

# Assessing Therapeutic Activities, Child Talk, and Session Outcome in Family Therapy with Young Children

A dissertation study  
by  
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## Introduction

Identification of change mechanisms in psychotherapy has long been regarded as an important contribution to clinical research (Kazdin & Nock, 2003). Process-outcome correlational studies are a valuable tool for illuminating change mechanisms, which are the specific components of therapy that promote healing and growth (Shirk, Jungbluth, & Karver, 2012). When clinicians learn what makes therapy work, they can maximize the benefit of their services by using the most effective therapeutic ingredients.

Empirical investigation of change mechanisms in family therapy with young children has been virtually ignored in clinical literature. Studies on counselors' practices with children younger than age 12 in therapy settings with whole families are scarce (Haslam & Harris, 2011; Ruble, 1999) and are typically based on surveys or interview (vs. observational) data.

There is a growing body of literature on recommendations for using family play therapy techniques to treat child psychological problems in family-systemic practice (Lund, Zimmerman, & Haddock, 2002). A play-based approach has been recommended for use with families with children to facilitate child participation/engagement, build communicative bridges between adults and children, and to strengthen attachment relationships in the family (Gil, 1994; Sori, 2006; Wittenborn et al., 2006).

Although reviews of play therapy have been positive (Bratton, Ray, Rhine, & Jones, 2005; LeBlanc & Ritchie, 2001), some incredulity still exists about the viability of play therapy with whole families (Raimondi & Walters, 2004) because this approach is nearly untested. There are almost no published studies regarding the effect of family play therapy techniques on family therapy process or outcome, or on how such effects vary with a child's developmental level. It is not even known how often therapists currently use such techniques.

## Purpose and Research Questions

This observational, process-outcome study was designed to reveal descriptive information regarding counselors' actual practices with preschool- and school-aged children in family therapy, and to investigate change mechanisms proposed by family play therapy advocates. In addition to conducting a descriptive report on the clinical techniques used and topics discussed in this sample of family therapy sessions, the following research questions were addressed:

1. Is the time spent in therapeutic activities during family therapy sessions a significant predictor of child talk time (in minutes) when controlling for time spent in solely talk-based techniques, the child's age, the child's distress-level, and other variables believed to potentially influence child talk?
2. Do any latent relations exist between a set of independent, process variables (i.e., participant talk times, time spent in activity-oriented techniques, time spent in solely talk-based, or "verbal-only", techniques) and a set of dependent outcome variables (i.e., evaluations of the child-therapist relationship, participants' overall emotional experience during the session)? If a latent relation is found, what is the relative importance of the variables comprising the latent variable?

## Method

A purposive sample of 30 families receiving family therapy was recruited and video-taped in family sessions where at least one child between the ages of 4 and 12 was present. Following each session, the therapist and parent(s) completed questionnaires while one of the children (aged 4 to 12) was interviewed for about 40 to 45 minutes.

## Measures

**Therapist Background Questionnaire.** Assessed therapist demographics, child therapy training, theoretical approach, and attitudes regarding inclusion of children in family therapy.

**Youth-Outcome Questionnaire (Y-OQ<sup>TM</sup>).** A parent-report measure of child behavioral problems (for interviewed child). The total score represents overall child distress level. Cronbach's alpha for the Y-OQ<sup>TM</sup> total score in this study was .94.

**Parent/Therapist Post-Session Questionnaire.** Original questionnaire designed to quantitatively assess (using Likert-type scales) parent and therapist reports of the following session outcome-related constructs:

- key events that occurred in the session,
- overall helpfulness of the session
- emotional experiences of the parent/therapist and child during key events
- quality of the child-therapist relationship

A principle components analysis of 26 outcome measures from the parent/therapist post-session questionnaire revealed the presence of two factors, which were interpreted and labeled as the Child-Therapist Relationship-Adult Report (CTR-AR) and Overall Emotional Experience-Adult Report (OEE-AR). Cronbach's alphas were .77 (CTR-AR) and .76 (OEE-AR).

**Child Interview Items.** Designed to assess constructs similar to those in the parent/therapist questionnaires. Children were not asked about the “overall helpfulness” of the session because the concept was believed to be too developmentally advanced for young children. The Overall Emotional Experience-Child Report (OEE-CR) and Child-Therapist Relationship-Child Report (CTR-CR) total scores were calculated from child interview responses. Due to minimal variability, CTR-CR items were analyzed as separate outcome measures rather than a composite score. Cronbach’s alpha for the OEE-CR score was  $\alpha = .84$ .

**Videotape Coding.** Session recordings were coded, minute-by-minute, for participant talk-time, therapy technique type (e.g., activity-based vs. talk-only techniques), content of therapy talk, and other variables. Session recordings were coded by 3 undergraduate research assistants (RAs), who were blind to the purposes of the study and to what the other RAs were coding. To assess inter-rater agreement of the video-coding, the investigator randomly selected 1 video from every set of 5 videos in the sample and coded the sessions on all the targeted variables. Cohen’s kappa was calculated between the investigator and RAs’ coding of variables. Kappas ranged from .64 to 1.0, except 1 kappa (-.04) for therapist talk-time.

## Results

### Content of Therapy Talk

Conversational topics discussed at the greatest length across sessions were (in descending order): activity-specific talk, the presenting problem and/or family dynamics, family members’ feelings regarding an event or issue, examples of successful coping, nonclinical (or “small”) talk, meaning-making of completed activities or art projects, and family members’ strengths.

### Family Therapy Techniques

The five techniques that were utilized for the longest periods of time across sessions included: verbal-only techniques, experiential techniques, verbal techniques involving a prop (i.e., “verbal-plus-prop”), art techniques, and puppet/doll techniques.

