Firm, Fair, and Caring Officer-Offender Relationships Protect Against Supervision Failure

Patrick J. Kennealy and Jennifer L. Skeem University of California at Irvine

Sarah M. Manchak University of Cincinnati

Jennifer Eno Louden University of Texas at El Paso

A growing body of research suggests that high quality dual role relationships between community corrections officers and offenders reduce risk of recidivism. This study assesses whether this finding generalizes from offenders with mental illness to their relatively healthy counterparts. More importantly, this study tests the possibility that this finding is spurious, reflecting the influence of pre-existing offender characteristics more than a promising principle of practice. In this study of 109 parolees without mental illness, the authors found that (a) firm, fair, and caring relationships protect against rearrest, and (b) do so even after accounting for offenders' pre-existing personality traits and risk for recidivism. These findings are consistent with the theoretical notion that good dual role relationships are an essential element of core correctional practice, even (or particularly) for difficult or high risk offenders.

Keywords: therapeutic alliance, dual-role relationships, offender, parole, recidivism

The majority of offenders in the U.S. are supervised in the community (Glaze, Bonczar, & Zhang, 2010). Probation and parole officers exercise substantial discretion in supervising these offenders (Eno Louden, Skeem, Camp, & Christensen, 2008; Hannah-Moffat, Maurutto, & Turnbull, 2009). When officers supervise these offenders in a manner that embodies principles of effective intervention, they may go far in increasing public safety, given that these principles are more powerful when applied in the community than in institutional settings (Andrews, 2011). Most prominently, principles of effective intervention for offenders include the "Risk-Need-Responsivity" (RNR) principles. That is, programs are most effective when they provide relatively high intensity supervision and services to offenders at relatively high risk of recidivism (see Bonta, Wallace-Capretta, & Rooney, 2000; Lowenkamp, Latessa, & Holsinger, 2006), target offenders' changeable risk factors for crime like criminogenic attitudes (see Smith & Gendreau, 2007; Andrews & Dowden, 2006), and are delivered in a structured, skill-building, or cognitive-behavioral format that is responsive to offenders' learning styles and abilities (Dowden & Andrews, 2004; Landenberger & Lipsey, 2005).

Although these RNR principles have received the bulk of attention in the correctional literature, there is increasing recognition

This article was published Online First January 9, 2012.

Patrick J. Kennealy and Jennifer L. Skeem, Department of Psychology and Social Behavior, University of California at Irvine; Sarah M. Manchak, School of Criminal Justice, University of Cincinnati; Jennifer Eno Louden, Department of Psychology, University of Texas at El Paso.

Correspondence concerning this article should be addressed to Patrick J. Kennealy, M.A., Doctoral Student, Psychology & Social Behavior, University of California, Irvine, 4201 Social & Behavioral Sciences Gateway, Irvine, CA 92697-7085. E-mail: pkenneal@uci.edu

that the manner in which an individual officer delivers a program can determine whether that program actually reduces new crimes and new victims. According to "Core Correctional Practice" (CCP) principles embedded in the RNR model, effective officers establish high quality relationships with offenders (e.g., respectful, caring, enthusiastic, valuing of personal autonomy) and apply high quality structuring skills (e.g., prosocial modeling, effective reinforcement, problem-solving strategies, service advocacy; Andrews, 2011). Although these principles must be implemented at the officer-offender level, until recently, they had only been studied at the program level. Specifically, Dowden and Andrews (2004) meta-analytically demonstrated that programs comprised of staff who, as a group, obtained higher CCP scores were more effective in reducing recidivism than programs comprised of staff who, as a group, obtained lower scores. However, CCP scores were derived from study and program descriptions (which were often sparse), not from direct measurement of officer-offender interactions.

Relevant Evidence on the Therapeutic Alliance and Procedural Justice

Although surprisingly little research has directly evaluated the effect of individual officer-offender relationships on criminal outcomes, studies in related fields convey the promise of this CCP element. In the psychotherapy field, the therapeutic alliance is regarded as the "quintessential integrative variable" (Wolfe & Goldfried, 1988, p. 449) for achieving treatment adherence, symptom reduction, and behavior change across diverse modes of therapy (see Horvath & Symonds, 1991; Krupnick et al., 1996; Connors, Carroll, DiClemente, Longabaugh, & Donovan, 1997). Research indicates that a high quality therapist-client relationship or "alliance" is the strongest controllable source of variance in

clinical outcomes, explaining substantially more variance than specific models like cognitive-behavioral or interpersonal techniques (Horvath & Symonds, 1991; Asay & Lambert, 1999; Luborsky, et al., 2002). The mechanism by which the therapeutic alliance precipitates change has not been identified (Ross, Polaschek, & Ward, 2008), but may operate directly. That is, a bond and interpersonal closeness with the therapist may simply improve a client's well-being (Henry, Strupp, Schacht, & Gaston, 1994). Leading measures of the therapeutic alliance often assess a sense of a mutual bond or attachment and working toward shared goals by collaborating on agreed upon tasks (Ross et al., 2008).

Might these psychotherapy findings generalize to criminal justice settings and outcomes? Perhaps not directly. First, compared with traditional psychotherapy clients, offenders are less likely to be involved in treatment by choice, may be less motivated to collaborate with a therapeutic agent to change their behavior, and may have more difficulty establishing an alliance. Second, unlike traditional psychotherapists, probation and parole officers have dual roles: they function as both counselor and cop (Trotter, 1999). That is, although officers ideally work toward changing offenders' behavior in the prosocial direction (a caring role), they are also responsible for enforcing the law and protecting public safety (a controlling role; Trotter, 1999; Skeem, Eno Louden, Polaschek, & Camp, 2007). Although relationships with involuntary clients inherently involve balancing dual roles, the therapeutic alliance construct assumes only one role. This counseling-oriented bond may insufficiently represent effective dual role relationships.

Beyond the therapeutic alliance, the construct of "procedural justice" holds promise in representing high quality dual role relationships. Procedural justice involves an authority figure making (sometimes difficult) decisions about a person through neutral processes that treat that person fairly and with respect (Tyler & Rankin, 2011). Research has shown that people are more likely to comply with authority figures (Tyler & Huo, 2002) and less likely to feel coerced (Lidz et al., 1995) when they believe these figures are making decisions about them in a caring, fair, and respectful manner (Tyler & Huo, 2002). When an officer is considerate, listens to an offender, and provides him or her with an opportunity to take part in ongoing decisions, the offender may feel responsible to follow the law and help the officer do their job. In contrast, when an officer is controlling, demanding, inflexible, and authoritarian in interactions with an offender, he or she may feel coerced and react against the imposed rules.

