OFFENDERS' PERCEPTIONS OF RISK FACTORS FOR SELF AND OTHERS

Theoretical Importance and Some Empirical Data

STEPHANIE BROOKS HOLLIDAY
CHRISTOPHER KING
KIRK HEILBRUN
Drexel University

Little research has examined offenders' understanding of the factors that increase their likelihood of future criminal activity. Although social-psychological research has described many ways in which individuals have overly positive views of themselves and their performance, a more limited body of literature has demonstrated that offenders exhibit an unrealistically optimistic perception of their success upon release from incarceration. A survey designed to assess offender understanding of general risk factors and their own risk factors was administered to male offenders (N = 88) returning to the community from prison incarceration. Results suggest that these individuals have an appreciation for the factors that generally increase the risk of future offending, but do not perceive these factors as personally relevant. In addition, the concordance between offender-identified and Level of Service/Case Management Inventory–identified risk factors was limited. Implications of this lack of understanding, and ways to improve upon this knowledge, are discussed.

Keywords: risk; need; self-perception; offender; assessment

Identifying risk factors for criminal offending and using these factors to inform risk and risk/needs assessment have long been regarded as important to the understanding and rehabilitation of such conduct (Andrews, Bonta, & Wormith, 2006). A significant body of literature has focused on empirically supported risk factors, promoting risk/needs assessment that has become better supported and more nuanced.

In addition to studying risk-relevant domains, researchers have investigated the recognition and appreciation of such risk domains by various groups. For instance, Elbogen, Mercado, Scalora, and Tomkins (2002) surveyed mental health professionals in chronic, acute, and forensic settings to determine which risk factors they perceived as relevant to violence risk assessment. They found that behavioral variables were endorsed as most

relevant, although the specific variables endorsed by clinicians varied by mental health setting. Violence history was also rated as one of the most relevant variables. By contrast, other historical factors, as well as dispositional factors, were perceived as less relevant, even though many of these items were taken directly from violence risk assessment instruments. As another example, Yasuhara (2012) used a sample of undergraduate students to examine perceptions of substance abuse, mental health issues, and history of violence as risk factors for future violent behavior. Participants accurately weighed violent history and substance abuse as risk factors and did not rate individuals with mental illness as having higher violence risk than individuals without mental illness. This suggests that laypersons' perception of these risk factors is more accurate than may be expected.

Less attention, however, has been devoted to offenders' understanding of their own risk and need factors. Manchak, Skeem, Adel, Callow, and Nguyen (2012) examined the accuracy of individuals hospitalized in mental health facilities in appraising their own risk of violence; they reported that self-predictions modestly enhanced predictive accuracy. In addition, a study examining offenders' perceptions of their postrelease recidivism risk suggested that these individuals might hold unrealistically optimistic views (Dhami, Mandel, Loewenstein, & Ayton, 2006). The investigators noted that their participants may have based their predictions on a misunderstanding of the factors that contribute to risk, and suggested that these incarcerated individuals are poorly informed about risk and protective factors (but that they could profitably be provided with such information). This raises the questions of which influences offenders perceive to be general risk factors for offending, and which they believe apply to themselves?

SELF-ENHANCEMENT

Some evidence suggests that offenders have a limited understanding of the factors that contribute to their risk of reoffending. Offenders in the United States and United Kingdom, when asked to estimate their likelihood of reoffending and reincarceration, provided estimates averaging 28% and 29%, respectively—substantially lower than national recidivism figures (Dhami et al., 2006). In addition, participants rated others' likelihood of recidivism as significantly higher than their own.

This phenomenon is not unique to criminal offenders. *Self-enhancement bias* describes the tendency for individuals to engage in unrealistically positive self-evaluations (Robins & Beer, 2001) in which they "see themselves as somewhat better than others on positive attributes, and less negatively than others on undesirable traits" (Taylor, Lerner, Sherman, Sage, & McDowell, 2003, p. 166). Others have reported that individuals tend to rate themselves more positively than peer ratings and objective measures do. For instance, Robins and Beer (2001) asked participants to engage in a group decision-making task and then rate their own contributions versus those of their fellow group members. Self-evaluations were significantly more positive than peer evaluations, even though participants were able to accurately predict the magnitude of their peer evaluations. In a second study, Robins and Beer compared self-perceived performance to an objective criterion by studying longitudinal collegiate academic success. Participants were asked to judge their own academic abilities upon entering college; these judgments were compared with their GPA and SAT

scores. They again found support for self-enhancement bias, and also found that greater self-enhancement was correlated with measures of narcissism and self-serving attributions, particularly in the short term.

Individuals also tend to midjudge their own performance or abilities in other ways as well. Although some individuals have a realistic understanding of their abilities in domains such as humor, logic, and grammar, others substantially overestimate their skills (Kruger & Dunning, 1999). Individuals who performed most poorly in these domains were also most likely to overestimate their skill level in the respective domain. In addition, there is substantial evidence supporting the *above average effect* (also known as the *better-than-average effect*), such that "people compare their characteristics or behaviors against a norm or standard, which is usually the average standing of their peers on the characteristic" and rate themselves more favorably (Alicke & Govorun, 2005, p. 85). This effect has been found to be stronger when the reference point for the comparison is the average peer rather than a specific individual (Alicke & Govorun, 2005). In addition, the *self-serving attributional bias* (Duval & Silvia, 2002) describes the tendency to take credit for success, but attribute failure to external factors. Other explanations have been offered for the apparent limits on self-awareness, including the tendency for individuals to overestimate their level of control in situations, to base judgments on limited information, to ignore evidence that may counter their perceptions, and to place insufficient emphasis on contextual aspects of a situation (Dunning, 2005).

Generalizing such theoretical and empirical evidence provides additional support (and possible explanation) for the observation that offenders often engage in unrealistic appraisals of themselves and their deficits. Many of the risk factors for criminal offending (e.g., drug use, antisocial beliefs) may be considered personally controllable, rather than as static dispositions or traits. Some offenders may have received minimal formal feedback regarding such risk factors, limiting their ability to realistically evaluate their own risk factors. With an enhanced awareness of risk factors promoted through formal feedback, offenders might be more realistic and consequently better prepared to deal with obstacles (such as unemployment or lack of housing upon release) without returning to offending.

APPLICABILITY TO OFFENDING

Many correctional facilities and treatment programs utilize structured risk and risk/need assessment instruments as part of classification and/or treatment planning procedures. Information regarding individualized risk factors may be readily available in such settings and may also be easily described to offenders in the context of information regarding risk factors and risk assessment. However, it appears somewhat less likely, judging from the absence of scientific or professional literature on this topic, that correctional facilities regularly provide risk-relevant information to offenders through a formal feedback mechanism.

