

Assessing Relationship Quality in Mandated Community Treatment: Blending Care With Control

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Traditional measures of the therapeutic alliance do not capture the dual roles inherent in relationships with involuntary clients. Providers not only care for, but also have control over, involuntary clients. In 2 studies of probationers mandated to psychiatric treatment ($n = 90$; $n = 322$), the authors developed and validated the revised Dual-Role Relationships Inventory (DRI-R). The authors found that (a) relationship quality in mandated treatment involves caring and fairness, trust, and an authoritative (not authoritarian) style, (b) the DRI-R assesses these domains of relationship quality, is internally consistent, and relates in a theoretically coherent pattern with ratings of within-session behavior and with measures of the therapeutic alliance, relationship satisfaction, symptoms, and treatment motivation, and (c) the quality of dual-role relationships predicts future compliance with the rules, as assessed by probation violations and revocation. The DRI-R covaries with multiple domains more strongly than a leading measure of the therapeutic alliance, suggesting that it better captures the nature and effect of relationship quality in mandated treatment.

Keywords: therapeutic alliance, dual-role relationships, mandated treatment, probation, mental health

The quality of the relationship between a service provider and a client is a “quintessential integrative variable” that cuts across different modes of treatment (Wolfe & Goldfried, 1988, p. 449). The provider–client relationship affects patient satisfaction, treatment adherence, and outcomes in psychotherapy (Krupnick et al., 1996), psychiatric treatment (Alverson, Alverson, & Drake, 2000; Cruz & Pincus, 2002; Frank & Gunderson, 1990; Howego, Yellowlees, Owen, Meldrum, & Dark, 2003; McCabe & Priebe, 2004; Penn et al., 2004; Solomon, Draine, & Marcus, 2002), substance abuse treatment (Connors, Carroll,

DiClemente, Longabaugh, & Donovan, 1997), medical care (e.g., Cooper-Patrick et al., 1999; Hall, Horgan, Stein, & Roter, 2002; Kaplan et al., 1996; Kaplan, Greenfield, & Ware, 1989), and interventions for criminal behavior (Brown & O’Leary, 2000; Taft, Murphy, King, Musser, & DeDeyn, 2003). The size of the effect is larger than that of other processes that can be influenced by a provider. For example, the quality of the treatment relationship in psychotherapy shapes patient outcomes more strongly than the specific techniques applied (Asay & Lambert, 1999; Horvath & Symonds, 1991; Luborsky et al., 2002; Martin, Garske, & Davis, 2000). Moreover, the outcomes affected are diverse, ranging from improvement in symptoms for psychiatric patients (Cruz & Pincus, 2002) to a reduced risk of violence for criminal offenders (Brown & O’Leary, 2000). Such findings suggest that it would be a mistake to define evidence-based practices solely as technical procedures, without including the process of care. Across forms of treatment, communication “is the main ingredient in . . . care and it is the fundamental instrument by which therapeutic goals are achieved” (Roter & Hall, 1992, p. 3).

In most studies of relationship quality and treatment outcomes, investigators have simply imported measures developed in conventional psychotherapy contexts to assess the *therapeutic alliance*. These measures may not capture relationship quality in the context of mandated treatment. When patients are required to take part in treatment, providers have dual roles: They not only care for, but also have control over, the patient. In the present study, we developed and validated a measure of relationship quality in mandated treatment. We begin by outlining the need for such a measure.

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NEED FOR A MEASURE OF DUAL-ROLE RELATIONSHIP QUALITY

Treatment Mandates and Pressures Are Common in Contemporary Community Treatment

As observed by Howgego et al. (2003), conventional measures of the therapeutic alliance may poorly fit patients who “do not voluntarily seek help and enter a relationship motivated to engage” (p. 180). Such patients may compose a large group. First, a variety of legal tools are now being used to require that patients attend treatment and take psychotropic medication. Formal treatment mandates come in many forms, including involuntary outpatient commitment and special conditions of probation, which are civil and criminal judicial orders (respectively) for a patient to adhere to a community treatment plan. Based on a sample of 1,000 outpatients drawn from public community outpatient settings, Monahan et al. (2005) found that nearly half (44%–66%) had experienced at least one of four types of formal mandates to participate in treatment.

Second, patients are subject to informal pressure from others to adhere to treatment. Patients often have case managers who can be charged with keeping patients in treatment (Hellerstein, Rosenthal, & Miner, 1995), sometimes through *assertive outreach* efforts that involve taking treatment to the patient in the community, whether the patient wants it or not (McCabe & Priebe, 2004). Case managers use a variety of strategies to pressure clients to engage in treatment and change their behavior (Angell & Mahoney, 2007; Angell, Mahoney, & Martinez, 2006). Based on a sample of 1,564 veterans who had been treated by assertive case management teams, Neale and Rosenheck (2000) found that case managers routinely used strong verbal guidance (e.g., reminding a client to do or not do certain things) and often used money management to control behavior. Less often, they used contingent withholding of help, hospitalization, and appeals to external authorities. Conventional measures of the therapeutic alliance do not capture the social control inherent in these relationships.

Dual-Role Relationships Are More Complex Than the Therapeutic Alliance

Despite the routine use of mandates and pressures in treatment, little is known about how relationship quality may be altered in this context. There are both conceptual and practical reasons for developing a measure of relationship quality in mandated treatment. Conceptually, it is difficult to reduce relationship quality with involuntary patients to traditional notions of the therapeutic alliance. First, although there are several conceptualizations of this construct, most measures of the alliance tap (a) an affective bond or attachment and (b) collaboration or willingness to invest in the therapy process (Henry & Strupp, 1994; Horvath & Luborsky, 1993). When treatment is mandated, true collaboration and partnership may be lacking. The provider’s control over the patient seems to render the alliance lopsided. Second, in mandated treatment, one has dual roles. Reconciling one’s “helping, therapeutic, or problem-solving role” with one’s controlling or “surveillance role” (Trotter, 1999) may be both the most difficult and most important component of effective work with involuntary patients (D. A. Andrews, Zinger, Hoge, & Bonta, 1996; Klockars, 1972;

Trotter, 1999). Traditional measures of the alliance focus narrowly on the therapeutic part of this relationship, even though the manner in which the controlling part of the relationship is implemented may become an integral component of relationship quality as a whole.

Beyond the poor conceptual fit of the therapeutic alliance to dual-role relationships, there are practical reasons for developing a measure of relationship quality for the context of mandated treatment. The goals of mandated treatment are more complex than those in voluntary care. With patients who are mandated to treatment, one is interested in achieving both compliance with treatment and other requirements (i.e., rule compliance) and positive traditional clinical outcomes. Measures that capture both the caring and controlling aspects of relationship quality may better predict these multifaceted outcomes than traditional measures of the alliance. Indeed, effectively reconciling dual roles to establish a trusting relationship with involuntary patients may be pivotal in engaging them in treatment and achieving positive outcomes (Drake, Wallach, Alverson, & Mueser, 2002).

TOWARD ASSESSING DUAL-ROLE RELATIONSHIP QUALITY

The components of relationship quality in mandated treatment are largely undefined. The first steps toward defining and assessing relationship quality in mandated treatment involve (a) selecting an appropriate context for studying these relationships and (b) identifying the relationships’ likely contours.

Choosing an Ideal Context for Measure Development

Patients with co-occurring mental and substance abuse disorders are an appropriate population for studying dual-role relationships, given that treatment mandates and pressures are disproportionately applied to these patients. Relative to patients without co-occurring disorders, those with co-occurring disorders are at double the risk of having formal treatment conditions imposed on them (Monahan et al., 2005). Given that patients with co-occurring disorders are grossly overrepresented in correctional settings (Abram & Teplin, 1991), treatment is often mandated as a function of patients’ involvement in the criminal justice system. The vast majority of individuals arrested are placed on probation (Bureau of Justice Statistics, 2006), and those with mental disorders typically are required to participate in treatment as a special condition of probation (Ditton, 1999; U.S. Probation and Pretrial Services, 2001).

A similar picture emerges with informal pressure to participate in treatment. Case managers are likely to use treatment pressures with patients who have severe symptoms, recent drug use, and arrest histories (Neale & Rosenheck, 2000). Similarly, case managers for probationers often fall prey to the “treater-turned-monitor” phenomenon, chiefly monitoring for treatment noncompliance and elevating probationers’ risk of incarceration on a technical violation (Solomon et al., 2002). For patients with the triple stigma (Hartwell, 2004) of mental disorder, substance abuse, and criminal justice involvement, treatment relationships are often infused with social control.

For these reasons, an ideal context for developing a measure of relationship quality in mandated treatment is specialty mental health probation programs. This was the context in which the

present study was conducted. In specialty programs, officers with mental health training supervise reduced caseloads composed solely of probationers who predominantly have co-occurring mental and substance abuse disorders (Skeem, Emke-Francis, & Eno Loudon, 2006). These officers function much like case managers, in that they advocate for social services (e.g., psychiatric treatment, Social Security Disability Income, housing), coordinate closely with providers, and work directly with clients toward therapeutic goals (Skeem et al., 2006). Indeed, the majority of officers in the present study had once been case managers. Unlike traditional case managers, however, these officers are explicitly tasked with managing dual roles that place equal weight on care (rehabilitation) and control (rule compliance and public safety). These officers are experienced not only in advocating for services but also in monitoring and enforcing the conditions of probation, including the special condition to take psychotropic medication and participate in treatment. They are a logical choice, given that they provide care to and implement treatment mandates for a growing high-risk population.

