Blending care and control in delivery of the Practice Guide for Intervention (PGI)

An assessment of the quality of dual role relationships between offenders and supervising officers in the community

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Aims

The aim of this study was to explore dynamics of the dual role relationship between offenders and Community Corrections officers, in the context of implementing the new Practice Guide for Intervention (PGI) model of community supervision. A secondary aim was to examine the extent to which differences in officer characteristics or performance contribute to offender ratings of the dual role relationship.

Methods

Community Corrections officers (n = 30) were recruited to administer the Dual-Role Relationships Inventory – Revised (DRI-R) to offenders under their supervision (n = 103). In addition to diagnostic and descriptive analyses, this study employed a novel multilevel modelling design to estimate variance in DRI-R scores that may be attributed to differences at the offender and at the officer level.

Results

Offenders gave almost uniformly positive ratings of their supervising officer on the DRI-R, with evidence of ceiling effects for each of the factorial and Total scores on the measure. Multilevel models indicated that non-significant levels of variance could be attributed to differences across officers or particular officer-level predictor variables. At the offender level there was a marginal association between number of sessions attended with the current supervising officer and ratings on the Toughness subscale.

Conclusion

The results of this study suggest that Community Corrections officers may be consistently delivering the PGI and other supervision content in a manner that promotes quality dual role relationships with offenders. However, it is likely that the validity of these outcomes were influenced by offender response biases that were potentially exacerbated by methodological constraints imposed on the study. Future research and evaluation on relationships between community-based offenders and supervising officers may benefit from development of robust procedures for the selection and assessment of offenders.

INTRODUCTION

Each year more than 25,000 offenders are supervised in the community in New South Wales (NSW). This sector of service delivery thus has potential to be a substantial conduit for reducing the population-level rate of recidivism (NSW Department of Justice, 2018; Cullen, Jonson, & Mears, 2017). In recognition of this potential the Community Corrections branch of Corrective Services NSW has implemented the Practice Guide for Intervention (PGI) from 2016, which provides a framework of modules and exercises that can be applied by supervising officers to enhance the behaviour change content of sessions with offenders. The PGI was designed to promote adherence to principles of the Risk Need Responsivity (RNR) model of offender intervention (e.g. Andrews & Bonta, 2010) and improve consistency of practice across supervision sessions, officers and locations. Introduction of the PGI has provided a supportive foundation and allowed considerable scope for the delivery of targeted and individualised change interventions to offenders as part of their community supervision (NSW Department of Justice, 2018).

Policy and procedure reforms themselves can only provide a framework for action in guiding supervision practice and decisions, however. In practice, the effectiveness of community supervision sessions may be largely dependent on the performance of correctional officers in working with offenders (Kennealy, Skeem, Manchak, & Louden, 2012). Indeed, as Dowden and Andrews (2004) argued, officers are a crucial, integral component in the supervision of offenders, in that the way they deliver elements of a correctional program are as important as the design of the program itself. More assertively, Skeem and Manchak (2008) pointed out that "officers' orientation toward supervision and relationships with probationers influences outcomes more

strongly than the specific program they ostensibly apply" (p.241).

In one-on-one supervision sessions, community corrections officers are presented with invaluable opportunities to instil change in offenders by addressing their antisocial attitudes and behaviour (Gleicher, Manchak, & Cullen, 2013). In order to "reap the full benefits of such interactions, officers need to use effective tools" (Gleicher et al., 2013, p.24), part of which involves using and adhering to the principles of the RNR model and Core Correctional Practices (CCP) (Andrews & Kiessling, 1980; Dowden & Andrews, 2004). While CCP have highlighted the effective use of authority; provision of anti-criminal modelling and reinforcement of prosocial behaviour; problem solving; and effective use of community resources, an overarching and arguably most important practice involves the ability and skills to develop high quality relationships with the supervised offender (Dowden & Andrews, 2004).

The importance of building and maintaining a positive relationship between service provider and client is well documented. Considered as a "quintessential integrative variable" that cuts across different modes of treatment and models of service delivery (Wolfe & Goldfried, 1988, p.449), the impacts of high quality therapist-client relationships are not confined to outcomes of psychotherapy such as patient satisfaction and treatment adherence (Krupnick et al., 1996; Ross, Polaschek, & Ward, 2008), but also that of psychiatric treatment (Alverson, Alverson, & Drake, 2000; Howgego, Yellowlees, Owen, Meldrum, & Dark, 2003; McCabe & Priebe, 2004), substance abuse treatment (Connors, DiClemente, Carroll, Longabaugh, & Donovan, 1997; Miller & Rollnick, 2012), medical care (Cooper-Patrick et al., 1999; Hall, Horgan, Stein, & Roter, 2002), and change-oriented interventions for offenders (for reviews see, Gleicher et al., 2013; Horvath, Re, & Symonds, 1991; Kennealy et al., 2012; Manchak, Skeem, Kennealy, & Louden, 2014; Polaschek & Ross, 2010; Skeem, 2007; Skeem & Manchak,

2008). Meta-analytic reviews have found the therapist-client relationship to be the single highest contributor of variance in therapeutic outcomes (e.g. Horvath et al., 1991).