BENEFITS OF SHARING ASSESSMENT RESULTS

Providing evaluees with findings from psychological tests is important in many contexts (Meyer et al., 2001) and a common component of many evidence-based treatment protocols

(see, for example, Barlow, 2008). Potential benefits include increasing client well-being and treatment motivation, eliciting client concerns that might impede intervention effectiveness, and providing the opportunity to hear case conceptualizations and intervention plans (Addis & Carpenter, 2000; Curry & Hanson, 2010; Nezu, Nezu, & Cos, 2007; Smith, Wiggins, & Gorske, 2007). Research has shown that better therapy outcomes result when clients agree with a tendered case formulation and with the reasons for a particular method of treatment (Addis & Carpenter, 2000). Meta-analytic evidence suggests that client-focused assessment coupled with collaborative, personalized, and involved feedback (see, for example, therapeutic assessment; Finn, 2007) has a clinically meaningful impact on treatment process variables (Poston & Hanson, 2010; but cf. Lilienfeld, Garb, & Wood, 2011).

ASSESSMENT FEEDBACK AND JUSTICE-INVOLVED CLIENTS

More specific to the criminal justice context, discussing assessment results with offenders is a recommended component of risk-need-responsivity (RNR) for many of the same reasons. These include psychoeducational purposes (i.e., to increase the accuracy of self-perceptions) and the facilitation of informed and collaborative treatment decisions and treatment buy-in (Andrews, Bonta, & Wormith, 2011). Positive changes in these early process variables or intermediate targets of change presumably contribute to corresponding increases in treatment motivation and overall readiness (McMurran & Ward, 2010; Ward, Day, Howells, & Birgden, 2004). The inclusion of a case management section in newer Level of Service (LS) instruments (e.g., LS/Case Management Inventory [LS/CMI]; Andrews, Bonta, & Wormith, 2004) was intended to facilitate this process of translating assessment results into intervention strategies.

CONSISTENCY WITH PRINCIPLES OF EFFECTIVE INTERVENTION

Increasing the accuracy of self-perceptions through an individualized and collaborative formal feedback mechanism is also consistent with the psychosocial rehabilitation or recovery model (Anthony, 1993; Barton, 1999; Cnaan, Blankertz, Messinger, & Gardner, 1988; New Freedom Commission on Mental Health, 2003). As the "dominant mental health treatment model that has emerged over the past decade" for persons with serious mental illness, the psychosocial rehabilitation model is an encompassing and recovery-oriented approach to the management, treatment, and recovery of such individuals (Monahan & Steadman, 2012, p. 251).

The psychosocial rehabilitation model is consistent with RNR-driven interventions as well as with the ethical and humanistic principles included in the RNR model (Andrews & Bonta, 2010; Andrews et al., 2011). Improving offenders' reoffense risk by addressing identified risk factors and strengthening protective factors can be guided by the common principles of psychosocial rehabilitation, including (a) involving consumers in decisions regarding their treatment and mental health care, (b) helping individuals to be active directors of their recovery, (c) facilitating self-direction and empowerment, and (d) fostering respect and responsibility (Andrews et al., 2011). This perspective was supported by a recent study by Elbogen et al. (2012), which described the applicability of the recovery model to violence risk assessment and referenced authors who "advocate client participation in the process of violence risk management as a means to improve outcomes" (p. e767).

The principle of rehabilitative nonlinearity—anticipating relapses as well as progress—may also be applied to offenders who do not suffer from a mental illness. Doing so reflects the recognition that many offenders have multiple deficits in important life skills, adverse experiences during childhood and adolescence, and limited assurance of basic living necessities such as housing and employment. Rehabilitation will be challenging, setbacks frequent, and failures not uncommon for such individuals (Dvoskin, Skeem, Novaco, & Douglas, 2012).

TREATMENT MOTIVATION AND READINESS

The potential importance of motivation and other readiness factors for offender interventions (see, for example, Howells & Day, 2003; McMurran & Ward, 2004; Ward et al., 2004) has been recognized for some time (Andrews et al., 2011; Serin, 1998; Serin & Kennedy, 1997), and has received renewed attention recently. Ward et al. (2004) proposed a comprehensive model of offender readiness for treatment (the multifactor offender readiness model [MORM]) in which motivation is one of several components. In the RNR model, motivation and denial/minimization are considered under the specific responsivity rubric (Andrews et al., 2011). Other readiness factors posited by Ward et al. are variously classified in RNR as dynamic risk factors, specific responsivity factors, noncriminogenic needs, and strength areas (see Andrews et al., 2004).

Poor treatment motivation—along with other responsivity or readiness factors—has been associated with an increase in treatment noncompletion (Andrews & Bonta, 2010; Olver, Stockdale, & Wormith, 2011). High noncompletion rates, especially among community-based offenders, diminish the risk reduction impact and cost-effectiveness of otherwise good interventions (McMurran & Ward, 2010).

For instance, in their systematic review of the offender attrition literature (excluding substance abuse treatment studies), Olver et al. (2011) derived aggregate attrition base rates, examined predictors of attrition, and examined the relationship between attrition and recidivism. They found substantial treatment attrition; a total of 27% of offenders who began treatment failed to complete it. The aggregate base rate increased to 36% when offenders who dropped out prior to attending the first treatment session were included. In addition, Olver et al. examined the relationship between 72 different predictor variables and treatment attrition. Treatment responsivity indicators—such as negative treatment attitude, treatment engagement/change, and motivation—were found to be the strongest predictors of treatment attrition, followed by general criminal variables (e.g., psychopathy, history of institutional offenses). These findings support the notion that readiness for treatment includes more than whether an offender presents as motivated for treatment (Ward et al., 2004). Importantly, Olver et al. reported a significant association between treatment attrition and risk of recidivism. Across all programs, offenders who failed to complete treatment showed a 10% higher rate of violent recidivism, 20% higher rate of any recidivism, and 23% higher rate of nonviolent recidivism. Significant associations between attrition and increases in recidivism were likewise found across treatment settings and programs targeting specific offender types. In addition, a meta-analysis (McMurran & Thedosi, 2007) revealed that offenders who completed treatment recidivated at a lower rate than offenders of comparable risk who did not, and that treatment noncompleters recidivated at a higher rate than offenders who never entered treatment.

