

Family Therapy Retention: An Observation of First Session

Communication

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Abstract

This study focused on the relationship between communication patterns and dropout rates among families ($n = 12$) receiving family systems therapy. Families were considered treatment completers if they attended 12 sessions ($n = 6$) and dropouts if they attended 1-3 sessions ($n = 6$). Audiotape recordings of the first therapy session were transcribed and coded. The total percentage of communications by the parent, adolescent, and therapist was measured and the content of each communication was coded (positive, negative or neutral). Parents (but not adolescents) within families that completed therapy showed higher talk time proportions than parents in families that dropped out of therapy. In addition, completer families had higher percentages of therapist-to-parent communications while dropout families had higher percentages of therapist-to-adolescent communications. These findings demonstrate the potential utility of examining within session communication patterns and suggest that certain processes, especially parental communication involvement, may determine whether or not a family returns for treatment.

Introduction

Family therapy is considered an efficacious treatment of adolescent substance abuse and has been associated with improvement in many other realms including family interaction (Liddle, 1996; Liddle, et al., 2001; Liddle, Rowe, Dakof, Ungaro, & Henderson, 2004; Santisteban, et al., 2003); Williams & Chang, 2000). Therefore, retention is an important therapeutic goal so that the family obtains the benefits of treatment. Although several studies have examined predictors of retention for family therapy (Beyebach & Carranza, 1997; Robbins, et al., 2006; Robbins, Turner, Alexander, & Perez, 2003), few studies have identified within-session communication processes. An examination of therapeutic process can provide a unique and rich source of information for understanding treatment retention beyond self-report and interview methods alone (Beyebach & Carranza, 1997).

Therapy Process Research

Process research often includes examination of interactional patterns associated with therapeutic change (Bradley & Johnson, 2005). However, the majority of this research is limited to therapists' and clients' ratings of their perceptions of interactional dynamics prior to and following the therapy session (Beyebach & Carranza, 1997; Fernandez & Eyberg, 2009; (Holtzworth-Munroe, Jacobson, DeKlyen, & Whisman, 1989; Oei & Kazmierczak, 1997). While this offers important subjective and attitudinal information that might not be obtained using observational methods, self-report/interview methods are also limited by respondent bias and measurement error (Kazdin & Nock, 2003).

Using self-report questionnaires administered post-treatment, Beyebach and Carranza (1997) found that clients who interrupted their therapist at higher rates, disapproved of their therapist, and assumed a superior position in discussion, were more likely to drop-out of therapy than other clients (dropout was defined as interruption of treatment in the first, second, or third session). Using observational methods, Fernandez and Eyberg (2009) coded mother-child interactions before and after therapy sessions and found that more maternal negative talk and less maternal total praise predicted likelihood of dropout. While these studies offer useful information regarding the interactional dynamics that might predict treatment drop-out and retention, neither study included observational analysis of in-session communications.

No studies were found that analyzed proportion of talk time as a predictor of treatment completion; however, four studies were identified since 1976 that examined within-session communications as a predictor of family therapy dropout and retention. Overall, lower proportions of supportive compared to defensive communications (Alexander, Barton, Schiavo, & Parsons, 1976), higher rates of resistant communications (Chamberlain, Patterson, Reid, Kavanaugh, & Forgatch, 1984), and higher rates of within-family disagreements (Shields, Sprenkle, & Constantine, 1991) were associated with higher drop-out rates. While these early studies coded within session communications among family members without examination of therapist communication behaviors, Diamond, Liddle, Hogue and Dakof (Diamond, Liddle, Hogue, & Dakof, 1999) conducted a within-session analysis of therapist-client communication. Diamond et al. (1999) selected five cases in which therapeutic alliance was independently coded as poor and improved over time, and five cases in which

alliance was coded as poor and did not improve over time. Among improved alliance cases, therapists were coded as attending to the adolescent's experience, formulating personally meaningful goals and presenting as the adolescent's ally more extensively than among unimproved alliance cases.

Current Study

Little is known regarding family and therapist communication processes that maintain families in treatment. The current study addresses the dearth of information in the literature by analyzing the within-session communication patterns of the therapist, parent, and adolescent and the effect these patterns have on treatment dropout and completion. The communications in the first session might help determine whether or not a family returns for treatment. Identifying process variables that predict dropout can enable practitioners to target triggers of dropout in the first session, thereby increasing the likelihood that the client will remain in therapy.

