AN EXAMINATION OF THE COMPLEX INTERPLAY OF CRIMINAL RISK AND MENTAL HEALTH FUNCTIONING

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by

Maris Adams

B.A., University of North Texas, 2017

A Research Paper
Submitted in Partial Fulfillment of the Requirements for the Master of Science

Department of Psychology in the Graduate School
Southern Illinois University Carbondale
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AN EXAMINATION OF THE COMPLEX INTERPLAY OF CRIMINAL RISK AND MENTAL HEALTH FUNCTIONING

by

Maris Adams

A Research Paper Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in the field of Psychology

Approved by:

Dr. Robert Morgan, Chair

Graduate School
Southern Illinois University Carbondale
September 14, 2022
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TITLE: AN EXAMINATION OF THE COMPLEX INTERPLAY OF CRIMINAL RISK AND MENTAL HEALTH FUNCTIONING

MAJOR PROFESSOR: Dr. Robert Morgan

The undeniable overrepresentation of individuals with serious mental illness in the criminal justice system is a complex matter. Despite persistent assumptions that mental illness is the source of criminal behavior, research has continued to find a weak relationship between mental illness and criminal behavior. As a result, researchers have contended that the seeming link between mental illness and violence is misleading and distracts from the presence of other factors (such as criminogenic risk) that have an established relationship to criminal behavior. The current review of literature will investigate serious mental illness among justice-involved persons, touching on the historical context, theorized explanations, and treatment programs. A greater understanding of this relationship may have significant treatment implications for justice-involved persons with serious mental illness.
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Individuals living with a serious mental illness (SMI) are undeniably overrepresented in the criminal justice (CJ) system (Prins, 2014) to such a great extent that correctional systems are commonly considered the nation’s largest provider of mental health care (Torrey et al., 2002). The Bureau of Justice Statistics estimates that approximately 44% of individuals incarcerated in jail and 37% of individuals incarcerated in prison have a self-reported history of a mental health condition (Bronson & Berzofsky, 2017). Similarly, approximately 50% of persons with SMI in community mental health settings have a history of arrest (Scanlon, Morgan…in press; see also McFarland et al., 1989), yet jails and prisons house more persons with mental illness than psychiatric hospitals (Torrey et al., 2010; Lamb & Bachrach, 2001). The high prevalence of persons with SMI in correctional settings and justice-involved individuals in mental health settings indicate that the relationship between criminal behavior and mental illness is one not only of great complexity (Morgan et al., 2020) but also a public health and safety concern that warrants further investigation.

Mental health services for justice-involved individuals vary by correctional setting and should be considered as different depending on setting (e.g., jail versus prison). Jails are operated by county governments and typically confine individuals who have been arrested and charged with a criminal offense while awaiting trial or sentencing. Jails may also house individuals who have been sentenced to 1 year or less of incarceration for low level crimes and misdemeanors. As a result, jails experience high inmate turnover which, in addition to limited resources, has led to a notable lack of empirically supported interventions for persons with SMI in jails (AbuDagga et al., 2016). Still, jails commonly provide basic mental health services via medication.
management, intake screening, and crisis intervention, while short-term therapy, case management or reentry planning are offered less frequently (Jacobs & Giordano, 2018).

Prisons on the other hand confine individuals who have been convicted of a felony and have been sentenced to more than 1 year of imprisonment. Treatment in prisons is often bifurcated into two primary aims: providing basic mental health care and increasing desistence (Dvoskin & Morgan, 2010). In terms of mental health care, basic services are legally required to be available to all inmates, which are designed to promote adjustment within the prison setting. A meta-analysis evaluating interventions provided in criminal justice settings using 26 studies \( (n = 1649) \) found that mental health treatments effectively reduced symptoms of distress, improved coping skills, and improved institutional adjustment and behavioral functioning (Morgan et al., 2012). On the other hand, rehabilitative services are intended to reduce inmate’s risk for again becoming criminally involved upon release. Rehabilitative services have received significant empirical support for reducing recidivism (Parisi et al., 2022).

In terms of the jail population, a Special Report by the Bureau of Justice Statistics estimates that approximately 68% of females and 41% of males reported having a history of a mental health problem (Bronson & Berzofsky, 2017). Individuals who had been told that they had a mental health condition reported receiving a diagnosis for major depressive disorder (31%) the most frequently and schizophrenia and other psychotic disorders the least often (12%). Since admission, 45% of jail inmates with a history of a mental health disorder had received treatment, which consisted of prescribed medications (38%), counseling or therapy from a trained professional (24%), or combined prescription medication and counseling or therapy (18%). 48% of jail inmates incarcerated for a violent crime had a history of a mental health problem which was not statistically different from the percentage of jail inmates incarcerated for a property
offense (50%).