Evidence on Officer Orientation and Dual Role Relationships

Skeem et al. (2007) hypothesized that dual role relationships must possess elements of the therapeutic alliance and procedural justice to change behavior in the prosocial direction (i.e., increase rule compliance and reduce recidivism). Three studies of individual offenders are consistent with this proposition. First, in an ethnographic study, Klockars (1972) found that "synthetic" probation officers who placed equal emphasis on changing offenders' behavior and protecting public safety were more effective than officers who placed heavy emphasis on only one goal or the other ("therapeutic agents" or "law enforcement" officers). Unlike other officers, synthetic officers balanced their roles to solve the dual role dilemma; they earned enough trust for the offender to disclose

real problems (a necessary precursor for changing problematic behavior), even though disclosures of the wrong sort could have consequences. By establishing caring, respectful, and authoritative (not authoritarian) relationships, synthetic officers achieved a broader base of power for pro-social behavior change than officers who could be regarded as either "counselors" or "cops."

Second, Paparozzi and Gendreau (2005) arrived at a similar conclusion via a different empirical route. These authors used a brief questionnaire to measure the supervision orientation of 12 officers who oversaw 240 parolees on intensive supervision. Officers were categorized as oriented toward law enforcement, social work, or a balance between the two. Parolees supervised by officers with a balanced orientation were two to three times less likely to have their community supervision revoked during a 12-month follow-up period (19%) than those supervised by an officer who emphasized either law enforcement (59%) or social work (38%).

The third study seems to be the only one to formally operationalize dual role relationship quality and assess its effects on recidivism. Based on two samples of probationers with mental illness and their supervising officers, Skeem and colleagues developed and validated the revised Dual-Role Relationship Inventory (DRI-R; Skeem et al., 2007). The investigators distilled an initial pool of items that tapped both the therapeutic alliance and procedural justice into a smaller set of 30 psychometrically sound items. These items were completed by officers, probationers, and observers (i.e., trained research assistants who reviewed audio-taped officer-probationer meetings). These items seem to capture three factors: "Caring and Fairness" (n = 20, e.g., "X treats me fairly" and "X cares about me as a person"), "Trust" (n = 5, e.g., "I feel safe enough to be open and honest with X"), and "Toughness" (n = 5, e.g., "I feel that X is looking to punish me."). The DRI-Rpredicted the nature of officer-offender behavior during meetings (e.g., low scores predicted officers' use of confrontation and probationers' resistance). Moreover, the DRI-R predicted recidivism over an average follow-up period of 16.2 months (SD = 2.9), and did so after controlling for traditional measures of the therapeutic alliance.

Combined with program-level results (Dowden & Andrews, 2004), these studies are consistent with the hypothesis that relationships characterized by elements of the therapeutic alliance (i.e., caring, warmth, enthusiasm) combined with procedural justice (i.e., respect, fairness, trust, nonauthoritarianism) are a "protective factor" against recidivism. The use of the term "protective factor" is consistent with the work of Kraemer and colleagues (Kraemer et al., 1997), who defined a risk factor as any agent or exposure that increases an outcome's likelihood within a given population. For example, "cigarette smoking is a risk factor for lung cancer" (Kraemer et al., 1997, p. 337). If a given outcome is considered positive (e.g., good relationship quality precedes and decreases the likelihood of rearrest), Kraemer and colleagues (1997) suggest that the use of the term "protective factor" is a suitable alternative. Important to note, the terms risk and protective factor do not imply causality, which requires the demonstration that the likelihood of an outcome is altered when a risk or protective factor is manipulated. Nonetheless, only one study has directly tested this hypothesis of a protective factor (Skeem et al., 2007).

The Current Study

In this longitudinal study of parolees, we address two important, unanswered questions about the influence of dual role relationship quality on recidivism. First, does this effect generalize from offenders with mental illness to their relatively healthy counterparts? We hypothesize that it will, given the results of relevant research with general offenders (Klockars, 1972; Paparozzi & Gendreau, 2005). To date, however, direct examinations of dual role relationship quality have been conducted solely with probationers with serious mental illness. It is important to rule out the possibility that high quality relationships better protect against recidivism for this symptomatic, high-need subgroup than it does for offenders without mental illness.

Second, is the association between dual role relationships and recidivism *spurious*, that is, explained by the influence of a third variable? In the psychotherapy literature, which is relatively well-developed, a few studies have investigated whether client ratings of the therapeutic alliance are a function of client's pre-existing characteristics (Ross et al., 2008). For example, Puschner and colleagues (2005) found that hostile patients had lower initial ratings of the therapeutic alliance than more friendly patients, based on a large psychotherapy outpatient sample (n = 714). Similarly, Wallner-Samstag and colleagues (1992 as in Ross et al., 2008) found that hostile and aggressive clients were less likely to provide positive therapeutic alliance ratings than submissive and friendly clients.

Our aim is to assess whether dual role relationship quality predicts recidivism, above and beyond the effects of offenders' pre-existing personality traits and risk of recidivism. We hypothesize that dual role relationship quality will manifest incremental utility to these variables. Before concluding that high quality dual role relationships are a central element of CCP, however, it is important to rule out the alternative explanation that the effect merely reflects the operation of pre-existing offender variables. Compared with those with more positive traits, offenders with traits like alienation, hostility, and aggression may (a) be less able to establish good dual role relationships, and (b) be more likely to recidivate, regardless of the effects of relationship quality. Similarly, offenders at high risk of recidivism may have more difficulty establishing good relationships with (wary) officers than lower risk offenders and (by definition) are more likely to recidivate.

Method

Participants

Participants were 109 offenders (98 men and 11 women) on parole in a Western state. Eligibility criteria were: (a) English-speaking, (b) at least 18 years of age, (c) on active parole, (d) released from prison within 90 days of recruitment, and (e) no diagnoses of major mental illness or mental retardation. Participants were between the ages of 20 and 68 (M=38.09, SD=9.93), predominantly African American (71%; Hispanic, 17%; Caucasian, 6%; "Other," 6%), and supervised by 58 parole officers (88% men, 12% women).

