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How Do Probation Officers Assess and Manage Recidivism and Violence Risk for Probationers With Mental Disorder? An Experimental Investigation

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Persons with mental disorder are overrepresented in the criminal justice system. Once involved in the criminal justice system, offenders with mental disorder are more likely to return to custody while on probation than their nondisordered counterparts, often for breaking the rules of community supervision. Risk assessments and risk management strategies employed by probation officers can lead to higher rates of returns to custody for probationers with mental disorder, and the current study is the first to examine these experimentally. Here, 234 probation officers provided risk assessments and risk management decisions based on a vignette portraying a probationer with mental disorder, substance abuse disorder, both, or neither. Although substance abuse is a relatively stronger risk factor than mental disorder, mental disorder had a stronger effect on officers' risk assessments. In terms of risk management, mental disorder had the strongest effect on officers' desire to manage risk with forced mental health treatment. These findings suggest that training for probation officers in the relative utility of mental disorder in predicting risk, in addition to evidence-based risk management strategies that take the focus off mental disorder, may improve outcomes for probationers with mental disorder.

Keywords: probation, officers, mental illness, risk assessment, violence

Persons with a mental disorder are significantly overrepresented in the criminal justice system—a recent meta-analysis estimated the rate of serious mental disorders such as major depression, bipolar disorder, and schizophrenia in correctional populations at 14.2% (Fazel & Danesh, 2002; see also Steadman, Osher, et al., 2009). The majority of these offenders are supervised by probation and parole agencies (69.7%; Bonczar & Glaze, 2009), so the effects of their success or failure extend beyond the criminal justice system into the community. The Council of State Governments (CSG, 2002) noted in its Criminal Justice/Mental Health Consensus Project report (2002) that the recidivism rate for offenders with mental disorder is up to 70% in some jurisdictions, underscoring the fact that corrections agencies struggle to meet the complex needs of these offenders. Further, the public widely believes that persons with mental disorder are dangerous and prone to violence (Angermeyer & Matschinger, 1995; Corrigan & Cooper, 2005). The extent to which probation officers share the view that probationers with mental disorder are high-risk, dangerous offenders and thus, supervise them accordingly, may directly affect the rate of return to custody for this group.

Mechanisms of Recidivism

To fully understand the problem of recidivism for offenders with mental disorder, the mechanisms by which these offenders return to custody must be examined separately. There are two primary routes by which offenders can return to custody during community supervision, and the rates of return for offenders with mental disorder differs for each. First, offenders can return to custody for committing a new offense (e.g., burglary; Abadinsky, 2000). The research on whether offenders with mental disorder are more likely to commit new offenses while on community supervision is mixed. Many studies report that offenders with mental disorder are no more likely to commit new offenses than nondisordered offenders (Feder, 1991; Lovell, Gagliardi, & Peterson, 2002; McShane, Williams, Pelz, & Quarles, 2005; but see Eno Loudon & Skeem, 2011, for an exception). For example, Porporino and Motiuk (1995) found that only 4.8% of parolees with mental disorder whom they followed for 6 months after release committed a new offense during that time, compared to 23.1% of nondisordered parolees who committed a new offense. Most of these studies focus specifically on parolees (who are supervised in the community after serving time in prison) rather than probationers (who serve their sentence in the community in lieu of prison; Abadinsky, 2000). One unpublished study compared the outcomes of 633 probationers who were followed for 3 years. Here, Dauphinais (1996) found that probationers with mental disorder were more likely to be rearrested during the follow-up period than their nondisordered counterparts (54% vs. 30%).

Alternatively, offenders can return to custody by committing a technical violation, which occurs when an offender breaks the rules of community supervision (e.g., failing to maintain employment, associating with known felons; Abadinsky, 2000). When

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examining Porporino and Motiuk's (1995) relative rates of parole suspension in the 6-month window referenced above, parolees with mental disorder were more likely to have their parole suspended than parolees without mental disorder (47.6% vs. 38.5%). Given that parolees with mental disorder were less likely to commit new crimes, this suggests that they were primarily returning to custody for committing technical violations. Similarly, Dauphinot (1996) found that probationers with mental disorder were more likely to have their probation revoked for technical violations than probationers without mental disorder (36% vs. 0%). Thus, technical violations are a primary mechanism for return for offenders with mental disorder.

There are several possible explanations for the disproportionate rate of technical violations for offenders with mental disorder. First, risk factors known to predict new offenses may likewise predict technical violations. Offenders with mental disorder have been found to be "riskier" as measured on general risk factors such as antisocial cognitions and antisocial personality patterns (Morgan, Fisher, Duan, Mandracchia, & Murray, 2010; Skeem, Nicholson, & Kregg, 2008). Substance abuse, a strong predictor of both general recidivism and violence (Appelbaum, Robbins, & Monahan, 2000; Bonta, Law, & Hanson, 1998; Douglas, Guy, & Hart, 2009), is a problem for approximately three fourths of offenders with mental disorder (Abram & Teplin, 1991; Hartwell, 2004). Second, offenders with mental disorder often have additional conditions attached to their community supervision, primarily mandated mental health treatment (Skeem & Eno Louden, 2006). For example, Eno Louden and Skeem (2011) found that among 5,761 parolees in California who had returned to prison during a 1-year period for committing a technical violation, 7.6% of parolees with mental disorder who returned did so for failing to comply with required treatment. By having more requirements to meet to successfully complete community supervision, offenders with mental disorder may be at a disadvantage due to treatment mandates.

Third, the manner by which the criminal justice system supervises offenders with mental disorder can directly affect rates of recidivism for this group. At the agency level, policies may place offenders with mental disorder on intensive supervision caseloads. When not paired with additional services, high levels of supervision are associated with high rates of rearrest and technical violations because officers discover minor illegal activity they would not have under normal supervision (Petersilia & Turner, 1993). However, it is ultimately the officer who determines how to respond to infractions (Eno Louden, Skeem, Camp, & Christensen, 2008). How officers make these and other types of decisions in the supervision of offenders with mental disorder can directly influence the likelihood of an individual offender returning to custody. Because most (84%) offenders on community supervision are supervised by probation officers (Bonczar & Glaze, 2009), we focus on the roles of these officers next.

The Role of Officers

Officers are the primary point of contact between probationers and probation agencies and make a number of crucial decisions for probationers in their duties of assessing probationers' risk of reoffense (including violence) and managing this risk (Abadinsky, 2000). Thus, examining how officers may make decisions differently for offenders with and without mental disorder may elucidate

the reason for the disproportionate rate of returns to custody for these offenders.

Risk assessment. The first point of contact between officers and probationers is often when an officer estimates a defendant's risk of reoffense in the presentence investigation report (PSI), which informs the type of supervision the offender receives. Mental disorder itself is a weak predictor of recidivism compared to factors such as substance abuse (Bonta et al., 1998). For example, substance abuse is one of the eight most robust risk factors for general recidivism, and in a meta-analysis was found to have a mean effect size of 0.11 on general recidivism compared to a negative effect for mental disorder (Bonta et al., 1998). However, officers may mistakenly believe that mental disorder is a robust risk factor and rate offenders with mental disorder as high-risk. Even if an agency uses a structured risk measure to estimate offenders' risk, officers may ignore risk ratings that disagree with their perceptions of the offender's risk (Lynch, 1998; Shook & Sarri, 2007). This may be especially true if the officer shares the public's view that persons with mental disorder are highly likely to be violent (Angermeyer & Matschinger, 1995; Corrigan & Cooper, 2005). Even if the offender receives a low risk score based on general risk factors, an officer who believes that mental disorder strongly predicts violence may override that score and assign a high risk rating to that offender.