As this is one of the first studies to examine within-session communication as a predictor of treatment retention and drop-out, it is considered exploratory. However, some research indicates that higher levels of client negative talk and lower levels of positive talk are positively associated with treatment drop-out (Alexander et al., 1976; Chamberlain et al., 1984; Fernandez & Eyberg, 2009; Shields et al., 1991). Therefore, it was expected that among adolescents and parents, dropouts would have a greater proportion of negative talk time and a lower proportion of positive talk time than completers. Furthermore, this study explored the relationship between total talk time and treatment drop-out and retention among adolescents, parents and therapists. Finally,

given the role of the therapist in structuring therapy sessions, the direction of the therapist's communications - therapist to parent and therapist to adolescent - was of interest, and its relationship to treatment retention and dropout was also explored.

Method

Participants

Participants ($n = 12$ families) were recruited as part of a larger clinical trial testing adolescent substance abuse interventions with runaway adolescents and their families ($n = 180$ families). Adolescent participants for the larger study were between the ages of 12-17 years ($M = 15.5$, $SD = 1.2$), were temporarily residing at a local runaway shelter, had the legal option of returning home, had at least one parent or legal guardian willing to participate, and met DSM-IV (Association, 2000) criteria for substance abuse or dependence. The current study only examined data from families that completed or dropped out of the family therapy intervention. As the maximum number of sessions offered in the family therapy was 12, those families who attended all 12 sessions were considered treatment completers. Similar to Beyebach & Carranza (1997) those that attended 3 or fewer sessions were considered dropouts. Families who completed between 4 to 11 sessions were therefore not included in this analysis. Six families completed therapy (attended all 12 sessions) and six families dropped out of therapy (attended 1 to 3 sessions). Among those that dropped out, 2 families attended one session, 3 attended two sessions and 1 attended three sessions. Sample characteristics are presented in Table 1.

Procedure

A research assistant (RA) engaged potentially eligible youth at the runaway shelter. After the initial screening, parents were contacted and engaged into the study. Upon signing the consent and assent forms, adolescent's formal eligibility was determined using the Computerized Diagnostic Interview Schedule for Children (CDISC) (Shaffer, 1992). Those that did not meet the diagnostic criteria for substance abuse continued with the shelter program, otherwise, both the parent and adolescent completed a battery of self-report and interview questionnaires as part of the larger study. Upon completing the interview, parents were offered \$25 and adolescents were offered a \$40 gift card. Families were then randomly assigned to one of three different treatments, Ecologically-Based Family Therapy (EBFT) (n = 57), the Community Reinforcement Approach individual therapy (n = 62), and Motivational Enhancement Therapy (n = 61). The Ohio State University's Institutional Review Board approved all procedures used in this study.

Family Therapy. As noted, in the current study, only transcripts from those families that were randomly assigned to Ecologically-Based Family Therapy (EBFT) were examined. EBFT is an integrative, multi-systemic treatment based on the theory that problem behaviors occur due to many sources of influence and in the context of many systems. It uses a family systems orientation influencing change through improving family interaction. Although all family systems interventions are conceptually very similar, EBFT is home-based, includes therapeutic case management, and utilizes concepts from contextual therapy (Boszormenyi-Nagy & Krasner, 1986). In particular, the fundamental human need to be connected to others in trustable and loving relationships is one of the most salient targets of EBFT interventions. It has shown

efficacy for reducing substance use and improving psychological and family functioning in prior clinical trials (Slesnick & Prestopnik, 2005). EBFT was offered for 12, 50-minute sessions over a period of 3-6 months. EBFT was delivered by three therapists (one White male, one African-American female, and one White female) who were master's level or post-doctoral students in the Couple and Family Therapy Program at the Ohio State University.