Identifying Likely Contours of Relationship Quality

A small literature provides a glimpse of the importance and nature of relationship quality in the context of mandated treatment. In a multisite focus group study, Skeem, Encandela, and Eno Loudon (2003) found that probationers with mental disorder and their officers believed that the quality of their relationships colored every interaction and strongly influenced clinical and criminal outcomes. Harmful relationships were described as authoritarian ones characterized by many demands, little flexibility, and belittling use of control. These relationships were perceived as ongoing stressors that compromised probationers' mental state and functioning and sometimes engendered reactance to officers' directives. In helpful relationships, the affiliative aspects of the therapeutic alliance were blended with social control. Here, however, control was used in the right way, that is, in a manner perceived as fair, respectful, and motivated by caring. This manner may be viewed as an explicitly interpersonal form of procedural justice (see MacCoun, 2005). Such relationships provided support, encouraged trust, and instilled a desire to please officers.

The concept of procedural justice has also proven crucial to providers in psychiatric settings (Lucksted & Coursey, 1995). Psychiatric patients experience admissions, including involuntary admissions, as less coercive when they were implemented with procedural justice (Lidz, Hoge, Gardner, & Bennett, 1995). More broadly, in both psychiatric and medical settings, patients place a premium on negotiation and participatory decision making about treatment (Cooper-Patrick et al., 1999; Kaplan et al., 1996; Ware, Tugenberg, & Dickey, 2004). Good relationships require caring, respectful dialogue about treatment decisions.

OUTLINING THE STUDY GOALS

In the present study, we developed and validated a measure of relationship quality in mandated treatment that emphasizes interpersonal dimensions of both affiliation (bond, caring, and trust) and control (voice, respect, and fairness). These dimensions and subcomponents are specified later (see Measures). Our broad premise is that effective relationships in mandated treatment bear

the hallmarks of the traditional therapeutic alliance but emphasize an interpersonal form of procedural justice, or a "firm but fair" relational style (Bonta et al., 2000). A chief departure from the traditional therapeutic alliance lies in the ongoing processes of role clarification and open discussion of rules, or what is and is not negotiable (Trotter, 1999). In effective relationships, this process unfolds in an authoritative manner that defines and strengthens the alliance.

This premise informed a multiple informant design that was implemented in a specialty probation program. Our draft measure of relationship quality distilled literature on the therapeutic alliance, mandated treatment, and dual-role relationships (Skeem et al., 2003). We expected our refined measure of relationship quality in mandated treatment to be reliable; to predict compliance with the rules; and to manifest a theoretically coherent pattern of relationships with ratings of within-session behavior and with measures of relationships, treatment motivation, and psychological distress (for hypotheses, see Measures below). We also expected our measure of dual-role relationship quality to relate more strongly than a leading measure of the therapeutic alliance to indices of within-session behavior and relationship satisfaction and to better predict future rule compliance.

METHOD

Overview of Studies

We asked pairs of specialty probationers and their officers to complete our new Dual-Role Relationship Inventory (DRI), along with measures of theoretically related constructs, shortly after a regularly scheduled supervision meeting. We audiotaped, transcribed, and then coded transcripts of these supervision meetings to provide an objective yardstick of the DRI's ability to capture the quality of interactions. We also reviewed probationers' records to code their compliance with the rules. These data allowed us to refine the DRI and assess its reliability, validity (e.g., association with within-session behavior), and predictive utility for rule compliance. We also conducted a secondary study to cross-validate the structure of the revised DRI. This involved administering the measure to a larger sample of probationers than we were able to include in the primary study.

Primary Study

Participants

Recruitment

Participant recruitment proceeded in two steps. First, we recruited probation officers within a large and prototypic (see Skeem et al., 2006) specialty agency in the Southwest by presenting the study to 11 officers at a monthly staff meeting. Although agency policies prohibited offering officers an incentive for participating, 7 (63%) officers agreed to do so. Participating officers did not differ significantly from those who declined to participate in gender or years of experience. Second, we recruited probationers on the caseloads of participating officers. All probationers were diagnosed with an Axis I major mental disorder and were required to participate in treatment. Study eligibility requirements for probationers included the following: (a) English speaking, (b) com-

petent to provide informed consent, and (c) having met at least three times with, or having been supervised for at least 2 months by, the supervising officer. Prospective participants were randomly selected for recruitment from the current caseloads of participating officers. As recruitment progressed, probationers were sampled to match the specialty population in gender, ethnicity, and whether they had a telephone number (a rough index of financial stability). Of the 109 participants invited to participate, 12% refused, and 5% could not be located. The vast majority (83%, $n = 90$) agreed to participate.

Characteristics

Officers ($n = 7$) predominantly were White (100%) women (71%; men, 29%) with a bachelor's degree (71%; master's degrees, 29%). Some 14% were of Hispanic ethnicity. Officers were an average age of 40.8 years ($SD = 9.9$) and had an average of 6.3 ($SD = 3.1$) years' experience as an officer. The majority (57%) had prior mental health experience, having worked as a case manager (75%) or psychologist (25%). Each officer was associated with 11–14 probationers enrolled in the study.

Of probationers ($n = 90$), the majority were White (64%, Black, 20%, other, 15%) men (61%; women, 39%) with an average age of 37.5 years ($SD = 9.1$). Some 16.9% were of Hispanic ethnicity. Although most (73.4%) had attained at least a high school degree, the vast majority (80%) were unemployed, and typically cited psychiatric disability (68%) as the reason for unemployment. According to their records, probationers' most common primary diagnoses were bipolar disorder (34.4%); schizophrenia, schizoaffective, and other psychotic disorders (29.2%); major depression (24.7%); or other (12.7%) disorders. Of those with an Axis I mental disorder, 76.7% had one or more co-occurring substance-related disorders. Most (85.6%) were prescribed psychotropic medication, and most (77.5%) were also required to complete substance abuse treatment.

On the basis of their records, probationers had an average of 3.9 ($SD = 3.8$) prior convictions before the index term of probation. Their most serious charge for the current term of probation was for a drug (40%), property (24%), person (22%), or minor (13%) offense. At the time of the study, probationers had spent an average of 28.1 ($SD = 30.0$; $Mdn = 24.0$) months on probation, about 9.5 ($SD = 8.7$; $Mdn = 6.0$) months of which was spent with the officer they rated in the study.

Measures

Measures tapped four content domains: the officer–probationer relationship, officer–probationer interactions, probationers' internal state (symptoms and motivation), and probationers' compliance behavior (probation violations and new arrests). These measures crossed four sources of information: probationer self-report, officer report, observer ratings, and record review.

Relationship

DRI. DRI items were developed by considering the results of our focus group study (Skeem et al., 2003) and practice guidelines for treating involuntary clients (Trotter, 1999) in light of the content of (a) an existing measure for assessing probation officer–

probationer relationship quality (Bonta et al., 2000), and (b) two existing measures of therapist–client relationship quality, the California Psychotherapy Alliance Scales (Marmar, Horowitz, Weiss, & Marziali, 1986), and the Agnew Relationship Measure (Agnew-Davies, Stiles, Hardy, Barkham, & Shapiro, 1998). The leading alliance measure was reserved for use as a validation instrument.

The DRI items were designed to assess two hypothesized domains of relationship quality in mandated treatment. The first is alliance, which includes bond (acceptance, support, and trust), partnership (officer efforts to engage the probationer; collaborative work on problems), and confident commitment (belief and investment in the helpfulness of the process). Relative to extant scales, the alliance domain emphasizes the probationers' trust in the officer and concern about disclosing information (see Hatcher & Barends, 1996). The second hypothesized domain is relational fairness or clarity and voice (clear explanation of limits; freedom to express opinions), considerate respect (matter of fact application of rules), and flexible consistency (reasonable accommodation of rules to individual with consistent enforcement). Notably, the DRI assesses officers' use of empathy and warmth to selectively reinforce prosocial behavior (Bonta et al., 2000; Trotter, 1999).

For each of the two hypothesized domains, 29 questions were written, for a total of 58 items. Within these domains, items were positively and negatively worded to minimize the potential influence of response biases. The Flesch–Kinkaid reading level of the instrument was grade 4.9.

The DRI has parallel forms for officers, probationers, and observers (e.g., “My officer considers my views,” “I consider _____'s views,” “The officer considers the probationer's views”). In this study, each of the three groups of respondents indicated how often each item described the target (officer, probationer, or relationship) on a 7-point, anchored Likert scale that ranged from 1 (*never*) to 7 (*always*).

Working Alliance Inventory (WAI). The WAI (Horvath & Greenberg, 1986) is the most frequently used measure of the therapeutic alliance. The measure consists of 36 items in parallel form for client, therapist, or observer ratings on a 7-point Likert scale (*never* to *always*). The WAI relates in a theoretically coherent manner with such other variables as treatment outcome (Horvath, 1994). It was adapted for use in this study (with permission) by replacing the terms therapy, therapist (counselor), and client with the terms probation, probation officer, and probationer, respectively.

WAI total scores for probationers ($\alpha = .82$, M interitem $r = .12$) and officers ($\alpha = .80$, M interitem $r = .10$) were used in this study to assess the convergent validity of the DRI. We expected the WAI to be moderately associated with the DRI's alliance domain but only weakly associated with its relational fairness domain.

