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Client Characteristics and Therapist Competence and Adherence to Family Therapy for Schizophrenia

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Abstract

This study aims to clarify how therapist competence/adherence relates to client characteristics, consumer satisfaction, and dropout rates for family interventions for schizophrenia. As hypothesized, less severe psychiatric symptoms and lower ratings of family difficulty were related to greater therapist competence/adherence in several non-specific and treatment specific domains of treatment. Aspects of greater competence/adherence were also related to lower dropout rates and higher consumer satisfaction. Contrary to expectations, general emotional distress and family cohesion were not related to competence/adherence. This study suggests that clinicians and researchers may want to take client characteristics into account when evaluating therapist performance and choosing clients who are most suitable for therapy.

Keywords: Schizophrenia; Competence/adherence; Family therapy.

Relaciones entre las Características de Clientes y la Competencia y Adherencia de Terapeutas a una Terapia Familiar para la Esquizofrenia

Compendio

Este estudio examina la manera en que la competencia/adherencia del terapeuta se relaciona con características del cliente, la satisfacción del cliente y la terminación prematura en intervenciones familiares para el tratamiento de la esquizofrenia. Como fue predicho, síntomas psiquiátricos menos severos e índices más bajos de tensión familiar fueron relacionados con niveles más altos de competencia/adherencia en los terapeutas, en varias áreas específicas y no específicas de tratamiento. Índices de más competencia/adherencia también fueron relacionados con índices más bajos de terminación prematura e índices más altos de satisfacción del cliente. Contrario a predicciones, la aflicción emocional general y la cohesión de familia no tuvieron relaciones con la competencia/adherencia. Este estudio sugiere que terapeutas e investigadores deberían tomar en cuenta las características de sus clientes en el proceso de evaluar el rendimiento del terapeuta y escoger clientes más apropiados para terapia.

Palabras clave: Esquizofrenia; Competencia/adherencia; Intervenciones familiares.

Mental health treatments are increasingly being standardized by manuals that lay out specific guidelines for therapists to follow as they proceed through treatment (Cukrowicz et al., 2005; Miller & Binder, 2002). However, using treatment manuals does not guarantee that therapists deliver treatment in the intended manner. Thus, it is critical to examine therapist competence and adherence to the guidelines outlined in the treatment manual in order to ensure treatment fidelity (Barber, Foltz, Crits-Christoph, & Chittams, 2004). Surprisingly, Moncher and Prinz (1991) found that less than 6% of treatment outcome studies provided adequate methods to ensure fidelity. If treatment fidelity is not established, client outcome can not be attributed to the specific treatment (Waltz, Addis, Koerner, & Jacobson, 1993).

This study will describe a procedure that was used to measure fidelity to a culturally informed therapy for

schizophrenia (CIT-S) and a treatment as usual (TAU) control condition. This study will also evaluate client characteristics associated with fidelity with the aim of helping researchers and clinicians identify traits that may make treatment fidelity more difficult. The study also assesses how fidelity relates to dropout and consumer satisfaction.

Treatment Fidelity

Therapist adherence is one of the primary components of establishing treatment fidelity. Adherence refers to how closely the therapist follows the protocol of the treatment (Perepletchikova & Kazdin, 2005). In addition to prescribed behaviors, Waltz et al. (1993) also include avoiding proscribed behaviors in their definition of adherence. Therapist competence is the other main component of establishing fidelity. Competence refers to the level of skill the therapist uses in conducting psychotherapy. In addition to competence and

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adherence, patient receipt and enactment of the treatment should also be measured (Bellg et al., 2004).

