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Mental Illness and Criminal Behavior

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Abstract

The tragic events in Aurora, CO and Newtown, CT have renewed public perception of mentally persons as 'dangerous' and 'criminal.' Unfortunately, this perception is based more on conjecture and fear than research. The following essay takes stock of the empirical research on mental illness and criminal behavior. Three noteworthy trends emerge from this literature. First, the prevalence of mental illness is substantially higher among individuals who have come in contact with the criminal justice system relative to the general population. Second, individuals with psychotic and externalizing behavioral disorders, particularly those who also abuse drugs and alcohol, tend to engage in higher levels of violence than individuals with other forms of mental illness. Third, mental illness does not determine whether someone will break the law; rather, it is but one of many criminogenic risk factors that interact in complex ways to influence individual behavior.

On July 20, 2012, a lone gunman opened fire in a crowded movie theater in Aurora, Colorado. He killed 12 people and wounded an additional 70 before fleeing the scene. Less than 6 months later, a young man shot his way into an elementary school in Newtown, Connecticut. Within 15 minutes, he killed 20 students and 6 staff members before turning the weapon on himself. The perpetrators of both attacks were young men with histories of severe mental illness. These tragic events left politicians, police, and policy makers desperately searching for ways to prevent the unpredictable: seemingly random acts of mass violence committed by isolated individuals. The ensuing rhetoric revolved around two primary themes: (i) limiting the availability of large-capacity weapons and (ii) identifying individuals at risk of perpetrating such acts of violence. In relation to the second point, the topic of mental illness and violence emerged as a key theme of policy debates across country.[1]

Before conflating mental illness with dangerousness, it is important to recognize that mental illness affects a significant portion of the US population while such displays of violence are incredibly rare. Recent estimates place the overall prevalence of mental illness among American adults somewhere around 20 percent (SAMHSA 2012). These estimates reach as high as 25 percent for children and adolescents (Merikangas et al. 2010). As many as 4 percent of the population can be described as suffering from severe mental illness, and in 2011 alone, an estimated 3.4 million US adults experienced severe psychological distress (SAMHSA 2012). To put it in perspective, this number is roughly equivalent to the population of Connecticut.

The fact that these isolated instances of unspeakable violence were committed by mentally ill persons should not be taken as evidence that persons with mental illness pose a threat to public safety on the whole. Rather, psychological impairment operates in concert with a variety of individual and environmental factors to influence human decision making and behavior. Unfortunately, these nuances are often lost in the political rhetoric and public opinion surrounding mental illness. Case in point, a PEW center poll conducted in January of 2013 indicated that 80 percent of the American public favored legislation preventing

persons with mental illnesses from purchasing firearms (Pew Research Center 2013). A related poll conducted during the same time frame revealed that 46 percent of Americans consider mentally ill persons to be more dangerous than members of the general population and over two-thirds reported that they would be unwilling to have a mentally ill person as a coworker or neighbor (Barry et al. 2013).[2]

These figures underscore a disturbing consensus – mentally ill persons form a dangerous constituency of the US population; in the interest of public safety, they should not be granted the same rights as the rest of the population. Unfortunately, the perception of the mentally ill as a threat to the social order is not a contrivance of the 21st century. Rather, it reflects continuity in a long, sordid history of the treatment of mental illness in the United States. The following essay provides an overview of the empirical literature on mental illness and criminal offending, focusing specifically on mental illness as a predictor of violence. Several noteworthy themes emerge in the literature: (i) violence is statistically rare, even among the most severely mentally ill; (ii) it is difficult to predict with certainty who – even among the "mentally ill" – will become violent; and (iii) a focus on sociological and criminological factors will be more effective in preventing violence than will a focus on restricting the rights of the mentally ill.

The essay begins by defining key concepts that are often used in the study on mental illness. The empirical literature on mental illness as a risk factor for criminal behavior is then examined. The essay concludes by reviewing several recent studies that demonstrate that mental health risk factors often interact with social and criminological factors in predicting criminal behavior. The implications of this research for social policy and the treatment of persons with mental illness more generally are discussed.