Risk management. Next, a probationer is assigned to an officer's caseload for supervision (this may or may not be the same officer who completed the PSI). The supervising officer can affect the probationer's outcome through a variety of decisions. First, the officer may recommend that the offender be assigned to a high-surveillance caseload. As noted above, high levels of supervision lead to a higher likelihood of infractions being discovered. This may set up the offender to fail from the beginning of supervision.

Second, the officer may make recommendations regarding the specific conditions of probation (Abadinsky, 2000). Officers who view mental health treatment as a mechanism to decrease recidivism risk may be particularly likely to advocate for mandated mental health treatment. Despite evidence from a variety of correctional settings demonstrating that mental health treatment does not ameliorate recidivism risk (e.g., Skeem, Manchak, et al., 2009; Steadman & Naples, 2005; Steadman, Osher, et al., 2009; see also Skeem, Manchak, & Peterson, 2011, for a review), such treatment is widely viewed by criminal justice practitioners as the primary mechanism to prevent recidivism among offenders with mental disorder (CSG, 2002). Even if the decision to require treatment for probationers with mental disorder is made at the agency level, officers may nonetheless view treatment and offenders' motivation for it as a crucial component of community supervision (Solomon, Draine, & Marcus, 2002). Although mental health treatment may indeed improve clinical outcomes for offenders, it is unlikely to improve criminal justice outcomes for most offenders (Skeem, Manchak, et al., 2009). Ultimately, mental health treatment may be an additional requirement for probationers with mental disorder, acting as another hurdle to scale to fulfill the requirements of community supervision.

Third, officers may directly influence the rate of incarceration for probationers with mental disorder through the manner by which they respond to technical violations. Whereas new offenses can be detected either by community corrections or police agencies, technical violations are generally handled solely by commu-

nity corrections agencies. Officers have considerable discretion (flexibility) in handling these violations, and few agencies have specific policies to guide officers' interactions with probationers with mental disorder (Eno Louden et al., 2008). Officers have many possible strategies they can employ to handle noncompliance, ranging from engaging in conversations with the offender to persuade or encourage him or her to comply, to the most punitive strategy of seeking revocation of probation where the probationer is returned to jail (see Taxman, Soule, & Gelb, 1999). Due to widespread prison overcrowding and calls for increased focus on rehabilitation, criminal justice scholars have emphasized the need to use revocation sparingly and have recommended the use of intermediate sanctions, such as increased reporting to the probation officer, to respond to technical violations so that return to custody is reserved for only repeat or serious infractions (Harris, Petersen, & Rapoza, 2001; Taxman et al., 1999). Ideally, officers would apply such strategies similarly to probationers with and without mental disorder, but there is evidence that officers recommend revocation disproportionately for offenders with and without mental disorder. As noted above, Porporino and Motiuk (1995) found that although parolees with mental disorder were more likely to return to prison for a technical offense than nondisordered parolees, nondisordered parolees were more likely to return for committing a new offense—this could be the case for probationers with mental disorder as well. This is evidence of differing thresholds in the criminal justice system for offenders with mental disorder—they are returned to prison for committing less serious technical violations while nondisordered offenders must commit a more serious offense to be returned.

Officers may perceive a technical violation as indication that the offender is decompensating, and that more serious forms of noncompliance, such as violence, are forthcoming. A probation officer participating in a focus group discussing the supervision of probationers with mental disorder noted: "From the first indication that something is going wrong, you need to get a handle on it right away or else it just becomes . . . it goes from bad to worse pretty quickly, usually" (Skeem, 2003). Officers may fear that they and their agency will be held responsible if an offender with mental disorder commits a technical violation because the officer did not preemptively take the offender into custody at the first sign of noncompliance. As a second officer in the focus groups noted: "It's . . . a huge liability to the probation department if they're not taken into custody" (Skeem, 2003). Thus, returning probationers with mental disorder to custody when only a technical violation has occurred may be a way of preventing (perceived) imminent violence.

Sometimes returning an offender to custody may be a misguided attempt to secure treatment services for him or her. Lynch's (2000) ethnography of California parole offices discovered that officers often returned parolees with mental disorder to prison when the offender was in urgent need of mental health treatment, guided by the belief that this is the most expedient way to obtain treatment for the offender. Although officers in this case were well intentioned, the result was unnecessary incarceration.

Examining the effect of officers. These qualitative accounts point to several viable hypotheses explaining why officers may disproportionately return offenders with mental disorder to custody. However, this has yet to be examined quantitatively. An experimental design offers an approach to test this empirically,

where all variables other than offender mental disorder can be held constant and officers' judgments then compared to isolate the effect of mental disorder on decisions (see Shadish, Cook, & Campbell, 2002). An example of such an approach can be found in Callahan's (2004) experimental investigation of correctional officers working in prisons. This study employed vignettes adapted from the General Social Survey (Pescosolido, Monahan, Link, Steuve, & Kikuzawa, 1999) describing a hypothetical inmate. Callahan manipulated symptoms of mental disorder and history of violence, and asked officers to provide their recommendations for the inmate. Officers were more likely to endorse forced psychiatric treatment if the inmate was described as having schizophrenia (compared to depression or no disorder) and/or a history of violence. A similar investigation could shed light on probation officers' decisions for probationers with mental disorder.

The Current Study

Probation officers' decisions for probationers with mental disorder can directly affect recidivism rates for these offenders, but to date no study has investigated the effect of officers' decisions on recidivism. We sought to examine this experimentally, and the current study had two primary research questions. First, what effect do probationers' mental disorder and substance abuse characteristics have on officers' risk assessments? Given common misperceptions, such as the myth of a strong link between mental disorder and violence, we predict that officers will judge mental disorder to be a strong risk factor, particularly for violence. As discussed earlier, substance abuse is a robust risk factor that is common among offenders with mental disorder (Andrews, Bonta, & Wormith, 2006; Bonta et al., 1998; Hartwell, 2004), so it serves as a good yardstick by which to compare officers' perceptions of the risk associated with mental disorder. We expect that mental disorder will have a stronger effect on officers' risk assessments than will substance abuse, particularly in terms of violence risk, given the widely held belief that persons with mental disorder are violent (Corrigan & Cooper, 2005). Second, what effect do probationers' mental disorder (and substance abuse) characteristics have on probation officers' risk management strategies? We predict that officers seek to monitor probationers with mental disorder more closely than nondisordered probationers, respond to them in a harsher manner when they break the rules, and seek to address their risk of recidivism with requirements of mental health treatment. As described earlier, all of these strategies can increase the likelihood of a probationer being returned to custody. We addressed these aims with the experiment described next.

Method

The experiment used a vignette-based design. To reduce the likelihood that presenting officers with multiple vignettes would affect their ratings, we employed a between-subjects design where each officer viewed one vignette and based his or her ratings on that vignette (Shadish et al., 2002). A tradeoff to this design is that within-subjects comparisons are not possible; however, presenting multiple vignettes to officers would have greatly increased the amount of time required of participants.