Predictors of Treatment Fidelity

It is also important to examine predictors of competence and adherence in order to determine factors potentially interfering or contributing to the therapeutic environment. Many client characteristics have been examined as potential predictors of competence/adherence. Symptom severity is one variable that has been shown to predict therapist performance in some studies but not others. In a study looking at the treatment of schizophrenia, better social functioning for the patient and fewer symptoms were predictive of higher therapeutic alliance (Couture et al., 2006). In a study treating troubled youth, Schoenwald, Halliday-Boykins, and Henggeler (2003) found that severity of problems negatively predicted adherence. Barber, Crits-Christoph, and Luborsky (1996) found that improvement of depressive symptoms in early sessions predicted greater adherence to supportive expressive dynamic psychotherapy. Not all studies have shown a predictive relationship between symptom severity and therapist performance. For example, Startup and Shapiro (1993) found that therapist adherence to a treatment for depression was not related to baseline symptoms. Similarly, Elkin, Falconnier, Martinovich, and Mahoney (2006) found baseline levels of depression were not related to therapist effects. It may be that symptoms associated with more severe forms of psychopathology may have more impact on therapist performance than more normative symptoms. In this study we examine both severe psychiatric symptoms (e.g., delusions, hallucinations) as well as more common symptoms (i.e., depression, anxiety, and stress) within the same population.

When evaluating family therapies, it is also important to examine client or family difficulty, as this may negatively predict therapist performance (Foley, O'Malley, Rounsaville, Prusoff, & Weissman, 1987) and therapeutic alliance (Trepka, Rees, Shapiro, Hardy, & Barkham, 2004). Clients who are difficult and uncooperative likely make it harder for therapists to adhere to manualized techniques and to competently conduct therapy (Pereplechikova & Kazdin, 2005; Waltz et al., 1993). However, some studies have not found a clear connection between client difficulty and therapist performance. For example, Elkin et al. (2006) found that patient difficulty was not related to therapist effects for treatment of depression. However, this study was not looking directly at competence/adherence, but at the differential effects of outcome between therapists. Another study by Weisman et al. (1998) found that family difficulty was not related to many areas of competence/adherence in a treatment study for bipolar disorder,

though it was related to the therapist's ability to control the session. Due to mixed findings in the literature, as well as the dearth of studies looking at schizophrenia, research in this area is needed.

Examining other measures of family functioning, such as family cohesion, may help to clarify the relationship between family difficulty and competence/adherence. Family cohesion has been shown to be positively related to mental health (Harris & Molock, 2000) and family functioning (Baer, 2002), which should in turn make it easier for the therapist to achieve competence/adherence (Schoenwald, Henggeler, Brondino, & Rowland, 2000).

Therapist Fidelity, Client Satisfaction, and Treatment Retention

Clients' attitudes about therapy are also likely to be intertwined with therapists' performance. One study found that aspects of competence were positively related to consumer satisfaction for case management with homeless clients with severe mental illnesses (Klinkenberg, Calsyn, & Morse, 1998). If clients appear satisfied with therapy sessions, therapists may be more motivated to perform at their best. Likewise, if therapists are demonstrating greater skill and are following guidelines, clients are likely to be more satisfied.

Similarly, therapist performance is likely to impact clients' motivations to continue with therapy. One study with opioid-dependent patients found that stronger therapeutic alliance predicted better treatment retention for patients with moderate to severe levels of psychiatric symptoms (Petry & Bickel, 1999). We did not find any studies examining this relationship specifically in schizophrenia. Therefore, the current study aims to fill this gap by examining the relationships among therapist performance, consumer satisfaction, and dropout rates during family therapy for schizophrenia.

The Current Study

The current study describes a new measure of treatment fidelity and uses this instrument to evaluate therapist competence and adherence to a Culturally Informed Therapy for Schizophrenia (CIT-S) and Treatment As Usual (TAU). See Weisman, Duarte, Koneru, and Wasserman (2006) for a review of CIT-S and the ongoing study to test its efficacy against TAU. In addition to establishing levels of competence/adherence, the current study also examined factors that predict competence/adherence and assessed whether competence/adherence predicted consumer satisfaction and treatment retention.

