A PROGRAM EVALUATION OF THE YOUTH FOR CHANGE
PARENT-CHILD INTERACTION THERAPY PROGRAM

A Thesis
Presented
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In Partial Fulfillment
of the Requirements for the Degree
Master
of
Social Work

by
Maralee Anne Salamon

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ABSTRACT

A PROGRAM EVALUATION OF THE YOUTH FOR CHANGE
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This thesis involved an outcome evaluation of the Parent-Child Interaction Program offered by a youth and family service agency. Secondary data was collected from records on 103 children who participated in this program over the last three years. Analysis highlighted the effectiveness of the program, as measured by improved parent-child interaction skills, prognosis and level of goal attainment at discharge. Length of treatment and rates of client drop-out were also examined. Challenges of this study included missing data and inconsistencies in the collection of the evaluation measures. The researcher recommends that this agency develop a system for monitoring data collection and further operationalize the measures of prognosis, treatment drop-out and goal attainment.
CHAPTER I

INTRODUCTION

The program that I have chosen to evaluate is the Youth For Change Parent-Child Interaction Therapy (PCIT) program. Parent-Child Interaction Therapy (PCIT) is defined as “a short-term, evidence-based intervention designed for families with children between the ages of 2 and 6 who are experiencing a broad range of behavioral, emotional, and family problems” (Herschell, Calzada, Eyberg & McNeil, 2002, p. 9). Parent-Child Interaction Therapy (PCIT) focuses on enhancing the parent-child relationship and changing interaction patterns. “In PCIT, parents are taught specific skills to help them establish a nurturing and secure relationship with their child, while increasing their child’s prosocial behavior and decreasing negative behavior” (University of Florida, 2007, What is PCIT?, para. 1). These skills include a set of “Do’s,” also known as the PRIDE skills, that include describing appropriate behavior, reflecting appropriate verbalizations, imitating appropriate play and praising prosocial behavior. Parent behaviors that are discouraged are referred to as “Don’ts” and include giving commands or making requests, asking questions, and criticizing or correcting in a negative way.

This treatment is completed in two phases and focuses on two basic interactions: Child Directed Interaction (CDI) and Parent Directed Interaction (PDI). CDI is similar to play therapy, as the goal of this phase of treatment is for the parent(s) to engage their child in a play situation that strengthens their relationship by recognizing
their child’s positive qualities and identifying and reframing misbehavior. PDI closely resembles clinical behavior therapy where the parent(s) learn to use specific behavior management techniques as they play with their child (Hembree-Kigin & McNeil, 1995, p. 9).

On average, a full course of treatment is completed in 10-16 one hour sessions that are conducted weekly. The seven steps of PCIT as outlined by (Hembree-Kigin & McNeil in *Parent-Child Interaction Therapy* (1995) are as follows:

Step 1: Pretreatment assessment of child and family functioning and feedback (1 to 2 sessions). Step 2: Teaching behavioral play therapy skills (1 session). Step 3: Coaching behavioral play therapy skills (2 to 4 sessions). Step 4: Teaching discipline skills (1 session). Step 5: Coaching discipline skills (4 to 6 sessions). Step 6: Post-treatment assessment of child and family functioning and feedback (1 to 2 sessions). Step 7: Booster sessions (as needed). (p. 12)

Throughout treatment the parent is evaluated on their progress in obtaining and implementing the PRIDE skills and behavior management techniques in their sessions.

Youth For Change has adapted this standard PCIT process to meet the needs of their clients. Some of the modifications that this agency has implemented are: adding one-on-one collaterals contacts with the parents, extending treatment time, implementing in-home as well as community sessions. Their program works with a number of parents and children who have multiple needs, making successful completion of services within the standard, above noted timeline, very difficult. These needs include: severe marital discord, parental psychopathology, mental retardation and pervasive developmental disorder diagnoses. Hembree-Kigin and McNeil (1995), recommend that modifications to the modality be used for such patients, ranging from starting with individual therapy to extended treatment length.
This thesis focused on evaluating the effectiveness of the Youth For Change adapted PCIT program in decreasing or eliminating parent stress and negative child behaviors, while increasing positive parent interaction skills. As a result of working with this agency for a year, I was aware that there was data that had been gathered on this program that had never been analyzed. In addition to looking at program effectiveness, this researcher was interested in understanding the strengths and limitations of the methods used by Youth For Change in evaluating the PCIT program. Administrators and clinicians were both supportive of my efforts and interested in receiving information about their program. In particular, they were interested in learning about: the average age of the children they were working with, where the majority of their referrals were coming from, whether or not the majority of their clients had some type of abuse history and the average number of sessions being completed. The administrators were also interested in the successful completion rates for this program and rates of client dropout from services.