Participants

Participants were 234 probation officers (“officers”) who actively supervised adult probationers from two large probation agencies. The agencies were selected due to their proximity to the researchers’ home institution and because they did not currently have specialty mental health programs, so that all officers routinely supervised some probationers with mental disorder. Roughly half of the participants were White (51.3%; 30.8% Hispanic, 7.3% African American, 10.6% other ethnicities), and just over half were female (55.6%). Participants ranged in age from 26 to 63 years ($M = 40.9$, $SD = 8.9$), and had been working as a probation officer for an average of 10.1 year ($SD = 8.0$). Most officers held at least a bachelor’s degree (84.5%), and most earned their degrees in the area of criminal justice or sociology (66.7%).

Procedure

Officers were invited to participate in the study during time set aside from regular staff meetings, where the first author described the study procedures and invited officers to participate. The vast majority (97.5%) of officers who were present at these meetings participated in the study. Of the six who declined to participate, two thirds (four) were female, and 83% were White (one was African American). In one agency, study packets were left with the unit supervisor so that officers who were not present at the meetings could participate—10 officers completed the study materials in this manner. Although the characteristics of officers who were absent from these meetings is not known, every eligible officer in one of the agencies was invited to participate, and 60% of officers in the second agency were invited to participate (recruitment ended once the predetermined sample size was obtained).

Measures

Officers completed a study packet comprised of the study materials, which reflected the independent (probationer characteristics) and dependent variables (officer risk assessments and case management decisions) for this experiment. Each officer received one version of the vignette (described below), which was completed immediately after a demographic questionnaire, given that the other measures refer to the vignette. Officers completed the materials anonymously: They did not write their name anywhere on the study materials. Officers were asked not to talk with each other while completing the materials to ensure independent responses, and were asked not to discuss the research with officers in their own or other probation agencies to avoid influencing other potential participants.

Independent Variables: Probationer Mental Disorder and Substance Abuse

Vignette. Each officer was presented with one of eight vignettes adapted from Callahan (2004) and the General Social Survey (GSS; Phelan, Link, Stueve, & Pescosolido, 2000). Officers were assigned to the vignette condition via random ordering of the study packets; post hoc comparisons revealed no differences by vignette condition among officer characteristics (age, gender, ethnicity, years as a probation officer, and whether the officer had ever supervised a mental health caseload). The vignettes portrayed

a male probationer (“Sam Jones”) whose characteristics were manipulated across two dimensions: mental disorder and substance abuse. The mental disorder dimension had four conditions: no disorder (“troubled person”), schizophrenia, major depression, and bipolar disorder. To remain consistent with prior research and allow for the possibility of comparisons to other studies, we based the vignettes for the first three conditions directly on the vignettes used in the GSS. We selected these three disorders because they are the most common serious disorders in correctional populations (see Teplin, 1990). The control vignette portrays a person with personal troubles not meeting diagnostic criteria for any mental disorder; the mental disorder vignettes portray a person who meets diagnostic criteria for major depression or schizophrenia (Phelan et al., 2000). The bipolar disorder vignette was created for this study, using the GSS vignettes as a formatting model and the diagnostic criteria for Bipolar Disorder I (American Psychiatric Association, 2000). The second dimension manipulated in the vignette was the presence or absence of substance abuse. In the substance abuse condition, a paragraph was added to the vignette describing symptoms consistent with cocaine dependence, which was based on the GSS vignette and was selected to be consistent with this prior research (Phelan et al., 2000). An added consideration in including cocaine dependence is that mild to moderate substance abuse is very common in correctional populations, and by including a more serious manifestation of substance use, we could better highlight the fact that this probationer had serious substance abuse problems to determine the effect this would have on officers’ ratings. Conditions with no substance abuse omitted this text, so that vignettes varied in length depending on the substance abuse condition. All characteristics other than the independent variables were held constant in the vignettes to ensure experimental control and avoid potentially confounding variables. Examples of the vignette are presented in the Appendix.

Dependent Variables: Risk Assessments and Case Management Decisions

After reading the vignette, officers were asked to imagine that the person depicted was placed on their caseload, and provide an assessment of his risk level and their planned approach to managing the case. We selected a male probationer to avoid effects of gender, and because the majority of offenders are male (Bonczar & Glaze, 2009).

Risk assessment. Officers were first asked to assume that they were to complete a presentence evaluation (PSI) of the person portrayed. Risk assessment was measured with a series of items designed for the current study that assess officers’ perceptions of Sam’s risk for (a) technical violations, (b) committing a new offense, and (c) becoming involved in a violent incident. Officers were asked to rate the likelihood that Sam would engage in these acts on a scale of 0% (*completely unlikely*) to 100% (*completely likely*; e.g., “How likely is it that Sam will commit a technical violation during his term of probation?”).

Case management and supervision. Officers were next asked to make case decisions for Sam using the Case Management Questionnaire (CMQ). The CMQ was developed for the current study, and is designed to assess officers’ recommendations for the supervision of the person portrayed in the vignette. This measure asked officers to imagine that Sam has been placed on their

caseload. Officers' decisions in four areas were assessed with this instrument: placement recommendation, frequency of contact, agreement with forced treatment, and supervision strategies.

First, officers were asked to make a placement recommendation for Sam. Here, officers were asked to rate the likelihood (from 0% to 100%) that they would recommend (a) regular probation supervision, (b) intensive probation supervision, or (c) commitment to a correctional facility for Sam. The items assessing intensive probation or placement in a correctional facility were correlated ($r = .34$) and related conceptually in that they both referred to the likelihood of recommending placements for Sam more restrictive than regular probation. Thus, we converted them to a mean score to yield an index of recommending restrictive placements for Sam.

Second, officers' recommended frequency of contacts was assessed by asking them to recommend an optimal number of monthly contacts for Sam for supervision in person ($M = 2.7$, $SD = 1.4$) and by telephone ($M = 1.7$, $SD = 2.8$). For brevity, the number of ideal in-person and telephone contacts were summed to create an index of how many contacts per month officers desired for Sam.

Third, officers rated how likely they would be to recommend that various forms of mental health treatment (e.g., medication, individual therapy) should be required of Sam (items adapted from Callahan, 2004). These items were rated on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). A Principal Components Analysis (PCA) with varimax rotation was used to reduce these items to a smaller number of components. This type of analysis is useful for identifying coherent subsets of variables that reflect underlying concepts in a set of variables (see Tabachnick & Fidell, 2006). We used three criteria to determine the number of components in this and the following PCAs: the number of components with eigenvalues higher than 1.0, interpretation of the scree plot, and interpretability of the results (see Cattell, 1966; Tabachnick & Fidell, 2006). The scree plot suggested two components (flattening of the line after the second component), which was also the number having an eigenvalue greater than 1.0. The components generated by this solution were interpretable, so we retained them. These were named "Force Mental Health Treatment" (in order of weighting on the solution, the items comprising this component reflected agreement that Sam be (a) forced to take prescription medication for his behavior, (b) be forced to get mental health treatment as a condition of probation, and (c) be admitted to a psychiatric hospital) and "Force Treatment if Dangerous" (reflecting their agreement that Sam should be admitted to a psychiatric hospital if he is (a) a danger to himself or (b) a danger to others). These scales had good internal consistency ($\alpha = .70$ and $\alpha = .90$, respectively).