Assessing the congruence between the results of a structured assessment and a client's self-perceived risk, risk factors, and strengths may also inform treatment planning. Relative concordance may suggest that a client is likely to agree (at least initially) with the administration of RNR-type interventions. Less concordance, however, may suggest treatment readiness deficits or other responsivity issues (e.g., the client is unaware of his risk factors, or is engaged in denial or minimization). In this instance, it may be worthwhile to include pretreatment interventions, such as motivational interviewing or problem recognition education, as part of the process to address such barriers (see Anstiss, Polaschek, & Wilson, 2011; Ginsburg, Mann, Rotgers, & Weekes, 2002; McMurran, 2009). Of course, low concordance could also reflect an erroneous case conceptualization, signaling the need to reassess findings and adjust the appraisal of the client's risk-relevant circumstances. Adopting such an approach (see Finn, 2007) may also reduce assessment–treatment gaps and resulting ineffectiveness of interventions (see DeMatteo, Hunt, Batastini, & LaDuke, 2010).

In light of such findings, it seems feasible that providing offenders with information regarding recidivism base rates and risk factors for recidivism would provide an important foundation for subsequent interventions. By giving offenders information regarding their personal risk factors, the ways in which an intervention may target these factors, and the impact of these factors upon release, providers may increase clients' readiness and motivation to participate meaningfully in treatment. Reducing attrition may also improve the efficiency and cost-effectiveness of interventions. Accordingly, this study examined offenders' understanding of risk and need factors, as they apply generally and individually, to operationalize and describe the relationship between these domains.[1] More specifically, this study aimed to (a) explore and describe general and personal beliefs regarding risk and need factors, (b) describe any discrepancies between those factors identified as generally versus personally important, and (c) examine the match between self-identified risk factors and those identified by a more formal measure of risk and need factors (i.e., the LS/CMI).

METHOD

PROGRAM

Participants were recruited from a privately operated assessment and treatment facility in Trenton, New Jersey. The facility serves male and female clients who are either awaiting transfer to a halfway house from a New Jersey Department of Corrections (NJ DOC) facility, awaiting sentencing or serving sentences from Mercer or Gloucester County in New Jersey, or serving a sentence at the facility as a condition of parole after having violated parole. Only individuals under the custody of the NJ DOC were recruited for this study. NJ DOC residents at the facility are serving sentences for a variety of offenses, including drug- and firearms-related offenses, theft-type offenses, and violent crimes, including robbery.

PARTICIPANTS

An initial sample of male residents at the facility (N = 94) was recruited for this study. Residents were eligible for participation in the study if they had been (a) transferred to this facility directly from a New Jersey state prison or (b) transferred from another halfway

TABLE 1: Participant Characteristics.

Variable	%
Race	
White	15.91
Black	68.18
Hispanic/Latino	14.77
Other	1.14
Marital status	
Single	87.50
Married	5.68
Divorced	6.82
Current charge	
Drug/alcohol	46.59
Firearms	22.73
Violent	13.64
Property	12.50
Supervision violation	3.41
Eluding	1.14
Level of education	
6th through 12th	14.77
High school, no diploma	5.68
High school, diploma	34.09
GED	20.45
Some college	12.50
Associate's degree	3.41
Bachelor's degree	1.14
Not available	1.14
Other	6.82
Risk level	
Low	1.14
Medium	25.00
High	68.18
Very high	5.68

house in New Jersey for administrative purposes or after being charged with violating the program rules at the halfway house. Fluency in English was also necessary for participation. Residents who were transferred to the facility during a 60-day period of time were randomly solicited to participate in the study. From the total group of individuals who arrived during this period, residents were randomly selected to be invited to participate using a random number generator (www.random.org). Of the 148 residents who were invited to participate, 94 consented to be in the study, and 54 declined to participate or did not meet criteria. Of the 94 individuals who agreed to participate, a total of 88 participants completed the measures included in this investigation.

The mean age of study participants was 34.28 years old ($SD = 8.53$) and ranged from 21 to 62 years. Approximately 73% ($n = 64$) were transferred to the facility from a NJ DOC prison facility, and approximately 27% ($n = 24$) were transferred from a halfway house. The mean LS/CMI participant score was 22.06 ($SD = 5.07$), which is in the high-risk category. Scores ranged from 9 (*low risk*) to 32 (*very high risk*). Additional demographic information is presented in Table 1.

MEASURES

LS/CMI. The LS/CMI is a risk/need instrument designed to assess the risk of general criminal recidivism among male and female offenders aged 16 years or older (Andrews et al., 2004). Section 1 of the instrument assesses the "central eight" general risk and need factors, and includes static and dynamic items. This section yields a total risk score, which also corresponds to an overall risk category (very low, low, medium, high, or very high). In addition, the instrument yields a risk category for each of the eight risk factor/criminogenic need areas. The internal consistency of the subscales ranges from .51 (Family/Marital) to .84 (Alcohol/Drug Problem).

Risk and Need Perception Survey. To measure participant understanding of general risk factors for offending, as well as understanding of their own risk factors, the Risk and Need Perception Survey was developed. The survey consists of two 30-item questionnaires. The first questionnaire measures general understanding of risk and need factors and begins by asking, "Which of these factors do you think may increase the chance that a person will commit a crime in the future?" This is followed by a list of factors, which includes some known predictors of offending behavior (e.g., "criminal history," "friends and acquaintances"), which were designed to be consistent with the central eight risk factors (Andrews & Bonta, 2010) and those items that appear on the LS/CMI; items that may be considered responsivity factors (e.g., "mental illness," "IQ"), designed to be consistent with those that have been described in research by Andrews and Bonta (2010); and items that have no known relationship to offending risk (e.g., "athleticism," "physical attractiveness"). There was a three-point scale for responses: 1 (*Not Important*), 2 (*Possibly Important*), or 3 (*Definitely Important*). Note that the wording of the items in Table 2 matches the wording of the items on the survey (with the exception of "Significant other," which appears on the survey as "The person's significant other").

A parallel measure was designed to measure understanding of one's own risk and need factors. It begins with the question, "Which of these factors do you think are present for **you** that may increase your risk of committing a crime again in the future?" (emphasis in original). This is followed by the same list of factors, although the items were reworded to reflect the personal applicability of the questions. For the majority of the factors, the wording remained very similar. For instance, "education level" on the general survey became "*your* education level" (emphasis added) on the personal survey. Some items were changed slightly more; for example, "being outgoing" on the general survey became "your comfort in large groups" on the personal survey.[2] The same three response options were available.

