WHAT GETS MEASURED IN REENTRY RESEARCH? A SCOPING REVIEW ON COMMUNITY REENTRY FROM JAIL AND PRISON FOR PERSONS WITH MENTAL ILLNESSES

STACEY L. BARRENGER
Northeast Ohio Medical University
LIAT KRIEGEL
Washington State University
KELLI E. CANADA
University of Missouri
AMY BLANK WILSON
University of North Carolina

Research on reentry for individuals with mental illnesses leaving jails and prisons lacks outcome specificity and standardization needed to advance knowledge about the efficacy and effectiveness of interventions. This scoping review aims to provide clarity about reentry outcomes by: (a) ascertaining what outcomes are a focus in reentry research, (b) explicating how outcomes are defined, and (c) identifying commonalities or gaps in outcomes reported. A search of multiple databases yielded 415 articles for potential inclusion. After independent document review by two of the authors, 61 articles were included in the review. Recidivism was the most used construct, accounting for 58% of total outcomes and 95% of criminal legal outcomes. Behavioral health indicators were reported the second most frequently and other outcomes were rarely reported. Increasing the specificity of commonly used concepts while also expanding the breadth of outcomes considered is needed to build an evidence base this area of research.

Keywords: scoping review; prison reentry; jail reentry; recidivism; mental illnesses

Individuals with mental illnesses are overrepresented in jails and prison (Bronson & Berzofsky, 2017). This phenomenon persists despite efforts to improve transitions to the community for those that have been incarcerated. Early reentry interventions focused on linkage to treatment which succeeded in that endeavor, but had little impact on recidivism (Osher & Steadman, 2007; Skeem et al., 2011). As these first-generation interventions have

AUTHORS' NOTE: *Stacey L. Barrenger is now at the Psychiatry Department in the College of Medicine at Northeast Ohio Medical University. Correspondence concerning this article should be addressed to Stacey L. Barrenger, Department of Psychiatry, Northeast Ohio Medical University, 4209 State Route 44, Rootstown, OH 44272; e-mail: sbarrenger@neomed.edu.*

had little sustained impact on recidivism (Epperson et al., 2014), reentry interventions are moving past solely linking individuals to treatment by also addressing the risks and needs most closely associated with criminal behavior (Blank Wilson et al., 2018; Morgan et al., 2020; Skeem et al., 2011).

Recent foci on criminogenic needs (Bonta & Andrews, 2017; risk factors for recidivism) or criminalness (Morgan et al., 2012; i.e., deviant behavior that can lead to criminal offenses) highlights the importance of considering criminal risk factors for reoffending and addressing criminogenic needs when developing the next generation of interventions for this population. This new generation of interventions is informed by the Risk-Needs- Responsivity Model (Bonta & Andrews, 2017), where interventions that engage criminogenic risk factors are the central focus of treatment. While there is accumulating evidence for the applicability of the risk and needs principles to individuals with mental illnesses, the responsivity principle, which addresses individual's learning style, motivation level, and cognitive abilities, has yet to be tested in this population (Skeem et al., 2015). As the array of treatment services available to this population expands, it becomes important to conduct research that can specify what treatments work and for whom. To engage in this type of comparative effectiveness research more specificity and standardization is required in the measurement of treatment outcomes, along with an examination of potential mediators and moderators that influence these outcomes.

A burgeoning, yet understudied area of reentry research highlights the importance of the interpersonal, community, and structural factors that may impinge on the reentry process for those with mental illnesses leaving incarceration (Barrenger et al., 2017; Jacobs & Panichelli, 2020; Kriegel, 2019). As formerly incarcerated individuals with mental illnesses are in particularly precarious positions due to their high concentration in areas of poverty and social disadvantage (Baillargeon et al., 2010; Draine et al., 2002), research on the socio-contextual factors accompanying community reentry may show how factors outside of the individual may contribute to recidivism. Furthermore, these structural and interpersonal factors may be intervention points to improve community tenure.