Coding System. The Living in Familial Environments (LIFE) coding system (Arthur, Hops, & Biglan, 1982) was used to code communication behaviors. This system contains 15 content codes which refer to a person's verbal behavior. These codes were then collapsed into three codes, positive, negative or neutral. A positive code included any of the following codes: facilitative, solicitous, self-positive, problem statement, or proposed solution. A negative code included any of the following: complaint, oppositional, command unaccountable, or self-complaint. A neutral code included any of the remaining codes. Support for the construct validity of LIFE comes from the research of Biglan and his colleagues (Biglan, et al., 1985; Biglan, Rothlind, Hops, & Sherman, 1989).

Coder Training. Two undergraduate research assistants received approximately 15 hours of training until an overall reliability criterion of .80 with each other and the graduate student trainer was obtained. During training, the LIFE codebook was reviewed and each code's meaning was clarified and discussed. Coders practiced on mock transcripts provided in the coding manual. Each coder was given the same mock transcript to code and when coders obtained an inter-rater reliability of 80% with each other and the graduate student trainer, coding of actual transcripts began. Furthermore, in

order to receive a new transcript to code, undergraduate coder must have agreed at a rate of 80% with each other. If they failed to receive an inter-rater reliability of .80, the codes were reviewed and the transcript recoded. Overall, the two coders had an inter-rater reliability of .82.

Data Reduction and Coding. The audiotaped recording of the first session for each of the 12 families was transcribed by undergraduate research assistants and each transcript was coded by both trained undergraduate coders. Transcripts of family interactions were thought unitized (Gottman, 1980), and each unit was coded according to the categories in the LIFE manual. Communication percentages were determined by summing the total number of communications, or coded thought units, of each person (parent, adolescent, or therapist) and dividing this by the total number of thought units in the entire session. Each coded thought unit specified both the sender and target of the communication. However, only the target of therapist communications was of interest in this study (therapist to adolescent or therapist to parent). For parents and adolescents, any communications, regardless of the target, were collapsed and referred to only by the sender and the content of the communication ('parent positive' or 'adolescent negative'). To reduce coder bias, coders were unaware of whether the family was a treatment dropout or completer family.

Results

Parent and Adolescent Communications

Higher percentages of negative communications by either the parent or adolescent were expected among those that dropped out compared to those that completed treatment.

Also, higher percentages of positive communications (parental or adolescent) were expected among the treatment completers compared to dropouts. Table 1 shows the means and standard deviations of communications. Results of the Mann-Whitney U test showed that higher percentages of both parental positive ($U = 5.0, p < .05$) and parental negative ($U = 5.0, p < .05$) were observed among the treatment completers compared to dropouts. In contrast, neither a higher percentage of adolescent positive ($U = 17.0, p > .05$) nor adolescent negative ($U = 16.0, p > .05$) communications were associated with treatment dropout or completion (see Table 2).

The exploratory analysis compared the total talk time among dropout and completer families. Findings indicated that completer families had higher total percentages of parental communication compared to dropout families ($U = 1.5, p < .05$). However, there was no significant difference in total percentages of adolescent communication among dropout and completer families ($U = 8.0, p > .05$).

Therapist communications

Neither total proportion of therapist positive nor negative communications differentiated completer from dropout families (see Table 2 for means and standard deviations). However, among completer families, the therapist directed more communications to the parent ($M = 59.1\%$) and less to the adolescent ($M = 40.9\%$) [$t(10) = 2.20, p < .05$]. In contrast, those that dropped out had a therapist who directed more communications to the adolescent ($M = 61.2\%$) and less to the parent ($M = 38.8\%$) [$t(10) = -2.20, p < .05$].

Discussion

This study compared characteristics of the first therapy sessions' communication patterns among families that completed and dropped-out of family therapy. This comparison can offer insight regarding those within-session communication patterns associated with treatment retention and can suggest guidance to therapists seeking to maintain families in treatment. Furthermore, therapy process evaluations of within-session communication patterns as a means to understanding treatment retention and drop-out has received little research attention.

Parent and Adolescent Communications

Among parents, higher total proportions of positive, negative and total communications differentiated dropout from completer families. However, adolescent talk time did not differentiate families. Although future research is needed to further explore this finding, it suggests that active parental involvement during therapy is associated with better treatment retention, regardless of whether the involvement includes positive or negative communications. Possibly, parent's, in contrast to adolescent's, active participation in therapy may be integral to successful retention given that in most families, parents hold more power than the adolescent in family activities (Minuchin, 1974; (Szapocznik, et al., 1988). Alternatively, talkative parents might enjoy engaging with others, or might be more motivated to receive therapeutic assistance than less talkative parents, resulting in greater willingness or commitment to continue with therapy. In any case, regardless of the adolescent's level of treatment participation (positive or negative), higher parental participation appears associated with higher retention.