Review of psychological concepts

Before diving into the empirical literature, it would be useful to provide a brief overview of psychological terminology that will be unfamiliar to some readers. First, when psychologists refer to mental illnesses, they are typically talking about *symptoms* that reflect some underlying disorder. Unlike traditional diseases, most psychological disorders do not manifest in physical abnormalities. By means of comparison, consider a patient who visits a cardiologist complaining of chest pain. The physician may conclude that the *symptom* (i.e. chest pain) is indicative of heart disease. The physician may then order an EKG to confirm that the patient does indeed have heart disease – this either confirms or refutes the presence of a physical anomaly associated with the symptom. There is no analogous test for most psychological disorders. Rather, mental health practitioners rely on symptoms to make diagnoses. Symptoms that meet the criteria for various disorders are listed in the Diagnostic and Statistical Manual of the American Psychological Association (DSM-V), the functional equivalent of the Physician's Desk Reference.

The DSM-V is a multiaxial diagnostic tool, meaning that diagnoses are based on assessments in five categories, referred to as Axes. Axis I includes clinical psychological disorders, such as depression or anxiety. Axis II includes personality disorders, such as narcissism or antisocial personality as well as mental retardation. The remaining axes list general medical conditions, psychosocial conditions, and level of functional impairment. With the notable exception of pervasive developmental disorders, such as autism, most psychological disorders can be classified as either internalizing or externalizing. Externalizing behavior disorders are characterized by symptoms that manifest outwardly, such as hitting, kicking, screaming, while the internalizing behavior disorders manifest in inwardly directed behaviors such as substance use or self-harm.

The term 'mental illness' is typically used to describe persons who have a diagnosis on Axis I or II or those who exhibit symptoms that *would likely* lead to such a diagnosis. As there is not a single overarching 'mental disorder', the term is often used to refer to a rather heterogeneous population. Individuals with various permutations of mental illnesses experience different symptoms, different levels of functional impairment, and importantly for the task at hand, exhibit different behavioral manifestations of these symptoms. Case in point, the most recent iteration of the DSM recognizes over 300 unique disorders. Some are associated with externalizing behavioral outbursts, while others may insulate individuals from antisocial behavior.

Mental illness, except in rare instances, is not a fixed characteristic. Many disorders are temporary, developing in response to stressful life events and then disappearing after some time. Some disorders, such as bipolar disorder, are episodic, meaning that symptoms emerge, dissipate, and then reemerge. The time between episodes is characterized by periods of lucidity, where the individual is essentially symptom free. Other disorders, including many psychotic disorders, are characterized by persistent symptoms. Many disorders can be effectively treated with cognitive therapy or counseling, while others can be effectively managed through pharmaceutical regimens that help to regulate the function of chemicals in the central nervous system.[3]

Mental illness and criminal behavior

A consistent theme throughout this essay is that the risk of violence among the mentally ill is grossly overstated. To be clear, this does not mean that mentally ill persons lack the capacity to engage in violence or that some psychological disorders do not increase the risk of violence. Rather, the association between mental illness and criminal behavior is much more complex than commonly acknowledged. Three noteworthy themes emerge from the literature on mental illness and criminal behavior. First, the prevalence of mental illness is substantially higher among individuals who have come in contact with the criminal justice system relative to the general population. Second, individuals with psychotic and externalizing behavioral disorders, particularly those who also abuse drugs and alcohol, tend to engage in higher levels of violence than individuals with other forms of mental illness. Third, mental illness does not determine whether someone will break the law; rather, it is but one of many criminogenic risk factors that interact in complex ways to influence human behavior.

