final-test administration of the instruments.
<table>
<thead>
<tr>
<th>Problems Related to Abuse</th>
<th>Academic/School Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current or past physical abuse</td>
<td>Learning difficulties</td>
</tr>
<tr>
<td>Current or past sexual abuse</td>
<td>Problems with peers</td>
</tr>
<tr>
<td>Current or past emotional abuse</td>
<td>Problems with teachers</td>
</tr>
<tr>
<td>Current or past neglect</td>
<td>Speech Problem</td>
</tr>
<tr>
<td>History of abandonment</td>
<td></td>
</tr>
<tr>
<td>Suspected sexual abuse</td>
<td></td>
</tr>
<tr>
<td>History of family domestic violence</td>
<td></td>
</tr>
<tr>
<td><strong>Mood-related Concerns</strong></td>
<td><strong>Family Relationship Concerns</strong></td>
</tr>
<tr>
<td>Disturbing memories</td>
<td>Difficulty adjusting to family changes</td>
</tr>
<tr>
<td>Difficulty going to sleep/staying asleep</td>
<td>Discipline concerns</td>
</tr>
<tr>
<td>Nightmares/night terrors</td>
<td>Parent-child relationship problems</td>
</tr>
<tr>
<td>Suicidal ideation</td>
<td>Sibling concerns</td>
</tr>
<tr>
<td>Sadness</td>
<td>Divorce/Separation</td>
</tr>
<tr>
<td>Depression</td>
<td>Religious/Spiritual Concerns</td>
</tr>
<tr>
<td>Feelings of guilt and shame</td>
<td></td>
</tr>
<tr>
<td>Excessive worrying</td>
<td></td>
</tr>
<tr>
<td>Anger/Irritable</td>
<td></td>
</tr>
<tr>
<td><strong>Rule-Breaking/Behavior Problems</strong></td>
<td><strong>Other Behavioral Concerns</strong></td>
</tr>
<tr>
<td>Aggression toward others</td>
<td>Sexual identity concerns</td>
</tr>
<tr>
<td>Drug/alcohol use</td>
<td>Inappropriate sexual behavior</td>
</tr>
<tr>
<td>Truancy</td>
<td>Overeating/refusal to eat</td>
</tr>
<tr>
<td>Gang involvement</td>
<td>Bedwetting or soiling</td>
</tr>
<tr>
<td>Running away</td>
<td>Hyperactive/Inattentive</td>
</tr>
<tr>
<td>Stealing</td>
<td></td>
</tr>
<tr>
<td>Intentionally hurting animals</td>
<td></td>
</tr>
<tr>
<td>Fire-setting</td>
<td></td>
</tr>
</tbody>
</table>
To maintain the confidentiality of child clients, the researcher assigned an ID code to each participant, with only the researcher having the master list with participants’ full names. Each ID code has seven digits. The first digit indicates the clinic. The second and third digits refer to client’s first letter of last name (01--A; 02--B; 03--C;...26--Z). The last four digits refer to how many clients are under each last name category. Data from the archival files were transferred to the coding sheets and then entered into the SPSS database. All confidential client files and coding sheets remained locked in the clinic during the period of this study. In accordance with state law (Subtitle A, Texas Department of Mental Health and Mental Retardation, Sec. 577.012.b), child files remain locked at the university-based clinic until the file destruction date, the later of the client’s 20th birthday or the 10th anniversary of the date on which the client last received services (Texas Department of State Health Services, 2007).

Treatment

Participants between the ages of 3 and 10 years who received child-centered play therapy (CCPT) conducted by masters or doctoral counseling interns at a university-based counseling training clinic were included in this research.

Play Therapists

All play therapists had completed at least two courses in play therapy, including an introduction to play therapy course and a clinical practicum. Each counselor intern was required to participate in individual or triadic supervision for 1 hour per week with a counseling faculty member certified in play therapy or an advanced doctoral student. Supervisors ensured that play therapists followed the basic principles of CCPT. Play therapists conducted counseling at the clinic as part of their master’s or doctoral
internship. In addition, all play therapists had completed at least 39-42 graduate hours in counseling and were usually assigned to the clinic for a 2-semester period.

The play therapist facilitated CCPT with the participant once a week until both the play therapist and the parent/guardian decided to terminate treatment, based on either the completion of treatment goals or if the parent/guardian prematurely terminated treatment. Each play session was 40 to 45 minutes in length. The trained child-centered play therapists respond to the children with specific verbal and nonverbal skills during play therapy (Landreth, 2000; Ray 2004, 2008). The child-centered play therapists’ reflective nonverbal responses include (a) leaning forward toward the child at all times and maintaining open posture; (b) appearing interested in the child throughout the play session; (c) appearing comfortable and remaining relaxed; (d) matching the level of affect displayed by child through tone and rate of speech; and (e) conveying a sense of genuineness by matching words and affect. The child-centered play therapists’ reflective verbal responses include (a) utilizing short, interactive and personalized responses; (b) tracking child’s play behavior; (c) reflecting content; (d) reflecting feeling; (e) facilitating decision making and returning responsibility; (f) using esteem-building responses and encouragement; and (g) facilitating relationship (Carmichael, 1993; Landreth, 2002; Ray, 2004).

Playroom and Materials

All play sessions were conducted in specially-equipped playroom with a variety of selected toys at the university-based play therapy clinic. Toys and materials were selected to facilitate the seven essentials in play therapy: establishing a positive relationship with the child, expressing a board range of feelings, exploring of real-life
experiences, testing of limits, developing a positive self-image, developing self-understanding, and developing self-control (Landreth, 2002). According to Landreth (2002), the recommendations of toys in the playroom are as follows.

<table>
<thead>
<tr>
<th>Sand/sandbox</th>
<th>Play kitchen</th>
<th>Domestic animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scoops/shovel/bucket</td>
<td>Food/empty fruit cans</td>
<td>Zoo animals</td>
</tr>
<tr>
<td>Hand puppets</td>
<td>Pots/pans/dishes</td>
<td>Truck and car</td>
</tr>
<tr>
<td>Puppet theatre</td>
<td>Egg cartons</td>
<td>Airplane and boat</td>
</tr>
<tr>
<td>Dollhouse/bendable family</td>
<td>Craft table</td>
<td>School bus/riding cars</td>
</tr>
<tr>
<td>Baby dolls/clothes</td>
<td>Crayons, pencil, and paper</td>
<td>Rubber knife/sword</td>
</tr>
<tr>
<td>Pacifiers</td>
<td>Play dough or clay</td>
<td>Dart gun</td>
</tr>
<tr>
<td>Nursing bottles</td>
<td>Transparent tape and glue</td>
<td>Handcuffs</td>
</tr>
<tr>
<td>Pillow/blanket</td>
<td>Blunt scissors</td>
<td>Rope</td>
</tr>
<tr>
<td>Medical kit/bandaids</td>
<td>Paints and easel</td>
<td>Soldiers/army equipment</td>
</tr>
<tr>
<td>Dramatic play clothes</td>
<td>Chalkboard and chalk</td>
<td>Bop bag</td>
</tr>
<tr>
<td>Masks and hats</td>
<td>Telephone</td>
<td>Wood blocks</td>
</tr>
<tr>
<td>Purse and jewelry</td>
<td>Musical instruments</td>
<td>Log/hammer</td>
</tr>
<tr>
<td>Cash register/play money</td>
<td>Camera/binoculars</td>
<td>Broom/dust pan/mop</td>
</tr>
</tbody>
</table>

*Play Therapy Procedure*

In the clinic setting, the following procedures were followed. After the intake was done and informed consents were received, the assigned play therapist conducted an initial parent consultation to explore parent/guardian’s concerns about their child, to understand parent/guardian’s expectation of treatment, and to establish a coordinative
relationship with parent/guardian before treatment began. Each play session lasted 40 to 45 minutes in length. The play therapist facilitated CCPT with the child once a week until both the play therapist and the parent decided to terminate treatment based on either the completion of treatment goals or the parent prematurely terminated treatment. During treatment period, CBCL and PSI were administered every 10 play sessions to measure play therapy progress. The play therapist also met with the child's parent or guardian periodically. Issues concerning the child's emotions and behaviors at home and school were discussed during the parent consultations. Clinic guidelines recommended conducting one parent consultation for every three to five play therapy sessions, but this is not required. Final testing of the CBCL and PSI was administrated when either the therapy terminated, at the end of a university academic semester, or upon completion of 10 sessions.

The play therapist completed a client visit summary for each scheduled session, noting whether the client attended, canceled, or no-showed for an appointment. The play therapist also noted whether the session was a play therapy session or parent consultation and kept a separate session count for each type of session completed on the client visit summary. Furthermore, the play therapist completed a play therapy session summary for each session the client attended. Play therapy session summary forms served as treatment notes for the client. They included the objective nature of events during the session and the subjective understanding of the play therapist regarding session events and progress. Parent consultation forms were also completed in addition to play therapy session summaries, when applicable. Once play therapy was terminated, the play therapist was required to complete a client treatment summary.
Client treatment summaries included a diagnosis, summary of progress for the client over the treatment period, and recommendations for client care. Either counselor-client decision or client decision was marked on the client treatment summary to determine whether play therapy was prematurely terminated or not. Each completed file was given to the play therapist’s supervisor prior to closing. The play therapist, supervisor, and clinic director signed each file. Once the file was closed, the file was placed in a locked cabinet in the university-based play therapy clinic.

Data Analysis

The procedure of data analysis included organizing the data, coding the data, analyzing the data, searching for alternative explanation, and writing the report (Marshall & Rossman, 2006). Statistical Package for the Social Sciences for Windows (SPSS, 2006) was utilized for data entry and data analysis. After the data were collected, data were analyzed through different analyses for each research question.

For Question 1, regarding description of child characteristics for children seeking services, descriptive statistical data were computed, including the frequency, mean, and standard deviation of child’s age and length in play therapy as well as the frequency of child’s gender, ethnicity, receiving special education, presenting concerns, current household living status, and household income.

For Question 2, regarding clinical and nonclinical status of child clients, the pre-CBCL was used to distinguish behavioral clinical groups. According to Achenbach and Rescorla (2001), borderline clinical range is set at T scores of 60 through 63 (approximately the 84th through the 90th percentiles) and the clinical range at T >= 64 for Internalizing, Externalizing, and Total Problems scales on CBCL (p. 96). For the
purpose of examining the clinical versus nonclinical groups in this study, participants who scored at or above 60 of T score on Internalizing, Externalizing, or Total Problems on CBCL at pretest fell in the clinical range. In addition, the pre-PSI was utilized to distinguish clinical and nonclinical range. Based on Abidin (1995), clinical scores were decided at or above the 85th percentile. Hence, scores of 116 or higher on Child Domain, scores of 148 or higher on Parent Domain, scores of 258 or higher on Total Stress, and scores of 14 or higher on Life Stress at pretest were determined to be at clinical ranges.

For Question 3, regarding the effect of CCPT, repeated measures analysis of variance (ANOVA) was used to examine the effectiveness of individual CCPT of child behavior and parent-child relationship stress. In addition, clinical significance was computed to investigate whether participants return to normative levels after receiving play therapy intervention.

For Question 4, regarding variables related to change, multiple regression analyses were conducted. The independent variables included the child’s six presenting concerns, termination, session number of play therapy, and session number of parent consultation. The dependent variables were a difference score on CBCL and PSI. Difference scores were computed as posttest score minus pretest score on Internalizing, Externalizing, and Total Problem scales on the CBCL as well as the Child Domain, Parent Domain, and Total Stress Score on the PSI.

For Question 5, regarding characteristics related to premature termination, descriptive statistical data were computed, including the frequency, mean, and standard deviation of child’s age and length in play therapy as well as the frequency of child’s gender, ethnicity, receiving special education, presenting concerns, current household
living status, and household income. Independent samples $t$-tests and pair samples $t$-

-tests were used to investigate the play therapy treatment outcome on completion and

non-completion groups.
CHAPTER 3

RESULTS AND DISCUSSION

This chapter includes the results of the analysis of data to investigate an experimental evaluation of university-based play therapy clinical services and to examine the effectiveness of child-centered play therapy (CCPT) with children aged 3 to 10 years old in this setting. The detailed statistical results for each research question are presented in the results session. A discussion of the possible meaning/explanation of the results is also presented. In addition, the chapter includes implications, limitations of the findings, and recommendations for further research.

Results

The results of the study are presented in the order in which the research questions are listed. The alpha (α) .05 level of statistical significance was used as a criterion in the analyses. The researcher collected and organized data from the archival clinical files of child clients who received child-centered play therapy at a university-based clinic between June 2000 and October 2008. Over time, this clinic used multiple instruments to collect data on client progress, including the Behavior Assessment System for Children (BASC; Reynolds & Kamphaus, 1992), the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2000, 2001), and the Parenting Stress Index (PSI; Abidin, 1995), to evaluate the behaviors and parent perceptions of children. In the early 2000s, the clinic decided to administer only two instruments to assess children, one for behavior, the CBCL, and the other for parent-child relationship stress, the PSI. The purpose of deciding upon one behavior instrument was to offer consistency in data collection. Instruments were administered at termination of counseling or at the end of
each semester, depending on which occurred first. In 2006, the clinic instituted the policy of administering instruments every 10 sessions in order to avoid a lack of posttesting resulting from premature termination. When play therapy was terminated, the completed file was given to the play therapist’s supervisor for formal closure of file. Once the file was closed, the data from the CABIF, the CBCL, and the PSI were entered into the child database.

Between June 2000 and October 2008, there were 364 children aged between 3 and 10 at the initiation of treatment in the child database. Of the 364 participants, 254 participants (70%) received at least one play therapy session, and 110 participants (30%) participated only in an intake session. Of the 254 participants, 225 had completed pre-CBCL and 235 completed pre-PSI information, with missing data on 29 and 39, respectively. Further, of the 254 participants, 132 completed post-data on the CBCL, 126 completed post-data on the PSI and were filled out by the same rater. Participants who did not have completed information on the CBCL and/or the PSI were excluded for some research questions and are explained in the related analyses.

Of the 254 participants, 198 (78%) received only individual child-centered play therapy, 5 (2%) received only group play therapy, 45 (17.7%) received individual and group play therapy, and 6 (2.4%) received multiple types of treatments (i.e., individual play therapy, group play therapy, and/or filial therapy). Among the 198 participants who received individual CCPT, 180 completed the pre-CBCL and 185 completed the pre-PSI. Additionally, of the 198 participants who received individual CCPT, 82 completed post-data on the CBCL, and 92 completed post-data on the PSI and were filled out by the same rater.
Research Question 1

Research Question 1: What were the characteristics (i.e., age, gender, ethnicity, receiving special education, presenting concerns, current household living status, household income, parent education level, parent marital status, and length in play therapy) of children whose parents sought university-based play therapy clinical services?

For the purpose of answering Research Question 1, 364 participants were analyzed in this section. Sample size of participants who sought therapy services at the initiation of treatment of each year are shown in Figure 1.

![Figure 1](image_url)

*Figure 1. Sample size of participants who sought play therapy services at the initiation of treatment of each year.*

The low numbers of participants between 2000 and 2003 were influenced by the transition from BASC to CBCL instruments. In other words, children whose parents or guardians had completed BASC instruments were not included in the study. Additionally,
the low numbers of participants between 2007 and 2008 were influenced by continuance of play therapy services. Namely, children who received play therapy at the initiation of treatment of 2007 and 2008 were likely to still be receiving clinical services in this setting, and thereby not entered into the database yet.

Gender and Age

Of the 364 participants, 219 (60.2%) were male and 145 (39.8%). Ages ranged from 3 to 10, with a mean of 6 ($M = 6.26$; $SD = 2.128$) years old and a median of 6 years. Numbers of participants; age were as follows: 3-year-old ($n = 42; 11.6%$), 4-year-old ($n = 50; 13.7%$), 5-year-old ($n = 50; 13.7%$), 6-year-old ($n = 49; 13.5%$), 7-year-old ($n = 61; 16.8%$), 8-year-old ($n = 50; 13.7%$), 9-year-old ($n = 35; 9.6%$), and 10-year-old ($n = 27; 7.4%$). Figure 2 presents the sample size of participants in each age group.

![Figure 2. Sample size of participants in each age group.](image-url)
**Special Education**

Of the 364 participants, parents reported 78 (21.8%) participants received special education services and 279 (78.2%) did not receive the services, with missing data on 7. In other words, parent of approximately four fifths of the children in this university-based play therapy clinic did not report their children receiving special education services at school.

**Ethnicity**

Each participant’s parent/guardian reported child ethnicity as follows: African-American ($n = 15; 4.2\%$), Asian ($n = 9; 2.5\%$), Caucasian ($n = 267; 74.8\%$), Hispanic/Latin ($n = 26; 7.3\%$), Native American ($n = 5; 1.4\%$), Biracial ($n = 33; 9.2\%$), Other ($n = 2; 0.6\%$), with missing ethnicity data on 7. Sample size of participants’ ethnicity groups are shown in Figure 3.

![Figure 3](image)

*Figure 3.* Sample size of participants’ ethnicity group.
Household Annual Income

Household annual income was reported as less than $15,000 \((n = 90; 31.4\%)\), $15,000-20,000 \((n = 51; 17.8\%)\), $20,001-30,000 \((n = 55; 19.2\%)\), $30,001-40,000 \((n = 41; 14.3\%)\), and over $40,000 \((n = 50; 17.4\%)\), with missing data on 77. Figure 4 displays participants’ household annual income.

![Bar chart showing household annual income distribution.](image)

**Figure 4.** Sample size of participants’ household annual income.

Current Household Living Situation

Current household living situation was reported as 12 (3.5%) participants in an adoptive family, 9 (2.6%) in a father-only family, 1 (.3%) in a foster family, 135 (39.4%) in a mother-only family, 15 (4.4%) in a biological father and stepmother family, 26 (7.1%) in a biological mother and stepfather family, 97 (26.6%) in a biological parents family, 20 (5.5%) in a grandparents family, and 28 (7.7%) in a relative family, with missing data on 21. The top two current household living situations were from a mother-only family.
(39.4%), followed by a biological parents family (26.6%). These two categories represented almost 70% of participants. Sample size of participants’ current household living situation are presented in Figure 5.

![Current Household Living Situation](image.png)

**Figure 5.** Sample size of participants’ current household living situation.

**Number of Family Members**

Number of family members ranged from 2 to 10, with a mean of almost 4 ($M = 3.89$; $SD = 1.435$) persons and a median of 4 people. Numbers of family members were as follows: 2 people ($n = 54; 14.8%$), 3 people ($n = 83; 22.8%$), 4 people ($n = 97; 26.6%$), 5 people ($n = 64; 17.6%$), 6 people ($n = 15; 4.6%$), 7 people ($n = 8; 2.2%$), 8 people ($n = 3; .8%$), 9 people ($n = 4; 1.1%$), and 10 people ($n = 1; .3%$). Figure 6 presents the sample size of family members in each group.
Figure 6. Sample size of family members in each group.

**Presenting Concerns**

On the background information form, parents were able to circle items that were seen by the parent as the most significant issue of concern for the child. Presenting concerns are organized into six categories: problems related to abuse, academic/school problems, mood-related concerns, family relationship concerns, rule-breaking/behavior problems, and other behavioral concerns. Each category contains three to nine related concerns. When more than one related concern was marked under a specific category, the category was determined as a presenting concern. In addition to the six categorized groups, specific behaviors were listed when parents or guardians viewed those behaviors as unusual, and they did not belong to the above six groups. Parents or
guardians were able to choose more than one concern when needed. The six presenting concerns categories are shown in Table 1.

Of the 364 participants, presenting concerns were reported on 352 participants, with missing data on 12. Of the 352 participants who reported presenting concerns, 60 (17.0%) participants indicated having concerns within one category, 97 (27.5%) in two categories, 96 (27.3%) in three categories, and 99 (28.1%) in four and more categories. Sample sizes of presenting concerns in multiple categories are shown in Figure 7.

Of the six categories, parent reported significant concern as follows: 97 (27.6%) participants in Problems Related to Abuse; 268 (76.1%) in Mood-related Concerns; 64 (18.2%) in Rule-Breaking/Behavior Problems; 162 (46.0%) in Academic or School Problems; 260 (73.9%) in Family Relationship Concerns; and 125 (35.5%) in Other Behavioral Concerns. Figure 8 presents the sample size of identification with presenting concern in each category.

![Figure 7. Sample size of presenting concerns in multiple categories.](image-url)
In the Other Unusual Behavioral Concerns group, 34 (9.7%) participants provided their responses. Other unusual behaviors were specified as follows: very negative self-esteem (n = 3), hair pulling (n = 1), cutting hair and clothes (n = 2), illegal behaviors (n = 4), bizarre actions (n = 1), imaginary friend (n = 1), compulsive behaviors (n = 2), tics (n = 1), biting oneself (n = 2), disruptive behavior (n = 1), lying (n = 2), physical complaints (n = 3), spitting and name-calling (n = 1), writing inappropriate words at school (n = 1), exaggerating responses to situations (n = 1), stuffing/hoarding food (n = 1), using the bathroom everywhere but home (n = 1), pacing and walking in circles (n = 1), aggressive toward self (n = 1), not talking to people (n = 1), excessive crying at school (n = 1), and personal growth (n = 2).
**Intake Group versus Treatment Group**

Analysis was conducted to explore differences between children whose parents seek services but do not follow-through to receive services (intake group) and children whose parents follow through with receiving services (treatment group).

Results of the crosstabs on intake group and treatment group indicated no statistical significance on gender ($\chi^2(1) = .432, p = .511$), no statistical significance on ethnicity ($\chi^2(6) = 6.207, p = .40$), no statistical significance on special education ($\chi^2(1) = 3.180, p = .204$), no statistical significance on household income ($\chi^2(4) = 1.823, p = .768$), no statistical significance on mother’s education ($\chi^2(5) = 5.759, p = .33$), no statistical significance on father’s education ($\chi^2(5) = 1.124, p = .952$), and no statistical significance on current living household ($\chi^2(8) = 5.07, p = .75$). In addition, results of the independent samples $t$-test revealed no statistical significance on age, $t(362) = 1.762, p = .079$. Therefore, the participants’ demographic information between intake group and treatment group was not statistically significant different.

On the CBCL at pretest, results of the independent samples $t$-test revealed no statistical significance on Internalizing Problems, $t(309) = -.946, p = .345$; no statistical significance on Externalizing Problems, $t(309) = -1.317, p = .189$; and no statistical significance on Total Problems, $t(309) = -1.631, p = .104$. Additionally, on the PSI at pretest, results of the independent samples $t$-test indicated no statistical significance on Child Domain, $t(331) = -.035, p = .972$; no statistical significance on Parent Domain, $t(331) = -.071, p = .943$; no statistical significance on Total Stress, $t(331) = -.109, p = .931$; and no statistical significance on Life Stress, $t(331) = .545, p = .586$. Hence,
participants’ behavioral concerns and parent-child relationship stress were not statistically significant different between intake and treatment groups.

Research Question 2

Research Question 2: What were the clinical versus nonclinical ranges of children whose parents sought university-based play therapy clinical services?

In order to investigate the clinical range, the pre-CBCL and pre-PSI were utilized to distinguish clinical versus nonclinical ranges of children whose parents sought university-based play therapy clinical services. For the purpose of answering this Research Question, all 364 participants were analyzed in this section.

Independent Samples T Test

The t-test is utilized to determine whether the difference between means of two groups is because of the independent variable or simply due to chance. The null hypothesis indicates that the experimental manipulation has no effect; thus, the means of the two groups are equal. Data analyses are conducted to determine whether the independent variable manipulation resulted in significant difference in mean scores between the two groups on the dependent variable. Because the t-test is an inferential statistic, it allows the researchers to infer a causal relationship between the independent and dependent variables (Tabachnick & Fidell, 2007).

An independent samples t-test is usually conducted for a between-subjects design. Before interpreting the results, the researchers need to check on Levene’s test for equality of variances in order to determine whether the assumptions of the t-test are met. If the variances for the two groups are not equal (i.e., Sig. < .05), the assumption that the two groups’ variances are equal is violated. Therefore, a statistical adjustment
needed to be made by using equal variances not assumed in evaluating the t statistic.

Evaluation of the t statistic is based on an adjusted degree of freedom that takes into account the dissimilar variances in the two groups (Tabachnick & Fidell, 2007). When conducting an independent samples t-test in the following section, the value of Levene’s test for equality of variances is greater than .05 unless otherwise specified.

*Child Behavior Checklist (CBCL)*

Due to the archival nature of this study (period between June 2000 to October 2008), both the Achenbach (1991) and the revised Achenbach and Rescorla (2001) versions were utilized for participants aged between 6 and 10. Additionally, both the Achenbach (1992) and the revised Achenbach and Rescorla (2000) versions were used for children aged 1½ to 5.

Achenbach (1966) first identified “internalizing” and “externalizing” terms to classify psychiatric problems in children. Internalizing behaviors refer to behaviors that are symptomatic of an attempt to cope with internal conflicts as an inward expression of experience, such as being withdrawn or depressed. Externalizing behaviors refer to behaviors that express inner conflict or internal problems outwardly (Achenbach & Rescorla, 2001). When children are exhibiting both internalizing and externalizing behaviors at a clinical level, the term “combined problems” is used (Achenbach & Rescorla, 2001; Ray, 2008).

According to Achenbach and Rescorla (2001), borderline clinical range is set at T scores of 60 through 63 (approximately the 84th through the 90th percentiles) and the clinical range at T >= 64 for Internalizing, Externalizing, and Total Problems scales on the CBCL (p. 96). For the purpose of examining the clinical versus nonclinical groups in
Of the 364 participants, 311 participants filled out the pre-CBC instruments, with missing data on 53. Missing data were attributed to incomplete administration of the CBCL instrument. Of the 311 participants, participants who fell in the clinical range were as follows: 169 participants (54.3%) in the Internalizing, 163 (52.4%) in the Externalizing, and 174 (55.9%) in the Total Problems. In other words, more than half of the participants were in the clinical range on Internalizing, Externalizing, and Total Problems at the initiation time of treatment. Figure 9 presents the sample size in the clinical range for these three scales.

Figure 9. Sample size in the clinical and nonclinical range for Internalizing, Externalizing, and Total Problems on CBCL at pretest.

Table 2 presents the descriptive statistics of age on Internalizing, Externalizing, and Total Problems between clinical and nonclinical groups. Table 3 displays the
independent samples *t*-tests results on age between clinical and nonclinical groups.

Results are discussed as follows.

Table 2

*Descriptive Statistic Results of Age on Internalizing, Externalizing, and Total Problems Between Clinical and Nonclinical Groups*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Clinical group</th>
<th>Nonclinical group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inter</td>
<td>Exter</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Size</td>
<td>169</td>
<td>163</td>
</tr>
<tr>
<td>Mean</td>
<td>6.5</td>
<td>6.24</td>
</tr>
<tr>
<td>Median</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>SD</td>
<td>2.006</td>
<td>2.009</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Size</td>
<td>101</td>
<td>110</td>
</tr>
<tr>
<td>Mean</td>
<td>6.62</td>
<td>6.17</td>
</tr>
<tr>
<td>Median</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>SD</td>
<td>1.943</td>
<td>1.953</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Size</td>
<td>68</td>
<td>53</td>
</tr>
<tr>
<td>Mean</td>
<td>6.32</td>
<td>6.38</td>
</tr>
<tr>
<td>Median</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>SD</td>
<td>2.098</td>
<td>2.132</td>
</tr>
</tbody>
</table>

*Note.* Inter = Internalizing; Exter = Externalizing; Total = Total Problems.
Table 3

*Independent Samples t-test on Age Between Males and Females on CBCL*

<table>
<thead>
<tr>
<th>Scale</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>$\eta^2$</th>
<th>MD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internalizing problems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical group</td>
<td>.954</td>
<td>167</td>
<td>.342</td>
<td>0.005</td>
<td>.300</td>
</tr>
<tr>
<td>Nonclinical group</td>
<td>-2.124</td>
<td>140</td>
<td>.035*</td>
<td>0.031</td>
<td>-.778</td>
</tr>
<tr>
<td><strong>Externalizing problems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical group</td>
<td>-.608</td>
<td>161</td>
<td>.544</td>
<td>0.002</td>
<td>-.205</td>
</tr>
<tr>
<td>Nonclinical group</td>
<td>-.630</td>
<td>146</td>
<td>.529</td>
<td>0.003</td>
<td>-.230</td>
</tr>
<tr>
<td><strong>Total problems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical group</td>
<td>.214</td>
<td>172</td>
<td>.831</td>
<td>0.000</td>
<td>.068</td>
</tr>
<tr>
<td>Nonclinical group</td>
<td>-1.555</td>
<td>135</td>
<td>.122</td>
<td>0.018</td>
<td>-.579</td>
</tr>
</tbody>
</table>

*Note. MD = Mean difference (i.e., mean score of male subtracts mean score of female).*

* $p < .05.$

**Internalizing Problems**

Of the 311 participants, results demonstrated that 169 (54.3%) participants scored in the clinical range and 142 (45.7%) scored in the normal behavioral range. Of the 169 participants who scored in the clinical range, 101 (59.8%) were male and 68 (40.2%) female. Ages ranged from 3 to 10 years old, with a mean of 6.5 ($SD = 2.006$) and a median of 7. Internalizing Problems score ranged from 60 to 85, with a mean of 67.42 ($SD = 5.103$). Externalizing Problems score ranged from 40 to 86, with a mean of 64.53 ($SD = 9.836$). Total Problems score ranged from 35 to 89, with a mean of 66.84 ($SD = 7.49$).
Of the 142 participants who scored in the normal behavioral range, 85 (59.9%) were male and 57 (40.1%) female. Ages ranged from 3 to 10 years old, with a mean of 5.81 ($SD = 2.165$) and a median of 6. Internalizing Problems score ranged from 29 to 59, with a mean of 49.63 ($SD = 7.704$). Externalizing Problems score ranged from 28 to 78, with a mean of 53.8 ($SD = 11.088$). Total Problems score ranged from 29 to 73, with a mean of 52.96 ($SD = 8.877$).