Procedure

Study procedures. Participants were recruited from mandatory weekly parole orientation meetings. At the beginning of each

meeting, research assistants (RAs) described the study and compiled recruitment lists of eligible parolees. After the meetings, parolees were individually recruited by mail, phone, parole office meetings, and home visits when necessary. Parolees were removed from active recruitment if they could not be located and interviewed within 14 weeks of release or if they were removed from active parole due to reincarceration. Of parolees recruited, 62% participated in the study, whereas the others either declined to participate (18%) or could not be interviewed within 14 weeks of release (20%).

Trained RAs met with participants in private areas in the parole office, other community agencies or businesses, or participants' homes. After completing the informed consent process and being assured that their answers would be kept confidential, participants completed a semistructured interview and the measures of relationship quality and personality described below. These meetings took approximately 1 to 2 hours to complete, and participants were paid for their time. After the meeting, RAs reviewed and coded participants' criminal justice records for information relevant to the study measures. An average of 16.4 months (SD = 2.03; range: 13 to 21 months) from the date of the interview, RAs reviewed official parole office records and state parole databases to code rearrest. This follow-up period is methodologically sound, given that studies featuring follow-up periods of 3 to 6 years have reported more than half of all rearrests of released adult offenders occur within the first year (Walters, 2003; Langan & Levin, 2002).

Measures

Dual role relationship quality. Offender-officer relationship quality was assessed using the offender version of the DRI-R (Skeem et al., 2007). Each of the 30 items is rated on a 7-point Likert-type scale ("never" = 1 to "always" = 7). In the present study, the average item score for each of the three DRI-R scales and the total score was calculated, allowing for a maximum of 20% of each scale's items to be missing. DRI-R total scores are rendered by summing the "Caring and Fairness" and "Trust" scales with the inverse of the "Toughness" scales. As suggested earlier, DRI-R total and factor scores demonstrate a theoretically meaningful and distinct pattern of associations with offender-officer behaviors during supervision meetings, as well as with measures of symptoms and motivation (Skeem et al., 2007). Adequate levels of internal consistency for DRI-R factor and total scores have been previously established in offenders with mental disorders ($\alpha = .87$ – .96; Skeem et al., 2007), and adequate levels were observed in this sample of general offenders ($\alpha = .75 - .95$). Each of the DRI-R factors was highly intercorrelated in this study (see Table 1), as in prior research (Skeem et al., 2007). In addition to DRI-R total and scale scores, we also used a trichotomization of the DRI-R total scores into low, medium, and high groups in analyses, using cut scores of 4.57 and 5.44.

Rearrest. Official state records were reviewed for information on the chief outcome of interest: the number of days until first rearrest. We chose rearrest rather than revocation of parole as our chief outcome measure for two reasons. First, because parole officers have less discretion over rearrests than revocation, rearrests arguably are more independent of the quality of the officer-offender relationship. Second, rearrests are a cleaner index of behavior that violates public safety than revocation (which can be

MPQ scale	DRI-R total	DRI-R caring-fairness	DRI-R trust	DRI-R toughness
DRI-R Total	1.00	_	_	_
DRI-R Caring-Fairness	.99***	1.00	_	_
DRI-R Trust	.92***	.86**	1.00	_
DRI-R Toughness	57***	58***	49**	1.00

Table 1
Intercorrelations Among DRI-R Total and Factor Scores

based on minor technical violations rather than new crimes and new victims). In this study, the majority (55%) of offenders were rearrested. The average days until first rearrest was 153 (SD=108.05, range: 2 to 400 days). Typically, a parolee's first arrest was for nonviolent offenses (85%) including drug possession and sales, theft, and burglary, but a minority of parolees' first arrests was for violent offenses (15%) including assault, robbery, and attempted murder. For analyses, the outcome was coded as either present or absent for the participant, and the dates of each outcome were recorded to permit survival analyses, which take participants' varying lengths of follow-up into account.

Potential third variables. Several potential third variables were examined.

Traits were assessed with the Multidimensional Personality. Personality Questionnaire-Brief Form (MPQ-BF; Patrick, Curtin, & Tellegen, 2002), a 155-item (yes/no) self-report questionnaire that is strongly correlated with its parent measure (Patrick et al., 2002). The MPO has three scales that generate normalized T scores (Patrick et al., 2002). The Positive Emotionality (PEM; M =52.39, SD = 8.32) scale assesses social potency, achievement, and social closeness (e.g., "I often feel happy and satisfied for no particular reason."). Negative Emotionality (NEM; M = 57.09, SD = 10.81) assesses stress reactivity, alienation, and aggression (e.g., "Occasionally I have strong feelings [like anxiety or anger] without really knowing why."). Constraint (CON; M = 48.48, SD = 7.23) measures self-control, harm avoidance, and traditionalism (e.g., "I am more likely to be fast and careless than to be slow and plodding.").

MPQ-BF scales evinced adequate levels of internal consistency in past research ($\alpha=.75-.84$; Patrick et al., 2002), and in this study ($\alpha=.68-.91$). Evidence of the MPQ-BF's construct validity are suggested by its demonstrated associations with Buss and Plomin's (1984) Emotionality–Activity–Sociability–Impulsivity Temperament Survey, Fear Survey Schedule III (Arrindell, Emmelkamp, & van der Ende, 1984), Narcissistic Personality Inventory (Raskin & Terry, 1988), and other established personality scales (see Patrick et al., 2002). Further, research indicates a similar pattern of relations between MPQ scales and personality constructs including interpersonal dominance, and disinhibition is observed in twin, undergraduate, and correction samples suggesting the measure's applicability in offender populations (Patrick et al., 2002; Hall, Benning, & Patrick, 2004; Kennealy, Hicks, & Patrick, 2007).