Yet, despite these developments toward developing more responsive reentry interventions, the percentage of people with mental illnesses in jails and prisons has not decreased significantly (Bronson & Berzofsky, 2017). Therefore, interventions for this population are missing key targets for disrupting cycles of recidivism. Even with an increased awareness of reentry needs and development of more specific interventions, there is a limited understanding of what services and supports help formerly incarcerated individuals with mental illnesses to transition back to their communities and avoid additional criminal legal contact. Research on service intervention targets, individual mechanisms of change, structural factors, and strategies for effectively measuring intervention outcomes is needed to better understand how to successfully move people with mental illnesses out of the criminal legal systems.

MEASURING INTERVENTION EFFECTIVENESS

A common method for determining treatment effectiveness is to conduct a systematic review or meta-analysis to determine the pooled effects of an intervention across multiple studies. There have been a number of narrative reviews and systematic reviews of interventions at the intersection of the mental health and criminal legal systems (Canada et al., 2019;

Drake et al., 2004; Hopkin et al., 2018; Lamb et al., 1999; Lamb & Weinberger, 1998; Loveland & Boyle, 2007; Martin et al., 2012; Morgan et al., 2012; Skeem et al., 2011; Smith-Merry et al., 2019). In general, evidence for interventions focused at the intersection of the mental health and criminal legal systems has been mixed, with a range of results from strong to weak and variation in the design and rigor of the studies.

Three recent reviews, one a systematic review (Hopkin et al., 2018), one narrative review (Smith-Merry et al., 2019), and one a narrative synthesis (Kendall et al., 2018), have focused specifically on reentry interventions from prison for people with mental illnesses. Hopkin and colleagues (2018) found an emerging body of evidence for interventions to improve access to insurance coverage, mental health services, and health care. However, the evidence for a reduction in reoffending is weak and evidence for reincarceration shows increased risk through increased monitoring that occurs with the interventions. Furthermore, the authors note that very few studies examined clinical or behavioral outcomes and most studies were rated as weak or moderate in study quality.

In their review of qualitative evaluations of reentry programs, Kendall and colleagues (2018) pinpointed social and structural factors, including relationships with case workers and access to social support and housing as well-evidenced outcomes of qualitative reentry studies. Smith-Merry and colleagues (2019) echoed many of these findings in their systematic narrative review of recovery-oriented and person-centered mental health programs during reentry, adding that a dearth of resources and lacking communication between systems were additional barriers during reentry. These reviews point to a need to understand a broader range of outcomes, that move beyond measures of recidivism or criminal risk, and can both hinder or enable successful community reentry of individuals with mental illnesses.

As prior systematic reviews have shown limited evidence for the effectiveness of interventions for persons with mental illnesses leaving jails and prisons, conducting another systematic review or meta-analysis will not add to this body of research to move the field forward. As the narrative reviews show, there is an increasing awareness of the complex nature of community reentry, specifically that interpersonal and structural factors, in addition to individual level factors, may influence reentry outcomes. Therefore, now is the time to take stock of what outcomes have commonly been utilized in reentry research, how they have been operationalized, and what commonalities or gaps appear in similarly measured outcomes. To this end, a scoping review that aims to examine the outcome research within community reentry literature broadly, without concern for study quality, is the best method to help to identify both gaps in research and areas on which to build a more responsive research agenda. This study aims to provide clarity about reentry outcomes for formerly incarcerated individuals with mental illnesses by: (a) ascertaining which outcomes are utilized in reentry research, (b) understanding how outcomes are defined in reentry research, and (c) identifying commonalities or gaps in outcomes reported in reentry research for individuals with mental illnesses leaving prison or jail.