Clinical group. Of the 169 participants who scored in the clinical range, 101 (59.8%) were male and 68 (40.2%) female. Of the 101 male participants, the mean age was 6.62 ($SD = 1.943$) years old, with a median of 7. Of the 68 female participants, the mean age was 6.32 ($SD = 2.098$) years old, with a median of 6. Results of the independent samples $t$-test on age between males and females in the Internalizing Problems clinical range revealed no statistically significant difference, $t(167) = .954$, $p = .342$ ($\eta^2 = .005$). According to Cohen (1988), the effect for age between males and females in the Internalizing Problems clinical group was very small.

Nonclinical group. Of the 142 participants who scored in the normal behavioral range, 85 (59.9%) were male and 57 (40.1%) female. Of the 85 male participants, the mean age was 5.49 ($SD = 2.068$) years old, with a median of 5. Of the 57 female participants, the mean age was 6.27 ($SD = 2.240$) years old, with a median of 6. Results of the independent samples $t$-test on age between males and females in the Internalizing Problems nonclinical range demonstrated a statistically significant difference, $t(140) = -2.124$, $p = .035$ ($\eta^2 = .031$). That is, the mean difference of age between male and female was .778, indicating that the average age of males ($M = 5.49$, $SD = 2.068$) was statistically younger than that of females ($M = 6.27$, $SD = 2.240$).
Based on Cohen’s (1988) guidelines, the effect for age between males and females in the Internalizing Problems normal behavioral group was small.

**Externalizing Problems**

Of the 311 participants, results revealed that 163 (52.4%) participants scored in the clinical range and 148 (47.6%) scored in the normal behavioral range. Of the 163 participants who scored in the clinical range, 110 (67.5%) were male and 53 (32.5%) female. Ages ranged from 3 to 10 years old, with a mean of 6.24 ($SD = 2.009$) and a median of 6. Of the 148 participants who scored in the nonclinical range, 76 (51.4%) were male and 72 (48.6%) female. Ages ranged from 3 to 10 years old, with a mean of 6.13 ($SD = 2.213$) and a median of 6.

**Clinical group.** Of the 163 participants who scored in the clinical range, 110 (67.5%) were male and 53 (32.5%) female. Of the 110 male participants, the mean age was 6.17 ($SD = 1.953$) years old, with a median of 6. Of the 53 female participants, the mean was 6.38 ($SD = 2.132$) years old, with a median of 6. Results of the independent samples $t$-test on age between males and females in the Externalizing Problems clinical range revealed no statistically significant difference, $t(161) = -.608, p = .544$ ($\eta^2 = .002$). According to Cohen (1988), the effect for age between males and females in the Externalizing Problems clinical group was very small.

**Nonclinical group.** Of the 148 participants who scored in the normal behavioral range, 76 (51.4%) were male and 72 (48.6%) female. Of the 76 male participants, the mean age was 6.01 ($SD = 2.248$) years old, with a median of 6. Of the 72 female participants, the mean age was 6.24 ($SD = 2.185$) years old, with a median of 6. Results of the independent samples $t$-test on age between males and females in the
Externalizing Problems nonclinical range revealed no statistically significant difference, \( t(146) = -.630, p = .529 (\eta^2 = .003) \). Based on Cohen’s (1988) guidelines, the effect for age between males and females in the Externalizing Problems nonclinical group was very small.

*Total Problems*

Of the 311 participants, findings indicated that 174 (55.9%) participants scored in the clinical group and 137 (44.1%) scored in the normal behavioral range. Of the 174 participants who scored in the clinical range, 109 (62.6%) were male and 65 (37.4%) female. Ages ranged from 3 to 10 years old, with a mean of 6.40 (SD = 2.031) and a median of 6. Of the 137 participants who scored in the nonclinical range, 77 (56.2%) were male and 60 (43.8%) female. Ages ranged from 3 to 10 years old, with a mean of 5.92 (SD = 2.175) and a median of 6.

*Clinical group.* Of the 174 participants who fell in the clinical range, 109 (62.6%) were male and 65 (37.4%) female. Of the 109 male participants, the mean age was 6.42 (SD = 1.95) years old, with a median of 7. Of the 65 female participants, the mean age was 6.35 (SD = 2.175) years old, with a median of 6. Results of the independent samples \( t \)-test on age between males and females in the Total Problems clinical range revealed no statistically significant difference, \( t(161) = -.608, p = .544 (\eta^2 = .002) \). According to Cohen (1988), the effect for age between males and females in the Total Problems clinical group was very small.

*Nonclinical group.* Of the 137 participants who fell in the normal behavioral range, 77 (56.2%) were male and 60 (43.8%) female. Of the 77 male participants, the mean age was 5.66 (SD = 2.174) years old, with a median of 5. Of the 60 female participants,
the mean age was 6.24 (SD = 2.15) years old, with a median of 6. Results of the independent samples t-test on age between males and females in the Total Problems nonclinical range revealed no statistically significant difference, $t(135) = -1.555$, $p = .122$ ($\eta^2 = .018$). Based on Cohen’s (1988) guidelines, the effect for age between males and females in the Total Problems nonclinical group was small.

**Gender and Age on CBCL Clinical versus Nonclinical Group**

**Gender.** Of the 186 male participants, 101 (54.3%), 110 (59.1%), and 109 (58.6%) scored in the clinic ranges on Internalizing, Externalizing, and Total Problems. Of the 125 female participants, 68 (54.4%), 53 (42.4%), and 65 (52.0%) scored in the clinic ranges on Internalizing, Externalizing, and Total Problems. To investigate whether there was a difference of gender on CBCL clinical versus nonclinical groups; $\chi^2$ (Chi squared) was conducted because gender is a categorical variable. Crosstabs analyses were utilized in Internalizing, Externalizing, and Total Problems scales. Results of the crosstabs demonstrated a statistical significance for Externalizing between clinical and nonclinical groups ($\chi^2(1) = 8.399$, $p = .004$), no statistical significance for Internalizing ($\chi^2(1) = .0001$, $p = .986$), and no statistical significance for Total Problems ($\chi^2(1) = 1.322$, $p = .25$). In other words, a statistical significance between males and females as well as Externalizing clinical versus nonclinical groups was found. Female participants in the Externalizing clinical and nonclinical ranking groups were 42.4% and 57.6%, respectively. Male participants in the Externalizing clinical and nonclinical ranking groups were 59.1% and 40.9%, respectively. In other words, when seeking for services, males were more likely to score clinically on Externalizing Problems than were females.
**Age.** To examine whether there was a difference of age on CBCL clinical versus nonclinical groups; independent samples $t$-test were conducted because age is a continuous variable. Independent samples $t$-test were utilized in Internalizing, Externalizing, and Total Problems scales. Results of the independent samples $t$-test demonstrated a statistically significant age difference on Internalizing between clinical and nonclinical groups, $t(309) = 2.942, p = .004 (\eta^2 = .027)$; no statistically significant age difference on Externalizing groups, $t(309) = .477, p = .633 (\eta^2 = .001)$; and a statistically significant age difference on Total Problems groups, $t(309) = 2.007, p = .046 (\eta^2 = .013)$. That is, the mean age difference (.697) on Internalizing between clinical and nonclinical groups was statistically different, with the average age of Internalizing clinical group ($M = 6.5, SD = 2.006$) being statistically older than that of the nonclinical group ($M = 5.81, SD = 2.165$). Additionally, the mean age difference (.48) of Total Problems between clinical and nonclinical groups was statistically different, with the average age of the Total Problems clinical group ($M = 6.4, SD = 2.031$) being statistically older than that of the nonclinical group ($M = 5.92, SD = 2.175$). The effects of Internalizing and Total Problems between clinical and nonclinical groups were both small. However, there was no significant age difference between the Externalizing clinical group ($M = 6.23, SD = 2.009$) and the nonclinical group ($M = 6.13, SD = 2.213$). Table 4 summarizes the mean of age on CBCL clinical and nonclinical groups and the independent samples $t$-test results.
Table 4

*Independent Samples t-test on Age Between CBCL Clinical and Nonclinical Groups*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Clinical</th>
<th>Nonclinical</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalizing</td>
<td>6.5</td>
<td>5.81</td>
<td>2.942</td>
<td>309</td>
<td>.004*</td>
<td>.027</td>
</tr>
<tr>
<td>Externalizing</td>
<td>6.24</td>
<td>6.13</td>
<td>.477</td>
<td>309</td>
<td>.633</td>
<td>.001</td>
</tr>
<tr>
<td>Total Problems</td>
<td>6.4</td>
<td>5.92</td>
<td>2.007</td>
<td>309</td>
<td>.046*</td>
<td>.013</td>
</tr>
</tbody>
</table>

*Note. MD = Mean difference (i.e., mean score of clinical subtracts mean score of nonclinical).
*p < .05.*

**Parenting Stress Index (PSI)**

According to Abidin (1995), child characteristics, parent characteristics, and situational life stress are three primary source domains of stressors. In other words, the PSI is represented by three domains, including Child Domain, Parent Domain, and Life Stress. The Child and Parent Domains are joined together to present an overall Total Stress Score. The Life Stress represents stress that a parent is currently experiencing outside of the parent-child relationship. Based on Abidin (1995), clinical scores are decided at or above the 85th percentile. Hence, scores of 116 or higher on Child Domain, scores of 148 or higher on Parent Domain, scores of 258 or higher on Total Stress, and scores of 14 or higher on Life Stress at pretest are determined to be in the clinical range.

Of the 364 participants, 333 participants completed the pre-PSI instruments, with missing data on 31. Missing data were attributed to incomplete administration of the PSI instrument. Of the 333 participants, results indicating clinical range on four subscales were as follows: 164 (49.2%) in the Child Domain, 48 (14.4%) in the Parent Domain,
118 (35.4%) in the Total Stress, and 152 (45.6%) in the Life Stress. Namely, approximately half (50%) of the participants were ranked as clinical in the Child Domain at the initiation of treatment. Additionally, approximately half (50%) of the participants’ parents or guardians reported experiencing Life Stress at the clinical range when they brought participants for services. Sample sizes of clinical and nonclinical ranges on the Child Domain, Parent Domain, Total Stress, and Life Stress are shown in Figure 10.

![Figure 10](image)

**Figure 10.** Sample sizes of clinical and nonclinical on the Child Domain (CD), Parent Domain (PD), Total Stress (TS), and Life Stress (LS) on the pre-PSI.

Table 5 summarizes the descriptive statistics of age on Child Domain, Parent Domain, Total Stress, and Life Stress on the PSI at pretest between clinical and nonclinical groups. Table 6 displays the independent samples t-test results on age between clinical and nonclinical groups. Results are discussed as follows.
Table 5

**Descriptive Statistic Results of Age on Child Domain (CD), Parent Domain (PD), Total Stress (TS), and Life Stress (LS) on Pre-PSI Between Clinical and Nonclinical Groups**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Clinical group</th>
<th>Nonclinical group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CD</td>
<td>PD</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Size</td>
<td>164</td>
<td>48</td>
</tr>
<tr>
<td>Mean</td>
<td>6.25</td>
<td>5.88</td>
</tr>
<tr>
<td>Median</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>SD</td>
<td>2.070</td>
<td>2.017</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Size</td>
<td>107</td>
<td>21</td>
</tr>
<tr>
<td>Mean</td>
<td>6.35</td>
<td>6.01</td>
</tr>
<tr>
<td>Median</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>SD</td>
<td>2.015</td>
<td>1.841</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Size</td>
<td>57</td>
<td>27</td>
</tr>
<tr>
<td>Mean</td>
<td>6.08</td>
<td>5.7</td>
</tr>
<tr>
<td>Median</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>SD</td>
<td>2.179</td>
<td>2.163</td>
</tr>
</tbody>
</table>
Table 6

**Independent Samples t-test on Age Between Male and Females on PSI**

<table>
<thead>
<tr>
<th>Scale</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>$\eta^2$</th>
<th>MD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child Domain</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical group</td>
<td>.785</td>
<td>162</td>
<td>.434</td>
<td>0.004</td>
<td>.267</td>
</tr>
<tr>
<td>Nonclinical group</td>
<td>-1.110</td>
<td>167</td>
<td>.268</td>
<td>0.007</td>
<td>-.371</td>
</tr>
<tr>
<td><strong>Parent Domain</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical group</td>
<td>.663</td>
<td>46</td>
<td>.511</td>
<td>0.009</td>
<td>.392</td>
</tr>
<tr>
<td>Nonclinical group</td>
<td>-.729</td>
<td>283</td>
<td>.466</td>
<td>0.002</td>
<td>-.190</td>
</tr>
<tr>
<td><strong>Total Stress</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical group</td>
<td>.421</td>
<td>116</td>
<td>.674</td>
<td>0.002</td>
<td>.170</td>
</tr>
<tr>
<td>Nonclinical group</td>
<td>-.668</td>
<td>213</td>
<td>.505</td>
<td>0.002</td>
<td>-.196</td>
</tr>
<tr>
<td><strong>Life Stress</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical group</td>
<td>-.409</td>
<td>150</td>
<td>.683</td>
<td>0.001</td>
<td>-.142</td>
</tr>
<tr>
<td>Nonclinical group</td>
<td>.030</td>
<td>179</td>
<td>.976</td>
<td>0.000</td>
<td>.01</td>
</tr>
</tbody>
</table>

*Note. MD = Mean difference (i.e., mean score of male subtracts mean score of female). * $p < .05.$

**Child Domain**

Of the 333 participants, results revealed that 164 (49.2%) participants scored in the clinical range and 169 (50.8%) in the normal functioning range. Of the 164 participants who scored in the clinical range, 107 (65.2%) were male and 57 (34.8%) female. Ages ranged from 3 to 10 years old, with a mean of 6.25 ($SD = 2.070$) and a median of 6. Of the 169 participants who scored in the nonclinical range, 93 (55%) were
male and 76 (45%) female. Ages ranged from 3 to 10 years old, with a mean of 6.18 
\(SD = 2.161\) and a median of 6.

**Clinical group.** Of the 164 participants who scored in the clinical range, 107 
(65.2%) were male and 57 (34.8%) female. Of the 107 male participants, the mean age 
was 6.35 \(SD = 2.015\) years old, with a median of 6. Of the 57 female participants, the 
mean age was 6.08 \(SD = 2.179\) years old, with a median of 6. Results of the 
independent samples \(t\)-test on age between males and females in the Child Domain 
clinical range revealed no statistically significant difference, \(t(162) = .785, p = .434 \(\eta^2 
= .004\). According to Cohen (1988), the effect for age between males and females in 
the Child Domain clinical group was very small.

**Nonclinical group.** Of the 169 participants who scored in the normal functioning 
range, 93 (55.0%) were male and 76 (45.0%) female. Of the 93 male participants, the 
mean age was 6.01 \(SD = 2.088\) years old, with a median of 6. Of the 76 female 
participants, the mean age was 6.38 \(SD = 2.245\) years old, with a median was 6.5. 
Results of the independent samples \(t\)-test on age between males and females in the 
Child Domain nonclinical range did not demonstrate a statistically significant difference, 
\(t(167) = -1.110, p = .268 \(\eta^2 = .007\). Based on Cohen’s (1988) guidelines, the effect for 
age between males and females in the Child Domain nonclinical group was very small.

**Parent Domain**

Of the 333 participants, results revealed that 48 (14.4%) participants scored in 
the clinical range and 285 (85.6%) scored in the normal functioning range. Of the 48 
participants who scored in the clinical range, 21 (43.8%) were male and 27 (56.2%) 
female. Ages ranged from 3 to 10 years old, with a mean of 5.88 \(SD = 2.017\) and a
median of 6. Of the 285 participants who scored in the normal functioning range, 179
(62.8%) were male and 106 (37.2%) female. Ages ranged from 3 to 10 years old, with a
mean of 6.27 (SD = 2.128) and a median of 6.

Clinical group. Of the 48 participants who scored in the clinical range, 21 (43.8%)
participants were male and 27 (56.2%) female. Of the 21 male participants, the mean
age was 6.10 (SD = 1.841) years old, with a median of 6. Of the 27 female participants,
the mean age was 5.7 (SD = 2.163) years old, with a median of 5. Results of the
independent samples t-test on age between males and females in the Parent Domain
clinical range did not demonstrate a statistically significant difference, \( t(46) = .633, p
= .511 (\eta^2 = .009) \). According to Cohen (1988), the effect for age between males and
females in the Parent Domain clinical group was small.

Nonclinical group. Of the 285 participants who scored in the normal functioning
range, 179 (62.8%) were male and 106 (37.2%) female. Of the 179 male participants,
the mean age was 6.20 (SD = 2.078) years old, with a median of 6. Of the 106 female
participants, the mean age was 6.39 (SD = 2.215) years old, with a median was 7.
Findings of the independent samples t-test on age between males and females in the
Parent Domain nonclinical range did not demonstrate a statistically significant difference,
\( t(283) = -.729, p = .466 (\eta^2 = .002) \). Based on Cohen’s (1988) guidelines, the effect for
age between males and females in the Parent Domain nonclinical group was very small.

Total Stress

Of the 333 participants, results revealed that 118 (35.4%) participants scored in the
clinical range and 215 (64.6%) scored in the normal functioning range. Of the 118
participants who scored in the clinical range, 68 (57.6%) were male and 50 (42.4%)
female. Ages ranged from 3 to 10 years old, with a mean of 6.18 (SD = 2.159) and a median of 6. Of the 215 participants who scored in the normal functioning range, 132 (61.4%) were male and 83 (38.6%) female. Ages ranged from 3 to 10 years old, with a mean of 6.23 (SD = 2.094) and a median of 6.

Clinical group. Of the 118 participants who scored in the clinical range, 68 (57.6%) were male and 50 (42.4%) female. Of the 68 male participants, the mean age was 6.25 (SD = 2.010) years old, with a median of 6. Of the 50 female participants, the mean age was 6.08 (SD = 2.363) years old, with a median of 6. Results of the independent samples t-test on age between males and females in the Total Stress clinical range did not indicate a statistically significant difference, \( t(116) = .421, p = .674 \) (\( \eta^2 = .002 \)). According to Cohen (1988), the effect for age between males and females in the Total Stress clinical group was small.

Nonclinical group. Of the 215 participants who scored in the normal functioning range, 132 (61.4%) were male and 83 (38.6%) female. Of the 132 male participants, the mean age was 6.16 (SD = 2.078) years old, with a median of 6. Of the 83 female participants, the mean age was 6.36 (SD = 2.126) years old, with a median was 6. Findings of the independent samples t-test on age between males and females in the Parent Domain nonclinical range revealed no statistically significant difference, \( t(213) = -.668, p = .505 \) (\( \eta^2 = .002 \)). Based on Cohen's (1988) guidelines, the effect for age between males and females in the Total Stress nonclinical group was very small.

Life Stress

Of the 333 participants, results revealed that 152 (45.6%) participants scored in the clinical range and 181 (54.4%) in the normal functioning range. Of the 152
participants who scored in the clinical range, 88 (57.9%) were male and 64 (42.1%) female. Ages ranged from 3 to 10 years old, with a mean of 6.23 (SD = 2.108) and a median of 6. Of the 181 participants who scored in the nonclinical range, 112 (61.9%) were male and 69 (38.1%) female. Ages ranged from 3 to 10 years old, with a mean of 6.2 (SD = 2.125) and a median of 6.

Clinical group. Of the 152 participants who scored in the clinical range, 88 (57.9%) were male and 64 (42.1%) female. Of the 88 male participants, the mean age was 6.17 (SD = 2.035) years old, with a median of 6. Of the 64 female participants, the mean age was 6.31 (SD = 2.217) years old, with a median of 6. Results of the independent samples t-test on age between males and females in the Life Stress clinical range revealed no statistically significant difference, \(t(150) = -.409, p = .683\) (\(\eta^2 = .001\)). According to Cohen (1988), the effect for age between males and females in the Life Stress clinical group was very small.

Nonclinical group. Of the 181 participants who scored in the nonclinical range, 112 (61.9%) were male and 69 (38.1%) female. Of the 112 male participants, the mean age was 6.21 (SD = 2.071) years old, with a median of 6. Of the 69 female participants, the mean age was 6.2 (SD = 2.225) years old, with a median was 6. Results of the independent samples t-test on age between males and females in the Life Stress nonclinical range did not reveal a statistically significant difference, \(t(179) = .030, p = .976\) (\(\eta^2 < .001\)). Based on Cohen’s (1988) guidelines, the effect for age between males and females in the Life Stress nonclinical group was very small.
Gender and Age on PSI Clinical Versus Nonclinical Group

**Gender.** Of the 200 male participants, 107 (53.5%), 21 (10.5%), 68 (34.0%), and 88 (44.0%) scored in the clinic ranges on Child Domain, Parent Domain, Total Stress, and Life Stress. Of the 133 female participants, 57 (42.9%), 27 (20.3%), 50 (37.6%), and 64 (48.1%) scored in the clinic ranges on Child Domain, Parent Domain, Total Stress, and Life Stress. To investigate whether there was a difference of gender on PSI clinical versus nonclinical groups; Chi² was conducted because gender is a categorical variable. Crosstabs analyses were utilized in Child Domain, Parent Domain, Total Stress, and Life Stress. Results of the crosstabs revealed no statistical significance for Child Domain groups ($\chi^2(1) = 3.62, p = .057$), a statistical significance for Parent Domain groups ($\chi^2(1) = 6.22, p = .013$), no statistical significance for Total Stress groups ($\chi^2(1) = .451, p = .502$), and no statistical significance for Life Stress groups ($\chi^2(1) = .547, p = .46$). That is, a statistical significance between males and females between Parent Domain clinical and normal functioning groups was found. Namely, female participants in the Parent Domain clinical and normal functioning groups were 20.3% and 79.7%, respectively. Additionally, male participants in the Parent Domain clinical and normal functioning were 10.5% and 89.5%, respectively. Namely, when parents experience a clinical level of parent-child relationship stress contributed by parent characteristics, female children were more likely to be brought for play therapy treatment than male children.

**Age.** To examine whether there was a difference of age on PSI clinical versus nonclinical groups; independent samples $t$-test were conducted because age is a continuous variable. Independent samples $t$-test were utilized in Child Domain, Parent
Domain, Total Stress, and Life Stress. Results of the independent samples $t$-test demonstrated no statistically significant difference on Child Domain groups, $t(331) = .326, p = .745 (\eta^2 < .001)$; no statistically significant difference on Parent Domain groups, $t(331) = -1.204, p = .229 (\eta^2 = .004)$; no statistically significant difference on Total Stress groups, $t(331) = -.235, p = .815 (\eta^2 < .001)$; and no statistically significant difference on Life Stress groups, $t(331) = .123, p = .902 (\eta^2 < .001)$. In other words, there were no significant differences for age between PSI clinical and normal functioning groups. Table 7 summarizes the mean of age on PSI clinical and normal functioning groups.

Table 7

<table>
<thead>
<tr>
<th>Scale</th>
<th>Clinical M</th>
<th>Clinical SD</th>
<th>Nonclinical M</th>
<th>Nonclinical SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Domain</td>
<td>6.25</td>
<td>2.070</td>
<td>6.18</td>
<td>2.161</td>
<td>.326</td>
<td>331</td>
<td>.745</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Parent Domain</td>
<td>5.88</td>
<td>2.017</td>
<td>6.27</td>
<td>2.128</td>
<td>-1.204</td>
<td>331</td>
<td>.229</td>
<td>.004</td>
</tr>
<tr>
<td>Total Stress</td>
<td>6.18</td>
<td>2.159</td>
<td>6.23</td>
<td>2.094</td>
<td>-.235</td>
<td>331</td>
<td>.815</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Life Stress</td>
<td>6.23</td>
<td>2.108</td>
<td>6.20</td>
<td>2.125</td>
<td>.123</td>
<td>331</td>
<td>.902</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

**Research Question 3**

Research Question 3: What effect did child-centered play therapy have on children who received university-based play therapy clinical services based on examining archival data?
For the purpose of answering Research Question 3, only participants who received individual child-centered play therapy were used for data analyses. Data analyses on this research question were to investigate change among participants after participating in individual CCPT on child behavior and parent-child relationship stress. Of the 254 participants who received university-based play therapy treatment, 198 received only individual CCPT. Of the 198 participants, 82 participants completed post-data on the CBCL and 92 completed post-data on the PSI and were filled out by the same rater.

Because only participants who received individual CCPT were used for further analyses, brief summaries of other types of play therapy treatment were reported as follows.

Of the 254 participants who received play therapy treatment, 198 (78%) received only individual child-centered play therapy, 5 (2%) received only group play therapy, 45 (17.7%) received individual and group play therapy, and 6 (2.4%) received multiple therapy (i.e., individual play therapy, group play therapy and/or filial therapy).

For the 198 participants who received only individual CCPT, the number of individual play therapy sessions ranged from 1 to 114, with a mean of 18.59 (SD = 19.30) and a median of 12. The number of parent consultation sessions ranged from 0 to 43, with a mean of 4.48 (SD = 5.55) and a median of 3.

Among the 5 participants who received only group play therapy, the number of group play therapy sessions ranged from 12 to 44, with a mean of 25.4 (SD = 14.17) and a median of 22. The number of parent consultation sessions ranged from 0 to 7, with a mean of 4.00 (SD = 2.65) and a median of 5.
For the 45 participants who received both individual and group play therapy services, the number of play therapy sessions ranged from 3 to 160, with a mean of 42.56 ($SD = 33.15$) and a median of 37. The number of parent consultation sessions ranged from 0 to 61, with a mean of 8.51 ($SD = 9.52$) and a median of 6.

Among the 6 participants who received multiple play therapy services, the number of play therapy sessions ranged from 4 to 84, with a mean of 38.33 ($SD = 30.52$) and a median of 35. The number of parent consultation sessions ranged from 2 to 34, with a mean of 14.17 ($SD = 10.93$) and a median of 12. Table 8 and Table 9 present the descriptive statistics for session number of play therapy and parent consultations for different treatment type groups.

Table 8

Descriptive Statistics on Number of Play Therapy Sessions for Different Treatment Type Groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Range</th>
<th>M</th>
<th>Mdn</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Play Therapy</td>
<td>198</td>
<td>1-114</td>
<td>18.59</td>
<td>12</td>
<td>19.30</td>
</tr>
<tr>
<td>Group Play Therapy</td>
<td>5</td>
<td>12-44</td>
<td>25.40</td>
<td>22</td>
<td>14.17</td>
</tr>
<tr>
<td>Individual and Group</td>
<td>45</td>
<td>3-160</td>
<td>42.56</td>
<td>37</td>
<td>33.15</td>
</tr>
<tr>
<td>Multiple Treatment</td>
<td>6</td>
<td>4-84</td>
<td>38.33</td>
<td>35</td>
<td>30.52</td>
</tr>
</tbody>
</table>

Table 9

Descriptive Statistics on Number of Parent Consultation Sessions for Different Treatment Type Groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Range</th>
<th>M</th>
<th>Mdn</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Play Therapy</td>
<td>198</td>
<td>0-43</td>
<td>4.48</td>
<td>3</td>
<td>5.55</td>
</tr>
<tr>
<td>Group Play Therapy</td>
<td>5</td>
<td>0-7</td>
<td>4.00</td>
<td>5</td>
<td>2.65</td>
</tr>
<tr>
<td>Individual and Group</td>
<td>45</td>
<td>0-61</td>
<td>8.51</td>
<td>6</td>
<td>9.52</td>
</tr>
<tr>
<td>Multiple Treatment</td>
<td>6</td>
<td>2-34</td>
<td>14.17</td>
<td>12</td>
<td>10.93</td>
</tr>
</tbody>
</table>
Repeated Measures ANOVA

In this section, repeated measures ANOVA was conducted to determine significant differences on Internalizing, Externalizing, and Total Problems on the CBCL and on Child Domain, Parent Domain, and Total Stress on the PSI after receiving individual CCPT. Further, effect sizes were calculated to determine the strength of the relationship between play therapy and outcome. Effect size is any “statistic that quantifies that degree to which sample results diverge from the expectations (e.g., no difference in group medians, no relationship between two variables) specified in the null hypothesis” (Vacha-Haase & Thompson, 2004, p. 473). Therefore, effect sizes can be utilized to inform improvement regarding the practice significance of research results.

To answer this research question, partial eta squared ($\eta^2$) was used to report effect size for repeated measures ANOVA. “Eta squared is an estimate of the proportion of variability in the dependent variable explained, or accounted for, by membership in the groups defining the independent variable. Eta squared estimates are referred to as variance-accounted-for statistics” (Trusty, Thompson, & Petrocelli, 2004, p.108). For example, the interpretation of eta squared value of .12 for an independent variable would mean that 12% of the difference in the dependent variable scores was explained by the independent variable. The guidelines proposed by Cohen (1988) were used for interpreting the eta squared ($\eta^2$) value: .01 = small effect, .06 = moderate effect, and .14 = large effect.

Statistical and Practical Significance on Child Behavior Checklist (CBCL)

Internalizing. A one-way repeated measures ANOVA was conducted to compare Internalizing score on the CBCL at pretest and posttest. Results of the ANOVA on
Internalizing problems indicated a statistically significant effect for time, $F(1, 81) = 11.489, p = .001$ (partial $\eta^2 = .124$). The mean decrease over time in Internalizing scale scores was 4.20, with a 95% confidence interval ranging from -6.68 to -1.74. According to Cohen (1988), the effect size of .124 indicated a moderate effect.