The Youth For Change PCIT program is largely Medi-Cal funded and currently does not have a completed evaluation to present the effectiveness of this program. Although the data is available, this program has had no outcome evaluation process developed. The program clinicians have been collecting outcome measures, such as the Parenting Stress Index (PSI), the Eyberg Child Behavior Index (ECBI) and Dyadic Parent-Child Interaction Coding System (DPICS), but have struggled with consistency of collection. It was clear at the beginning of this thesis that this might limit the amount of data available to use for this outcome evaluation.
Prior to accessing the data, this researcher preformed a literature review. It was focused on the effectiveness of the PCIT model, aspects of the model that may lead to success, and possible reasons for attrition or drop-out.
CHAPTER II

LITERATURE REVIEW

Eyberg and Robinson (1982) found that the Parent-Child Interaction Therapy proved to be an effective treatment of disturbed behavior in children. Seven consecutive families were trained in the two stages of treatment, Child-Directed Interaction and Parent-Directed Interaction. The following measures were used both pre and post treatment; Dyadic Parent-Child Interaction Coding System-II, the Locke-Wallace Marital Adjustment Test, the Shipley Harford Retreat Scale, the Minnesota Multiphasic Personality Inventory, the Becker Bipolar Adjective Checklist and the Eyberg Child Behavior Inventory. At pre-treatment, a demographic data sheet and, at post-treatment, the Therapy Attitude Inventory was also administered. Parents reported high treatment satisfaction and observed a significant decline in the number and intensity of the child’s problem behaviors at the end of treatment. This suggests that this treatment modality altered interaction patterns, allowing these families to better relate to one another and to deal more effectively with problems.

Werba, Eyberg, Boggs, and Algina (2006), explored predictors of treatment success and attrition in Parent-Child Interaction Therapy. Their study consisted of 99 families with children with disruptive behavior disorders, ranging from ages 3 to 6 years. The results of this study showed that maternal parenting stress and inappropriate parenting were predictors of premature termination of services. However, the authors
note that other factors may also need to be examined as to their influence on treatment outcomes. Measures used were the DSM-II-R Structured Interview, the PPVT-R, the Wonderlic Personnel Test, the Dyadic Adjustment Scale (DAS), the Eyberg Child Behavior Inventory (ECBI), the Parenting Stress Index (PSI), the Parental Locus of Control (PLOC), the Beck Depression Inventory (BDI) and the Dyadic Parent-Child Interaction Coding System-II (DPICS-II). The authors suggest that “a more comprehensive array of potential parent variables, including parenting styles, cognitive processes, personality characteristics and social support, is a promising direction for further study” (Werba, Eyberg Boggs, & Algina, 2006, p. 641). They also suggest that future research include other potential predictors of outcomes including; treatment expectations, treatment acceptability, the demands of treatment and the strength of the parent-therapist relationship.

Boggs et al. (2004), examined outcome data for PCIT that was gathered from one to three years after treatment. Comparisons were made between 23 families who completed treatment and 23 families who did not. The measures used were the Structured Interview for Disruptive Behavior Disorders, Eyberg Child Behavior Inventory, Parenting Stress Index, Parental Locus of Control Scale and the Therapy Attitude Inventory. These researchers also examined the reasons for early termination of services. They found that primary reasons parents reported for dropping out were difficultly obtaining childcare and transportation. These findings suggest that there is a relationship between lack of financial resources and completion of treatment.