Risk. Offenders' risk of recidivism was assessed using Part 1 of the Level of Service/Case Management Inventory (LS/CMI; Andrews, Bonta, & Wormith, 2004). Part 1 is a 43-item scale that yields a total score by measuring 8 well-established risk factors for recidivism (i.e., Criminal History, Antisocial Pattern, Education/

Employment Problems, Family/Marital Problems, Leisure/Recreation Problems, Procriminal Companions, Alcohol/Drug Problems, Procriminal Attitude/Orientation). These total scores robustly predict both general (r=.41) and violent (r=.29) recidivism (Andrews et al., 2004). Adequate levels of internal consistency were observed for LS/CMI total scores in past research ($\alpha=.91$; Girard & Wormith, 2004) and in this study ($\alpha=.80$).

Interrater reliability typically is more difficult to establish than simple internal consistency. Prior to working on the study, all 4 RAs received extensive training on how to establish rapport, conduct effective interviews, and administer and score the LS/CMI. As a part of training, each interviewer attained a predefined level of agreement (intraclass correlations; ICC \geq .85) by independently completing two LS/CMI training cases. Feedback and supervision were provided in between each case. Further, ongoing meetings were held during the course of the study where interviewers completed additional training cases to protect against rater drift. For both the initial (n=2) and ongoing (n=5) training cases, interrater reliability for the LS/CMI was assessed via ICC (Shrout & Fleiss, 1979). Interrater reliability for LS/CMI total scores of the initial cases (ICC = .92) and ongoing training cases (ICC = .88) was good (see Fleiss, 1981).

Results

This study's aims were addressed in two steps. First, to assess whether the association between dual role relationship quality and rearrest generalizes to general offenders, we conducted a series of survival analyses via Cox proportional hazard regressions. We did so because survival analysis corrects for variation in length of follow-up period among participants, which was present in this study. Second, to determine whether dual role relationship quality predicted rearrest above and beyond offenders' problematic traits and risk level, we conducted incremental utility analyses via Cox proportional hazard regressions.. These analyses were conducted using SPSS 16.0.

Prior to addressing the study aims, we conducted preliminary analyses to rule out the possibility that DRI-R data were nonindependent. Because some participants shared parole agents, there was a possibility that DRI-R ratings reflected a parole agent effect. If so, the data would be dependent upon, and "cluster" within, agents. To test this possibility, we fit multilevel models to the DRI-R data and tested the relative fit of two nested models using the "xtmixed" command in STATA 10.1. Results indicated that the model that added clustering within agents did not significantly improve fit, relative to the model that included no clustering (χ^2 =

^{*} p < .05. ** p < .01. *** p < .001.

0.10, *ns*). Given this evidence, the main study aims were addressed without clustering or nesting by parole agent.

Aim 1: Does the Association Between Dual Role Relationship Quality and Rearrest Generalize to Offenders Without Mental Illness?

A series of three survival analyses were conducted to examine predictive utility of dual role relationship quality for rearrest. Specifically, three predictors (i.e., DRI-R total scores, trichotomized DRI-R total scores, and DRI-R factor scores) were examined in relation to rearrest.

DRI-R total scores significantly predicted the number of days until first rearrest ($\chi^2=10.77,\,df=1,\,p<.001$). For each one point increase in DRI-R total scores (range 1–7), there is a 31% reduction in the rate of rearrest, Hazard Ratio (HR) = 0.69, Confidence Interval (CI) [.55, .86], p<.001. Similarly, trichotomized DRI-R total scores significantly predicted the number of days until first rearrest ($\chi^2=7.23,\,df=2,\,p<.05$). Figure 1 displays the number of days of survival in the community without rearrest as a function of the sample's trichotomized DRI-R total score. In comparison with the low scoring group, the medium scoring group was not at a significantly lower risk of rearrest, but the high scoring group had a 57% reduction in the rate of rearrest, HR = 0.43, CI [.23, .81], p<.01.

For *DRI-R scale scores*, each of the scales was entered together in a forward stepping algorithm that utilized the likelihood ratio to determine which variables were retained or removed. Analyses revealed that the DRI-R Caring-Fairness scale, the largest scale, significantly predicted the number of days until first rearrest ($\chi^2=11.52,\,df=1,\,p<.001$). For each one point increase in the DRI-R Caring-Fairness score (range 1–7), the rate of rearrest decreased by 25%, HR = 0.75, CI [.64, .89], p<.01. Although the Trust and Toughness scales did not independently predict rearrest, this may partially be based on their strong intercorrelations with Caring-Fairness, as both scales significantly predicted rearrest when entered by themselves. Together, these results suggest that the scales share significant predictive utility for rearrest.

Receiver operating characteristic (ROC) analyses were also conducted to assess the degree of association between DRI-R total scores and rearrest. This analysis renders an estimate of the area under the curve (AUC), which represents the probability that a randomly selected parolee who was not arrested will have a higher dual role relationship quality rating than a randomly selected parolee who was arrested (Swets, 1988). An AUC value of .50 indicates a tool does not improve prediction beyond chance, whereas as a value of 1.00 reflects perfect accuracy (Steadman, et al., 2000). In this study, DRI-R total scores had an AUC value of .68, CI [.58, .78], p < .01, which is considered a medium effect size according to Cohen's standards (see Rice & Harris, 2005). This AUC value is (a) considered fairly large within treatment research (Kraemer et al., 1999), and (b) within range of risk assessment tools for predicting recidivism (e.g., Manchak, Skeem, & Douglas, 2008; Barbaree, Seto, Langton, & Peacock, 2001). This suggests that DRI-R total scores significantly improve pre-

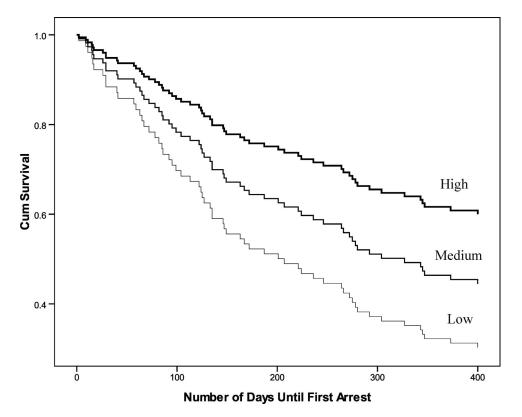


Figure 1. Parolee's survival function for arrest by DRI-R trichotomization.

diction beyond chance levels. Nonetheless, AUC values will not be emphasized because this analysis is not optimal for outcomes that vary in length of follow-up period among participants.