*Externalizing.* Findings of the ANOVA on Externalizing Problems demonstrated a statistically significant effect for time, $F(1, 81) = 14.735, p < .001$ (partial $\eta^2 = .154$). The mean decrease over time in the Externalizing scale scores was 4.31, with a 95% confidence interval ranging from -6.54 to -2.07. Based on Cohen’s (1988) guidelines, the effect size of .154 indicated a large effect.

*Total Problems.* Results of the ANOVA on Total Problems scale also revealed a statistically significant effect for time, $F(1, 81) = 20.41, p < .001$ (partial $\eta^2 = .201$). The mean decrease over time in Total Problems scores was 5.3, with a 95% confidence interval ranging from -7.64 to -2.97. Based on Cohen’s (1988) guidelines, the effect size of .201 demonstrated a large effect. Table 10 summarizes the findings of repeated measures ANOVAs for Internalizing, Externalizing, and Total Problems on the CBCL. Table 11 represents the descriptive statistics for Internalizing, Externalizing, and Total Problems on the CBCL for pretest and posttest.

Table 10

<table>
<thead>
<tr>
<th>Subscale</th>
<th>N</th>
<th>df</th>
<th>$F$</th>
<th>$p$</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalizing</td>
<td>82</td>
<td>81</td>
<td>11.489</td>
<td>.001*</td>
<td>.124 (moderate)</td>
</tr>
<tr>
<td>Externalizing</td>
<td>82</td>
<td>81</td>
<td>14.735</td>
<td>&lt;.001*</td>
<td>.154 (large)</td>
</tr>
<tr>
<td>Total Problem</td>
<td>82</td>
<td>81</td>
<td>20.41</td>
<td>&lt;.001*</td>
<td>.201 (large)</td>
</tr>
</tbody>
</table>

* $p < .05.$
Table 11

Descriptive Statistics for Internalizing, Externalizing, and Total Problems on CBCL for
Pretest and Posttest

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Pretest</th>
<th></th>
<th>Posttest</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Internalizing</td>
<td>82</td>
<td>56.63</td>
<td>10.83</td>
<td>52.43</td>
</tr>
<tr>
<td>Externalizing</td>
<td>82</td>
<td>59.04</td>
<td>11.63</td>
<td>54.73</td>
</tr>
<tr>
<td>Total Problem</td>
<td>82</td>
<td>59.41</td>
<td>10.01</td>
<td>54.11</td>
</tr>
</tbody>
</table>

Statistical and Practical Significance on Parenting Stress Index (PSI)

Child Domain. Findings of the ANOVA on Child Domain revealed a statistically
significant effect for time, $F(1, 91) = 15.719, p < .001$ (partial $\eta^2 = .147$). The mean
decrease over time in Child Domain was 8.67, with a 95% confidence interval ranging
from -13.02 to -4.33. According to Cohen (1988), the effect size of .147 indicated a large
effect.

Parent Domain. Results of the ANOVA on Parent Domain did not indicate a
statistically significant effect for time, $F(1, 91) = 1.525, p = .22$ (partial $\eta^2 = .016$). The
mean decrease over time in Parent Domain was 2.39, with a 95% confidence interval
ranging from -6.24 to 1.46. Although Parent Domain did not indicate a statistically
significant effect, the effect size of .016 demonstrated a small effect.

Total Stress. Results of the ANOVA on Total Stress demonstrated a statistically
significant effect for time, $F(1, 91) = 9.77, p = .002$ (partial $\eta^2 = .097$). The mean
decrease over time in Total Stress was 11.09, with a 95% confidence interval ranging
from -18.13 to -4.04. According to Cohen (1988), the effect size of .097 demonstrated a moderate effect. Table 12 shows the results of repeated measures ANOVA for Child Domain, Parent Domain, and Total Stress on the PSI. Table 13 summarizes the descriptive statistics for Child Domain, Parent Domain, and Total Stress on the PSI for pretest and posttest.

Table 12

*Repeat Measures ANOVA for Child Domain, Parent Domain, and Total Stress on PSI*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>N</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>Partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Domain</td>
<td>92</td>
<td>91</td>
<td>15.719</td>
<td>&lt;.001*</td>
<td>.147 (large)</td>
</tr>
<tr>
<td>Parent Domain</td>
<td>92</td>
<td>91</td>
<td>1.525</td>
<td>.22</td>
<td>.016 (small)</td>
</tr>
<tr>
<td>Total Stress</td>
<td>92</td>
<td>91</td>
<td>9.77</td>
<td>.002*</td>
<td>.097 (moderate)</td>
</tr>
</tbody>
</table>

*p < .05.

Table 13

*Descriptive Statistics for Child Domain, Parent Domain, and Total Stress on PSI for Pretest and Posttest*

<table>
<thead>
<tr>
<th>Subscale</th>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Child Domain</td>
<td>92</td>
<td>113.75</td>
<td>25.93</td>
</tr>
<tr>
<td>Parent Domain</td>
<td>92</td>
<td>118.87</td>
<td>28.26</td>
</tr>
<tr>
<td>Total Stress</td>
<td>92</td>
<td>232.62</td>
<td>46.90</td>
</tr>
</tbody>
</table>
Clinical Significance

Kazdin (1999) defined “clinical significance” as referring “to the practical or applied value or importance of the effect of the intervention—that is, whether the intervention makes a real (e.g., genuine, palpable, practical, noticeable) difference in everyday life to the clients or to others with whom the client interacts” (p. 332). He further distinguished practical and clinical significance by pointing out that even interventions yielding no effect could still have a clinical significance.

Primary indexes of clinical significance are whether participants return to normative levels after receiving interventions. This kind of evaluation is particularly helpful when a study is conducted without a control/comparison group (Kazdin, 1999; Ray, 2008). For the purpose of this study, the proportion of participants whose scores at pretest fell within clinical range and scores at posttest fell within normal functional range was computed. Because the number of play therapy sessions was not a controlled variable, progression from clinical to normal can be attributed to session range of one to 114. Change is also not reflective of counselor/client agreed upon termination and hence, clients may have prematurely terminated prior to progress.

Child Behavior Checklist (CBCL)

Comparison of number of participants reported in Clinical/Borderline range on the CBCL at pretest and posttest are shown in Table 14. Each subscale is discussed as follows.

Internalizing Problems. Of the 82 participants, 36 scored at the Borderline or Clinical range at pretest (T scores of 60 or above). Of the 36 participants, 13 (36%) scored in the Normal functioning range at posttest. Namely, 1 out of 3 participants
identified in the Borderline or Clinical range for Internalizing behavioral problem on the CBCL prior to play therapy improved to the Normal functioning range following play therapy.

*Externalizing Problems*. Of the 82 participants, 40 scored at the Borderline or Clinical range at pretest (T scores of 60 or above). Of the 40 children, 16 (40%) scored in the Normal functioning range at posttest. That is, 2 out of 5 participants identified in the Borderline or Clinical range for Externalizing behavioral problems on the CBCL prior to play therapy improved to the Normal functioning range following play therapy.

*Total Problems*. Of the 82 participants, 44 scored at the Borderline or Clinical range at pretest (T scores of 60 or above). Of the 44 participants, 19 (43%) scored in the Normal functioning range at posttest. Again, more than two fifths of the participants identified in the Borderline or Clinical range for Total Problems on the CBCL prior to play therapy improved to the Normal functioning range following play therapy.

Table 14

*Number of Children Reported in Clinical/Borderline Range for Internalizing, Externalizing, and Total Problems on CBCL at Pretest and Posttest*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Pretest Clinical/Borderline</th>
<th>Posttest Clinical/Borderline</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalizing</td>
<td>36</td>
<td>23 (64%)</td>
<td>13 (36%)</td>
</tr>
<tr>
<td>Externalizing</td>
<td>40</td>
<td>24 (60%)</td>
<td>16 (40%)</td>
</tr>
<tr>
<td>Total Problem</td>
<td>44</td>
<td>25 (57%)</td>
<td>19 (43%)</td>
</tr>
</tbody>
</table>
**Parenting Stress Index (PSI)**

Comparison of number of participants reported in clinical range on the PSI at pretest and posttest are shown in Table 15. Each subscale is discussed as follows.

Table 15

*Number of Children Reported in Clinical Range for Child Domain, Parent Domain, Total Stress on PSI at Pretest and Posttest*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clinical range</td>
<td>Clinical range</td>
</tr>
<tr>
<td>Child Domain</td>
<td>42</td>
<td>19 (45%)</td>
</tr>
<tr>
<td>Parent Domain</td>
<td>12</td>
<td>7 (58%)</td>
</tr>
<tr>
<td>Total Stress</td>
<td>28</td>
<td>15 (54%)</td>
</tr>
</tbody>
</table>

*Child Domain.* Of the 92 participants, 42 scored in the clinical range at pretest (scores of 116 or above). Of the 42 participants, 23 (55%) scored in the normal functioning range at posttest. In other words, over half of the participants identified in the clinical range for child characteristics contributing to overall parent-child relationship stress prior to play therapy improved to the normal range of stress following play therapy.

*Parent Domain.* Of the 92 participants, 12 scored in the clinical range at pretest (scores of 148 or above). Of the 12 participants, 5 (42%) scored in the normal functioning range at posttest. Namely, approximately two fifths of the participants identified in the clinical range for parent characteristics, contributing to the overall parent-child relationship stress level prior to play therapy improved to the normal range of stress following play therapy.
Total Stress. Of the 92 participants, 28 scored in the clinical range at pretest (scores of 258 or above). Of the 28 participants, 13 (46%) scored in the normal functioning range at posttest. That is, approximately two fifths of the participants identified in the clinical range for parent-child total stress level prior to play therapy improved to the normal range of stress following play therapy.

Research Question 4

Research Question 4: What variables were significantly correlated to change for children receiving child-centered play therapy?

To answer this research question, only participants who received individual child-centered play therapy would be used for data analyses. Of the 198 participants who received individual CCPT in this study, 82 participants completed post-data on the CBCL and 92 completed post-data on the PSI and were filled out by the same rater as the pre-CBCL and PSI.

Multiple Regressions

Main data analyses intended to answer this research question were ordinary least squares regression. The ordinary least squares regression is a type of general linear model (GLM) analyses that (a) are correlation in nature, (b) yield variance-account-for type effect size, and (c) maximize shared variance between variables or sets of variables (Cohen, 1968; Henson, 2006). Cohen’s $d$ (standardized mean difference) and $r^2$ (variance-accounted-for) are related to each other. The Pearson’s $r$ conventions offered by Cohen (1988) are presented in Table 16 (Henson, 2006). The $r_{pb}$, point biserial correlation represents the relationship between a dichotomous
grouping variable and a continuous variable. The \( r \) indicates the relationship between two continuous variables.

Table 16

*Conversion of \( d \) to \( r^2 \) for Three Benchmarks Using Cohen's (1988) Formula*

<table>
<thead>
<tr>
<th>( d )</th>
<th>Point biserial correlation</th>
<th>Pearson's ( r ) correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( r_{pb} )</td>
<td>( r^2 )</td>
</tr>
<tr>
<td>.20</td>
<td>.100</td>
<td>.10</td>
</tr>
<tr>
<td>.50</td>
<td>.243</td>
<td>.30</td>
</tr>
<tr>
<td>.80</td>
<td>.371</td>
<td>.50</td>
</tr>
</tbody>
</table>

Additional statistical information for the multiple regression analyses between the predictor variable and criterion variables are included in the following section. The unstandardized regression coefficient (\( b \)) was obtained for each of the predictor variables by dividing Pearson's \( r \) of each factor by \( R \) from the regression analysis. The standardized regression coefficients (beta weights, \( \beta \)) were used and allowed for direct comparisons between coefficients. The \( p \)-value indicates significance, and the asterisks indicate levels of statistical significance at the level of .05 (*\( p < .05 \)).

Further, the structure coefficient (\( r_s \)) is the bivariate correlation indicating the degree of relationship between a given predictor variables and the synthetic variable, predicted \( Y \) or \( \hat{Y} \). That is, the structure coefficient is a Pearson \( r \) between observed variables and synthetic variables. The structure coefficient also provides information regarding the practical significance, or usefulness, of the results (Courville & Thompson, 2001). The squared structure coefficient (\( r_s^2 \)) reveals the proportion of variability that each predictor variable can explain in the presence of the other collected predictor variables. Because reporting beta weights (\( \beta \)) alone might, in certain cases, result in
insufficient reporting of significant results, use of both beta weights ($\beta$) and structure coefficients ($r_s$) is important when interpreting regression results (Thompson, 1992). To determine significance of the predictor variables, the researcher used both beta weights ($\beta$) and squared structure coefficients ($r_s^2$) to determine the strong/weak contribution of the predictors in this study.

**Independent Variables**

LeBlanc and Ritchie (1999) conducted a meta-analysis of play therapy to examine the factors that predicted play therapy treatment outcome. Results indicated that gender, age, presenting concerns, and group versus individual play therapy were not associated with treatment outcome. In contrast, the involvement of parents in play therapy and the number of therapy sessions were significantly related to the treatment outcome (Bratton et al., 2005; LeBlanc & Ritchie, 2001). For this analysis, the number of play therapy sessions and number of parent consultation sessions were selected as independent variables. Additionally, termination factor (i.e., completion and premature termination) was chosen as an independent variable to examine its impact on treatment outcome. The criteria of premature termination included (a) participant had three consecutive no-shows (i.e., the play therapist indicated on the client visit summary that client did not call to cancel a session for 3 consecutive weeks); (b) the play therapist recommended continuing play therapy, but participant did not return for treatment after summer or winter break; (c) parent/guardian indicated no further interest in treatment; (d) participant or parent had schedule conflict; (e) parent/guardian stated seeking services somewhere else; (f) participant moved somewhere else; or (g) other (such as lack of transportation, parent’s physical health, and so on). Although literature has indicated
that play therapy is effective for children regardless of presenting concerns, Bratton et al. recommended further research to address specific targeted problems to better understand the treatment outcome of play therapy on particular presenting concerns. As suggested by scholars, the six presenting concerns (listed in Table 1) which are identified and utilized in this university-based clinic were selected as independent variables as well. Therefore, nine independent variables were selected for multiple regression analyses in the following section.

Of the nine independent variables, no missing data were found in the number of play therapy sessions, number of parent consultation sessions, and termination variables. Each presenting concern variable had missing data on 3. That is, of the 82 participants who filled out both pre- and post- CBCL, the sample sizes of identifying presenting concerns were as follows: 17 participants in abuse-related problems, 64 in mood-related concerns, 10 in rule-breaking behaviors, 33 in academic/school problems, 57 in family relationship concerns, and 25 in other behavior concerns. Additionally, of the 92 participants who filled out both pre- and post- PSI, the sample sizes of identifying presenting concerns were as follows: 17 participants in abuse-related problems, 72 in mood-related concerns, 10 in rule-breaking behaviors, 39 in academic/school problems, 65 in family relationship concerns, and 28 in other behavior concerns. As for the termination independent variable, 36 and 43 participants were identified as premature terminated for CBCL and PSI analyses, respectively.

Because the six presenting concern variables being categorical variables, missing data were replaced by the mode of each variable. After replacing the missing data of the 82 participants for CBCL analyses, the sample sizes of identifying presenting

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concerns were as follows: 17 participants in abuse-related problems, 67 in mood-related concerns, 10 in rule-breaking behaviors, 33 in academic/school problems, 60 in family relationship concerns, and 25 in other behavior concerns. Again, of the 92 participants for PSI analyses, the sample sizes of identifying presenting concerns were as follows: 17 participants in abuse-related problems, 75 in mood-related concerns, 10 in rule-breaking behaviors, 39 in academic/school problems, 68 in family relationship concerns, and 28 in other behavior concerns.

The sample sizes, means, standard deviations, skewness and kurtosis were conducted for each independent variable for CBCL analyses (shown in Table 17) and for PSI analyses (shown in Table 18). Because the skewness of the nine independent variables were between negative 3 and positive 3, these independent variables were reasonably normally distributed. Thus, no transformation was utilized in this study.

Table 17

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of PT sessions</td>
<td>82</td>
<td>28.02</td>
<td>21.988</td>
<td>2.061</td>
<td>4.873</td>
</tr>
<tr>
<td>Number of PC sessions</td>
<td>82</td>
<td>6.82</td>
<td>6.414</td>
<td>2.751</td>
<td>11.848</td>
</tr>
<tr>
<td>Termination</td>
<td>82</td>
<td>.056</td>
<td>.499</td>
<td>-0.25</td>
<td>-1.986</td>
</tr>
<tr>
<td>Problems related to Abuse</td>
<td>82</td>
<td>.21</td>
<td>.408</td>
<td>1.471</td>
<td>.167</td>
</tr>
<tr>
<td>Mood-related Concerns</td>
<td>82</td>
<td>.82</td>
<td>.389</td>
<td>-1.671</td>
<td>.811</td>
</tr>
<tr>
<td>Rule-Breaking Behaviors</td>
<td>82</td>
<td>.12</td>
<td>.329</td>
<td>2.354</td>
<td>3.629</td>
</tr>
<tr>
<td>Academic/School Problems</td>
<td>82</td>
<td>.40</td>
<td>.493</td>
<td>.405</td>
<td>-1.882</td>
</tr>
<tr>
<td>Family Relationship Concern</td>
<td>82</td>
<td>.73</td>
<td>.446</td>
<td>-1.066</td>
<td>-.887</td>
</tr>
<tr>
<td>Other Behavior Concern</td>
<td>82</td>
<td>.30</td>
<td>.463</td>
<td>.864</td>
<td>-1.286</td>
</tr>
</tbody>
</table>

Note. PT = Play therapy; PC = Parent consultation.
Table 18

**Descriptive Statistics of Independent Variables for PSI Analyses**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of PT sessions</td>
<td>92</td>
<td>27.10</td>
<td>21.325</td>
<td>2.110</td>
<td>5.288</td>
</tr>
<tr>
<td>Number of PC sessions</td>
<td>92</td>
<td>6.46</td>
<td>6.289</td>
<td>2.723</td>
<td>11.906</td>
</tr>
<tr>
<td>Termination</td>
<td>92</td>
<td>.53</td>
<td>.502</td>
<td>-.133</td>
<td>-2.027</td>
</tr>
<tr>
<td>Problems related to Abuse</td>
<td>92</td>
<td>.18</td>
<td>.390</td>
<td>1.651</td>
<td>.743</td>
</tr>
<tr>
<td>Mood-related Concern</td>
<td>92</td>
<td>.82</td>
<td>.390</td>
<td>-1.651</td>
<td>.743</td>
</tr>
<tr>
<td>Rule-Breaking Behaviors</td>
<td>92</td>
<td>.11</td>
<td>.313</td>
<td>2.556</td>
<td>4.635</td>
</tr>
<tr>
<td>Academic/School Problems</td>
<td>92</td>
<td>.42</td>
<td>.497</td>
<td>.313</td>
<td>-1.945</td>
</tr>
<tr>
<td>Family Relationship Concern</td>
<td>92</td>
<td>.74</td>
<td>.442</td>
<td>-1.107</td>
<td>-.792</td>
</tr>
<tr>
<td>Other Behavior Concern</td>
<td>92</td>
<td>.30</td>
<td>.463</td>
<td>.865</td>
<td>-1.281</td>
</tr>
</tbody>
</table>

*Note. PT = Play therapy; PC = Parent consultation.*

**Dependent Variables**

Six dependent variables were utilized in this study: difference scores computed between pretest and posttest of Internalizing, Externalizing, and Total Problem scores on the CBCL as well as difference scores of Child Domain, Parent Domain, and Total Stress on the PSI. A reduction of scores on the CBCL and PSI difference scores demonstrated positive progress after receiving play therapy, while an increase in scores demonstrated a move toward clinical scores. Six multiple regressions were analyzed separately.

Table 19 indicates the sample sizes, means, standard deviations, skewness, and kurtosis of difference scores for Internalizing, Externalizing, and Total Problem on the
CBCL as well as difference scores for Child Domain, Parent Domain, and Total Stress on the PSI. No missing data were found for these variables. Because the skewness of all variables was between negative 3 and positive 3, these dependent variables were reasonably normally distributed. Therefore, no transformation was used in the study.

Table 19

*Descriptive Statistics of CBCL and PSI Difference Scores*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference Score on CBC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalizing</td>
<td>82</td>
<td>-4.21</td>
<td>11.240</td>
<td>.189</td>
<td>3.671</td>
</tr>
<tr>
<td>Externalizing</td>
<td>82</td>
<td>-4.30</td>
<td>10.155</td>
<td>-.097</td>
<td>1.484</td>
</tr>
<tr>
<td>Total Problem</td>
<td>82</td>
<td>-5.30</td>
<td>10.634</td>
<td>-.540</td>
<td>2.472</td>
</tr>
<tr>
<td>Difference Score on PSI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Domain</td>
<td>92</td>
<td>-8.67</td>
<td>20.985</td>
<td>-.225</td>
<td>1.784</td>
</tr>
<tr>
<td>Parent Domain</td>
<td>92</td>
<td>-2.39</td>
<td>18.571</td>
<td>-.047</td>
<td>.724</td>
</tr>
<tr>
<td>Total Stress</td>
<td>92</td>
<td>-11.09</td>
<td>34.023</td>
<td>-.202</td>
<td>.781</td>
</tr>
</tbody>
</table>

**Outliers**

Outliers are defined as very high or very low scores (Tabachnick & Fidell, 2007).

Outliers on the dependent variables were identified from the standardized residual plot in this study. Six separate scatterplots of standardized error on standardized Internalizing, Externalizing, Total Problems, Child Domain, Parent Domain, and Total Stress difference scores were drawn to check out the outliers. Results of standardized error on standardized Internalizing difference score (as shown as Figure 11) and
standardized Externalizing difference score (as shown as Figure 12) indicated the case number of 75 was an outlier and was removed from further analyses.

*Figure 11.* Scatterplot of standardized residual and standardized predicted Internalizing Problems difference scores.

*Figure 12.* Scatterplot of standardized residual and standardized predicted Externalizing Problems difference scores.
Findings on standardized Total Problems difference score (as shown as Figure 13) indicated the case numbers of 10, 73, 74, and 75 were outliers and were removed from further analyses.

![Dependent Variable: Difference score_Total](image)

**Figure 13.** Scatterplot of standardized residual and standardized predicted Total Problems difference scores.

Results of standardized error on the standardized Child Domain difference score (as shown as Figure 14) indicated that the case numbers of 59 and 69 were outliers and were removed from further analyses. Again, results on the Parent Domain difference score scatterplot (as shown as Figure 15) indicated that the case numbers of 14, 31, and 77 were outliers and were removed from further analyses. Findings on Total Stress standardized error scatterplot (as shown as Figure 16) indicated that the case numbers of 31, 59, and 69 were outliers and were removed from further analyses. Separate scatterplots for Child Domain, Parent Domain, and Total Stress difference score are shown as follows.
After specific outliers were removed from each dependent variable, the total number of participants for data analyses was 81 for Internalizing, 81 for Externalizing, and 78 for Total Problems on CBCL analyses as well as 90 for Child Domain, 89 for Parent Domain and 89 for Total Stress on PSI analyses. Separate analyses on independent and dependent variables were conducted again to determine the normal distribution. Results of the skewness of all independent variables and dependent variable of six separate analyses were between negative 3 and positive 3, indicating reasonably normal distribution. Multiple regressions were then conducted separately.

*Figure 14.* Scatterplot of standardized residual and standardized predicted Child Domain difference scores.
Figure 15. Scatterplot of standardized residual and standardized predicted Parent Domain difference scores.

Figure 16. Scatterplot of standardized residual and standardized predicted Total Stress difference scores.
As shown in Table 20, results from the multiple regression analysis indicated a statistically significant prediction between the nine collected predictors and Internalizing Problems score change, $F(9, 71) = 2.131$, $p = .038$. Results also indicated $R$ of .461, $R^2$ of .213, and adjusted $R^2$ of .113 in the full model. The nine collected predictors all together demonstrated a moderate effect size and were able to account for 11% of the variance of the estimated Internalizing problem score reduction.

Table 20

Regression Summary Table for Internalizing Problem Difference Score ($n = 81$)

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>$p$</th>
<th>$R^2$</th>
<th>Adj. $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1755.539</td>
<td>9</td>
<td>195.060</td>
<td>2.131</td>
<td>.038*</td>
<td>.213</td>
<td>.113</td>
</tr>
<tr>
<td>Residual</td>
<td>6499.523</td>
<td>71</td>
<td>91.543</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8255.062</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Predictors were (constant), session of play therapy, session of parent consultation, termination, and 6 presenting concerns (abuse-related, mood-related, rule-breaking, academic, family, and other concerns).

Table 21 presents each predictor’s unstandardized coefficients ($b$), standardized coefficients ($\beta$), structure coefficients ($r_s$), and squared structure coefficient ($r_s^2$) on the dependent variable of Internalizing difference score. Results demonstrated that family relationship concerns ($\beta = -.265$, $r_s^2 = .311$) and termination variables ($\beta = -.247$, $r_s^2 = .209$) had strong prediction in the full model. That is, family relationship concerns and termination were strong contributors and could explain 31% and 21% of the variance of the estimated Internalizing score reduction, respectively. Additionally, results indicated that other behavioral concerns ($\beta = -.254$, $r_s^2 = .147$) and academic concerns variables...
(β = -.245, \( r_s^2 = .119 \)) had moderate prediction as well. Namely, other behavioral concerns and academic concerns could explain 15% and 12% of the variance of the estimated Internalizing score reduction, respectively.

Table 21

_Coefficients: b, Beta Weights, Structure Coefficients, and Structure Coefficient Squares on Dependent Variable of Internalizing Problem Difference Score_

<table>
<thead>
<tr>
<th>Variable</th>
<th>( b )</th>
<th>( \beta )</th>
<th>( r_s )</th>
<th>( r_s^2 )</th>
<th>( t )</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.467</td>
<td>.721</td>
<td>.473</td>
<td>.473</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of PT sessions</td>
<td>.120</td>
<td>.207</td>
<td>-0.069</td>
<td>0.005</td>
<td>1.277</td>
<td>.206</td>
</tr>
<tr>
<td># of PC sessions</td>
<td>-.518</td>
<td>-.230</td>
<td>-0.171</td>
<td>0.029</td>
<td>-1.403</td>
<td>.165</td>
</tr>
<tr>
<td>Termination</td>
<td>-5.035</td>
<td>-.247</td>
<td>-0.458</td>
<td>0.209</td>
<td>-2.134</td>
<td>.036*</td>
</tr>
<tr>
<td>Abuse-related</td>
<td>-.493</td>
<td>-.020</td>
<td>-0.061</td>
<td>0.004</td>
<td>-.174</td>
<td>.862</td>
</tr>
<tr>
<td>Mood-related</td>
<td>-.426</td>
<td>-.016</td>
<td>-0.009</td>
<td>0.000</td>
<td>-.141</td>
<td>.888</td>
</tr>
<tr>
<td>Rule-Breaking</td>
<td>1.176</td>
<td>.038</td>
<td>-0.206</td>
<td>0.042</td>
<td>.333</td>
<td>.740</td>
</tr>
<tr>
<td>Academic</td>
<td>5.042</td>
<td>.245</td>
<td>0.345</td>
<td>0.119</td>
<td>2.180</td>
<td>.033*</td>
</tr>
<tr>
<td>Family</td>
<td>-6.005</td>
<td>-.265</td>
<td>-0.557</td>
<td>0.311</td>
<td>-2.408</td>
<td>.019*</td>
</tr>
<tr>
<td>Other Concern</td>
<td>-5.625</td>
<td>-.254</td>
<td>-0.384</td>
<td>0.147</td>
<td>-2.221</td>
<td>.030*</td>
</tr>
</tbody>
</table>

* \( p < .05 \).

Results of structure coefficients indicated that family relationship concerns (\( r_s = -.557 \)) and other behavior concerns (\( r_s = -.384 \)) had a negative relationship, whereas academic problems (\( r_s = .345 \)) had a positive relationship with Internalizing difference scores. In this study, the difference scores were computed as posttest score minus pretest score. A reduction of scores (i.e., a negative score) on the dependent variables
demonstrated positive progress after receiving play therapy, while an increase in scores (positive score) demonstrated a move toward clinical scores. Therefore, participants who identified as having family relationship concerns and other behavioral concerns, as well as those who did not have academic problems prior receiving play therapy, could predict a greater decrease in internalizing behavior problem after receiving individual CCPT. Further, termination variable ($r_s = -.458$) indicated a negative moderate relationship with estimated Internalizing Problems reduction. That is, participants who completed play therapy treatment could predict greater decrease in Internalizing Problems after receiving individual CCPT.

**Externalizing Problem**

As shown in Table 22, findings from the multiple regression analysis revealed a statistically significant prediction between the nine collected variables and Externalizing Problems difference score, $F(9, 71) = 2.072, p = .043$. Results also indicated $R$ of .456, $R^2$ of .208, and adjusted $R^2$ of .108 in the full model. The nine collected predictors all together demonstrated a moderate effect size and were able to account for 11% of the variance of the estimated Externalizing Problems score reduction.

Table 22

*Regression Summary Table for Externalizing Problem Difference Score (n = 81)*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$</th>
<th>$R^2$</th>
<th>Adj. $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1475.406</td>
<td>9</td>
<td>163.934</td>
<td>2.072</td>
<td>.043*</td>
<td>.208</td>
<td>.108</td>
</tr>
<tr>
<td>Residual</td>
<td>5616.150</td>
<td>71</td>
<td>79.101</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7091.556</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Predictors were (constant), session of play therapy, session of parent consultation, termination, and 6 presenting concerns (abuse-related, mood-related, rule-breaking, academic, family, and other concerns).*

* $p < .05$. 