In summary, in the present study we test whether the following variables will be associated with higher competence/adherence ratings: less severe psychiatric

symptoms, lower ratings of family difficulty, lower ratings of general emotional distress, and greater family cohesion. As some research has demonstrated a relationship between patient symptoms and family difficulty with competence/adherence, the current study asserts that family member's general emotional distress and family cohesion will predict competence/adherence above and beyond what symptoms and difficulty already predict. Additionally, the current study hypothesizes that higher competence/adherence will be related to greater consumer satisfaction and lower dropout rates.

Method

Participants

Participants were drawn from a larger, ongoing schizophrenia family treatment-outcome study. Twenty-three families were included in the current study. Fifteen of the families were randomly assigned to CIT-S, and 8 to TAU. Twenty-two patients diagnosed with schizophrenia or schizoaffective disorder participated in this study. One family member from each family was randomly picked in order to maintain independence of data, resulting in 11 mothers, 4 fathers, 3 significant others, 2 sisters, 1 brother, 1 son, and 1 grandmother. Patients were between the ages of 18 and 60 ($M = 30.95$, $SD = 12.40$) and family members were between the ages of 27 and 77 ($M = 53.91$, $SD = 12.16$). Eleven participants identified themselves as White, 29 as Hispanic, 1 as African American, and 2 as other. Demographic information was missing for one patient and one sister. Competence/adherence data was collected from 69 videotapes (35 Spanish, 34 English) with 6 different therapists. Five therapists were clinical psychology graduate students and one therapist was a licensed psychologist.

Overview of Treatment

Culturally Informed Therapy for Schizophrenia (CIT-S). CIT-S is a family therapy that consists of five modules over the course of 15 weeks. Therapists use handouts from the treatment manual to guide each segment. The first of the five modules, Family Collectivism, aims to build a strong sense of unity and teamwork among the family members. The second module, Education, provides factual information about schizophrenia. The third module, Spirituality, aims to utilize the family's pre-existing spiritual/existential beliefs and/or develop new adaptive ways of viewing their beliefs in order to better conceptualize and cope with the illness. The fourth module, Communication Training, teaches family members more effective methods of communicating. The fifth module, Problem Solving, aims to strengthen family members' problem-solving abilities.

Treatment as Usual (TAU). TAU consists of the three session Education section of CIT-S. Therapists are

advised to avoid using techniques from the other four CIT-S modules in order to assure that the therapies are distinct.

Measures

All assessments and therapies were offered in English and Spanish. Measures were translated from English to Spanish using the editorial board approach (Geisinger, 1994). This study used the psychotic symptoms section of the *Structured Clinical Interview for the DSM-IV Axis I Disorders, Version 2.0, patient edition* ([SCID-I/P], First, Spitzer, Gibbon, & Williams, 1996) to confirm diagnoses of schizophrenia or schizoaffective disorder. To assess inter-rater reliability in the current study, all interviewers as well as the Principle Investigator of the treatment outcome study (PI, second author) watched five videotaped interviews and independently rated each question and determined an overall diagnosis. Inter-rater agreement for presence or absence of diagnosis between each rater and the PI ranged from 80%-100% agreement.

The *CIT-S Therapist Competence Adherence Scale* (CIT-S-TCAS) was used to evaluate therapist competence and adherence to CIT-S. The CIT-S-TCAS is modeled after the *Behavioral Family Management Therapist Competency/Adherence Scale* ([BFM-TCAS], Weisman et al., 1998) but has been modified to fit the specifications of CIT-S. In total, the CIT-S-TCAS consists of twenty-four 7-point Likert-type scale items which are broken into eight sections. Rating criteria are described in detail for every other anchor point on each question. The first five sections assess adherence to the treatment manual's guidelines for the five modules of CIT-S. The next section is made up of seven general skills that do not pertain to any specific module of CIT-S (rapport, pacing, problem specification, homework, trouble shooting, session command, and cultural sensitivity). The next section evaluates proscribed behaviors (disrespecting clients, placing blame, inappropriately challenging delusions, using other techniques, or providing inaccurate information). The last section deals with patient and family characteristics (difficulty of the family, patient and family receipt, patient and family enactment).