PROCEDURE

Upon entry to the facility, residents were randomly selected to be invited to participate in the study. For those who expressed interest in participating, informed consent was obtained. Currently, the facility administers the LS/CMI to residents within 10 days of their entry; however, at the time of the study, administration of the instrument did not always take place within this time frame. Therefore, within 2 weeks of their entry, participants were administered an LS/CMI interview by one of four research assessors, each of whom were students in a doctoral program in clinical psychology. Section 1 of the LS/CMI was scored by the first author (S.B.H.) for all participants. For 71 of the study participants, the

TABLE 2: Mean Ratings of General and Personal Risk Factors.

Item	n	General Perceptions	Self-Perceptions
Criminal history[a]	88	2.30	1.52
Education level[a]	88	2.34	1.59
Physical attractiveness	88	1.44	1.26
Sleeping habits	88	1.53	1.32
Medical history[a]	88	1.80	1.23
Employment history[a]	88	2.49	1.91
Being a perfectionist	87	1.52	1.44
Self-esteem[a]	88	2.40	1.60
Friends and acquaintances[a]	87	2.54	2.16
Patience	88	2.38	2.11
Family members[a]	88	2.28	1.70
Anxiety[a]	86	1.90	1.51
Significant other[a]	87	2.09	1.49
Stress[a]	86	2.35	1.83
Being outgoing	88	1.52	1.36
How free time spent	88	2.28	2.13
Sexual prowess[a]	87	1.69	1.33
Racial or ethnic back-ground	88	1.51	1.27
Smoking cigarettes or cigars	88	1.15	1.07
Religious beliefs	86	1.55	1.44
Use of drugs or alcohol[a]	88	2.65	1.82
Age	88	1.56	1.34
Mental illness[a]	88	2.11	1.27
Athleticism	88	1.30	1.25
Attitudes and thoughts[a]	87	2.61	2.17
Creativity	87	1.78	1.63
Financial difficulties[a]	88	2.69	2.32
Childhood experiences[a]	87	2.17	1.61
IQ[a]	87	1.86	1.48
Depression[a]	88	2.20	1.61

Note. Items with significantly different mean general- and self-ratings are bolded. Additional table details (including those items that received ratings that were significantly different from the midpoint) are available upon request from the authors.
a. Mean difference remained significant following a Bonferroni correction.

Risk and Need Perception Survey was also completed at this time. In all, 15 participants completed the Risk and Need Perception Survey within 1 week of release from the facility and 2 completed the Risk/Need Perception Survey at another point during their stay at the facility. The research assessor was available to answer questions for the participants during completion of this measure.

DATA ANALYSIS

Analyses were conducted using IBM SPSS 20. To identify initial trends and patterns in participant responses, the mean participant rating was calculated for each item on both surveys. To determine whether participant responses for each item varied significantly from the midpoint of the scale (i.e., a rating of 2), a series of one-sample t tests were

conducted with alpha = .05. Subsequently, to determine whether a significant discrepancy existed between general survey and personal survey responses for a given item, a series of two-tailed one-sample t tests were conducted, with alpha = .05. Due to the large number of analyses, these analyses were also conducted using a Bonferroni correction.

Next, analyses focused on determining whether there was a relationship between self-rated and LS/CMI-identified risk factors. To conduct this analysis, the categorical scores on each Section 1 subscale of the LS/CMI were correlated with an individual's ratings on the corresponding items of the self-specific survey. For some LS/CMI subscales, there were several associated items on the Risk and Need Perception Survey. For instance, for the Education/Employment subscale, both the "education level" and "employment history" survey items were relevant. Therefore, we first determined which Risk and Need Perception Survey items were associated with each respective LS/CMI subscale. When more than one survey item was relevant, a composite score was calculated by summing the ratings for each survey item that mapped onto the risk/need factor. After these scores had been calculated for each risk/need domain, Spearman correlations were conducted to determine whether self-rated risk and need factors were significantly related to categorical risk scores on each subscale of the LS/CMI.

RESULTS

The mean participant rating for each item was calculated on both surveys. A series of one-sample t tests was conducted to determine whether the mean rating for each item on both surveys was significantly different from the midpoint of the scale. In addition, a series of repeated measures t tests was conducted to compare the difference between the general-rated means and self-rated means for each of the 30 items. These results are summarized in Table 2.

On the general survey, 16 of the 30 items were rated as important by participants, and 14 received ratings that were significantly different from the midpoint of the scale. This included the majority of the known risk factors for reoffending (including criminal history, education level, employment history, family members, use of drugs or alcohol, and attitudes and thoughts). Several other items that were selected as important may not have a known empirical relationship to offending behavior, but included responsivity factors (e.g., "depression") and other factors that may could be commonly perceived as related to recidivism (e.g., "stress"). Of the 14 items that were rated as not important, several "filler" items were identified, including physical attractiveness and smoking cigarettes or cigars. Twelve of these items were significantly different from the midpoint of the scale. These results suggest that, generally, participants had a reasonably good understanding of the factors that increase the risk for criminal offending.

In contrast, on the personal survey, only five items were rated as important: friends and acquaintances, patience, how free time is spent, attitudes and thoughts, and financial difficulties. Only two of these items were significantly different from the midpoint of the scale: attitudes and thoughts, $t(86) = 1.99$, $p = .05$; and financial difficulties, $t(87) = 4.06$, $p < .01$. Several established risk factors were rated as not personally important (e.g., use of drugs or alcohol, criminal history). Of the 25 items that were rated as not important, 23 were significantly different from the midpoint of the scale.

TABLE 3: Highest- and Lowest-Rated Items on the General and Personal Surveys.

General Survey		Personal Survey	
Highest-Rated Items	Mean Rating	Highest-Rated Items	Mean Rating
Financial difficulties	2.69	Financial difficulties	2.32
Use of drugs and alcohol	2.65	Attitudes and thoughts	2.17
Attitudes and thoughts	2.61	Friends and acquaintances	2.16
Friends and acquaintances	2.54	How free time is spent	2.13
Lowest-Rated Items	Mean Rating	Lowest-Rated Items	Mean Rating
Smoking cigarettes or cigars	1.15	Smoking cigarettes or cigars	1.07
Athleticism	1.30	Medical history	1.23
Physical attractiveness	1.44	Athleticism	1.25
Racial/ethnic background	1.51	Physical attractiveness	1.26

Table 3 summarizes the four highest- and lowest-rated items on each survey. It should be noted that the highest four selections are consistent between the general and personal survey, with one exception: "Use of drugs and alcohol" appears among the top four on the general survey but not on the personal survey. Instead, "how free time is spent" is among the top four on the personal survey. A similar pattern is seen for the lowest four selections on each survey, such that three of the items are consistent across the two surveys. However, "racial/ethnic background" was one of the lowest-rated items on the general survey, versus "medical history" on the personal survey.