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Table 23 presents each predictor’s unstandardized coefficients (b), standardized coefficients (β), structure coefficients (rs), and squared structure coefficient (rs²) on the dependent variable of Externalizing difference score. Results demonstrated that termination (β = -.165, rs² = .214) and family relationship concerns variables (β = -.137, rs² = .318) had strong prediction in the full model. Results indicated that other behavioral concerns (β = -.322, rs² = .151) and academic concerns (β = .056, rs² = .122) had moderate prediction as well. That is, family relationship concerns (rs² = .318), termination (rs² = .214), other behavioral concerns (rs² = .151), and academic concerns (rs² = .122) could explain 32%, 21%, 15%, and 12% of the variance for estimated Externalizing Problems reduction, respectively.

Table 23

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>β</th>
<th>rs</th>
<th>rs²</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.034</td>
<td>.011</td>
<td>.991</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td>.020</td>
<td>.038</td>
<td>-0.070</td>
<td>0.005</td>
<td>.234</td>
<td>.816</td>
</tr>
<tr>
<td>PC</td>
<td>-.423</td>
<td>-.202</td>
<td>-0.173</td>
<td>0.030</td>
<td>-1.232</td>
<td>.222</td>
</tr>
<tr>
<td>Termination</td>
<td>-3.115</td>
<td>-.165</td>
<td>-0.463</td>
<td>0.214</td>
<td>-1.421</td>
<td>.160</td>
</tr>
<tr>
<td>Abuse-related</td>
<td>-1.581</td>
<td>-.069</td>
<td>-0.061</td>
<td>0.004</td>
<td>-.599</td>
<td>.551</td>
</tr>
<tr>
<td>Mood-related</td>
<td>3.604</td>
<td>.150</td>
<td>-0.009</td>
<td>0.000</td>
<td>1.286</td>
<td>.202</td>
</tr>
<tr>
<td>Rule-Breaking</td>
<td>-1.820</td>
<td>-.064</td>
<td>-0.208</td>
<td>0.043</td>
<td>-.555</td>
<td>.581</td>
</tr>
<tr>
<td>Academic</td>
<td>1.065</td>
<td>.056</td>
<td>0.349</td>
<td>0.122</td>
<td>.496</td>
<td>.622</td>
</tr>
<tr>
<td>Family</td>
<td>-2.876</td>
<td>-.137</td>
<td>-0.564</td>
<td>0.318</td>
<td>-1.241</td>
<td>.219</td>
</tr>
<tr>
<td>Other Concern</td>
<td>-6.590</td>
<td>-.322</td>
<td>-0.388</td>
<td>0.151</td>
<td>-2.799</td>
<td>.007*</td>
</tr>
</tbody>
</table>

* p < .05.
As for the presenting concern variables, family relationship concerns \( (r_s = -0.564) \) and other behavioral concerns \( (r_s = -0.388) \) indicated negative moderate relationships with the estimated Externalizing difference score, whereas academic problems \( (r_s = 0.349) \) indicated a positive moderate relationship. That is, participants who identified as having family relationship concerns and other behavioral concerns as well as those who did not have academic problems at the initial time of treatment were more likely to have greater decrease in Externalizing Problems after receiving individual CCPT. Further, termination variable \( (r_s = -0.463) \) indicated a negative moderate relationship with estimated Externalizing Problems score reduction. That is, participants who completed play therapy treatment could predict a greater decrease in Externalizing Problems after receiving individual CCPT.

**Total Problems**

As presented in Table 24, results from the multiple regression analysis did not reveal a statistically significant prediction between the nine collected predictors and Total Problem difference score, \( F(9, 68) = 1.941, p = .06 \). Results revealed \( R \) of 0.452, \( R^2 \) of 0.204, and adjusted \( R^2 \) of 0.099 in the full model. That is, the nine collected predictors all together demonstrated a moderate effect size (Adj. \( R^2 = 0.099 \)) and were able to account for 10% of the variance of estimated Total Problems reduction. However, because statistical significance was not found, no further analysis was conducted for Total Problems difference scores.
Table 24

*Regression Summary Table for Total Problem Difference Score (n = 78)*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>$R^2$</th>
<th>Adj. $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1063.013</td>
<td>9</td>
<td>118.113</td>
<td>1.941</td>
<td>.06</td>
<td>.204</td>
<td>.099</td>
</tr>
<tr>
<td>Residual</td>
<td>4136.935</td>
<td>68</td>
<td>60.837</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5199.949</td>
<td>77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Predictors were (constant), session of play therapy, session of parent consultation, termination, and 6 presenting concerns (abuse-related, mood-related, rule-breaking, academic, family, and other concerns).

*Child Domain*

As displayed in Table 25, results from the multiple regression analysis indicated a statistically significant prediction between the nine collected predictors and Child Domain difference score, $F(9, 80) = 3.621$, $p = .001$. Results demonstrated $R$ of .538, $R^2$ of .289, and adjusted $R^2$ of .210 in the full model. The nine collected predictors all together demonstrated a large effect size (Adj. $R^2$=0.210) and were able to account for 21% of the variance of the estimated Child Domain score reduction.

Table 25

*Regression Summary Table for Child Domain Difference Score (n = 90)*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>$R^2$</th>
<th>Adj. $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>8993.638</td>
<td>9</td>
<td>999.293</td>
<td>3.621</td>
<td>.001*</td>
<td>.289</td>
<td>.210</td>
</tr>
<tr>
<td>Residual</td>
<td>22075.351</td>
<td>80</td>
<td>275.942</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>31068.989</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Predictors were (constant), session of play therapy, session of parent consultation, termination, and 6 presenting concerns (abuse-related, mood-related, rule-breaking, academic, family, and other concerns).

* $p < .05.$
Table 26 displays each predictor’s unstandardized coefficients (b), standardized coefficients (β), structure coefficients (rs), and squared structure coefficient (rs²) on the dependent variable of Child Domain difference score. Results revealed that the termination variable (β = -.382, rs² = .363) was the strongest predictor in the full model. Namely, the termination variable could explain 36% of the variance of the estimated decrease in parent-child relationship stress contributed by child characteristics. In addition, the number of play therapy sessions (β = .149, rs² = .194), number of parent consultation sessions (β = .159, rs² = .197), and mood-related concerns (β = .225, rs² = .164) also demonstrated moderate prediction in the full model.

Table 26

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>β</th>
<th>rs</th>
<th>rs²</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-6.939</td>
<td>-1.281</td>
<td>.204</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td>.144</td>
<td>.149</td>
<td>0.441</td>
<td>0.194</td>
<td>.973</td>
<td>.333</td>
</tr>
<tr>
<td>PC</td>
<td>.493</td>
<td>.159</td>
<td>0.444</td>
<td>0.197</td>
<td>1.060</td>
<td>.292</td>
</tr>
<tr>
<td>Termination</td>
<td>-14.241</td>
<td>-.382</td>
<td>-0.602</td>
<td>0.363</td>
<td>-3.774</td>
<td>&lt;.001*</td>
</tr>
<tr>
<td>Abuse-related</td>
<td>-6.050</td>
<td>-.124</td>
<td>-0.219</td>
<td>0.048</td>
<td>-1.242</td>
<td>.218</td>
</tr>
<tr>
<td>Mood-related</td>
<td>10.687</td>
<td>.225</td>
<td>0.405</td>
<td>0.164</td>
<td>2.196</td>
<td>.031*</td>
</tr>
<tr>
<td>Rule-Breaking</td>
<td>-1.666</td>
<td>-.028</td>
<td>-0.197</td>
<td>0.039</td>
<td>-.280</td>
<td>.780</td>
</tr>
<tr>
<td>Academic</td>
<td>-5.918</td>
<td>-.157</td>
<td>-0.232</td>
<td>0.054</td>
<td>-1.576</td>
<td>.119</td>
</tr>
<tr>
<td>Family</td>
<td>-3.454</td>
<td>-.082</td>
<td>-0.141</td>
<td>0.020</td>
<td>-0.851</td>
<td>.397</td>
</tr>
<tr>
<td>Other Concern</td>
<td>-2.462</td>
<td>-.061</td>
<td>0.000</td>
<td>0.000</td>
<td>-.602</td>
<td>.549</td>
</tr>
</tbody>
</table>

*p < .05.
It was noticed that the number of play therapy sessions \((r_s = .441\)\), number of parent consultation sessions \((r_s = .444\)\), and mood-related concerns \((r_s = .405\)\) indicated positive moderate relationships with estimated overall parent-child relationship stress contributed by child characteristics. In other words, participants who had a greater number of play therapy sessions and parent consultations predicted an increase in parent-child relationship stress contributed by child characteristics. Also, not having mood-related presenting concerns predicted a greater decrease in the estimated Child Domain difference score.

**Parent Domain**

As presented in Table 27, findings from the multiple regression analysis revealed a statistically significant prediction between the nine collected predictors and Parent Domain difference score, \(F(9, 79) = 1.94, p = .038\). Additionally, results indicated \(R\) of .441, \(R^2\) of .194, and adjusted \(R^2\) of .103 in the full model. The nine collected predictors all together demonstrated a moderate effect size (Adj. \(R^2 = 0.103\) and were able to account for 10% of the variance of the estimated Parent Domain score reduction.

Table 27

**Regression Summary Table for Parent Domain Difference Score** (n = 89)

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>(R^2)</th>
<th>Adj. (R^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5207.971</td>
<td>9</td>
<td>578.663</td>
<td>2.117</td>
<td>.038*</td>
<td>.194</td>
<td>.103</td>
</tr>
<tr>
<td>Residual</td>
<td>21593.265</td>
<td>79</td>
<td>273.332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26801.236</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Predictors were (constant), session of play therapy, session of parent consultation, termination, and 6 presenting concerns (abuse-related, mood-related, rule-breaking, academic, family, and other concerns).

* * \(p < .05\).
Table 28 presents each predictor’s unstandardized coefficients ($b$), standardized coefficients ($\beta$), structure coefficients ($rs$), and squared structure coefficient ($rs^2$) on the dependent variable of Parent Domain difference score. Results demonstrated that family relationship concerns ($\beta = -.274$, $rs^2 = .444$) was the strongest predictor in the full model. Termination ($\beta = -.225$, $rs^2 = .116$) and other behavioral concerns ($\beta = -.256$, $rs^2 = .210$) also indicated moderate prediction. That is, the family relationship concerns variable itself could explain 44% of the variance for parent characteristics contributing to overall estimated parent-child relationship stress reduction. The termination variable and other behavioral concerns could explain 16% and 21% of the variance of estimated Parent Domain score change as well. However, low beta weight and squared structure coefficient of number of play therapy sessions ($\beta = 0.101$, $rs^2 = .003$) and number of parent consultation sessions ($\beta = .071$, $rs^2 = .0035$) indicated a lack of importance for the prediction.

Further, the termination variable ($rs = -.340$), family relationship concerns ($rs = -.667$), and other behavioral concerns ($rs = -.458$) all indicated negative moderate relationships with the estimated parent-child relationship stress score contributed by parent characteristics. That is, participants who completed play therapy treatment and those who identified as having family relationship concerns and other behavioral concerns could predict a greater decrease for parent characteristics contributing to overall parent-child relationship stress after receiving individual CCPT.
Table 28

Coefficients: b, Beta Weights, Structure Coefficients, and Structure Coefficient Squares on Dependent Variable of Parent Domain Difference Score

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>β</th>
<th>rs</th>
<th>$r_s^2$</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>8.098</td>
<td>1.490</td>
<td>.140</td>
<td></td>
<td></td>
<td>.140</td>
</tr>
<tr>
<td>PT</td>
<td>.096</td>
<td>.101</td>
<td>0.172</td>
<td>0.030</td>
<td>.616</td>
<td>.539</td>
</tr>
<tr>
<td>PC</td>
<td>.206</td>
<td>.071</td>
<td>0.188</td>
<td>0.035</td>
<td>.434</td>
<td>.666</td>
</tr>
<tr>
<td>Termination</td>
<td>-7.825</td>
<td>-.225</td>
<td>-0.340</td>
<td>0.116</td>
<td>-2.079</td>
<td>.041*</td>
</tr>
<tr>
<td>Abuse-related</td>
<td>1.701</td>
<td>.039</td>
<td>-0.111</td>
<td>0.012</td>
<td>.355</td>
<td>.723</td>
</tr>
<tr>
<td>Mood-related</td>
<td>-3.058</td>
<td>-.069</td>
<td>-0.138</td>
<td>0.019</td>
<td>-.627</td>
<td>.533</td>
</tr>
<tr>
<td>Rule-Breaking</td>
<td>1.109</td>
<td>.019</td>
<td>-0.109</td>
<td>0.012</td>
<td>.179</td>
<td>.858</td>
</tr>
<tr>
<td>Academic</td>
<td>5.126</td>
<td>.146</td>
<td>0.202</td>
<td>0.041</td>
<td>1.363</td>
<td>.177</td>
</tr>
<tr>
<td>Family</td>
<td>-10.866</td>
<td>-.274</td>
<td>-0.667</td>
<td>0.444</td>
<td>-2.641</td>
<td>.010*</td>
</tr>
<tr>
<td>Other Concern</td>
<td>-9.655</td>
<td>-.256</td>
<td>-0.458</td>
<td>0.210</td>
<td>-2.376</td>
<td>.020*</td>
</tr>
</tbody>
</table>

*p < .05.

Total Stress

As shown in Table 29, results from the multiple regression analysis indicated a statistically significant prediction between the nine collected predictors and Total Stress difference score, $F(9, 79) = 3.084$, $p = .003$. Results also revealed $R$ of .51, $R^2$ of .26, and adjusted $R^2$ of .176 in the full model. The nine collected predictors all together indicated a large effect size (Adj. $R^2=0.176$) and were able to account for 18% of the variance of estimated overall parent-child relationship stress reduction.
Table 29

Regression Summary Table for Total Stress Difference Score (n = 89)

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>R²</th>
<th>Adj. R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>21263.018</td>
<td>9</td>
<td>2362.558</td>
<td>3.084</td>
<td>.003*</td>
<td>.26</td>
<td>.176</td>
</tr>
<tr>
<td>Residual</td>
<td>60518.779</td>
<td>79</td>
<td>766.060</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>81781.798</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Predictors were (constant), session of play therapy, session of parent consultation, termination, and 6 presenting concerns (abuse-related, mood-related, rule-breaking, academic, family, and other concerns).
* p < .05.

Table 30 shows each predictor’s unstandardized coefficients (b), standardized coefficients (β), structure coefficients (rs), and squared structure coefficient (rs²) on the dependent variable of Total Stress difference score. Results demonstrated that the number of play therapy sessions (β = .375, rs² = .344) and termination (β = -.318, rs² = .212) were strong contributors in the full model. That is, the number of play therapy session (rs² = .344) and the termination variable (rs² = .212) could explain 34% and 21% of the variance of estimated overall parent-child relationship stress reduction. Additionally, the number of parent consultation sessions (β = -.026, rs² = .189) and family relationship concerns variables (β = -.187, rs² = .160) served as moderate predictors as well.

It was noted that the number of play therapy sessions (rs = .586) and parent consultations (rs = .435) indicated positive moderate relationships with estimated overall parent-child relationship stress score change. In other words, participants who had a greater number of play therapy sessions and parent consultations predicted an increase in parent-child relationship stress.
Termination variable \((r_s = -.416)\) and family relationship concerns \((r_s = -.40)\) indicated negative moderate relationships with estimated parent-child relationship stress score change. That is, participants who completed play therapy treatment and who identified as having family relationship concerns could predict a greater decrease in overall parent-child relationship stress after receiving individual CCPT.

Table 30

*Coefficients: b, Beta Weights, Structure Coefficients, and Structure Coefficient Squares on Dependent Variable of Total Stress Difference Score*

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>β</th>
<th>(r_s)</th>
<th>(r_s^2)</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-4.324</td>
<td>-.473</td>
<td>.637</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td>.613</td>
<td>.375</td>
<td>0.586</td>
<td>0.344</td>
<td>2.318</td>
<td>.023*</td>
</tr>
<tr>
<td>PC</td>
<td>-.132</td>
<td>-.026</td>
<td>0.435</td>
<td>0.189</td>
<td>-.164</td>
<td>.870</td>
</tr>
<tr>
<td>Termination</td>
<td>-19.365</td>
<td>-.318</td>
<td>-0.461</td>
<td>0.212</td>
<td>-3.072</td>
<td>.003*</td>
</tr>
<tr>
<td>Abuse-related</td>
<td>-8.176</td>
<td>-.104</td>
<td>-0.243</td>
<td>0.059</td>
<td>-1.003</td>
<td>.319</td>
</tr>
<tr>
<td>Mood-related</td>
<td>8.365</td>
<td>.108</td>
<td>0.278</td>
<td>0.078</td>
<td>1.029</td>
<td>.306</td>
</tr>
<tr>
<td>Rule-Breaking</td>
<td>-2.548</td>
<td>-.027</td>
<td>-0.196</td>
<td>0.038</td>
<td>-.256</td>
<td>.799</td>
</tr>
<tr>
<td>Academic</td>
<td>2.702</td>
<td>.044</td>
<td>0.020</td>
<td>0.000</td>
<td>.425</td>
<td>.672</td>
</tr>
<tr>
<td>Family</td>
<td>-12.807</td>
<td>-.187</td>
<td>-0.400</td>
<td>0.160</td>
<td>-1.887</td>
<td>.063</td>
</tr>
<tr>
<td>Other Concern</td>
<td>-8.501</td>
<td>-.128</td>
<td>-0.141</td>
<td>0.020</td>
<td>-1.229</td>
<td>.223</td>
</tr>
</tbody>
</table>

* *p < .05.*

Table 31 outlines the results of the six multiple regression analyses, including the contributors to each dependent variable.
Table 31

**Contributors for Multiple Regression Analyses on Internalizing, Externalizing, Total Problems, Child Domain, Parent Domain, and Total Stress**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>( p )</th>
<th>Contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalizing</td>
<td>.038*</td>
<td>Decrease: Termination; Family relationship concerns; Other behavioral concerns</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase: Academic concerns</td>
</tr>
<tr>
<td>Externalizing</td>
<td>.043*</td>
<td>Decrease: Termination; Family relationship concerns; Other behavioral concerns</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase: Academic concerns</td>
</tr>
<tr>
<td>Total Problems</td>
<td>.060</td>
<td>No statistically significant prediction</td>
</tr>
<tr>
<td>Child Domain</td>
<td>.001*</td>
<td>Decrease: Termination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase: Number of play therapy session; Number of parent consultation session; Mood-related concerns</td>
</tr>
<tr>
<td>Parent Domain</td>
<td>.038*</td>
<td>Decrease: Termination; Family relationship concerns; Other behavioral concerns</td>
</tr>
<tr>
<td>Total Stress</td>
<td>.003*</td>
<td>Decrease: Termination; Family relationship concerns;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase: Number of play therapy session; Number of parent consultation session;</td>
</tr>
</tbody>
</table>

* \( p < .05 \).
Scatter Plots

Unexpectedly, the number of play therapy sessions and the number of parent consultation sessions predicted an increase in parent-child relationship stress contributed by child characteristics and overall stress. According to LeBlanc and Ritchie (2001), two significant predictors of play therapy outcome are (a) the length of play therapy and (b) parent involvement. Results from meta-analytic analyses demonstrated a quadratic trend of the number of play therapy session and effect sizes. That is, the optimal effect sizes are obtained approximately following the completion of 30 to 40 play therapy sessions (Bratton et al., 2005; LeBlanc & Ritchie, 2001). Casey and Berman (1985) found a small negative relationship between the length of treatment and effect sizes; they considered the length of treatment and efficacy as a linear relationship.

Because this study used a linear relationship prediction instead of curvilinear relationship, the actual relationship between the number of play therapy sessions and difference scores may not be reflected by the number of play therapy sessions in isolation. This was also true for the number of parent consultation sessions. To better represent the relationship between the number of play therapy sessions, and parent consultations with difference scores, scatterplots were created. Figure 17 and 18 present the scatterplots between the number of play therapy sessions with Child Domain and Total Stress difference scores. Figure 19 and 20 show the scatterplots between the number of parent consultation sessions with Child Domain and Total Stress difference scores. As can be seen in all four scatterplots, an observed trend is evident. In Figure 17 and 18, number of play therapy sessions is related to decrease in PSI Child Domain and Total Stress scores up to optimal effects at 35 to 40 sessions.
Over 40 sessions begins a trend of increasing Child Domain and Total Stress scores. This same pattern is found in Figure 19 and 20 where 8-12 parent consultation sessions reach optimal effects.

Figure 17. Scatterplot of the number of play therapy sessions and Child Domain difference scores.
Figure 18. Scatterplot of the number of play therapy sessions and Total Stress difference scores.

Figure 19. Scatterplot of the number of parent consultation sessions and Child Domain difference scores.
Research Question 5

Research Question 5: What were the characteristics (i.e., age, gender, ethnicity, receiving special education, presenting concerns, current household living status, household income, parent education level, parent marital status, and length in play therapy) related to premature termination of play therapy?

In order to determine whether the participant prematurely terminated play therapy, the researcher read each child client treatment summary and client visit summary in the archival files. The criteria for premature termination included (a) participant had three consecutive no-shows (i.e., the play therapist indicated on the client visit summary that client did not call to cancel a session for 3 consecutive weeks), (b) the play therapist recommended continuing play therapy, but participant did not return for treatment after summer or winter break, (c) parent/guardian indicated no further interest in treatment, (d)
participant or parent had schedule conflict, (e) parent/guardian stated seeking services somewhere else, (f) participant moved, or (g) other (such as financial concerns, lack of transportation, parent’s physical health, or custody battle). Upon one of these criteria, the file was then closed by play therapists.

Of the 254 participants who received university-based play therapy treatment, 147 did not complete play therapy treatment overall. The dropout rate in this study was 57.9%. Among the 147 participants who did not complete play therapy, participants’ premature termination reasons were as follows: 35 (23.8%) participants had three consecutive no-shows, 28 (19.0%) did not return for treatment after summer or winter break, 32 (21.8%) indicated no longer interested in treatment, 12 (8.2%) had schedule conflicts, 21 (14.3%) sought services somewhere else, 9 (6.1%) moved somewhere else, and 10 (6.8%) had other concerns (such as financial concerns, lack of transportation, parent’s physical health, or custody battle).

Of the 254 participants who received university-based play therapy treatment, 198 received only individual child-centered play therapy. Of the 198 participants, 72 (36.4%) completed the treatment, whereas 126 (63.6%) did not complete the treatment. The dropout rate for participants who only received individual child-centered play therapy was 63.6% in this study. Again, participants’ premature termination reasons were as follows: 30 (23.8%) participants had three consecutive no-shows, 26 (20.6%) did not return for treatment after summer or winter break, 28 (22.2%) indicated no longer interested in treatment, 9 (7.1%) had schedule conflicts, 15 (11.9%) sought services somewhere else, 9 (7.1%) moved somewhere else, and 9 (7.1%) had other
concerns (such as financial concerns, lack of transportation, parent’s physical health, or custody battle).

For the purpose of this study, only participants who received individual child-centered play therapy were used for data analyses. Of the 198 participants, 180 participants completed data on the pre-CBCL and 185 completed data on the pre-PSI. Additionally, of the 198 participants, 82 participants completed post-data on the CBCL and 92 participants completed post-data on the PSI and were filled out by the same rater as the pre-CBCL and the pre-PSI.

*Independent Samples t-test*

The *t*-test is utilized to determine whether the difference between means of two groups is due to the independent variable or simple chance. The null hypothesis indicates that the experimental manipulation has no effect; thus, the means of the two groups are equal. Data analyses are conducted to determine whether the independent variable manipulation resulted in significant difference in mean scores between the two groups on the dependent variable. Because the *t*-test is an inferential statistic, it allows the researchers to infer a causal relationship between the independent and dependent variables (Tabachnick & Fidell, 2007).

Independent samples *t*-test is usually conducted for a between-subjects design. Before interpreting the results, the researchers need to check Levene’s test for equality of variances in order to determine whether assumptions of the *t*-test are met. If the variances for the two groups are not equal (i.e., Sig. < .05), the assumption of two groups’ variances being equal is violated. Therefore, a statistical adjustment needed to be made by use of equal variances not assumed in the evaluation of the *t* statistic.
Evaluation of the $t$ statistic is based on an adjusted degree of freedom that takes into account the dissimilar variances in the two groups (Tabachnick & Fidell, 2007). When conducting an independent samples $t$-test in the following section, the value of Levene’s test for equality of variances is greater than .05 unless otherwise specified.

**Demographic Information**

Of the 72 participants who completed play therapy treatment, 42 were boys (58.3%) and 30 were girls (41.7%). Ages ranged from 3 to 10, with a mean of 6 ($M = 5.92; SD = 2.154$) years old and a median of 6 years. Each child’s age when he/she received play therapy was as follows: 3-year-old ($n = 14; 19.4%$), 4-year-old ($n = 10; 13.9%$), 5-year-old ($n = 7; 9.7%$), 6-year-old ($n = 9; 12.5%$), 7-year-old ($n = 13; 18.1%$), 8-year-old ($n = 11; 15.3%$), 9-year-old ($n = 4; 5.6%$), 10-year-old ($n = 4; 5.6%$). Of the 72 participants, 12 (16.7%) participants reported receiving special education services and 60 (83.3%) did not. Each participant’s parent/guardian reported child ethnicity as follows: African-American ($n = 2; 2.8%$), Asian ($n = 3; 4.2%$), Caucasian ($n = 51; 70.8%$), Hispanic/Latin ($n = 5; 6.9%$), Biracial ($n = 9; 12.5%$), Other ($n = 1; 1.4%$), with missing ethnicity data on 1.

Of the 126 participants who did not complete play therapy treatment, 78 were boys (61.9%) and 48 were girls (38.1%). Ages ranged from 3 to 10, with a mean of 6 ($M = 6.01; SD = 2.026$) years old and a median of 6 years. Each child’s age when he/she received play therapy was as follows: 3-year-old ($n = 14; 11.1%$), 4-year-old ($n = 22; 17.5%$), 5-year-old ($n = 20; 15.9%$), 6-year-old ($n = 20; 15.9%$), 7-year-old ($n = 16; 12.7%$), 8-year-old ($n = 17; 13.5%$), 9-year-old ($n = 11; 8.7%$), 10-year-old ($n = 6; 4.8%$). Of the 126 participants, 25 (19.8%) participants reported receiving special education services.
services and 98 (77.8%) did not, with missing data on 3. Each participant’s parent/guardian reported child ethnicity as follows: African-American \( (n = 6; 4.8\%) \), Asian \( (n = 3; 2.4\%) \), Caucasian \( (n = 89; 71.8\%) \), Hispanic/Latin \( (n = 13; 10.5\%) \), Native American \( (n = 2; 1.6\%) \), Biracial \( (n = 11; 8.9\%) \), with missing ethnicity data on 2.

Results of the crosstabs on completion and non-completion groups indicated no statistically significant difference on gender \( \chi^2(1) = .245, p = .621 \), no statistically significant difference on ethnicity \( \chi^2(6) = 5.037, p = .539 \), no statistically significant difference on special education \( \chi^2(1) = .395, p = .529 \), no statistically significant difference on household income \( \chi^2(4) = 6.284, p = .179 \), no statistically significant difference on mother’s education \( \chi^2(5) = 2.233, p = .816 \), no statistically significant difference on father’s education \( \chi^2(5) = 8.054, p = .153 \), and no statistically significant difference on current living household \( \chi^2(7) = 9.699, p = .206 \). In addition, results of the independent samples \( t \)-test revealed no statistically significant difference on age, \( t(196) = -.298, p = .766 \). Therefore, the participants’ demographic information between completion and non-completion groups was not statistically significantly different.

**Play Therapy and Parent Consultation Session**

*Completion group.* Total individual CCPT sessions on the completion group ranged from 3 to 106, with a mean of 27.19 \( (SD = 19.7) \) and a median of 21.5. Parents or guardians received parent consultation sessions ranging from 0 to 23, with a mean of 6.28 \( (SD = 5.03) \) and a median of 5.

*Non-completion group.* Total individual CCPT sessions on the non-completion group ranged from 1 to 114, with a mean of 13.67 \( (SD = 17.31) \) and a median of 8.5. Parents or guardians received parent consultation sessions ranging from 0 to 43, with a
mean of 3.45 times ($SD = 5.59$) and a median of 2. Table 32 presents descriptive statistics for play therapy and parent consultation sessions on completion and non-completion groups.

Table 32

*Descriptive Statistics for Play Therapy and Parent Consultation Sessions on Completion and Non-Completion Groups*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Completion group ($N = 72$)</th>
<th>Non-completion group ($N = 126$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>PT</td>
<td>27.19</td>
<td>19.70</td>
</tr>
<tr>
<td>PC</td>
<td>6.28</td>
<td>5.03</td>
</tr>
</tbody>
</table>

*Note.* PT = Play therapy; PC = Parent consultation.

Table 33 shows the results of the independent samples $t$-test on the number of play therapy sessions and parent consultations.