Fourth, officers responded to items assessing their likely responses to various types of probation violations and infractions, ranging from missing an appointment with the probation officer to committing a new crime. For each infraction, officers were asked to choose the type of sanction they would be most likely to employ if Sam were to engage in that act, ranging from doing nothing to filing for revocation (recommending that Sam goes to jail). The strategies were coded based on severity on a scale of 0 to 6, based on how much the sanction restricts Sam's freedom (where 0 = *do nothing*, 1 = *remind Sam of the rules*, 2 = *have a problem-solving discussion with Sam*, 3 = *offer Sam and incentive*, 4 = *threaten Sam with incarceration*, and 5 = *file revocation & seek short jail*

term, 6 = *file violation and seek probation revocation*). The range and coding of sanctions as well as the violations were drawn from prior research (Eno Loudon et al., 2008; Skeem et al., 2006).

We computed a PCA of these items in the same manner described above; both the scree plot and analysis of the eigenvalues suggested three components, which were interpretable. The first component, named "Serious Offenses" contained the items reflecting the probability of Sam's commission of a new crime or a technical violation likely to be associated with a crime—in order of loading on the component: (a) committing a new crime, (b) possessing, using, or selling drugs, (c) possessing a weapon, (d) committing violence, and (e) leaving the community without permission (absconding). Although absconding is generally considered to be a technical violation, we retained it in this component because the fact that it shared variance with the other serious offense items suggests that officers may perceive it to be conceptually related to these other offenses, perhaps due to the likelihood that probationers who leave the community without permission do so to escape probation supervision. The second component, named "Technical Violations" contained items reflecting the probability of Sam's engaging in behaviors that are violations of the rules of probation—in order of loading: (a) failing to pay fines or fees, (b) failing to maintain employment, and (c) drinking alcohol to excess. The third component, named "Treatment Noncompliance/Missing Meetings" contained the items reflecting the probability of Sam's refusal to attend treatment, failing to take prescribed medications, and failure to meet with the probation officer. These scales had fair to good internal consistency ($\alpha = .58$, $\alpha = .64$, and $\alpha = .70$, respectively).

Results

As described earlier, the present experiment had two aims: to determine the effect of probationer mental disorder and substance abuse on officers' risk assessments (aim 1) and risk management decisions (aim 2) for probationers. We addressed these aims by examining (a) whether mental disorder elicited higher risk assessment ratings than substance abuse and/or no disorder, and (b) whether mental disorder elicited desires for closer monitoring, mandated mental health treatment, restrictive placement, and more punitive responses to violations. To this end, we computed 4×2 factorial ANOVAs where the independent variables were the mental health and substance abuse conditions of the probationer portrayed in the vignette. As described earlier, there were four levels of the mental health condition (no disorder ("troubled person"), schizophrenia, major depression, and bipolar disorder) and two levels of the substance abuse condition (no substance abuse and cocaine dependence).

Aim 1: Effect of Probationer Mental Disorder and Substance Abuse on Officers' Risk Assessments

Across all of the risk items, mental disorder—particularly schizophrenia and bipolar disorder—increased officers' perceptions of risk. Substance abuse increased officers' perceptions only in the cases of technical violations and new offenses, but not for violence risk. When there was no mental disorder present, substance abuse lead to significantly higher changes in risk perception than when substance abuse was added to mental disorder. This is

likely due to a ceiling effect, since officers' risk ratings for the mental disorder conditions were already near the top of the scale. Officers' risk ratings for all vignettes are presented in Table 1, and each of these analyses is presented next.

Risk of technical violation. As shown in Table 2, there were significant main effects for both mental health and substance abuse conditions of the vignette, and these were the strongest effects out of all of the risk assessment ratings. Overall, officers thought that Sam had the lowest risk of committing a technical violation if he had no mental health or substance abuse disorder, where they judged him as having just more than a 50% chance of committing a technical violation ($M = 51.03\%$, $SD = 21.77\%$). If Sam had a mental disorder (major depression, bipolar disorder, or schizophrenia), officers estimated that he had at least a 72.4% chance (in the case of major depression) of committing such a violation, and having a co-occurring substance abuse disorder increased this risk to at least 80.1% (for major depression).

The specific type of mental disorder Sam presented with affected officers' risk assessments, where officers perceived Sam as having the highest risk of committing a technical violation if he had schizophrenia ($M = 80.7\%$, $SD = 20.3\%$ for schizophrenia only condition). Post hoc Bonferroni tests showed that schizophrenia elicited significantly higher risk ratings than the troubled person and major depression conditions, but not the bipolar disorder condition ($M\Delta = 19.56\%$, $F(1, 226) = 34.94$, $p < .001$, and $M\Delta = 9.04\%$, $F(1, 226) = 7.47$, $p = .041$ for troubled and major depression, respectively).

Further, the significant interaction term indicates symptoms of substance abuse had a different effect on officers' risk rating depending on what type of mental health condition it was paired with. Specifically, the presence of cocaine dependence added more in terms of perceived risk when it was paired with the troubled person condition than when it was paired with any of the mental disorder conditions. Here, the mean risk rating was 30 percentage points higher in the substance condition versus the control condition, whereas the addition of substance abuse to any condition with a mental disorder present resulted in a smaller increase in the risk rating ($M\Delta = 8.26\%$, 3.99% , and 9.64% for major depression, bipolar disorder, and schizophrenia, respectively). Because we were interested in the effect of adding substance abuse to the mental disorders in general rather than to specific disorders, we did

not compute post hoc tests for this analysis. As mentioned earlier, officers' risk ratings for technical violations seemed to be subject to a ceiling effect; risk ratings for the major depression, bipolar disorder, and schizophrenia conditions were already near the top of the scale, so adding substance abuse couldn't add as much in terms of perceived risk, whereas the control condition was near the middle of the scale and had more room to increase.

Risk of new offense. The effect of Sam's mental health and substance abuse characteristics on officers' risk assessments for new offense showed a similar pattern as for technical violations. Again, officers perceived Sam as being more risky if he had mental disorder than if he did not, and more risky if he had substance abuse than if he did not (see Table 2 for F values). Again, there was an interaction between mental disorder and substance abuse, where substance abuse had more effect on perceived risk when there was no mental disorder present, since officers' risk ratings for the troubled condition were lower than those for the mental disorder conditions.

The primary differences between this pattern and the one found for technical violations were (a) the risk ratings were slightly lower overall (e.g., officers thought that the troubled version of Sam had a 49.31% chance of committing a new offense vs. a 81.33% chance if he had schizophrenia plus cocaine dependence), and (b) the difference between risk rating for schizophrenia and major depression was no longer significant—schizophrenia conditions differed only from the troubled person conditions ($M\Delta = 13.36\%$, $F(1, 226) = 13.23$, $p = .002$). In other words, mental disorder elicited higher risk ratings from officers, but officers did not differentiate among the specific disorders in their risk assessment ratings—officers viewed all mental disorder conditions as equally risky.