Relationship satisfaction. To assess overall relationship satisfaction, we asked probationers and officers to rate on a 5-point Likert scale, “how satisfied are you in the relationship you have with (your officer *or* this probationer)?” Conceptually, relationship satisfaction should be positively associated with relationship quality. Given that the DRI may better capture relationship quality in mandated treatment, we expected the DRI to be more strongly associated with general relationship satisfaction than the WAI.

Within-Session Behavior

To assess the nature of officer–probationer interactions, we arranged 83 meetings between officers and probationers that were audiotaped, transcribed, and coded by trained observers for interpersonal process. (Although 90 probationers were interviewed, technical difficulties rendered seven audiotapes unusable.) The average length of the audiotaped officer–probationer sessions was 22 min ($SD = 14.3$). Data were prepared for coding by segmenting transcripts into 50-unit counts on a tape recorder, which corresponds to roughly 4 min of meeting time. Then, each segment was coded for the presence or absence of six types of officer behavior and two types of probationer behavior.

The six forms of officer behavior recorded were reflect (statements that reflect content or meaning offered by the probationer), affirm (statements that complement the probationer's efforts or characteristics), support (understanding, supportive, reassuring, or compassionate comment not captured by reflect or affirm), advise (giving advice, making a suggestion, or offering a possible action), direct (giving an order or command), and confront (disagreeing, contradicting). The two forms of probationer behavior recorded were change talk (statements that indicate moving forward, in the direction of compliance with conditions) or resistance (statements that are inconsistent with or show movement away from compliance). We expected DRI ratings to relate positively to indices of supportive or positive officer (reflect, affirm, support, advise) and probationer (change talk) process and negatively to indices of directive or negative officer (direct, confront) and probationer (resist) behavior. We also expected the DRI to relate to these indices more strongly than the WAI.

These behaviors were rated using a coding manual derived for this study from the Motivational Interviewing Skill Code (Miller, 2000). The manual precisely defined each type of behavior to be coded and included at least one example of that behavior, drawn from the study's audiotapes. For example, *direct* was defined as "The officer gives an order or command to the probationer. Or, the officer has directed the probationer to do something. The language should be imperative, i.e. must, can't, should . . . the tone is often emphatic." An example of direct was "You need to call the clinic if you're going to miss an appointment."

To ensure adherence to the coding manual, we had raters complete a 2-day workshop, independently rate eight or more training cases until they reached a good level of agreement with the criterion (defined as $\kappa \geq .65$), and then meet with the rating group biweekly to review additional cases to avoid rater's drift. During the baseline training, the group met in between each case to review each rater's consistency with the criterion ratings and discuss any discrepancies. Kappa was used to compute interrater agreement for within-session behavior, using the four most recent training cases. Generally, kappa values of .75 and greater are considered to reflect excellent agreement; .60–.74, good agreement; .40–.59, fair agreement; and .00–.40, poor agreement (Cicchetti & Sparrow, 1981). Using these categorizations, raters found the team's average reliability for ratings of within-session behavior to be excellent ($M \kappa = .75$, $SD = .19$).

After rating within-session behavior, raters completed the observer form of the DRI. Raters were trained to reliability on the DRI using the same process and training cases described earlier. On the basis of the last four training cases, the team's average

reliability for DRI ratings was good (weighted kappa = .65, $SD = .07$; Cohen, 1968).

Probationer's Internal State

Psychological distress. Psychological distress was assessed using the Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983), a 53-item self-report inventory in which participants rate on a 5-point scale the extent to which they have been bothered (0, *not at all* to 4, *extremely*) in the past week by various symptoms. The BSI generally manifests a theoretically coherent pattern of association with the scales of the MMPI (Derogatis & Melisaratos, 1983). It includes a measure of global psychological distress, the general severity index (GSI), and nine subscales designed to assess individual symptom constellations. However, only four of the BSI's subscales demonstrate adequate discriminant validity: depression, anxiety, somatization, and hostility (for a review, see Skeem, et al., 2007). In the present study, we used scores on the full scale (GSI; $\alpha = .96$, M interitem $r = .32$) and the depression, anxiety, and hostility subscales ($\alpha = .78-.91$, M interitem $r = .34-.61$). We expected indices other than hostility to be unrelated to DRI scores. Ideally, the DRI would work similarly across levels of distress and negative affect. However, we expected hostility (which taps anger; Skeem et al., 2006) to relate inversely to DRI scores.

Treatment motivation. Treatment motivation was assessed using the Situational Motivation Scale (SMS; Guay, Vallerand, & Blanchard, 2000), a 15-item self-report measure with a 7-point Likert (1, *not at all true* to 7, *exactly true*) scale. The SMS is designed to assess intrinsic versus extrinsic motivation for a given activity—in this case, participation in treatment—across four dimensions: amotivation (no sense of purpose for treatment participation; "There may be good reasons to be in treatment, but personally I don't see any"), external regulation (participating in treatment because of consequences and rewards; "I am in treatment because it is something that I have to do"), intrinsic motivation (participating in treatment for the inherent pleasure and satisfaction of it; "I am in treatment because it is pleasant"), and identified regulation (valuing treatment and perceiving it as chosen by oneself; "I am in treatment because I think it is good for me"). The SMS is reliable and valid, with scales related as expected to measures of perceived competence, concentration, and behavioral intentions (Guay et al., 2000). We expected DRI scores to relate positively to identified regulation and internal treatment motivation, given the results of our focus group study (Skeem et al., 2003).

Rule Compliance

We coded recent and future probation violations because the quality of officer–probationer relationships should relate to rule compliance. First, probationers' willingness to comply with the conditions of probation likely is influenced by the perceived fairness of their enforcement (see MacCoun, 2005) and their rapport with the officer (Klockars, 1972). Second, negative relationships can serve as a stressor that compromises probationers' functioning and ability to comply with conditions of probation (Skeem et al., 2003). On the basis of these notions and work suggesting that a firm but fair (not permissive) approach reduces recidivism (D.

Andrews & Kiessling, 1980; Trotter, 1999), we expected the DRI (which captures relational fairness) to relate more strongly to future violations and revocation than the WAI (which assesses only the therapeutic alliance).

Recent violations. Recent violations were defined as those that occurred during the 2 months preceding the baseline interview. They were assessed by reviewing probation records to indicate whether or not there was a recent violation for (a) treatment noncompliance (psychotropic or psychosocial treatment; base rate = 12.2%), (b) substance use (alcohol or drug possession, use, or sale; base rate = 15.6%), (c) failure to report to the officer (base rate = 12.2%), (d) other technical violation (e.g., failure to pay fines, pursue work as directed; base rate = 43.5%), or (e) physical violence or commission of a new offense (base rate = 2.2%). Across violation types, nearly half (47.5%) of probationers had one or more recent violations. Beyond these categorical measures, the total number of recent violations was recorded, ranging from 0 (53.5%) to 5 (1.1%).

Future violations and probation revocation. To explore the utility of the DRI in predicting rule compliance, both absolutely and relative to the WAI, we coded probation records to assess violations that occurred after the DRI was completed. The average length of follow-up after baseline interviews was 16.2 months ($SD = 2.9$). At the time of follow-up, half (48.9%) of probationers were still on specialty mental health probation.

Violations (date of earliest violation, violation type, and number of violations) and revocation (*yes-no*) were used as follow-up variables. The majority of probationers (63.3%) had at least one violation during the follow-up period (range = 1–19, $Mdn = 1$). The base rates of violations by type were as follows: (a) treatment noncompliance (33.3%), (b) substance use (47.8%), (c) failure to report to the officer (23.3%), (d) other technical violation (37.8%), or (e) physical violence or commission of a new offense (43.3%). Probation was revoked for nearly one-third of probationers (32.3%) for a technical violation (15.6%), new offense (3.3%), or both (13.3%).

Procedure

Research assistants (RAs) recruited probationers by mail, telephone, home visits, and probation office visits. RAs arranged to meet probationers expressing interest in the study at the probation office at their next regularly scheduled meeting with their officer. Prior to the officer–probationer meeting, the RA obtained informed consent from probationers, had probationers complete the symptom measure (the BSI), and arranged a tape recorder in the officer's office. Following the officer–probationer meeting, the RA met with the probationer to complete the study materials, provided officers with the study materials to complete within 24 hr, and coded probationers' records. For both probationers and officers, the order of study materials was counterbalanced to avoid order effects. Probationer participants were paid \$50. Audiotaped officer–probationer meetings were transcribed and rated by trained observers.

Secondary Study

Participants

In the secondary study, we administered a revised version of the DRI to a large sample of probationers to cross-validate the struc-

ture of the measure identified in the first study. Participants were 322 probationers with mental disorder drawn from a specialty mental health agency in a large Southern city and a traditional agency in a large Western city. Eligibility criteria were similar to those applied in the primary study. Of probationers invited to participate, most (78%) agreed to do so. As a group, participants were an average of 36.7 years old ($SD = 10.8$), with the majority being male (58%; female, 42%) and Black (50%; White, 28%; other, 12%). Most (74.5%) were also required to participate in psychiatric or substance abuse treatment as a condition of probation. According to their records, probationers' most common primary diagnoses were bipolar disorder (44.0%); schizophrenia, schizoaffective, and other psychotic disorders (30.5%); major depression (20.4%); or other (5.1%) disorders. Probationers' most serious charge for their lifetime history of arrest was for a person (53%), drug (24%), property (19%), or minor (4%) offense. At the time of the study, probationers had spent an average of 8.6 ($SD = 14.4$) months on probation, about 4.6 ($SD = 6.2$) months of which was spent with the officer they rated in the study.