Table 33

*Independent Samples $t$-test on the Number of Play Therapy Sessions and Parent Consultations*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$t$</th>
<th>$df$</th>
<th>$p$</th>
<th>$\eta^2$</th>
<th>MD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Play Therapy Sessions</td>
<td>4.851</td>
<td>132.737</td>
<td>&lt;.001*</td>
<td>.11</td>
<td>13.52</td>
</tr>
<tr>
<td>Number of Parent Consultation Sessions</td>
<td>3.544</td>
<td>196</td>
<td>&lt;.001*</td>
<td>.06</td>
<td>2.83</td>
</tr>
</tbody>
</table>

*Note.* MD = Mean difference (i.e., completion group – non-completion group).
* $p < .05$. 
**Play therapy sessions.** The results of Levene’s test for equality of variances on play therapy sessions, $p = .006$, indicated a statistically significant difference between completion and non-completion groups. Thus, the assumption that the two groups’ variances on play therapy sessions are equal was violated. The value of equal variances not assumed then was used to determine the $t$ value. Results of independent samples $t$-test demonstrated a statistically significant difference in play therapy sessions between completion and non-completion groups, $t(132.737) = 4.85$, $p < .001$ ($\eta^2 = .11$). The mean difference of play therapy sessions between the two groups was 13.52. That is, the average play therapy sessions of the completion group ($M = 27.19$, $SD = 19.70$) was statistically greater than that of the non-completion group ($M = 13.67$, $SD = 17.31$). Based on Cohen’s (1988) guideline, the effect size of .11 indicated a moderate effect.

**Parent consultation sessions.** Results of the independent samples $t$-test indicated a statistically significant difference in parent consultation sessions between completion and non-completion groups, $t(196) = 3.54$, $p < .001$ ($\eta^2 = .06$). The mean difference of parent consultation sessions between the two groups was 2.83. That is, the average number of parent consultation sessions of the completion group ($M = 6.28$, $SD = 5.03$) was statistically greater than that of the non-completion group ($M = 3.45$, $SD = 5.59$). According to Cohen (1988), the effect size indicated a moderate effect.

**Pretreatment Analyses on Child Behavior Checklist (CBCL) Behavioral Groups**

Of the 198 participants who received individual CCPT, only 180 filled out the CBCL at the pretest, with missing data on 18. Of the 180 participants, 67 participants completed play therapy intervention, whereas 113 prematurely terminated play therapy treatment. Of the 180 participants, 91 (50.6%) scored in the Internalizing clinical range,
98 (54.4%) in the Externalizing clinical range, and 104 (57.8%) in the Total Problems clinical range. Of the 67 participants who completed play therapy treatment, 33 (49.3%) scored in the Internalizing clinical range, 31 (46.3%) in the Externalizing clinical range, and 34 (50.7%) in the Total Problems clinical range. Additionally, of the 113 participants who did not complete play therapy treatment, 58 (51.3%) scored in the Internalizing clinical range, 67 (59.3%) in the Externalizing clinical range, and 70 (61.9%) in the Total Problems clinical range. The dropout rates for Internalizing, Externalizing, and Total Problems clinical groups were 64.7%, 68.3%, and 67.3%, respectively. Further, the dropout rates for Internalizing, Externalizing, and Total Problems normal behavior groups were 61.8%, 56.5%, and 43.4%, respectively.

Results of the crosstabs on completion and non-completion groups demonstrated no statistically significant difference between Internalizing clinical and nonclinical groups, \( \chi^2(1) = .072, p = .788 \); no statistically significant difference between Externalizing clinical and non-clinical groups, \( \chi^2(1) = 2.876, p = .090 \); and no statistically significant difference between Total Problems clinical and nonclinical groups, \( \chi^2(1) = 2.163, p = .141 \). Hence, there were no statistically significant differences between completion and non-completion based on the CBCL clinical syndrome and total scores.

Pretreatment Analyses on Parenting Stress Index for Clinical versus Nonclinical Group Child Domain. Of the 198 participants who received individual CCPT, 185 filled out the PSI at the pretest, with the missing data on 13. Results of the crosstabs on Child Domain demonstrated a statistically significant difference between clinical and nonclinical groups and termination, \( \chi^2(1) = 8.286, p = .004 \). Findings revealed that of the 67 participants in the completion group, 25 (37.3%) participants were in the clinical
group, whereas 42 (62.7%) were in the nonclinical group. Additionally, of the 118 dropout participants, 70 (59.8%) participants were in the clinical group, whereas 48 (40.2%) were in the nonclinical group. The drop-out rates for clinical range and nonclinical were 73.7% and 53.3%, respectively.

**Parent Domain.** Findings of the crosstabs on Parent Domain did not demonstrate a statistically significant difference between clinical groups and termination, $\chi^2(1) = 3.778$, $p = .052$. Results revealed that the drop-out rates for clinical range and nonclinical were 80.7% (21 out of 26) and 61.0% (97 out of 159), respectively.

**Total Stress.** Results of the crosstabs on Total Stress indicated a statistically significant difference between clinical groups and termination, $\chi^2(1) = 5.329$, $p = .021$. Results indicated that of the 67 participants in the completion group, 16 (23.9%) participants were in the clinical group, whereas 51 (76.1%) were in the nonclinical group. Of the 118 dropout participants, 48 (40.7%) participants were in the clinical group, whereas 70 (59.3%) were in the nonclinical group. The drop-out rates for clinical and nonclinical were 75% and 57.8%, respectively.

**Life Stress.** Findings of the crosstabs on Total Stress did not reveal a statistically significant relationship between clinical groups and termination, $\chi^2(1) = .371$, $p = .542$. Results revealed that the dropout rates for clinical and nonclinical were 66.3% (53 out of 80) and 61.9% (65 out of 105), respectively. Table 34 summarizes the results of the crosstabs between clinical/nonclinical groups and completion/non-completion groups on the PSI at pretest.
Table 34

*Crosstabs Between Clinical/NonClinical Groups and Completion/Non-Completion Groups on PSI at Pretest*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Chi-Square ($\chi^2$)</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Domain</td>
<td>8.286</td>
<td>1</td>
<td>.004*</td>
</tr>
<tr>
<td>Parent Domain</td>
<td>3.778</td>
<td>1</td>
<td>.052</td>
</tr>
<tr>
<td>Total Stress</td>
<td>5.329</td>
<td>1</td>
<td>.021*</td>
</tr>
<tr>
<td>Life Stress</td>
<td>0.371</td>
<td>1</td>
<td>.542</td>
</tr>
</tbody>
</table>

*p < .05.

*Mean Scores Gain From Pretest to Posttest on CBCL*

For the purpose of investigating the improvement from pretest to posttest on completion and non-completion groups who received individual CCPT play therapy, only instruments filled out by the same rater in pre- and posttest were used for data analyses in the following section. Of the 198 participants who received individual CCPT, 82 participants completed post-data on the CBCL and 92 participants completed post-data on the PSI and were filled out by the same rater. Of the 82 participants who filled out both pre- and post-CBCL, 46 (56%) participants were in the completion group and 36 (44%) were in the non-completion group. Of the 92 participants who filled out both pre- and post-PSI, 49 (53%) participants were in the completion group and 43 (47%) in the non-completion group. To examine the mean scores gain from pretest to posttest, repeated measures ANOVA was conducted for the CBCL and PSI subscales.

As discussed in Research Question 3, a repeated measures ANOVA design allows researcher’s the ability to measure change over time. Kraemer and Theimann
(1989) indicated that a repeated measures design is appropriate for measuring soft data such as psychotherapeutic research characteristics (intersubject and intrasubject variability). Partial eta squared ($\eta^2$) was used to report effect size for repeated measures ANOVA. The guidelines proposed by Cohen (1988) were used for interpreting the eta squared ($\eta^2$) value: .01 = small effect, .06 = moderate effect, and .14 = large effect. Results of the repeated measures ANOVA for the CBCL and PSI are discussed as follows.

**Internalizing Problems.** Results of the repeated measures ANOVA on Internalizing Problem on CBCL demonstrated a statistically significant main effect for time, $F(1, 80) = 10.07, p = .002$ (partial $\eta^2 = .112$), a statistically significant main effect for interaction effect, $F(1, 80) = 5.02, p = .028$ (partial $\eta^2 = .06$), and no statistically significant main effect for termination, $F(1, 80) = .945, p = .334$ (partial $\eta^2 = .012$). Based on Cohen’s (1988) guidelines, the observed effect for time was moderate (partial $\eta^2 = .112$), indicating that play therapy accounted for 11.2% of the variance of Internalizing Problems score change.

Figure 21 presents the main effect for completion and non-completion group differences and the main effect for time, which indicated progress on Internalizing Problems in both groups. Results of the paired-samples correlations on the completion group revealed a significant positive moderate correlation between pre- and post-CBCL Internalizing Problem score, ($r = .70, p < .001$), indicating that participants who scored high on the pretest also tended to score high on the posttest. Additionally, findings of the paired-samples $t$-test demonstrated a statistically significant difference from pretest to posttest on the completion group, $t(45) = 4.50, p < .001$ ($\eta^2 = .31$). The mean
Internalizing Problems score difference in the completion group was 6.61, indicating that the mean Internalizing Problems score after receiving individual CCPT ($M = 50.24$) was significantly lower than the mean before treatment ($M = 56.85$). According to Cohen (1988), the effect for the completion group ($\eta^2 = .31$) was very large.

Results of the paired-samples correlations on the non-completion group also demonstrated a significant positive small relationship between pres and post-CBCL Internalizing Problems score, ($r = .351$, $p = .036$), demonstrating that participants who scored high on the pretest also tended to score high on the posttest. Results of the paired-samples $t$-test did not reveal a statistically significant difference from pretest to posttest on the non-completion group, $t(35) = .563$, $p = .577$ ($\eta^2 = .009$). The mean Internalizing Problems score difference in the non-completion group was 1.14, indicating that the mean Internalizing Problems score after receiving individual CCPT ($M = 55.22$) was not significantly lower than the mean before treatment ($M = 56.36$). Although statistical significance was not found, the non-completion group demonstrated a small effect ($\eta^2 = .009$).
Externalizing Problems. Results of the repeated measures ANOVA on Externalizing Problems on the CBCL demonstrated a statistically significant main effect for time, $F(1, 80) = 13.22, p < .001$ (partial $\eta^2 = .142$), a statistically significant main effect for termination, $F(1, 80) = 4.86, p = .03$ (partial $\eta^2 = .06$), and no statistically significant main effect for interaction effect, $F(1, 80) = 3.94, p = .051$ (partial $\eta^2 = .05$). Based on Cohen’s (1988) guidelines, the observed effect for time was large (partial $\eta^2 = .142$), indicating that play therapy could explain 14.2% of the variance of the Externalizing Problems score change.

Figure 22 displays the main effect for completion and non-completion group differences and the main effect for time, which indicated that progress on Externalizing
Problems in both groups. Results of the paired-samples correlations on the completion group revealed a significant positive moderate correlation between pre- and post-CBCL Externalizing Problems score, \( r = .656, p < .001 \), indicating that participants who scored high on the pretest also tended to score high on the posttest. Additionally, findings of the paired-samples \( t \)-test demonstrated a statistically significant difference from pretest to posttest on the completion group, \( t(45) = 4.53, p < .001 \) \( (\eta^2 = .31) \). The mean Externalizing Problems score difference in the completion group was 6.24, indicating that the mean Externalizing Problems score after receiving individual CCPT \( (M = 51.41) \) was significantly lower than the mean before treatment \( (M = 7.65) \). According to Cohen (1988), the effect for the completion group was very large \( (\eta^2 = .31) \).

Results of the paired-samples correlations on the non-completion group revealed a significant moderate positive relationship between pre- and post-CBCL Externalizing Problems score, \( r = .656, p < .001 \), demonstrating that participants who scored high on the pretest were more likely to score high on the posttest. Results of the paired-samples \( t \)-test did not reveal a statistically significant difference from pretest to posttest on the non-completion group, \( t(35) = 1.03, p = .31 \) \( (\eta^2 = .003) \). The mean Externalizing Problems score difference in the non-completion group was 1.83, indicating that the mean Externalizing Problems score after receiving individual CCPT \( (M = 58.97) \) was not significantly lower than the mean before treatment \( (M = 60.81) \). Although statistical significance was not found, the non-completion group demonstrated a very small effect \( (\eta^2 = .003) \).
Figure 22. Mean CBCL Externalizing Problems scores on completion and non-completion groups from pretest to posttest.

Total Problems. Results of the repeated measures ANOVA on Total Problem on the CBCL revealed a statistically significant main effect for time, $F(1, 80) = 18.81, p < .001$ (partial $\eta^2 = .19$), no statistically significant main effect for termination, $F(1, 80) = 2.77, p = .10$ (partial $\eta^2 = .03$), and no statistically significant main effect for interaction effect, $F(1, 80) = 2.11, p = .15$ (partial $\eta^2 = .03$). Based on Cohen’s (1988) guidelines, the observed effect for time was large (partial $\eta^2 = .19$), indicating that play therapy accounted for 19% of the variance of Total Problem score change.

Figure 23 presents the main effect for completion and non-completion group differences and the main effect for time, which indicated progress on Total Problems in both groups. Results of the paired-samples correlations on the completion group
revealed a significant positive correlation between pre- and post-CBCL Total Problems score, \((r = .68, p < .001)\), indicating that participants who scored high on the pretest also tended to score high on the posttest. Additionally, findings of the paired-samples \(t\)-test demonstrated a statistically significant difference from pretest to posttest on the completion group, \(t(45) = 4.78, p < .001 (\eta^2 = .33)\). The mean Total Problems score difference in the completion group was 6.80, indicating that the mean Total Problems score after receiving individual CCPT \((M = 51.61)\) was significantly lower than the mean before treatment \((M = 58.41)\). According to Cohen (1988), the effect for the completion group was very large \((\eta^2 = .33)\).

Results of the paired-samples correlations on the non-completion group also demonstrated a significant moderate positive relationship between pre- and post-CBCL Total Problems score, \((r = .55, p < .001)\), demonstrating that participants who scored high on the pretest were more likely to score high on the posttest. Results of the paired-samples \(t\)-test did not reveal a statistically significant difference from pretest to posttest on the non-completion group, \(t(35) = 1.748, p = .09 (\eta^2 = .08)\). The mean Total Problem score difference in the non-completion group was 3.39, indicating that the mean Total Problems score after receiving individual CCPT \((M = 57.31)\) was not significantly lower than the mean before treatment \((M = 60.69)\). Although statistical significance was not found, the non-completion group demonstrated a moderate effect \((\eta^2 = .08)\).
Figure 23. Mean CBCL Total Problems scores on completion and non-completion groups from pretest to posttest.

Mean Scores Gain From Pretest to Posttest on PSI

Child Domain. Results of the repeated measures ANOVA on THE PSI Child Domain demonstrated a statistically significant main effect for time, $F(1, 90) = 15.14, p < .001$ (partial $\eta^2 = .144$), a statistically significant main effect for termination, $F(1, 90) = .945, p = .047$ (partial $\eta^2 = .043$), and a statistically significant main effect for interaction effect, $F(1, 90) = 4.02, p = .048$ (partial $\eta^2 = .043$). Based on Cohen’s (1988) guidelines, the observed effect for time was large (partial $\eta^2 = .144$), indicating that play therapy could explain 11.4% of the variance of Child Domain score change.

Figure 24 displays the main effect for completion and non-completion group differences and the main effect for time, which indicated progress on Child Domain in
both groups. Results of the paired-samples correlations on the completion group revealed a significant positive moderate correlation between pre- and post-PSI Child Domain score, \( r = .698, p < .001 \), indicating that participants who scored high on the pretest also tended to score high on the posttest. Further, findings of the paired-samples \( t \)-test demonstrated a statistically significant difference from pretest to posttest on completion group, \( t(48) = 5.287, p < .001 (\eta^2 = .37) \). The mean Child Domain score difference in the completion group was 12.72, indicating that the mean Child Domain score after receiving individual CCPT \( (M = 98.67) \) was significantly lower than the mean before treatment \( (M = 111.39) \). According to Cohen (1988), the effect for the completion group was very large \( (\eta^2 = .37) \).

Results of the paired-samples correlations on the non-completion group also demonstrated a significant positive moderate relationship between pre- and post-PSI Child Domain, \( r = .624, p < .001 \), demonstrating that participants who scored high on the pretest also more likely to score high on the posttest. Results of the paired-samples \( t \)-test did not reveal a statistically significant difference from pretest to posttest on the non-completion group, \( t(42) = 1.10, p = .278 (\eta^2 = .03) \). The mean Child Domain score difference in the non-completion group was 4.07, indicating that the mean Child Domain score after receiving individual CCPT \( (M = 112.37) \) was not significantly lower than the mean before treatment \( (M = 116.44) \). Although statistical significance was not found, the non-completion group demonstrated a small effect \( (\eta^2 = .03) \).
Results of the repeated measures ANOVA on the PSI Parent Domain revealed no statistically significant main effect for time, $F(1, 90) = 1.40$, $p = .24$ (partial $\eta^2 = .015$), no statistically significant main effect for termination, $F(1, 90) = 2.28$, $p = .135$ (partial $\eta^2 = .025$), and no statistically significant main effect for interaction effect, $F(1, 90) = .51$, $p = .48$ (partial $\eta^2 = .006$). Although statistically significant difference was not found, the observed effect for time was small (partial $\eta^2 = .015$), indicating that play therapy could explain 1.5% of the variance of the Parent Domain score change. Because a statistically significant effect for time was not found, no further analysis is needed for Parent Domain.

Figure 24. Mean PSI Child Domain scores on completion and non-completion groups from pretest to posttest.
Total Stress. Findings of the repeated measures ANOVA on PSI Total Stress indicated a statistically significant main effect for time, $F(1, 90) = 9.25, p = .003$ (partial $\eta^2 = .09$), no statistically significant main effect for termination, $F(1, 90) = 3.89, p = .052$ (partial $\eta^2 = .041$), and no statistically significant main effect for interaction effect, $F(1, 90) = 2.65, p = .11$ (partial $\eta^2 = .03$). Based on Cohen’s (1988) guidelines, the observed effect for time was moderate (partial $\eta^2 = .09$), indicating that play therapy accounted for 9% of the variance of Total Stress score change.

Figure 25 presents the main effect for completion and non-completion group differences and the main effect for time, which indicated progress on Total Stress in both groups. Results of the paired-samples correlations on the completion group revealed a significant positive moderate relationship between pre- and post-PSI Total Stress, $(r = .727, p < .001)$, indicating that participants who scored high on the pretest also tended to score high on the posttest. Further, findings of the paired-samples $t$-test demonstrated a statistically significant difference from pretest to posttest on completion group, $t(48) = 3.61, p = .001$ ($\eta^2 = .26$). The mean Total Stress score difference in the completion group was 16.45, indicating that the mean Total Stress score after receiving individual CCPT ($M = 210.59$) was significantly lower than the mean before treatment ($M = 227.04$). According to Cohen (1988), the effect for the completion group was very large ($\eta^2 = .26$).

Results of the paired-samples correlations on the non-completion group also revealed a significant positive moderate relationship between pre- and post-PSI Parent Domain, $(r = .738, p < .001)$, demonstrating that participants who scored high on the pretest also tended to score high on the posttest. Results of the paired-samples $t$-test
did not indicate a statistically significant difference from pretest to posttest on the non-completion group, \( t(42) = .91, p = .37 \) \( (\eta^2 = .02) \). The mean Total Stress score difference in the non-completion group was 4.98, indicating that the mean Total Stress score after receiving individual CCPT \( (M = 234.00) \) was not significantly lower than the mean before treatment \( (M = 238.98) \). Although statistical significance was not found, the non-completion group demonstrated a small effect \( (\eta^2 = .02) \).

![Figure 25. Mean PSI Total Stress scores on completion and non-completion groups from pretest to posttest.](image)

Figure 25. Mean PSI Total Stress scores on completion and non-completion groups from pretest to posttest.
Discussion

This research was designed for the purposes of conducting an experimental evaluation of a university-based counseling clinic with children aged 3 to 10 years old and determining the effectiveness of child-centered play therapy treatment with children in this setting.

Beginning with an introduction, discussion specifically focuses on (a) demographic factors, (b) the effect of CCPT on children’s internalizing and externalizing behavior problems, (c) the effect of CCPT on parent-child relationship stress, (d) factors related to completion and premature termination of CCPT, and (e) correlational analyses of CCPT outcome prediction have been included in the following sections.

Introduction

Children who suffer from mental problems have a much greater risk of dropping out of school and have lower functioning skills in life (U.S. Public Health Service, 2000). About 1 in 10 children and adolescents experience emotional disturbance or behavioral difficulties. However, an estimated two thirds of all young people with mental health problems are not getting the help they need. Untreated mental health problems can lead to suicide, which is the sixth leading cause of death for 5- to 14-year olds (SAMHSA’s National Mental Health Information Center, 2003). Concerning the burden of suffering experienced by children and adolescents and their families with mental health needs, the Surgeon General’s report (2000) referred to it as “a health crisis in this country” (p. 1).

In order to fill the gaps of children’s mental health service needs, more demands have been put on community-based service providers. Research focusing on identifying
evidence-based mental health treatment which can effectively treat children’s and adolescent’s problems is needed and has became prominent in child and adolescent mental health professional services (Glied & Cuellar, 2003). Therefore, providing professional services at a local level for children and youth with mental health needs now plays a significant role in the children mental health field. However, there is a dearth of research available on child services in the community mental health setting in the fields of psychology and counseling. This study examined real-life clinical services to the largest number of child participants (364) in decades of mental health research. Through examination, this study explored the relationship between child variables and the effectiveness of play therapy, among other descriptive data that inform the counseling field regarding child therapy.

In this study, all children receiving child-centered play therapy treatment were referred to a university-based play therapy clinic in the southwestern United States by their parents or guardians due to concerns related to the child's behavioral and emotional problems. The trained child-centered play therapists, master’s or doctoral counseling interns, provided all play therapy treatment in a specially equipped playroom with a variety of selected toys.

To better understand the magnitude of treatment effects and interpret empirical research results, Thompson (2002) highlighted the importance of reporting statistical, practical, and clinical results for researchers and practitioners. In addition, the APA Task Force on Statistical Inference’s report stressed that reporting and interpreting effect sizes in the context of previously reported effects is essential to good research. It enables readers to evaluate the stability of results across samples, designs, and analyses. Reporting effect sizes also
informs power analyses and meta-analyses needed in the further research. (Wikinson & TFSI, 1999, p. 599)

The statistical, practical, and clinical results were analyzed and reported in this study. The results provide information on the effects of child-centered play therapy with children on the child’s internalizing, externalizing, and total behavioral problems as well as parent-child relationship stress. A detailed discussion of the effects of child-centered play therapy in decreasing child’s emotional and behavioral problems and reducing parent-child relationship stress is provided in the following sections.

**Demographic Factors**

The demographic factors discussed in this section specifically address the areas of age, gender, ethnicity, and presenting concerns. The typical child who sought services as analyzed by this study most likely lived in a single-mother home, was Caucasian, lived below poverty level, in a 4 person household, and presented with multiple concerns, specifically mood-related and family relationship issues.

**Age**

*Average age for children receiving mental health services.* Reports from the previous meta-analyses studies on age are provided as follows. Casey and Berman (1985) examined 76 studies using participants younger than a mean age of 13 years old. Findings demonstrated that the average age was 8.9 years old (age ranged from 3-15 years old). Further, Weisz et al. (1987) evaluated 108 outcome studies with 4-18-year-old participants. Results revealed that the mean age was 10.23 years old ($SD = 4.00$). Similar results were found in the Weisz et al. (1995) research examining 150 outcome studies. Results indicated that the ages ranged from 1.5 to 17.6 years old and a mean
age of 10.5 years old ($SD = 3.52$). Kazdin et al. (1990) investigated 223 psychotherapy studies and reported the mean age of 10.3 years old ($SD = 3.3$). Specifically examining 93 play therapy outcome studies, the average age of a child receiving play therapy was 7.0 years old (Bratton et al., 2005).

Based on the previous meta-analyses studies, it is notable that the mean age (7 years old) from only play therapy studies is much younger than in other studies (ranging from 8.9 to 10.5 years old). Because play therapy is a developmentally appropriate intervention, it is reasonable and more suitable for working with younger children than children targeted by traditional talk treatment (Bratton et al., 2005).

**Age factor on seeking mental health services.** According to Cunningham and Freiman’s (1996) study, findings demonstrated no statistical significant effect of a child’s age on seeking mental health services. Similar results were also found in a study by Flisher et al. (1997). Of the 364 participants in this study, ages ranged from 3 to 10, with a mean of 6.26 ($SD = 2.128$) years old and a median of 6 years old. Numbers of participants’ ages were as follows: 3-year-old ($n = 42; 11.6\%$), 4-year-old ($n = 50; 13.7\%$), 5-year-old ($n = 50; 13.7\%$), 6-year-old ($n = 49; 13.5\%$), 7-year-old ($n = 61; 16.8\%$), 8-year-old ($n = 50; 13.7\%$), 9-year-old ($n = 35; 9.6\%$), and 10-year-old ($n = 27; 7.4\%$). Results reveal similar number of participants across the age groups (as shown in Figure 2). However, number of participants of 7-year-olds seems to be slightly higher than for other age groups. An explanation of the results is that children of 7-year-olds are more likely to be moody, sulky, and sometime depressed. They also tend to spend long periods in their rooms, alone by choice, reading or listening to music (Wood, 2007).
Age factor between clinical and nonclinical groups on the CBCL and PSI. To investigate age factor on clinical and nonclinical behavioral problems, statistical results are discussed as follows. First, results of independent samples t-tests on age between the CBCL clinical and nonclinical groups demonstrated statistically significant differences on Internalizing Problems and Total Problems (as showed in Table 4). That is, the mean age difference (.697) on Internalizing between clinical and non-clinical groups was statistically different, with the average age of Internalizing clinical group \((M = 6.5, SD = 2.006)\) being statistically older than that of nonclinical group \((M = 5.81, SD = 2.165)\). Additionally, the mean age difference (.48) of Total Problems between clinical and nonclinical groups was statistically different, with the average age of Total problem clinical group \((M = 6.4, SD = 2.031)\) being statistically older than that of nonclinical group \((M = 5.92, SD = 2.175)\). That is, children who were brought for the clinical Internalizing and Total Problems by their parents tend to be older than those who do not exhibit behavioral concerns in the clinical range. Viewing the results from the other direction, younger children are likely to display less severity in Internalizing and Total Problems. An explanation for the results is that internalizing children are usually quieter. From parents’ point of view, being quiet is usually viewed as a good characteristic. In addition, internalizing behavior problems are less noticeable than externalizing. Usually, it takes a longer time for parents to perceive children’s internalizing behavioral problems as a concern, until children are getting older.

Second, further analyses regarding the age of subgroups (male and female groups) on CBCL clinical and nonclinical groups revealed a statistically significant difference only on the Internalizing non-clinical group. That is, the mean difference of
age between males and females was .778, indicating that the average age of males ($M = 5.49$, $SD = 2.068$) was statistically younger than that of females ($M = 6.27$, $SD = 2.240$). However, when examining the age factor on clinical and nonclinical groups on parent-child relationship stress, no statistically significant differences were found across the subscales. As results shown in Table 3, one explanation may be males were more likely to seek services at a younger age than females, with the exception of Internalizing and Total Problems clinical groups. Another explanation may be males exhibit more clinical externalizing behaviors than females. Males with more severe externalizing behavioral problems may be more likely to be perceived by their parents as having a problem and brought children for play therapy services.

**Gender**

*Percentage of males and females receiving mental health services.* Findings from the previous meta-analyses studies on gender are shown as follows: 60% male and 40% female (Casey & Berman, 1985); 66% male and 34% female (Weisz et al., 1987); 67.3% male and 32.7% female (Kazdin et al., 1990); and approximately 2/3 male and 1/3 female (Bratton et al., 2005). Consistent results show that male participants (60% to 67.3%) are more likely to receive treatment services than are females. Of the 364 participants in this study, 219 (60.2%) were male and 145 (39.8%) female. The results of proportion of males and females are consistent with previous studies in child psychotherapy.

*Males and females seeking mental health services.* A study conducted by Flisher et al. (1997) demonstrated that a child’s gender was not found to be correlated with seeking mental health services. However, results of a Bussing et al. (2003) study
indicated that boys had over 5 times the probability over girls of receiving a mental health evaluation and an attention deficit hyperactivity disorder diagnosis. Findings from Zimmerman’s (2005) study also revealed that girls are less likely to receive treatment in general and, particularly, much less for externalizing behavior disorders than boys.

To further investigate whether there was a difference of gender on the CBCL clinical versus nonclinical groups, crosstabs analyses were conducted. Results of the crosstabs only demonstrated a statistical significance for Externalizing Problems between clinical and nonclinical groups \( (\chi^2(1) = 8.399, p = .004) \). That is, female participants in the Externalizing Problems clinical and nonclinical groups were 42.4% and 57.6%. Male participants in the Externalizing Problems clinical and nonclinical groups were 59.1% and 40.9%. In other words, males are more likely to receive play therapy treatment for clinical externalizing behaviors than are females. Results from Zimmerman’s (2005) study have supported the findings of this study.

Crosstabs analyses were also conducted to examine whether there was a difference of gender on the PSI clinical versus normal functioning groups. Findings of the crosstabs only demonstrated a statistically significant difference for Parent Domain between clinical and normal functioning groups \( (\chi^2(1) = 6.22, p = .013) \). Namely, female participants in the Parent Domain clinical and nonclinical were 20.3% and 79.7%. Male participants in the Parent Domain clinical and normal functioning groups were 10.5% and 89.5%. When parents experience a clinical level of parent-child relationship stress contributed by parent characteristics, female children may be brought for play therapy intervention more than males.
Gender comparison on play therapy treatment outcome. Previous meta-analyses studies examining the efficacy of child psychotherapy reported mixed findings in terms of the impact of gender. Casey and Berman (1985) noted that studies involving a greater proportion of male participants are more likely to yield a smaller outcome effect. Additionally, Weisz et al. (1987) found no relationship between gender and effect size. The authors noted that the averaged effect sizes for majority male and female groups are .08 and 1.11, respectively. According to Weisz et al. (1995), gender effect was found to be statistically significant among adolescents (12 years of age and older), but not for children (11 years of age and younger). The authors reported that intervention effects were larger for females than males. Moreover, LeBlanc and Ritchie (2001) reported that gender is not a significant contributor to play therapy outcome. Bratton et al. (2005) also found that play therapy is equally effective for both males and females.