Risk of violence. Finally, Sam's symptoms affected officers' ratings of his likelihood of committing violence, as indicated by the significant omnibus test, but the pattern of results was different than in the previous two risk items. Here, officers' ratings of the likelihood of Sam committing violence were lower than for the other two items—ratings ranged from 36.21% ($SD = 24.56\%$) for the depression only condition to 58.5% ($SD = 19.43\%$) for the bipolar disorder plus substance abuse condition. Here, the condition that most affected officers' risk ratings was schizophrenia. This condition differed significantly from the troubled person and major depression conditions (but not from the bipolar disorder

Table 1
Officers' Risk Rating by Vignette

Vignette	Risk of technical violation	Risk of new offense	Risk of violence
	$M (SD)$	$M (SD)$	$M (SD)$
Control (troubled person)	51.0 (21.8)	49.3 (22.0)	39.0 (23.0)
Major depression	72.4 (24.6)	59.0 (25.0)	36.2 (24.6)
Bipolar disorder	80.3 (12.7)	72.8 (16.5)	53.5 (25.8)
Schizophrenia	80.7 (20.3)	68.6 (21.3)	55.2 (24.6)
Cocaine dependence	81.0 (17.8)	74.1 (26.0)	49.7 (25.7)
Major depression plus cocaine dependence	80.7 (17.3)	76.2 (15.2)	37.1 (22.9)
Bipolar disorder plus cocaine dependence	84.3 (14.3)	76.7 (14.0)	58.5 (19.4)
Schizophrenia plus cocaine dependence	90.3 (11.0)	81.3 (15.3)	57.7 (23.4)

Note. Officers rated risk on a scale of 0 to 100 indicating how likely the probationer in the vignette was to commit the act in question.

Table 2

Effect of Probationer Mental Health and Substance Abuse Characteristics on Officers' Risk Assessments

Independent variable	<i>M</i> (<i>SE</i>)	95% CI	<i>d</i>	<i>F</i> (<i>df</i>)	<i>p</i>	Partial η^2
Risk of technical violation						
Mental health				13.63 (3,234)	<.001	.15
None	66.03 (2.35)	61.40–70.66				
Major depression	76.55 (2.35)	71.92–81.18	0.46			
Bipolar disorder	82.34 (2.33)	77.75–86.93	0.82			
Schizophrenia	85.51 (2.35)	80.92–90.10	0.92			
Substance abuse				30.76 (1,234)	<.001	.12
Absent	71.12 (1.66)	67.85–74.36				
Present	84.10 (1.65)	80.85–87.34	0.66			
MH $\times$ SA				6.12 (3,234)	<.001	.08
Risk of new offense						
Mental health				5.97 (3,234)	<.001	.07
None	61.72 (2.61)	56.58–66.86				
Major depression	67.59 (2.61)	62.45–72.73	0.24			
Bipolar disorder	71.71 (2.59)	69.62–79.81	0.60			
Schizophrenia	74.98 (2.59)	69.88–80.07	0.57			
Substance abuse				31.91 (1,234)	<.001	.12
Absent	62.41 (1.84)	58.78–66.05				
Present	77.09 (1.83)	73.48–80.69	0.71			
MH $\times$ SA				2.84 (3,234)	.039	.04
Risk of violence						
Mental health				9.45 (3,234)	<.001	.11
None	44.31 (3.12)	38.17–50.46				
Major depression	36.68 (3.15)	30.48–42.87	0.32			
Bipolar disorder	55.97 (3.09)	49.88–62.07	0.49			
Schizophrenia	56.42 (3.09)	50.33–62.51	0.50			
Substance abuse				2.37 (1,234)	.13	.01
Absent	45.95 (2.21)	41.60–50.29				
Present	50.74 (2.20)	46.41–55.07	0.20			
MH $\times$ SA				0.47 (3,234)	.70	.00

Note. Values of *d* for the mental health condition reflect effect of comparison to control condition.

conditions), as confirmed by post hoc Bonferroni comparisons ($M\Delta = 12.13\%$, $F(1, 225) = 7.63$, $p = .037$, and $M\Delta = 19.77\%$, $F(1, 225) = 20.10$, $p < .001$, respectively). Substance abuse did not significantly affect officers' perceptions of Sam's likelihood of committing violence, and there was no interaction between mental disorder and substance abuse for this risk assessment. Thus, officers' ratings of Sam's likelihood of violence were driven primarily by the presence of schizophrenia symptoms, not symptoms of substance abuse or mood disorder.

Aim 2: Effect of Probationer Mental Disorder and Substance Abuse on Officers' Risk Management Decisions

Mental disorder and substance abuse had small but significant effects on several of officers' risk management decisions. The largest effect on officers' decisions was for mental disorder, which affected officers' endorsement of forced mental health treatment during probation. In addition, the presence of substance abuse increased the likelihood that officers would recommend a placement more restrictive than regular probation, and also elicited more punitive responses to technical violations related to treatment nonadherence. Descriptive statistics for all items are presented in Table 3, and ANOVA results are presented in Table 4. Each of these analyses is presented next.

Recommendation of restrictive placement. Sam's symptoms affected officers' likelihood of recommending a restrictive placement for him (intensive probation or confinement), as evidenced by the significant main effects for mental disorder and substance abuse. If Sam had schizophrenia, bipolar disorder, or cocaine dependence, officers were more likely to recommend a restrictive placement for him. The schizophrenia plus cocaine dependence condition elicited the highest likelihood of restrictive placement for Sam (mean likelihood 62.50%, $SD = 26.7\%$), whereas the troubled condition elicited the lowest likelihood of restrictive placement (mean likelihood 31.74%, $SD = 19.5\%$). Post hoc Bonferroni tests suggested that if Sam had no mental disorder or major depression only, officers were significantly less likely to recommend a restrictive placement for him, whereas if Sam had any condition including substance abuse (cocaine dependence only, major depression plus cocaine dependence, bipolar disorder plus cocaine dependence, and schizophrenia plus cocaine dependence), this resulted in officers wanting to keep him on a shorter leash via a restrictive probation placement (e.g., comparing no disorder conditions to schizophrenia, $M\Delta = 11.62\%$, $F(1, 226) = 7.12$, $p = .049$).

Frequency of contacts. For the analysis of contact frequency, we held out the 26 officers who reported on the background survey that they had ever supervised specialty mental health caseloads—officers who supervise such caseloads often

have smaller than average caseloads and thus, routinely meet with probationers much more often than do traditional probation officers (Skeem et al., 2006). As described earlier, we examined the total number of ideal in-person and telephone contacts for each officer. As shown in Table 4, there was a small main effect for mental disorder (partial $\eta^2 = .04$) but not substance abuse. Specifically, officers wanted to monitor Sam more frequently if he had schizophrenia ($M = 5.44$ contacts per month) than if he had major depression, bipolar disorder, or no disorder ($M\Delta = 1.70$, $F(1, 198) = 8.83$, $p = .02$, $M\Delta = 2.00$, $F(1, 198) = 12.58$, $p = .003$, and $M\Delta = 1.65$, $F(1, 198) = 8.41$, $p = .025$, respectively).

Endorsement of forced treatment. As described in the method section, officers' responses to the items reflecting their endorsement of forced treatment for Sam were reduced to two components: Forced Mental Health Treatment and Forced Treatment if Dangerous. We computed the ANOVAs of these components using the components scores generated by the PCAs, but for descriptive purposes, we computed means and standard deviations of the items making up these components as presented in Table 3.