In addition, general and personal ratings for each item were compared (see Table 2). For 24 of the 30 items, the general rating was significantly higher than the personal rating, and most remained so following a Bonferroni correction (18 of the 24). Among the ratings that were not significantly different between general and personal were "being a perfectionist," "being outgoing," "smoking cigarettes or cigars," "athleticism," and "religious beliefs," each of which were rated as not important, either generally or personally. "How free time is spent" was rated as important, generally and personally.

The most substantial discrepancies between general and personal ratings were observed for "mental illness," $t(87) = 10.03$, $p < .01$; "use of drugs or alcohol," $t(87) = 8.41$, $p < .01$; "self-esteem," $t(87) = 8.68$, $p < .01$; and "criminal history," $t(87) = 8.49$, $p < .01$. With respect to mental illness or self-esteem, it may have been that these items did not personally apply to the participants of this study. At the time that the study was conducted, the facility was not designed to serve offenders with severe mental illness. Similarly, it may have been that self-esteem was not a common deficit among participants of the study. However, several of the participants described a history of drug or alcohol use. Although the categorical scores on this subscale of the LS/CMI were relatively low (63.64% scored in the low risk category), this may have been largely influenced by the scoring rules for items regarding recent use of substances, which are sensitive to lengthier periods of incarceration. Similarly, the LS/CMI scores for the criminal history subscale revealed that participants had a substantial history of criminal justice involvement, with 61.4% scoring in the high-risk category and 12.5% in the very high-risk category. Taken together, this suggests that even when history of criminal justice involvement or drug use was present, the participants minimized the personal importance of these factors.

TABLE 4: LS/CMI Subscales and Corresponding Risk and Need Perception Survey Items.

LS/CMI Category	Corresponding Risk and Need Perception Survey Item(s)
Criminal History	Criminal history
Education/Employment	Education history
	Employment history
Family/Marital	Family members
	Significant other
Leisure/Recreation	How free time is spent
Companions	Friends and acquaintances
Alcohol/Drug Problem	Use of drugs or alcohol
Procriminal Attitude	Patience
	Attitudes and thoughts
Antisocial Pattern[a]	Patience
	Attitudes and thoughts
	Financial difficulties
	Employment history
	Education level
	Family members
	How free time is spent
	Friends and acquaintances

Note. LS = Level of Service; LS/CMI = LS/Case Management Inventory.
a. Because this subscale includes distinct items in addition to pulling from questions asked on other subscales of the LS/CMI, several items corresponded to this scale.

We also examined the concordance between ratings of self-perceived risk factors and scores on the subscales of the LS/CMI to determine how well offenders' perceptions of their own risk factors for recidivism matched those provided by a formal risk/need tool. These analyses examined the correlation between categorical scores on each Section 1 subscale of the LS/CMI and an individual's ratings on the corresponding items of the self-specific survey. For some LS/CMI subscales, there were several associated items on the Risk and Need Perception Survey. For instance, for the Education/Employment subscale, the "education level" and "employment history" survey items were relevant. Therefore, we first determined which Risk and Need Perception Survey items were associated with each respective LS/CMI subscale (see Table 4). When more than one survey item was relevant, a composite score was calculated by summing the ratings for each survey item that mapped onto the risk/need factor. After these scores had been calculated for each risk/need domain, Spearman correlations were conducted to determine whether self-rated risk and need factors were significantly related to categorical risk scores on each subscale of the LS/CMI. Complete data were available for 86 participants. Correlation coefficients are reported in Table 5.

As may be seen in Table 5, only two correlation coefficients between LS/CMI-implicated and self-identified risk/need factors were significant: alcohol/drug problem and antisocial pattern. However, for alcohol/drug problem, the correlation was small ($\rho_s = .21$). The correlation for antisocial pattern was small to moderate ($\rho_s = .39$). The correlation between LS/CMI-rated and self-identified factors approached significance for the family/marital domain, but the correlation was also small ($\rho_s = .21$).

TABLE 5: Relationship Between LS/CMI Subscale Score and Corresponding Self-Rated Risk Factor.

Risk/Need Factor	Correlation (ρ_s)	p
Criminal History	.15	.18
Education/Employment	.11	.29
Family/Marital	.21	.06
Leisure/Recreation	−.13	.24
Companions	.08	.47
Alcohol/Drug Problem	.21*	.048
Procriminal Attitude/Orientation	.02	.84
Antisocial Pattern	.39**	<.01

Note. LS = Level of Service; LS/CMI = LS/Case Management Inventory.
*p < .05. **p < .01.

DISCUSSION

Offenders' understanding of the nature of risk factors for crime, and how such risk factors apply personally, may be an important link between assessment and intervention. To the extent that such understanding is limited, either generally or personally, this may suggest the value of feedback and training in this area prior to interventions. This study offers some preliminary data relevant to offender appreciation of general risk factors for offending behavior, as well as factors that they perceive to apply to themselves. Results suggest that offenders recognize most factors that increase the risk of reoffending, but they are less inclined to regard these factors as personally applicable. When the concordance between LS/CMI-identified and self-identified risk factors was examined, the association was significant or approached significance for only three domains (family/marital, alcohol/drug problem, and antisocial pattern), and the magnitudes of these relationships were modest. This provides further evidence that there may be a discrepancy between the presence of a risk factor for an individual as determined by an external source, and the individual's perception as to whether that factor increases his or her risk of recidivism.

Why does this discrepancy exist? One possibility is that offenders believe they have the capacity to overcome adverse circumstances or that such circumstances are not overly influential. Although this study did not examine whether an individual perceives a deficit in a particular area—only whether a deficit may affect risk of recidivism—it may be that study participants would acknowledge a deficit but do not perceive that it will affect their risk of future criminal activity. Misperceptions regarding controllability, as well as a failure to consider situational influences, may be present. Factors such as employment, substance abuse, and relationships all appear to have an inherent degree of control, particularly as they do not represent specific personality traits or stable characteristics. Offenders may therefore overestimate the extent of change they can make in these domains upon release. Similarly, offenders may be ignoring contextual factors, such as the barriers to obtaining a job, moving from a previous neighborhood, or losing an established peer group. Present results suggest that offenders are aware of the risk factors that are relevant to the prototypical offender. As such, there may be some process by which many offenders (mistakenly) conclude that they are "better than average" and hence less likely to be influenced by the risk factors in their life.