METHOD

For this study, we conducted a scoping review of reentry literature, using methods developed by Peters et al. (2015) and utilizing guidelines set by the PRISMA-ScR (Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews)

TABLE 1: Key Search Terms

Step	Search term(s)
1	Jail reentry & (10–15)
2	Prison* reentry & (10–15)
3	Reentry programs & (10–15)
4	Jail diversion programs & (10–15)
5	Prison & (10–15)
6	Jail & (10–15)
7	Incarcerated & (10–15)
8	Criminal justice system & (10–15)
9	Arrest & (10–15)
10	Mentally ill*
11	Serious mental illness
12	SMI (serious mental illness)
13	Mentally disordered
14	Mentally disturbed
15	Co-occurring disorders

TABLE 2: Inclusion and Exclusion Criteria

Criterion	Inclusion	Exclusion
Time period	1988–March 2020	Prior to 1988
Language	English	Non-English studies
Study focus	Outcomes measured in reentry research (jail and prison) for individuals with mental illnesses.	Descriptive studies with no outcomes; process studies with no post-release outcomes; secondary reviews (e.g. systematic reviews, scoping reviews, meta-analyses); outcomes measured only during incarceration
Participant population	Adjudicated individuals with mental illnesses or co-occurring disorders returning to their communities from jails and prisons	Pre-adjudicated detainees, probationers; individuals without mental illnesses; individuals with personality disorders, traumatic brain injuries, or substance misuse only; individuals diverted to hospital, community, or treatment settings
Criminal legal setting	Prisons and Jails	Community supervision without linked incarceration (e.g. probation), Courts

checklist (Tricco et al., 2018). The goal of this scoping review was to clarify the types of outcomes reported in reentry research, how the outcomes are defined, and identify commonalities and gaps in the outcomes reported. The review steps included definitions of objectives and methods for the scoping review (stated above), identification of search terms (see Table 1), and selection of databases.

INCLUSION AND EXCLUSION CRITERIA

Preliminary inclusion criteria included English language articles published between 1988 and March, 2020 in academic journals, dissertations, white papers, and research reports (Table 2). We chose 1988 as it provided a 10-year buffer preceding Lamb and Weinberger's (1998) seminal article on the prevalence of serious mental illnesses in jails. The earliest reentry study found in our initial search was published in 1994, so it was unnecessary to extend the search to earlier dates. Following the methods outlined by Peters et al. (2015), initial inclusion criteria were set broadly to include a wide swath of articles to reduce the likelihood

of missing articles of interest. For the scoping review, we included research studies and reports of reentry interventions or programs and analyses of data on reentry from prisons and jails for adults with mental illnesses and co-occurring (substance use and/or personality) disorders. Studies that identified mental illnesses through current or past history of diagnosis or treatment, and self-report or diagnostic assessment were included. In addition, we included studies with populations that also identified co-occurring substance use disorders or personality disorders but excluded studies that examined substance or personality disorders only. We chose to exclude these studies, not because these diagnoses do not reflect mental illnesses, but because the extensive research on these populations merit their own reviews. We sought empirical studies that identified outcomes associated with reentry. As the focus of this review was on the conceptualization and operationalization of outcomes, studies were not excluded based on type of research or the quality of the study.

SEARCH STRATEGY

Databases searched were Medline, Academic Search Complete, JStor, PsychINFO, Scopus, Web of Science, Google Scholar, and Google. In addition to academic search engines, Google Scholar and Google were utilized in an attempt to include applied research and reports. Searches included a combination of location-based (i.e., jails and prisons), programmatic (i.e., reentry), and population-based (i.e., serious mental illnesses) terms to maximize search results (see Table 1).