A survey of prison inmates in 2016 produced by the Bureau of Justice Statistics estimated that 43% of state and 23% of federal prisoners had a history of a mental health problem (Maruschak & Bronson, 2021). Like the jail population a larger percentage of females in state (69%) and federal (52%) prison have a history of mental health problems than males in state (41%) and federal (21%) prison. The survey also revealed that major depressive disorder was the most common diagnosis among both state (27%) and federal prisoners (13%). About 63% of state prisoners and 58% of federal prisoners who had a history of mental health problems, reported receiving treatment since being imprisoned. Among those who had a history of mental health concerns, receiving prescription medications was the most common form of mental health treatment among both state (53%) and federal prisoners (48%). Likewise, receiving combined prescription medication and counseling was reported the least frequently across state (40%) and federal (28%) prison systems. As with jail inmates, similar percentages were observed for those imprisoned for a violent offense (42%) and a property offense (41%) among prisoners who have a history of a mental health problem (Bronson Berzofsky, 2017).

In addition to disproportionate rates of individuals with mental illness in correctional systems, justice-involved persons with mental illness are also more likely than their peers without mental illness to fail under correctional supervision (Messina et al., 2004; Skeem et al., 2008; Eno Louden et al., 2011). Understandably, the high prevalence rates of individuals with a mental health condition in the justice system have attracted considerable attention among researchers, practitioners, and policymakers (Skeem et al., 2011). Historically, addressing justice-involved individuals’ mental health symptoms and access to mental healthcare has been the main focus of efforts to prevent and reduce recidivism. This focus, however, is the result of a
common misconception that mental illness is the cause of criminal behavior (Pescosolido et al., 1999; Markowitz, 2011). This impression is further perpetuated by the news media misrepresenting the connection between mental illness and violence (McGinty et al., 2014), particularly following mass shootings (e.g., Sandy Hook Elementary School shooting).
HEADING 2

REVIEW OF THE LITERATURE

Overview

The current review of literature will investigate serious mental illness among justice-involved persons, touching on the historical context, theorized explanations, and treatment programs. The first section of the review will examine the evidence concerning a direct link between mental illness and crime and evaluate treatment programs that operate from such a framework. The subsequent section will evaluate the role of criminal risk factors among justice-involved persons with serious mental illness. Finally, the review will summarize research on integrated treatment programs that target both mental illness and criminal risk to address and reduce criminal involvement.

Throughout the review of the literature, the term serious mental illness (SMI) will be used to indicate the presence of a psychiatric disorder that considerably interferes with social and occupational functioning. Generally, when referring to SMI in the literature, a formal diagnosis of major depressive disorder, bipolar disorder, or a psychotic disorder will have been provided by a mental health professional. Additionally, the term criminalness will be used throughout, which has been defined by Morgan and colleagues (2012) as behavior that disregards the law and social conventions and/or infringes on the rights and well-being of other people.

Deinstitutionalization

The relationship between mental health conditions and criminal activity cannot be discussed without first addressing the topic of deinstitutionalization, which is a term that has come to encompass the shift of national policies and trends of the 1950s and 60s that led to the widespread closures of psychiatric hospitals across the United States. The shift can be attributed
to a confluence of factors, including President John F. Kennedy signing the Community Mental Health Centers Act in 1963, which facilitated the transition of patients from inpatient psychiatric hospitals into communities. However, Markowitz (2011) speculates that three key elements can explain the advent of deinstitutionalization.

First, antipsychotic medications (e.g., Chlorpromazine under the trade name Thorazine) were developed to help regulate severe mental illness. This innovation challenged the notion that psychiatric hospitals were indispensable for treating patients with severe mental health conditions, such as psychosis. Therefore, the well-intentioned belief at the time was that, with effective medication, individuals previously deemed lifelong psychiatric patients would receive adequate care in community mental health care systems instead. Secondly, the costs for mental health care shifted from the states to the federal government, almost immediately followed by the reduction of federal support for mental healthcare (Markowitz, 2011). The last development occurred when states began to adopt more stringent standards for involuntary commitment, shifting from a “need-for-treatment model” to a “dangerousness” criterion. To be exact, states gradually implemented criteria for civil commitment that an individual must pose an imminent physical threat to their safety or the safety of others before they could be committed against their will (Testa & West, 2010).