Another possible explanation is that offenders do not have the information necessary to make accurate predictions about their own risk. Research suggests that having relevant information regarding a topic or domain helps individuals increase the accuracy of their performance estimates (Kruger & Dunning, 1999). Others have proposed that individuals often base their perceptions of their performance on irrelevant or incomplete information (Dunning, 2005). If offenders have never been provided with formal feedback about recidivism base rates, general risk factors, personal risk factors, and how these factors may be addressed, they may be at a disadvantage in making informed predictions about their own success upon release.

This study suggests that offenders lack some understanding of personal risk factors for crime. But what is the impact of this limited understanding? With respect to criminal justice outcomes, it is possible that this lack of understanding is associated with an increased risk of recidivism, serves as a protective factor, or has no effect. Some have argued that positive self-illusions may be protective or have benefits for mental health (e.g., Taylor et al., 2003), but it is unclear whether this effect is limited to short-term outcomes (see Robins & Beer, 2001). Accordingly, it will be important to gauge the short- and long-term influences of this type of misperception on offenders, and to use an objective outcome measure such as recidivism to measure such impacts.

IMPLICATIONS FOR TREATMENT

Another important consideration is how to improve offenders' knowledge of their personal risk factors and the impact of those deficits on recidivism risk. Research suggests that there are ways to intervene when people inaccurately estimate their abilities; for instance, experience with a situation or event helps individuals to calibrate their perception of control (Dunning, 2005). Providing structured information regarding a given domain may also help individuals form more realistic beliefs. For example, Kruger and Dunning (1999) found that providing a brief logical-reasoning training packet was sufficient to improve the accuracy of self-evaluations of performance at logical-reasoning tasks. This suggests that there may be ways to improve offenders' understanding of the impact of their risk factors, even if this information is not provided in an individually tailored fashion (e.g., by the provision of general education about criminogenic risk and needs).

It is also worthwhile to consider more individually tailored interventions. As noted previously, there has been an increased recognition of the potential importance of motivation and other factors related to readiness for intervention (Andrews et al., 2011; Serin, 1998; Serin & Kennedy, 1997). Noteworthy is that high-risk offenders—among the most important to target to meaningfully lower recidivism rates—often appear the least motivated for treatment (Andrews, 2012; Andrews & Bonta, 2010). A review of treatment motivation and readiness measures reveals that the accuracy of self-perceptions with respect to personal deficits partially informs treatment readiness determinations. Our results highlight some of the discrepancies between risk/need factors that are identified by clinicians and treatment programs, and those that are perceived by offenders enrolled in such programs. The question thus arises of how to go about improving the accuracy of treatment-relevant self-perceptions and treatment motivation so as to bolster overall readiness for treatment.

We suggest, as have others, that affording offenders with collaborative and therapeutically styled feedback (see, for example, Finn, 2007) about the results of risk/need assessments

and corresponding treatment goals may improve treatment motivation and engagement by involving offenders more in the treatment planning process, thereby reducing treatment attrition and decreasing recidivism (Andrews et al., 2011). Such feedback could be accomplished, for instance, in the context of motivational interviewing (Miller & Rollnick, 2002). At present, motivational interviewing is the best-recognized approach for treatment preparation with unmotivated clients. It began as a method for overcoming treatment reluctance on the part of substance abusing clients, and has been adapted for work with offenders ambivalent about changing their criminal behavior (Bogue & Nandi, 2012; Ginsburg et al., 2002; see also Burrowes & Needs, 2009, and Casey, Day, & Howells, 2005, for critical reviews of the closely associated "stages of change" model as applied to offending behavior). It is frequently recommended as part of RNR-driven interventions (Andrews & Bonta, 2010; Dvoskin et al., 2012; Monahan & Steadman, 2012).

In a narrative review of primary studies examining the efficacy of motivational interviewing as applied to offenders, McMurran (2009) concluded that it was associated with some positive outcomes (e.g., improved treatment retention on the part of substance abusing offenders; improvements on motivational and readiness measures among individuals involved in substance abuse, domestic violence, and/or drunk driving). Findings were more equivocal with respect to decreases in problem behaviors such as drug use or reoffending. However, a key finding of this review was the relative scarcity of available primary studies ($n = 19$), only one of which pertained to general offending (a then-unpublished dissertation, eventually published as Anstiss et al., 2011).

Two well-known motivational interviewing acronyms are DARES (develop discrepancy, avoid arguing, roll with resistance, express empathy, and support self-efficacy) and FRAMES, the latter of which is particularly relevant in the present context (Miller & Rollnick, 2002). FRAMES directs the motivational interviewer to offer clients personalized feedback (F), stress and individual's personal responsibility (R) for change, provide clear and supportive advice (A) about the need for change, suggest a menu (M) of options for effecting the necessary changes, deliver treatment in a warm, supportive, and emphatic (E) manner, and enhance a client's self-efficacy (S) beliefs regarding his or her capacity for change. In attempting to help an individual advance from precontemplation to contemplation and later stages of change using the FRAMES approach, we propose that informing offenders of their risk level is consistent with feedback (F) and advice (A), of the concept of dynamic risk factors in general (specifically that they can be changed in the positive direction) and their specific criminogenic needs with feedback (F) and self-efficacy (S), and of general treatment goals as set forth, for example, by Andrews and Bonta (2010) with feedback (F) and menu of options (M). Doing all of this in an individualized, respectful, and collaborative manner, as called for by RNR (see Andrews & Bonta, 2010), is consistent with personal responsibility (R), empathy (E), and self-efficacy (S).

LIMITATIONS AND FUTURE DIRECTIONS

This study has several limitations. First, there was not a direct match between the Risk Need Perception Survey and the LS/CMI items. As a result, when examining the concordance between ratings on the two instruments, the range of potential scores on the Risk and Need Perception Survey varied by domains (as described previously). The larger range and large magnitude of values for the antisocial pattern domain may account in part for the

larger correlation between the Risk and Need Perception Survey and LS/CMI. Second, this study utilized a pilot version of the Risk and Need Perception Survey, and participants may have misunderstood some of the directions or items. Although an experimenter was sitting with each participant while the survey was being completed and was available to answer questions or clarify vocabulary, some participants may not have indicated their confusion. In addition, little work examining self-enhancement bias and positive self-illusions has been conducted with offenders, with many studies utilizing college students. It is possible that offender populations differ in a systematic or substantive ways, so other research in this area does not generalize directly to offenders.