Results in this study demonstrated statistically significant effects over time for all CBCL and PSI measures, with the exception of Parent Domain on the PSI. Further analyses regarding the play therapy effect on gender revealed differences on the following two measures: Internalizing Problems and Total Stress (as shown in Tables 35).

As for Internalizing Problems, findings demonstrated a statistically significant improvement for males, $F(1, 47) = 8.447, p = .006$ (partial $\eta^2 = .152$). Although a statistically significant improvement was not found for females, $F(1, 33) = 3.882, p = .057$, the $p$-value approached the significance level. Similar gender comparison results were found for Total Stress. As for Total Stress, results revealed a statistically significant improvement for males, $F(1, 52) = 5.719, p = .020$ (partial $\eta^2 = .099$).
Although a statistically significant improvement was not found for females, $F(1, 38) = 3.959, p = .054$, the $p$-value was shown to approach the significance level. In terms of practical effects in this study, results found that males were more likely to reduce Internalizing Problems, Child Domain score, and Total Stress than females. In contrast, females demonstrated greater improvement on Externalizing Problems and Total Problems. Table 35 outlines the $p$-value and partial $\eta^2$ for gender on the CBCL and PSI.

Table 35

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBCL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalizing</td>
<td>.006*</td>
<td>.057</td>
</tr>
<tr>
<td>Externalizing</td>
<td>.010*</td>
<td>.008*</td>
</tr>
<tr>
<td>Total Problem</td>
<td>.002*</td>
<td>.004*</td>
</tr>
<tr>
<td>PSI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Domain</td>
<td>.001*</td>
<td>.049*</td>
</tr>
<tr>
<td>Parent Domain</td>
<td>.736</td>
<td>.173</td>
</tr>
<tr>
<td>Total Stress</td>
<td>.020*</td>
<td>.054</td>
</tr>
</tbody>
</table>

*p < .05

Ethnicity

Based on Cunningham and Freiman (1996), the authors used the 1987 National Medical Expenditure Survey to investigate the use of mental health-related services by children aged 6-17. Findings demonstrated that mental health-related use was strongly associated with ethnic groups. Bussing et al. (2003) found that Caucasian children were more than twice the odds of African children to receive a mental health evaluation. According to Flisher et al. (1997), when comparing Hispanics and Caucasians, ethnic was no significantly associated with unmet need. However, when comparing African
Americans and Caucasians, ethnicity was significantly associated with unmet need. In other words, African Americans had a greater unmet need than Caucasians. That is, minority children were less likely than Caucasian children to seek mental health-related services.

According to the National Center for Education Statistics (NCES), the ethnic percentage of student enrollment in the local school district encompassing this study’s mental health clinic is as follows: 56.2% for Caucasian, 12.6% for African American, 28.3% for Hispanic, 2.3% for Asian/Pacific Islander, and .7% for American Indian/Alaska Native. That is, the percentage of minority students in total was 43.8% (U.S. Department of Education Institute of Education Sciences, 2007).

Of the 364 participants in this study, each participant’s parent/guardian reported child ethnicity as follows: Caucasian (n = 267; 74.8%), African American (n = 15; 4.2%), Hispanic/Latin (n = 26; 7.3%), Asian (n = 9; 2.5%), Native American (n = 5; 1.4%), Biracial (n = 33; 9.2%), and Other (n = 2; 0.6%). Namely, the percentage of minority participants was 25.2%, which is 18.6% lower than the overall students at school age in the community. Hispanic, African American, and Asian ethnicity groups are discussed in the following section.

Hispanic. When comparing the ethnicity groups between overall students in the present school district and in this study’s clinic, two minority groups demonstrated the greater discrepancies: Hispanic/Latin (28.3% vs. 7.3%) and African American (12.6% vs. 4.2%). Cultural barriers may provide an explanation for these results. Scholars have discussed the barriers to Hispanics receiving treatment, including the following: (a) Hispanics are more reluctant to disclose family problems outside the family; (b)
Hispanics’ limited English speaking and listening skills are an obstacle to access to mental health-related services; (c) Mental health services are perceived as irrelevant or oppressive; (d) Illegal immigrants are afraid of deportation; (e) Families have a lack of understanding of mental illness; and (f) Hispanics are mainly somatic in their description of problems and use traditional or spiritual methods of healing (Altarriba & Bauer, 1998; Preciado & Henry, 1997; Santiago-Rivera, 1995). Nationally, Hispanic children are overrepresented in high-risk environments. The NCES (2003) pointed out that the percentage of kindergartners with two or more risk factors is five times greater among Hispanic children than among their American peers. Because Hispanic children demonstrate the largest discrepancy and Hispanics will soon become the majority minority group in the U.S. (Bureau of Census, 2000); delivery of culturally sensitive play therapy services for Hispanic children becomes an urgent need and challenge for play therapists (Garza, 2004).

African American. Historically, African Americans have underused mental health services in community settings. Literature shows that the counseling profession has been slow in addressing the unique needs of this population, especially the needs of young children and their families (Baggerly & Parker, 2005; Boyd-Franklin, 2003). Further, scholars have discussed the barriers to African Americans receiving treatment including: (a) African-Americans do not trust Caucasian service providers; (b) African Americans have been misdiagnosed and overdiagnosed with mental disorders; (c) African Americans experiences a discrepancy in expectations between themselves and therapists; and (d) African Americans tend to use mental health services as a last resort (Boyd-Franklin, 2003; Parham & Parham, 2002; Parham, White, & Ajamu, 1999).
Additionally, the percentage of African American children aged six and below represented 44% of the population living in poverty (Parham, White, & Ajamu). The need for action to emphasize the socio-emotional development of African American young children may be even more critical and challenge. Again, providing culturally sensitive counseling interventions for the African American population, specifically the needs of young children at high-risk, must be addressed in the future by the play therapy field (Baggerly & Parker, 2005; Sheely, 2008).

Asian. The third minority group, Asian, is reasonably represented by the clinic in this study as compared to the community population, which is 2.3% in the overall community students and 2.5% in this clinic. When comparing participants who received play therapy and those who received only intake services, it is notable to recognize that nine Asian children received play therapy intervention after the intake services, which is not the case for the other ethnic groups.

When further analyzed, results indicated a greater difference regarding the education level of mothers and fathers. Of the 9 Asian participants, education level of the mother was reported as follows: high school (n = 1; 11.1%), undergraduate degree (n = 3; 33.3%), graduate degree (n = 5; 55.6%). The same findings were found for fathers. In other words, approximately 90% of Asian participants’ parents had received at least a bachelor’s or higher level degree, which indicated a high level of education. When removing the nine Asian children from the entire sample of participants, the education level of the mother was reported as follows: 8th grade or below (n = 6; 1.8%), high school (n = 56; 16.5%), GED (n = 24; 7.1%), some college/trade school (n = 151; 44.5%), undergraduate degree (n = 71; 20.9%), graduate degree (n = 31; 9.1%).
Education level of father was reported as follows: 8th grade or below \((n = 14; 4.8\%)\), high school \((n = 72; 24.5\%)\), GED \((n = 21; 7.1\%)\), some college/trade school \((n = 99; 33.7\%)\), undergraduate degree \((n = 67; 22.8\%)\), graduate degree \((n = 21; 7.1\%)\). That is, for the other ethnic groups all together, parents of participants who attained at least bachelor or higher level degrees for both mother and father were 30%. One explanation of these results is that parents of children with a higher level of education are more likely to utilize mental health services for their child. Results of the Farmer et al. (1999) study have supported the findings in this study.

Viewing the results from another perspective, these results can be potentially problematic for Asian children. Unlike Asian participants, parents of children from other ethnic groups are from more diverse educational levels (i.e., from 8th grade to graduate school). Parents of Asian children who have a lower education level may be less likely to bring the child for mental health services as the child needs.

**Presenting Concerns**

Play therapy has shown promise as an effective intervention for children regardless of the presenting concerns (Bratton et al., 2005; Bratton & Ray, 2000; LeBlanc & Ritchie, 2001). At this university-based play therapy clinic, presenting concerns are categorized into six groups: problems related to abuse, academic/school problems, mood-related concerns, family relationship concerns, rule-breaking/behavior problems, and other behavioral concerns (as shown in Table 1). Results demonstrated that 17.0% participants indicated having concerns within one category, 27.5% for two categories, 27.3% for three categories, and 28.1% for four and more categories.
Namely, the majority (83%) of parents reported concerns of the child in more than two areas.

Of the six categories, parent reported significant concerns as follows: 27.6% for Problems Related to Abuse, 76.1% for Mood-related Concerns, 18.2% for Rule-Breaking/Behavior Problems, 46.0% for Academic/School Problems, 73.9% for Family Relationship Concerns, and 35.5% for Other Behavioral Concerns. Studies regarding the prevalence of presenting concerns of children who sought play therapy treatment were difficult to find, especially in a university-based clinic setting. Previous studies regarding the prevalence of presenting concerns of children who seek mental health treatment could not be found for this discussion. Repie’s (2005) study provided information from school personnel’s perspectives that may provide a better understanding of this issue.

To examine the perceptions of school staff on the presenting problems of students, Repie (2005) nationally surveyed regular and special education teachers, school counselors, and school psychologists on a random sample from Market Data Retrieval (MDR). Results from Repie’s (2005) study cited the following presenting problems: Impaired self-esteem; Attention Deficit / Hyperactivity; Peer relationship problems; Classroom disruptiveness; Worrying/anxiety/ nervousness; Depression; Impulsive/ dangerous behavior; Alcohol/drug abuse; Inappropriate sexual behavior; and suicidal thoughts and/or behavior. Additional presenting problems of students reported by respondents included Parents (2.7%), Aggression/Conduct (1.9%), and Academics (1.5%). In Table 36, I compared presenting problem categories from the present study to the students’ presenting problems results from Repie’s.
Table 36

Comparison of Presenting Concerns Between the Present Study and Repie’s (2005)

<table>
<thead>
<tr>
<th>Presenting Problems</th>
<th>M</th>
<th>SD</th>
<th>Presenting Category</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impaired self-esteem</td>
<td>3.55</td>
<td>1.00</td>
<td>Mood-Related</td>
<td>76.1</td>
</tr>
<tr>
<td>Attention Deficit/Hyperactivity</td>
<td>3.53</td>
<td>.98</td>
<td>Other Behavior</td>
<td>35.5</td>
</tr>
<tr>
<td>Peer relationship problems</td>
<td>3.43</td>
<td>.99</td>
<td>Academic</td>
<td>46.0</td>
</tr>
<tr>
<td>Classroom disruptiveness</td>
<td>3.39</td>
<td>1.12</td>
<td>Academic</td>
<td>46.0</td>
</tr>
<tr>
<td>Worrying/anxiety/nervousness</td>
<td>3.33</td>
<td>.96</td>
<td>Mood-Related</td>
<td>76.1</td>
</tr>
<tr>
<td>Depression</td>
<td>2.98</td>
<td>1.03</td>
<td>Mood-Related</td>
<td>76.1</td>
</tr>
<tr>
<td>Impulsive/dangerous behavior</td>
<td>2.90</td>
<td>1.20</td>
<td>Rule-Breaking</td>
<td>18.2</td>
</tr>
<tr>
<td>Alcohol/drug abuse</td>
<td>2.56</td>
<td>1.33</td>
<td>Rule-Breaking</td>
<td>18.2</td>
</tr>
<tr>
<td>Inappropriate sexual behavior</td>
<td>2.52</td>
<td>1.21</td>
<td>Other Behavior</td>
<td>35.5</td>
</tr>
<tr>
<td>Suicidal thought / behavior</td>
<td>2.40</td>
<td>1.09</td>
<td>Mood-Related</td>
<td>76.1</td>
</tr>
<tr>
<td>Parents</td>
<td>(2.7%)</td>
<td></td>
<td>Family Relationship</td>
<td>73.9</td>
</tr>
<tr>
<td>Aggression/Conduct</td>
<td>(1.9%)</td>
<td></td>
<td>Rule-Breaking</td>
<td>18.2</td>
</tr>
<tr>
<td>Academics</td>
<td>(1.5%)</td>
<td></td>
<td>Academic</td>
<td>46.0</td>
</tr>
</tbody>
</table>

Based on the comparisons listed in Table 36, similarities and differences are discussed as follows. First, parents and school personnel (teachers, counselors, and psychologists) often perceive the child/student as exhibiting more than one presenting concern. Second, mood-related concerns (i.e., impaired self-esteem, worrying/anxiety/nervousness, and depression) are highly recognized and reported by parents and
school personnel. Third, both parents in this study and school personnel in Repie’s study reported fewer concerns about rule-breaking or behavior problems (i.e., impulsive/dangerous behavior, alcohol/drug abuse, and aggression/conduct in Repie’s study).

However, academic and school problems are highly recognized by the school personnel in Repie’s (2005) study, but only moderately reported by the parents in this study. An explanation of this result is that school personnel focus more on students’ academic performance and the related activities. Therefore, factors that impact students’ academic performance are more likely to be identified as presenting concerns by school personnel. As shown in Table 36, academically related behavior problems (attention deficit/hyperactivity, peer relationship problems, and classroom disruptiveness) are the top second, third, and fourth presenting problems reported by school personnel.

Significantly, family relationship concerns between this study and Repie’s (2005) demonstrated the largest discrepancy. That is, in this study, 73.9% of parents reported having family relationship concerns with the child, whereas only 2.7% of school personnel recognized this issue as presenting problems of students in Repie’s survey. An explanation of this result is that family relationship concerns (i.e., difficulty adjusting to family changes, discipline concerns, parent-child relationship problems, sibling concerns, parents’ divorce/separation, and religious/spiritual concerns) are day-to-day issues for parents to face and deal with their children. When parents want to help children cope with family relationship issues more effectively, they are more likely to bring children for play therapy services. Yet, these issues might not be quickly and easily recognized by school personnel and viewed as a presenting problem of student’s. Because parents and a stable family environment are central to the healthy
development of children (Deater-Deckard, 2005), how to help school personnel (teachers, counselors, and psychologists) to recognize the family relationship concerns of students in order to offer appropriate early intervention becomes an important task. The important role of family relationship concerns in the play therapy treatment outcome is emphasized and discussed in a later section.

**Effectiveness of CCPT on Children Behavior**

Play therapy is known to be an effective treatment for children’s emotional and behavioral problems (Bratton et al., 2005; Bratton & Ray, 2000; LeBlanc & Ritchie, 2001). According to the meta-analysis of a play therapy treatment outcome study conducted by Bratton et al. (2005), results demonstrated that children receiving play therapy intervention were functioning 0.80 standard deviations better than children who did not receive treatment, revealing a large outcome effect for play therapy treatment with children. To date, these results have demonstrated the strongest effect over previous meta-analytic child psychotherapy studies. Similar meta-analysis findings investigating the effects of treatment using play techniques revealed that the average standardized effect sizes were 0.66 for 42 play therapy studies (LeBlanc & Ritchie, 1999), and 0.65 for 20 play therapy studies (Casey & Berman, 1985).

An examination of the effectiveness of play therapy in terms of participants’ problem behaviors (i.e., internalizing, externalizing, or a combination of internalizing and externalizing) (Bratton et al., 2005), reveals the following findings. Twenty-four studies examined internalizing behavioral problems and demonstrated a large effect size (ES = .81). Seventeen studies addressed externalizing behavioral problems and revealed a moderate, approaching to large, effect size (ES = .78). In addition, 16 studies
investigated a combination of internalizing and externalizing behavioral problems and demonstrated a large effect size (ES = .93). These results indicated that play therapy is a valuable and effective intervention for children's internalizing, externalizing, and combined behavioral problems. Findings of the effectiveness of Internalizing Problems and Externalizing Problems in this study are addressed as follows.

**Internalizing Problems**

*How play therapy works for children exhibiting internalizing problems.* Moustakas (1955) stated that an emotionally disturbed child's perceptions toward self are usually negative. The child then experiences feelings of fear and anger. Hostility is viewed as a primary outer source, whereas anxiety is viewed as an internal attitude. Although hostility and anxiety can not completely be separated, one is often expressed more significantly than the other (pp. 79-83). In CCPT, the therapist assists the child to express his/her fear, anxiety, and depression with an understanding and accepting therapeutic relationship. Through exploring feelings, the child gains a sense of inner comfort, pleasure, worthiness, and adequacy. As a result, the child's feeling of inadequacy decreases and the level of anxiety reduces (Moustakas, 1955).

The therapeutic relationship plays a significant role in the process of change (Landreth, 2002; Moustakas, 1955). The therapist must respect the child's uniqueness and accept the child for exactly who he/she is. In this way, the child accepts the self when feeling this acceptance. When the child's sense of self-significance and self-adequacy grows, the anxiety decreases. As a conclusion, the therapeutic relationship is an essential key in decreasing the child’s internalizing problem behaviors (Landreth, 2002; Moustakas, 1955).
Statistical, practical, and clinical significance. Results of this study highlight the effectiveness of individual CCPT with children in decreasing children’s internalizing behavioral problems as measured by the Internalizing Problem scale on the CBCL. Individual CCPT was shown to have statistical and practical significance as demonstrated through a moderate, approaching to large, effect (partial $\eta^2 = .124$) between pretest and posttest for the overall participants. Further, individual CCPT demonstrated a very large effect ($\eta^2 = .31$) when specifically examining participants who completed play therapy treatment. Children’s internalizing behaviors were improved notably with completion of play therapy treatment. Additionally, individual CCPT was shown to have clinical significance as demonstrated through 36% (13 out of 36) of participants identified in the Borderline or Clinical range for Internalizing Problems on the CBCL prior to play therapy improving to the Normal functioning range following play therapy.

Past researchers have indicated the effectiveness of CCPT for children exhibiting internalizing behaviors. For example, Barlow, Strother, and Landreth (1985) illustrated how CCPT works with a child exhibiting depressive behaviors. Results indicated that the child expressed her feelings of anger and frustration through play and her presenting problems reduced significantly after a few play sessions. Findings of Internalizing Problems in the present study provide strong evidence between CCPT and reduction in children’s internalizing behavioral problems. Effectiveness of CCPT has also been reported in other previous research (Baggerly, 2004; Baggerly & Jenkins, 2009; Brandt, 1999; Shen, 2002; Tyndall-Lind, 1999).

Externalizing Problems
How play therapy works for children exhibiting externalizing problems.

Children exhibiting externalizing problem behaviors may break more limits and display more aggressive behaviors in the playroom. When dealing with this specific problem concern, limit-setting is important. Axline (1969) indicated that consistent limits offer the child a sense of security and prevent the child from experiencing guilt when he/she tries to violate the world. When consistent limits are set as needed, play therapy provides an opportunity for the child to learn self-control. In CCPT, the child-centered play therapist states the limit-setting statement in an empathic way (Guerney, 2001; Ray, Blanco, Sullivan, & Holliman, in press). Through limit-setting in an empathic way, the play therapist delivers the message that I (the play therapist) understand you (the child) want to cross the line, and I accept your feelings. However, the breaking of limits is not allowed. By experiencing acceptance from the play therapist, the child accepts him/herself. Limits also let the child-centered play therapist sustain the characteristics of warmth, genuineness, and empathy in the therapeutic relationship with the child (Guerney, 2001).

Mills and Allan (1992) described the stages of CCPT with children exhibiting aggressive behaviors. In the beginning stage, the therapist provides a safe and trusting environment for the child to experience the sense of security to express feelings. In the second stage, through re-experiencing acceptance and security, the child’s inner growth tendency increases. At the same time, anxiety and ambivalence levels increase and limit-testing behaviors occur. As indicated earlier, the play therapist sets consistent limits in an empathic way. Once the child feels safe, understood, and accepted, he/she uses the therapeutic relationship to work on previous issues in the third stage. As play
therapy intervention progresses, the child displays less aggressive behaviors and engages in more interactive play in the last stage. As discussed previously, the therapeutic relationship is an essential key in decreasing the child’s aggressive behaviors (Guerney, 2001; Mills & Allan, 1992; Ray et al., in press).

**Statistical, practical, and clinical significance.** Results of this study reflect the effectiveness of individual CCPT with children in decreasing children’s externalizing behavioral problems as measured by the Externalizing Problems on the CBCL. Individual CCPT was shown to have statistical and practical significance as demonstrated through a large effect (partial $\eta^2 = .154$) between pretest and posttest for the overall participants. Further, individual CCPT demonstrated a very large effect ($\eta^2 = .31$) when particularly examined with participants who completed play therapy treatment. Children’s externalizing behavioral problems were decreased valuably with completion of play therapy treatment. Additionally, individual CCPT was shown to have clinical significance as demonstrated through 40% (16 out of 40) of participants identified in the Borderline or Clinical range for Externalizing Problems on the CBCL prior to play therapy, improving to the Normal functioning range following play therapy.

Research indicated that child-centered play therapy has been shown to improve children’s externalizing behaviors. For example, Kot, Landreth, and Giordano (1998) conducted intensive CCPT with children who had witnessed domestic violence. The authors compared 11 children participating in each CCPT experimental and non-treatment control group. Results indicated that children in the CCPT group significantly decreased aggressive behaviors over children in the control group. Ray et al. (in press) compared 19 and 22 children participating in 14 sessions of a CCPT experimental
group and a waitlist control group. Results indicated that children in the CCPT experimental group decreased aggressive behaviors moderately, as reported by their parents. Findings of Externalizing Problems in this present study also offer strong evidence for the reduction of children’s externalizing behavioral problems as a result of CCPT. The effectiveness of CCPT with externalizing behaviors has also been reported in previous research (Dogra & Veeraraghavan, 1994; Garza & Bratton, 2005; Schumann, 2005).

**Effectiveness of CCPT on Parent-Child Relationship Stress**

Similar to the results on the CBCL, play therapy is an effective treatment for decreasing parent-child relationship stress (Brandt, 1999; Dougherty & Ray, 2007; Ray, 2008). However, only few studies were found to specifically emphasize the impact of child-centered pay therapy on parent-child relationship stress. Brandt (1999) conducted an experimental (15 participants) and waitlist control (14 participants) groups design research to examine the effectiveness of CCPT on reducing parenting stress. Although results demonstrated that parents of experimental group children exhibited less parenting stress than did control group parents, a statistically significant differences were not found between the two groups.

Further, Dougherty and Ray (2007) analyzed archival data to investigate the impact of CCPT on 12 children (preoperational development group; 3-6 years old) and 12 children (concrete operations development group; 7-8 years old) who received 19-23 individual CCPT sessions. Results demonstrated a statistical and practical difference on Child Domain and Total Stress for all participants. However, statistical or practical difference was not found on Parent Domain. Specifically, a comparison of children in the
preoperational and concrete operational developmental stage showed statistical and practical difference for Total Stress.

Additionally, the most current study conducted by Ray (2008) addressed the importance of CCPT on parent-child relationship stress according to diverse behavioral groups (Internalizing, Externalizing, Combined, and Non-Clinical). Results of analyzing archival data from 202 child clients indicated that CCPT was particularly effective with children who exhibited clinical externalizing behavioral problems, combined with internalizing and externalizing behavioral problems, and were not categorized with clinical behavioral problems. These results indicate that play therapy is an effective intervention for parent-child relationship stress reduction. Specifically, parenting stress and child adjustment, as well as findings of the effectiveness of Child Domain, Parent Domain, and Total Stress on PSI in this study, are discussed as follows.

**Parenting Stress and Child Adjustment**

Deater-Deckard and Scarr (1996) conducted a study with 589 married couples with young children (12 to 60 months old) to investigate parenting behavior and child adjustment. Results revealed that parents with higher levels of parenting stress correlated with more authoritarian parental discipline behavior, was in turn associated with higher levels of behavioral problems among children. Deater-Deckard (1998) examined the associations between parenting stress and child adjustment. Findings indicated a moderated association between parenting behavior and child adjustment in both community and clinical settings. That is, a higher level of maladjustment among children and adolescents is positively correlated with a high level of harsh, negative, and inconsistent parenting.
Deater-Deckard (2005) collected theoretical ideas and empirical work from psychological and developmental studies to measure and conceptualize parenting stress. Although individual differences tend to arise from parent-specific stressors or personality factors, results from this collection of studies addresses the consistent outcome, that higher levels of parenting stress usually correspond with higher levels of children’s behavioral problems such as aggressive and anxious behaviors. Findings from this collection of studies also recognized that the signs of distressed parenting are indicative of a cumulative process. In other words, the day-to-day challenge of unreliable childcare and managing a difficult child not only evaporates on a daily basis, but also accumulates ineffective coping and stress proneness (Crnic, Gaze, & Hoffman, 2005). Because fluctuating stress has an impact on parents as well as their children, chronic parenting stress can result in harmful consequences and continue to worsen over time.

Studies focused specifically on parenting stress and child internalizing and externalizing behavioral problems have been conducted by Ackerman, Brown, and Izard (2003), Ray (2008), Kazdin and Wassell (2000), and Kazdin and Whitley (2003). These results indicate that parent-child relationship stress is correlated highly with child internalizing and externalizing behavioral problems.

Child Domain

*How play therapy works in reducing Child Domain score.* As noted earlier, child-centered play therapy is an effective intervention in reducing a child’s emotional and behavioral problems. Previous research examining parenting-child relationship stress indicated a recursive relationship between parent stress and child internalizing and
externalizing problems. Because of the positive moderate relationships between Child Domain and Internalizing and Externalizing Problems, when scores on the Internalizing and Externalizing Problems decrease, a reduction score in the Child Domain can be expected.

The principles of CCPT provide an additional explanation. When a child establishes and develops a relationship with his/her play therapist, this particular relationship could be transferable to other relationships in the child’s life. Within the warm and caring relationship, child-centered play therapists provide a safe and secure environment for children to freely express their feelings verbally and nonverbally (Landreth, 2002). Axline (1969) pointed out that CCPT offers children the opportunity to gain insight into their behavior through recognition and reflection of their feelings by the play therapist. Because CCPT emphasizes the child rather than the child’s problems, CCPT helps the child to be more self-accepting, to develop more positive self-concept, to be more self-reliant, to become more trusting of self, to experience more sense of self-control, and to assume greater self-responsibility (Landreth, 2002). As CCPT progresses, more pleasing behaviors among children are likely to occur.

_Statistical, practical, and clinical significance._ Results of this study confirmed the effectiveness of CCPT in reducing parent-child relationship stress contributed by child characteristics as measured by the Child Domain on the PSI. Individual CCPT was shown to have statistical and practical significance, as demonstrated through a large effect (partial $\eta^2 = .147$) between pretest and posttest for the overall participants. Individual CCPT also demonstrated a very large effect ($\eta^2 = .37$) when specifically examined with participants who completed play therapy treatment. Further, individual
CCPT was shown to have clinical significance, as demonstrated through 55% (23 out of 42) of participants identified in the Clinical range for Child Domain on the PSI prior to play therapy improving to the Normal functioning range following play therapy.

**Parent Domain**

The Parent Domain reflects parents’ perceptions of their functioning as parents such as competence, attachment, and role restriction. The Parent Domain also measures a parent’s personal factors and support system such as isolation, health, depression, and spouse support. According to Abidin (1995), “High scores on the Parent Domain suggest that the sources of stress and potential dysfunction of the parent-child relationship system may be related to dimensions of the parent’s functioning” (p. 9). High scores on the Parent Domain indicate that intervention may need to focus on the parent.

*How play therapy works in reducing Parent Domain score.* It is important to acknowledge that individual CCPT is an intervention for children and does not particularly emphasize the areas of a parent's function as measured by parent-child relationship stress contributed by parent characteristics. When high scores are shown on the Parent Domain, it might be necessary to refer the parent/guardian to counseling in order to gain a statistically significant reduction of stress resulting from the parent’s functioning.

Based on Deater-Deckard's (2005) study, although the day-to-day challenge of taking care of a demanding/difficult child might accumulate parenting stress, there is room for coping and adaptation to take place. In order for less parenting stress to occur, results indicated that coping successfully with stressors is the norm in many families.
The principles of child-parent relationship therapy (CPRT; Landreth & Bratton, 2006) provide a way for parents to cope successfully.

Child-parent relationship therapy (CPRT), also called filial therapy, is a therapeutic intervention that connects both children and parents with the primary goal of enhancing family relationships (L. Guerney, 2000; Landreth & Bratton, 2006; VanFleet, 2000). From a child-centered perspective, Landreth and Bratton (2006) provided the definition of child-parent relationship therapy:

*a unique approach used by professionals trained in play therapy to train parents to be therapeutic agents with their own children through a format of didactic instruction, demonstration play sessions, required at-home laboratory. Parents are taught basic child-centered play therapy principles and skills including reflective listening, recognizing and responding to children’s feelings, therapeutic limit setting, building children’s self-esteem, and structuring required weekly play sessions with their children using a specific kit of selected toys. Parents learn how to create a nonjudgmental, understanding, and accepting environment that enhances the parent-child relationship, thus facilitating personal growth and change for child and parent.* (p. 11)

Thus, child-parent relationship therapy could specifically assist parents in the areas of competence, attachment, and role restriction on the Parent Domain, and in return in decreasing parent-child relationship stress contributed by parent characteristics. Further discussion regarding the effectiveness of filial therapy is included later in the section.