Mental illness as a risk factor for criminal behavior

A common approach to assessing criminal behavior among the mentally ill has been to compare the prevalence of mental disorders among inmates and adjudicated juvenile offenders to the general (i.e. non-institutionalized) population. The consensus is that adolescents and adults who come into contact with the criminal justice system are significantly more likely to meet diagnostic criteria for one or more mental disorders (Teplin et al. 2002). The prevalence of externalizing disorders, such as Attention Deficit/Hyperactivity Disorder (ADHD), oppositional defiant disorder, and conduct disorder, is significantly higher among adjudicated juvenile offenders relative to the general population (Timmons-Mitchell et al. 1997).[4] Juvenile offenders are also more likely to display symptoms of anxiety and depression (Vermeiren 2003). Similar trends emerge within adult prison populations. For instance, in their comprehensive review of the literature, Fazel and Danseh (2002) report that adult prison populations have higher rates of psychosis, major depression, and antisocial personality disorder. Collectively, these trends should be taken as evidence that individuals who are processed through the criminal justice system are significantly more likely to exhibit symptoms of mental illness than expected given the prevalence of mental illness among the general population.

Before concluding that the higher rates of mental illness among criminal justice populations reflect higher rates of offending among the mentally ill, we need to consider two important caveats. First, the criminal justice system is a funneling process – not all criminal behavior results in arrest, not all arrests lead to conviction, and not all those who are convicted are sentenced to jail or prison. Often, only the most severe offenders, especially adolescents, end up in secure facilities. Selection looms large in this research; comparisons of incarcerated persons and the general population are likely complicated by fundamental differences between groups. It bears to reasons that individuals with the most severe disorders have the greatest risk of ending up behind bars, artificially inflating the prevalence of mental disorders relative to the general population. Second, as is discussed in the companion essay, conditions in correctional facilities are far from pleasant. Social isolation, stress, and the persistent threat of violence may actually contribute to the development of mental illness (Schnitcker et al. 2012; Walker et al. 1991). Simply put, merely being in a correctional institution seems to increase the risk of developing psychological disorder. Therefore, higher levels of mental illness among incarcerated populations should not be interpreted as evidence of a higher level of criminality among the mentally ill; rather, it likely reflects some culmination of selection and the lingering effects of subpar conditions in correctional facilities.

In an effort to overcome these limitations, researchers sometimes use data gleaned from population-based surveys such as the National Comorbidity Study or the Epidemiological Catchment Area Study to better understand the association between mental illness and criminal behavior. A distinction of this approach is that respondents are asked to complete questionnaires meant to mimic clinical interviews, using instruments such as the Diagnostic Interview Schedule (Helzer and Robbins 1988). Respondents' also provide information on their criminal behavior, substance use history, and a variety of other factors. Researchers then assess whether individuals who report symptoms of mental illness tend to engage in higher levels of illegal or antisocial behavior. Using this approach, Jeffery Swanson and colleagues (1990; Swanson, 1994) demonstrated that people with serious mental illnesses, such as schizophrenia and bipolar disorder, were significantly more likely to be involved in violent assaults than those without such disorders. However, the authors are also careful to point out that the overwhelming majority of people with mental disorders do not engage in violence. Other researchers have since replicated these findings, demonstrating that mental illness is indeed a risk factor for violent behavior (Silver and Teasdale 2005; Sirotich 2008).

A key advantage of this approach is that respondents' self-report criminal behavior, thereby circumventing the requirement of the behavior coming to the attention of authorities. However, this strategy is not without limitations. Notably, the classification of a respondent as mentally ill is determined by the researcher analyzing the data rather than a licensed mental health practitioner. The American Psychological Association adamantly warns against non-clinicians using the DSM and related tools to make diagnoses (DSM 2012). Relatedly, these surveys are usually conducted via in-person or telephone interviews. Given the sensitive nature of the topic of mental illness, it is unlikely that an interviewer would have the training or rapport necessary to elicit an accurate response. Researchers often categorize individuals who report any symptom of a major mental disorder (MMD) as 'mentally ill'. This loose classification masks meaningful differences within the subset of respondents who have been classified as 'mentally ill.' For instance, persons exhibiting symptoms of ADHD are likely to engage in impulsive acts, while those with severe depression are likely to be withdrawn from everyday life. The criminogenic implications are clear; respondents in the first group are likely to engage in troublesome behaviors while those in the latter group are unlikely to.