The *TAU Therapist Competence Adherence Scale* (TAU-TCAS) is similar to the CIT-S-TCAS. Instead of measuring adherence to the five modules of CIT-S, however, the TAU-TCAS only measures adherence to the Education module. Additionally, to measure treatment differentiation, there are four questions assessing the use of the other four modules of CIT-S, because these modules are proscribed in TAU.

Two trained coders rated videotapes using the CIT-S-TCAS and the TAU-TCAS. To establish inter-rater reliability, coders rated 3 videotapes from each module,

equaling 15 tapes. Inter-rater reliability using intraclass correlations were satisfactory for all 24 questions, ranging from .75 for problem specification to 1.00 for instructions, problem-solving, and delusions/hallucinations. Ratings on five questions had zero variance, as therapists demonstrated excellent performance for these items (cultural sensitivity, disrespect, blame, other techniques, and inaccurate information). Internal reliability was also adequate, with a Chronbach's alpha of .80 for the therapist competence/adherence questions and .72 for the patient/family characteristics.

Severity of psychiatric symptoms was rated using the *Brief Psychiatric Rating Scale* ([BPRS], Ventura et al., 1993). Following Shafer (2005), the current study used 17 of the 24 items to evaluate the following five symptom subscales: positive symptoms, negative symptoms, resistance, activation, and affect. A total score was created by summing across the 17 items. To establish inter-rater reliability, all interviewers, including the PI, watched 10 videotaped BPRS interviews. Total score intraclass correlation coefficients (ICC) between the 4 study interviewers and the PI (second author) was .91 with an average score on each symptom of .81. Reliability for individual items ranged from .45 for Tension to 1.00 for Mannerisms-Posturing. In general, and as is common in studies using this scale (e.g., Schützwohl et al., 2003; Ventura, Green, Shaner, & Liberman, 1993) coefficients were higher for items with structured verbal prompts ($M = .91$, $SD = .05$) and lower for items based on interviewer observations ($M = .69$, $SD = .19$). Restriction of range in the observation-only scores appeared to contribute to lower coefficients.

The *Depression Anxiety Stress Scale* (DASS) was used to measure general emotional distress (Lovibond & Lovibond, 1995). Internal reliability for the current study was good for family members and patients (family members, $\alpha = .98$; patients, $\alpha = .98$). Family cohesion was measured using the Family Cohesion Subscale of the *Family Environment Scale* ([FES], Moos & Moos, 1986). The FES demonstrated adequate internal reliability for patients ($\alpha = .81$) and lower reliability for family members ($\alpha = .68$). The *Consumer Satisfaction Survey* was used to measure how satisfied each family member was with that day's session. It consists of one question ("Using the following scale, how satisfied were you with today's session?") answered with a 7-point Likert-type scale.

Procedure

All aspects of assessments and treatments were offered in English and Spanish. Assessments were conducted with all participants through interview format. After each baseline assessment was completed, the family was randomly assigned to receive either CIT-S or TAU. Each therapy session was videotaped. After each

session, participants completed the *Consumer Satisfaction Survey*. Trained raters reviewed videotapes of the first session from each module and rated the therapist using the CIT-S-TCAS or the TAU-TCAS.

Results

Preliminary Analyses

We examined for differences in competence/adherence in primary demographic variables and found no differences based on ethnicity, language use, gender of patient, and age of patient ($p > .05$ for all comparisons). Thus, these variables were not included as covariates in further analyses.

Primary Analyses

Overall, therapists demonstrated excellent competence and adherence ($M = 6.29$, $SD = .45$). Therapists were most competent/ adherent at avoiding proscribed behaviors and being culturally sensitive and least adherent to assigning homework. Refer to Table 1 for mean levels and standard deviations of competence/adherence for each question. Refer to Table 2 for means and standard deviations for all other measures.