Whether Sam had a mental disorder affected officers' endorsement of Forced Mental Health Treatment, as indicated by the significant main effect. Officers were most likely to endorse forced mental health treatment if Sam had schizophrenia, and post hoc Bonferroni tests showed that these ratings were significantly higher than those for either of the other two disorders or no mental disorder ($M\Delta = 0.80$ to 1.42 , all $p < .001$). In terms of endorsement ratings, officers' mean ratings were $M = 3.84$ ($SD = 0.5$; on a 5-point scale where 3 indicates *neutral* and 4 indicates *agree*) for the schizophrenia plus cocaine dependence condition, and $M = 2.48$ ($SD = 0.9$) for the control condition. Thus, if Sam had schizophrenia, officers agreed that he should be required to accept mental health treatment, whereas they disagreed with this if he had no disorder. If Sam had major depression or bipolar disorder, officers' ratings fell between these two conditions.

Sam's condition also affected officers' endorsement of whether he should be forced to accept mental health treatment if he is

dangerous, but here the significant main effect was for substance abuse, not mental disorder. If Sam was described as having cocaine dependence, officers' endorsements of forced treatment were near the top of the scale ($M = 4.9$, $SE = 0.8$, where 4 = *agree* and 5 = *strongly agree*). If he had no substance abuse, officers' ratings fell in the "neutral" range ($M = 3.6$, $SE = 0.8$, where 3 = *neutral*). As shown in Table 4, this was the strongest effect among all of the risk management decisions officers made (partial $\eta^2 = .27$). There was no main effect for mental disorder, so officers were neutral in their agreement of whether Sam should be forced to accept mental health treatment if he is dangerous regardless of the type of mental disorder he had, unless he had co-occurring substance abuse.

Supervision strategies. As described earlier, supervision strategies were transformed into three component scores: Technical Violations, Serious Offenses, and Treatment Nonadherence/Missing Probation Officer Appointments. We used the component scores created by the PCAs to compute ANOVAs for our comparisons, but present descriptive statistics of the items making up these components in Table 3. We examined each of components separately.

Sam's condition did not significantly affect officers' preferred responses technical violations, as the omnibus test was not significant. An examination of officers' responses to these items indicates that officers' preferred strategies were generally reminders of the rules and problem-solving discussions. For example, the mean strategy for the schizophrenia condition was $M = 2.32$ ($SD = 0.8$) and the mean for the cocaine dependence only condition was $M = 2.93$ ($SD = 1.0$). As stated earlier, a 2 on this scale corresponds to a reminder of the rules, whereas a 3 corresponds to a problem-solving discussion—officers' mean ratings for the technical violation items all fell within this range.

At the other end of the spectrum, serious offenses, Sam's mental health and substance abuse characteristics did not affect officers' preferred strategies. For these types of offenses, officers' preferred strategy was threatening incarceration—mean responses to these items ranged from $M = 5.05$ ($SD = 0.5$) for the schizophrenia

Table 3
Officers' Case Management Decisions by Vignette

Vignette			Endorsement of forced treatment		Preferred supervision strategies		
			Forced mental health treatment	Forced mental health treatment if dangerous	Technical violations	Serious offenses	Treatment nonadherence/missing officer appointments
	Recommendation of restricted placement	Frequency of contacts					
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Control (troubled person)	31.7 (19.5)	3.3 (2.4)	2.6 (0.8)	4.0 (1.5)	2.7 (0.8)	5.2 (0.5)	1.7 (0.5)
Major depression	39.9 (26.5)	3.8 (1.6)	3.1 (0.6)	4.6 (0.8)	2.6 (1.0)	5.3 (0.5)	1.9 (0.8)
Bipolar disorder	50.5 (25.2)	3.3 (2.0)	3.0 (0.8)	4.1 (1.3)	2.5 (1.0)	5.1 (0.6)	1.9 (0.6)
Schizophrenia	50.4 (18.6)	4.8 (1.9)	3.8 (0.7)	4.8 (0.4)	2.3 (0.8)	5.1 (0.5)	2.0 (0.7)
Cocaine dependence	58.1 (24.9)	4.3 (2.1)	2.5 (0.9)	4.4 (1.1)	2.9 (1.0)	5.2 (0.4)	2.3 (1.0)
Major depression plus cocaine dependence	60.5 (22.8)	3.6 (2.0)	3.1 (0.5)	4.5 (0.8)	2.7 (1.0)	5.3 (0.5)	1.9 (0.8)
Bipolar disorder plus cocaine dependence	56.8 (22.7)	3.5 (1.6)	3.0 (0.8)	4.5 (0.8)	2.7 (1.2)	5.3 (0.5)	1.9 (0.8)
Schizophrenia plus cocaine dependence	62.5 (26.7)	6.1 (6.3)	3.8 (0.5)	4.7 (0.9)	2.6 (1.0)	5.1 (0.7)	2.1 (0.7)

Note. Recommendation of restrictive placement rated on scale of 0 to 100% likelihood. Endorsement of forced treatment rated on scale of 1 (*strongly disagree*) to 5 (*strongly agree*). Supervision strategies are coded on a scale of restrictiveness, where 0 = *do nothing* and 6 = *file violation and seek probation revocation*.

Table 4

Effect of Probationer Mental Health and Substance Abuse Characteristics on Officers' Risk Management Decisions