Harwood and Eyberg (2004) examined therapist verbal behavior early in PCIT and its relation to successful completion of treatment. The measures that were used in this
study were the Structured Interview- Parent Version, Child Behavior Checklist, Peabody Picture Vocabulary Test-III, Wechsler Intelligence Scale for Children-III Full Scale IQ, Wonderlic Personnel Test, Wechsler Adult Intelligence Scale Full Scale IQ, Dyadic Parent-Child Interaction Coding System-II, Therapy Process Codes, and the Coder Impressions Scale. The findings of this research suggest that supportive therapist behaviors were related to positive treatment outcomes and that both confrontation and advice-giving had a negative effect. The authors describe supportive behaviors as affirming clients’ comments, praising them in session and expressing empathy during treatment. Harwood and Eyberg further state that if these supportive behaviors are to have the maximum benefit, they must take place in the very first session with the parent and during the first thirty minutes of the meeting. Results of this study also indicate that treatment dropout was predicted primarily by lower rates of supportive behavior and higher rates of questions.

Eyberg et al. (2001) examined the long-term treatment outcomes for 13 families with conduct-disordered preschoolers who participated in PCIT treatment. The families were divided into two different groups; seven families started the CDI stage of treatment first, while the later six started in the PDI stage of treatment. The measures that were used in this study were the Structured Interview for Disruptive Behavior Disorders (DSM-III-R), the DPICS, the ECBI, the CBCL, the Werry-Weiss-Peters Activity Rating Scale, Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PCSA), the PSI and the TAI. Following treatment, there was no significant difference between the two groups. Follow-up with these two treatment groups showed no long-term difference in treatment outcomes based on the order in which treatment
phases were provided. These results suggest that treatment may be successful in achieving long-term gains regardless of treatment sequence.

Timmer et al. (2006), discuss the successful results of a single case study employing the Parent-Child Interaction Therapy (PCIT) modality with an aggressive young boy and his foster-adoptive mother. This article identifies the effectiveness of this form of treatment, specifically for children placed in out-of-home care. It documents specifically the steps used in the PCIT modality and outlines a timeframe for length of treatment. This article identifies the following measures that can be used to evaluate this type of therapy. The Eyberg Child Behavior Inventory (ECBI), the Parenting Stress Index (PSI), and the Therapy Attitude Inventory were all administered. The data from these measures were gathered at pre, mid and post-treatment and then compared. This article found that the treatment was effective in moderating the young boy’s impulsiveness. The article also notes that the authors believe that “a large part of PCIT’s success depends on caregivers’ dedication to and belief in the treatment process and their investment in changing their children’s behavior” (Timmer et al., 2006, p. 935).

A study done by Hood and Eyberg (2003), found significant outcomes for Parent-Child Interaction Therapy, as reported by mothers of children with oppositional defiant disorder (ODD) and/or Attention Deficient Hyperactivity Disorder (ADHD) three to six years following treatment. A sample of 29 out of 50 completers of treatment participated in this study. The mothers were mailed and asked to complete a packet of measures including a consent form, a demographic questionnaire, the ECBI, the Parenting Locus of Control-Short Form (PLOC-SF), and the Beck Depression Inventory II (BDI-II). Upon receiving the packet, the researchers completed a telephone interview
to review the measures. Analysis was conducted on the data provided by the 23 participants that completed and returned the packet at pre, post, follow-up testing. Results showed significant changes in the child’s behavior, as well as improvements in the ability of the mothers to establish parental control. The changes that were seen at the completion of treatment were maintained or increased at long-term follow-up. Hood and Eyberg proposed that these gains were due to the positive parent-child interactions that were initiated in treatment and that “serve to reinforce the parent and child behaviors reciprocally over time in a reinforcement spiral” (Hood & Eberg, 2003, p. 427).