*Statistical, practical, and clinical significance.* Results of this study did not demonstrate a statistically significant reduction of CCPT in parent-child relationship stress contributed by parent characteristics as measured by the Parent Domain on the PSI. As addressed in the above, CCPT does not particularly emphasize the areas of the parent’s function, and these results are not surprising. Although statistical difference
was not found, individual CCPT was shown to have practical significance, as demonstrated through a small effect (partial $\eta^2 = .016$) between pretest and posttest for overall participants. Further, individual CCPT was shown to have clinical significance, as demonstrated through 42% (5 out of 12) of participants identified in the Clinical range for Parent Domain on the PSI prior to play therapy improving to the Normal functioning range following play therapy.

Completion Versus Premature Termination of Individual CCPT

Dropout Rate

The dropout rate in this study was 57.9% for the overall 254 participants who received play therapy treatment and 63.6% for those who only received individual CCPT. The dropout rate results were consistent, slightly higher, with other studies in child psychotherapy: 46.81% in Wierzbici and Rekarik’s (1993) study, 47.5% in Kazdin and Mazurick’s (1994) research, and 64% in a Campbell et al. (2000) study. This slightly higher rate might be due to the use of a more conservative definition of continuance in this present study (i.e., mutual termination agreement between the play therapist and the parent) than for other studies.

Factors Related to Premature Termination

Gender. Previous research findings on gender for dropping out of treatment indicated different results. Some studies demonstrated that gender was not correlated with premature termination (Campbell et al. 2000; Durrant, 1999; Kazdin & Mazurick, 1994), whereas the study indicated that female children dropped out of therapy more than did male children (Wierzbici & Rekarik, 1993). Findings on gender in this study revealed no statistically significant difference between male (65%) and female (61%)
participants. Results of the present study were consistent with another study, which found no statistically significant difference between males and females, particularly related to play therapy intervention, conducted by Campbell et al. (2000).

*Income.* Several previous studies indicated that lower income was a factor related to premature termination of treatment (Kazdin, 1996; Kazdin, Holland, & Crowley, 1997; Wierzbici & Rekarik, 1993), whereas one did not reveal significant findings (Gould, Shaffer, & Kaplan, 1985). According to the U.S. *Census Bureau News* (2008), the average household annual income in Texas was $44,717 dollars during 2004-2005 and $45,294 during 2006-2007. At this university-based clinic, the majority of participants’ (approximately 82%) annual household incomes was lower than $40,000, with an average household income at or near the poverty level. That is, 4 out of 5 participants at this clinic were from a low-income family. In this study, annual household income showed no statistical difference between completion and non-completion groups. An explanation of these results could be due to the fact that the majority of participants were already from low-income families. In addition, the university-based clinic provides sliding scale fee services. If participants are unable to afford treatment payment, the assigned play therapist discusses with the parent/guardian a decreased treatment fee so that the child could continue play therapy as needed. Hence, income variable was not a contributor for determining completion or dropping out of play therapy treatment.

*Single-parent family.* The relationship between single-parent family and dropout has been examined and reported in previous studies. Kazdin et al. (1997) found that children from a single parent home were correlated with dropping out of treatment. Similar results were reported by Armbruster and Fallon (1994), Campbell et al (2000),
and Kazdin and Mazurick (1994). However, Durrant (1999), Gould et al. (1985), and Weisz and Weiss (1993) found no significant correlation between single parent and child dropout. As for participants who only received individual CCPT in this study, the percentage of participants who came from a single-parent family (father- or mother- only family) was 42.4% (84 out of 198) at the initiation of treatment. The proportion of single-parent family was 38.9% (28 out of 72) for completion group and 44% for the non-completion group (56 out of 126). Although the non-completion group demonstrated a slightly higher proportion of single-parent families than the completion group, results of children’s current living household status did not demonstrate a statistically significant difference on the termination variable.

*Child behavioral and emotional problems.* Additionally, this study examined the dropout rate on CBCL clinical and normal behavioral groups. Results revealed that the dropout rates for Internalizing, Externalizing, and Total Problems clinical groups were 64.7%, 68.3%, and 67.3%, respectively. Further, the drop-out rates for Internalizing, Externalizing, and Total Problems normal behavioral groups were 61.8%, 56.5%, and 43.4%, respectively.

Results from Kazdin, Mazurick, and Siegal (1994) revealed that children who dropped out of treatment tended to exhibit more severe impairment at intake (i.e., pretreatment) than those who completed treatment. In the present study, findings from the pretreatment analyses on the CBCL demonstrated a statistically significant difference on Externalizing Problems. That is, the average Externalizing Problems at pretest of the completion group ($M = 57.69$, $SD = 10.964$) was statistically lower than that of non-completion group ($M = 61.34$, $SD = 12.523$) and indicated a small effect ($\eta^2$)
Although a statistically significant difference was not found on Internalizing Problems at pretest, completers ($M = 57.55, SD = 10.05$) indicated a slightly lower score than did non-completers ($M = 59.42, SD = 11.12$). Hence, participants with less severity in Internalizing and Externalizing Problems were more likely to complete play therapy treatment.

Studies specifically examining the dropout rate for children based on the criteria cut-off score on the CBCL were rare. Durrant (1999) conducted a study with children who were diagnosed with a behavior disorder at a community-based clinic to investigate the dropout rate. Durrant reported that participants who had scores higher than 65 on the Internalizing and Externalizing scale were 2.79 and 3.17 times more likely to drop out of treatment than those with scores less than 65, respectively. Results from the present study supported the findings that there is a relationship between severe child behavioral and emotional problems and premature termination. This has also been reported in previous research (Campbell et al., 2000; Durrant, 1999; Kazdin et al., 1994). One explanation for these results may be the impact of problem severity on the family. With clinical experiences, a higher level of problem severity normally requires a longer time in treatment to exhibit significant improvements. However, many factors (such as move to another place, schedule conflicts, expectation to see change occur in a short period of time, and so on) could influence keeping a commitment for a long period of time and then result in premature termination.

*Parent-child relationship stress.* Similar to the findings of dropout rate on the CBCL, participants who were in the normal functioning range on the PSI were more likely to complete play therapy treatment. Results revealed that the dropout rates for
Child Domain, Parent Domain, and Total Stress clinical groups were 73.7%, 80.7%, and 75.0%, respectively. In contrast, the dropout rates for Child Domain, Parent Domain, and Total Stress normal functioning groups were 53.3%, 61.0%, and 57.8%, respectively. Studies particularly investigating the dropout rate for mental health services using PSI were hardly found. Campbell et al. (2000) indicated that non-completers reported slightly higher levels of parent-child relationship stress contributed by child and parent characteristics.

As mentioned earlier, Kazdin et al. (1994) found that non-completing children are more likely to exhibit severe impairment at intake (i.e., pretreatment) than completers. In this study, results from the pretreatment analyses on the PSI demonstrated a statistically significant difference on Child Domain and Total Stress. That is, the average Child Domain mean score at pretest of the completion group ($M = 111.24, SD = 22.30$) was statistically lower than that of the non-completion group ($M = 120.47, SD = 26.23$). Also, the average Total Stress mean score at pretest of the completion group ($M = 229.49, SD = 41.52$) was statistically lower than that of the non-completion group ($M = 243.27, SD = 47.64$). Although statistically significant differences were not found on Parent Domain at pretest, completers ($M = 118.25, SD = 26.37$) indicated a slightly lower score than did non-completers ($M = 123.78, SD = 27.37$). Hence, participants reporting less severity in parent-child relationship stress are more likely to complete play therapy treatment.

In the present study, it was noticed that parents/guardians who reported having clinical range parent-child relationship stress indicated high dropout rates (73.7% to 80.7%). As discussed in the previous section, parent-child relationship stress
demonstrates positive moderate to strong relationships with child behavioral problems. High levels of stress on the parent-child relationship and severity of child behavioral problems could result in impacting parental functioning and then influence dropout rate in treatment. Therefore, increasing the engagement and involvement of parents in child treatment and/or providing counseling services for parents are solutions to decreasing the dropout rates.

Treatment Outcome Comparison Between Completion and Non-completion Groups

Statistical significance. In a comparison between completion and non-completion groups, it was expected that participants who completed treatment would demonstrate greater improvement from the pretest to posttest than did children who dropped out. Results in the present study demonstrated that both completers and dropouts improved on five outcome measures (i.e., Internalizing, Externalizing, Total Problems, Child Domain, and Total Stress). Regardless of completion treatment, play therapy is effective in decreasing children’s Internalizing, Externalizing, and Total Problems as well as overall parent-child relationship stress and parent-child relationship stress contributed by child characteristics. Yet completers improved significantly on all of the five measures, which was not the case for the dropouts. Although improvements were also found for non-completers, none of the five measures demonstrated significant progress. Additionally, the magnitudes of improvement (i.e., the amount of pre-to-post treatment change) were greater for completers than for dropouts, as shown in Figures 17, 18, 19, 20, and 21. Namely, participants who completed individual CCPT demonstrated greater improvement than those who dropped out. The findings of this study were consistent with the dropout study conducted by Kazdin et al. (1994). As indicated earlier,
participants who received play therapy treatment improved greatly on all measures, with the exception of Parent Domain. It is important to acknowledge that individual CCPT is an intervention for children and does not particularly emphasize the areas of that parent functioning as measured by the Parent Domain of the PSI. It might be necessary to refer the parent/guardian to counseling in order to gain a statistically significant reduction of stress resulting from the parent’s functioning.

Practical significance. Further, individual CCPT was demonstrated to have practical significance for both completers and dropouts on the six outcome measures. These results were consistent with other studies in play therapy (Bratton et al., 2005; Bratton & Ray, 2000; Muro et al., 2006; Post, 1999; Ray, 2008; Ray et al., in press). Specifically, individual CCPT for participants who completed play therapy treatment indicated valuable improvements between pretest to posttest, as demonstrated by a very large effect ($\eta^2 = .31$) for Internalizing Problems, a very large effect ($\eta^2 = .31$) for Externalizing Problems, a very large effect ($\eta^2 = .33$) for Total Problems, a very large effect ($\eta^2 = .37$) for Child Domain, a small effect ($\eta^2 = .03$) for Parent Domain, and a very large effect ($\eta^2 = .26$) for Total Stress. Further, individual CCPT for participants who did not complete play therapy also indicated greater improvements between pretest to posttest, as demonstrated through a small effect ($\eta^2 = .009$) for Internalizing Problems, a very small effect ($\eta^2 = .003$) for Externalizing Problems, a moderate effect ($\eta^2 = .08$) for Total Problems, a small effect ($\eta^2 = .03$) for Child Domain, a very small effect ($\eta^2 = .003$) for Parent Domain, and a small effect ($\eta^2 = .02$) for Total Stress. Because completers demonstrated significantly greater progress than did dropouts, it is critical for children to complete necessary treatment in order to better reduce their
internalizing and/or externalizing behavioral problems as well as parent-child relationship stress.

_Termination Factors on Treatment Outcome_

_Mutual termination._ In this study, counselor-client decision referred to the mutual termination agreement between the play therapist and the parent. In other words, both the play therapist and the parents decided to terminate play therapy intervention based on the completion of treatment goals. Consistent results from this study indicated an essential importance of the completion of play therapy for demonstrating and predicting greater play therapy treatment outcome. As reported earlier, completion of play therapy treatment revealed a very large effect ($\eta^2 = .26 \sim \eta^2 = .37$) on CBCL and PSI outcome measures, with the exception of a small effect for Parent Domain ($\eta^2 = .03$). Further, termination variable (completion versus non-completion of play therapy intervention) was a moderate to strong predictor on play therapy treatment outcome prediction for Internalizing and Externalizing Problems as well as Child Domain, Parent Domain, and Total Stress. That is, the termination variable could explain moderate to large variance for estimated difference score reduction. Consistent results across the CBCL and PSI emphasize the significant value of completion of play therapy on treatment outcome. Yet, children do not come for treatment by themselves. Forming an alliance with parents then plays a clinically important role in keeping children in play therapy treatment (Landreth, 2002).

_Parent engagement._ Parents are central to the healthy development of children (Deater-Deckard, 2005). However, engaging with parents can be demanding and challenging for the play therapist. As recommended by McGuire and McGuire (2001),
practical principles for linking parents to play therapy are addressed as follows. The first and fundamental goal is to listen to parents and to establish a relationship from the beginning. During the initial parent consultation session, child-centered play therapists are encouraged to gather information regarding the child and family background, clarify parents’ expectation of play therapy, reflect parents’ feelings, and explain the process and treatment goals of play therapy. The play therapist not only serves as the child’s play therapist, but also as a supporter and educator of parents.

Maintaining a relationship with parents throughout the entire treatment period is also significantly important. Regular parent consultations, in conjunction with the child’s play therapy treatment, provide the therapists the chance to answer parents’ questions or concerns as well as to offer additional parent education and support (Cates, Paone, Rackman, & Margolis, 2006; Kottman & Ashby, 1999; Landreth, 2002). Further, McGuire and McGuire (2001) indicated that assigning homework to parents as a way for parents and children to connect with each other.

Another practical way to engage with parents is to provide a Weekly Parent Report form and have parents complete it while the child is in play therapy. At this university-based play therapy clinic, the Weekly Parent Report form is being developed by Bratton and Trotter (in progress). Information obtained from the Weekly Parent Report includes reporting any significant and/or new happenings in the child’s life at home and/or at school since last session. Information regarding changes in the child and changes in parenting the child is also assessed by five items using Likert scales from 1 to 10. With clinical experiences, the Weekly Parent Report provides the play therapists valuable information regarding any significant happenings for the parents and
the child, as play therapists may not have time to conduct weekly parent consultations. Providing the form to the parents also serves to maintain a therapeutic relationship between the play therapists and parents. A complete Weekly Parent Report form is included in Appendix at the end of this study.

**Correlational Analyses of Individual CCPT Outcome Prediction**

*Previous Meta-Analytic Studies on Play Therapy Outcome Prediction*

Results from meta-analytic literature have indicated that play therapy is effective for children regardless of presenting concerns (LeBlanc & Ritchie, 2001; Bratton et al., 2005). Bratton et al. (2005) pointed out that further research needs to address specifically targeted problems to better understand the treatment outcome of play therapy on particular presenting concerns. As suggested by scholars, the six presenting concerns that are identified and utilized in this university-based clinic were selected as independent variables. In addition to the six presenting concern variables, the number of play therapy sessions, the number of parent consultation sessions, and termination were chosen as well. Therefore, multiple regression analyses were conducted using the nine independent variables all together to examine the CCPT outcome prediction in this study. To date, however, very limited study was found that used correlational analyses to examine CCPT outcome prediction (Ray, 2008, October). The results of this study are especially important, not only because it is a pioneer study using multiple regression to predict CCPT treatment outcome, but also because it provides significant findings and implications for further research.

According to LeBlanc and Ritchie (2001), two significant predictors of play therapy outcome are (a) the length of play therapy and (b) parent involvement. Results
from meta-analytic analyses demonstrated a quadratic trend of the number of play therapy session and effect sizes. That is, the optimal effect sizes are obtained approximately following the completion of 30 to 35 play therapy sessions. However, decreasing effect size occurred as the number of play therapy sessions moved away from the 30 to 35 range in either direction, which means less or more play therapy sessions. Casey and Berman (1985) found a small negative relationship between the length of treatment and effect sizes; they considered the length of treatment and efficacy as a linear relationship. Additionally, Bratton et al. (2005) found that the number of play therapy sessions is a significant contributor to outcome efficacy. The authors revealed a curvilinear relationship between number of play therapy sessions and outcome effects. Results demonstrated that the maximum effect sizes occurred approximately during 35 to 40 sessions, which is similar to the findings of LeBlanc and Ritchie (2001).

Based on the scatter plots, Bratton et al. (2005) and LeBlanc and Ritchie (2001) reported that negligible effect sizes are more likely to be associated with a lower number of play therapy sessions. Lower numbers of play therapy sessions were identified as 14 and 10 sessions in Bratton et al. and LeBlanc and Ritchie, respectively. When children prematurely terminated in this early stage (i.e., fewer than 10 or 14 sessions), the benefits of play therapy were less likely to present.

Multiple Regressions Analyses in the Present Study

In this study, the difference scores were computed as posttest score minus pretest score. A reduction of scores (i.e., a negative score) on the dependent variables demonstrated positive progress after receiving play therapy, while an increase in scores
(positive score) demonstrated a move toward clinical scores. As for the six presenting concerns, the presence of a concern was coded as 1 and no presenting concern was coded as 0. Therefore, a negative structure coefficient \((r_s)\) on presenting concern variables indicated that participants who identified as having particular presenting concerns are more likely to have greater positive progress than those who did not have presenting concerns. Further, the termination variable is coded as 1 when participants completed play therapy treatment and coded as 0 when participants prematurely terminated. Thus, a negative structure coefficient \((r_s)\) on the termination variable revealed that greater positive progress is more likely to occur when participants completed play therapy treatment.

Results of multiple regression analyses demonstrated a statistically significant prediction on all CBCL and PSI difference scores, with the exception of the Total Problems difference score. Hence, results regarding Total Problems treatment prediction are excluded from the following discussion. To further explain play therapy outcome prediction, independent variables are discussed below.

**Number of play therapy sessions.** Results from the five prediction models demonstrated that the number of play therapy sessions was a weak to moderate predictor on Child Domain and Total Stress score reduction. Namely, the number of play therapy sessions indicated a weak to moderate prediction on Child Domain \((\beta = .149, r_s^2 = .194)\) and Total Stress \((\beta = .375, r_s^2 = .344)\) score reduction and could explain 19% and 34% of the variance of the estimated reduction in parent-child relationship stress contributed by child characteristics and overall parent-child relationship stress, respectively. Additionally, it is noted that the number of play therapy
sessions demonstrated positive moderate relationships with both estimated Child
Domain ($r_s = .441$) and Total Stress ($r_s = .586$) score reduction. In other words, having a
higher number of play therapy sessions predicted increase of parent-child relationship
stress contributed by child characteristics and overall parent-child relationship stress.

As noted earlier, number of play therapy sessions and play therapy treatment
effect demonstrated a curvilinear relationship, and the optimal effect sizes are obtained
approximately following the completion of 30 to 40 play therapy sessions (Bratton et al.,
2005; LeBlanc & Ritchie, 2001). In the present study, the ordinary least squares
regression is a type of general linear model (GLM) analysis. Because this study used a
linear relationship prediction instead of curvilinear relationship, the actual relationship
between the length of play therapy and treatment outcome may not be reflected by the
number of play therapy sessions in isolation. Negative relationships were found
between the length of play therapy sessions and treatment effect on Child Domain and
Total Stress in this study. To represent the relationship between the number of play
therapy sessions and the treatment outcome, a scatterplot was analyzed (presented in
Figure 17 and 18). According to visual analysis, the same quadratic trend as seen in
Bratton et al. and LeBlanc and Ritchie was found for this study. Number of play
sessions was positively correlated with decrease in parent-child relationship stress up to
35 to 40 sessions. Above 40 sessions began a slight increase in parent-child
relationship stress. This relationship appears to explain the finding that number of play
therapy sessions appeared as a predictor of outcome.

*Number of parent consultation sessions.* In the five prediction models, the
number of parent consultation sessions was indicated as a weak to moderate
contributor on Child Domain and Total Stress score reduction. That is, the number of parent consultation sessions revealed a weak to moderate prediction on Child Domain ($\beta = .159, r_s^2 = .197$) and Total Stress ($\beta = -.026, r_s^2 = .189$) and could explain 20% and 19% of the variance of the estimated reduction in parent-child relationship stress contributed by child characteristics and overall parent-child relationship stress, respectively. Additionally, the number of parent consultation sessions indicated a positive moderate relationship with estimated Child Domain score reduction ($r_s = .444$), while demonstrating a negative moderate relationship with estimated Total Stress score reduction ($r_s = .435$). Although having a higher number of parent consultation sessions predicted increase of parent-child relationship stress contributed by child characteristics, results indicated that a greater number of parent consultation sessions predict decreasing the overall parent-child relationship stress. Again, because this study used a linear relationship prediction instead of curvilinear relationship, the actual relationship between the length of parent consultation and treatment outcome may not be reflected by the number of parent consultation sessions in isolation. To represent the relationship between the number of parent consultation play therapy sessions and the treatment outcome, a scatterplot was analyzed (shown in Figures 19 and 20). Visual analyses demonstrated the same trend as evident in the earlier findings on number of play therapy sessions, with 8 to 12 parent consultation sessions offering optimal effects on parent-child relationship stress.

Although results for beta weights ($\beta$) and squared structure coefficients ($r_s^2$) did not reveal the number of parent consultation sessions as an important predictor on Internalizing and Externalizing Problems score reduction. The number of parent
consultation sessions indicated a negative weak relationship with estimated Internalizing ($r_s = -0.171$) and Externalizing ($r_s = -0.173$) Problems score reduction. That is, parents who received a higher number of parent consultation sessions could predict a small amount of decrease in the child’s internalizing and externalizing behavior problems.

Termination. Results for beta weights ($\beta$) and squared structure coefficients ($r_s^2$) of multiple regression analyses demonstrated that the termination variable is a moderate to strong predictor across the five measures. Squared structure coefficients ($r_s^2$) ranged from .116 to .363 in the five prediction models. In other words, the termination variable could explain 20.9%, 21.4%, 36.3%, 11.6%, and 21.2% of the variance of the estimated Internalizing Problems, Externalizing Problems, Child Domain, Parent Domain, and Total Stress score reduction, respectively.

Further, structure coefficient ($r_s$) between the termination variable and the dependent variable (difference scores) on all of the five measures indicated negative relationships. Hence, participants who completed play therapy treatment could predict greater decrease in Internalizing Problems, Externalizing Problems, Child Domain, Parent Domain, and Total Stress after receiving individual CCPT. These results are consistent with the outcome effect findings when comparing between completers and non-completers. The results also confirm that play therapy is more effective when participants complete treatment.

Abuse-related concerns. On the five prediction models show, consistent low beta weight ($\beta$) and squared structure coefficient ($r_s$) of abuse-related concerns indicated a lack of importance for the prediction in the five measures. Thus, abuse-related concerns
variable is not considered as a contributor for the score reduction prediction for the five measures.

*Mood-related concerns.* In the five prediction models, mood-related concern is a statistically significant contributor only on Child Domain prediction. That is, mood-related concerns ($\beta = .225$, $r_s^2 = .164$) demonstrated moderate prediction and could explain 16.4% of the variance of the estimated decrease in parent-child relationship stress contributed by child characteristics. Mood-related concerns ($r_s = .405$) indicated a positive moderate relationship with estimated Child Domain difference score. Therefore, participants who do not have mood-related presenting concerns were more likely to have a greater decrease in parent-child relationship stress contributed by child characteristics after receiving individual CCPT.

However, low beta weight ($\beta$) and squared structure coefficient ($r_s$) of mood-related concerns demonstrated a lack of importance for the prediction on Internalizing Problems, Externalizing Problems, Parent Domain, and Total Stress measures. Thus, mood-related concern was not viewed as a predictor for the above four measures.

*Rule-breaking/behavior problems.* Similar to the abuse-related concerns variable, results on the five prediction models indicated consistent low beta weight ($\beta$) and squared structure coefficient ($r_s$) of the rule-breaking variable in the full models. Because of a lack of importance for the prediction in the five measures, rule-breaking/behavior problems variable was not a contributor for predicting play therapy outcome.

*Academic/school problems.* In the five prediction models, academic concern is a weak to moderate contributor only on Internalizing Problems and Externalizing
Problems. That is, academic problems revealed weak to moderate predictions on Internalizing Problems ($\beta = .245$, $r_s^2 = .119$) and Externalizing Problems ($\beta = .056$, $r_s^2 = .122$). In addition, the academic problem variable could explain 11.9% and 12.2% of the variance of the estimated reduction in Internalizing and Externalizing behavior problems, respectively. Academic problems indicated a positive weak relationship with estimated difference scores on Internalizing Problems ($r_s = .345$) and Externalizing Problems ($r_s = .349$). Hence, participants who did not have academic problem concerns are more likely to have a greater decrease in Internalizing and Externalizing behavior problems after receiving individual CCPT.

However, consistent low beta weight ($\beta$) and squared structure coefficient ($r_s$) of the academic problems variable demonstrated a lack of importance for the prediction on parent-child relationship stress. Thus, the academic problems variable is unable to predict individual CCPT outcome for reducing parent-child relationship stress.

*Family relationship concerns.* Among the six presenting concern variables, the family relationship concerns variable was found to be an important contributor for four measures. Family relationship concerns demonstrated strong prediction on Internalizing Problems ($\beta = -.265$, $r_s^2 = .311$), Externalizing Problems ($\beta = -.137$, $r_s^2 = .318$), and Parent Domain ($\beta = -.274$, $r_s^2 = .444$). Family relationship concerns also revealed a moderate prediction on Total Stress ($\beta = -.187$, $r_s^2 = .160$). That is, family relationship concerns could explain 31.1% and 31.8% of the variance of the estimated internal and external behavior decrease. Family relationship concerns could also explain 44.4% and 16.0% of the variance of the estimated parent-child relationship stress contributed by parent characteristics and overall stress.
It is noted to recognize that family relationship concerns indicated a negative moderate relationship with the above four measures. That is, participants who identified as having family relationship concerns tended to have greater decreases in emotional and behavioral problems as well as having a greater reduction of parent-child relationship stress, particularly contributed by parent characteristics. Specifically, the results are important because 73.9% of parents reported bringing the child for play therapy due to family relationship concerns. Therefore, individual CCPT shows evidence of enhancing the relationship between parent and the child through demonstrating parent-child relationship stress reduction.

Other behavioral concerns. Other behavioral concern is also found to be a significant contributor for three measures. The other behavioral concerns variable indicated moderate predictions on Internalizing Problems ($\beta = -.254$, $r^2_s = .147$), Externalizing Problems ($\beta = -.322$, $r^2_s = .151$), and Parent Domain ($\beta = -.256$, $r^2_s = .210$). Therefore, other behavioral concerns could explain 14.7% and 15.1% of the variance of the estimated internal and external behavior decrease. Other behavioral concerns could also explain 21% of the variance of the estimated parent-child relationship stress contributed by parent characteristics.

In this study, approximately one third (35.5%) of the participants received play therapy treatment due to other behavioral concerns (such as hair pulling, compulsive behaviors, biting oneself, pacing and walking in circles, and so on). Additionally, it is valuable to acknowledge that other behavioral concerns demonstrated negative weak to moderate relationships with all of the above three measures. Namely, participants who identified with other behavioral concerns tend to have a greater decrease in emotional
and behavioral problems and have a greater reduction of parent-child relationship stress contributed by parent characteristics. Based on these results, it demonstrated that individual CCPT can predict positive progress working with participants who have other behavioral concerns.

*Prediction effects between CBCL and PSI.* Based on prediction results, the nine collected predictors all together demonstrated moderate to large effect sizes on score reduction on the CBCL (Internalizing and Externalizing Problems) and PSI (Child Domain, Parent Domain, and Total Stress). Results of $R^2$ and adjusted $R^2$ revealed that the nine collected predictors all together could explain the slightly greater variance of the estimated score reduction on the PSI measures than the CBCL.

**Limitations of the Study**

Due to the use of data from clinical archival child files, several limitations were presented. The following limitations are addressed for the reader’s consideration when interpreting the data analysis.

1. Because the nature of this study was based on archival data, no objective controls were available to ensure the treatment protocols of child-centered play therapy. This study did not demonstrate the effectiveness of child-centered play therapy as compared to no-intervention or another type of intervention.

2. The administration of the posttest CBCL and PSI was not standardized by time. The period of pretest to posttest varied across participants.

3. Child participants who had only intake information and did not pursue further play therapy services were not analyzed for treatment effectiveness.
4. For the purpose of this study to examine to effectiveness of individual child-centered play therapy, participants who received both individual and group play therapy, only group play therapy, and multiple treatments (i.e., individual play therapy, group play therapy, and/or filial therapy) were not included for analysis of the effectiveness of individual CCPT.

5. This study included both master’s- and doctoral-level play therapists who had completed at least 39-42 graduate hours in counseling and had completed at least two courses in play therapy, including an introduction to play therapy course and a clinical practicum. However, the amount of play therapy training and experience of the counselor may differ at the master’s and doctoral level.

6. In 2006 the university-based clinic instituted the policy of administering instruments every 10 play therapy sessions in order to avoid a lack of instruments resulting from premature termination. Therefore, before 2006, the length of administering CBCL and PSI instruments may differ from one play therapist to another.

7. Over time, the university-based play therapy clinic used multiple instruments to collect data on child client progress, including the BASC, CBCL, and PSI. Between 2000 and 2003, child participants who filled out BASC instruments were excluded from this study to ensure the consistent instrument for analysis.

8. Children who received play therapy at the initiation of treatment of 2007 and 2008 were more likely to still be receiving clinical services at this setting. Therefore, those participants who had not terminated play therapy treatment were not included in this research.
9. The majority of the participants was Caucasian and did not include a diverse cultural or ethnic representation in this study. The reader should cautiously interpret the results to ethnic groups other than Caucasian.

10. Because of the limited number of participants who filled out both the CBCL and the PSI, the prediction results should be interpreted with caution.

Implications

The present study examined real-life clinical services to the largest number of child participants (364) in decades of mental health research, especially in the field of play therapy. Results highlighted the effectiveness of individual CCPT in decreasing participants’ emotional and behavioral problems and reducing parent-child relationship stress. Although individual CCPT has shown promise regarding treatment effects, further research is needed to offer this intervention as an evidence-based practice. As discussed in the limitation section, the lack of control in terms of the length of treatment and instrument administration, and the lower percentage of participants from minority groups, offer the direction for further research on individual CCPT.