Patients' scores were analyzed separately from family members'. CIT-S and TAU groups were combined for shared domains between therapies (i.e., non-specific factors: general skills and general proscribed behaviors) and separate analyses were conducted for questions in which they differed (i.e., specific factors: questions about specific CIT-S modules, use of proscribed CIT-S modules for TAU families). Scores for CIT-S families and TAU families did not significantly differ on any of the baseline measures or on non-specific competence/adherence scores ($p > .05$ on all comparisons).

Pearson correlation coefficients were computed to determine the relationship between patients' and family members' understanding and use of material, as related to competence/adherence. Level of receipt and enactment was high (see Table 2). Patient and family receipt and enactment were not related to therapist performance ($p > .20$ for all correlations). Therefore, these variables were not included in subsequent analyses.

Baseline Variables Predicting Competence/Adherence

We hypothesized that baseline characteristics of patients and family members would predict competence/adherence. A series of hierarchical regression analyses were conducted to examine the additive predictive power of each variable. Based on literature reviewed above, for patients, psychiatric symptoms were added in step 1, general emotional distress (GED) was added in step 2, and family cohesion as rated by the patient was added in step 3 (see Table 3). As hypothesized, patients'

Table 1
Mean Competence/Adherence Ratings^a

Variable	Mean	Standard Deviation
Family Cohesion	5.27	1.49
Education		
CIT-S	6.08	.76
TAU	6.38	.52
Spirituality	6.00	.00
Communication Training		
Instructions	6.09	.70
Role-play	6.38	.74
Feedback	6.30	.58
Problem Solving	6.27	.65
General Skills		
Rapport	6.17	.69
Pacing/Efficiency	5.55	.98
Problem specification	6.27	.78
Homework	3.77	2.43
Trouble shooting	6.53	.63
Session command	5.81	1.26
Cultural sensitivity	7.00	.00
Proscribed Behavior		
Disrespect	7.00	.00
Blame	6.97	.11
Delusions/Hallucinations	6.91	.42
Other techniques	7.00	.00
Inaccurate information	7.00	.00
Overall Competence/Adherence	6.29	.45

Note. ^a CIT-S rating scale: 0 = not applicable; 1 = very poor; 2 = poor; 3 = fair; 4 = competent; 5 = good; 6 = very good; 7 = excellent.

Table 2
Means and Standard Deviations for All Measures

Measures	Mean	Standard Deviation
Psychiatric Symptoms	38.83	9.61
General Emotional Distress		
Patient	38.40	32.68
Family Member	27.18	28.64
Family Cohesion		
Patient	6.50	2.54
Family Member	6.83	2.02
Patient/Family Difficulty	1.60	.74
Consumer Satisfaction		
Patient	5.75	1.27
Family Member	6.26	.88
Competence/Adherence		
Non-Specific	6.33	.43
CIT-S Specific	5.48	1.31
TAU-Specific	6.69	.26
Receipt		
Patient	1.82	1.03
Family Members	1.09	.20
Enactment		
Patient	1.89	1.08
Family Member	1.16	.27

psychiatric symptoms did negatively predict competence/adherence for non-specific factors. There was also a trend for psychiatric symptoms to negatively predict competence/adherence for CIT-S-specific factors. There

was no significant relationship between psychiatric symptoms and TAU-specific competence/adherence. No additional variance was explained when patients' GED and patients' ratings of family cohesion were added to the models.

Table 3
Hierarchical Linear Regression for Patient Characteristics Predicting Therapist Competence/Adherence