In spite of these limitations, this investigation provides important information regarding an understudied question. The present findings regarding offenders' understanding of general and personal risk factors provide an important basis for future investigation. Questions regarding the predictive utility of self-perceived risk of recidivism and the congruence between self-perceived risk and assessment measured-risk should be among the next issues to be formally investigated. In addition, given the potential benefits of fostering offender buy-in to treatment, the present findings raise questions about the ways in which an offender's understanding of personal risk factors may be improved. McMurran and Ward (2010) highlighted the dearth of pretherapy preparation research with offenders. It will be important to investigate the impact of different types of assessment feedback on the concordance between self-perceived risk and those yielded by risk/needs assessment, as well as the impact of assessment feedback on treatment motivation and readiness. Future research will improve our understanding of the parameters and importance of self-awareness among offenders regarding risk and risk factors, and suggest how it can be improved to bolster the efficacy of assessment and intervention in reducing offending risk.

NOTES

1. A previous study using these data (Brooks Holliday, Heilbrun, & Fretz, 2012) addressed the different question of whether overall risk level, as well as specific criminogenic needs, could be improved during participation in a brief, structured reentry program.

2. Most items on the personal survey were created by simply adding "Your" to the item as it appeared on the general survey (e.g., "Stress" became "Your Stress"). However, the wording for five items changed slightly more substantially: (a) "Being a perfectionist" became "*Your perfectionism*"; (b) "The person's significant other" became "*Your significant other*"; (c) "Being outgoing" became "*Your comfort in large groups*"; (d) "How free time is spent" became "*How you like to spend your free time*"; and (e) " Creativity" became "*Your creative abilities*."

REFERENCES

Addis, M. E., & Carpenter, K. M. (2000). The treatment rationale in cognitive behavioral therapy: Psychological mechanisms and clinical guidelines. *Cognitive and Behavioral Practice*, *7*, 147-156. doi:10.1016/S1077-7229(00)80025-5

Alicke, M. D., & Govorun, O. (2005). The better-than-average effect. In M. D. Alicke, D. A. Dunning, & J. I. Krueger (Eds.), *The self in social judgment* (pp. 85-106). New York, NY: Psychology Press.

Andrews, D. A. (2012). The risk-need-responsivity (RNR) model of correctional assessment and treatment. In J. A. Dvoskin, J. L. Skeem, R. W. Novaco, & K. S. Douglas (Eds.), *Using social science to reduce violent offending* (pp. 127-156). New York, NY: Oxford University Press.

Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct* (5th ed.). New Providence, NJ: Matthew Bender.

Andrews, D. A., Bonta, J., & Wormith, S. J. (2004). *The Level of Service/Case Management Inventory (LS/CMI)*. Toronto, Ontario, Canada: Multi-Health Systems.

Andrews, D. A., Bonta, J., & Wormith, S. J. (2006). The recent past and near future of risk and/or need assessment. *Crime & Delinquency*, *52*, 7-27. doi:10.1177/0011128705281756

Andrews, D. A., Bonta, J., & Wormith, S. J. (2011). The risk-need-responsivity (RNR) model: Does adding the good lives model contribute to effective crime prevention? *Criminal Justice and Behavior*, 38, 735-755. doi:10.1177/0093854811406356

Anstiss, B., Polaschek, D. L. L., & Wilson, M. (2011). A brief motivational intervention with prisoners: When you lead a horse to water, can it drink for itself? *Psychology, Crime & Law*, *17*, 689-710. doi:10.1080/10683160903524325

Anthony, W. A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*, *16*, 11-23.

Barlow, D. H. (Ed.). (2008). *Clinical handbook of psychological disorders: A step-by-step treatment manual* (4th ed.). New York, NY: Guilford.

Barton, R. (1999). Psychosocial rehabilitation services in community support systems: A review of outcomes and policy recommendations. *Psychiatric Services*, *50*, 525-534.

Bogue, B., & Nandi, A. (2012). *Motivational interviewing in corrections: A comprehensive guide to implementing MI in corrections* (NIC Accession No. 025556). Retrieved from http://nicic.gov/Library/files/025556.pdf

Brooks Holliday, S., Heilbrun, K., & Fretz, R. (2012). Examining improvements in criminogenic needs: The risk reduction potential of a structured re-entry program. *Behavioral Sciences & the Law*, *30*, 431-447. doi:10.1002/bsl.2016

Burrowes, N., & Needs, A. (2009). Time to contemplate change? A framework for assessing readiness to change with offenders. *Aggression and Violent Behavior*, *14*, 39-49. doi:10.1016/j.avb.2008.08.003

Casey, S., Day, A., & Howells, K. (2005). The application of the transtheoretical model to offender populations: Some critical issues. *Legal and Criminological Psychology*, *10*, 157-171. doi:10.1348/135532505X36714

Cnaan, R. A., Blankertz, L., Messinger, K. W., & Gardner, J. R. (1988). Psychosocial rehabilitation: Toward a definition. *Psychosocial Rehabilitation Journal*, *11*, 61-77.

Curry, K. T., & Hanson, W. E. (2010). National survey of psychologists' test feedback training, supervision, and practice: A mixed methods study. *Journal of Personality Assessment*, *92*, 327-336. doi:10.1080/00223891.2010.482006

DeMatteo, D., Hunt, E., Batastini, A., & LaDuke, C. (2010). The disconnect between assessment and intervention in the risk management of criminal offenders. *Open Access Journal of Forensic Psychology*, *2*, 59-74.

Dhami, M. K., Mandel, D. R., Loewenstein, G., & Ayton, P. (2006). Prisoners' positive illusions of their post-release success. *Law and Human Behavior*, *30*, 631-647. doi:10.1007/s10979-006-9040-1

Dunning, D. (2005). *Self-insight: Roadblocks and detours on the path to knowing thyself*. New York, NY: Psychology Press. doi:10.4324/9780203337998

Duval, T. S., & Silvia, P. J. (2002). Self-awareness, probability of improvement, and the self-serving bias. *Journal of Personality and Social Psychology*, *82*, 49-61. doi:10.1037/0022-3514.82.1.49

Dvoskin, J. A., Skeem, J. L., Novaco, R. W., & Douglas, K. S. (2012). Extending violence reduction principles to justice-involved persons with mental illness. In J. A. Dvoskin, J. L. Skeem, R. W. Novaco, & K. S. Douglas (Eds.), *Using social science to reduce violent offending* (pp. 245-261). New York, NY: Oxford University Press.