The initial search yielded 27,595 articles (see Figure 1 for article flow diagram) for first round review and these abstracts were uploaded into Covidence (Veritas Health Innovation, 2018). The lead author performed the initial review of articles at the title and the abstract level and eliminated articles that clearly did not have a criminal legal, mental health, or an outcomes component. The remaining 417 full-text articles were reviewed independently by two members of the research team to determine final inclusion into the review. In this round, eliminated articles included those that reported on diversion programs, forensic services in hospitals, jails, or prisons, and conceptual pieces. If articles included populations with substance use disorders or personality disorders only, they were eliminated as well. Reviewers disagreed in 11% of reviewed articles at this stage and the discrepancies regarding final inclusion or exclusion were resolved through consensus and resulted in a final sample of 61 articles for the scoping review.

DATA EXTRACTION

Information sought from the articles included the goal of the study/article, methods type, and outcomes measured and the data extraction was guided by summative content analysis (Hsieh & Shannon, 2005). Reported outcomes were entered on a data-charting form developed by the first two authors. The reviewers independently charted the outcomes and met regularly to discuss results and address any discrepancies. This was an iterative process, especially as outcomes capturing similar concepts were grouped together. Through consensus the reviewers determined if grouped outcomes were indicators of a single construct or more than one construct. For example, outcomes reporting rearrest and reincarceration are measures of the construct recidivism, so these were grouped together. Counts were entered each time an outcome was reported and we indicated the article in which the outcome occurred (see supplemental materials for list of articles included in the review and corresponding outcomes). All four authors then reviewed the outcomes and the constructs they reflected, discussed various