Measure

Probationers completed a revised version of the DRI (DRI-R described below) that included 30 items. Given indications during the secondary study that probationers with cognitive impairments had difficulty completing negatively worded items, these items were revised in the middle of this secondary study to be positively worded. Because (a) the measures used in Study 1 and Study 2 differ and (b) the measure used in Study 2 was revised well into recruitment, these are noisy data that provide a relatively stringent cross-validation of the structure of the DRI-R.

Procedure

RAs recruited eligible probationers by mail, telephone, home visits, and probation office visits. RAs arranged to meet probationers expressing interest in the study at probation offices, public places, or probationers' residences. After securing informed consent, the RA completed an interview with the probationer that included administration of the DRI-R. Participants were paid \$40.

RESULTS

Overview

The data from both studies were analyzed in four phases. First, data from the primary study were prepared for analysis by "centering around officers" to reduce problems of data dependence. Second, the internal structure of the DRI was analyzed using primary study data to refine the measure by deleting items with questionable distributions and relationships with the overall scale. Third, the structure of the DRI-R was explored via confirmatory factor analysis, using data from the secondary study. Fourth, the reliability, validity, and predictive utility of the DRI-R was analyzed using primary study data, with emphasis on the measure's relation to within-session behavior, treatment adherence, and rule compliance. In this section, each phase is described.

Preparing the Primary Study Data

Data included 90 officer ratings, 90 probationer ratings, and 83 observer ratings. For cases missing less than 10% of DRI items,

missing values were replaced with average values for that case. Because seven officers were associated with 90 probationers, there was a potential for biased officer ratings (in which particular officers rated their relationships as more positive or negative than the officer group) or affected probationer or observer ratings (in which probationers or observers nested within an officer rated relationships as more positive or negative than their group). Multivariate analyses of variance and interclass correlation analyses (see Kenny & La Voie, 1985) indicated that officers, but not probationers or observers nested within officers, had systematic rating biases. To reduce problems of data dependence, we centered officers' DRI scores to remove systematic response biases. That is, an individual officer's average DRI score across his or her cases was deducted from his or her rating of each case, and then the officer group average rating was added to each item score (see Hatcher, Barends, Hansell, & Gutfreund, 1995). Analyses conducted with and without officer-centered scores produced the same pattern of results.

Refining the DRI

After the data were prepared for analyses, the DRI was refined on the basis of analyses of its internal structure. First, distributions of responses to DRI items were examined within rater type (officer, probationer, or observer) to identify items with poor distributions. Items with poor distributions were defined as those with (a) very high or low average scores and low standard deviations, (b) extreme splits at the median response (i.e., $\leq 8\%$ in either direction), or (c) visibly skewed or kurtotic distributions. Second, the degree of association among the items was computed to identify items that were weakly associated with the remaining item pool. Specifically, we computed squared multiple correlations between each item and the remaining item pool, bivariate correlations among the items, and exploratory factor analysis. Given the limited sample size within rater types ($N = 83\text{--}90$), factor analyses were repeated within and across observer types to identify a stable solution. A three-factor oblique solution was most stable within the three observer types and across observer type combinations (officer–probationer and officer–probationer–observer groups). Items that failed to contribute to this solution were considered for deletion or revision.

This solution was coherent, but not neatly consistent with the hypothesized DRI domains of alliance and fairness. Instead, the first and largest factor was marked by bond (alliance) and clarity–voice (fairness) items. The second factor consisted of items that tapped the extent to which the probationer and officer trusted one another from the bond (alliance) items. The third factor tapped the officers' toughness and punitiveness with the probationer (e.g., disciplinary orientation; expectations of independence) on the basis of items from a variety of designed scales. On the basis of these results, the factors were provisionally labeled Caring–Fairness, Trust, and Toughness.

After integrating the results of these item correlation and item distribution analyses and revisiting theories of dual-role relationships, 28 items were deleted from the DRI. The deleted items chiefly were from the hypothesized alliance scales that were designed to assess partnership and confident commitment (see Measures above). These domains may be less relevant to relationship quality in mandated treatment than in traditional psychotherapy.

The results were also used to revise the wording of other items to better target DRI–R domains. These revised items are included in the current, 30-item DRI (DRI–R).

Assessing the Structure of the DRI–R

Data on 322 probationers from the secondary study were used to cross-validate the exploratory factor structure of the DRI–R observed in the primary study. Amos 5.0.1 was used to test the correlated three-factor model depicted in Figure 1. Notably, this structure is mathematically equivalent to a hierarchical three-factor structure in which a superordinate relationship quality factor over-arches the three factors. We depict the correlated version to show the degree of association among each of the three factors, which is attributable to the superordinate factor. Comparative fit index (CFI) values at or above .90 and root-mean-square error of approximation (RMSEA) values at or below .10 were used to define adequate fit (Browne & Cudeck, 1993; Byrne, 1994). Applying those criteria, the three-factor model manifested an acceptable fit to our sample's data, $\chi^2(402, N = 322) = 1481.11, p < .001$, RMSEA = .09, CFI = .90. The basic three-factor model fit the data better than (a) a two-factor model in which Trust items were combined with those of Caring–Fairness to create one factor, and Toughness remained a separate factor, $\chi^2(433, N = 322) = 1654.21, p < .001$, RMSEA = .09, CFI = .88, and (b) a one-factor model, $\chi^2(405, N = 322) = 1762.28, p < .001$, RMSEA = .10, CFI = .87.

Assessing Psychometric Properties of the DRI–R

Given these results, in the remainder of this article, we describe the psychometric properties of the DRI–R, with the original DRI item wording and with the items grouped into three DRI–R scales that reflect the sum of Caring–Fairness, Trust, and Toughness items shown in Figure 1. Total scores were the sum of the items, reversing those of the Toughness scale. We examine DRI–R scales individually because use of a multidimensional test as a single variable can obscure important relationships with criterion variables (Smith, Fischer, & Fister, 2003).

Reliability and Validity

Reliability

With respect to reliability, DRI–R scales and total scores had excellent internal consistency ($\alpha = .96, .90, .87$, and $.95$ for Caring–Fairness, Toughness, Trust, and Totals, respectively) and moderate interitem correlations ($M r = .59, .67, .56$, and $.59$, respectively). To assess cross-informant reliability and convergent validity, we analyzed the pattern of correlations between and within rater types for total scores on the DRI–R, total scores on the WAI, and global ratings of relationship satisfaction. As shown in Table 1, there was poor cross-informant agreement across rater types for all measures. For example, probationers' ratings on the DRI–R ($r = .06$) and the WAI ($r = .17$) were not significantly associated with their officers' ratings on the same measures. As shown later, these findings are consistent with literature on the therapeutic alliance. At the subscale level, the pattern of cross-informant correlations (not shown) makes theoretical sense. For example, observer and officer, but not probationer, ratings of

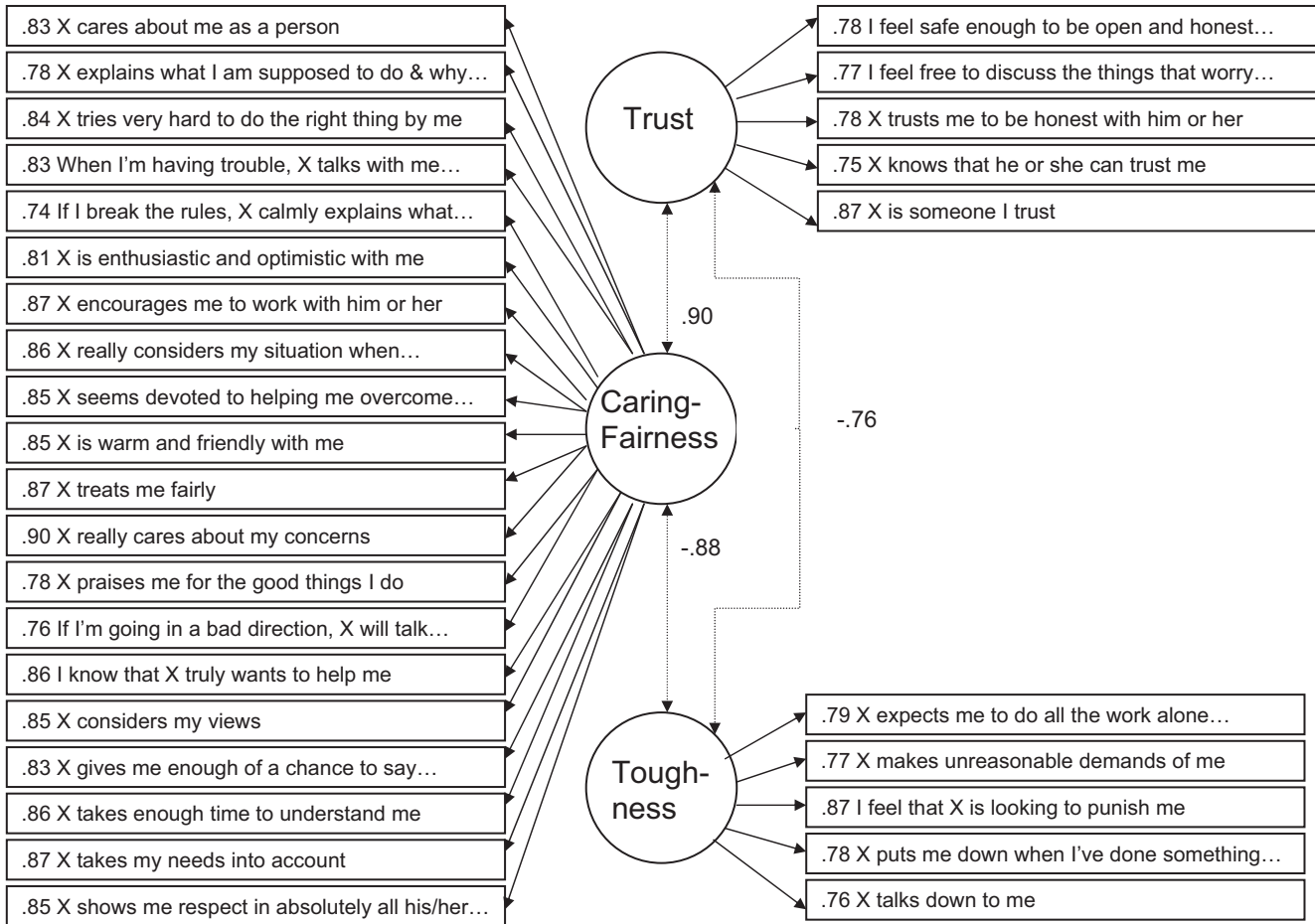


Figure 1. Factor structure of the revised Dual-Role Relationship Inventory (DRI-R).

probationers' Trust are correlated ($r = .29, p < .01$). Similarly, observer and probationer, but not officer, ratings of officers' Toughness are correlated ($r = .28, p < .05$).