While the new standards were adopted to safeguard the rights of persons with a mental health condition, the shift also inadvertently ushered in several adverse consequences. For instance, the dangerousness criterion had the unintended effect of hindering access to psychiatric care for non-dangerous persons with a mental health condition who may require but decline treatment. Meanwhile, patients who do receive inpatient treatment are often swiftly discharged back into the community once stabilized and no longer presenting a physical threat to themselves
or others. With few resources to help them adjust, patients discharged from psychiatric hospitals may have difficulties maintaining their psychiatric stability (Lamb & Weinberger, 2020) and may find themselves marginalized to unsafe circumstances (Testa & West, 2010).

Overall, the average length of stay in psychiatric hospitals declined from about six months during the early 1960s (Markowitz, 2006) to approximately nine days today (Adepoju et al., 2022). In a review of 30 studies, Tulloch and colleagues (2011) found that the maximum reported length of stay in the United States is currently only 24.9 days. At the same time, admission rates for psychiatric hospitals have increased, which can be explained, in part, by frequent readmissions, which Kiesler and Sibulkin (1987) have dubbed the “revolving door” phenomenon.

**Criminalization of Mental Illness Hypothesis**

Due to the aftermath of deinstitutionalization, it is often cited as the basis for the increased number of persons with SMI involved in the criminal justice system (Lamb & Weinberger, 1998). Namely, it is assumed that the deviant behaviors of individuals with a mental illness were once adequately managed through psychiatric institutions but have since been misclassified through the criminal justice system. This assumption that individuals become criminally involved due to insufficient mental healthcare has been termed the “criminalization of mental illness” hypothesis (Abramson, 1972). Simplistically, such a framework places mental illness as the root cause of criminal behavior. As a result, researchers, practitioners, and policymakers have emphasized understanding and targeting the role of mental health problems in justice involvement in preventing and reducing recidivism among criminal justice-involved persons with mental illness.

Consequently, correctional programs have historically emphasized psychiatric treatment
services as the dominant means to reduce criminal involvement among justice-involved individuals with SMI (Corrigan et al., 2007; Skeem et al., 2011). For instance, mental health courts (MHCs) were introduced in the 1990s to address the disproportionate numbers of persons with a mental health condition in the criminal justice system. Modeled after the success of drug courts, MHCs divert mentally ill defendants from the criminal justice system to a specialized docket that often links them to community-based mental health treatments. As of 2020, there are over 450 adult MHCs and approximately 50 juvenile MHCs (GAINS Center, 2020), making MHCs the second most common diversion program (after drug courts) in the U.S. (Strong et al., 2016). However, unlike drug courts, MHCs have little standardization, and programs vary by jurisdiction (Steadman et al., 2001). There remain no clear guidelines on how MHCs are deemed appropriate for one defendant versus another. Such murky practices make it challenging to assess and make conclusions about the effectiveness of MHCs (Sarteschi et al., 2011). Additionally, based on the extant literature, MHCs do not appear to be governed by any discernable theoretical framework (Sarteschi et al., 2011). Again, this leaves unanswered questions on how and why MHCs are successful.

Meanwhile, studies on MHCs have revealed promising results. In particular, two meta-analyses (Sarteschi et al., 2011; Lowder et al., 2018) found the diversion programs to produce small to moderate effect sizes on reducing recidivism. In the first synthesis of the extant MHC literature, Sarteschi et al. (2011) evaluated 18 studies published through July 2009 and found that MHCs were moderately effective in reducing recidivism (mean effect sizes = -0.54 and -0.55). The investigators also assessed and found modest improvements in clinical outcome variables. Namely, MHC participants received fewer inpatient treatment days after MHC involvement (g = -.203), and their GAF (i.e., Global Assessment of Functioning; an assessment of their
psychological, social, and occupational functioning) scores increased ($g = -.69$; Aas, 2011). The second meta-analysis, conducted by Lowder et al. (2018), included 16,129 participants across 17 studies published between 2004 and 2015. Lowder and colleagues’ (2018) investigation revealed MHCs to have a smaller effect size ($d = -.20$) on reducing recidivism, concluding that more research is needed to identify the specific mechanisms through which MHCs improve recidivism. As for limitations, the authors of both reviews note methodological concerns, including the lack of randomized control trials (RCTs) among MHC studies.