Fernandez and Eyberg (2009) studied reasons for attrition in 99 families that participated in the PCIT. They discovered that 71% of:

. . . dropouts were identified by lower socioeconomic status (SES) and more maternal negative talk. Higher maternal stress predicted 63% of the dropouts in the assessment session only. Lower maternal intellectual functioning predicted 83% of dropouts from maintenance treatment. (p. 1)

Measures used in this study are as follows: the Hollingshead Four Factor Index of Social Status, the CBCL, the Wonderlic Personnel Test, the Peabody Picture Vocabulary Test (3rd ed.), the BDI-II, PSI, DPICS-II, and the TAI. The primary reasons for discontinuing treatment, as reported by 31 families were as follows: disagreement with treatment approach (26%), too busy to participate (13%), having additional stressors that interfered with treatment (13%) and having logistical problems that interfered (13%). The author suggests, based on these results, they may be able to decrease attrition by emphasizing the role of positive parent-child interactions in changing children’s behaviors, focusing on mastery of the new communication skills, clarifying parent
expectations, improving therapist verbal behaviors and incorporating motivational interviewing skills.
CHAPTER III

METHODOLOGY

An application was submitted by this researcher to the California State University, Chico Human Subjects Review Board. Upon receiving permission to conduct this program evaluation, this researcher collected the previous three years of secondary data from the Youth For Change Parent-Child Interaction Therapy program closed case files. There were multiple measures collected and used in this evaluation.

The first measure was the Parental Stress Index (PSI). The PSI is a 101-item inventory designed to measure stress in the parent-child dyads, as reported by the parent. This instrument consists of 13 subscales that are grouped into a Parent Domain and Child Domain. The Parent Domain measures personal attributes that can lead to stress in their parenting role, such as depression, low attachment, role restriction, low sense of competence, social isolation, poor parent health and poor relationship with spouse. The Child Domain measures the child’s behavior attributes that can lead to frustration for the parent in trying to develop a relationship with the child, such as low adaptability and acceptability, demandingness, mood related problems or distractibility/hyperactivity. The two domains are combined to make the total stress score. Abidin (1990) states that this instrument has demonstrated internal consistency and test-retest stability as well as concurrent validity. For purposes of this thesis the total stress pre and post scores were analyzed.
The second measure used was the Eyberg Child Behavior Inventory (ECBI). This instrument was designed to be used in pediatric settings as a screening tool for indentifying disruptive behavior in children between 2 and 16 years of age (Eyberg & Pincus, 1999). The ECBI is a 36-item parent report rating scale consisting of two subscales. The first subscale is the Intensity Scale which measures the frequency and severity of the daily behaviors with the options ranging from 1 (never) to 7 (always). The second subscale is the Problem Scale, which asks whether or not the behavior is a problem for the parent in the form of a yes or no response. This score measures the parent’s tolerance for the child’s behaviors. Rich and Eyberg (2001), state that “Both scales have shown high internal consistency and stability as well as convergent and discriminate validity, with ratings scales of psychopathology and behavioral observation measures” (p. 250-1).

The third measure used was the Dyadic Parent-Child Interaction Coding System-II (DPICS-II) (Eyberg, Nelson, Duke, & Boggs, 2005). This instrument was designed to measure child and parent behaviors and verbalizations in a five minute segment during their session.

The purpose of the DPICS is to: (a) to provide an observational measure of parent and child behaviors during dyadic interactions as one component of the psychological evaluation of childhood disorders and/or parenting skills; (b) to measure baseline or pre-treatment behaviors occurring in dyadic family interactions; (c) to provide a measure of ongoing progress during therapy that focuses on changing general parent-child interaction patterns; and (d) to serve as a behavioral observation measure of treatment outcome. (Eyberg et al., 2005, p. 9)

Eyberg et al. (2005), developed the DPICS to focus on five areas of behaviors and verbalizations: Praise, Description, Reflection, Question and Command. A tally mark is made by the therapist in the above areas when the behavior or verbalization is
demonstrated by the parent during the five minute segment. Proficiency is demonstrated when the parent has been able to reach 15 praises, 25 descriptions and/or reflections and less than 5 questions or commands in the five minute segment. This measure has demonstrated interrater and test retest reliability, as well as discriminative and convergent validity (Eyberg et al. 2005).