On a related note, measures of self-reported crime derived from survey research often combine multiple types of behaviors into heterogeneous scales, grouping items like substance use, shoplifting, and violence into a single scale. As with measures of 'mental illness,' such broad categorizations of criminal behavior likely mask important variation in the types of offenses committed by individuals with particular types of psychological disorder. For example, persons with severe anxiety may smoke marijuana as a form of self-medication, but they may be no more likely to engage in robbery or physical assault than someone with no history of mental illness. Thus, the lack of precision in measuring both mental illness and violence poses a threat to this type of research.

Finally, many surveys are retrospective in nature, meaning that respondents are asked to report on both mental health status and criminal offending with a given time frame, usually 12 months prior to the interview. It is difficult to disentangle causal ordering – did respondents engage in criminal behavior because they were experiencing symptoms of mental illness, or did the symptoms of mental illness arise because they were involved in criminal behavior?

A third analytic strategy relies on community-based studies that collect detailed information on respondents' psychiatric history, criminal justice involvement, and various behavioral outcomes (often reported by multiple parties, such as parents, teachers, and adolescents). This allows researchers to compare behavioral outcomes between those with known disorders and those with no disorders, as well as between people with different types of disorders. These studies overcome many of the limitations outlined above. For one, mental health status is collected from official diagnoses, rather than survey items meant to mimic a clinical interview. Second, researchers are able to consider factors that occurred before a youth came into contact with the criminal justice system. Third, major mental disorders can be disaggregated and behavioral patterns analyzed across disorder type.

Research in this vein has produced rather telling findings. Hirschfield and colleagues (2006) report that prior to first arrest, delinquent youth display more symptoms of oppositional defiant disorder and other externalizing symptoms relative to their non-delinquent peers. Vogel and Messner (2012) report that relative to youth with other known disorders, those with various permutations of Oppositional Defiant Disorder and Conduct Disorder have the highest levels of self-reported delinquency, while youth with anxiety disorders have the lowest levels of delinquency. While the information gleaned from these studies provide a clear advantage over other methods, they tend to be expensive and the confidentiality requirements are daunting. As a result, samples are typically small and isolated to particular geographic areas, rendering the generalizability of findings problematic.

Mental illness, individual and social risk factors, and criminal behavior

On the whole, the empirical literature provides some evidence of a link between mental illness and criminal behavior. Certain *disorders*, particularly those that manifest externally or are accompanied by delusions, seem to increase the risk of criminal behavior. However, to conclude that this is a causal relationship oversimplifies the issue. Now, let us introduce another layer of complexity: the association between psychological risk factors and antisocial behavior seems to be contingent on individual and environmental risk factors. For one, the factors that are associated with the development of mental illness may also increase the likelihood of engaging in antisocial behavior. Likewise, scholars now recognize that criminal behavior among people with serious mental illness likely results from the interplay between risk factors in multiple domains. This has led mental health scholar Eric Silver to call upon researchers to better incorporate criminological and sociological variables into the study of

mental illness and crime (2006). Consequently, the past decade has seen a growth in research aimed at uncovering the dispositional and social factors that both mediate and moderate the relationships between mental illness and criminal behavior. These mechanisms include the presence of other psychological impairments, individual risk factors, social stressors, and broader environmental conditions.

Comorbidity and substance use

Sometimes individuals display symptoms characteristic of several different psychological disorders. This condition is referred to as comorbidity. Research indicates that youth with multiple Axis I diagnoses, especially those with permutations of externalizing and substance use disorders, face the highest risk of engaging in maladaptive behavior (Babinski et al. 1999; Copeland et al. 2007; Moffitt 1991; Walker et al. 1991). Similarly, the presence of certain personality disorders, such as antisocial personality disorder and psychopathy, have been shown to increase the risk of violence among mental health patients with diagnosed Axis I disorders (Crocker et al. 2005; Harris et al. 1993; Link et al. 1999). Finally, the association between substance abuse and violence may be even more pronounced among the mentally ill. For instance, some scholars have found that mentally ill persons who abuse drugs and alcohol have the highest risk of engaging in violence (Swanson et al. 2002).