In addition to mental health courts, Skeem and colleagues (2011) evaluated some of the most common contemporary programs for justice-involved individuals with mental health needs. The researchers identified four programs that followed a criminal justice model and two that followed a mental health model. Skeem and colleagues concentrated their search on studies that utilized random assignment and a comparison condition. Additionally, as studies often vary in how recidivism is defined (i.e., re-arrest, re-incarceration, etc.), the investigators narrowed their search to studies that measured re-arrest as the outcome variable. This criterion was selected to evaluate the programs’ effectiveness in preventing new crimes from being committed. Overall, the evaluation produced mixed results in terms of reducing re-arrests. Notably, the mental health-based programs were the weaker of the two models, with only minor differences (or none at all) between the intervention and control groups on recidivism. The evidence for the criminal justice-based programs were similarly varied in respect of re-arrest reduction yet appeared slightly more promising. Based on these unsatisfying findings, Skeem and colleagues (2011) advocate for a complete revamping of correctional policies that shifts away from the criminalization framework.
Relationship Between Mental Illness and Criminal Behavior

A growing body of research challenges the assumption that providing psychiatric treatment to mentally ill offenders will reduce criminal involvement. Although such programs have been demonstrated to improve mental health symptoms, research has found no indication that symptom reduction will reduce criminal justice involvement among individuals with SMI (Fisher et al., 2006; Steadman et al., 2009). In a sample of probationers ($N = 359$), Skeem and colleagues (2009) found that symptom reduction was not associated with the likelihood of arrest or revocation over 12 months. The lack of evidence that alleviating psychiatric symptoms reduces recidivism and criminal justice involvement has called the criminalization of mental illness assumption into question.

In fact, SMI alone rarely motivates individuals to commit crimes. Skeem and colleagues (2011) suggest that mental illness may drive criminal behavior for only a small subset of justice-involved individuals. For instance, Junginger et al. (2006) interviewed 113 individuals with mental illness involved in jail diversion programs. Raters independently reviewed the interviews and police reports and rated the probability that the index offense was directly or indirectly caused by mental illness or substance use. The researchers defined a direct effect as the identifiable influence of delusions or hallucinations on the index offense, while an indirect effect was considered any other symptom-based influence, such as confusion, depression, thought disorder, or irritability. For the most part, the presence of SMI was not considered to have a substantial effect on the index offense; however, the raters estimated that 8% of the sample committed offenses that were either the direct (4%) or indirect (4%) effect of SMI.

Similar findings were reported by Peterson et al. (2010) in a study of unique offense patterns among 220 parolees. After reviewing interviews given by the participant and their
record file, raters classified the parolee into one of five offending patterns. While 112 participants had a serious mental illness, only 5% of the sample were criminally involved as a direct result of hallucinations and delusions. However, the findings suggest that justice-involved persons with mental illness do not become criminally involved due to their symptoms.

Expanding on this research, Peterson et al. (2014) conducted another study to establish how frequently offenders commit crimes that are motivated by their symptoms of mental illness. Unlike the aforementioned studies, Peterson and colleagues broadened their definition of psychiatric symptoms beyond psychotic disorders and included bipolar disorder and depression. Their sample included 143 justice-involved persons with a serious mental illness (i.e., major depression, bipolar disorder, schizophrenia spectrum disorder). Crimes were either coded as directly related to mental illness symptoms or completely independent. The researchers considered a crime to be directly related if symptoms immediately preceded the offense and increased the likelihood of its occurrence. Of the 429 coded crimes, the majority (i.e., 64.7%) were completely independent of symptoms of mental illness, while only 7.5% of the crimes were entirely directly associated with symptoms. 27.9% of the crimes were either rated as mostly independent or mostly directly related. When analyzed by mental health condition, 4% of the crimes were directly related to psychosis, 3% to depression, and 10% were directly related to bipolar disorders.

These findings suggest that, even when expanding the definition of mental health symptoms, crimes are still rarely motivated by psychiatric symptoms. Furthermore, Peterson and colleagues (2014) estimate that rehabilitative services that emphasize reducing mental health symptoms would only improve criminal justice outcomes for a small subset of criminal justice involved persons with mental illness (approximately 18%). However, for the majority of criminal
justice-involved individuals with mental health needs, targeting mental health symptoms alone would have little impact on recidivism.

Furthermore, multiple meta-analyses have demonstrated that psychiatric status is a weak predictor of criminal behavior. Douglas et al. (2009) conducted a meta-analysis on the relationship between psychosis and violence in 204 studies. Although a small correlation between psychosis and violence was found ($r = .16$), meaningful correlations were not observed among forensic patients ($r = .02$) or general offenders ($r = .06$). A decade earlier, Bonta and colleagues (1998) calculated effect sizes for predictors of recidivism using 64 distinct samples. Of the 62 predictors, eleven were clinical variables (e.g., diagnosis, hospital admissions, psychosis, treatment history), which were not found to meaningfully predict either a new general ($r = -.02$) or violent offense ($r = -.03$).

This lack of support for a direct causal link between untreated mental illness and crime is further challenged by evidence that the majority of individuals with SMI do not become criminally involved or violent. Moreover, most arrests of persons with mental illness are primarily due to nonviolent, minor charges. Using administrative data from California Medicaid claims and state arrest systems, Cuellar et al. (2007) investigated the frequency and severity of arrests among 6624 persons with a serious mental illness. Contrary to common misconceptions, the most serious offense for 62% of the sample were nonviolent crimes. In fact, individuals living with a mental illness are more likely to be the victim of violence rather than the aggressors. A longitudinal national cohort study (Dean et al., 2018) found that, across diagnoses, the onset of mental illness is associated with an elevated risk of exposure to violent crime. Collectively, these findings suggest that targeting mental health services alone is inadequate for addressing criminal justice involvement for this population.
**Relationship Between Criminogenic Risk and Criminal Behavior**

Based on the body of research that suggests that treatment programs that target mental illness alone will not prevent or reduce criminal involvement for justice-involved persons with SMI, correctional policies have recently shifted to emphasizing services that target empirically validated risk factors for reoffending (Morgan et al., 2020). This change draws its influence from the Risk-Need-Responsivity (RNR) model (Andrews, 2012), the leading rehabilitation framework that contends that the interventions and strategies used to address criminal justice-involved individual’s criminogenic needs (*Need* principle) should be tailored to the individual (*Responsivity* principle) and their level of risk for recidivism (*Risk* principle). This approach recognizes that traditional predictors of justice involvement for individuals without mental illness are generalizable to persons with SMI (Bonta et al., 1998) and are more predictive of criminal justice-involvement than mental health functioning (Bonta et al., 2014).

The presence of criminal risk factors elevates an individual’s risk for engaging in criminal behaviors (Bonta & Andrews, 2016). These factors are split between static (i.e., fixed attributes of a justice-involved person of their past) and dynamic (i.e., adaptable characteristics of justice-involved persons) variables. Due to their pliability, dynamic risk factors (also termed “criminogenic needs”) are deemed crucial targets for rehabilitative services in correctional settings. Bonta and Andrews (2016) identified eight such risk factors (i.e., the Central Eight) that predict criminal involvement the most dependably. These factors include, (a) antisocial personality, (b) antisocial behavior, (c) antisocial cognition, (d) antisocial associates, (e) substance abuse, (f) problematic marital and family circumstances, (g) problematic circumstances at work or school, and (h) problematic circumstances with leisure and recreation. The first four factors (i.e., the Big Four) are considered the strongest predictors for criminal
involvement, while the latter four (i.e., the Moderate Four) are deemed to be moderate predictors (Bonta & Andrews, 2016).

Although the majority of research on the RNR framework has been conducted among general correctional samples, an expansive body of research demonstrates that these risk factors not only apply to justice-involved populations without mental illness (Bonta et al., 1998; Hodgins & Janson, 2002) but also to justice-involved individuals living with mental illness (Bonta et al., 1998; Monson et al., 2001; Hiday, 1999). For instance, Bonta and colleagues (1998) conducted a meta-analysis using 58 studies to evaluate if traditional predictors of recidivism for criminal justice-involved individuals without mental illness is the same for those with mental illness. The results of this systematic review revealed that the major predictors (e.g., criminal history, substance abuse, marital/family discord, and antisocial personality pattern) of recidivism were nearly identical for both justice-involved populations with and without mental illness. Furthermore, the clinical factors (e.g., mood disorder, treatment history) were the least important in assessing long-term risk for recidivism, while criminal history variables proved to be the best predictors.

Moreover, Morgan and colleagues (2010) examined the prevalence of criminal thinking in adult male \( n = 265 \) and female \( n = 149 \) inmates. Participants with a SMI made up 92% of the sample and endorsed antisocial cognitions at a rate consistent with their relatively healthy counterparts. These findings highlight that not only do justice-involved persons with SMI have mental health needs, but also criminogenic needs. In fact, research has demonstrated that criminal justice-involved individuals with SMI have significantly more general risk factors than criminal justice-involved individuals without a mental health condition (Girard & Wormith, 2004).
To augment the field’s understanding of the specific criminogenic needs of justice-involved persons with mental illness, Skeem et al. (2014) followed 221 parolees with \( n = 112 \) and without \( n = 109 \) mental illness for over a year. Their study revealed several valuable findings on the presence of risk factors (as assessed by the Level of Service/Case Management Inventory; Andrews et al., 2004) for recidivism among criminal justice-involved persons with mental illness. In contrast to their non-mentally ill counterparts, individuals with mental illness scored higher on four general risk factors: antisocial patterns, procriminal attitudes, education employment problems, and family and marital problems. These findings are consistent with a number of other studies that have demonstrated that criminal justice-involved persons with mental illness have comparable general risk factors for recidivism to justice-involved persons without mental illness (Morgan et al., 2010; Wolff et al., 2011; Prins & Draper, 2009).

Despite little evidence that psychiatric status is related to criminal behavior, some research suggests that justice-involved persons with mental illness have worse community outcomes after incarceration than their counterparts without mental health problems (Baillargeon et al., 2009; Cloyes et al., 2010). Notably, Skeem and colleagues (2014) also found that psychiatric symptoms predicted parole failure but not rearrests. Relatedly, persons with mental illness were more likely to return to prison for a technical violation while under intensive supervision. This finding is consistent with an experimental design study (Eno Louden & Skeem, 2013), which found that probation officers often perceive probationers with mental illness as high-risk, resulting in more stringent monitoring of justice-involved persons with mental illness. Another byproduct of this belief is that probation officers endorsed forcing mental health treatment on probationers. Either as a form of punishment (Lynch, 2000) or as a means of reducing reoffence, research has found both to be problematic. For instance, stipulating mental
health treatment as a condition of their supervision may result in legal consequences if probationers do not comply. Thus, mandated mental health treatment may have the adverse effect of increasing the probability that probationers will fail community supervision (Eno Louden & Skeem, 2011). Together, these findings highlight potential systemic issues that may increase the likelihood of justice-involved persons to recidivate.

In the first systematic review to evaluate programs that target criminogenic risk factors, Parisi and colleagues (2022) identified 21 studies ($N = 1,175$) that examined nine interventions delivered to justice-involved individuals with SMI. The investigators analyzed the impact of criminogenic interventions on three criminogenic risk factors (i.e., antisocial personality pattern, antisocial cognitions, and substance abuse), recidivism, violence, mental health, and treatment completion. All eleven of the studies that assessed the impact of criminogenic interventions on recidivism or violence found that at least one measure of criminal justice involvement or violence was reduced. Despite these findings, however, criminogenic needs are rarely a prominent focus of treatment in current mental health services (Bewley & Morgan, 2011).

**Relationship Between Criminogenic Risk and Mental Illness**

Despite the host of findings that individuals with mental illness become justice-involved due to influences unrelated to clinical factors, it appears that criminal risk may exasperate individuals with SMI’s inclination towards criminal activity (Bartholomew & Morgan, 2015). That is, research has demonstrated that mental illness may be associated with increased criminal risk (Matejkowski et al., 2011), which in turn, may increase the likelihood of recidivism and reincarceration. Some studies have posited that criminal risk factors may mediate the relationship between mental illness and criminal involvement (Matejkowski et al., 2011; Skeem et al., 2011). Although a direct link has not been found to exist between mental illness and recidivism,
researchers have proposed that criminal justice-involved persons with mental illness are
disproportionately exposed to criminogenic risk factors (e.g., unstable housing, unemployment, 
substance use) that are directly related to recidivism. This hypothesis may explain, in part, the 
disproportionate recidivism rates of justice-involved persons with mental illness. Thus, in recent 
years, the extant literature has increasingly recognized and established that a complex 
relationship exists between criminogenic risk and mental illness (Ditton, 1999; Fisher et al.,
2006).

A growing body of evidence has demonstrated that individuals with SMI often possess 
more risk factors associated with criminal involvement. For example, in a sample of justice-
involved individuals with \( n = 219 \) and without \( n = 184 \) any axis 1 disorders, Matejkowski et 
al. (2011) found that mental illness was predictive of presenting with co-occurring substance use 
disorder and antisocial personality disorder. Furthermore, the presence of antisocial personality 
and substance abuse were significantly associated with parole denial. Similarly, in a special 
report by the Bureau of Justice Statistics, Ditton (1999) estimated that state prison inmates with a 
mental health condition were more likely to have a history of alcohol dependence and to have 
been unemployed prior to offense than inmates without mental health needs. Antisocial attitudes 
have also been demonstrated to increase with the presence of serious mental illness in justice-
involved individuals (Wolff et al., 2013).

One criminal risk factor that has received particular attention for justice-involved 
individuals with mental illness is criminal thinking, which are thought patterns that often 
accompany criminal behavior (Yochelson & Samenow, 1976). Studies conducted in both jail and 
prison settings found that inmates with SMI demonstrate criminal thinking that is consistent with 
or higher than inmates without SMI (Morgan et al., 2010; Wilson et al., 2014; Wolff et al.,
Additionally, using a path analysis, Walters (2011) found that criminal thinking partially mediated the relationship between mental illness and institutional violence among a sample of male prison inmates with \((n = 356)\) and without \((n = 2131)\) serious mental illness. Furthermore, justice-involved individuals with mental illness have been found to have general risk factors for recidivism that exceeds their counterparts without mental illness (Wilson et al., 2020; Skeem, 2014).

To begin disentangling mental health problems from criminal justice involvement, researchers have begun to explore the relevance of criminogenic risk factors among individuals with SMI outside of correctional settings. For instance, Gross and Morgan (2013) compared criminal thinking and psychiatric symptomatology among persons with mental illness who are and are not involved in the criminal justice system. The results indicated that inpatient psychiatric persons with mental illness with a history of criminal justice involvement demonstrated similar criminal thinking and mental health symptoms to incarcerated persons with mental illness. Yet, when compared to the incarcerated sample, inpatient psychiatric persons without criminal justice involvement demonstrated fewer thought patterns associated with criminal actions.

To expand on these findings, Bolanos and colleagues (2020) examined the prevalence of all Central Eight criminal risk factors and psychiatric symptomology in a psychiatric inpatient sample with \((n = 142)\) and without \((n = 68)\) a history of criminal-justice involvement. Overall, significant differences were found for individuals who were involved with the criminal justice system compared to those who were not. Specifically, criminal risk factors were found to be more strongly associated with criminal justice involvement among persons with a mental illness than psychiatric symptomatology.
In light of such findings, Bartholomew & Morgan (2015) propose that the mental illness-criminalness relationship may be of a reciprocal nature, wherein one intensifies the other; this resembles the pathoplasticity model of psychopathology, in which personality and psychopathology mutually influence one another (Widiger & Smith, 2008). This hypothesis is built on findings that individuals with mental illness who report the highest levels of criminal thinking similarly demonstrated elevated psychiatric symptomology (Gross & Morgan, 2013). Analogously, Van Deinse et al. (2021) also found that the intensity of mental health symptoms is correlated with higher criminogenic risk. Thus, Bartholomew and Morgan (2015) posit that the relationship may be both bidirectional, wherein untreated criminal risk prompts increased criminal recidivism and untreated mental illness prompts increased psychiatric recidivism, and multidirectional, wherein decline in mental illness may prompt decline in the criminalness domain and vice versa. To adequately address both mental health and criminal domains, Morgan et al., (2008) has recommended that mental illness and criminalness be conceptualized as co-occurring concerns and interventions should dually target both areas to facilitate improved outcomes. Such a conceptualization of this relationship could have vital implications for how mental illness is treated across the criminal justice system, and likewise, how criminal risk is tackled in mental health settings (Morgan et al., 2020).

Correspondingly, Draine and colleagues (2002) postulate that mental illness does not incite criminal activity, but likely contributes to risk factors (e.g., unemployment, absence of prosocial relationships, poverty, lack of education, substance misuse) shared with criminal involvement. Consequently, a significant challenge to disentangling mental health problems from criminal justice involvement lies in controlling spurious associations due to sharing many of the same risk factors (Silver et al., 2008). Draine and colleagues propose two solutions for public
policies. First, strategies could be enacted to reduce the risk of social disadvantages, such as joblessness, poverty, undereducation, and lack of access to affordable housing. Such a response would aid persons with mental illness since these risk factors disproportionately impact them. Secondly, public policies could provide more safety nets for persons with mental illness that would help reduce the prevalence of these social problems. This approach may prevent persons with mental illness from living in poverty and becoming unhoused, and in turn, minimize their risk of criminal involvement and incarceration. That is, many of the life experiences and circumstances that impact individuals’ propensity towards criminal activity may also contribute to mental health functioning.

Therefore, understanding the nature of this relationship has become of increased interest (Morgan et al., 2020). Understanding this complex interchange between mental illness and criminogenic risk is believed to be the next frontier of research, which could have a significant impact on how we assess, treat, and manage individuals with these co-occurring needs (Morgan et al., 2020).
FUTURE DIRECTIONS AND RECOMMENDATIONS

Integrated Treatment Programs

Today, addressing criminogenic risk is a common practice in correctional settings, which often underpins rehabilitative interventions (Bonta & Andrews, 2007); yet, the mental health literature and correctional practices continue to underemphasize (or overlook entirely) criminogenic risk in treatments for justice-involved persons with mental health needs. There is growing evidence and support for treatment programs that simultaneously address psychiatric symptoms and criminogenic risk; however, Morgan and colleagues (2020) caution that programs that target criminalness and mental illness as distinct constructs and merely supplement a mental health component to effective correctional rehabilitation programs, and vice versa, minimize the intricacy of the mental illness and criminalness relationship.