Another measure used in this evaluation was the Episode Transfer/Closing and Discharge Summary. The Episode Transfer/Closing and Discharge Summary is completed by the clinician at the time of discharge. The form includes: referral source, age, gender, ethnicity, sexual abuse history, physical abuse history, neglect history, prenatal exposure to drugs or alcohol, domestic violence history, the number of sessions completed, whether the client dropped out of services (defined as yes or no), reasons for dropout (defined as: mutual agreement with goals met, mutual agreement with goals partially met, mutual agreement with goals not met, AWOL partially complete, AWOL with no improvement, client moved out of service area, program decision and administrative reasons), goals met (defined as: yes, no and some), change in functioning (defined as: improved, no change and worse), and prognosis (defined as: poor, fair, good and excellent).

A database of variables was created and analyzed in SPSS. These included: DPICS pre, mid and post scores for Praise, Reflections and Questions; PSI pre, mid and post scores for each of the five domains; ECBI pre, mid and post scores for the two domains; and each of the 15 areas of the Episode Transfer/Closing and Discharge Summary described above. Descriptive as well as inferential statistical tests were run to access the effectiveness of this program.
CHAPTER IV

RESULTS

The sample that was used included 103 children who participated in the PCIT program and ended services within the last three years. They ranged in age from one year to ten years. The mean age of participants is 4.1 (SD=1.6). The distribution of the referral sources is as follows: Department of Social Services=36.1%, School=17.5%, Other Social Services=39.2% and Self=7.2% (Figure 1). The sample size break down regarding ethnicity is: White=59.4%, Mexican American=10.9%, African American=1.0%, Asian=1.0% and more than one ethnicity=27.7% (Figure 2). The gender distribution of the sample is: Male=58.3% and Female=41.7%. The categories of prior abuse experienced by the child were defined as: physical, sexual, neglect, domestic violence and prenatal exposure to drugs or alcohol. Out of the 103 participants, only 34.3% reported having no abuse history. The average number of PCIT sessions completed by participants ranged from 0 to 79 (M=19.9). Prognosis at discharge and levels of goal attainment varied for clients served. Almost 12% completed treatment with an excellent prognosis, 31% with a good prognosis, 31% with a fair prognosis and 26% with a poor prognosis. Roughly 35% of clients met treatment goals, while 33% met some goals and 31% did not meet goals.

T-tests were performed on the data collected from the DPICS to further assess the effectiveness of the Youth For Change program (see Table 1). This researcher
selected out the cases that had pre and post DIPIC scores concerning the parents’ use of praise, \( n=32 \). A paired samples t-test was performed in order to determine if there was a
Table 1

Comparisons of Pre and Post Scores and T-Tests

<table>
<thead>
<tr>
<th>Measures</th>
<th>Pre Mean</th>
<th>Pre SD</th>
<th>Post Mean</th>
<th>Post SD</th>
<th>t</th>
<th>p</th>
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<tr>
<td>DPICS Praise</td>
<td>3.56</td>
<td>4</td>
<td>13.62</td>
<td>6.6</td>
<td>7.8</td>
<td>.000</td>
</tr>
<tr>
<td>DPICS Reflect</td>
<td>19</td>
<td>7.2</td>
<td>29</td>
<td>9.3</td>
<td>-4.7</td>
<td>.000</td>
</tr>
<tr>
<td>DPICS Quest</td>
<td>20.3</td>
<td>10.9</td>
<td>6.4</td>
<td>6.1</td>
<td>7.0</td>
<td>.000</td>
</tr>
<tr>
<td>PSI Total</td>
<td>92.9</td>
<td>23.9</td>
<td>81.5</td>
<td>25.5</td>
<td>2.6</td>
<td>.017</td>
</tr>
<tr>
<td>ECBI Prob</td>
<td>17.7</td>
<td>7.8</td>
<td>7.7</td>
<td>8.2</td>
<td>6.5</td>
<td>.000</td>
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significant difference in pre and post scores on this measure of treatment progress. The mean pre score was 3.56 (SD=4) and the mean post score was 13.62 (SD=6.6). The scores increased on average by 10 points (SD=7.3). The difference between the pre and post measures was significant (t=7.8, df=31, p=.000). A paired t-test was also preformed on the DPICS data concerning the parents’ use of reflection. This researcher selected out the cases that had pre and post reflection DPICS scores, n=32. Of those participants who had pre and post scores for reflection DPICS the results are as follows. The mean pre score was 19 (SD=7.2) and the mean post score was 29 (SD=9.3). Scores increased on average by 10 points from pre to post (SD=12.3). The difference between the pre and post scores on this measure was significant (t=-4.7, df=31, p=.000).