Step		R^2	F	p	R^2 change	F change	p
Non-Specific Factors							
Step 1		.21	4.90	.04	.21	4.90	.04
	Psychiatric Symptoms ($\beta = -.46, p = .04$)						
Step 2		.33	4.24	.03	.12	3.03	.10
	Psychiatric Symptoms ($\beta = -.35, p = .11$)						
	General Emotional Distress ($\beta = -.36, p = .10$)						
Step 3		.40	3.51	.04	.07	1.71	.21
	Psychiatric Symptoms ($\beta = -.33, p = .13$)						
	General Emotional Distress ($b = -.31, p = .15$)						
	Family Cohesion ($\beta = .26, p = .21$)						
CIT-S Specific Factors							
Step 1		.26	3.90	.07	.26	3.90	.07
	Psychiatric Symptoms ($\beta = -.51, p = .07$)						
Step 2		.27	1.86	.21	.01	.14	.72
	Psychiatric Symptoms ($\beta = -.48, p = .13$)						
	General Emotional Distress ($\beta = -.11, p = .72$)						
Step 3		.28	1.17	.38	.01	.11	.75
	Psychiatric Symptoms ($\beta = -.48, p = .15$)						
	General Emotional Distress ($\beta = -.14, p = .67$)						
	Family Cohesion ($\beta = -.10, p = .75$)						
TAU Specific Factors							
Step 1		.17	1.04	.35	.17	1.04	.35
	Psychiatric Symptoms ($\beta = -.42, p = .35$)						
Step 2		.18	.43	.68	.01	.03	.88
	Psychiatric Symptoms ($\beta = -.43, p = .41$)						
	General Emotional Distress ($\beta = .08, p = .88$)						
Step 3		.18	.22	.88	<.01	.01	.92
	Psychiatric Symptoms ($\beta = -.40, p = .55$)						
	General Emotional Distress ($\beta = .05, p = .93$)						
	Family Cohesion ($\hat{\alpha}\beta = .07, p = .92$)						

For models using family members, family difficulty was added in step 1, family members' GED was added in step 2, and family cohesion as rated by family members was added in step 3 (see Table 4). As hypothesized, higher levels of family difficulty significantly predicted lower levels of competence/adherence for non-specific factors and CIT-S factors. Family members' GED and FES did not significantly explain additional

variance for non-specific factors or CIT-S specific factors. A different relationship was found when looking at TAU-specific factors. Interestingly, though the model with family difficulty was not significant in Step 1, family difficulty and family member GED became significant predictors in Step 2, with the full model reaching a marginal level of significance. None of the predictors, or the model, was significant in Step 3.

Table 4
Hierarchical Linear Regression for Family Member Characteristics Predicting Therapist Competence/Adherence

<i>Step</i>	<i>R</i> ²	<i>F</i>	<i>p</i>	<i>R</i> ² <i>change</i>	<i>F</i> <i>change</i>	<i>p</i>
Non-Specific Factors						
Step 1	.20	5.13	.04	.20	5.13	.04
Difficulty ($\beta = -.45, p = .04$)						
Step 2	.21	2.54	.11	.01	.17	.69
Difficulty ($\beta = -.42, p = .06$)						
General Emotional Distress ($\beta = .09, p = .69$)						
Step 3	.22	1.67	.21	.01	.15	.70
Difficulty ($\beta = -.42, p = .08$)						
General Emotional Distress ($\beta = .08, p = .74$)						
Family Cohesion ($\beta = -.08, p = .70$)						
CIT-S Specific Factors						
Step 1	.39	7.74	.02	.39	7.74	.02
Difficulty ($\beta = -.63, p = .02$)						
Step 2	.44	4.31	.04	.05	.92	.36
Difficulty ($\beta = -.59, p = .03$)						
General Emotional Distress ($\beta = .22, p = .36$)						
Step 3	.48	3.12	.08	.04	.85	.38
Difficulty ($\beta = -.56, p = .04$)						
General Emotional Distress ($\beta = .25, p = .30$)						
Family Cohesion ($\beta = -.21, p = .38$)						
TAU Specific Factors						
Step 1	.17	1.27	.30	.17	1.27	.30
Difficulty ($\beta = -.42, p = .30$)						
Step 2	.68	5.29	.06	.51	7.86	.04
Difficulty ($\beta = -.90, p = .03$)						
General Emotional Distress ($\beta = -.86, p = .04$)						
Step 3	.72	3.38	.14	.04	.54	.50
Difficulty ($\beta = -.67, p = .21$)						
General Emotional Distress ($\beta = -.44, p = .55$)						
Family Cohesion ($\beta = .40, p = .50$)						