In traditional psychotherapeutic contexts the therapist-client relationship has been conceptualised in terms of the working alliance, which includes the extent of bond or attachment between therapist and client and their agreement on the goals and tasks of treatment (e.g. Bordin, 1979; Horvath et al., 1991; Taft & Murphy, 2007). It has been observed, however, that therapist-client relationships in correctional settings often differ to those of traditional psychotherapy on various dimensions (Gleicher et al., 2013; Skeem et al., 2007).

In traditional therapeutic settings, therapists and clients enter the relationships on a voluntary basis. Relationships thus tend to be "geared primarily towards improving symptoms and functioning" (Gleicher et al., 2013, p.23). In contrast, in criminal justice settings, offenders are less likely to engage in treatment by choice and thus less likely to collaborate with therapeutic agents of change.

In addition, therapeutic agents in contexts such as community supervision often face dual, equally important and interacting obligations of both caring and control. That is, they serve a balanced dual role of both "counsellor and cop" (Kennealy et al., 2012, p.497). A related challenge involves the officer developing and fostering a firm but fair quality relationship with the offender while simultaneously working towards changing their behaviour in a prosocial direction (a caring role) and monitoring compliance to legal requirements (a control role) (Skeem et al., 2007; Trotter, 2015). In other words, dual role relationships uniquely possess elements of both therapeutic alliance and procedural justice to effect attitudinal and behavioural change. This sets relationships in a mandated treatment context *distinctive* from, and more *complex* than, that of conventional therapeutic settings where the therapist assumes a single treatment-oriented role (Kennealy et al., 2012).

Despite the recognised importance of the dual role relationship in promoting behavioural change among offenders (e.g., Kennealy et al., 2012; Manchak, Skeem et al., 2014), few instruments have been developed and validated to measure this unique construct. A large number of studies have historically imported measures developed for assessing therapeutic alliance in conventional therapeutic settings to examine quality of relationships with offenders (Skeem et al., 2007). Given the poor conceptual fit between therapeutic alliance and the dual role relationship, conventional measures of the therapeutic alliance do not appear to adequately capture the "social control" or compliance monitoring aspect inherent to relationships between offenders and supervising officers (Skeem et al., 2007, p.398). Also, measures of therapeutic alliance lack an incorporation of the care/control balance that officers must achieve in order to establish effective and high quality relationships with their supervisees (Manchak, Kennealy, & Skeem, 2014).

In recent years the Dual-Role Relationships Inventory – Revised (DRI-R; Skeem et al., 2007) has been established as a robust psychometric measure of the unique relationship between correctional officers and offenders. Originally developed on samples of probationers with mental illness and their supervising officers (Skeem et al., 2007), the DRI-R was constructed on the basis of both theoretical literature and the real-world experiences of correctional practitioners and the offenders they supervise. The measure was designed to assess two hypothesised domains of relationship quality in mandated treatment. The first domain includes bond (acceptance, trust, and support), partnership (e.g., collaborative work between the offender and officer) and confident commitment. The second domain involves relational fairness, respect and flexible consistency. Refinement of the DRI-R derived three intercorrelated factors including Caring / Fairness,

Trust, and Toughness. Studies using the DRI-R have indicated that high quality relationships are characterised by caring, fairness, trust and an authoritative interpersonal style, whereas high levels of toughness or an authoritarian approach may be considered detrimental (Skeem et al., 2007; Manchak, Kennealy et al., 2014).

Validation research has indicated that features of the dual role relationship as assessed by the DRI-R have important associations with dynamics of therapeutic sessions and offender outcomes. For example, Skeem and colleagues (2007) found that factors measured by the DRI-R showed theoretically meaningful relationships with observed in-session behaviour (e.g. resistance and willingness to change) in addition to treatment motivation and compliance. Scores on the DRI-R have also been found to predict revocation of probation and new arrests among offenders (Manchak, Skeem et al., 2014; Skeem et al., 2007). A recent study by Kennealy and colleagues (2014) found that among 100 parolees, quality of the dual role relationship was associated with time to reoffending after controlling for pre-existing offender characteristics that may contribute to risk. Consistent with the unique qualities of the dual role relationship, DRI-R scores have been found to have superior predictive validity for offender outcomes when compared to traditional measures of the therapeutic relationship such as the Working Alliance Inventory (e.g. Gutierrez, 2011; Skeem et al., 2007).