Independent variable	<i>M</i> (<i>SE</i>)	95% CI	<i>d</i>	<i>F</i> (<i>df</i>)	<i>p</i>	Partial η^2
Recommendation of restrictive placement						
Mental health				2.60 (3,233)	.05	.03
None	44.92 (3.09)	38.83–51.02				
Major depression	50.22 (3.09)	44.13–56.31	0.20			
Bipolar disorder	53.66 (3.07)	47.63–59.72	0.35			
Schizophrenia	56.44 (3.07)	50.40–62.48	0.47			
Substance abuse				23.20 (1,233)	<.001	.11
Absent	43.14 (2.19)	38.83–47.45				
Present	59.49 (2.17)	55.22–63.73	0.68			
MH $\times$ SA				2.08 (3,233)	.10	.03
Frequency of contacts						
Mental health				2.86 (3,202)	.04	.04
None	3.78 (0.41)	2.98–4.59				
Major depression	3.72 (0.42)	2.90–4.54	0.03			
Bipolar disorder	3.44 (0.40)	2.65–4.22	0.17			
Schizophrenia	5.44 (0.40)	4.65–6.22	0.45			
Substance abuse				6.99 (1,202)	.04	.02
Absent	3.80 (0.29)	3.23–4.37				
Present	4.39 (0.28)	3.83–4.95	0.19			
MH $\times$ SA				0.90 (3,202)	.44	.01
Endorsement of forced treatment						
Mental health				26.62 (3,233)	<.001	.27
None	–0.66 (0.11)	–0.89––0.44				
Major depression	–0.04 (0.11)	–0.27–0.18	0.67			
Bipolar disorder	–0.08 (0.11)	–0.30–0.15	0.62			
Schizophrenia	0.77 (0.11)	0.54–0.99	1.65			
Substance abuse				0.27 (1,233)	.60	.00
Absent	0.03 (0.08)	–0.13–0.19				
Present	–0.03 (0.08)	–0.19–0.13	0.05			
MH $\times$ SA				0.43 (3,233)	.74	.01
Endorsement of forced treatment if dangerous						
Mental health						
None				1.39 (3,233)	.25	.02
Major depression	–0.11 (0.13)	–0.37–0.15				
Bipolar disorder	0.06 (0.13)	–0.19–0.32	0.16			
Schizophrenia	–0.14 (0.13)	–0.40–0.12	0.02			
Substance abuse						
Absent	0.18 (0.13)	–0.07–0.44	0.27			
Present				1.56 (1,233)	.21	.01
MH $\times$ SA	0.08 (0.09)	–0.10–0.26	0.16			
				1.55 (3,233)	.20	.02
Response to technical violation						
Mental health				0.89 (3,216)	.45	.02
None	0.12 (0.14)	–0.15–0.38				
Major depression	0.01 (0.14)	–0.26–0.29	0.11			
Bipolar disorder	0.05 (0.13)	–0.21–0.32	0.06			
Schizophrenia	–0.19 (0.14)	–0.46–0.09	0.32			
Substance abuse				1.22 (1,216)	.27	.01
Absent	–0.08 (0.10)	–0.27–0.11				
Present	0.07 (0.10)	–0.12–0.26	0.15			
MH $\times$ SA				0.58 (3,216)	.69	.01
Response to serious offenses						
Mental health				2.02 (3,216)	.11	.03
None	0.13 (0.14)	–0.13–0.40				
Major depression	0.15 (0.14)	–0.12–0.42	0.02			
Bipolar disorder	–0.02 (0.13)	–0.28–0.24	0.17			
Schizophrenia	–0.27 (0.14)	–0.54–0.00	0.37			
Substance abuse				0.18 (1,216)	.67	.00
Absent	0.03 (0.10)	–0.16–0.22				
Present	–0.03 (0.10)	–0.22–0.16	0.05			
MH $\times$ SA				0.51 (3,216)	.67	.01
Response to missed appointments						
Mental health				0.45 (3,216)	.73	.01
None	–0.11 (0.13)	–0.37–0.15				
Major depression	0.11 (0.14)	–0.16–0.37	0.20			
Bipolar disorder	–0.02 (0.13)	–0.28–0.24	0.08			
Schizophrenia	0.02 (0.14)	–0.25–0.28	0.12			
Substance abuse				10.42 (1,216)	<.001	.05
Absent	–0.22 (0.09)	–0.40––0.03				
Present	0.21 (0.09)	0.03–0.40	0.44			
MH $\times$ SA				1.33 (3,216)	.27	.02

Note. Values of *d* for the mental health condition reflect effect of comparison to control condition. Figures for endorsed treatment and supervision strategies reflect component scores.

condition to $M = 5.32$ ($SD = 0.5$) for the bipolar disorder plus cocaine dependence condition (a 5 on this scale corresponds to responding to Sam with a threat of incarceration).

The one type of infraction where Sam's symptoms did affect officers' preferred responses was if Sam missed treatment appointments or appointments with the probation officer. Here, if Sam had substance abuse, this elicited more restrictive strategies from officers (component $M = 0.23$, $SE = 0.1$) than if he did not (component $M = -0.30$, $SE = 0.1$). Sam's mental health condition did not significantly affect officers' preferred response to him, and there was no significant interaction between the mental health and substance abuse conditions of the vignette. Officers preferred the least restrictive strategies for Sam if he had no disorder ($M = 1.73$, $SD = 0.5$) and the most restrictive strategies if Sam had major depression and substance abuse ($M = 2.43$, $SD = 1.0$, where 1 indicates the officer would do nothing and 2 indicates they would remind Sam of the rules).

Discussion

Probationers with mental disorder are more likely to fail community supervision than nondisordered offenders, often by committing technical violations (Feder, 1991; Bonczar & Glaze, 2007; McShane et al., 2005; Porporino & Motiuk, 1995). Given that discovery and processing of these minor violations is handled primarily by probation officers, officers' risk assessment and case management decisions for these offenders are key (Abadinsky, 2000; Callahan, 2004). This study was the first to use experimental methodology to investigate the effect of probationer mental disorder on officers' risk assessments and risk management strategies, and yielded three key findings. First, officers perceive probationers with mental disorder as high-risk: mental disorder increased officers' estimates of risk for probationers, and had a stronger effect on risk ratings compared to the robust risk factor of substance abuse. Second, officers seek to manage this risk with forced mental health treatment. Third, officers prefer to monitor probationers with mental disorder, particularly those with schizophrenia, more closely than nondisordered offenders. After the study's limitations are noted, each of these key findings will be discussed in detail, followed by a description of the study's implication for research and practice for the assessment and supervision for probationers with mental disorder.

Limitations

As with any research, the present study had some limitations that should be noted. First, the vignette presented was not in the same format that probation officers receive when they complete presentence investigations. Officers generally have more detailed information about each probationer, including their criminal history (Abadinsky, 2000). Further, officers making case management decisions do so with a live probationer in mind. However, the strengths offered by the experimental approach provide what observations of "live" probation supervision could not: the ability to draw causal conclusions regarding the effect of probationers' characteristics on officers' ratings. Second, officers' responses may have been affected by bias or demand characteristics. For example, the strategies officers reported could have been affected by what they perceived would make them or their agency look good, such

as seeking revocation for any serious offense to make them appear "tough" on infractions. Further, if these agencies have expectations for what officers do in response to various violations, so officers could have reported these expected strategies rather than what they actually do in practice. Third, our vignette portrayed only male probationers, so the extent to which officers perceive risk for female probationers with mental disorder is not known.

Finally, our selection of cocaine dependence as the substance abuse condition may not have been ideal. Because cocaine itself is illegal, this may have muddled the distinction between substance abuse and a drug offense. This could be examined further in future research by adding a substance abuse condition that does not reflect illegal drug use, such as alcohol abuse. Further, cocaine dependence is a serious condition marked by tolerance and withdrawal symptoms (American Psychiatric Association, 2000)—this is markedly different from casual or even moderate drug use, and reflects a subset of offenders with severe substance abuse. The extent to which our findings may generalize to offenders with less severe substance abuse or to offenders who use substances other than cocaine is not known and will need to be addressed in future research.

Primary Findings

Officers perceive probationers with mental disorder as high risk. The first key finding in this study is that the presence of mental disorder, particularly schizophrenia, increased officers' estimations of risk for probationers. On its own, mental disorder increased risk estimations about as much as substance abuse did. For example, compared to a nondisordered probationer, a probationer with mental disorder was judged to have a 23% higher likelihood of committing a technical violation and a probationer with cocaine dependence was judged as having a 29% higher chance of committing a technical violation over a probationer with no disorder. When cocaine dependence was added to mental disorder, officers' estimation of risk only increased a small amount, likely due to the fact that they had such high risk estimates for probationers with mental disorder; there was not much room for their judgments to increase with the addition of cocaine dependence. Officers' perceptions of the effect of these factors on risk only partly conform to empirical studies of the utility of these risk factors. Although substance abuse is a reliable predictor of new offenses (Bonta et al., 1998), the majority of studies have suggested that offenders with mental disorder have rates of new offense in the community that are no higher than nondisordered offenders (Feder, 1991; McShane et al., 2005; Porporino & Motiuk, 1995).