Therapist Fidelity, Client Satisfaction, and Treatment Retention

We also hypothesized that competence/adherence would be related to participants' satisfaction and dropout rates. As hypothesized, point biserial correlations indicated that higher competence/adherence ratings in terms of non-specific factors ($r_b = -.65, p < .001$) and CIT-S-specific factors ($r_b = -.82, p < .001$) were related to better treatment retention. Competence/adherence ratings for TAU-specific factors were not related to treatment retention ($r_b = -.45, p > .05$). Competence/adherence for non-specific factors was positively related to consumer satisfaction for family members ($r = .50, p < .05$), but not patients ($r = -.23, p > .05$). Competence/

adherence for specific factors was not significantly related to satisfaction for family members (CIT-S: $r = .32, p > .05$; TAU: $r = .11, p > .05$) or patients (CIT-S: $r = -.42, p > .05$; TAU: $r = .11, p > .05$).

Discussion

Few studies have assessed how therapist competence/adherence relates to client characteristics and to treatment retention and client satisfaction. Furthermore, no studies that we are aware of have examined associates of treatment fidelity specifically in the context of family therapy for schizophrenia. The objective of the current study was to fill these gaps by examining the relationship

between client characteristics and therapist competence/adherence to a new, family-focused, Culturally Informed Therapy for Schizophrenia (CIT-S) and a Psychoeducation control group (Treatment As Usual [TAU]). The current study also examined how competence/adherence relates to consumer satisfaction and dropout rates. Encouragingly, overall, therapists demonstrated very high levels of competence/adherence while conducting both CIT-S and TAU. Patients and family members also demonstrated good understanding and use of therapy materials, and these variables were not related to therapist performance. This is encouraging for two reasons. First, it suggests that it is possible to develop materials that are clear and understandable, even to clients who are coping with severe psychopathology. Second, it indicates that independent raters are able to separate their evaluation of therapist performance from participants' capacity to grasp the information presented.

Consistent with prior research (e.g., Couture et al., 2006), we did find that therapists had greater difficulty conducting therapy with patients who displayed more severe psychiatric symptoms at baseline. Many of the core symptoms of schizophrenia include factors that, by definition, would likely make it more challenging for therapists to maintain control over the session. For example, clients who are rated high on conceptual disorganization on the BPRS are likely to be tangential and circumstantial, making it more difficult for the therapist to keep the session on track.

There was also a trend for patients' psychiatric symptoms to be related to CIT-S specific factors of competence/adherence. However no relationship was found for TAU specific factors. Symptom severity may have more of an impact on CIT-S-specific behaviors, as the non psychoeducation components of CIT-S require more interaction from patients and possibly more skill from the therapist.

In this study, contrary to expectations, general emotional distress was not related to therapist competence and adherence for patients nor for family members (except for the instance where this variable became significant in a model predicting TAU specific factors, that also included family difficulty. This case is discussed further below). Thus, while patients' more severe psychiatric symptoms do likely interfere with the therapists' ability to skillfully conduct treatment, more normative symptoms may not have this effect. This may be because symptoms of depression, anxiety, and stress are so prevalent in patients presenting for psychotherapy, that therapists are likely to encounter some form of these symptoms in most clients who present for treatment. Thus therapists likely may have more experience with this type of symptom and may be less likely to become derailed by them.

As hypothesized, family difficulty was related to non-specific factors and CIT-S specific factors of competence/adherence. We did not find a relationship between family difficulty and competence/adherence for TAU sessions (except when GED was already in the model). Therapists may be able to maintain control over sessions more easily with difficult clients when therapy goals are concrete and focused on providing factual information. We are not sure what to make of the apparent suppression effect that GED has on the association between family difficulty and competence/adherence to TAU. Perhaps coders modulate their ratings of family difficulty when therapists are working with highly stressed, anxious, or depressed family members, so as not to merge the difficulty construct with that of general distress in clients. When the variance associated with GED is removed, the connection between family difficulty and competence/adherence may become more visible.