There are indications that DRI-R scores have varying although significant patterns of predictive validity when completed by officers or offenders (e.g. Skeem et al., 2007) or by a third party observing in-session behaviour (Gutierrez, 2011). In their original research on the DRI-R, Skeem et al. (2007) concluded that offenders give meaningful ratings of relationships with their supervising officers that tend not to be substantially influenced by individual cognitive biases. The study by Kennealy and colleagues (2012) also found that quality of the dual role relationship predicted

rearrest over and above offenders' individual characteristics and actuarial risk of recidivism, leading the authors to conclude that "even for high risk offenders with negative traits, strong officer-offender relationships can be established and reduce the risk of rearrest" (p.501). These findings suggest that responses on the DRI-R are not fully mediated by the individual perceptions or characteristics of offenders, and may alternatively reflect dynamic features of the interpersonal relationship between officers and offenders. As such there is the potential that DRI-R scores are a function of the capacity or skill with which officers interact with offenders and contribute to the development and maintenance of relationships with offenders under their supervision. While the ability of therapeutic agents to develop quality relationships with their clients is central to CCP (e.g. Dowden & Andrews, 2004) and therapeutic principles more generally, much of the literature on the working alliance has nonetheless studied variance as a function of clients' pre-existing differences (e.g. Puschner, Bauer, Horowitz, & Kordy, 2005; Ross, Polaschek, & Ward, 2008).

The aim of the current study is to explore community-based offenders' ratings of the dual role relationship with their supervising officers, as assessed by the DRI-R, in the context of the statewide implementation of the PGI model. Assessing the extent to which Community Corrections officers can maintain positive dual role relationships with offenders, and the dynamics of such relationships, can provide important insights about implementation and uptake of the new PGI model. Other models for enhancing the rehabilitative content of supervisory sessions with offenders in the community, such as the Strategic Training Initiative in Community Supervision (STICS), have emphasised high quality relationships as the foundational component of change (e.g. Bonta et al., 2011; Bonta, Bourgon, Rugge, Gress, & Gutierrez, 2013; Gleicher et al., 2013). There have also been suggestions that implementation of a more therapeutic model to the detriment of

countervailing compliance-oriented functions may have adverse effects on the quality of the supervisory relationship in the event that it promotes permissiveness (Andrews & Kiessling, 1980; Skeem et al., 2007).

A secondary aim of this study is to examine whether variance in offenders' perceptions of the dual role relationship can be meaningfully related to the contribution of their supervising officers. Development of a strong relationship with offenders is a key goal of the PGI and other behaviour change models that adhere to RNR and CCP principles, and therefore may be considered an indicator of the officer's performance or success in implementing such a model. However, there is little evidence to suggest that offenders' ratings of the dual role relationship differ systematically as a function of the performance of their supervising officer. As noted by Kennealy et al. (2012), there is a need for further research to understand the impact of officers' characteristics on the dual role relationship and ultimately the goal of reducing recidivism. To address this, the current study employed a novel multilevel model design to isolate variance in DRI-R scores that may be attributed to differences at the officer level and to differences at the offender level. Within this design we also aimed to examine the associations between DRI-R scores and a small number of officer and offender variables that may be predicted to contribute to the dual role relationship, including number of sessions attended and degree of officer experience and training in the new PGI model.

METHODS

Sample

The sample for this study comprised 103 offenders (78 male; 25 female) who were supervised by Community Corrections between November 2017 and April 2018. The average (mean) age of offenders was 35.5 years (SD = 10.74). Around half of the offenders (51.5%) were in relatively early stages of supervision and had undergone less than 10 sessions with their current supervising officer. The majority of offenders in the sample (62.1%) had previously been supervised by Community Corrections prior to the index episode.

The sample of offenders was accessed by asking a total of 41 Community Corrections officers located at offices throughout NSW to administer study materials to as many as 5 offenders under their supervision. Thirty officers contributed to data collection for the sample of offenders, resulting in a response rate of 50.2% relative to the potential total for the study design. This group of 30 officers thus comprised the superordinate sample for analyses at the officer level. The mean age of officers in this group was 44 years (SD = 12.94). The majority (70%) were currently employed as Community Corrections Officers whereas the remainder (30%) were employed as Senior Community Corrections Officers. On average officers had been employed with Community Corrections for 5.7 years (SD = 5.77).