To highlight the complexity of this relationship when it comes to treatment needs, Morgan et al. (2020) calls attention to the fact that multiple presenting concerns (e.g., mental illness, criminalness, substance abuse) often result in negative outcomes (Goodell et al., 2011). For example, research has demonstrated that having a criminal record (Varghese et al., 2009) and being mentally ill (Alexander & Link, 2003) are considerable barriers to gaining employment. As a result, these difficulties are especially heightened for justice involved persons with mental illness. Thus, Morgan et al. (2020) calls for treatment programs that appreciate and effectively address the interwoven needs of mental illness-criminalness for justice involved persons with mental illness. However, there is a paucity of programs that do so.

To address this gap, Morgan and colleagues developed A Treatment Manual for Justice Involved Persons With Mental Illness: Changing Lives and Changing Outcomes (CLCO; 2018),
a structured treatment program that addresses the unique treatment needs of justice-involved persons with co-occurring mental health and criminogenic risk. CLCO is based on the bi-adaptive model (Morgan et al., 2018), which emphasizes that symptoms of mental illness and criminalness should be targeted equally to reduce criminal justice involvement. Thus, CLCO does not address the mental illness and criminogenic risk as distinctive needs, rather, they are treated as co-occurring problems that contribute to both criminal justice and psychiatric outcomes.

To test this framework, Scanlon and Morgan (2021) isolated the theoretical models of CLCO by delivering three variations to 9 groups of adult men on probation: 1) mental illness content only \((n = 16)\), 2) criminalness content only \((n = 20)\), and 3) mental illness and criminalness content combined \((n = 22)\). The participants in their sample had all received dual diagnoses of mental illness and substance disorders and were receiving treatment at a residential facility. As expected, the researchers found that the combined module produced large effect sizes in both psychiatric and criminalness domains, highlighting the significance of integrating mental illness and criminalness in interventions for justice-involved persons with mental illness.

Research has found promising evidence that addressing both psychiatric and criminogenic symptoms improves both psychiatric and criminogenic outcomes (Morgan et al., 2014). In a sample of 186 male \((n = 112)\) and female \((n = 74)\) moderate- to high-risk inmates at a Dual Diagnosis Residential program, Gaspar et al. (2019) found moderate to large Cohen’s \(d\) effect sizes (i.e., 0.18 to 1.25) for improvements in psychiatric domains. That is, CLCO participants experienced reduced psychiatric symptomology and engaged in behaviors and attitudes contributing to treatment and recovery, such as medication adherence. Measures of criminalness (e.g., criminal attitudes and thinking that motivate criminal justice involvement)
similarly decreased after engaging in CLCO, with medium to large effect sizes.

Important strides have been made towards more effective management of justice-involved persons with mental illness by developing treatment programs that address mental illness and criminalness as co-occurring concerns. However, the nature of the interaction between mental illness and criminogenic risk remains opaque and more research is necessary. Specifically, future studies should explore long-term psychiatric and criminal justice outcomes.
The current review of the literature highlights the fact that the overrepresentation of individuals with psychiatric disorders in the justice system is a complex matter. For decades following deinstitutionalization, programs for justice-involved persons with mental illness operated on the assumption that untreated symptoms are at the root of criminal involvement; however, research has continued to find a weak relationship between mental illness and criminal behavior. The fragility of this relationship is further corroborated by evidence that recidivism is not significantly reduced when correctional programs emphasize mental health treatment (e.g., symptom reduction, medication management) over addressing criminogenic risk.

Thus, researchers increasingly contend that the seeming link between mental illness and violence is misleading and distracts from the presence of other factors (such as criminogenic risk) that have an established relationship to criminal behavior. Now, a robust body of literature substantiates the conclusion that criminogenic risk is the main source of criminal activity for justice-involved persons both with and without mental illness. Researchers have proposed that the mental illness-criminalness interaction may be better understood as a reciprocal relationship (Bartholomew & Morgan, 2015; Morgan et al., 2020). Recent studies have provided evidence that criminal risk factors may exacerbate symptoms of mental illness and vice versa, which could have significant treatment implications. Notably, preliminary studies evaluating integrated treatment programs that equally address symptoms of mental illness and criminalness have produced promising results.

More research is required to probe more in depth into the nature of the relationship between criminogenic risk and mental illness. Further investigation is also necessary regarding
how this relationship influences treatment needs, and of paramount importance, how treatment of these co-occurring needs contribute to psychiatric and criminal justice outcomes.
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