A paired t-test was performed on the DPICS data concerning the parents’ use of questions. This researcher selected out the cases that had pre and post question DPICS scores, n=32. Of those who had pre and post scores for this measure, the results are as follows. The mean pre score was 20.3 (SD=10.9) and the mean post score was 6.4
Scores decreased on average by 13.9 (SD=11.3). The difference between the pre and post scores on this measure was significant \((t=7.0, df=31, p=.000)\), indicating improvement in the parent-child interaction.

A paired t-test was also performed on the PSI measure of total stress to assess if there had been a decrease in parent stress by the close of treatment. This researcher selected out the cases that had pre and post PSI total stress scores, \(n=19\). Of those who had pre and post scores on this measure the results are as follows. The mean pre score was 92.9 (SD=23.9), and the mean post score was 81.5 (SD=25.5). The mean scores on average decreased by 11.4 (SD=19). The difference between the pre and post scores on this measure was significant \((t=2.6, df=18, p=.017)\), showing declining levels of parent stress.

A paired t-test was performed on the ECBI subscale problem behavior scores. This researcher selected out the cases that had pre and post ECBI problem scores, \(n=24\). Of those who had pre and post scores on this measure the results are as follows. The mean pre score was 17.7 (SD=7.8) and the mean post score was 7.7 (SD=8.2), showing significantly decreased problem behaviors as reported by the parent(s) \((t=6.5, df=23, p=.000)\). A correlation between pre and post scores was found suggesting that those parents who initially identified a low number of problem behaviors and those who indentified a high number of problem behaviors, reduced their problem behaviors by approximately the same amount \((r=.554, p=.005)\).

A paired t-test was performed to assess the relationship between skill development in parents and improvements in child behavior. First, a dichotomous variable was created distinguishing between parents who had met the graduation standard
of 15 or greater praises and those who had 14 or less within a five minute period of time at case closure, as measured by the DPICS. Cases were selected that had pre and post scores for PRIDE skill development as it relates to praise and ECBI intensity scores, \( n=25 \). There was no significant difference found in the ECBI intensity scores based on whether the parent met the graduation standard for post praise scores.

A chi-squared test was performed to assess the relationships between parents praise skill development and prognosis. Cases were selected out that had a prognosis noted on the Episode Transfer/Closing and Discharge Summary and post praise DPICS scores, \( n=30 \). The dichotomous variable that was created for these DPICS scores was used in this analysis. To prepare for this analysis of prognosis date, this researcher tool the original prognosis variable with four response options (defined as poor, fair, good and excellent) and transformed it into a dichotomous variable (good=1 and poor=2). There was no significant difference found in prognosis based on whether the client met or didn’t meet the graduation standard on the praise domain of DPICS.

A new dichotomous variable was created for reflection DPICS scores to distinguish between clients who met the graduation standard of 25 or greater reflections (1=yes) and those who displayed 24 or less (2=no). A chi square test was preformed to examine the relationship between parent skill development in this area and prognosis. This researcher selected out cases that had post reflection DPICS scores and prognosis data, \( n=30 \). There was no significant difference found in prognosis based on whether clients met or didn’t meet the graduation standard on their use of reflections.

Out of the 103 participants, 61% were identified as clients who dropped out of treatment at some point. To better understand this finding, data on treatment completion
rates was examined in relation to prognosis assigned to clients by their clinician at discharge. It was also related to levels of goal attainment. For participants that dropped out, 18.2% had a good prognosis and 81.8% had a poor prognosis. A chi square analysis showed that the difference in prognosis based on whether treatment was completed is significant \((x^2=39.46, p=.000)\). For participants that dropped out, 8% met their goals, 45.3% met some of their goals and 46.7% did not meet their goals. A chi square analysis showed that the difference in goal attainment based on whether treatment was completed is significant \((x^2=51.8, p=.000)\).