Unlike the current study's findings which showed higher proportions of parental negative (and positive) communications in completer compared to dropout families, prior studies indicate the higher negative communications among family members (defensiveness, resistance or family disagreements) predict family therapy drop-out (Alexander et al., 1976; Chamberlain et al., 1984; Shields et al., 1991). This difference in findings could be attributed to the study designs utilized. The current study only examined first session communication patterns while the prior studies examined communication at later points in therapy. That is, completer families in this study likely would show significantly reduced negative communications as therapy progressed. More recently, Fernandez and Eyberg (2009) also reported that more negative and less positive communication predicted higher treatment dropout rates. Fernandez and Eyberg's observation data were also obtained at later points in therapy and were based upon interaction tasks between mother and child outside the therapy session. The relationship between communication exchanges observed outside, versus during therapy likely differ, at least in relationship to treatment drop-out.

Therapist Communications

Differences among completer and dropout families were also observed when examining therapist directed communications, although therapist's talk time did not differentiate families. Completer families showed a higher proportion of therapist-to-parent directed communications than did dropout families. The opposite was found when comparing therapist-to-adolescent directed communication percentages; higher proportions of therapist-to-adolescent communications occurred in dropout compared to completer families. These findings are consistent with those above indicating that parent

involvement in treatment might be a fruitful focus for understanding correlates of treatment engagement. Future research is needed to clarify the relationship between therapist directed communications and drop-out. For example, more therapists directed communications to the adolescent, compared to the parent, could indicate that the parent is disengaged, or could serve to alienate the parent, reducing the likelihood that the family will return for treatment.

Limitations

Some limitations should be noted. First, the sample size was small, which may have increased Type II error, limiting statistical power to detect differences among dropouts and completers. Also, the study focused on substance abusing runaway adolescents and their parents receiving Ecologically-Based Family Therapy. Generalization of this study's findings to other samples and other family systems therapy approaches is unknown. That is, families without substance abusing runaways might interact differently within treatment, and generalization of study findings to other populations, using other family therapy approaches is needed. Despite these limitations, examination of within-session communication is lacking in the literature, and can offer a rich source of information not offered by self-report or interview methods of information gathering.

Conclusion

Several researchers conclude that significant gaps remain in knowledge regarding how and why treatment works (Jensen, Weersing, Hoagwood, & Goldman, 2005; Kazdin & Nock, 2003). However, many conclude that engagement in treatment is consistently associated with better treatment outcomes (e.g., (Stark, 1992)). The extant literature examining treatment process associated with retention primarily focuses on the therapist-

client relationship using self-report questionnaires. This literature indicates that higher levels of therapeutic alliance are associated with higher treatment retention (Kazdin & Nock, 2003). Too few observational studies of within-session client-client and therapist-client communication patterns have been conducted to make conclusions regarding those communication processes associated with higher likelihood of retention. However, the current study provides a step towards understanding the complex interactional dynamics within the therapy setting. And, although these findings are preliminary, unmeasured variables (e.g., sociability, motivation) might account for the observed relationship between parent talk time and retention. The findings suggest that active parental involvement (higher proportional talk time) in the first session could be important to maintaining the family in treatment. Therefore, therapists seeking to increase retention should consider making special efforts to engage less talkative parents into the conversation.