Construct Validity

The within-rater data provided in Table 1 provide evidence of convergent validity for the DRI-R. First, within rater types, the DRI-R and WAI were moderately associated. For example, officers' WAI ratings were moderately ($r = .42$) correlated with their DRI-R ratings, suggesting that the DRI-R taps something that is related to, but not the same as, the therapeutic alliance. Second, within rater types, the DRI-R is more strongly associated with global ratings of satisfaction than is the WAI. For example, officers' satisfaction ratings are not significantly associated with their WAI scores ($r = .18$) but weakly to moderately associated with their DRI-R scores ($r = .37$). This suggests that the DRI-R taps qualities that are more relevant to respondents' appraisals than the WAI.

These data are consistent with analyses of the relation between ratings of within-session behavior and scores on the WAI and DRI-R. No significant relationships were found between within-session behavior and probationers' or officers' total scores on the WAI. In contrast, within-session behavior bore a theoretically

coherent pattern of relationships with probationers,' officers,' and observers' DRI-R total and scale scores, as shown in Table 2. For example, all informants' total DRI-R scores were moderately strongly inversely associated with officers' confrontation of probationers in session and moderately inversely associated with probationers' resistance of officers in session. Observers' DRI-R scores were moderately positively related to affirming and supportive within-session behavior by the officers. A closer look at the pattern of association between ratings of within-session behavior and scales of the DRI-R provides some evidence for the scales' validity. For example, within-session ratings of resistance by probationers were positively associated with probationers' DRI-R ratings of Toughness ($r = .41$), inversely associated with Trust ($r = -.33$), and weakly and nonsignificantly associated with Caring-Fairness ($r = -.18$).

Next, we assessed the relation between the DRI-R and treatment motivation. The results are shown in Table 3. We expected DRI-R scores to be significantly associated with probationers' amotivation, which was the case for some subscale scores (e.g., probationers' and observers' ratings of Toughness), but not total scores. Similarly, although we expected DRI-R total scores to relate positively to intrinsic motivation, there was merely a trend at the scale level (for observers) and significant findings for two sub-

Table 1
Cross-Informant Agreement on Relationship Quality and Within-Informant Association of Relationship Measures

Respondent	Informant					
	Probationer			Officer		
	WAI	DRI-R	Satisfaction	WAI	DRI-R	Satisfaction
Probationer						
DRI-R	.54**					
Satisfaction	.27*	.50**				
Officer						
WAI	.13	.11	.13			
DRI-R	.17	.06	.19	.42**		
Satisfaction	.01	.03	.11	.18	.37**	
Observer						
DRI-R	.16	.07	.10	.13	.26**	.17

Note. WAI = Working Alliance Inventory; DRI-R = revised Dual-Role Relationship Inventory.
* $p < .05$. ** $p < .01$.

scales (e.g., probationers' and observers' ratings of Trust and Toughness, respectively).

The chief measure of divergent validity in the study was the BSI measure of psychological distress. Ideally, DRI-R scores would be relatively independent of a probationers' symptomatology. As hypothesized, we found that probationers', officers', and observers' total DRI-R scores were not significantly associated with the BSI indices of general distress, depression, anxiety, or somatization. Probationer DRI-R total scores, but not those of officers or observers, were significantly inversely associated with the BSI Hostility scale ($r = -.21, p < .05$), as predicted. Aside from the BSI Hostility scale, there was only 1 (of 36) significant relation between the DRI-R subscales and the BSI subscales: Probationers' DRI-R Toughness scores were weakly associated with their BSI ratings of anxiety ($r = .22, p < .05$).

Predictive Utility for Rule Compliance

First, the association of the DRI-R with recent probation violations was assessed. As shown in Table 4, officers' DRI-R total

scores and both officers' (Trust) and probationers' (Toughness) subscale scores were significantly associated with the number of recent violations. The pattern of association differed by violation type.

Second, we assessed the utility of the DRI-R in predicting whether, and how quickly, probationers violated one or more conditions of probation. Because probationers' time at risk varied as a function of when their interview was completed (see Measures above), Cox proportional hazards survival analyses were completed to determine whether the four DRI-R scales predicted probationers' time to their first violation (or lack thereof). The scales were entered in a forward stepping algorithm, with the likelihood ratio as the criterion for entry and removal. The results indicated that time to violation was predicted by one or more DRI-R subscales completed by probationers, $\chi^2(1, N = 90) = 5.59, p < .01$; officers, $\chi^2(1, N = 90) = 6.02, p < .01$; and observers, $\chi^2(1, N = 83) = 7.71, p < .01$. For probationers, officers, and observers, only the Toughness scale, $exp(B) = 1.28, p < .01$, Caring-Fairness scale, $exp(B) = 0.26, p < .01$, and Trust scale, $exp(B) = 0.68, p < .01$, respectively, were significantly predictive. These estimated odds ratios mean, for example, that for every 1-point increase in a probationers' DRI-R Toughness score, the odds of violation increased by 28%. A repetition of these analyses with DRI-R Total scores as the only predictor indicates that officers', $\chi^2(1, N = 90) = 3.77, p < .05$, but not probationers' or observers' global scores predicted time to violation. WAI scores did not predict time to violation.

Third, parallel survival analyses were completed to assess the utility of the DRI-R in predicting whether, and how quickly, probation was revoked for rule noncompliance that was deemed serious. As with violations, the subscale-based analyses indicated that time to revocation was predicted by one or more DRI-R subscales completed by probationers, $\chi^2(1, N = 90) = 12.51, p < .01$; officers, $\chi^2(1, N = 90) = 7.26, p < .01$; and observers, $\chi^2(2, N = 83) = 10.14, p < .01$. For observers, the Caring-Fairness scale, $exp(B) = 0.32, p < .01$, and Trust scale, $exp(B) = 0.40, p < .01$, significantly predicted time to revocation. For probationers and officers, only the Toughness scale, $exp(B) = 1.94, p < .01$, and Caring-Fairness scale, $exp(B) = 0.12, p < .01$, respectively, were significantly predictive. These estimated odds ratios mean,

Table 2
Relation Between Informants' DRI-R Scores and Ratings of Within-Session Behavior

Within-session behavior	Probationer scores		Officer scores		Observer DRI-R	
	Total	C-F/Trust/Tough	Total	C-F/Trust/Tough	Total	C-F/Trust/Tough
Officer behavior						
Reflect	-.05	-.06/-.04/.01	-.08	-.11/.00/.08	.23*	.22*/.21/-.12
Affirm	.02	.00/-.01/-.15	.03	.02/.08/.03	.43**	.44***/.29**/-.32**
Support	.13	.14/.13/-.03	.09	.04/.16/-.01	.37**	.38***/.24*/-.27*
Advise	-.02	.01/-.05/.11	-.01	.00/-.02/-.02	.21	.23*/.14/-.08
Direct	.04	.07/-.01/.05	-.28**	.21*/-.19/.25**	-.23*	-.18/-.33*/.22*
Confront	-.22*	-.18/-.18/.31**	-.30**	-.29**/-.21*/.15	-.53**	-.42***/-.60***/.66***
Probationer behavior						
Change talk	-.07	-.02/-.05/.26*	-.10	.01/-.12/.18	.11	.10/.18/-.02
Resist	-.27*	-.18/-.33**/.41**	-.30*	-.30**/-.16/.18	-.35**	-.29**/-.33**/.45***

Note. DRI-R = revised Dual-Role Relationship Inventory; C-F = Caring-Fairness subscale; Trust = Trust subscale; Tough = Toughness subscale.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3
Relation Between Informants' DRI-R Scores and Ratings of Within-Session Behavior

Situational Motivational Scale subscale	Probationer DRI-R scores		Officer DRI-R scores		Observer DRI-R scores	
	Total	C-F/Trust/Tough	Total	C-F/Trust/Tough	Total	C-F/Trust/Tough
Amotivation	-.17	-.12/-.12/.31**	.06	.14/.05/.14	-.14	-.11/-.12/.22*
External Regulation	.15	.15/.13/-.14	.21*	-.01/.29**/-.24*	.02	.01/.07/.02
Intrinsic Motivation	.11	.17/.21*/.04	.03	.12/-.08/-.00	.19	.18/.12/-.22*
Identified Regulation	-.05	-.01/-.07/.15	-.10	-.09/-.03/.09	-.23*	-.22/-.17/.23*

Note. DRI-R = revised Dual-Role Relationship Inventory; C-F = Caring-Fairness subscale; Trust = Trust subscale; Tough = Toughness subscale. * $p < .05$. ** $p < .01$.

for example, that for every 1-point increase in a probationers' DRI-R Toughness score, the odds of revocation increased by 94%. A repetition of these analyses with DRI-R total scores as the only predictor indicates that officers', $\chi^2(1, N = 84) = 4.86, p < .05$, but not probationers' or observers' global scores predicted time to revocation. Neither officers' nor probationers' WAI scores predicted time to revocation. In summary, the DRI-R is linked with both past and future rule compliance, ranging from recent treatment noncompliance to future revocation.

DISCUSSION

In this study, we refined and validated a measure of relationship quality in mandated treatment. The DRI-R was developed in a context in which care and control are equally emphasized, with specialty mental health probation officers and their supervisees with mental disorder. The three primary findings of this study have implications for understanding, assessing, and evaluating the effect of dual-role relationships. First, the results indicate that the quality of dual-role relationships is not adequately captured by traditional conceptualizations of the therapeutic alliance. In the context of mandated treatment, effective relationships involve not only caring, but also fairness, trust, and an authoritative (not authoritarian) style. Here, caring becomes blended with fairness. Second, the study indicates that the DRI-R assesses these key domains, is internally consistent, and manifests a theoretically coherent pattern of associations with ratings of within-session behavior and measures of the therapeutic alliance, relationship satisfaction, symptoms, treatment motivation, and future rule compliance. Moreover, the DRI-R was more strongly related to within-session behavior

and relationship satisfaction and more strongly predictive of rule compliance than the leading measure of the therapeutic alliance. Third, the utility of the DRI-R in predicting probation violations and new arrests suggests that the quality of dual-role relationships affects important outcomes for those with co-occurring disorders. Beyond technical interventions, the process of care and supervision is crucial. In this section, we describe each of these main findings.

Understanding Dual-Role Relationships

The results of this study indicate that the quality of dual-role relationships is not adequately captured by traditional conceptualizations of the therapeutic alliance. The nature of relationship quality differs in traditional and dual-role contexts, perhaps because the latter context involves primary interpersonal dimensions of both affiliation and control (see Benjamin, 1996). There are three key differences between the therapeutic relationship and the dual-role relationship. First, although caring (bond, attachment) is key to both types of relationships, a collaborative willingness to invest in the therapy process seems less central to dual-role relationships. Of DRI items designed to tap the alliance, those that tapped bond (acceptance, support, trust, openness) were retained, whereas those that tapped partnership (working together toward shared goals) and confident commitment (belief in one another's abilities) were deleted because they did not cohere with the rest of the scale. This is consistent with Angell and Mahoney's (2007) finding that the themes discussed by case managers in focus groups "pertain to aspects of the relationship bond, but did not focus specifically upon goal and task consensus, as would be

Table 4
Relation Between Informants' DRI-R Scores and Recent Recorded Rule Compliance

Recent violations	Probationer DRI-R scores		Officer DRI-R scores		Observer DRI-R scores	
	Total	C-F/Trust/Tough	Total	C-F/Trust/Tough	Total	C-F/Trust/Tough
Number	-.15	-.09/-.10/.34***	-.26**	-.12/-.36***/.11	-.08	-.04/-.13/.19
Treatment noncompliance	.02	.04/.04/.07	-.17	-.08/-.22*/.09	-.14	-.10/-.17/.18
Substance abuse	-.13	-.09/-.11/.23*	-.26*	-.14/-.24*/.24*	-.18	-.15/-.16/.25*
Failure to report	-.26*	-.20/-.22*/.40***	-.16	-.09/-.19/.08	.07	.10/-.03/.00
Other technical	-.08	-.04/-.12/.19	-.23*	-.18/-.23*/.07	-.04	-.06/.04/.07
Violence/new offense	-.19*	-.23*/-.11/.04	.19	.19/.07/-.12	.11	.11/.05/-.13

Note. DRI-R = Dual-Role Relationship Inventory; C-F = Caring-Fairness subscale; Trust = Trust subscale; Tough = Toughness subscale. * $p < .05$. *** $p < .001$.

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predicted by the literature on the working alliance" (p. 31). In dual-role relationships, the power imbalance may obviate the need for clients to agree with treatment and supervision decisions.

The second key difference is that, in dual-role relationships, caring becomes blended with fairness. In the DRI-R, caring and fairness are integrated into one scale that is associated with trust. This finding may be viewed as a relational variant of the finding that citizens' trust in the law, or compliance with decisions made by authority figures, depends on their perception of both procedural justice and benevolent or caring motives (Tyler & Huo, 2002). In contrast with our expectations that they would be relatively distinct, the aspects of the alliance that are relevant to dual-role relationships are integral components of relational justice.

Third, the style of implementing control appears to be a key component of dual-role relationships, but not the therapeutic alliance. Beyond Caring-Fairness and Trust, a darker side of dual-role relationships emerged in this study that we labeled Toughness. As shown in Figure 1, the items of this scale tap a punitive orientation and expectations of independence and compliance. This scale seems to bode poorly for relationships: It was associated with officer confrontation within sessions, probationer mistrust, treatment amotivation, and future rule noncompliance. Angell and Mahoney (2007) found that limit setting in dual-role case management relationships introduced a parent-child-like dynamic into the relationship. Along these lines, the Toughness scale seems to capture an authoritarian supervisory style. Research on parenting suggests that authoritarian parents are highly demanding and directive but (unlike authoritative parents) are not responsive to their children's needs. "They are obedience- and status-oriented, and expect their orders to be obeyed without explanation" (Baumrind, 1991, p. 52). The Toughness scale emphasizes an indifference to probationers' views and feelings, expectation of compliance, and punitiveness when expectations are not met. This darker side of dual-role relationships is consistent with Angell and Mahoney's (2007) qualitative finding that conflict and struggle over issues of power and control are an important negative aspect of case management relationships. The nature of the relationship is different in dual-role contexts than in strictly therapeutic ones: In mandated treatment, there is an emphasis on caring, fairness, trust, and an authoritative (not authoritarian) style.

Assessing Dual-Role Relationships

The DRI-R, which captures these dimensions, is the first validated measure of dual-role relationship quality developed to date. Relative to the most widely used measure of the therapeutic alliance (the WAI), the DRI-R relates more strongly to ratings of within-session behavior and officers' and probationers' satisfaction with their relationships. This suggests that the DRI-R captures facets that are more relevant to the nature and quality of relationships in mandated treatment than are traditional measures of the alliance.

With respect to reliability, the DRI-R is internally consistent at both total score and subscale levels. Although there was low convergence between probationers' and officers' (but not officers' and observers') ratings on the DRI-R, there was also low convergence between their ratings of the WAI. Indeed, this finding of poor cross-rater agreement is consistent with findings on the

therapeutic alliance in psychotherapy (e.g., Tichenor & Hill, 1989). Across studies in psychotherapy, each perspective appears similarly predictive of treatment outcome (Martin et al., 2000), with the client perspective having a slight advantage (Horvath & Symonds, 1991). Similarly, in the present study, officers' and probationers' total DRI-R ratings were both predictive of rule noncompliance (although for different reasons). Within each perspective (probationer, officer, or observer), DRI-R ratings correlated with other variables (e.g., within-session behavior) in a theoretically coherent manner. Despite different views of the relationship, it seems that each view possesses some validity.

The DRI-R also related to such variables as the treatment alliance, relationship satisfaction, within-session behavior, treatment motivation, and future rule compliance in a theoretically coherent manner, both at the total score and scale level. For example, officers' confrontation of probationers within session was strongly positively linked with observers' rating of Toughness, strongly negatively linked with their ratings of Trust, and moderately negatively related to their ratings of Caring-Fairness.

The DRI-R was developed and validated in a mandated treatment context that involves prototypically dual roles. In the relationship between specialty mental health officers and probationers with co-occurring disorders, casework and supervision are both paramount. The extent to which the DRI-R will generalize to capture the quality of relationships between clinicians and involuntary clients is unclear. Nevertheless, two points bode positively for the measure's generalizability. First, there are a number of parallels between work on specialty mental health probation (Roskes & Feldman, 1999; Skeem et al., 2003; Solomon et al., 2002) and others' work on intensive case management (Angell & Mahoney, 2007; Neale & Rosenheck, 2000). For example, both contexts involve social control, limit setting, and potential conflict over issues of power and compliance. As noted by McCabe and Priebe (2004), "statutory responsibilities for care and the requirement to monitor patients in the community . . . mean that many 'therapeutic relationships' are initiated and maintained not by the patient but by the mental health professional, a feature of assertive outreach models of care and all forms of 'compulsory treatment'" (p. 124). Second, the most widely used measure of the therapeutic alliance (the WAI) has been extended with some success well beyond the traditional psychotherapy relationship (see Introduction, above). Recently, the WAI was used to capture the parent-therapist alliance, which predicted positive outcomes in parent management training (Kazdin, Whitley, & Marciano, 2006). It is possible that the DRI-R may generalize to mandated treatment contexts beyond probation (e.g., case managers or therapists with involuntary clients; counselors with substance abuse clients; mental health court judges with defendants). Nevertheless, because particular types of relationships in mandated treatment may differ in their tasks, settings, formality, and weighting of clinical versus supervisory roles, the generalizability of the DRI-R must be directly investigated in future research.

Evaluating the Impact of Dual-Role Relationships

In keeping with our past work (Skeem et al., 2003), we found that the quality of the dual-role relationship predicted rule compliance, that is, probation violations, probation revocation, and new arrests. This was not the case for the therapeutic alliance. The

mechanism for this association is unclear. It is possible that dual-role relationship quality links directly with rule compliance, through procedural justice (MacCoun, 2005), the skills of the *synthetic officer* (Klockars, 1972), or both. First, Tom Tyler's (1990; Tyler & Huo, 2002) work on procedural justice indicates that citizens' willingness to comply with decisions made by legal authorities is linked with perceptions that these decisions are based on fair procedures and benevolent motives. Such perceptions are created by treating people with dignity, respect, and caring. These are aspects of positive dual-role relationships tapped by the DRI-R.

Second, the skills of the synthetic officer may be at work. According to Carl Klockars' (1972) ethnography, the synthetic type of officer obtains compliance by satisfying both therapeutic and social control roles. In contrast, the *law enforcer* and *time server* are unshakably rule-enforcing officers, whereas the *therapeutic agent* errs in the direction of unstructured support and permissiveness. Only the synthetic approach brings the power of both the relationship and the mandate to bear on rule compliance. In this study, synthetic relationships (indexed by DRI-R total scores) predicted rule compliance, whereas therapeutic agent relationships (indexed by WAI scores) were unrelated to future rule compliance. These findings are consistent with D. Andrews and Kiessling's (1980) finding that a firm but fair approach (e.g., one that involves both active listening and directive supervision) is most effective in reducing recidivism risk for general probationers. Authoritarian and permissive approaches are less effective than authoritative ones.

Synthetic relationships and relational justice describe a link between dual-role relationship quality and rule compliance that is direct. However, there is probably an indirect link, as well, wherein the effect of relationship quality on rule compliance is mediated by mental state. Negative relationships can compromise probationers' mental state, functioning, and ability to comply with the conditions of probation. As noted by one probationer with mental disorder:

My mental condition is something of a severe emotional turbulence . . . and anything that causes me an additional bit of unease or anything, you know, additionally bad in my life, contributes to the strain of a situation that is already teetering on the brink of suicide. So . . . it seems like it would make sense for my probation officer . . . to be very decent in his treatment of me. . . (Skeem et al., 2003, pp. 454-455)

The bulk of the literature on social support and social undermining indicates that relative to positive social exchanges, negative ones more strongly predict deterioration in well-being and quality of life (Baumeister, Bratslavsky, Finkenhauser, & Vohs, 2001; Rook, 1998; Rosenfield & Wenzel, 1997). In turn, compromised mental state and functioning may limit probationers' ability to comply with the conditions of probation (e.g., getting to required appointments; abstaining from substance use; Skeem et al., 2003). Indeed, there is evidence that negative treatment alliances and clinicians' limit setting elevate patient's risk of becoming involved in violence (Beauford, McNiel, & Binder, 1997; see also Fagan-Pryor et al., 2003; Ilkiw-Lavalle & Grenyer, 2003). Thus, negative dual-role relationships may compromise probationers' mental state and ability to comply with rules.

Whatever the mechanism, it is clear that the quality of dual-role relationships predicts rule compliance. In the context of specialty mental health probation, rule compliance relates directly to whether probationers with co-occurring disorders are sent to prison. This population is rapidly growing and is at high risk deepening involvement in the criminal justice system: Compared with their relatively healthy counterparts, probationers with mental disorder are twice as likely to violate probation and return to incarceration (Dauphinot, 1997). Training specialty officers and others with dual-role relationships to establish caring, fair, trusting, and nonauthoritarian relationships may improve outcomes for these probationers. To improve outcomes for high-risk populations in mandated treatment, we must include the process of supervision and treatment in our definition of evidence-based practice.

References

- Abram, K. M., & Teplin, L. A. (1991). Co-occurring disorders among mentally ill jail detainees: Implications for public policy. *American Psychologist, 46*, 1036-1045.
- Agnew-Davies, R., Stiles, W. B., Hardly, G. E., Barkham, M., & Shapiro, D. A. (1998). Alliance structure assessed by the Agnew Relationship Measure (ARM). *British Journal of Clinical Psychology, 37*, 155-172.
- Alverson, H., Alverson, M., & Drake, R. E. (2000). An ethnographic study of the longitudinal course of substance abuse among people with severe mental illness. *Community Mental Health Journal, 36*, 340-345.
- Andrews, D., & Kiessling, J. (1980). Program structure and effective correctional practice: A summary of CaVic research. In R. Ross & P. Gendreau (Eds.), *Effective correctional treatment* (pp. 439-463). Toronto, Ontario, Canada: Butterworths.
- Andrews, D. A., Zinger, I., Hoge, R. D., & Bonta, J. (1996). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. In D. F. Greenberg (Ed.), *Criminal careers* (Vol. 2, pp. 437-472). Brookfield, VT: Dartmouth.
- Angell, B., & Mahoney, C. (2007). Reconceptualizing the case management relationship in intensive treatment: A study of staff perceptions and experiences. *Administration and Policy in Mental Health and Mental Health Services Research, 34*, 172-188.
- Angell, B., Mahoney, C. A., & Martinez, N. I. (2006). Promoting adherence in assertive community treatment. *Social Service Review, 80*, 485-526.
- Asay, T. P., & Lambert, M. J. (1999). The empirical case for the common factors in therapy: Quantitative findings. In M. A. Hubble, B. L. Duncan, & S. D. Miller (Eds.), *The heart and soul of change: What works in therapy* (pp. 23-55). Washington, DC: American Psychological Association.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology, 5*, 323-370.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence, 11*, 56-95.
- Beauford, J. E., McNiel, D. E., & Binder, R. L. (1997). Utility of the initial therapeutic alliance in evaluating psychiatric patients' risk of violence. *American Journal of Psychiatry, 154*, 1272-1276.
- Benjamin, L. S. (1996). A clinician-friendly version of the Interpersonal Circumplex: Structural analysis of social behavior (SASB). *Journal of Personality Assessment, 66*, 248-266.
- Bonta, J., Hanson, R. K., Sedo, B., Coles, R., Nascimento, G., & Rugge, T. (2000). *Effective case management in Manitoba probation*. Unpublished project description.
- Brown, P. D., & O'Leary, K. D. (2000). Therapeutic alliance: Predicting continuance and success in group treatment for spouse abuse. *Journal of Consulting and Clinical Psychology, 68*, 340-345.

- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Newbury Park, CA: Sage.
- Bureau of Justice Statistics. (2006). *Correctional facts at a glance*. Retrieved August 5, 2006, from <http://www.ojp.usdoj.gov/bjs/glance/corr2.htm>
- Byrne, B. M. (1994). *Structural equation modeling with EQS and EQS/Windows: Basic concepts, applications, and programming*. Thousand Oaks, CA: Sage.
- Cicchetti, D., & Sparrow, S. (1981). Developing criteria for establishing interrater reliability of specific items: Applications to assessment of adaptive behavior. *American Journal of Mental Deficiency, 86*, 127–137.
- Cohen, J. (1968). Weighted kappa: Nominal scale agreement provision for scaled disagreement or partial credit. *Psychological Bulletin, 70*, 213–220.
- Connors, G. J., Carroll, K. M., DiClemente, C. C., Longabaugh, R., & Donovan, D. M. (1997). The therapeutic alliance and its relationship to alcoholism treatment participation and outcome. *Journal of Consulting and Clinical Psychology, 65*, 588–598.
- Cooper-Patrick, L., Gallo, J. J., Gonzales, J. J., Vu, H. T., Powe, N. R., Nelson, C., & Ford, D. E. (1999). Race, gender, and partnership in the patient–physician relationship. *Journal of the American Medical Association, 282*, 583–589.
- Cruz, M., & Pincus, H. A. (2002). Research on the influence that communication in psychiatric encounters has on treatment. *Psychiatric Services, 53*, 1253–1265.
- Dauphinot, L. L. (1997). The efficacy of community correctional supervision for offenders with severe mental illness (Doctoral dissertation, University of Texas at Austin, 1997). *Dissertation Abstracts International, 57*, 5912.
- Derogatis, L. R., & Melisaratos, N. (1983). The Brief Symptom Inventory: An introductory report. *Psychological Medicine, 13*, 595–605.
- Ditton, P. (1999). *Mental health and treatment of inmates and probationers*. Washington, DC: Bureau of Justice Statistics.
- Drake, R. E., Wallach, M. A., Alvenson, H. S., & Mueser, K. T. (2002). Psychosocial aspects of substance abuse by clients with severe mental illness. *Journal of Nervous and Mental Disease, 190*, 100–106.
- Fagan-Pryor, E. C., Haber, L. C., Dunlap, D., Nall, J. L., Stanley, G., & Wolpert, R. (2003). Patients' view of causes of aggression by patients and effective interventions. *Psychiatric Services, 54*, 549–553.
- Frank, A. F., & Gunderson, J. G. (1990). The role of the therapeutic alliance in the treatment of schizophrenia: Relationship to course and outcome. *Archives of General Psychiatry, 47*, 228–236.
- Guay, F., Vallerand, R. J., & Blanchard, C. (2000). On the assessment of situational intrinsic and extrinsic motivation: The Situational Motivation Scale. *Motivation and Emotion, 24*, 175–213.
- Hall, J. A., Horgan, T. G., Stein, T. S., & Roter, D. L. (2002). Liking in the physician–patient relationship. *Patient Education and Counseling, 48*, 68–77.
- Hartwell, S. (2004). Triple stigma: Persons with mental illness and substance abuse problems in the criminal justice system. *Criminal Justice Policy Review, 15*(1), 84–99.
- Hatcher, R., & Barends, A. (1996). Patients' view of the alliance in psychotherapy: Exploratory factor analysis of three alliance measures. *Journal of Consulting and Clinical Psychology, 64*, 1326–1336.
- Hatcher, R. L., Barends, A., Hansell, J., & Gutfreund, M. J. (1995). Patients' and therapists' shared and unique views of the therapeutic alliance: An investigation using confirmatory factor analysis in a nested design. *Journal of Consulting and Clinical Psychology, 63*, 636–643.
- Hellerstein, D. J., Rosenthal, R. N., & Miner, C. R. (1995). A prospective study of integrated outpatient treatment for substance-abusing schizophrenic patients. *American Journal on Addictions, 4*, 33–42.
- Henry, W. P., & Strupp, H. H. (1994). The therapeutic alliance as interpersonal process. In A. O. Horvath & L. S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp. 51–84). Oxford, England: Wiley.
- Horvath, A. O. (1994). Empirical validation of Bordin's pantheoretical model of the alliance: The Working Alliance Inventory perspective. In A. O. Horvath & L. S. Greenberg's (Eds.), *The working alliance: Theory, research, and practice* (pp. 109–128). New York: Wiley.
- Horvath, A., & Greenberg, L. (1986). The development of the Working Alliance Inventory. In L. Greenberg & W. Pinsof (Eds.), *The psychotherapeutic process: A research handbook* (pp. 529–556). New York: Guilford Press.
- Horvath, A., & Luborsky, L. (1993). The role of the therapeutic alliance in psychotherapy. *Journal of Consulting and Clinical Psychology, 61*, 561–573.
- Horvath, A., & Symonds, B. (1991). The role of the therapeutic alliance in psychotherapy. *Journal of Consulting and Clinical Psychology, 38*, 139–149.
- Howgego, I. M., Yellowlees, P., Owen, C., Meldrum, L., & Dark, F. (2003). The therapeutic alliance: The key to effective patient outcome? A descriptive review of the evidence in community mental health case management. *Australian and New Zealand Journal of Psychiatry, 37*, 169–183.
- Ilkiw-Lavalle, O., & Grenyer, B. F. (2003). Differences between patient and staff perceptions of aggression in mental health units. *Psychiatric Services, 54*, 389–393.
- Kaplan, S. H., Greenfield, S., & Ware, J. E. (1989). Assessing the effects of physician–patient interactions on the outcomes of chronic disease. *Medical Care, 27*, S110–S127.
- Kaplan, S. H., Sullivan, L. M., Spetter, D., Dukes, K. A., Khan, A., & Greenfield, S. (1996). Gender patterns of physician–patient communication. In M. F. Falik, & K. S. Collins (Eds.), *Women's health: The Commonwealth Fund Survey* (pp. 76–95). Baltimore, MD: Johns Hopkins University Press.
- Kazdin, A. E., Whitley, M., & Marciano, P. L. (2006). Child–therapist and parent–therapist alliance and therapeutic change in the treatment of children referred for oppositional, aggressive, and antisocial behavior. *Journal of Child Psychology and Psychiatry, 47*, 436–445.
- Kenny, D. A., & La Voie, L. (1985). Separating individual and group effects. *Journal of Personality and Social Psychology, 48*, 339–348.
- Klockars, C. (1972). A theory of probation supervision. *The Journal of Criminal Law, Criminology, and Police Science, 63*, 550–557.
- Krupnick, J., Sotsky, S., Simmens, S., Moyer, J., Elkin, I., Watkins, J., & Pilkonis, P. (1996). The role of the therapeutic alliance in psychotherapy and pharmacotherapy outcome: Findings in the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology, 64*, 532–539.
- Lidz, C. W., Hoge, S. K., Gardner, W., & Bennett, N. S. (1995). Perceived coercion in mental hospital admission: Pressures and process. *Archives of General Psychiatry, 52*, 1034–1039.
- Luborsky, L., Rosenthal, R., Diguier, L., Andrusyna, T. P., Berman, J. S., Levitt, J. L., et al. (2002). The dodo bird verdict is alive and well—Mostly. *Clinical Psychology: Science and Practice, 9*, 2–12.
- Lucksted, A., & Coursey, R. D. (1995). Consumer perceptions of pressure and force in psychiatric treatments. *Psychiatric Services, 46*, 146–152.
- MacCoun, R. J. (2005). Voice, control, and belonging: The double-edged sword of procedural fairness. *Annual Review of Law and Social Science, 1*, 171–201.
- Marmar, C. R., Horowitz, M. J., Weiss, D. S., & Marziali, E. (1986). The development of the Therapeutic Alliance Rating System. In L. S. Greenberg, & W. M. Pinsof (Eds.), *The psychotherapeutic process: A research handbook* (pp. 367–390). New York: Guilford Press.
- Martin, D., Garske, J., & Davis, M. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 68*, 438–450.

- McCabe, R., & Priebe, S. (2004). The therapeutic relationship in the treatment of severe mental illness: A review of methods and findings. *International Journal of Social Psychiatry, 50*, 115–128.
- Miller, W. R. (2000). *Motivational Interviewing Skill Code*. Retrieved August 5, 2006, from <http://casaa.unm.edu/download/misc1.pdf>
- Monahan, J., Steadman, H. J., Robbins, P. C., Appelbaum, P., Banks, S., Grisso, T., et al. (2005). An actuarial model of violence risk assessment for persons with mental disorders. *Psychiatric Services, 56*, 810–815.
- Neale, M. S., & Rosenheck, R. A. (2000). Therapeutic limit setting in an assertive community treatment program. *Psychiatric Services, 51*, 499–505.
- Penn, D. L., Mueser, K. T., Tarrrier, N., Gloege, A., Cather, C., Serrano, D., & Otto, M. W. (2004). Supportive therapy for schizophrenia: Possible mechanisms and implications for adjunctive psychosocial treatments. *Schizophrenia Bulletin, 30*, 101–112.
- Rook, K. S. (1998). Investigating the positive and negative sides of personal relationships: Through a lens darkly? In B. H. Spitzberg & W. R. Cupach (Eds.), *The dark side of close relationships* (pp. 369–393). Mahwah, NJ: Erlbaum.
- Rosenfield, S., & Wenzel, S. (1997). Social networks and chronic mental illness: A test of four perspectives. *Social Problems, 44*, 200–216.
- Roskes, E., & Feldman, R. (1999). A collaborative community-based treatment program for offenders with mental illness. *Psychiatric Services, 50*, 1614–1619.
- Roter, D. L., & Hall, J. A. (1992). *Doctors talking with patients, patients talking with doctors*. Westport, CT: Auburn House.
- Skeem, J. L., Emke-Francis, P., & Eno Louden, J. (2006). Probation, mental health, and mandated treatment: A national survey. *Criminal Justice and Behavior, 33*, 158–184.
- Skeem, J. L., Encandela, J., & Eno Louden, J. (2003). Perspectives on probation and mandated mental health treatment in specialized and traditional probation departments. *Behavioral Sciences & the Law, 21*, 429–458.
- Skeem, J., Schubert, C., Odgers, C., Mulvey, E., Gardner, W., & Lidz, C. (2007). Psychiatric symptoms and community violence among high-risk patients: A test of the relationship at the weekly level. *Journal of Consulting and Clinical Psychology, 74*, 967–979.
- Smith, G. T., Fischer, S., & Fister, S. M. (2003). Incremental validity principles of test construction. *Psychological Assessment, 15*, 467–477.
- Solomon, P., Draine, J., & Marcus, S. C. (2002). Predicting incarceration of clients of a psychiatric probation and parole service. *Psychiatric Services, 53*, 50–56.
- Taft, C. T., Murphy, C. M., King, D. W., Musser, P. H., & DeDeyn, J. M. (2003). Process and treatment adherence factors in group cognitive-behavioral therapy for partner violence men. *Journal of Consulting and Clinical Psychology, 71*, 812–820.
- Tichenor, V., & Hill, C. (1989). A comparison of sic measures of the working alliance. *Psychotherapy, 26*, 195–199.
- Trotter, C. (1999). *Working with involuntary clients: A guide to practice*. Thousand Oaks, CA: Sage.
- Tyler, T. R. (1990). *Why people obey the law*. New Haven, CT: Yale University Press.
- Tyler, T. R., & Huo, Y. J. (2002). *Trust in the law: Encouraging public cooperation with the police and courts*. New York: Russell Sage Foundation.
- U.S. Probation and Pretrial Services. (2001). Court and community [“Fact Sheet” on probation]. Washington, DC: Federal Judicial Center.
- Ware, N. C., Tugenberg, T., & Dickey, B. (2004). Practitioner relationships and quality of care for low-income persons with serious mental illness. *Psychiatric Services, 55*, 555–559.
- Wolfe, B., & Goldfried, M. (1988). Research on psychotherapy integration: Recommendations and conclusions from an NIMH workshop. *Journal of Consulting and Clinical Psychology, 56*, 448–451.

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