Another focus of analysis was the relationship between length of treatment and outcomes. A dichotomous variable was created for the number of sessions completed, with 0-8 sessions considered a low number and 9 or more sessions considered a high number. A chi-square analysis was run to see if there was a significant difference in prognosis for clients based on the number of sessions that were completed. A significant difference was found \((x^2=9.31, p=.002)\). Of those who had 0-8 sessions 18.5% had a good prognosis, while 81.5% had a poor prognosis. Of those participants who had 9 or greater sessions, 53% had a good prognosis, while 47% had a poor prognosis.

Frequencies concerning the mean number of sessions for clients categorized by prognosis are as follows: \(M=9.30 (SD=10.62)\) for those with poor prognosis, \(M=20.31 (SD=14.51)\) for those with fair prognosis, \(M=29.17 (SD=19.29)\) for those with good prognosis and \(M=20.55 (SD=11.36)\) for those with excellent prognosis. A one way ANOVA test was preformed that also showed that prognosis was significantly related to the number of sessions completed \((F=7.4, p=.000)\). It is interesting to note that the lowest average number of sessions was seen with clients who had a poor prognosis. However, clients
with an excellent prognosis had, on average, a shorter treatment episode than those with a good prognosis.

Another chi square analysis was performed to examine if session length was significantly associated with goal attainment. A significant relationship was found ($\chi^2=45.69, p=.000$). For clients who had 8 or fewer sessions 3% met their goals, 19% met some of their goals, and 75% didn’t meet the goals. For clients who had 9 or greater sessions 49.2% had met their goals, 39.4% met some of their goals and 11.4% did not meet their goals. Frequencies were also completed to find the mean number of sessions for clients who attained varying levels of goal attainment. The mean number of sessions for clients who met goals was 28.69 ($SD=16.21$). The mean number of sessions for clients who did not met their goals was 7.16 ($SD=8.0$). The mean number of sessions for clients who met some of their goals was 22.47 ($SD=15.93$). A one way ANOVA test showed that the number of sessions completed was significantly related to the client’s level of goal attainment ($f=20.21, p=.000$).

A new dichotomous variable was created that used different cut points for defining a high versus low number of sessions. This was done in order to distinguish between clients who received treatment that was consistent with the pure model length (0-16 sessions) and those who continued in services beyond 16 sessions. A chi square analysis was run to see if there was a significant difference in prognosis for clients based on the number of sessions that were completed. A significant difference was found ($\chi^2=7.76, p=.005$). Of those who had 0-16 sessions 29.2% had a good prognosis, while 70.8% had a poor prognosis. Of those participants who had 17 or greater sessions, 57.8% had a good prognosis, while 42.2% had a poor prognosis. Another chi square analysis
was performed to examine if session length was significantly associated with goal attainment. A significant relationship was found ($x^2=21.69, p=.000$). For clients who had 16 or fewer sessions 16.7% met their goals, 35.2% met some of their goals, and 48.1% didn’t meet the goals. For clients who had 17 or greater sessions 56.3% had met their goals, 31.2% met some of their goals and 12.5% did not meet their goals.
In an effort to discover if treatment in this program was successful for clients, I first wanted to define success. According to Harwood and Eyberg, (2004), successful completion of treatment is determined when the identified problems have been decreased or eliminated. Given this definition, this researcher has found evidence through analyzing the data that suggests that there has been success for clients who engaged in PCIT as provided by Youth For Change. For the subsample of clients who had pre and post scores for their PSI ($n=19$) and ECBI ($n=24$), the tests reveal a positive outcome. This is evidenced by a significant decrease in their total stress (as seen on the PSI measure) and a decrease on their child’s problem behaviors (measured by the ECBI). Another definition of success relates to improved parent skills. Again, the analysis suggests that this type of success occurred for many of the clients served based on improved parent-child interaction (increased DPICS scores). Other measures of success that were examined included prognosis at discharge, level of goal attainment, and completion of treatment versus drop-out. A majority of clients had a fair, good or excellent prognosis at discharge. Sixty-eight percent of participants met some or all of their treatment goals. Almost half of the clients served completed the treatment program.