We hypothesized that family cohesion would be positively associated with competence/adherence, since it may be easier for therapists to work with families who view themselves as a team. This hypothesis was not supported. These results suggest that therapists do not have more difficulty when working with families who view themselves as disconnected. While unified families may be less contentious and easier to engage in some senses, less cohesive families may offer therapists more to work with and therefore more opportunities to demonstrate their skill, thus canceling out any consistent findings. Families who are willing to enter treatment together may already view themselves as at least somewhat cohesive. This was evidenced by our relatively high levels of family cohesion. A relationship between family cohesion and therapist performance may be more evident in a larger sample of families with a wider range of family cohesion.

The current study also examined how therapist performance relates to the family's experiences in treatment. Consumer satisfaction was not related to competence and adherence for patients. For family members, as hypothesized, those who were working with therapists rated as more competent/adherent for non-specific factors also reported being more satisfied with therapy. This finding may be interpreted in multiple ways. For example, family members may be more pleased with treatment when their therapist is conducting the sessions in an organized and skillful way. On the other hand, therapists may have an easier time being faithful to the treatment manual when working with clients who appear satisfied. There is likely an interaction in which satisfied families enable the therapist to conduct therapy as planned, and the skill of the therapist contributes to greater satisfaction.

Also as hypothesized, families who were working with therapists rated as demonstrating higher levels of

competence/adherence were less likely to drop out of treatment. This relationship was evident for non-specific factors and CIT-S-specific factors. One conclusion may be that families are more motivated to continue working with a therapist who they have a good relationship with, skillfully conducts sessions, and appears to be following a protocol. Another conclusion may be that families who drop out may display less motivation early on, making it more difficult for therapist to follow the treatment guidelines.

Results of the current study suggest that clinicians and researchers should pay close attention to therapist competence and adherence. Therapist performance appears to be tied to consumer satisfaction and treatment retention, which are both critical factors for therapy success. Treatment retention is a very important issue, as treatment efficacy cannot be evaluated if participants cease treatment and clinicians are not able to complete treatment plans and maximize benefits to clients. It is important to measure competence/adherence early in a treatment outcome study so that problems can be detected and corrected. Additionally, early evaluation can help determine if certain therapists work better with certain types of clients (e.g., more or less symptomatic patients), which could be useful in the assignment of clients.

The results of this study suggest that researchers and clinicians may want to take client characteristics into account when conducting therapy and measuring competence/adherence. Researchers could use variables such as family difficulty and patients' symptoms as covariates when measuring competence/adherence. Clinicians may also want to be mindful of these characteristics when deciding which therapy is appropriate for particular clients. Further work should be done to see how therapists can improve competence/adherence when working with these clients to further eliminate therapist effects. In general, the current study also demonstrated that competence/adherence in terms of TAU-specific factors was not as influenced by baseline characteristics and was also not as important in terms of satisfaction and retention. This may mean that the ability to impart factual information and discuss symptoms does not fluctuate in the same way that general skills do.

This study was marked by several limitations. Most notable is the small sample size. Secondly, there was a restriction in range for competence/adherence as the rapists generally exhibited high levels of competence/adherence. Although uniformly high competence/adherence is desirable for treatment efficacy, limited range makes it difficult to examine how therapist performance is truly related to outcome and client variables. Future studies should utilize a larger sample, as well as a more diverse group of therapists, in order to further deduce the relationship between therapist competence/adherence and other variables.

In conclusion, this study provides an example of how therapist fidelity can be assessed in therapy outcome research, and offers further insight into the relationship of competence/adherence, client characteristics, and retention and satisfaction. Competence/adherence appears to be important for increasing treatment retention and satisfaction, and seems to be related to client characteristics such as psychiatric symptoms and family difficulty in session. Future studies are needed to confirm these results as well as examine the processes underlying these relationships in further detail.

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