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Table 1:

Sample characteristics among completer and dropout families

	<u>Completer</u>	<u>Dropout</u>	<u>Total</u>
Parent's Average Age (SD)	42.2(5.8)	42.2(6.8)	42.2(6.0)
Adolescent Average Age (SD)	15.2(1.2)	14.5(1.4)	14.8(1.3)
Adolescent Ethnicity			
No. AA	3	4	7
No. White	2	2	4
No. Hispanic	1	0	1
No. Mixed	0	0	0
Adolescent Gender			
No. of Males	3	3	6
No. of Females	3	3	6
Average Grade in School (SD)	8.2(0.8)	8.3(1.2)	8.3(1.0)
Attending Session:			
No. of mother only families	3	5	8
No. of father only families	1	1	2
No. of two-parent families	2	0	2

Table 2:

Summary of total within-session parent, adolescent, and therapist communication percentages

	Completers (n=6)	Dropouts (n=6)	
	M%(SD)	M%(SD)	Mann-Whitney U and T-test
Parent			
Positive	8.6 (3.1)	4.33 (2.5)	5.0*
Negative	9.9 (3.2)	5.02 (3.8)	5.0*
Neutral	21.3 (3.5)	16.37 (6.3)	n/a
Total	39.9 (8.2)	25.72 (8.6)	1.5*
Adolescent			
Positive	5.2 (2.8)	6.32 (5.0)	17.0
Negative	3.9 (3.3)	4.02 (2.7)	16.0
Neutral	10.5 (4.7)	19.20 (4.3)	n/a
Total	19.5 (8.6)	29.54 (7.9)	8.0
Therapist			
Positive	5.5 (2.4)	9.83 (7.9)	13.0
Negative	0.5 (0.5)	0.44 (0.3)	17.5
Neutral	34.6 (6.5)	34.57 (8.7)	n/a
Total	40.5 (4.9)	44.75 (2.3)	9.0
To Parent	59.1 (13.6)	38.77 (18.1)	2.2*
To Adolescent	40.9 (13.6)	61.22 (18.0)	-2.2*

* $p < .05$

Figure 1:

Average communication percentages of the parent and adolescent during the first session

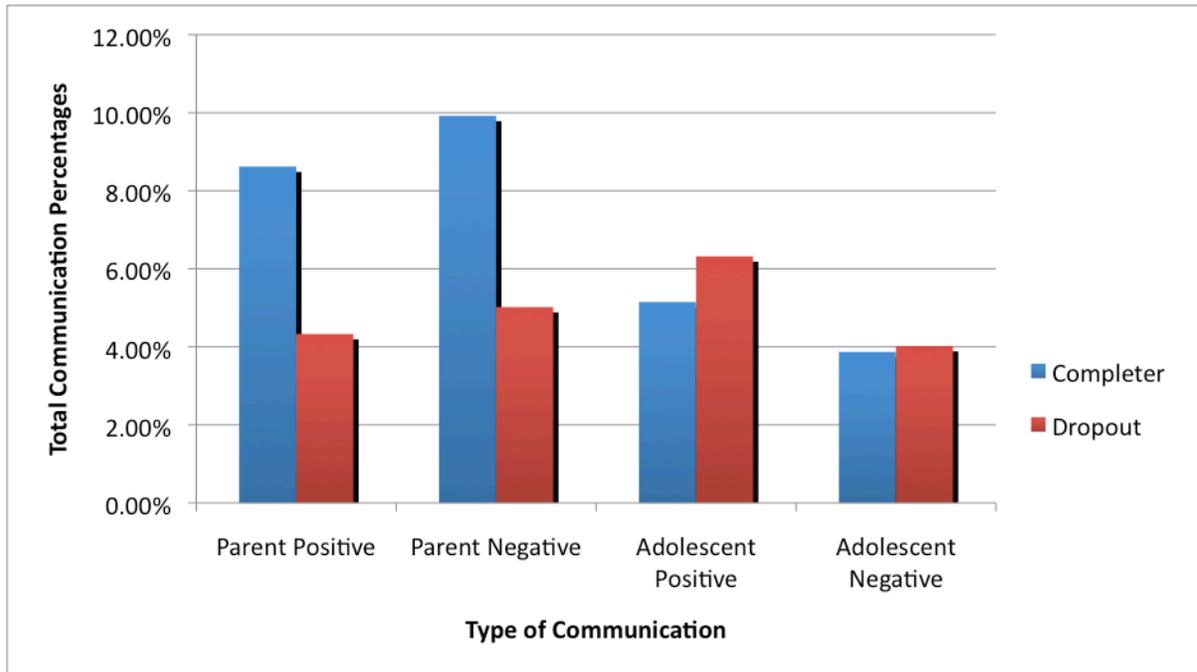


Figure 2:

Average percentages of therapist-to-client directed statements