Social and environmental risk factors

While psychologists are often concerned with the associations between internal risk factors and behavior, sociologists and criminologists tend to focus on broader interpersonal and ecological risk factors. Research suggests that risk factors identified in the criminological literature play an important role in the relationship between mental illness and offending. For instance, Vogel and Messner (2012) report that low self-control, exposure to violence, physical victimization, and friends' behavior explain variation in self-reported delinquency above and beyond indicators of psychological impairment. While constellations of criminological and psychological factors both contributed independent effects on behavior, the criminological factors better explained why some adolescents engaged in delinquency in their study. Moreover, the authors also detected multiplicative effects between criminological and psychological risk factors. For instance, the association between self-control and offending was stronger among youth with oppositional defiant disorder.

Silver and Teasdale (2005) argued that the association between mental illness and violence may be attributed to a common set of factors. They proposed that stressful life events, such as violent victimization, increase the risk that an individual will experience a major mental disorder while simultaneously increasing the likelihood that an individual will engage in violent behavior. Conversely, they argued that emotional support from families and friends may insulate against the development of mental illness and reduces the likelihood of engaging in violence. Consistent with their expectations, the authors reported that the relationship between mental illness and violence was substantially diminished once considering these external factors, suggesting that mental illness and violent behavior may be attributed to a common set of causes rooted in the stress and support contexts within which individuals are embedded.

Broader environmental characteristics, particularly neighborhood and community factors, have also been shown to influence the association between mental illness and criminal behavior. For instance, some researchers have demonstrated that neighborhood economic disadvantage amplifies the effect of mental illness on offending. This is clearly illustrated in the work of Silver

and colleagues (1999), who reported that concentrated neighborhood poverty was associated with a threefold increase in violent behavior among recently released mental hospital patients. The authors speculate that social stressors concentrated in economically depressed areas, such as chronic strain, exposure to violence, and poverty, are the key mechanisms linking MMDs to violence (see also Silver 2000a,2000b). Research by Swanson and colleagues (2002) lends further credence to these findings, demonstrating that victimization and the overall level of violence in the community increase the risk of violent behavior among the mentally ill.

Collectively, these studies reveal a much more nuanced picture of the association between mental illness and criminal behavior. For one, the research demonstrates that mental illness is one of many risk factors for criminal behavior. Moreover, it seems that traditional criminological risk factors, such as peer behavior and exposure to violence, have a stronger effect on offending than indictors of psychological impairment. The evidence also suggests that mental illness and criminal behavior may be attributed to a common set of external factors, such as experiencing stressful life events and having poor interpersonal relationships. Finally, the relationship between mental illness and criminal behavior may be mitigated or exacerbated by risk and protective factors in other domains. Rather than draw a direct causal association between mental illness and criminal behavior, the research suggests that certain types of mental disorders are among a variety of individual, interpersonal, and environmental risk factors that interact in complex ways.

Taking stock: mental illness and criminal behavior

The tragic events in Newtown and Aurora have brought the issue of mental illness and criminal offending to the forefront of public discourse. Public opinion surveys indicate that the majority of Americans consider persons with mental illness to be dangerous. Legislation has been enacted to limit the rights of persons with diagnosed mental disorders. The general sentiment is clear – persons with mental illness pose a threat a public safety and must be dealt with accordingly.

The empirical literature portrays a much more complex story. We can conclude with some certainly that persons with mental illnesses are more likely to come into contact with the criminal justice system than the general population. However, this association is complicated by two processes. First, people with severe disorders are more likely to reach the final stages in the criminal justice process, and second, the conditions of institutional settings may increase psychological impairment. We can also conclude that the association between mental illness and criminal offending depends on disorder type as not all symptoms manifest in the same way. Therefore, the conceptualization of 'mental illness' as a catch-all category is problematic. There are many different types of mental illness; some increase the risk of violent and other antisocial behaviors, others do not. Likewise, it is important to recognize that 'crime' is a heterogeneous concept, consisting of a variety of potential behaviors that are legally prohibited. Concluding that all mental illnesses lead to criminal behavior obscures these fundamental differences.