Elbogen, E. B., Johnson, S. C., Wagner, H. R., Newton, V. M., Timko, C., Vasterling, J. J., & Beckham, J. (2012). Protective factors and risk modification of violence in Iraq and Afghanistan War veterans. *Journal of Clinical Psychiatry*, *73*, e767-e773. doi:10.4088/JCP.11m07593

Elbogen, E. B., Mercado, C. C., Scalora, M. J., & Tomkins, A. J. (2002). Perceived relevance of factors for violence risk assessment: A survey of clinicians. *International Journal of Forensic Mental Health*, *1*, 37-47. doi:10.1080/14999013.2002.10471159

Finn, S. E. (2007). *In our clients' shoes: Theory and techniques of therapeutic assessment*. Mahwah, NJ: Erlbaum.

Ginsburg, J. I. D., Mann, R. E., Rotgers, F., & Weekes, J. R. (2002). Motivational interviewing with criminal justice populations. In W. R. Miller & S. Rollnick (Eds.), *Motivational interviewing, Preparing people for change* (2nd ed., pp. 333-347). New York, NY: Guilford.

Howells, K., & Day, A. (2003). Readiness for anger management: Clinical and theoretical issues. *Clinical Psychology Review*, *23*, 319-337. doi:10.1016/S0272-7358(02)00228-3

Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, *77*, 1121-1134. doi:10.1037/0022-3514.77.6.1121

Lilienfeld, S. O., Garb, H. N., & Wood, J. M. (2011). Unresolved questions concerning the effectiveness of psychological assessment as a therapeutic intervention: Comment on Poston and Hanson (2010). *Psychological Assessment*, *23*, 1047-1055. doi:10.1037/a0025177

Manchak, S., Skeem, J., Adel, S., Callow, S., & Nguyen, J. (2012, March). *Cognitive scaffolding: Improving patient accuracy in self predictions of violence*. Paper presented at the annual meeting of the American Psychology-Law Society, San Juan, Puerto Rico.

McMurran, M. (2009). Motivational interviewing with offenders: A systematic review. *Legal and Criminological Psychology*, *14*, 83-100. doi:10.1348/135532508X278326

McMurran, M., & Thedosi, E. (2007). Is treatment non-completion associated with increased reconviction over no treatment? *Psychology, Crime & Law*, *13*, 333-343. doi:10.1080/10683160601060374

McMurran, M., & Ward, T. (2004). Motivating offenders to change in therapy: An organizing framework. *Legal and Criminological Psychology*, *9*, 295-311. Retrieved at http://dx.doi.org/10.1348/1355325041719365

McMurran, M., & Ward, T. (2010). Treatment readiness, treatment engagement and behaviour change. *Criminal Behaviour and Mental Health*, *20*, 75-85. doi:10.1002/cbm.762

Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., Dies, R. R., & Reed, G. M. (2001). Psychological testing and psychological assessment: A review of evidence and issues. *American Psychologist*, *56*, 128-165. doi:10.1037/0003-066X.56.2.128

Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York, NY: Guilford.

Monahan, J., & Steadman, H. J. (2012). Extending violence reduction principles to justice-involved persons with mental illness. In J. A. Dvoskin, J. L. Skeem, R. W. Novaco, & K. S. Douglas (Eds.), *Using social science to reduce violent offending* (pp. 245-261). New York, NY: Oxford University Press.

New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America. Final Report* (DHHS Publication No. SMA-03-3832). Rockville, MD: U.S. Department of Health and Human Services.

Nezu, A. M., Nezu, C. M., & Cos, T. A. (2007). Case formulation for the behavioral and cognitive therapies: A problem-solving perspective. In T. D. Eells (Ed.), *Handbook of psychotherapy case formulation* (2nd ed., pp. 349-378). New York, NY: Guilford.

Olver, M. E., Stockdale, K. C., & Wormith, S. J. (2011). A meta-analysis of predictors of offender treatment attrition and its relationship to recidivism. *Journal of Consulting and Clinical Psychology*, *79*, 6-21. doi:10.1037/a0022200

Poston, J. M., & Hanson, W. E. (2010). Meta-analysis of psychological assessment as a therapeutic intervention. *Psychological Assessment*, *22*, 203-212. doi:10.1037/a0018679

Robins, R. W., & Beer, J. S. (2001). Positive illusions about the self: Short-term benefits and long-term costs. *Journal of Personality and Social Psychology*, *80*, 340-352. doi:10.1037/0022-3514.80.2.340

Serin, R. (1998). Treatment responsivity, intervention and reintegration: A conceptual model. *Forum on Corrections Research*, *10*, 29-32.

Serin, R., & Kennedy, S. (1997). *Treatment readiness and responsivity: Contributing to effective correctional programming* (Research Report R-54). Ottawa, Ontario: Correctional Services of Canada.

Smith, S. R., Wiggins, C. M., & Gorske, T. T. (2007). A survey of psychological assessment feedback practices. *Assessment*, *14*, 310-319. doi:10.1177/1073191107302842

Taylor, S. E., Lerner, J. S., Sherman, D. K., Sage, R. M., & McDowell, N. K. (2003). Portrait of the self-enhancer: Well adjusted and well liked or maladjusted and friendless? *Journal of Personality and Social Psychology*, *84*, 165-176. doi:10.1037/0022-3514.84.1.165

Ward, T., Day, A., Howells, K., & Birgden, A. (2004). The multifactor offender readiness model. *Aggression and Violent Behavior*, *9*, 645-673. doi:10.1016/j.avb.2003.08.001

Yasuhara, K. (2012). *History of violence, substance abuse, and mental illness: Perceptions of risk factors and communication of risk* (Unpublished doctoral dissertation). Drexel University, Philadelphia, PA.

Stephanie Brooks Holliday is a doctoral student in the clinical psychology program at Drexel University, and a predoctoral intern at the Washington DC VAMC. Her research and practice interests include risk assessment and risk reduction, forensic mental health assessment, and special considerations related to veteran populations.

Christopher King is a JD-PhD student in the law and clinical psychology program at Drexel University. His research interests include forensic mental health assessment, offender risk assessment and reduction, and mental health and corrections law and public policy.

Kirk Heilbrun is a professor in the Department of Psychology at Drexel University. His research and practice interests include risk assessment and risk reduction, diversion, and forensic mental health assessment.