### Question 1

Hierarchical multiple regression analysis was used to determine how well the interviewed (or “target”) child’s talk time (the criterion variable) could be predicted by the time spent in therapeutic activities and two sets of control variables. The **first block** of predictors included the total activity time as the primary predictor with time spent in verbal-only techniques, the target child’s age, and target child’s Y-OQ™ total score as control variables. The **second block** of predictors comprised the number of parents present (1 vs. 2 parents), the number of children in the session (1 vs. 2+ children), and the therapist’s licensure status (not licensed vs. licensed). This second set of control variables was used to rule out potential validity threats identified in earlier (*t*-test) analyses.

Both multiple regression equations were significant (First:  $F(4, 25) = 4.01, p = .01, R^2 = .39, \text{adjusted } R^2 = .29$ ; Second:  $F(3, 23) = 8.22, p < .001, R^2 = .72, \text{adjusted } R^2 = .64$ ). Total activity time ( $\beta = .90, p = .01$ ) was the only significant predictor in the first block of variables. With the second block added, total activity time was still significant, and its standardized beta-weight increased to 1.19 ( $p < .001$ ). Partial correlations for total activity time with child talk time were .48 ( $p = .01$ ) and .70 ( $p < .001$ ) for the first and second multiple regression equations, respectively. These were the highest of all the partial correlations found among the predictors in both multiple regression equations.

### Question 2

To answer the second research question, Canonical Correlation Analysis (CCA) was conducted with one set of independent process-oriented variables and one set of session outcome variables. CCA was used because it is particularly useful for analyzing data sets with multiple independent and multiple dependent variables, and assessing dimensionality of the 2 sets of variables.

Independent Variable Set	Dependent Variable Set
Time in therapeutic activities	CTR-AR
Time in verbal-only activities	OEE-ARE
Child talk time	
Parent/Therapist talk time	

**Dimensionality.** The CCA model revealed the presence of two possible canonical functions (or, dimensions) underlying the sets of independent and dependent variables, but only the first of the dimensions was statistically significant,  $F(8) = 2.10, p < .04$ . Dimension 1 demonstrated a canonical correlation of .50. The squared canonical correlation of the first canonical function indicated that dimension 1 accounted for about 25% of the shared variance between the two canonical variates (or, sets of variables).

**Canonical loadings.** The canonical loadings comprise the simple linear correlation between a variable and its respective canonical variate (a concept analogous to factor loadings in factor analysis), and were calculated for both the independent and dependent variable in the first canonical function. Based on the canonical loadings, the CTR-AR total score (.995) demonstrated a much higher contribution than the OEE-AR total score (.246) to the dependent variate. For the independent variate, the highest canonical loadings were found for the time in activities (.825) and child talk time (.842) variables, suggesting these variables had the strongest relative contribution. The loading for time in verbal-only techniques was negative (-.558). This indicates the time spent in solely talk-based therapy techniques demonstrated a negative relationship with the dimension underlying the independent variate.

## Discussion

These results provided preliminary evidence that play-based family therapy techniques can make a valuable contribution to child-focused family treatment by eliciting child participation, strengthening the child-therapist relationship, and enhancing the positivity of the family's emotional experience in session. Children in this study were shown to talk more as time spent in therapeutic activities increased, offering an indication that activity-oriented methods may have evoked greater child involvement. The increase in children's talk times could be a manifestation that positive feelings connected to their play overrode their fears or anxieties, and helped them stay engaged during therapeutic activities or conversations which, otherwise, may have been more distressing and led to their withdrawal.

The finding that time spent in therapeutic activities was correlated with aspects of the child-therapist relationship is noteworthy since children's working alliance has consistently been associated with outcome in youth clinical literature (Hawley & Weisz, 2005; Shirk, Karver, & Brown, 2011). Recently, the emotional bond between child and therapist has been seen by scholars as the core component of the child's working alliance, and has been theorized to be based more on the child's perception of the therapist as fun, stimulating, and rewarding rather than as a person who can help them solve their problems (Shirk et al., 2011). In the current study, therapists who used playful activities more frequently may have strengthened their relationship with the child because they were viewed by the child as more fun and exciting than therapists who employed a predominantly talk-based approach.

Analyses from this study showed child participation and play therapy techniques were correlated with greater parent/therapist reports of emotional positivity during the session. Such findings lend credence to Sori's (2006) assertion that helping families play together in session "cultivates a new emotional climate which promotes cohesion among family members" (p. 39). It may be that assisting families, who are used to family conflict, to participate in fun activities with one another could help strengthen the family's emotional bond by enhancing the mutuality of positive feelings shared among family members.

## Limitations

These research findings were based on association and correlational analyses; thus, conclusions regarding causality cannot be made due to the absence of an experimental study design (e.g., random sampling, comparison groups). Non-randomized trials are also susceptible to sample-selection and performance biases (Marko & Weil, 2010).

## Recommendations for Future Research

Ongoing development and research of play therapy applications in family therapy is sorely needed to advance understanding of the effectiveness of this psychotherapy approach. For family play therapy to be more widely accepted as an efficacious practice, additional effort will be needed to consolidate suggestions for implementing systemic play therapy techniques (e.g., Gil, 1994; Lund et al., 2002) within the theoretical framework of specific family therapy models and to translate these recommendations into treatment manuals or protocols in which the approach is delineated, from start to finish, across the course of treatment.

In future studies of this nature, researchers will want to consider child developmental factors as well as individual child- and family-level outcome measures. Findings from such studies may serve as a catalyst to develop treatment accommodations for children of different ages that would otherwise not have been considered.

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