When relationships between these outcome measures were analyzed, some interesting results were found. Skill development in parents was not significantly related
to improved child behavior or prognosis at discharge. This may be due to the very small sample of clients who had completed measures for these analyses ($n=30$ or less). While successful completion of treatment was significantly related to goal attainment and good prognosis overall, some clients who dropped out were found to have had a good prognosis (18%) and a majority (53%) met at least some of their treatment goals. This is a puzzling finding as it would appear that a majority of the clients in this sample at one time or another were marked as a dropout (61%), and yet some were still able to meet their goals and left with a good prognosis. It seems to raise the question as to how treatment drop-out was defined in a program that extends the service period beyond the standard number of sessions provided in the pure PCIT model (10 to 16).

Prior research shows that successful completion of treatment seems to rely on many factors. Werba, Eyberg, Boggs, and Algina (2006), found that high maternal stress and inappropriate maternal behavior were significant predictors of a poor treatment outcome. Youth For Change currently administers the Parental Stress Index prior to the PCIT treatment. Given Werba et al’s finding, this may allow the clinicians an opportunity to adjust their treatment for parents who score high in stress to include a focus on lowering it in order to achieve a successful outcome. Fernandez and Eyberg (2009) discuss that the prevalence of drop-out may also be due to low socioeconomic status, high maternal negative talk and lower maternal intellect. These aspects were not examined in this study, but may be an area for future research.

Results of this evaluation do make clear that drop-out is not the only factor associated with prognosis. A higher number of sessions for study participants is significantly related to a better prognosis and improved goal attainment overall. One must
exercise caution when interpreting this result however. It cannot be assumed that the number of sessions caused a better prognosis. It could be that the participants who stayed in treatment longer started out with a better prognosis even before services began. It is also interesting to note that of the clients who completed 16 or less PCIT sessions, 29% had a good prognosis and 52% met at least some of their treatment goals. This result raises the question as to the benefits achieved by extending services beyond the pure model for most or all of clients served.

One limitation involved with modifying treatment length is that it doesn’t allow for the program to be evaluated in relation to other PCIT programs. On the other hand, extended treatment length may have clinical benefits for some families served. It may allow clients with other life factors (i.e. mental illness, marital stress, and mental retardation) the opportunity to address these issues while also learning the needed positive parent-child interaction skills. It may also allow for parents who have been effected by these other life stressors the opportunity to receive needed help from the clinician in overcoming these difficult challenges. Another benefit that these clients may receive from the extended treatment length is the opportunity to generalize the skills that they are learning in their sessions into their daily activities in the community.

This researcher encountered several challenges in performing this program evaluation. The amount of missing data and inconsistencies in the collection of the PSI, ECBI, DPICS and Episode Transfer/Closing and Discharge Summaries created limitations to this study. It is recommended that a formal evaluation process be created for this program that will monitor the collection of pre and post measures. It is also important that there be a system put into place for collecting data on those participants
who chose not to continue with PCIT services (i.e. telephone contact, mailed questionnaires). This will allow for reduced bias in the evaluation results and the analysis of feedback regarding reasons for attrition in this program. It is also important to note that although the DPICS, PSI and ECBI are all standardized measures, they are only a part of the definition of success employed by this program. Another primary challenge for this agency is in further operationalizing the measures of prognosis, drop-out, and goal attainment. It is important that clinicians have clear definitions of these variables when they complete the Episode Transfer/Closing and Discharge Summary form. Finally, this author recommends that the Therapy Attitude Inventory (TAI) be used as an additional measure of both clients and program success, as it would reflect the client’s perspective of the therapist’s skills and the treatment modality. The use of this measure would provide additional information that could be used to guide efforts at reduced attrition and improved outcomes.
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