Violence risk emerged in this study as the area where probation officers' ratings were least in line with what is known about real world violence risk. Findings from this study indicate that officers perceive probationers with mental disorder as being 13% more likely to commit violence—in stark contrast to Bonta and colleagues' (1998) suggestion that they are 10% less likely to do so than general offenders. On the other hand, substance abuse greatly increases the risk of violence among persons with mental disorder (Steadman et al., 1998). This interaction between mental disorder and substance abuse was not reflected in officers' estimates of violence in our study. The fact that officers focused on the presence of mental disorder to the exclusion of cocaine dependence in

their violence predictions suggests that the widespread belief that mental disorder, particularly schizophrenia, causes violence (see Corrigan & Cooper, 2005) may be affecting probation officers' risk assessments. Because probation officers are primarily responsible for identifying and processing technical violations (Abadinsky, 2000), their expectation that probationers with mental disorder are riskier, particularly in terms of violence, likely affects the increased rate of technical violations for this group, making them more likely to process, rather than ignore, a disproportionate number of technical violations for probationers with mental disorder (see Porporino & Motiuk, 1995).

Officers seek to manage risk with forced treatment. Officers overall endorsed forced mental health treatment for probationers with mental disorder. Of the risk management strategies we examined, mental disorder had the strongest effect on officers' endorsement of forced treatment. Mental health treatment itself is not a bad thing—if pursued for the goals of symptom reduction and improved functioning. However, if the reason for wanting the probationer to attend such treatment disregards the wellbeing of the probationer, it is problematic. For example, Lynch's (2000) ethnography revealed that officers often require offenders to attend treatment as a form of punishment—officers, she observed, often required increasingly frequent substance abuse treatment as a response to misbehavior.

Even requiring mental health treatment as a means of reducing the likelihood of reoffense is problematic, given that such treatment is ineffective at reducing the rate of reoffense for most offenders. Recent research by Skeem and colleagues (Skeem, Manchak, Vidal, & Hart, 2009) found that for probationers with mental disorder, symptom change due to mental health treatment received did not mediate criminal justice outcomes (see Steadman, Dupius, et al.'s 2009 similar findings from a jail diversion program). In other words, mental health treatment did not prevent these probationers from committing acts that lead to arrests or probation revocation. The relation between symptoms and reoffense may be more complicated, and future research will need to address how the quality or type of treatment received affects outcomes for probationers (see Skeem et al., 2011). Although officers endorse required treatment, simply requiring probationers to accept mental health treatment is likely ineffective at reducing recidivism.

This leads to another issue—when mental health treatment is required of probationers as a condition of their supervision, they can get into legal trouble by not complying with it. Rather than meeting its intended goal of decreasing recidivism for offenders with mental disorder, mandated treatment may instead be increasing the likelihood that these offenders will fail community supervision, as it is another requirement to be met (Eno Louden & Skeem, 2011). Although mandated mental health treatment is common in the criminal justice system (see Redlich, Steadman, Robbins, & Swanson, 2006), officers' endorsement of forcing or coercing probationers to accept it is concerning. Requiring individuals who are involved in the criminal justice system through no direct cause of their mental disorder to accept mental health treatment is a form of structural stigma. The mental health treatment required of offenders is often psychotropic medications with troubling side effects (see Winick, 2003), so it may cause harm to offenders while not affecting their chances of recidivism. For

mandated treatment to be justifiable, it must be effective (see Winick, 2003, for a detailed argument).

Officers desire close monitoring of probationers with mental disorder. Probationer mental disorder caused desire for more frequent contact from officers. Specifically, if the probationer had schizophrenia, officers wanted to meet with him more often, perhaps as a means to keep him on a "tighter leash" as is done in intensive surveillance for high-risk offenders (see Petersilia & Turner, 1993). However, increased risk did not translate into more frequent contacts for probationers with cocaine dependence. Although officers rated probationers with cocaine dependence as high risk, they did not seek to watch these offenders more closely. This is a seeming mismatch between what officers perceive is a high-risk case and how they seek to manage that risk. Alternatively, it could be because of the uniqueness of the situation. Substance abuse (but not necessarily cocaine dependence) is widespread in corrections populations (Abram, & Teplin, 1991), but only about 14% of offenders have a mental disorder (Fazel & Danesh, 2002). Given that officers don't have the resources to monitor every probationer with substance abuse closely, they may allocate scarce resources to probationers with mental disorder.

Implications

This research was a first step toward understanding probation officers' risk assessments and case management decisions for offenders with mental disorder. To maximize internal validity, this study employed an experimental design with case vignettes. The next step should be to maximize external validity by examining how officers make decisions for live cases. Although research has pointed to the importance of officers' impact on the supervision of offenders (e.g., Dowden & Andrews, 2004), there is a dearth of in vivo research on how officers supervise probationers (see Bonta et al., 2008; Eno Louden, Skeem, Camp, Vidal, & Peterson, 2010, for examples). Given the impact of officers' risk assessments and outcomes on offenders' outcomes, this area needs to be explored further.

Further, this research speaks to the need for specialized training for probation officers. First, officers could be educated on the relative influence of risk factors, including mental health variables so their accuracy when making risk assessments can be increased. This is not to say that officers should not provide referrals for services for probationers with mental disorder, but mental health treatment alone should not be seen as a means to reduce recidivism. Instead, officers should be trained to address known risk factors to decrease reoffense. Correctional programming targeted at known risk factors can be very effective at reducing recidivism (see Andrews et al., 1990). Training programs directed at officers' skills in supervising offenders (Lerner, Arling, & Baird, 1986; Stalans, Juergens, Seng, & Lavery, 2004), have shown promise in increasing officers' ability to target risk factors known to affect recidivism. Such training for probation officers should address both empirically supported methods for assessing and managing risk, in addition to addressing officers' beliefs about mental disorder and its effect on violence. By targeting interventions away from a sole focus on mental disorder toward robust predictors of recidivism, real improvements can be made in the criminal justice outcomes for offenders with mental disorders.

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Appendix

Examples of Vignettes

Example Vignette: Control (Troubled Person)

Sam Jones is a 27-year-old man. Most of the time, life is pretty okay for Sam. While nothing much is going wrong in Sam's life, he sometimes feels worried, a little sad, or has trouble sleeping at night. Sam feels that at times things bother him more than they bother other people, and that when things go wrong, he sometimes gets nervous or annoyed. Otherwise Sam is getting along pretty well. He enjoys being with other people and although Sam sometimes argues with his family, Sam has been getting along pretty well with his family.

Example Vignette: Bipolar Disorder

Sam Jones is a 27-year-old man. Sometimes, Sam finds that he has a lot more energy than usual, and feels really good about himself, like he can do

anything. During these times, he can get by with much less sleep than he usually needs, sometimes sleeping only 2 or 3 hours per night. His thoughts race through his head so quickly that he can't keep up with them, and people complain that he is talking too fast. He has extra energy and is very active during these times, often doing things that get him into trouble. For example, he often buys things he can't afford, spending all of his money on things he doesn't need rather than paying bills. He has gotten into serious financial trouble several times, and has been evicted from his apartment several times for not paying his rent. His family notices that he is not himself when he is doing these things, but Sam insists there is nothing wrong. He can become very irritable and get into arguments with others.

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