Materials and procedure

Measures

Dual-Role Relationships Inventory – Revised (DRI-R). The DRI-R (Skeem et al., 2007) is a 30-item self-report scale that indexes aspects of the dual role relationship between correctional officers in the community and offenders under their supervision. It was designed to assess factors associated with the quality of the unique dual role relationship between community officers and offenders, including Trust (5 items), Caring / Fairness (20 items) and Toughness (5 items). The 30 items can also be summed into a higher order Total score of the overall quality of the relationship. Because the Toughness factor assesses features of the relationship that are inversely associated with quality, items on this scale were reverse coded prior to calculation of the Total score or other analyses. Each item is scored on 7 point Likert-type scales to indicate the frequency with which the

supervising officer displays the target attribute (1 = not at all; 7 = very often).

The DRI-R has been the subject of previous validation research and has been found to have acceptable validity and reliability (Skeem et al., 2007; Kennealy et al., 2012; Manchak, Skeem et al., 2014). In the current study the internal consistency of items was high for each of the Trust (α = .89), Caring / Fairness (α = .96), and Toughness (α = .84) factors, in addition to the Total score (α = .95).

Procedure

Community Corrections officers were asked to recruit offenders under their supervision for the study as part of their participation in semi-structured face to face interviews conducted between October and December 2017 (see Thaler, Chong, Raudino, & Howard, 2019). Interviews were conducted as part of a series of studies evaluating implementation of the PGI. Officers discussed a number of factors associated with their work, including implementation of the PGI as well as their perceptions of the core aims and functions of supervision in the community. For the purposes of the current study, officers were asked to rate on a scale of 1 to 5 (1 = not important at all; 5 = extremely important) the perceived importance of rehabilitation and of compliance functions to supervision of offenders in the community. They were also asked to provide administrative data relating to their age; position; the amount of time they had been employed at Community Corrections as well as the amount of time spent in their current supervisory position; and whether or not they had received training in the PGI as part of their initial induction with Community Corrections (0 = no; 1 = yes).

Following the conclusion of interviews, eligible Community Corrections officers who currently had an active caseload of supervised offenders in the community (n = 41) were each given 5 brief questionnaires to administer to offenders under their supervision. The questionnaire included the DRI-R in addition to items about the offender's age, number of sessions with their current supervising officer (0 = less than 10 sessions; 1 = 10 sessions or more), and previous experience of supervision by Community Corrections (0 = no; 1 = yes). They were also asked to identify their supervising officer by name to allow for matching between offender level and officer level data.

Officers were instructed to sequentially ask each of the offenders under their caseload for their consent to complete the survey at the time of their next face to face session, until all of the allocated questionnaires were exhausted. Offenders were given the option to voluntarily consent to the study and were informed that this would have no bearing on their supervision. Upon giving consent, offenders were given privacy to complete the survey while at the Community Corrections office. They were then instructed to seal the completed questionnaire in an unmarked envelope and return it to the officer. Offenders were assured in writing that their sealed responses would not be opened or otherwise seen by their supervising officer.

Data analysis

A number of responses on the DRI-R had missing data for one or more of the items. Considering evidence for high internal consistency across items for factors of the DRI-R in this sample, we opted to calculate scale scores from the mean of relevant items that had been validly responded to. We adopted a validity criterion whereby means were only calculated for factors which had 80% or higher proportion of valid items. All responses met this criterion and each of the DRI-R factorial and Total scores were consequently calculated for the entirety of the sample.

Other than the DRI-R, valid responding on other measures was close to 100% and only a small number of offenders or officers had missing data (for example, 2 offenders did not report number of sessions with their supervising officer and one did not report prior experience of supervision). Given

the low incidence of missing data we imputed replacement values using the linear interpolation method.

Initial data diagnostics indicated that each of the factorial and Total scores on the DRI-R were not normally distributed and characterised in particular by substantial negative skew (see Figure 1). To address this we applied nonparametric statistics and analyses when reporting on descriptive results and measures of association for the DRI-R scores. For use in inferential analyses (multilevel and multivariable regression models) we applied an exponential transformation to original DRI-R factorial and Total scores, which was found to effectively address assumptions of normality for these analyses.