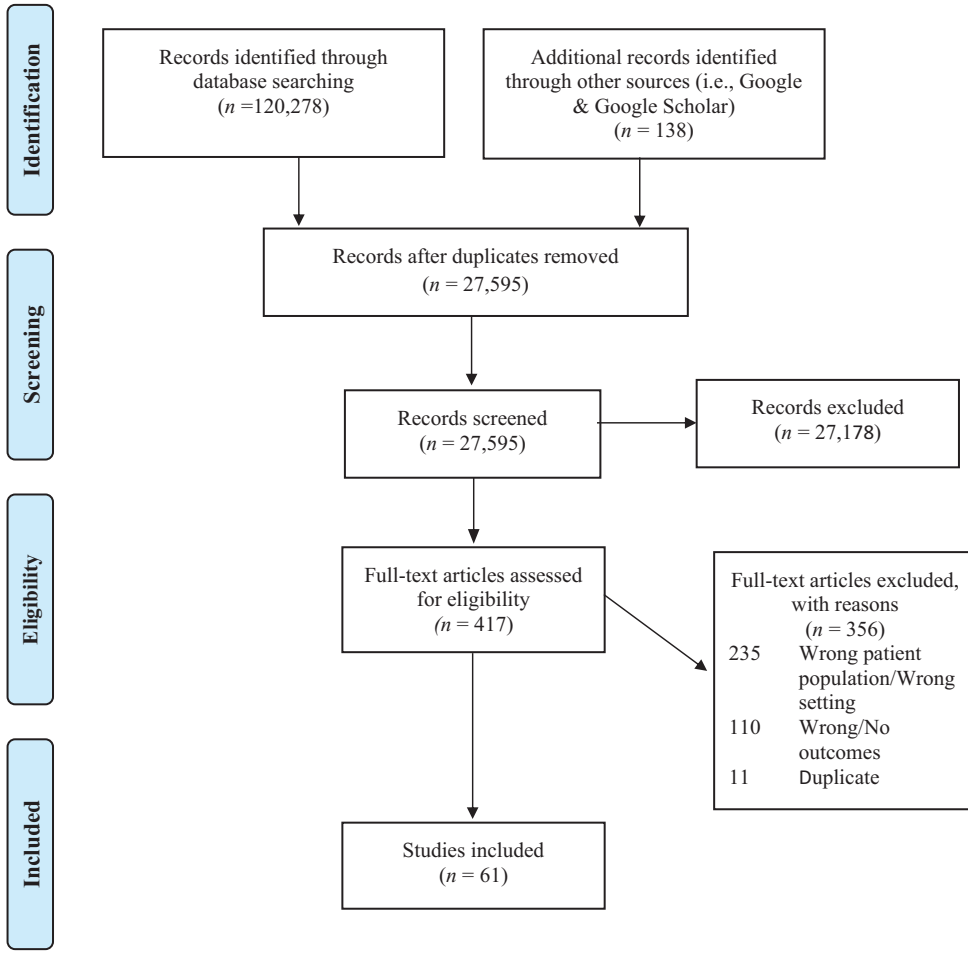

Figure 1: Flowchart of Articles

ways for grouping concepts categorically, and achieved consensus in grouping concepts into three broad categories based on content: criminal legal, behavioral health, and quality of life. Outcomes that reported on recidivism, aspects of criminal behavior, or compliance with probation or parole were grouped under the criminal legal category. Outcomes that indicated receipt of behavioral health services across a variety of modalities or receipt of medication, outcomes that measured symptoms or functioning, and engagement or completion of related behavioral health services were included in the broad category entitled behavioral health. Finally, outcomes having to do with basic needs like housing or medical health care, social support, public assistance programs and employment, and any standardized measures of quality of life were grouped within the quality of life category.

RESULTS

There were 61 articles included in the scoping review and 38 examined reentry programs that included reentry planning, case management programs, Medicaid enrollment, and peer support. The remaining 23 articles examined reentry outcomes outside of a programmatic

intervention. Across all 61 articles, 165 outcomes were reported. The criminal legal category had 97 outcomes comprising 58% of all reported outcomes. Behavioral health had 40 outcomes comprising 24% of all outcomes. The quality of life category had 28 outcomes and 17% of all reported outcomes (see Table 3).

CRIMINAL LEGAL

The criminal legal category includes recidivism, crime, and compliance constructs. Recidivism was the most commonly used construct in reentry research for people with mental illnesses, accounting for 58% of total outcomes and 95% of criminal legal outcomes. Recidivism had seven different operationalizations and was most often operationalized as reoffending (new arrests) and reincarceration (return to jail or prison). These two conceptualizations made up more than half of all the reported types of recidivism. Other operationalizations of recidivism included technical (parole) violations, reconvictions, and number of days in jail or prison. Other criminal legal constructs utilized in the literature were crime (operationalized as type of conviction or criminal activity), and compliance (operationalized as attendance a parole outpatient clinic).

BEHAVIORAL HEALTH

The behavioral health category includes the constructs of treatment, linkage to services, symptomatology, and recovery. The treatment construct had the most reported outcomes and was operationalized eight different ways. Receiving outpatient mental health services (including case management) and having a hospitalization occurred with the most frequency. Other treatment outcomes were medication (services or adherence), outpatient and inpatient substance abuse treatment, emergency room visits, and hospital days. The construct, linkage to services, operationalized as either engagement or completion of services, was reported a total of three times. Symptomatology, which included alcohol or drug misuse, psychiatric symptoms, and risk of harm to self and others, was reported six times. One study reported on functioning and was determined to be an operationalization of recovery.

QUALITY OF LIFE

The quality of life category includes housing, employment, public assistance, quality of life, physical health, social functioning, and income constructs. Public assistance was reported the most, occurring seven times and comprising 25% of the category, but it was operationalized in five different ways. Housing/housing stability and physical health status were both the second most frequently occurring constructs, with each being reported six times. Occurring less frequently were employment, income, quality of life (QOL), and social support which both were conceptualized with standardized measures.

COMMONALITIES OR GAPS IN OUTCOMES ON REENTRY RESEARCH

Overwhelmingly, recidivism was the outcome most often reported and was most commonly operationalized as reoffending (new arrest) or reincarceration (return to prison or jail). These two recidivism constructs report on important, but different conceptual aspects of recidivism. Reoffending indicates repeat criminal offending; whereas, reincarceration is a return to jail or prison possibly resulting from a new offense, a technical (parole) violation, or a summary offense such as “driving without a license.” