

# THE PAROLEE–PAROLE OFFICER RELATIONSHIP AS A MEDIATOR OF CRIMINAL JUSTICE OUTCOMES

BRANDY L. BLASKO

*George Mason University*

PETER D. FRIEDMANN

*Department of Veteran Affairs Medical Center*

*Rhode Island Hospital*

ANNE GIURANNA RHODES

*Virginia Department of Health*

FAYE S. TAXMAN

*George Mason University*

---

---

Although psychotherapy literature identifies the client–therapist relationship as a key factor contributing to client outcomes, few studies have examined whether relationship quality among corrections populations and supervising officers influences outcomes. This is surprising given that many criminal justice intervention models include quality of the client–practitioner relationship. Parolees enrolled in a six-site randomized clinical trial, where they were assigned to a parole officer–therapist–client collaborative intervention designed to improve relationship quality ( $n = 253$ ) or supervision as usual ( $n = 227$ ), were asked to rate relationship quality with their supervising officer. Results showed parolees assigned to the intervention endorsed significantly higher relationship ratings and demonstrated a lower violation rate than those assigned to the control group. Ratings of the parolee–parole officer relationship mediated the relationship between study condition and outcomes; better perceived relationship quality was associated with fewer drug use days and violations during the follow-up period, regardless of the study condition. Findings are discussed as they pertain to supervision relationships.

**Keywords:** client–practitioner relationship; parole officer–parolee relationship; parole supervision; supervision relationship

---

---

---

**AUTHORS' NOTE:** *Data used here were collected under the Criminal Justice Drug Abuse Treatment Studies (CJ-DATS), a cooperative agreement from the National Institute on Drug Abuse (NIDA) and National Institutes of Health, with support from the Center for Substance Abuse Treatment of the Substance Abuse and Mental Health Services Administration, the Centers for Disease Control and Prevention, the National Institute on Alcohol Abuse and Alcoholism, and the Bureau of Justice Assistance. The authors gratefully acknowledge the collaborative contributions of NIDA and the Research Centers participating in CJ-DATS: Brown University, Lifespan Hospitals and Memorial Hospital of Rhode Island; Connecticut Department of Mental Health and Addiction Services; NDRI, Center for Therapeutic Community Research and Center for the Integration of Research and Practice; Texas Christian University, Institute of Behavioral Research; University of Delaware, Center for Drug and Alcohol Studies; University of Kentucky, Center on Drug and Alcohol Research; University of California at Los Angeles, Integrated Substance Abuse Programs; and University of Miami, Center for Treatment Research on Adolescent Drug Abuse. Materials here may not reflect the opinions or policies of the funders, George Mason University, or other CJ-DATS partners. Correspondence concerning this article should be addressed to Brandy L. Blasko, George Mason University, 4087 University Drive, Suite 4100, Fairfax, VA 22030; e-mail: bblasko@gmu.edu.*

CRIMINAL JUSTICE AND BEHAVIOR, 2015, Vol. 42, No. 7, July 2015, 722–740.

DOI: 10.1177/0093854814562642

© 2015 International Association for Correctional and Forensic Psychology

According to the Bureau of Justice Statistics, 4,781,300 individuals were under community supervision at year end of 2012 (Bureau of Justice Statistics, 2013). From 1980 to 2001 state and federal prison populations increased 238%—from 139 to 470 per 100,000. Parole supervision revocations have contributed significantly to the rise in United States incarceration rates over the last three decades. The increase “was not attributable to more crime nor to increased police effectiveness in terms of arrests per crime” (Blumstein & Beck, 2005, p. 50), but rather the growth was due to both increased prison commitments per arrest and increased time served in prison, including time served by parolees due to recommitment (Blumstein & Beck, 2005). Depending on the jurisdiction, anywhere from 20% to 80% of new prison intakes over the last several decades were a result of parole supervision violations and new parolee arrests (Grattet, Lin, & Petersilia, 2011; Petersilia, 2009). Recent meta-analyses (Bonta, Ruggie, Scott, Bourgon, & Yessine, 2008; Drake, 2011) have further demonstrated that community supervision efforts only reduce recidivism among individuals under supervision by up to 2%, sometimes not reducing recidivism at all (0%).

The unanswered question remains how to reduce parole violations (technical violations and new arrests) and the return of parolees to prison. A majority of parole research to date focuses on parolee characteristics associated with failure (Fendrich, 1991; Glaser & O’Leary, 1966; Petersilia & Turner, 1993), but little attention is given to other structural factors that might affect parole outcomes. Consequently, parole agencies have little empirical evidence to guide policymaking to improve supervision outcomes. This study considers one element that may affect parole supervision outcomes: the quality of the parolee–parole officer relationship. Building on limited research about officer–client interactions (Bonta et al., 2008; Skeem, Eno Louden, Polasheck, & Cap, 2007; Taxman & Ainsworth, 2009), this study examines supervision outcomes among a sample of parolees as a function of their perceived relationships with their parole officers.

## PAROLE SUPERVISION

Simply defined, parole is a system of the discretionary release of prisoners before the completion of their maximum sentences. Parole supervision assures some level of monitoring while prisoners serve the remainder of their sentences in the community (Rudes, 2012). While under community supervision, parolees must follow conditions outlined by the supervising jurisdiction, or risk recommitment. Recombitment can result when a parolee is (a) arrested for a new crime or (b) in violation of the conditions of parole set forth by the jurisdiction. Parolees falling in the latter category are commonly referred to as technical parole violators. A technical violation could result, for example, if a parolee breaches curfew, travels out of the state without permission, or does not report a change of address (among other conditions outlined by a particular jurisdiction).

## THE CLIENT–PRACTITIONER RELATIONSHIP

Findings from the general psychotherapy literature demonstrate that the client–therapist relationship positively correlates with client outcomes, beyond the specific treatment intervention utilized (Horvath & Bedi, 2002; Horvath & Symonds, 1991; Norcross & Lambert, 2005). Up to 30% of client improvement can be attributed to a positive relationship between the client and therapist (M. J. Lambert & Barley, 2001). Correlations

between the client–therapist relationship and client outcomes range from .22 to .26, with the client–therapist relationship explaining approximately 5% of outcome variance (Baldwin, Wampold, & Imel, 2007; Horvath & Bedi, 2002).

The client–therapist relationship encompasses the feelings and attitudes that a therapist and client have toward one another and how they are expressed (Bordin, 1979; Norcross, 2010). Bordin (1994) defined the working alliance (also referred to as the helping alliance or therapeutic alliance by others) between client and therapist as “a mutual understanding and agreement about change goals and the necessary tasks to move toward these goals along with the establishment of bonds to maintain the partners’ work” (p. 130). Although the concept of the working alliance originated in psychoanalytic theory, it is now considered an integral part of most theoretical orientations (Beck, 1976; Wampold, 2010). The established importance of the relationship to positive treatment outcomes with general psychotherapy clients (e.g., M. J. Lambert & Barley, 2001; Westen, Novotny, & Thompson-Brenner, 2004) has recently made better understanding the parolee–parole officer relationship a burgeoning area of research (Taxman, 2002; Taxman & Ainsworth, 2009, see also Ross, Polaschek, & Ward, 2008).

Beyond relationship quality in the context of psychotherapy, the client–practitioner relationship is highlighted in the theoretical frameworks of dominant criminal justice intervention models. For example, when Andrews and Kiessling (1980) first introduced the five dimensions of effective correctional practice they included a relationship dimension: the “quality of interpersonal relationships between staff and client” (Dowden & Andrews, 2004, p. 204). Andrews and his colleagues (e.g., Andrews & Carvell, 1998; Andrews & Dowden, 2004; Gendreau & Andrews, 1989) have since written extensively on the principles of effective correctional interventions, listing practitioner characteristics which can positively impact the client–practitioner relationship. These include being respectful, open, warm, mature, understanding, genuine, nonblaming, flexible, reflective, and bright (Andrews, 2011).

### **THE PAROLEE–PAROLE OFFICER RELATIONSHIP IN COMMUNITY SUPERVISION SETTINGS**

In a correctional supervision setting, many of the features traditionally associated with supervision could make perceiving a positive client–practitioner relationship difficult for clients (e.g., mandatory appointments, urinalysis), yet to date we know little empirically about under what circumstances this is true. Empirical findings do suggest offenders are able to form a good client–therapist relationship (Blasko & Jeglic, in press; Polaschek & Ross, 2010; Tatman & Love, 2010). For example, researchers and practitioners within the Iowa Department of Corrections used the Working Alliance Inventory–Short Form (WAI-Short Form; Horvath & Greenberg, 1989) to investigate whether sexual offenders under community supervision were capable of perceiving positive relationships with their therapists and parole officers (Tatman & Love, 2010). Results showed 90% of sexual offenders reported high or high average ratings with their parole officers and therapists (Iowa Department of Corrections, 2011). Blasko and Jeglic (in press) found similar results using the full form of the WAI–Client Form (Horvath & Greenberg, 1989) to assess incarcerated sexual offenders’ perceptions of their relationships with their therapists; ratings were comparable with those reported at treatment completion across a range of general psychotherapy client types.

Skeem and her colleagues (e.g., Kennealy, Skeem, Manchak, & Eno Loudon, 2012; Skeem, Encandela, & Eno Loudon, 2003; Skeem et al., 2007) have focused their work on the probationer–parole officer relationship in specialized mental health supervision settings. Their development of an instrument to assess the relationship between probationers and their supervising officers, with a specific emphasis on a mandated treatment setting, resulted in the measurement of three themes: caring/fairness, trust, and toughness. Skeem et al. (2007) conducted a two part study to first develop a relationship measure, with a sample of 90 probationers supervised in a specialty mental health unit, and then cross-validated it with a sample of 320 probationers, also diagnosed with mental health disorders. The resulting relationship measure, the Dual Relationships Inventory–Revised (DRI-R; Skeem et al., 2007), captures three dimensions: (a) caring and fairness, (b) trust, and (c) toughness. Skeem et al. (2007) found that the toughness dimension as perceived by probationers was associated with a significantly higher number of violations. Kennealy et al. (2012) later used the DRI-R (Skeem et al., 2007) to assess whether the relationship as perceived by 109 general probationers was associated with rearrest. They found that the caring and fairness dimension was negatively associated with rearrest. Although the other two dimensions (trust and toughness) also predicted rearrest, neither did after controlling for shared variance with the caring and fairness dimension.

In addition to the DRI-R (Skeem et al., 2007), other measures have been used or adapted to assess various dimensions of the supervision relationship. For example, since the development of the DRI-R (Skeem et al., 2007), Tatman and Love (2010) adapted the short form of the WAI (Horvath & Greenberg, 1989) for use with individuals under probation and parole supervision. The WAI was operationalized following Bordin's (1979, 1994) theoretical conceptualization of the working alliance and measures three main dimensions of the collaboration between client and practitioner: goals, tasks, and bond. The goals dimension refers to the agreement between the practitioner and the client regarding the goals for treatment, the tasks dimension refers to the specific therapeutic interventions utilized in treatment, and the bond dimension refers to the mutual trust, acceptance, and confidence between the client and practitioner (Bordin, 1979). Tatman and Love found the resulting measure, with adapted language to align with supervision rather than treatment, demonstrated strong reliability and validity among supervision populations.

Soliciting offender perceptions of the parolee–officer relationship is fundamental to understanding how the relationship develops and is maintained over the course of supervision (Bachelor, Meunier, Laverdière, & Gamache, 2010; Marshall et al., 2003), particularly because research finds that client–practitioner perceptions of the relationship are not likely to converge (Bachelor, 1988, 1991, 1995; Cecero, Fenton, Frankforter, Nich, & Carroll, 2001; Horvath & Marx, 1991; Horvath & Symonds, 1991; Levitt & Rennie, 2004; Taft, Murphy, Musser, & Remington, 2004). Perceptions of the client–practitioner relationship as rated by clients correlates more highly with outcomes than ratings completed by both practitioners (Busseri & Tyler, 2004; Zuroff et al., 2000) and independent observers (Bohart, Elliott, Greenberg, & Watson, 2002).

### THE CURRENT STUDY

Building on the existing research about officer–client interactions (Bonta et al., 2008; Skeem et al., 2003; Skeem et al., 2007), the primary aim of the current study was to identify

whether a positive parolee–parole officer relationship as perceived by the parolee is a mechanism by which community supervision can achieve positive outcomes. Specifically, in the current analysis, we build on results from a randomized control trial (RCT) designed to examine the efficacy of a collaborative supervision intervention within parole agencies. The main purpose of intervention was to reduce discrepant expectations among parolees, parole officers, and drug abuse treatment counselors. Outcomes showed parolees randomized to the intervention reduced their use of illicit substances over time; however, no differences were seen in total crime, including rearrests or parole revocations, between conditions (see discussion in Friedmann, Rhodes, & Taxman, 2009).

We extended these findings by examining (a) whether parolees randomized to the intervention perceived better relationships with their parole officers as compared with parolees randomized to supervision as usual, and (b) whether the relationship as perceived by the parolee mediated the relation between study assignment and outcomes. Given the aim of the intervention, it was hypothesized that parolees randomized to the intervention would perceive better quality relationships with their officers than their control group counterparts. Furthermore, based on findings from the general psychotherapy literature demonstrating that the client–therapist relationship positively correlates with client outcomes even beyond the specific treatment intervention utilized (Horvath & Bedi, 2002; Horvath & Symonds, 1991; M. J. Lambert & Barley, 2001; Murphy, Cramer, & Lillie, 1984; Norcross & Lambert, 2005), it was hypothesized the perceived relationship would significantly mediate the association<sup>1</sup> between study assignment and outcomes.

## METHOD

### PARTICIPANTS AND STUDY PROCEDURES

Participants were 480 parolees enrolled in a multisite RCT (Step'n Out) conducted as part of the Criminal Justice Drug Abuse Treatment Studies (CJ-DATS), a 10-center research cooperative funded by the National Institute on Drug Abuse (NIDA). Inclusion criteria were as follows: (a) at least 18 years of age; (b) English speaking; (c) probable drug dependence immediately prior to incarceration, as determined by a score of 3 or higher on the TCU Drug Screen II (TCUDS-II; Knight, Simpson, & Morey, 2002; Simpson, 1995; Simpson, Knight, & Broome, 1997) or mandated drug treatment; (d) substance use treatment as a mandated or recommended condition of parole; and (e) moderate-to-high risk of drug relapse and/or recidivism as determined by a Lifestyle Criminality Screening Form (LCSF; Walters, White, & Denney, 1991) score of 7 or greater, or a history of two or more prior episodes of drug abuse treatment or drug-related convictions. Parolees meeting the eligibility criteria were invited to enroll in the study. All participants were volunteers. Each participant signed the written informed consent document and completed a baseline interview at the time of the initial parole appointment.

The majority of participants were male (85.2%), 55.4% had eight or more lifetime arrests, a measure used in previous studies to indicate persistent offending (Piquero, Daigle, Gibson, Piquero, & Tibbetts, 2007), and 62.3% were deemed high risk for recidivism. Participants were randomly assigned to the control condition ( $n = 253$ ) or intervention group ( $n = 227$ ). Participants randomized to the control group received supervision as usual. Although typical parole supervision varied in intensity (range = 1–4 sessions per month) and orientation by the jurisdictions studied here, typical supervision generally involved weekly to monthly

in-person contacts between the parolee and parole officer to assure compliance with conditions of release (e.g., treatment attendance, employment, drug abstinence). Supervision typically emphasized detecting and sanctioning antisocial behavior, such as violation of supervision conditions, crime, and drug use. Participants randomized to the intervention group participated in a collaborative supervision intervention. The intervention included 12 weekly sessions with a parole officer trained in behavioral management and motivational interviewing.<sup>2</sup> A treatment counselor participated in 6 of the 12 sessions (biweekly) to increase collaboration between the parole officers, counselors, and parolees. The intervention aimed to reduce discrepant expectations among officers, substance use counselors, and parolees, and to improve relationship dynamics between parolees and their parole officers. See Friedmann et al. (2008) for a complete discussion of study rationale, design, and implementation.

Trained interviewers conducted structured interviews with participants at the time of enrollment (Time 1), and 3 (Time 2) and 9 months (Time 3) after the initial parole appointment. Participants received a US\$20, US\$40, and US\$60 honorarium, respectively, upon completion of the three interviews. The study demonstrated a 94% retention rate at the 3-month follow-up and 86% at the 9-month follow-up. The study was approved by the Institutional Review Board at all study sites, the Office of Human Rights Protection (OHRP), the CJ-DATS Steering Committee, and the NIDA Data and Safety Monitoring Board.

## OUTCOMES

### Frequency of Drug Use

Daily drug use data were collected via structured interviews using the event calendar approach (R. A. Brown et al., 1998; Roberts & Horney, 2010). Trained interviewers asked participants to identify retrospectively on a calendar the days drug use occurred (Midanik et al., 1998; Nelson & Clum, 2002; L. C. Sobell & Sobell, 1992). For example, at the 3-month follow-up interview, participants were asked to identify on the calendar which days they used drugs between the day of the baseline interview and the day of the 3-month interview. Drug use days were totaled by month for each participant. When a participant was incarcerated, the total was adjusted to account for the number of days spent in jail or prison; the time at risk for each participant reflects days in the community (see Maltz, 2001).

### Parole Violations

Violation data include any self-reported violation of parole, including arrests and other violations of supervision stipulations, except drug use. These data were collected using the event calendar approach (R. A. Brown et al., 1998; Roberts & Horney, 2010). Trained interviewers asked participants to identify retrospectively on a calendar the days they were arrested, committed a crime, or violated a parole condition (Midanik et al., 1998; Nelson & Clum, 2002; L. C. Sobell & Sobell, 1992). For this sample, across the follow-up period, violation days were a rare event. Only three subjects reported more than one violation day during the follow-up period. As a result, this variable was dichotomized to represent whether the participant violated a condition (yes = 1, no = 0) during the 9-month follow-up period.

## MEASURES

### The DRI-R

The DRI-R (Skeem et al., 2007) was used to measure the quality of the relationship between the parole officer and the parolee from the perspective of the parolee. The DRI-R is a 30-item instrument used to assess three relationship dimensions: caring/fairness, trust, and toughness. Items are rated on a 7-point Likert-type scale (1 = *never*, 2 = *rarely*, 3 = *occasionally*, 4 = *sometimes*, 5 = *often*, 6 = *very often*, and 7 = *always*). Evidence for the reliability and validity of the DRI-R has been demonstrated with probationers (Kennealy et al., 2012; Skeem et al., 2007); the DRI was reliable in the current sample (Cronbach's  $\alpha = .93$ ). The dimensions demonstrated acceptable levels of internal consistency reliability, coefficient alphas ranged from .89 to .96 (caring/fairness  $\alpha = .96$ , trust  $\alpha = .89$ , toughness  $\alpha = .91$ ; Cronbach, 1951; DeVellis, 2003). For the current study, the measurement of interest was the rating of the relationship by the parolee at the 3-month follow-up (Time 2).

### Lifetime Criminality Screening Form (LCSF)

The LCSF (Walters et al., 1991; Walters, 2007) is a 17-item instrument scored via file review. Conceptually, it emphasizes four dimensions of a criminal lifestyle: (a) irresponsibility, (b) self-indulgence, (c) interpersonal intrusiveness, and (d) social rule-breaking (Walters, 1990, 1998). Scores range from 0 to 22 with scores of 6 and below considered low risk for recidivism, scores of 7 to 9 considered moderate risk, and scores 10 and above considered high risk. Interrater reliability has been well established (.81-.96; Walters, 2005) and studies find this instrument demonstrates moderate accuracy in predicting rearrest (Walters, 1998; Walters & Chlumsky, 1993). In the current study, the total score on this instrument was used to represent risk of reoffending.

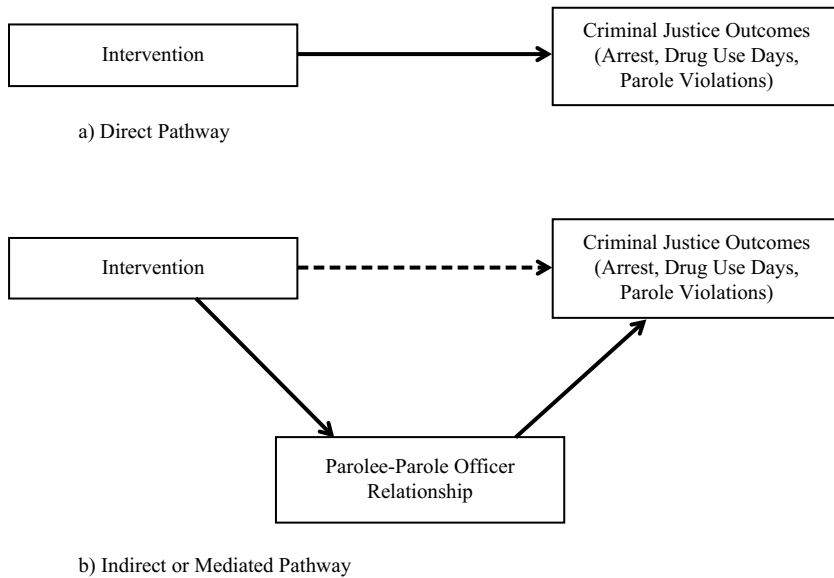
### Texas Christian University Drug Screen II (TCUDS-II)

The TCUDS-II (Knight et al., 2002) is a screening instrument comprising 15 items to measure substance use severity and is commonly used to determine level of need for substance use treatment. Items represent key criteria for substance dependence as they appear in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000). Scores range from 0 to 9, with scores of 3 or greater suggesting significant substance use concerns coinciding with diagnostic criteria for substance dependence. The TCUDS has been widely used and validated for use among offender populations (Broome, Knight, Joe, & Simpson, 1996; Knight et al., 2002; Peters, Greenbaum, Edens, Carter, & Ortiz, 1998; Peters et al., 2000; Simpson et al., 1997). In the current study, the total score on this instrument was used to represent substance use severity.

Study site as well as parolee gender (male = 1) and race (Black = 1, non-Black = 0), and study site, were controlled for. A linear time variable (coded as zero through eight for each month of follow-up, with zero as the first month of follow-up) was also created.

## ANALYTIC PLAN

The baseline characteristics of parolees and differences on outcomes of drug use and other violations were first examined as a function of study condition. Relationship ratings



**Figure 1: Mediation Model Tested Following Baron and Kenny (1986) and Kraemer, Wilson, Fairburn, and Agras (2002)**

were then examined as a function of baseline demographics, risk scores, and substance use severity. Finally, the mediation effect of relationship ratings at the 3-month follow-up on the association between drug use and violation outcomes and treatment assignment were examined using the approach developed by Baron and Kenny (1986; see Figure 1) and refined for randomized clinical trials by Kraemer, Wilson, Fairburn, and Agras (2002). The three-step analytic process included examining (a) the effect of treatment condition on DRI-R ratings, (b) the main effect of treatment condition alone on outcomes over the 9-month follow-up, and (c) the effect of treatment condition and DRI-R ratings simultaneously on outcomes. The use of this process made it possible to establish whether condition assignment was associated with the potential mediator (relationship rating), whether treatment condition by itself had a direct effect on self-reported drug use and arrests, and what changes occurred in the association between treatment condition and drug use and other violations when relationship ratings were considered.

Hierarchical Linear Modeling (HLM) was used to model the drug use outcome. This allowed us to account for repeated observations over time and plot the trajectory of individual drug use over the follow-up period (Horney, Osgood, & Marshall, 1995). Given that 53% of parolees reported no drug use over the study period, and in the monthly data 80% of the observations showed no drug use, zero-inflated Poisson (ZIP) models were used to estimate the associations. ZIP models allow for both excess zeros in the data and overdispersion of the data (Hall, 2000; D. Lambert, 1992). First, drug use was modeled as a function of follow-up time. The second set of models included the study condition variable, both alone and crossed with time in linear form while controlling for risk of recidivism and study site. The final set of models added the DRI-R rating, both alone and crossed with time. The



**TABLE 1: Summary Statistics of Study Variables**

	Control				Treatment			
	<i>M</i> or %	<i>SD</i>	Minimum	Maximum	<i>M</i> or %	<i>SD</i>	Minimum	Maximum
Male	84.0	—	0	1	84.4	—	0	1
Black	55.6	—	0	1	48.3	—	0	1
Age	35.6	8.9	18	59	34.7	8.5	18	61
LCSF score	9.6	3.2	1	16	9.5	3.2	2	18
TCU score	8.1	3.3	0	12	7.8	3.4	0	12
Dual Relationship Inventory—Revised total rating	157.1	31.4	77	209	169.6	26.9	74	203
Caring/Fairness***	111.1	31.4	22	154	125.0	25.5	23	154
Trust**	27.3	10.4	4	42	31.9	8.9	6	42
Toughness**	15.5	10.7	7	49	12.7	9.0	6	49
Violation during follow-up period	37.0	—	0	1	33.3	—	0	1
Used illegal drugs during follow-up period	43.8	—	0	1	40.8	—	0	1
Violations per 100 community days*	2.9	0.9	1.3	4.6	0.2	0.1	0.0	0.7
Drug use days per 100 community days	8.4	20.3	3.4	42.1	5.0	15.1	4.2	38.2

*Note.*  $N = 480$  (treatment group  $n = 253$ ; control group  $n = 227$ ). LCSF = Lifetime Criminality Screening Form (Walters, White, & Denney, 1991); TCU = Texas Christian University Drug Screen II (TCUDS; Knight et al., 2002). \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

other violations outcome (dichotomous) was modeled using a multivariate logistic regression, controlling for risk of recidivism and study site.

## RESULTS

### CHARACTERISTICS OF PAROLEES BY CONDITION ASSIGNMENT

The characteristics of the sample by study condition are summarized in Table 1. No significant differences in baseline demographics, risk scores, substance use severity, nor criminal history were found between the intervention and control groups. Results demonstrated equality between groups on preexisting data.

Turning to outcomes based simply on group membership, the intervention and control groups were not significantly different with regard to self-reported drug use days across the follow-up period. The groups did differ significantly with regard to self-report of parole violations, beyond drug use; the intervention group demonstrated significantly fewer parole violations, with a mean of 0.2 violations per 100 days in the community, as compared with a mean of 2.9 violations per 100 days in the community among the control group.

### PAROLEES' PERCEPTIONS OF THE RELATIONSHIP

Differences in relationship scores were first examined by baseline demographics, risk scores, substance use severity, and criminal history. Risk was significant; parolees deemed higher risk for recidivism, as compared with moderate or low, rated the relationship with

**TABLE 2: Fixed Effects Models: Drug Use Days**

Parameter	Model 2: Drug Use With No Mediation				Model 3: Drug Use Mediated by Relationship			
	OR	95% CI	Estimate:		OR	95% CI	Estimate:	
			Linear	SE			Linear	SE
Time	1.21***	[1.16, 1.28]	-0.013	.09	1.02	[0.90, 1.16]	.163	.29
Condition	1.14***	[1.03, 1.27]	0.014	.21	0.91	[0.80, 1.03]	-.096	.24
Condition × Time	0.89***	[0.83, 0.95]	0.012	.13	0.87***	[0.80, 0.94]	.058	.15
DRI-R	—	—	—	—	0.99***	[0.99, 0.99]	.010***	.01
DRI-R × Time	—	—	—	—	0.99***	[0.99, 0.99]	-.001	.01

Note. Control variables included Lifetime Criminality Screening Form (LCSF; Walters, White, & Denney, 1991) score and study site.  $N = 480$  (treatment group  $n = 253$ ; control group  $n = 227$ ). DRI = Dual Relationships Inventory-Revised (Skeem, Eno Louden, Polascheck, & Cap, 2007); OR = odds ratio; CI = confidence interval. \*\*\* $p < .001$ .

their parole officers lower,  $M = 156.53$ ,  $SD = 30.43$ , as compared with parolees deemed moderate risk,  $M = 165.87$ ,  $SD = 30.52$ ,  $t(478) = -4.57$ ,  $p = .03$ .

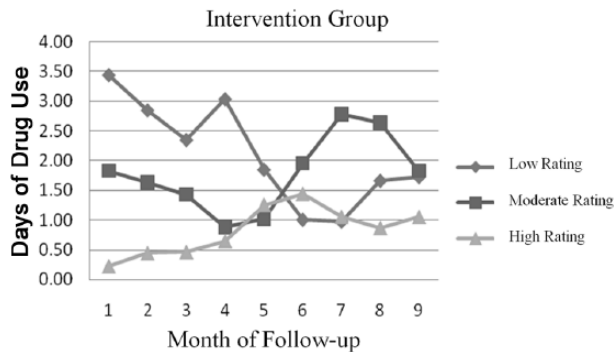
Parolees randomized to the intervention group endorsed significantly higher mean total ratings of their relationships,  $M = 157.05$ ,  $SD = 31.42$ , with their parole officers as compared with parolees assigned to the control condition,  $M = 169.64$ ,  $SD = 26.94$ ,  $t(479) = -4.52$ ,  $p < .01$ . The three subdimensions were also statistically significant between groups: caring/fairness,  $t(479) = -4.51$ ,  $p < .001$ ; trust,  $t(479) = -4.61$ ,  $p < .01$ ; and toughness,  $t(479) = 2.76$ ,  $p < .01$ . The total relationship ratings endorsed by the intervention group were comparable with those reported at treatment completion across a range of general therapy client types (see Busseri & Tyler, 2004; Saffran & Wallner, 1991).

#### THE RELATIONSHIP AS A MEDIATOR OF DRUG USE AND TREATMENT ASSIGNMENT

The mediation effect of relationship ratings at the 3-month follow-up on the relationship between drug use and treatment assignment was examined using a three-step approach (Baron & Kenny, 1986; Kraemer et al., 2002). First, a basic linear regression of relationship ratings at 3 months on treatment condition (intervention vs. control condition) yielded a significant parameter estimate of 24.46 ( $SE = 6.07$ ), indicating that those randomized to the intervention endorsed relationship ratings approximately 25 points higher than those in the control group. This also held true for the individual subscales, with significantly higher ratings endorsed by intervention participants on each of the dimensions of the relationship (fairness/caring = 7.2 points higher,  $SE = 1.71$ ; trust = 4.4 points higher,  $SE = 1.10$ ; toughness = 2.65 points lower,  $SE = 1.09$ ), as compared with participants making up the control group. This first step established that study condition assignment was significantly associated with the mediator: relationship rating.

The next series of analyses examined the main effect of treatment condition alone on outcomes over the 9-month follow-up. The first drug use model included only follow-up time, which was significant in the logistic portion of the model, indicating a higher probability of engaging in drug use. Time was not significant in the linear portion of the model, indicating that there was no trend over time in the amount of drug use (Model 1, results not shown).

The second two drug use models included study condition alone then crossed with time, controlling for recidivism risk and study site. Results for this model are presented in Table 2



**Figure 2: Mean Drug Use Days per Month by Relationship Ratings Among Parolees Randomized to the Intervention Group ( $n = 253$ )**

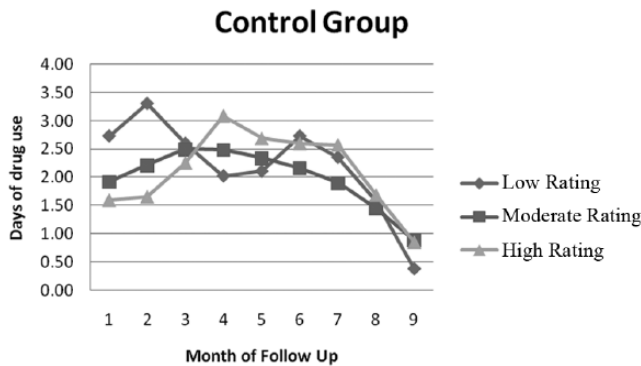
Note. The low score group ( $n = 55$ ) includes participants with relationship ratings at or below the 25th percentile ( $\leq 140$ ), the middle score group ( $n = 113$ ) are those between the 26th and 74th percentiles ( $\geq 141$  and  $\leq 187$ ), and the high score group ( $n = 85$ ) are those with ratings at the 75th percentile and above ( $\geq 192$ ).

(Model 2), where the odds ratios indicate the probability of drug use (the logistic portion of the model) and the linear estimates are the results of the Poisson estimation. Fit statistics demonstrated this model as better than using only time (AIC Model 1 = 11,444, AIC Model 2 = 10,526). Parolees randomized to the intervention group had a significantly higher probability of engaging in drug use at baseline (OR = 1.14) as compared with the control condition, but demonstrated a significantly lower probability of drug use over time (OR = 0.89). No terms were significant in the linear portion of the model.

The final drug use model (see Table 2, Model 3) examined the effect of treatment condition and total relationship ratings simultaneously on the drug use outcome, controlling for risk and study site. Fit statistics indicated a better fit than the model without mediation (AIC Model 3 = 7,660). Results showed, regardless of study condition, those with higher relationship ratings demonstrated a lower probability of drug use during the first month of follow-up (OR = .99), but reported a higher number of drug use days during the first month. Over time, however, those with higher ratings of the relationships with their parole officers were significantly more likely to use less drugs (OR = .99). Stated differently, participants demonstrated a general trend of decreased use over the 9 months, but that trend was in number of drug use days per 100 community days. Thus, while those using drugs used them less days over the follow-up period, more used drugs in the aggregate (see Figures 2 and 3).

#### THE RELATIONSHIP AS A MEDIATOR OF OTHER VIOLATIONS AND TREATMENT ASSIGNMENT

As shown in Table 3, study condition alone was not a significant predictor of crime across the follow-up period. However, when relationship quality was added to the model as a mediator, results showed that a better perceived relationship (higher rating) was associated with a significantly lower probability of crime (OR = .99), even after controlling for recidivism risk and study site. Treatment condition remained nonsignificant. The three subscales also significantly mediated the association between treatment condition and crime.



**Figure 3: Mean Drug Use Days per Month by Relationship Ratings Among Parolees Assigned to Treatment as Usual ( $n = 227$ )**

*Note.* The low score group ( $n = 75$ ) includes participants with relationship ratings at or below the 25th percentile ( $\leq 140$ ), the middle score group ( $n = 105$ ) are those between the 26th and 74th percentiles ( $\geq 141$  and  $\leq 187$ ), and the high score group ( $n = 47$ ) are those with ratings at the 75th percentile and above ( $\geq 192$ ).

## DISCUSSION

Despite the critical importance of the client–therapist relationship to positive treatment outcomes in general psychotherapy, relatively little empirical attention has been given to the parolee–parole officer relationship within community supervision populations. To examine this potentially influential factor in a community supervision setting, this study assessed whether parolees randomized to a collaborative treatment–supervision intervention perceived better relationships with their parole officers as compared with parolees randomized to supervision as usual across six study sites. Of further interest was whether parolees’ relationship ratings mediated the effect of the intervention on outcomes (drug use days and self-reported arrests).

Overall, results showed parolees randomized to the collaborative intervention were more likely than parolees under traditional supervision to perceive positive relationships—specifically increased caring/fairness and trust—with their parole officers. As such, the intervention group demonstrated a lower violation rate. Furthermore, the parolee–parole officer relationship emerged as a significant mediator of the association between study assignment and outcomes. When parolees perceived their relationships with their parole officers as positive, they were more likely to achieve better outcomes; this was true for both the intervention and control groups.

While the intervention had mixed results related to outcomes, parolees randomized to the intervention endorsed significantly higher DRI-R total scores and subscales as compared with parolees randomized to supervision as usual. This finding implies that one attribute of the intervention is that it can work to create better relationships between parole officers and their clients. This relationship can then facilitate positive outcomes over time. Furthermore, the current study demonstrated that parolees’ perceptions can be influenced and that it is possible for parolees to perceive a positive relationship with their parole officers. There were no significant differences between groups on preexisting data, yet parolees randomized to the intervention endorsed significantly better perceived relationships with their parole officers.

**TABLE 3: Violation Model**

Parameter	OR without Mediation	95% CI	OR with Mediation	95% CI
Study condition	0.89	[0.59, 1.34]	1.13	[0.67, 1.90]
Total DRI-R score	—	—	0.99**	[0.98, 0.99]
Caring/Fairness subscale	—	—	0.98**	[0.97, 0.99]
Trust subscale	—	—	0.94**	[0.91, 0.96]
Toughness subscale	—	—	1.06**	[1.03, 1.09]

Note. Control variables included Lifetime Criminality Screening Form (LCSF; Walters, White, & Denney, 1991) score and study site.  $N = 480$  (treatment group  $n = 253$ ; control group  $n = 227$ ). DRI = Dual Relationships Inventory-Revised (Skeem et al., 2007); OR = odds ratio; CI = confidence interval.

\*\* $p < .001$ .

Results suggest that parole officers have the opportunity to influence parolees' perceptions of them even when faced with interpersonally difficult parolees or parolees with complicated backgrounds and needs. It is important for parole officers to solicit parolees' perceptions of the supervision relationship, using the DRI-R or another validated measure of the relationship. This is particularly important because findings from general psychotherapy show that client perceptions of the client-therapist relationship and therapist perceptions tend not to converge (Bachelor, 1988, 1991, 1995; Cecero et al., 2001; Fenton, Cecero, Nich, Frankforter, & Carrol, 2001; Horvath & Marx, 1991; Horvath & Symonds, 1991; Levitt & Rennie, 2004; Taft et al., 2004). Parolees present with varying backgrounds, and the attitudes and beliefs they bring to the supervision relationship may influence how they perceive their parole officers and the world in general. In as much as these views may impact the relationship, they offer an invaluable opportunity as a target for intervention.

Using the criteria developed by Kraemer et al. (2002) for examining mediation in RCTs, results showed that the parolee's perceptions of the relationship with his or her parole officer mediated the relationship between supervision style and both drug use and violation outcomes. This suggests that even when parole officers are trained and are considered as acting "appropriately" in their interactions with offenders (i.e., officers trained for the intervention group), the officers' behaviors may be but one critical element that contributes to the formation of a positive relationship. Parolees present with varying backgrounds, and the attitudes and beliefs they bring to the supervision relationship may influence how they perceive their parole officers and the world in general. Their views and perspectives could be transferred onto relationships with their parole officers. In as much as these views may impact the relationship, they offer an invaluable opportunity as a target for intervention. Findings suggest parole officers trained on relationship dynamics could see dramatic improvements in the outcomes of their clients.

Although more studies are needed before definite conclusions can be reached, the current study found caring/fairness and trust, as measured by the DRI-R (Skeem et al., 2007), were important dimensions of the parole officer-parolee relationship in a mandated setting. This is consistent with previous work (Kennealy et al., 2012; Skeem et al., 2007). However, it is important to consider that the relationship measure used in this study captures only some interpersonal dimensions that may be important to the parolee-parole officer relationship and criminal justice outcomes. In addition, Skeem et al. (2007) focus on the mandated nature of the relationship, referring to the DRI-R dimensions as potentially "an interpersonal form of procedural justice" (p. 399). Yet, no studies have considered whether

procedural justice in the traditional sense (as measured in the form determined important to outcomes at other stages of the criminal justice system; Tyler, 2005, 2006) is important in mandated supervision settings. While this traditional form may not measure interpersonal relationship dynamics, it seems likely many of the facets of procedural justice outlined by Tyler (2010) and his colleagues (Jackson, Tyler, Bradford, Taylor, & Shiner, 2010; for example, fairness, consistency) could have implications for parolees' long-term behavior. Research in the area of supervision relationships is in its infancy, and more work is needed to parcel out the specific elements associated with, or conversely detrimental to, positive outcomes.

Results from the current study also demonstrated that parolees deemed high risk of recidivism, as compared with moderate or low risk, were more likely to perceive poorer perceived relationships with their parole officers. This finding is consistent with recent work by Blasko and Jeglic (in press). In their study of the perceived client–therapist relationship among male sexual offenders, they found offenders at higher risk of sexual recidivism perceived poorer relationships with their therapists as compared with their lower risk counterparts. These results appear consistent with general psychotherapy findings demonstrating that clients with increased symptoms have more difficulty forming a positive relationship with their therapists (Feeley, DeRubeis, & Gelfand, 1999). Considering higher risk parolees perceived poorer relationships with their officers, and considering findings from other studies (see Andrews, 2011; Polaschek & Gannon, 2004; Polaschek & Ross, 2010), it may be possible for parole officers to forecast the parolees with whom they may have more difficulty forming or maintaining a positive relationship. In these instances, parole officers should be prepared to adjust their approach to be responsive to the parolees' needs (Castonguay, Constantino, & Holtforth, 2006). Future studies should investigate the parole officer, individual, or intervention factors specific to higher risk offenders to delineate which facilitate a more positive perceived relationship.

## CONCLUSION

When interpreting the findings, there are several potential limitations to consider. Although the parolees making up the sample were recruited from six sites, it is possible that they are not representative of all community supervision populations. In addition, in the current study, we did not consider characteristics of the parole officers. In psychotherapy settings, some therapist characteristics, including therapist gender (Kiesler & Watkins, 1989; Persons, Persons, & Newmark, 1974; Wintersteen, Mensinger, & Diamond, 2005) and age (Connors et al., 2000), have been found to correlate with client perceptions of the relationship. An important next step would be to examine whether parole officer characteristics play a role in the perceived parolee–parole officer relationship.

With regard to the use of self-report data, research fairly consistently demonstrates there are minimal differences between criminal justice-involved individuals' self-reported criminal behavior and their official record data (Maxfield, Weiler, & Widom, 2000; Weis, 1986). Furthermore, studies also suggest that the stability of self-reports are higher for interviewer-administered instruments than for self-administered assessments (Catania, Gibson, Chitwood, & Coates, 1990; Weinhardt et al., 1998). In this study, we used interviewer-administered interviews. In addition, we were guided by the assumption that self-reported data would be comparable with official data, and further, that self-reported behavior may

even be a more accurate measure of behavior than official records (e.g., due to police discretion, inaccuracies in official records, time between drug use and tests; Elliott, 1994; Marquis, 1981). To assess this assumption, we compared a random sample of cases at two of the study sites on self-reported and official arrests finding that self-reported arrest data were comparable with official arrest data. Nonetheless, when interpreting findings it should be considered that this measurement decision could affect the findings. Although many of the skills, techniques, and client factors that have been found to promote a positive relationship among general psychotherapy populations may also promote better relationships among community supervision populations, there is little empirical research to support this supposition. Given the current study found the parolee–parole officer relationship was a significant mediator, further research should examine mechanisms of change in community supervision settings, with a special emphasis on understanding the factors related to parolees’ perceptions of the relationship as a vehicle for change (e.g., attachment style, levels of denial, schemas). Under what circumstances higher risk parolees perceive a positive relationship with their parole officers, which aspects of the relationship (e.g., agreement on goals, agreement on tasks, and formation of a bond) are important for different posttreatment outcomes, and which populations of dependent drug abusers experience difficulty forming a relationship are all important questions that can have implications for the prevention of crime and reduction of incarceration rates. Understanding the mechanisms through which community supervision outcomes operate is likely to facilitate the development of more effective supervision that will yield positive outcomes.

## NOTES

1. To differentiate between variable relationships and human relationships, we use “association” in place of “relationship” throughout when referring to the relationship between variables.

2. Officers received an initial uniform training, booster training 1 year after implementation, and were issued a standardized manual (Katz et al., 2004). A trainer monitored intervention fidelity through review of audiotaped initial and follow-up sessions. See Friedmann, Rhodes, and Taxman (2009, pp. 232-233) for a complete discussion of intervention adherence.

## REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Andrews, D. A. (2011). The principles of effective correctional programs. In E. J. Latessa & A. M. Holsinger (Eds.), *Correctional contexts: Contemporary and classical readings* (pp. 228-237). New York, NY: Oxford University Press.
- Andrews, D. A., & Carvell, C. (1998). *Core correctional training—Core correctional supervision and counseling: Theory, research, assessment and practice* (Unpublished training manual). Carleton University, Ottawa, Ontario, Canada.
- Andrews, D. A., & Kiessling, J. J. (1980). Program structure and effective correctional practices: A summary of the CaVIC research. In R. R. Ross & P. Gendreau (Eds.), *Effective correctional treatment* (pp. 439-463). Toronto, Ontario, Canada: Butterworth.
- Bachelor, A. (1988). How clients perceive therapist empathy: A content analysis of “received” empathy. *Psychotherapy: Theory, Research and Practice*, 25, 227-240.
- Bachelor, A. (1991). Comparison and relationship to outcome of diverse dimensions of the helping alliance as seen by client and therapist. *Psychotherapy: Theory, Research, Practice, Training*, 28, 534-549.
- Bachelor, A. (1995). Clients’ perception of the therapeutic alliance: A qualitative analysis. *Journal of Counseling Psychology*, 42, 323-337.
- Bachelor, A., Meunier, G., Laverdière, O., & Gamache, D. (2010). Client attachment to therapist: Relation to client personality and symptomatology, and their contributions to the therapeutic alliance. *Psychotherapy: Theory, Research, Practice, Training*, 47, 454-468.
- Baldwin, S. A., Wampold, B. E., & Imel, Z. E. (2007). Untangling the alliance-outcome correlation: Exploring the relative importance of therapist and patient variability in the alliance. *Journal of Consulting and Clinical Psychology*, 75, 842-852.

- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. New York, NY: International Universities Press.
- Blasko, B. L., & Jeglic, E. L. (in press). Sexual offenders' perceptions of the client-therapist relationship: The role of risk. *Sexual Abuse: A Journal of Research and Treatment*. Advance online publication. doi:0.1177/1079063214529802
- Blumstein, A., & Beck, A. (2005). Reentry as a transient state between liberty and recommitment. In J. Travis & C. Visser (Eds.), *Prisoner reentry and crime in America* (pp. 50-79). New York, NY: Cambridge University Press.
- Bohart, A. C., Elliott, R., Greenberg, L. S., & Watson, J. C. (2002). Empathy. In J. C. Norcross (Ed.), *Psychotherapy relationships that work* (pp. 89-108). New York, NY: Oxford University Press.
- Bonta, J., Rugge, T., Scott, T., Bourgon, G., & Yessine, A. K. (2008). Exploring the black box of community supervision. *Journal of Offender Rehabilitation, 47*, 248-270.
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice, 16*, 252-262.
- Bordin, E. S. (1994). Theory and research on the therapeutic alliance: New directions. In A. O. Horvath & L. S. Greenberg (Eds.), *The working alliance: Theory, research, and practice* (pp. 13-37). New York, NY: John Wiley.
- Broome, K. M., Knight, K., Joe, G. W., & Simpson, D. D. (1996). Evaluating the drug abusing probationer: Clinical interview versus self-administered assessment. *Criminal Justice and Behavior, 23*, 593-606.
- Brown, R. A., Burgess, E. S., Sales, S. D., Whiteley, J. A., Evans, D. M., & Miller, I. W. (1998). Reliability and validity of a smoking timeline follow-back interview. *Psychology of Addictive Behaviors, 12*, 101-112.
- Bureau of Justice Statistics. (2013). *Probation and parole in the United States, 2012* (Publication No. NCJ 243826). Washington, DC: Government Printing Office.
- Busseri, M. A., & Tyler, J. D. (2004). Client-therapist agreement on target problems, working alliance, and counseling outcome. *Psychotherapy Research, 14*, 77-88.
- Castonguay, L. G., Constantino, M. J., & Holtforth, M. G. (2006). The working alliance: Where are we and where should we go? *Psychotherapy: Theory, Research, Practice, Training, 43*, 271-279.
- Catania, J. A., Gibson, D. R., Chitwood, D. D., & Coates, T. J. (1990). Methodological problems in AIDS behavioral research: Influences on measurement error and participation bias in studies of sexual behavior. *Psychological Bulletin, 108*, 339-362.
- Cecero, J. J., Fenton, L. R., Frankforter, T. L., Nich, C., & Carroll, K. M. (2001). Focus on therapeutic alliance: The psychometric properties of six measures across three treatments. *Psychotherapy, 38*, 1-11.
- Connors, G. J., DiClemente, C. C., Dermen, K. H., Kadden, R., Carroll, K. M., & Frone, M. R. (2000). Predicting the therapeutic alliance in alcoholism treatment. *Journal of Studies on Alcohol and Drugs, 61*, 139-149.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 12*, 1-16.
- DeVellis, R. F. (2003). *Scale development: Theory and applications*. Thousand Oaks, CA: SAGE.
- Drake, E. K. (2011). "What works" in community supervision: *Interim report*. Retrieved from <http://www.wsipp.wa.gov/ReportFile/1094>
- Elliott, D. S. (1994). Serious violent offenders: Onset, developmental course, and termination. *Criminology, 32*, 1-21.
- Feeley, M., DeRubeis, R. J., & Gelfand, L. A. (1999). The temporal relation of adherence and alliance to symptom change in cognitive therapy for depression. *Journal of Consulting and Clinical Psychology, 67*, 578-582.
- Fendrich, M. (1991). Institutionalization and parole behavior: Assessing the influence of individual and family characteristics. *Journal of Community Psychology, 19*, 109-122.
- Fenton, L. R., Cecero, J. J., Nich, C., Frankforter, T. L., & Carrol, K. M. (2001). Perspective is everything: The predictive validity of six working alliance instruments. *Journal of Psychotherapy Practice and Research, 10*, 262-268.
- Friedmann, P. D., Katz, E. C., Rhodes, A. G., Taxman, F. S., O'Connell, D. J., Frisman, L. K., . . . Martin, S. S. (2008). Collaborative behavioral management for drug-involved parolees: Rationale and design of the Step'n Out study. *Journal of Offender Rehabilitation, 47*, 290-318.
- Friedmann, P. D., Rhodes, A. G., & Taxman, F. (2009). Collaborative behavioral management: Integration and intensification of parole and outpatient addiction treatment services in the Step'n Out study. *Journal of Experimental Criminology, 5*, 227-243.
- Gendreau, P., & Andrews, D. A. (1989). *The Correctional Program Assessment Inventory*. New Brunswick, Canada: University of New Brunswick.
- Glaser, D., & O'Leary, V. (1966). *Personal characteristics and parole outcome*. Washington, DC: Government Printing Office.
- Grattet, R., Lin, J., & Petersilia, J. (2011). Supervision regimes, risk, and official reactions to parolee deviance. *Criminology, 49*, 371-399.
- Hall, D. B. (2000). Zero-inflated Poisson and binomial regression with random effects: A case study. *Biometrics, 56*, 1030-1039.
- Horney, J., Osgood, D. W., & Marshall, I. H. (1995). Criminal careers in the short-term: Intra-individual variability in crime and its relation to local life circumstances. *American Sociological Review, 60*, 655-673.



- Horvath, A. O., & Bedi, R. P. (2002). The alliance. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patient needs* (pp. 37-69). London, England: Oxford.
- Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology, 36*, 223-233.
- Horvath, A. O., & Marx, R. W. (1991). The development and decay of the working alliance during time-limited counselling. *Canadian Journal of Counselling, 24*, 240-259.
- Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology, 38*, 139-149.
- Iowa Department of Corrections. (2011). *Working alliance works best*. Retrieved from <http://www.doc.state.ia.us/Research/March11WorkingAlliance.pdf>
- Jackson, J., Tyler, T. R., Bradford, B., Taylor, D., & Shiner, M. (2010). Legitimacy and procedural justice in prisons. *Prison Service Journal, 191*, 4-10.
- Katz, E., Friedmann, P. D., Clarke, J., Rose, J., Prendergast, M., Burdon, W., . . . Taxman, F. (2004). *Collaborative Behavioral Management (CBM) intervention manual* (Unpublished manual). Rhode Island Research Center, Providence.
- Kennealy, P., Skeem, J., Manchak, S., & Eno Louden, J. (2012). Firm, fair, and caring officer-offender relationships protect against supervision failure. *Law and Human Behavior, 36*, 496-505.
- Kiesler, D. J., & Watkins, L. M. (1989). Interpersonal complementarity and the therapeutic alliance: A study of relationship in psychotherapy. *Psychotherapy: Theory, Research, Practice, Training, 26*, 183-194.
- Knight, K., Simpson, D. D., & Morey, J. T. (2002). *Evaluation of the TCU drug screen—Final Report* (NCJ 196682). Washington, DC: United States Department of Justice, National Institute of Justice.
- Kraemer, H. C., Wilson, G. T., Fairburn, C. G., & Agras, W. S. (2002). Mediators and moderators of treatment effects in randomized clinical trials. *Archives of General Psychiatry, 59*, 877-883.
- Lambert, D. (1992). Zero-inflated Poisson regression, with an application to defects in manufacturing. *Technometrics, 34*, 1-14.
- Lambert, M. J., & Barley, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, Research, Practice, Training, 38*, 357-361.
- Levitt, H. M., & Rennie, D. K. (2004). Narrative activity: Clients' and therapists' intentions in the process of narration. In L. E. Angus & J. McLeod (Eds.), *The handbook of narrative and psychotherapy* (pp. 299-314). Thousand Oaks, CA: SAGE.
- Maltz, M. (2001). *Recidivism*. Orlando, FL: Academic Press.
- Marquis, K. H. (1981). *Quality of prisoner self-reports: Arrest and conviction response errors*. Santa Monica, CA: RAND.
- Marshall, W. L., Serran, G. A., Fernandez, Y. M., Mulloy, R., Mann, R. E., & Thornton, D. (2003). Therapist characteristics in the treatment of sexual offenders: Tentative data on their relationship with indices of behaviour change. *Journal of Sexual Aggression, 9*, 25-30.
- Maxfield, M. G., Weiler, B. L., & Widom, C. S. (2000). Comparing self-reports and official records of arrests. *Journal of Quantitative Criminology, 16*, 87-110.
- Midanik, L. T., Hines, A. M., Barrett, D. C., Paul, J. P., Crosby, G. M., & Stall, R. D. (1998). Self-reports of alcohol use, drug use and sexual behavior: Expanding the time-line follow-back technique. *Journal of Studies on Alcohol, 59*, 681-689.
- Murphy, P. M., Cramer, D., & Lillie, F. J. (1984). The relationship between curative factors perceived by patients in their psychotherapy and treatment outcome: An exploratory study. *British Journal of Medical Psychology, 57*, 187-192.
- Nelson, W. A., & Clum, G. A. (2002). Assessment of panic frequency: Reliability and validity of a time-line follow-back method. *Journal of Psychopathological Behavior, 24*, 47-54.
- Norcross, J. C. (2010). The therapeutic relationship. In B. L. Duncan, S. D. Miller, B. E. Wampold, & M. A. Hubble (Eds.), *The heart and soul of change: Delivering what works* (2nd ed., pp. 113-141). Washington, DC: American Psychological Association.
- Norcross, J. C., & Lambert, M. J. (2005). The therapy relationship. In J. C. Norcross, L. E. Beutler, & R. F. Levant (Eds.), *Evidence-based practices in mental health: Debate and dialogue on the fundamental questions* (pp. 208-218). Washington, DC: American Psychological Association.
- Persons, R. W., Persons, M. K., & Newmark, I. (1974). Perceived helpful therapists' characteristics, client improvements, and sex of therapist and client. *Psychotherapy: Theory, Research & Practice, 11*, 63-65.
- Peters, R. H., Greenbaum, P. E., Edens, J. F., Carter, C. R., & Ortiz, M. M. (1998). Prevalence of DSM-IV substance abuse and dependence disorders among prison inmates. *The American Journal of Drug and Alcohol Abuse, 24*, 573-587.
- Peters, R. H., Greenbaum, P. E., Steinberg, M. L., Carter, C. R., Ortiz, M. M., Fry, B. C., & Valle, S. K. (2000). Effectiveness of screening instruments in detecting substance use disorders among prisoners. *Journal of Substance Abuse Treatment, 18*, 349-358.
- Petersilia, J. (2009). *When prisoners come home: Parole and prisoner reentry*. New York, NY: Oxford University Press.
- Petersilia, J., & Turner, S. (1993). Intensive probation and parole. *Crime and Justice, 17*, 281-335.
- Piquero, A. R., Daigle, L. E., Gibson, C., Piquero, N. L., & Tibbetts, S. G. (2007). Research note: Are life-course-persistent offenders at risk for adverse health outcomes? *Journal of Research in Crime and Delinquency, 44*, 185-207.

- Polaschek, D. L., & Gannon, T. A. (2004). The implicit theories of rapists: What convicted offenders tell us. *Sexual Abuse: A Journal of Research and Treatment, 16*, 299-314.
- Polaschek, D. L., & Ross, E. C. (2010). Do early therapeutic alliance, motivation, and stages of change predict therapy change for high-risk, psychopathic violent prisoners? *Criminal Behaviour and Mental Health, 20*, 100-111.
- Roberts, J., & Horney, J. (2010). The life event calendar method in criminological research. In A. R. Piquero & D. Weisburd (Eds.), *Handbook of quantitative criminology* (pp. 289-312). New York, NY: Springer.
- Ross, E. C., Polaschek, D. L., & Ward, T. (2008). The therapeutic alliance: A theoretical revision for offender rehabilitation. *Aggression and Violent Behavior, 13*, 462-480.
- Rudes, D. S. (2012). Getting technical: Parole officers' continued use of technical violations under California's parole reform agenda. *Journal of Crime and Justice, 35*, 249-268.
- Saffran, J. D., & Wallner, L. K. (1991). The relative predictive validity of two therapeutic alliance measures in cognitive therapy. *Psychological Assessment, 2*, 188-195.
- Simpson, D. D. (1995). *TCU forms manual: Improving Drug Abuse Treatment, Assessment, and Research (DATAR)*. Fort Worth: Institute of Behavioral Research, Texas Christian University.
- Simpson, D. D., Knight, K., & Broome, K. M. (1997). *TCU/CJ forms manual: Drug dependence screen and initial assessment*. Fort Worth: Institute of Behavioral Research, Texas Christian University.
- Skeem, J., Encandela, J., & Eno Loudon, 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., Eno Loudon, J., Polaschek, & Cap, J. (2007). Relationship quality in mandated treatment: Blending care with control. *Psychological Assessment, 19*, 397-410.
- Sobell, L. C., & Sobell, M. B. (1992). Timeline follow-back. In R. Z. Litten & J. P. Allen (Eds.), *Measuring alcohol consumption: Psychosocial and biochemical methods* (pp. 41-72). New York, NY: Springer.
- Taft, C. T., Murphy, C. M., Musser, P. H., & Remington, N. A. (2004). Personality, interpersonal, and motivational predictors of the working alliance in group cognitive-behavioral therapy for partner violent men. *Journal of Consulting and Clinical Psychology, 72*, 349-354.
- Tatman, A. W., & Love, K. (2010). An offender version of the Working Alliance Inventory-Short Revised. *Journal of Offender Rehabilitation, 49*, 165-179.
- Taxman, F. S. (2002). Supervision: Exploring the dimensions of effectiveness. *Federal Probation, 66*, 14-27.
- Taxman, F. S., & Ainsworth, S. (2009). Correctional milieu: The key to quality outcomes. *Victims & Offenders, 4*, 334-340.
- Tyler, T. R. (2005). Policing in Black and White: Ethnic group differences in trust and confidence in the police. *Police Quarterly, 8*, 322-342.
- Tyler, T. R. (2006). *Why people obey the law*. Princeton, NJ: Princeton University Press.
- Tyler, T. R. (2010). Legitimacy in corrections. *Criminology & Public Policy, 9*, 127-134.
- Walters, G. D. (1990). *The criminal lifestyle: Patterns of serious criminal conduct*. Newbury Park, CA: SAGE.
- Walters, G. D. (1997). A confirmatory factor analysis of the Lifestyle Criminality Screening Form. *Criminal Justice and Behavior, 24*, 294-308.
- Walters, G. D. (1998). The Lifestyle Criminality Screening Form: Psychometric properties and practical utility. *Journal of Offender Rehabilitation, 24*, 294-308.
- Walters, G. D. (2005). Predicting institutional adjustment with the Lifestyle Criminality Screening Form and Psychological Inventory of Criminal Thinking Styles. *International Journal of Forensic Mental Health, 5*, 63-70.
- Walters, G. D., & Chlumsky, M. L. (1993). The Lifestyle Criminality Screening Form and antisocial personality disorder: Predicting release outcome in a state prison sample. *Behavioral Sciences the Law, 11*, 111-115.
- Walters, G. D., White, T. W., & Denney, D. (1991). The Lifestyle Criminality Screening Form: Preliminary data. *Criminal Justice and Behavior, 18*, 406-418.
- Wampold, B. E. (2010). The research evidence for the common factors models: A historically situated perspective. In B. L. Duncan, S. D. Miller, B. E. Wampold, & M. A. Hubble (Eds.), *The heart and soul of change: Delivering what works in therapy* (2nd ed., pp. 49-82). Washington, DC: American Psychological Association.
- Weinhardt, L. S., Carey, M. P., Maisto, S. A., Carey, K. B., Cohen, M. M., & Wickramasinghe, S. M. (1998). Reliability of the timeline follow-back sexual behavior interview. *Annals of Behavioral Medicine, 20*, 25-30.
- Weis, J. G. (1986). Issues in the measurement of criminal careers. In A. Blumstein, J. Cohen, J. A. Roth, & C. A. Visher (Eds.), *Criminal careers and "career criminals"* (pp. 2-51). Washington, DC: National Academy Press.
- Westen, D., Novotny, C. M., & Thompson-Brenner, H. (2004). The empirical status of empirically supported psychotherapies: Assumptions, findings, and reporting in controlled clinical trials. *Psychological Bulletin, 130*, 631-631.
- Wintersteen, M. B., Mensinger, J. L., & Diamond, G. S. (2005). Do gender and racial differences between patient and therapist affect therapeutic alliance and treatment retention in adolescents? *Professional Psychology: Research and Practice, 36*, 400-408.
- Zuroff, D. C., Blatt, S. J., Sotsky, S. M., Krupnick, J. L., Martin, D. J., Sanislow, C. A., & Simmens, S. (2000). Relation of therapeutic alliance and perfectionism to outcome in brief outpatient treatment of depression. *Journal of Consulting and Clinical Psychology, 68*, 114-124.

**Brandy L. Blasko** is a postdoctoral research fellow at George Mason University. She received her PhD from the Department of Criminal Justice at Temple University. Her research focuses on how criminal justice workers and criminal justice-involved individuals perceive, understand, and negotiate formal and informal aspects of the corrections environment.

**Peter D. Friedmann** is professor of medicine and health services, policy, and practice at the Warren Alpert Medical School and School of Public Health of Brown University. He directs the Center of Innovation in Long-Term Services and Supports at the Providence Veterans Affairs Medical Center and the Research Section in the Division of General Internal Medicine at Rhode Island Hospital. He served as principal investigator of the Rhode Island Research Center of NIDA's Criminal Justice Drug Abuse Treatment Studies, and study chair of the Step'n Out study.

**Anne Giuranna Rhodes** is the director of HIV Surveillance at the Virginia Department of Health. She has her doctorate in epidemiology and community health. Her major areas of research include social networks, the HIV continuum of care, and integration of data collection systems.

**Faye S. Taxman** is a university professor in the criminology, law, and society department and director of the Center for Advancing Correctional Excellence at George Mason University. She is recognized for her work in probation and community corrections, including the RNR Simulation Tool, and the development of seamless systems of care models that link criminal justice systems with other service delivery systems.