Aim 2: Does Dual Role Relationship Quality Predict Rearrest Above and Beyond the Effects of Offender Traits and Risk Level?

Prior to conducting incremental utility analyses, we first tested whether (a) measures of personality and risk-level significantly predicted rearrest, and (b) scores on these measures were correlated with DRI-R scores. First, in a series of survival analyses in which the MPQ scales or the LS/CMI total score was entered in a forward stepping algorithm, we found that Negative Emotionality, range: 22 to 78; $\chi^2 = 6.19$, df = 1, p < .05; HR = 1.03, CI = [1.01, 1.06], p < .05, and LS/CMI total scores, range: 0 to 43; $\chi^2 = 6.83$, df = 1, p < .01; HR = 1.06, CI [1.02, 1.11], p < .01, significantly predicted days until first rearrest. Second, as shown in Table 2, DRI-R Trust scores were weakly but significantly inversely associated with both Negative Emotionality (r = -.26, p <.01) and LS/CMI total scores (r = -.19, p < .05). Given that measures of personality and risk-level (a) predicted rearrest and (b) were correlated with DRI-R scores, we conducted a series of incremental utility analyses to determine whether DRI-R scores predicted the number of days until first arrest, above and beyond negative emotionality traits and risk level for rearrest.

Specifically, we conducted a series of survival analyses utilizing a forward conditional (stepwise) entry procedure, where either the MPQ Negative Emotionality scale or LS/CMI total scores were entered in the first block, and DRI-R total or scale scores were entered in the second block. First, findings reveal that both MPQ Negative Emotionality and DRI-R total scores significantly predicted number of days until first rearrest after controlling for each other ($\chi^2 = 14.58$, df = 2, p < .001). Specifically, the initial block featuring MPQ Negative Emotionality scale was significant, $\chi^2 = 6.19$, df = 1, p < .05; HR = 1.03, CI [1.01, 1.06], p < .05. The inclusion of DRI-R total scores, HR = 0.71, CI [.56, .90], p < .01, in the second block significantly improved the prediction of the number of days until first rearrest after taking into account personality ($\chi^2 = 7.61$, df = 1, p < .01).

Second, findings reveal that both LS/CMI and DRI-R total scores significantly predicted the number of days until first rearrest after controlling for each other ($\chi^2=15.28$, df=2, p<.001). Specifically, the initial block with LS/CMI total scores was significant, $\chi^2=6.83$, df=1, p<.01; HR = 1.06, CI [1.02, 1.11], p<.01. The addition of DRI-R total scores, HR = 0.71, CI [.57, .90], p<.01, in the second block significantly improved the prediction of the number of days until first rearrest after taking into account risk ($\chi^2=7.50$, df=1, p<.01).

All results remained consistent when substituting DRI-R Caring-Fairness scores for DRI-R total scores in the second step of the survival model and when controlling for ethnicity and gender. There were no interactions between personality, risk, and relationship quality scores. In sum, findings indicate that offenders with higher levels of offender-officer relationship quality, specifically relationships characterized by caring and fairness, are less prone to supervision failure even when controlling for the influence of personality and risk-level.

Discussion

Although "high quality relationships" are viewed as an essential element in the dominant model of correctional treatment (Andrews, 2011), few studies have directly examined the nature of good officer-offender relationships and their role in reducing criminal behavior. Moreover, it seems that even fewer studies have examined the extent to which the association between relationship quality and rearrest is spurious—less reflective of pre-existing offender characteristics than a supervision process that influences outcomes. This study addresses these understudied issues at the dyad level with general offenders. Its main findings may be organized into two points. First, dual-role relationships characterized by a firm, fair, and caring approach help protect against rearrest among general offenders. This suggests that the process of supervision is important. Second, the quality of the dual role relationship predicted rearrest, above and beyond the influence of offenders' problematic personality traits and level of risk for rearrest. This suggests that the apparent protective factor of firm, fair, and caring relationships is not attributable to these pre-existing offender characteristics. It seems that, even for high risk offenders with negative traits, strong officer-offender relationships can be established and reduce the risk of rearrest.

Before further discussing these findings, we note this study's limitations. First, although we examined the impact of pre-existing offender characteristics on dual role relationship quality, we were unable to examine the impact of officer characteristics. This is notable because ample evidence exists indicating that therapist characteristics can have an important impact on the therapeutic alliance (see Ross et al., 2008). Future research that examines these issues in the dual role context is needed. Second, we did not examine the consistency between a parolee's perceptions of dual role relationship quality and the officer's actual behavior and their interactions. Although this could lead to concerns of cognitive biases including halo effects where an offender's rating of dualrole relationship quality is influenced by other unrelated officer characteristics, a recent study with the DRI-R in a sample of 90 probationers limits such concerns (Skeem, Eno Louden, Polaschek & Camp, 2007). Specifically, this study shows that probationers' DRI-R ratings have been shown to predict observers' independent ratings of process, including the degree of officer confrontation and probationer resistance coded in officer-probationer meetings. This suggests that probationers' DRI-R ratings relate in a coherent manner to officers' confrontational behavior and probationers'

¹To test if dual role relationship quality's predictive utility for supervision failure is in fact due to the relationship and not a function of the personality or risk-level of the offender, we conducted additional survival analyses. Each analysis featured the DRI-R total score with either the MPQ Negative Emotionality scale or LS/CMI total scores entered on the first step, while the interaction between the DRI-R total score with either the MPQ Negative Emotionality scale or LS/CMI total scores were entered on the second step. These interaction terms for both personality and risk were not predictive of the number of days until first arrest when included in each of the previously described incremental utility models. Overall, the results suggest that good relationships are important regardless of personality or risk-level.

2. The state of 2. It is a						
Measure	DRI-R total	DRI-R caring-fairness	DRI-R trust	DRI-R toughness		
MPQ Positive Emotionality	13	14	09	.07		
MPQ Negative Emotionality	09	03	26**	.13		
MPQ Constraint	.02	.00	.08	.00		
LS/CMI Total Score	- 14	- 13	- 19*	.17		

Table 2
Bivariate Associations of DRI-R with Personality and Risk-Level

resistance and indicates that cognitive biases do not appear to play a large role in probationer ratings. Third, we relied upon official records to capture rearrest. Because official records capture only incidents that are detected by authorities and that authorities choose to pursue, it underrepresents behavior that is grounds for rearrest. Future designs that incorporate more sources of information in the measurement of rearrest would be beneficial. Fourth, high-risk parolees with difficult personality traits may be more likely to decline to participate. Although this could not be statistically tested for in this sample, our sample appears to include a good proportion of offenders at high risk as indicated by the LS/CMI total scores (M = 24.80, SD = 5.82, range = 11 to 36). Fifth, the sample included a very limited number of women (n = 11). Further research is needed to evaluate how well the findings generalize from men to women.