Importantly, risk factors for criminal behavior operate similarly among the mentally ill as they do in general populations of youths and adults. For instance, low self-control, neighborhood disadvantage, and exposure to violence each increase the risk of offending among persons with known disorders. In fact, it seems that these risk factors are more strongly associated with criminal behavior than indicators of the nature and severity of mental illness. The implications are clear – if we want to reduce violence, legislation limiting individual liberty and further stigmatizing persons with mental disorders seems to be poor policy. Given the relatively rare nature of severe mental illness, it seems that targeting mental illness alone will have little impact

on the overall level of violence in the United States. Rather, programs to reduce criminal behavior among the mentally ill should target the same factors as any other prevention initiative – reduce victimization, increase social support, train people to consider the long-term consequences of their actions, and reduce the effects of concentrated disadvantage in poor neighborhoods. Moreover, it seems that such policies may be better served by increasing access to services and treatment, rather than limiting access to weapons.

This review also highlights the necessity for further scholarship. For one, findings generated in prior research are often undermined by issues of selection, generalizability, and population heterogeneity. To overcome these limitations, there is a clear need for nationally representative data that contains official psychological records, criminal justice histories, and measures of social environments (such as neighborhood conditions, family functioning, and school context). These data should be longitudinal in nature and follow respondents from late childhood or early adolescence through adulthood. Such data would allow researchers to fully examine the complex associations among mental illness, individual and environmental risk factors, and maladaptive behaviors. Likewise, this would better allow researchers to identify which disorders are associated with which forms of criminal behavior. Such a design would circumvent many of the potential issues identified in prior research.

On the whole, the research indicates a complex association between mental illness and criminal behavior. Public discourse and social policies built around the notion of the mentally ill as dangerous are misinformed, at best. As a result, the risk of violence and other criminal behaviors among the mentally ill have been grossly overstated. Rather than be the sole factor determining whether or not someone will engage in crime, mental illness is but one of many individual and environmental risk factors that work together to influence behavior. To paraphrase clinical psychologist Richard Friedman – at the end of the day, most people who are mentally ill are not violent and most people who are violent are not mentally ill (Freidman 2006). Research and policy that implies otherwise have simply missed the proverbial mark.

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Short Biography

Matt Vogel is an Assistant Professor of Criminology and Criminal Justice at the University of Missouri–St. Louis. He received his PhD in Sociology from the University at Albany. His research interests include mental health and juvenile delinquency, person-context research, and the relationships between population dynamics and crime. His research has appeared in *Justice Quarterly*, *Journal of Quantitative Criminology*, and *Youth and Society*.

Notes

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[1] For instance, the Mental Health Law Provision of the New York SAFE law (MHL 9.46) requires mental health professionals to report to their local director of community services ("DCS") or his or her designees when, in their reasonable professional judgment, one of their patients is "likely to engage in conduct that would result in serious harm to self or others."

This information is then relayed to the New York State Division of Criminal Justice Services (DCJS). The DCJS will then determine whether the individual possess a firearm license. If so, the individual must surrender the license and all firearms immediately.

[2] The majority of respondents also reported that discrimination against the mentally ill was a problem and that most mentally ill persons could get better with treatment – opinions that are difficult to reconcile with the perception of mentally ill persons as dangerous.

[3] Mental illness and criminal behavior can be considered social constructions, meaning that their definitions are fluid, change over time, and are frequently decided by persons in power. For instance, homosexuality was recognized as a mental disorder on the DSM until 1973. Likewise, interracial marriages were illegal in Alabama as recently as 2001. Although beyond the purview of the current essay, it is important to recognize how the ways in which mental illness and crime are constructed may potentially influence the research on mental illness and criminal behavior.

[4] A diagnosis Conduct Disorder requires that an individual has engaged in criminal behavior in the past 12 months. Thus, the behavior leads to the diagnosis, rather than the other way around. This circular logic obscures the association between mental illness and delinquency.

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