University-based clinics not only fill in the gaps of children’s mental health services needs, but can also provide a rich environment for intervention research. In this study, the large number of child participants with diverse presenting concerns offered the researcher the groundwork for examining treatment efficacy. Yet, the importance of standardizing the length of instrument administration is a key increasing powerful results. In 2006, the clinic instituted the policy of administering instruments every 10 sessions to avoid a lack of instruments resulting from premature termination. It is hoped that such a policy will lead to the ability to better understand the play therapy process through the
use of repeated measures with multiple instrument results and will provide more evidence to support the treatment effects of individual CCPT.

Bratton et al. (2005) and LeBlanc and Ritchie (2001) found that the number of play therapy sessions is a significant contributor to play therapy outcome efficacy. The authors revealed a curvilinear relationship between the number of play therapy sessions and outcome effects and reported that the maximum effect sizes occurred approximately during 30 to 40 sessions. This study supports findings of the curvilinear relationship, indicating for the exploration of this particular issue. To date, however, very limited study was found that used correlational analyses to examine CCPT outcome prediction (Ray, 2008, October). The results of this study are especially important, not only because it is a pioneer study using correlational analyses to predict CCPT treatment outcome, but it also provides significant findings and implications for further research. This study was able to detect that termination and family relationship concerns variables were strong contributors to predicting greater improvement (more score reduction). However, factors related to positive and negative score change were not fully explored in the present study. Long-term and short-term play therapy treatment outcome was not comprehensively investigated. Therefore, it is hoped that further studies focusing on these issues will provide the opportunity to explore factors influencing treatment effects more in-depth.

The effects of individual CCPT did not specifically examine each minority group because of the high percentage of Caucasian participants in this study. Literature addressing ethnicity in play therapy is limited. Hence, how to recruit minority children for
participation in play therapy and provide culturally responsive CCPT becomes a practical need for further study.

Suggestions for Further Research

Based upon the results of this study, several recommendations for future research are listed as follows.

1. A longitudinal study recruiting more participants at this university-based play therapy clinic is recommended. A large sample size would increase the power of the statistical measures, especially for the play therapy outcome prediction analyses.

2. A replication study conducting long-term and short-term individual child-centered play therapy is suggested to determine what factors are related to short-term and long-term play therapy intervention effect.

3. A replication study should be conducted with the administration of the posttest CBCL and PSI standardized by time to better explore the process of play therapy.

4. Research to examine the premature termination factors in order to prevent high dropout rate and investigate therapeutic strategies to keep the child in treatment should be conducted.

5. The similarity and dissimilarity of individual child-centered play therapy outcome between minority children and Caucasian children should be explored.

6. A future replication study conducting at other university-based or community-based play therapy clinics is suggested to better generalize the findings from the present study.

7. A study to investigate the similar and dissimilar treatment outcomes between individual and group child-centered play therapy should be conducted.
8. A replication study is recommended to explore the impact of the extent of the play therapist’s training and experience on the outcome effects.

9. A study specifically focusing on the intake participants is suggested to better understand the obstacle factors in seeking play therapy services.

Conclusion

There is a dearth of research available on child services in the community mental health setting in the fields of psychology and counseling. The purpose of this study was to conduct an experimental evaluation of university-based play therapy clinical services with children aged 3 to 10 years old and to explore dimensions of the effectiveness of child-centered play therapy with children. This study examined real-life clinical services to the largest number of child participants (364) in decades of mental health research, especially in the field of play therapy.

The literature has suggested that child-centered play therapy is an effective intervention in working with children, regardless gender, age, and presenting concerns (Bratton et al., 2005; LeBlanc & Ritchie, 2001). In this study, results demonstrated statistically significant differences between pre- and post-CBCL and PSI measures, with the exception of Parent Domain for children who participated in play therapy. Findings also highlighted the effectiveness of individual CCPT through demonstrated moderate to large effects over time (partial $\eta^2 = .097$ to .201) in decreasing participants’ emotional and behavioral problems and reducing parent-child relationship stress. Additionally, individual CCPT revealed very large effects ($\eta^2 = .26$ to .37) when specifically examined with participants who completed play therapy treatment. Further, statistically significant predictions were found on the CBCL and the PSI measures, with the exception on Total
Problems. Termination and family relationship concerns variables were found to be strong contributors to predicting greater improvement. Based on the statistical, practical, and clinical significances, the primary contribution of this study is the fully exploration of child characteristics and effectiveness of play therapy for children who seek mental health services.
APPENDIX A

NOTICE OF PRIVACY PRACTICE AND INFORMED CONSENT
NOTICE OF PRIVACY PRACTICE AND INFORMED CONSENT

THIS NOTICE DESCRIBES HOW PROTECTED HEALTH INFORMATION ABOUT YOU MAY BE USED AND DISCLOSED AND HOW YOU CAN GET ACCESS TO THIS INFORMATION.

PLEASE REVIEW IT CAREFULLY.

Welcome to the UNT Counseling Program Clinical Services (CPCS). The following notice is an introduction to your rights and responsibilities as a client at the clinic. The UNT CPCS serve dual functions: to provide counseling for the community and to aid in the professional development of counselors and supervisors. All counseling is facilitated by graduate students at the masters or doctoral level who are supervised by a counseling professor. Counseling sessions at the UNT CPCS are supervised and recorded.

This notice describes how medical information about you may be used and disclosed and how you can get access to this information. This notice also serves to obtain your consent for clinical policies and procedures. Please review it carefully.

The UNT CPCS is required by law to maintain the privacy of your health information and to provide you with notice of its legal duties and privacy practices with respect to your health information. If you have questions about any part of this notice or if you want more information about the privacy practices at a UNT Counseling Clinic, please contact Dr. Dee Ray, (940) 565-2066.

Effective April 14, 2003:

I. How We Protect Your Health Information

We protect your health information by:

- Treating all of your health information that we collect as confidential.
- Stating confidentiality policies and practices in our clinic staff handbooks, as well as disciplinary measures for privacy violations.
- Restricting access to your health information only to those clinical staff that need to know your health information in order to provide our services to you.
- Maintaining physical, electronic, and procedural safeguards to comply with federal and state regulations guarding your health information.
II. Conditions That Require Release of Health Information

The UNT CPCS maintains records of client health information in a confidential file system. The client files remain the property of the UNT CPCS but the information belongs to you. The UNT CPCS protects the privacy of your health information.

Uses and Disclosures Requiring Authorization

The UNT CPCS may use or disclose mental health information outside treatment or healthcare operations when your appropriate authorization is obtained. An authorization is written permission above and beyond the general consent that permits only specific disclosures. In those instances when the UNT CPCS are asked for your private information, we will obtain a written authorization from you before releasing this information. You may revoke such authorizations at any time provided each revocation is in writing.

Uses And Disclosures With Neither Consent Nor Authorization

The UNT CPCS may use or disclose your mental health information without your consent or authorization in the following circumstances:

- **Abuse** – If we have reason to believe that a minor child, elderly person, or person with a disability has been abused, abandoned, or neglected, the UNT CPCS must report this concern or observations related to these conditions or circumstances to the appropriate authorities.
- **Health Oversight Activities** – If the Texas State Board of Examiners of Professional Counselors is investigating a clinician that you have filed a formal complaint against, the clinic may be required to disclose protected health information regarding your case.
- **Judicial and Administrative Proceedings as Required** – If you are involved in a court proceeding and a court subpoenas information about the professional services provided you and/or the records thereof, we may be compelled to provide the information. Although courts have recognized a clinician-client privilege, there may be circumstances in which a court would order the clinic to disclose personal health or treatment information. The UNT CPCS will not release your information without attempting to notify you or your legally appointed representative.
- **Professional Harm** – If you disclose sexual contact with another mental health professional with whom you have had a professional relationship, we are required to report this violation to the licensing board. You have the right to anonymity in the filing of the report.
- **Serious Threat To Health or Safety** – If you communicate to clinic personnel an explicit threat of imminent serious physical harm to yourself or others and we believe you may act on that threat, we have a legal duty to take the appropriate measures, including disclosing information to the police. In both cases, we will disclose only what we feel is the minimal amount of information necessary.
National Security – We may be required to disclose to military authorities the health information of armed forces personnel under certain circumstances. We may be required to disclose to authorize federal officials health information required for lawful intelligence, counterintelligence, and other national security activities. We may be required to disclose mental health information to a correctional institution or law enforcement official having lawful custody of protected mental health information of an inmate or client under certain circumstances.

Research and Training: Because the UNT CPCS serves to train counselors, client mental health information is used for research and training purposes. Recorded sessions may be used for the education of counseling students. In this case, personal identifying information is protected. Any research conducted at the UNT CPCS is subject to an institutional review board that serves to safeguard your privacy and health.

III. Client’s Rights and Counselor’s Duties

Rights to Request Restrictions - You have the right to request additional restrictions on certain uses and disclosures of protected health information. The clinic may not be able to accept your request, but if we do, we will uphold the restriction unless it is an emergency.

Right to Receive Confidential Communications by Alternative Means and at Alternative Locations – You have the right to request and receive confidential communications of mental health information by alternative means and at alternative locations. (For example, you may not want a family member to know you are being seen at the clinic. On your request, the clinic will send your information to another address.)

Right to Inspect and Copy – You have the right to inspect or obtain a copy of your clinical records. A reasonable fee may be charged for copying. Access to your records may be limited or denied under certain circumstances, but in most cases, you have a right to request a review of that decision. On your request, we will discuss with you the details of the request and denial process.

Right to Amend – You have the right to request in writing an amendment of your health information for as long as the mental health information records are maintained. The request must identify which information is incorrect and include an explanation of why you think it should be amended. If the request is denied, a written explanation stating why will be provided to you. You may also make a statement disagreeing with the denial, which will be added to the information of the original request. If your original request is approved, we will make a reasonable effort to include the amended information in future disclosures. Amending a record does not mean that any portion of your health information will be deleted.

Right to an Accounting – You generally have the right to receive an accounting of disclosures of mental health information. If your mental health information is disclosed for any reason other than treatment or health operations, you have the right to an accounting for each disclosure of the previous six (6) years, but the request cannot include dates
before April 14, 2003. The accounting will include the date, name of person, or entity, description of the information disclosed, the reason for disclosure, and other applicable information. If more than one (1) accounting is requested in a twelve (12) month period, a reasonable fee may be charged.

- Electronic Information – The UNT CPCS does not allow the distribution of client information through electronic means. Requests for client mental health information are honored through phone and postal mail communication only.

IV. UNT CPCS Duties:

- The UNT CPCS is required by law to maintain the privacy of mental health information and to provide you with a notice of legal duties and privacy practices.
- The clinic and university reserve the right to change the privacy policies and practices described in this notice. Unless we notify you of such changes, however, the clinic is required to abide by the terms currently in effect.

V. UNT CPCS Procedures:

- The clinic operates only during limited hours that do not include overnights, weekends, or university holidays and breaks. Counseling sessions are limited to pre-arranged times set between the counselor and client.
- The benefits you receive from counseling depend upon your attendance. Therefore, if you are absent two weeks in a row, your name will be placed at the end of the clinic’s waiting list.
- If you wish to reach your counselor between sessions, you may leave messages with the clinic secretary who will contact the counselor. If you experience mental health crisis, you will need to obtain clinical services from the list provided to you of crisis telephone numbers or by going to a nearby hospital emergency room.
- The clinic operates according to a fee schedule. You will be assigned a fee based on your financial situation and will be expected to pay for services at the end of each counseling session. If your fee represents a hardship for you, please notify your counselor who will work with you to possibly modify your fee. The counseling UNT CPCS do not file for reimbursement from health insurance companies.
- In case of secrets revealed during family or couple counseling, information will be kept confidential without another family member’s knowledge (unless it involves one or more of the exceptions mentioned under the Uses and Disclosure With Neither Consent Nor Authorization). However, open communication is encouraged among family members and couples, and counseling will be terminated if secrets are judged to be detrimental to therapeutic progress. By signing this Informed Consent, clients involved in couple and family counseling consent for one file to be maintained for all joint sessions which any family/couple member may access or obtain copies of at any time.
The clinic reserves the right to postpone or terminate counseling with you in any of the following circumstances: a) if you come to session under the influence of drugs or alcohol; b) if you do not comply with the medication recommendations of your psychiatrist or physician; c) if your counselor believes that you are not benefiting from counseling; d) if your counselor is impaired in providing competent counseling to you; e) if in couple counseling, your counselor learns that you are abusing your partner. In the case of group counseling, group entry may be denied to anyone considered inappropriate for the group or termination may be enacted for anyone whose behavior is considered detrimental to the group.

Other Restrictions:

- The UNT CPCS must also conform to Federal Regulations (42CFR, Part 2) regarding the release of alcohol/drug treatment records and confidentiality standards related to such treatment.

VI. Changes to this Notice

The UNT CPCS and the university reserve the right to change our privacy practices and terms of this notice at any time, as permitted by applicable law. We reserve the right to make the changes in our privacy practices and new terms of our notice effective for all mental health information that we maintain, including mental health information we created or received before we made the changes. Before we make such changes, we will update this notice and post the changes in the waiting room of the facility. You may request a copy of the notice at any time.

VII. Questions and Complaints

For questions regarding this notice or our privacy practices, please contact the UNT CPCS Privacy Officer, Dr. Dee Ray.

If you are concerned that your privacy rights may have been violated, you may contact the person listed below to make a complaint. You may also make a written complaint to the U.S. Department of Health and Human Services whose address can be provided upon request.

If you choose to make a complaint with us or the Texas Department of Health and Human Services, we will not retaliate in any way.

Dee Ray, Ph.D., LPC, NCC, RPT-S
Director, Child and Family Resource Clinic
University of North Texas
P.O. Box 310829
Denton, TX 76203
(940) 565-2066
APPENDIX B

CONFIRMATION OF RECEIPT OF NOTICE OF PRIVACY
AND INFORMED CONSENT
Confirmation of Receipt of Privacy Notice and Informed Consent

By your signature below, you are indicating 1) that you have received a copy of the Notice of Privacy and Informed Consent; 2) that you voluntarily agree to receive mental health assessment and medical health care, treatment, or services, and that you authorize the clinic to provide such services as considered necessary and advisable; 3) that you understand and agree that you will participate in the planning of your care, treatment, or services, and that you may at any time stop such services received through the clinic; 4) that you have read and understand this statement and have had ample opportunity to ask questions about, and seek clarification of, anything unclear to you.

Release for Liability and Hold Harmless Provisions: By signing this document, you are releasing the clinic and holding the clinic harmless from any personal liability that arises from departure from your right of confidentiality.

By my signature, I verify the accuracy of Notice of Privacy and Informed Consent and acknowledge my commitment to conform to its specifications.

_______________________________   _______________________________
Client Signature    Counselor Signature

_______________________________ _________________ ______________
Date       Date

If the client is a minor, the legal guardian (managing conservator) must sign the statement below:

The UNT Counseling Program Clinical Services requires documentation of conservatorship/guardianship. If your conservatorship/guardianship is established by a divorce decree or custody document, you are required to furnish the clinic with a photocopy of the cause page (first page calling out the case), the page specifying conservator(s), and the signature page from the decree or document, before clinical services can begin.

With your signature below, you affirm that you are the legal guardian (managing conservator) of ______________________________________ (minor’s name). With an understanding of the above requirements, you grant permission for your child to participate in counseling and release the counselor and the UNT Counseling Program Clinical Services from liability for same, as stated in the Release from Liability and Hold Harmless provisions above.

_______________________________  _________ _____________________
Managing Conservator’s Signature   Date
APPENDIX C

CHILD/ADOLESCENT BACKGROUND INFORMATION FORM
Welcome to the Child and Family Resource Clinic. Please answer all information as completely as possible. If applicable, both mother and father should complete together. Information given is strictly confidential and beneficial in providing the best possible service. Feel free to ask for assistance, if needed. Your child’s counselor will discuss your responses with you after he/she has reviewed the form.

Child's Name: __________________________  Date of First Visit: __________________

Last     First      MI
Completed by: ______________________  Relationship to Child: ____________________

Home Phone: _______________ (May call? Yes No  May Leave Message? Yes No)

Work Phone: ________________ (May call? Yes No  May Leave Message? Yes No)

Best Time and Place to call:
________________________________________________________________________

Child's Address:
________________________________________________________________________
________________________________________  City  State  Zip

(12)Child's Gender: Male___ Female___  (13) Age ___  (14) Date of Birth
___/___/___  SS#____________________

(15)Child's Ethnicity:
African American___  Bi-racial___  Hispanic/Latin___
Asian___  Caucasian___  Native American___
Other __________

Child's primary language: English____  Spanish____  Other____________
Language spoken at home (parent’s language): ______________________

Child's Legal Guardian (Managing Conservator): ______________________________
(If the child is not living with both natural parents, both adoptive parents, or only living parent, the clinic requires a photocopy of the legal document stating custody arrangements, consisting of the cover page, page specifying conservator(s), and signature page).  (The photocopy should be stapled to this form.)

In case of emergency, contact: ___________________________________________
________________________________________  Relationship  Phone

Is your child presently receiving counseling elsewhere?  Yes  No
(If yes, do not complete this form until you have talked with your counselor)
Family members receiving services at this clinic? Yes  No  (Name/Dates of service)__________________

Is your child currently on probation?  Yes   No  School Child attends:

Current School Address & Phone:

Grade Level (now): ______  Has your child ever been retained?  Yes   No  If yes, what grade?__________________

Current Teacher(s): 1)_________  2)_________  3)_________

Current School Counselor: ________________________________________________

(16) Is your child receiving special education or other services?  Yes   No (explain)_____________________________________________________________

Has your child ever seen a mental health professional (psychiatrist, psychologist, or a counselor)?  Yes   No  (If so, we will need your permission in order to communicate with that individual or agency)

Previous Mental Health Professional/Agency:

Name: _________________________________________________________________

Address: ______________________________________________________________

Phone: __________________ Dates of Service: _____________________________(beginning - ending)

Has your child been hospitalized for mental health concerns?   Yes   No

If yes:  When __________________________________________________________

Where________________________________________________________________

How were you referred to our clinic? (Check those that apply):
Counselor/Psychologist/Psychiatrist__      School personnel__
Court__                                  Minister__        Self__
DPRS__                                   Newspaper Ad__    UNT Community__
Flyer__                                  Physician__       Yellow Pages__
Friend or Co-Worker__                   Relative__        Other____________________

Are you seeking services because your child is a victim of a crime?   Yes   No
Did it result in legal action? Yes   No  (If Yes, explain)________________________

Person responsible for financial arrangements with our clinic:

Name: Last,          First

Are you applying for sliding scale payments?  Yes   No
(17)Gross Household Annual Income (including Child Support Payments)
Less than $15,000___  15,000 – 20,000___  21,000 – 30,000___
31,000 – 40,000___  40,000+___

(18)How many family members currently reside in your home? ________________
* INFORMATION ON CHILD’S MOTHER *

**Mother’s Name:**
____________________________________________________________________

(19) I am: ___ biological mother ___ stepmother ___ adoptive mother
other ______________________

**Address:**
____________________________________________________________________

Street     City     State     Zip

Home Phone: _______________________    Work Phone: ______________________
(May call: Yes No  Leave Message: Yes No) (May call: Yes No Leave Message: Yes No)

**Date of Birth:** ________________    Occupation: _______________________

Employer: _________________________    How Long: ________________________

(20) **Education Level of Mother:**
8th grade or below _______   Trade School/Some College ___
Undergraduate Degree ___    High School ___    GED ___
Graduate Degree ___

**History of learning, emotional, or behavioral problems:** Yes   No
(If yes, please explain)

____________________________________________________________________

**History of alcohol/drug/substance abuse:** Yes   No
(If yes, please explain)

____________________________________________________________________

**History of family violence:** Yes   No
(If yes please explain)

____________________________________________________________________

**History of criminal activity:** Yes   No
(If yes, please explain)

____________________________________________________________________

(21) **Current living arrangements:**
Family of origin_____    Single_____    Spouse/Partner _____    Roommate_____    Other_____    

(22) **Marital Status (indicate all that apply and duration of each, ex. 1965-1985):**
Never married_____    Currently married_____    Divorced_____    Widowed_____    Deceased_____    

(23) **Marital History**
Number of Marriages_____    Number of Divorces_____
**INFORMATION ON CHILD’S FATHER**

*Father's Name:*
____________________________________________________________________

(24) I am __ biological father ___stepfather ___adoptive father
other _______________

*Address:*
____________________________________________________________________

Street     City     State     Zip
Home Phone: _______________________ Work Phone: ______________________
(May call: Yes No Leave Message: Yes No) (May call: Yes No Leave Message:Yes No)

<table>
<thead>
<tr>
<th>Date of Birth:</th>
<th>Occupation:</th>
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<tr>
<td>Employer:</td>
<td>How Long:</td>
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</table>

(25) *Education Level of Father*

8th grade or below _______ Trade School/Some College ___
Undergraduate Degree ___ High School ___ GED ___
Graduate Degree ___

*History of learning, emotional, or behavioral problems:* Yes No
(If yes, please explain)
____________________________________________________________________

*History of alcohol/drug/substance abuse:* Yes No
(If yes, please explain)
____________________________________________________________________

*History of family violence:* Yes No
(If yes please explain)
____________________________________________________________________

*History of criminal activity:* Yes No
(If yes, please explain)
____________________________________________________________________

(26) *Current living arrangements:*

Family of origin____ Single____ Spouse/Partner ____ Roommate____
Other____

(27) *Marital Status (indicate all that apply and duration of each, ex. 1965-1985):*

Never married_____ Currently married_____ Divorced_____ Widowed_____
Deceased_____ 

(28) *Marital History*

Number of Marriages_____ Number of Divorces_____
**GENERAL INFORMATION**

(29) Child’s current household:

- Adoptive parents ____
- Biological Father and Stepmother ____
- Father only ____
- Biological Mother and Stepfather ____
- Foster family ____
- Biological Parents ____
- Institution ____
- Relatives (specify) ________________
- Mother only ____
- Grandparents ____

List by Household your child’s current family, beginning with the oldest member and include the child:

**Primary Household** (anyone who currently lives with child)

**How long in this current living situation:**

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<tr>
<th>Name</th>
<th>Age</th>
<th>Gender</th>
<th>Relationship to you (include step, half, etc.)</th>
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Child lives in:

- House____
- Apartment _____
- Duplex _____
- Other______

**Second Household** (non-custodial or extended family - if applicable)

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<th>Name</th>
<th>Age</th>
<th>Gender</th>
<th>Relationship to you (include step, half, etc.)</th>
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Currently involved in a custody dispute: No    Yes    (If yes, explain)

If divorced, circle the number which best describes your relationship with your ex-spouse.

Hostile     Frustrating    Friendly
1___________2________________3_________4_____________5

How often does client see non-custodial parent? _____________________________

**CHILD’S HEALTH**

Child’s Primary Care Physician: ____________________________

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<th>Name</th>
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Has your child ever seen a psychiatrist? Yes    No
**Is child currently seeing a psychiatrist?**  Yes  No  *(If yes, list name, address and phone)*

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<tr>
<th>Name</th>
<th>Phone</th>
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**Date of LAST complete physical:**

**Physical Disability:**  Yes  No  *(If yes, explain)*

**Chronic Illness:**  Yes  No  *(If yes, explain)*

**Terminal Illness:**  Yes  No  *(If yes, explain)*

*Check the following items for a diagnosis or medication that your child is now receiving or has received:*

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Current (list dates)</th>
<th>Past (list dates)</th>
<th>Physician’s Name</th>
<th>Name of medication</th>
<th>Dosage</th>
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<tr>
<td>Depression</td>
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<td>ADHD</td>
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<td>Conduct Disorder</td>
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<td>Anxiety/Nervousness</td>
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<td>Manic-Depression (Bipolar)</td>
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<td>Schizophrenia</td>
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<td>Oppositional Defiant Disorder</td>
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<td>Mood/Anger</td>
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<td>Tics</td>
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<td>Insomnia/Sleeplessness</td>
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<td>Obsessive/Compulsive</td>
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<td>Addictions</td>
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<td>Seizures</td>
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<td>Post-Traumatic Stress Disorder</td>
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</table>
(If you do not know the name and dosage of current medication, please bring the medication to your next session)

**What other medication is your child currently taking?**

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<tr>
<th>Medication</th>
<th>Dosage</th>
<th>Taken for what reason?</th>
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*CURRENT CONCERNS*

(30) Circle the item that you see as the most significant issue for your child. Underline any additional concerns.

**Problems Related to Abuse**
- Current or past physical abuse
- Current or past sexual abuse
- Current or past emotional abuse
- Current or past neglect
- History of abandonment
- Suspected sexual abuse
- History of family domestic violence

**Academic/School Problems**
- Learning difficulties
- Problems with peers
- Problems with teachers
- Speech problems

**Mood-related Concerns**
- Disturbing memories
- Difficulty going to sleep/staying asleep
- Nightmares/night terrors
- Suicidal ideation
- Sadness
- Depression
- Feelings of guilt and shame
- Excessive worrying
- Anger/Irritable

**Family Relationship Concerns**
- Difficulty adjusting to family changes
- Discipline concerns
- Parent-child relationship problems
- Sibling concerns
- Divorce/Separation
- Religious/Spiritual Concerns

**Rule-Breaking/Behavior Problems**
- Aggression toward others
- Drug/alcohol use
- Truancy
- Gang involvement
- Running away
- Stealing
- Intentionally hurting animals
- Fire-setting

**Other Behavioral Concerns**
- Sexual identity concerns
- Inappropriate sexual behavior
- Overeating/refusal to eat
- Bedwetting or soiling
- Hyperactive/Inattentive
- Other unusual behaviors (specify)

*Remember to circle the most significant issue.*
When did you first become concerned about the main/most significant issue? ___________
How have you attempted before now to deal with this issue? ____________________________
______________________________________________________________________________

Other treatment your child has received to address any of the concerns indicated above:
None  Couples Counseling  Group counseling
Individual counseling  Family counseling  Hospitalization
Other ______________________

* HISTORY OF TRAUMA/STRESSORS RELATED TO THE CHILD *

(For each of the following items that apply, write in your child’s approximate age at the time it occurred):

Chronic illness of family member  Death of significant person
Domestic Violence
Family member absent (explain)
Family member’s disability/major accident/illness
Family member emotional problems (explain)
Family member suicide (explain)
Parents divorced
Child separated from parent (how long and when)
Death of a pet  Difficult medical treatments  Natural Disaster
Sexual Assault  Victim of trauma (unusual, terrifying experience)
Other ______________________

History of your child having learning, emotional, behavioral problems:  Yes  No
(If yes, please explain) ____________________________________________________________

History of your child having alcohol/drug/substance abuse:  Yes  No
(If yes, please explain) ____________________________________________________________

History of family violence:  Yes  No
(If yes, please explain) ____________________________________________________________

History of criminal activity in the family:  Yes  No
(If yes, please explain) ____________________________________________________________

Has your child been abused (check all that apply):  Physically  Emotionally  Sexually

Has your child been neglected (check all that apply):  Physically  Emotionally

School Problems (check all that apply):
Academic problems  Discipline problems  Social Problems  Other

Early Language/Speech Problems (explain) __________________________________________

History of health/physical problems includes:  (check all that apply):
Asthma  Disability  Nervous stomach
Bedwetting___   Dizziness ___   Neurological problems/exam___  
Bone/joint/muscle ___   Severe Headaches ___   Severe PMS ___  
Chest pain ___   Heart Palpitations___  
Serious overeating/under-eating___   Chronic illness___  
Hospitalization___   Shortness of breath without exertion___  
Developmental delay(s) ___   Major accident___   Sleep problems___  
Chronic Diarrhea ___   Major illness___   Surgeries___  
Other__________________

* HOME ATMOSPHERE *

Your child's current use of Computer, VCR, and Television (circle the number of hours that best describes use):

Computer (circle approximate hours spent each week)

0-2  3-5  6-8  9-11  12+

TV/VCR (circle approximate hours spent each week)

0-2  3-5  6-8  9-11  12+

What do you enjoy most about this child?

__________________________________________________

What do you find most difficult about this child?

__________________________________________________

Anything else you think we need to know?

__________________________________________________

What is the one thing I need to know to help your child today?

__________________________________________________
APPENDIX D

WEEKLY PARENT REPORT FORM
Weekly Parent Report—University of North Texas
Developed by Sue Bratton, Ph.D., LPC-S, RPT-S and Kay Trotter, M.Ed., (work in progress)

Date: ___________________________        Child’s Name/Age: __________________
Therapist Name: __________________        Parent’s Name: _____________________

I. Note significant and/or new happenings in your child’s life since last session (positive and/or negative)? If more space needed, use back to write additional information.

At school—new teacher, chosen for honor (student of the week, etc), bad grads, behavior problem/detention, death in school, fight with friends, friend moved, etc.

At home—parent working extra long hours, parents’ separation, stress in marriage, child shared toys, completed chores, birthday, death in family, pet dying, friend moved away, etc.

Environment Changes—sleep patterns, appetite, changes in support system, moved to new home, grandma visiting, etc.

Physical Changes—complains, loss/gain of weight, head or stomachache, started menstruating, signs of puberty, etc.

II. Assessment of Change in My Child and Changes in Parenting My Child:

Child’s overall behavior, compared to last week

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Child’s specific behavior or concern ( ) compared to last week

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Child’s mood/attitude toward life, compared to last week

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My experience parenting my child (stressful vs. enjoyment of child) compared to last week

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* Very Important that I talk with you—today if possible.
* I need to talk with you before next session; best day/time/phone to call ________
* I’d like to schedule a time to talk you next week at this time.

Issue of concern__________________________
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