Finding 1: Strong Dual Role Relationship Quality Protects Against Rearrest Among General Offenders

Consistent with previous research in offenders with mental illness (Skeem et al., 2007), DRI-R total scores predicted rearrest in general offenders. This finding indicates that community supervision relationships that are characterized by trust, caring and fairness, and an authoritative style bode well for offenders, whether they have a mental illness or not. The apparent protective factor of high quality dual role relationships on rearrest is consistent with (a) the relatively strong effect of the therapeutic alliance on clinical outcomes (see Horvath & Symonds, 1991; Krupnick et al., 1996; Connors et al., 1997), (b) the effect of officers' "balanced" (care + control) supervision orientations on criminal justice outcomes (Klockars, 1972; Paparozzi & Gendreau, 2005), and (c) the program-level effect of "core correctional practice" (high quality relationships and high quality structuring skills) on rearrest (Dowden & Andrews, 2004).

When evaluating the predictive utility of the DRI-R at the scale level, results suggest that the Caring-Fairness scale drove most of the protectiveness. Although both the Trust and Toughness scales predicted rearrest independently, neither did so when controlling for their shared variance with the Caring-Fairness scale. This is consistent with previous findings based on a sample of offenders with mental illness (Skeem et al., 2007). Still, this effect may reflect limitations of the DRI-R measure more than convey the relative importance of Caring-Fairness, Trust, and Toughness. These DRI-R scales are highly intercorrelated (Skeem et al., 2007), and the Caring-Fairness scale (20 items) is substantially longer than the Trust and Toughness scales (5 items each). Further investigations using alternative (and perhaps less highly intercorrelated) measures of Caring-Fairness, Trust, and Toughness are

needed to clarify this issue and establish dual role relationship quality as a causal protective factor.

Finding 2: Protective Factor of Strong Dual Role Relationships is not Attributable to Pre-Existing Positive Offender Traits or Low Risk-Levels

In this study, we ruled out two promising alternative explanations for the effect of dual role relationship quality on rearrest. Although dual role relationship quality, personality traits, and risk-level were correlated with one another, each still independently predicted rearrest. This suggests that the DRI-R is not merely tapping pre-existing offender variables; instead, it appears to tap something inherent to the relationship between the offender and officer (for additional evidence, see Skeem et al., 2007). This finding is consistent with previous research from the psychotherapy literature. In that context, clients with problematic personality traits tend to have weaker therapeutic alliances, but therapists can still establish good alliances with patients who have these traits (for examples with borderline personality, see Gunderson, Najavits, Christoph, Sullivan, & Sabo, 1997; Lingiardi, Ludovica, & Baiocco, 2005; Ross et al., 2008). Nonetheless, a dearth of research on the role of problematic personality traits in the relationship between the therapeutic alliance and clinical outcomes in the psychotherapy literature limits the degree that generalization across contexts can be gauged. Our findings help to address the concern that offenders with positive traits or low risk level happen to be easier to relate to . . . and less likely to recidivate, independent of the effect of firm, fair, and caring relationships. Instead, it seems that good dual role relationships protect against rearrest for "easy" offenders as well as more "difficult" offenders who are at high risk of rearrest or have problematic personality traits. Although these individuals may be somewhat more difficult to relate to (correlations of .19/.26), our findings suggest that positive relationships can be established with them . . . and are likely to help. Taken together, these results underscore the importance of high quality officer-offender relationships as an integral component of core correctional practice. They also help to define and concretize what high quality relationships really are in these contexts, via the DRI-R operationalization.

Although the present study does rule out alternative explanations, it does not identify the mechanism by which dual role relationship quality improves criminal outcomes (as is the case in the psychotherapy literature; see Ross et al., 2008). Based on research on procedural justice, the therapeutic alliance, and probation and mental health, Skeem and colleagues (2007) hypothesized two potential mechanisms. First, procedural jus-

p < .05. ** p < .01.

tice may function as a mechanism. Offenders are more likely to follow the rules when they believe legal authority figures make decisions about them in a caring, fair, and respectful manner (Tyler & Huo, 2002). They may be more likely to break the rules when they are involved in an authoritarian relationship with an officer that violates these principles on an ongoing basis. A second mechanism may be the power afforded when officers balance their "controlling" and "caring" roles. According to Klockar's (1972) ethnography, when officers balance these roles, they achieve a much broader base of power for changing behavior in the prosocial direction than when they act exclusively as cop or counselor. When supervised by a balanced officer, offenders may realize that what they cannot achieve by complying perfectly with the rules may be achieved by disclosing these problems to the officer and appealing to him or her for help. This is the means toward solving the dual role dilemma (i.e., that problematic behavior is punishable, but must be disclosed to be targeted and changed in supervision). These hypotheses offer guidance for future studies, which are needed to better identify the mechanism of the effect of dual role relationship quality on rearrest.

Implications for Community Corrections Supervision & Future Research

As suggested by Dowden and Andrews (2004), officers are a crucial component in the supervision of offenders; the way they deliver the elements of a correctional program are just as important as the design of the program itself. Our findings support the importance of process in the supervision of offenders. This raises a question of whether effective officers are "born" or "made." Similar questions have been raised in the psychotherapy literature. Much of the research on the therapeutic alliance has focused on identifying characteristics of clinicians (e.g., warm, honest, flexible, and confident) who are effective at building a positive therapeutic alliance with their clients (see Ackerman & Hilsenroth, 2003, for a review). More recently, researchers have developed programs to train clinicians how to develop positive working relationships with clients by focusing on such skills as showing empathy, building a bond, and identifying and working with resistance (Carpenter, Escudero, & Rivett, 2008; Castonguay, 2000; Crits-Christoph et al., 2006). Such training programs could be developed to teach relevant skills to officers with focus on the likely mechanisms for officers' ability to effect behavior change in offenders as captured by the DRI-R. This training would need to move beyond what has been developed for therapists to address the reality of officers' dual roles and involuntary clients.