The primary inferential analytical approach used in this study involved multilevel modelling of predictors of DRI-R scores at the offender (Level 1) and the officer (Level 2) levels. Multilevel model regression analysis is a robust method for estimating variance in an outcome which is influenced by factors that have a hierarchy of multiple levels of organisation, and have some degree of dependence or nesting of observations at the lower levels. In the case of the current study, multilevel modelling can be used to estimate variance in DRI-R scores associated with differences at the offender and at the officer levels, while accounting for the likelihood that some officers in the sample may supervise groups of offenders who have different characteristics to those supervised by other officers.

A series of separate multilevel model analyses for each of the DRI-R factorial and Total scores were conducted using HLM7 (Raudenbush, Bryk, Cheong, Congdon, & Du Toit, 2011). In basic form multilevel models can be conceived as serving three functions over a series of three steps: 1) a null model is conducted to estimate the proportion of total variance in outcomes that may be attributed to differences between cases at Level 1 and at Level 2; 2) identified variables of interest at

Level 1 are tested for associations with outcome after adjusting for differences at Level 2; 3) identified variables of interest at Level 2 are tested for associations with outcome after adjusting for differences at Level 1 (e.g. Raudenbush & Bryk, 2002). Given the small samples at both Level 1 and Level 2 we identified a parsimonious group of predictor variables for use in the models. Correlations between the final identified group of predictors in each of the multilevel models were not indicative of multicollinearity (all r's < .24).

Variable	% / Median (range)
Level 1 (offenders)	
Age	35 (18-74)
Gender	
Male	75.7%
Female	24.3%
Number sessions supervision	
Less than 10	51.5%
10 or more	48.5%
Previous experience supervision	
No	37.9%
Yes	62.1%
Level 2 (officers)	
Years employed Community Corrections	3.5 (1-25)
Years supervising officer	2 (1-25)
Trained in PGI at induction	
No	46.7%
Yes	53.3%
Rated importance rehabilitative function	4 (3-5)
Rated importance compliance function	5 (3-5)
DRI-R outcomes	
Trust	35 (22-35)
Caring / Fairness	139 (89-140)
Toughness	35 (5-35)
Total	207 (140-210)

Table 1. Descriptive statistics for Level 1 (offender) and Level 2 (officer) variables in addition to the outcome variables of DRI-R factorial and Total scores.

RESULTS

Offender ratings on the DRI-R

Descriptive statistics for the DRI-R factorial and Total scores are given in Table 1. On average offenders returned highly positive ratings of the dual role relationship with their current supervising officer. The average (median) summed scores across the sample were 35 (out of a possible scale range of 5-35) for the Trust factor; 139 (of a possible range of 20-140) for the Caring / Fairness factor; 35 (of a possible range of 5-35) for the Toughness factor after reverse coding; and 207 (of a possible range of 30-210) for the Total score.

Figure 1 also shows the distribution of item-level means for each of the factors. It can be seen that ceiling effects were common and offenders often rated their supervising officers at the highest level possible. More than half of offenders (51.5%; n = 53) gave their supervising officers the highest possible rating on the Trust factor, whereas 43 offenders (41.7%) and 82 offenders (79.6%) gave ceiling ratings for the Caring / Fairness and the reverse coded Toughness factors respectively.

More than a third of offenders (35.9%; n = 37) gave their supervising officers the highest possible score on the aggregate total of 30 items.

There were indications that some offenders may have provided response patterns that were not sensitive to reverse scaling of items. The Toughness factor (in which all items were reverse coded) comprised the only scale in which an offender rated their supervising officer at floor level, or consistently provided the most negative possible ratings of their officer.