More broadly, this study highlights offender-officer relationship quality as an important target for change in practice and policy, particularly in this era of scarce resources. Savings can add up quickly for each offender who successfully completes community supervision rather than being reincarcerated. The Pew Center on the States recently estimated that the cost of housing a single inmate is more than 20 times as high as supervising that individual via community corrections (\$78.95 per day vs. \$3.42; Pew Center on the States, 2009). In the single parole agency we studied, where officers managed similarly large caseloads with limited resources, those who established

firm, fair, and caring relationships with offenders were more effective in saving taxpayer dollars and protecting public safety than those who did not. Beyond buying packaged treatment programs for offenders, it seems crucial to attend to *how* officers supervise their clients. Outcomes might be improved as much by improving supervision processes as by investing further resources in new programs.

References

- Ackerman, S. J., & Hilsenroth, M. J. (2003). A review of therapist characteristics and techniques positively impacting the therapeutic alliance. Clinical Psychology Review, 23, 1–33. doi:10.1016/S0272-7358(02)00146-0
- Andrews, D., & Dowden, C. (2006). Risk principle of case classification in correctional treatment: A meta-analytic investigation. *International Journal of Offender Therapy and Comparative Criminology*, 50, 88–100. doi:10.1177/0306624X05282556
- Andrews, D. A., Bonta, J., & Wormith, S. J. (2004). The Level of Service/ Case Management Inventory (LS/CMI). Toronto, Canada: Multi-Health Systems.
- Andrews, D. A. (2011). Reintroducing rehabilitation to corrections. In J. A. Dvoskin, J. L. Skeem, R. W. Novaco, & K. L. Douglas (Eds.), *Applying social science to reduce violent offending* (pp. 127–156). New York, NY: Oxford University Press.
- Arrindell, W. A., Emmelkamp, P. M. G., & van der Ende, J. (1984). Phobic dimensions: I. Reliability and generalizability across samples, gender, and nations. Advances in Behavior Research and Therapy, 6, 207–253. doi:10.1016/0146-6402(84)90001-8
- 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. doi:10.1037/11132-001
- Barbaree, H. E., Seto, M. C., Langton, C. M., & F. E. Peacock, E. J. (2001). Evaluating the predictive accuracy of six risk assessment instruments for adult sex offenders. *Criminal Justice and Behavior*, 28, 490–521. doi: 10.1177/009385480102800406
- Bonta, J., Wallace-Capretta, S., & Rooney, J. (2000). A quasi-experimental evaluation of an intensive rehabilitation supervision program. *Criminal Justice and Behavior*, 27, 312–329. doi:10.1177/0093854800027003003
- Buss, A. H., & Plomin, R. (1984). Temperament: Early developing personality traits. Hillsdale, NJ: Erlbaum.
- Carpenter, J., Escudero, V., & Rivett, M. (2008). Training family therapy students in conceptual and observation skills relating to the therapeutic alliance. An evaluation. *Journal of Family Therapy*, 30, 411–424. doi: 10.1111/j.1467-6427.2008.00442.x
- Castonguay, L. G. (2000). A common factors approach to psychotherapy training. *Journal of Psychotherapy Integration*, 10, 263–282. doi: 10.1023/A:1009496929012
- 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. doi:10.1037/0022-006X.65.4.588
- Crits-Christoph, P., Gibbons, C. M. B, Crits-Christoph, K., Narducci, J., Schamberger, M., & Gallop, R. (2006). Can therapists be trained to improve their alliances? A preliminary study of Alliance-Fostering Therapy. *Psychotherapy Research*, 16, 268–281. doi:10.1080/ 10503300500268557
- Dowden, C., & Andrews, D. (2004). Importance of staff practice in delivering effective correctional treatment: A meta-analytic review of core correctional practice. *International Journal of Offender Therapy*

- and Comparative Criminology, 48, 203-214. doi:10.1177/0306624X03257765
- Eno Louden, J., Skeem, J., Camp, J., & Christensen, E. (2008). Supervising probationers with mental disorder: How do agencies respond to violations? *Criminal Justice and Behavior*, 35, 832–847. doi:10.1177/ 0093854808319042
- Fleiss, J. L. (1981). Statistical methods for rates and proportions. (2nd ed). New York, NY: Wiley
- Girard, L., & Wormith, J. (2004). The predictive validity of the Level of Service Inventory–Ontario Revision on general and violent recidivism among various offender groups. *Criminal Justice and Behavior*, 31, 150–181. doi:10.1177/0093854803261335
- Glaze, L. E., Bonczar, T. P., & Zhang, F. (2010). Probation and parole in the United States, 2009. (BJS Special Bulletin NCJ 2231674). Washington, DC: U.S. Department of Justice. Retrieved from http:// www.bjs.gov/content/pub/pdf/ppus09.pdf
- Gunderson, J. G., Najavits, L. M., Christoph, L., Sullivan, C., & Sabo, A. N. (1997). Ontogeny of the therapeutic alliance in borderline patients. *Psychotherapy Research*, 7, 301–309. doi:10.1080/ 10503309712331332033
- Hall, J. R., Benning, S. D., & Patrick, C. J. (2004). Criterion-related validity of the three-factor model of psychopathy: Personality, behavior, and adaptive functioning. Assessment, 11, 4–16. doi:10.1177/ 1073191103261466
- Hannah-Moffat, K., Maurutto, P., & Turnbull, S. (2009). Negotiated risk: Actuarial illusions and discretion in probation. *Canadian Journal of Law and Society*, 24, 391–409. doi:10.1353/jls.0.0092
- Henry, W. P., Strupp, H. H., Schacht, T. E., & Gaston, L. (1994). Psychodynamic approaches. In A. E. Bergin & S. L. Garfield (Eds.), Handbook of psychotherapy and behavior change (4th ed., pp. 467–508). New York, NY: Wiley.
- Horvath, A., & Symonds, D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology*, 38, 139–149. doi:10.1037/0022-0167.38.2.139
- Kennealy, P. J., Hicks, B. M., & Patrick, C. J. (2007). Validity of factors of the Psychopathy Checklist-Revised in female prisoners: Discriminant relations with antisocial behavior, substance abuse and personality. *Assessment*, 14, 323–340. doi:10.1177/1073191107305882
- Klockars, C. (1972). A theory of probation supervision. *Journal of Criminal Law, Criminology, and Police Science*, 63, 550–557. Retrieved from http://www.jstor.org/pss/1141809
- Kraemer, H. C., Kazdin, A. E., Offord, D. R., Kessler, R. C., Jensen, P. S., & Kupfer, D. J. (1997). Coming to terms with the terms of risk. *Archives of General Psychiatry*, 54, 337–343. Retrieved from http://arch-psyc.ama-assn.org/cgi/content/abstract/54/4/337
- 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. doi:10.1037/0022-006X.64.3.532
- Landenberger, N., & Lipsey, M. (2005). The positive effects of cognitivebehavioral programs for offenders: A meta-analysis of factors associated with effective treatment. *Journal of Experimental Criminology*, 1, 451– 476. doi:10.1007/s11292-005-3541-7
- Langan, P. A., & Levin, D. J. (2002, June). Recidivism of prisoners released in 1994. Bureau of Justice Statistics Special Report (No. NCJ 193427). Washington, DC: U.S. Department of Justice. Retrieved from http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=1134
- Lidz, C. W., Hoge, S. K., Gardner, W., Bennett, N. S., Monahan, J., Mulvey, E. P., & Roth, L. H. (1995). Perceived coercion in mental hospital admission: Pressures and process. Archives of General Psychiatry, 52, 1034–1039. Retrieved from http://archpsyc.ama-assn.org/cgi/ content/abstract/52/12/1034