Consistent with the item level means, a series of Spearman rank-order correlations indicated that offenders often showed limited variability in their response patterns across the factors of the DRI-R. Responses on the Trust factor and the Caring / Fairness factor were highly correlated with large effect size (r_s = .80; p < .0005). In contrast, the Trust factor had a small, non-significant positive correlation with the Toughness factor after reverse coding (r_s = .18; p = .07). The Caring / Fairness factor was found to have a significant albeit small positive correlation with the reverse coded Toughness factor (r_s = .33; p = .001).
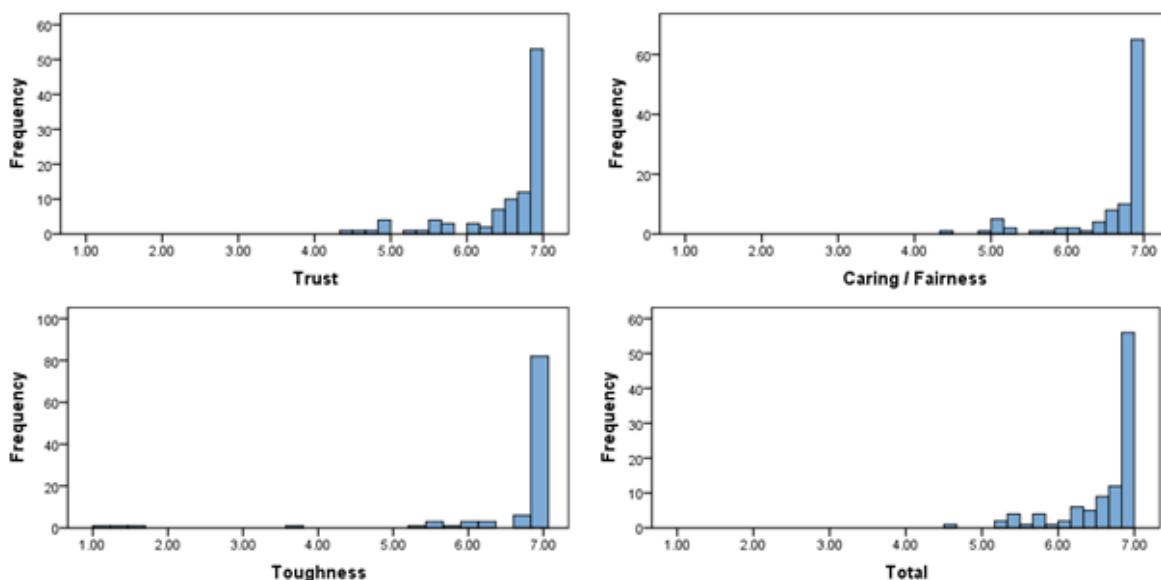

Figure 1. Distribution of item level means for offender responses on the a) Trust, b) Caring / Fairness, and c) Toughness factors, and d) the Total score, of the DRI-R.

Multilevel modelling of DRI-R ratings

A series of multilevel models were conducted with each of the DRI-R factorial and Total scores entered as the outcome variable. For each of these models, entered Level 1 predictors included the offender's reported age, the number of sessions they had attended with their current supervising officer estimated on a binomial scale, and whether the offender had prior experience of supervision with Community Corrections.

Level 2 predictors included officers' ratings of the perceived importance of rehabilitation and compliance aims in supervision of offenders in the community. Also included were their reports of whether they had completed training in the PGI as part of their initial induction into Community Corrections. It is noted that while this training variable is relevant to the officer's exposure and adjustment to the current model of supervision used by Community Corrections, it was also highly correlated with their reported years' experience as a supervising officer ($r_s = -.90$; $p < .0005$) and years' time with Community Corrections overall ($r_s = -.77$; $p < .0005$), which precluded simultaneous entry of more than one of these variables into multivariable models. As a result the PGI training variable is expected to share substantial variance with supervision experience more generally.

A critical first step of multilevel modelling is to conduct an unconditional (null) model, which allocates the overall variance in outcome to differences across observations at Level 1 (in this case offenders) and at Level 2 (in this case officers) in the absence of any specified predictors. For the purposes of this study, the null model can test whether there is significant variance in DRI-R scores between officers after controlling for within-group differences in offenders under their supervision. A significant variance component at Level 2 for the null model justifies further use of the multilevel model as an appropriate analytical approach to the data.

Null models for each of the Trust ($\chi(29) = 39.23$; $p = .10$), Caring / Fairness ($\chi(29) = 37.21$; $p = .14$), and Toughness ($\chi(29) = 30.73$; $p = .37$) factors of the DRI-R, in addition to the DRI-R Total score ($\chi(29) = 29.52$; $p = .44$), showed non-significant effects of Level 2 on the intercept of the outcome variable. That is, after controlling for other variables in the model there was no significant residual variance in DRI-R factorial or Total scores between groups. Intraclass correlation coefficients (ICC) for each of the models for the Trust, Caring / Fairness, Toughness, and Total scores indicated that differences between officers accounted for 8.8%, 6.6%, 2.5% and .2% respectively in total variance in DRI-R scores.

The outcomes of the null models indicated that differences across the group of officers that offenders were supervised by did not have a relationship with their responses on the DRI-R. By extension, it can be inferred from the results that sources of variance at the officer level that were intended predictors in the multilevel models, including officer experience and training and their perceived importance of rehabilitation or compliance functions of community supervision, had non-significant associations with DRI-R scores after adjusting for differences at the offender level.

Offender level predictors of DRI-R ratings

The results of multilevel modelling indicated that a non-significant proportion of variance in each of the DRI-R scores was accounted for by differences at the officer level, which suggests that a hierarchical model approach is not required or suitable for the data. To address this we conducted a series of generalised linear models to examine predictors of DRI-R responses at the offender level only. Separate models were conducted for each of the DRI-R factorial and Total scores after exponential transformation, with offender age, prior experience of supervision in the community, and number of sessions with the current officer simultaneously entered as predictor variables. Results of the models are shown in Table 2.

Variable	Trust		Caring / Fairness		Toughness		Total	
	B	[95% CI]	B	[95% CI]	B	[95% CI]	B	[95% CI]
Age	4.95	[-1.01 - 10.91]	2.24	[-3.23 – 7.69]	-3.22	[-8.57 – 2.12]	19.55	[-97.96 – 137.06]
Prior supervision	5.62	[-129.41- 140.69]	45.39	[-78.54 – 169.34]	4.85	[-116.33 – 126.04]	23.03	[-99.13 – 145.30]
10+ sessions	-3.05	[-132.97 – 126.86]	-.34	[-119.55 – 118.87]	105.86~	[-10.71 – 222.43]	.38	[-5.00 – 5.77]

Table 2. Model coefficients (B) and 95% confidence intervals for offender level predictors of each of the DRI-R factorial and Total scores. Coefficients and confidence intervals reflect estimated associations with DRI-R following exponential transformation. ~ p = < .1; * p = < .05.

As can be seen from Table 2, individual predictors at the offender level tended to be poor predictors of DRI-R scores on average. Model omnibus tests indicated that inclusion of age, prior supervision and number of sessions of supervision as predictors accounted for a non-significant increase in variance relative to intercept-only models for the DRI-R Total score ($\chi(3)$ = .36; p = .95) in addition to the Trust ($\chi(3)$ = 2.71; p = .44), Caring / Fairness ($\chi(3)$ = 1.36; p = .72) and Toughness ($\chi(3)$ = 4.61; p = .20) factorial scores.

All of the coefficients for individual predictors were also non-significant with the exception of the number of sessions of supervision, which had a marginal positive association with the Toughness score (β = 105.86; p = .075). This outcome indicates that offenders who had attended 10 sessions or more with their current supervising officer gave marginally more positive ratings of Toughness (indicating a less authoritarian approach to the dual role relationship) compared to offenders who had attended less than 10 sessions with their current supervisor.

DISCUSSION

As correctional services across jurisdictions increasingly shift from a largely punitive to a more rehabilitative orientation, the number of offenders receiving supervision orders in the community has been on the increase (Labrecque, Schweitzer, & Smith, 2014). Aligned with best practice principles of behavioural interventions with offenders such as the RNR model (e.g. Andrews & Bonta, 2010) and CCP (e.g. Dowden & Andrews, 2004), an identified critical factor in outcomes of community based supervision is the quality of the dual role relationship between offenders and officers (Gleicher et al., 2013; Skeem et al., 2007). The aim of the current study was to examine offenders' perceptions of the dual role relationship with their officers as part of the implementation of the new PGI model of supervision across Community Corrections. This study also explored factors at both the officer and the offender level that may contribute to variation in the quality of the dual role relationship.

The results of this study showed that on average, offenders gave almost uniformly positive ratings of their current supervising officer on the DRI-R. Similarly high average ratings were observed across each of the Trust, Caring / Fairness and Toughness factors in addition to the Total score index of overall relationship quality. The Trust and Caring / Fairness factors were highly correlated; in contrast, these factors tended to have weak covariance with Toughness. There were indications that some offenders' ratings of the Toughness factor may have been impacted to some degree by invalid responses to reverse scaled items. It is possible that some offenders may benefit from literacy support or additional instruction in order

to improve the validity of responding on this particular subscale.

Consistent with the degree of uniformity in responses, multilevel modelling indicated that non-significant levels of variance in DRI-R scores could be attributed to differences across officers. By extension, it was inferred on the basis of the current data that selected predictors of the dual role relationship at the officer level had non-significant relationships with DRI-R outcomes, including the officer's experience in supervising offenders, exposure to the PGI model and related training, or perceived importance of rehabilitative and compliance functions of community supervision.

Offender level predictors were also found to have poor relationships with outcome in this study. There was an indication that offenders gave marginally more favourable ratings of officer Toughness when they had attended more sessions with their current supervising officer. Working relationships are a dynamic construct, and it may not be unexpected that many offenders would perceive their supervising officers as having a relatively authoritarian or compliance oriented initial approach that becomes more therapeutic and collaborative over time. In the context of implementation of the PGI, introductory modules such as discussing expectations of supervision are mandatory and may place an initial emphasis on rules or standards. Nonetheless, the results of this study indicate that early efforts to build rapport and emphasise a both authoritative and collaborative approach to sessions may be an important goal of more rehabilitative models of community supervision.

One explanation of the pattern of results derived from this study is that Community Corrections officers are showing almost uniform success in developing and maintaining dual role relationships with offenders under their supervision, in the context of delivering the PGI model. It is possible that consistency in the quality of relationships with

offenders is an outcome of the PGI model, in that it aims to standardise session delivery and the rehabilitative focus of sessions with offenders. In addition, there are indications that Community Corrections officers typically recognise the importance of both rehabilitative and compliance functions in their relationships with offenders, and such perceptions are relatively constant across differing levels of experience and exposure to the PGI model (Tran, Thaler, Chong, & Howard, 2019). Given this consistency (and thus low statistical variance) across officers it would be difficult to identify contributors to covariance in DRI-R scores in our analytical models.

An alternative explanation is that differences at the officer level have marginal impact on offenders' ratings of the dual role relationship as assessed by the DRI-R. Dual role relationships, like all relationships, are ostensibly a product of dynamics between and characteristics of two people (Skeem et al., 2007). However, it is possible that how offenders respond to items on the DRI-R are a function of their characteristics alone. An implication of this interpretation is that DRI-R scores may not be meaningfully attributed to the performance of the officer. By extension, scores on the DRI-R may have predictive validity (e.g. Gutierrez, 2011; Kennealy et al., 2012; Manchak, Skeem et al., 2014; Skeem et al., 2007) because they reflect characteristics of offenders that confer risk. One relevant example is antisocial attitudes, which would be expected to influence an offender's approach to relationships with correctional officers and progress in therapeutic interventions (e.g. Howard, Neto, & Galouzis, 2018; Larochelle, Diguer, Laverdière, & Greenman, 2011) as well as their likelihood of reoffending (e.g. Andrews & Bonta, 2010; Gendreau, Little, & Goggin, 1996; Howard & van Doorn, 2018). In contrast, there are some indications that DRI-R scores can have predictive validity for recidivism outcomes after adjusting for observed pre-existing individual differences at the offender level (Kennealy et al., 2012).

A third, and perhaps most relevant, explanation is that the patterns of responses provided by offenders in the current study were not a valid representation of the dual role relationship with officers. In particular, offenders may have been motivated to provide overly positive ratings on the DRI-R. This is consistent with the observed ceiling effects in scores, which are often indicative of demand effects, as well as the relative absence of covariance with other relevant predictor variables. Previous research suggests that the DRI-R may not be invalidated by offender response patterns under all conditions, in that Skeem and colleagues (2007) concluded that offenders did not exhibit marked halo effects or other cognitive biases. It is noted that the current study had methodological limitations associated with relatively poor uptake rates by officers in the sample. As a result of methodological constraints imposed on the study we also had limited control over how officers administered DRI-R assessments and which offenders they delivered the assessments to. It is possible that some officers may have applied offender selection or instruction processes that were not intended by the planned methodology for this study.

Some other limitations are noted. Samples at both the offender and officer levels were smaller than expected, which limited the complexity and power of analytical models used. The observed low covariance between DRI-R scores and other variables in this study also precluded additional analyses into predictive validity for outcomes such as completion of the community supervision order. In addition, methodological constraints prevented us from asking officers to independently complete DRI-R scores for offenders under their supervision. While previous research indicates that offenders and officers give differing reports that nonetheless both have predictive validity (Skeem et al., 2007), a cross-validation approach would have been beneficial to better explore contributors to ceiling effects and the potential presence of response biases among offenders.

Considering the results of this study, an important direction for future research using the DRI-R would be to establish more robust protocols for administration to offenders. This may include business as usual assessment of all offenders undergoing active supervision after a specified number of sessions, or alternatively administration on a research basis using standardised delivery methods and prior selection of offender samples. Additional instruction about reverse scaling of the Toughness factor may also be applied to improve the validity of some offenders' responses (although it is acknowledged that reverse scaling can act as a useful validity check for random responding in itself). Cross-validation through parallel completion of DRI-R assessments by officers may also be beneficial.

Development of improved methods for administering the DRI-R would provide insights into a critical construct for the outcomes of community supervision and may support indications from this study that Community Corrections officers are implementing the PGI in a way that consistently promotes quality relationships with offenders. However, on the balance of this study it is not possible to conclude that responses on the DRI-R were a valid indicator of relationship dynamics between the assessed offenders and their supervising officers, or provides meaningful information about the performance of officers in supporting the development and maintenance of the dual role relationship.

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