- Lingiardi, V., Ludovica, F., & Baiocco, R. (2005). Therapeutic alliance evaluation in personality disorders psychotherapy. *Psychotherapy Re*search. 15, 45–53.
- Lowenkamp, C., Latessa, E., & Holsinger, A. (2006). The risk principle in action: What have we learned from 13,676 offenders and 97 correctional programs? *Crime and Delinquency*, 52, 77–93. doi:10.1177/ 0011128705281747
- Luborsky, L., Rosenthal, R., Diguer, L., Andrusyna, T. P., Berman, J. S., Levitt, J. L., . . . Krause, E. D. (2002). The dodo bird verdict is alive and well—Mostly. *Clinical Psychology: Science and Practice*, 9, 2–12. doi:10.1093/clipsy.9.1.2
- Manchak, S. M., Skeem, J. L., & Douglas, K. S. (2008). Utility of the Revised Level of Service Inventory (LSI-R) in predicting recidivism after long-term incarceration. *Law and Human Behavior*, 32, 477–488. doi:10.1007/s10979-007-9118-4
- Paparozzi, M. A., & Gendreau, P. (2005). An intensive supervision program that worked: Service delivery, professional orientation, and organizational supportiveness. *Prison Journal*, 85, 445–466. doi:10.1177/0032885505281529
- Patrick, C. J., Curtin, J. J., & Tellegen, A. (2002). Development and validation of a brief form of the Multidimensional Personality Questionnaire. *Psychological Assessment*, 14, 150–163. doi:10.1037/1040-3590.14.2.150
- Pew Center on the States. (2009). *One in 31: The long reach of American corrections*. Washington, DC: The Pew Charitable Trusts. Retrieved from http://www.pewcenteronthestates.org/uploadedFiles/PSPP_1in31_report_FINAL_WEB_3-26-09.pdf
- Puschner, B., Bauer, S., Horowitz, L. M., & Kordy, H. (2005). The relationship between interpersonal problems and the helping alliance. *Journal of Clinical Psychology*, 61, 415–429. doi:10.1002/jclp.20050
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54, 890–902. doi:10.1037/0022-3514.54.5.890
- Rice, M. E., & Harris, G. T. (2005). Comparing effect sizes in follow-up studies: ROC area, Cohen's d, and r. Law and Human Behavior, 29, 615–620. doi:10.1007/s10979-005-6832
- Ross, E., Polaschek, D., & Ward, T. (2008). The therapeutic alliance: A theoretical revision for offender rehabilitation. Aggression and Violent Behavior, 13, 462–480. doi:10.1016/j.avb.2008.07.003
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, 86, 420–428. doi: 10.1037/0033-2909.86.2.420
- Skeem, J., Eno Louden, J., Polaschek, D., & Camp, J. (2007). Assessing relationship quality in mandated community treatment: Blending care with control. *Psychological Assessment*, 19, 397–410. doi:10.1037/ 1040-3590.19.4.397
- Smith, P., & Gendreau, P. (2007). The relationship between program participation, institutional misconduct, and recidivism among federally sentenced adult male offenders. Forum on Corrections Research, 19. Retrieved from http://www.csc-scc.gc.ca/text/pblct/forum/Vol19No1/v19n1b-eng.shtml
- Steadman, H., Silver, E., Monahan, J., Appelbaum, P., Robbins, P., Mulvey, E., ... Banks, S. (2000). A classification tree approach to the development of actuarial violence risk assessment tools. *Law and Human Behavior*, 24, 83–100. doi:10.1023/A:1005478820425
- Swets, J. A., (1988). Measuring the accuracy of diagnostic systems. Science, 240, 1285–1293. doi:10.1126/science.3287615
- Trotter, C. (1999). Working with involuntary clients: A guide to practice. London, UK: Sage.
- Tyler, T., & Rankin, L. E. (2011). Public attitudes and punitive policies. In J. A. Dvoskin, J. L. Skeem, R. W. Novaco, & K. L. Douglas (Eds.), Applying social science to reduce violent offending (pp. 103–126). New York, NY: Oxford University Press.

- Tyler, T. R., & Huo, Y. J. (2002). *Trust in the law: Encouraging public cooperation with the police and courts*. New York, NY: Russell Sage Foundation.
- Walters, G. D. (2003). Predicting institutional adjustment and recidivism with the psychopathy checklist factor scores: A meta-analysis. *Law and Human Behavior*, 25, 541–558. doi:10.1023/A:1025490207678
- 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. doi:10.1037/0022-006X.56.3.448

Received April 7, 2011
Revision received October 14, 2011
Accepted November 9, 2011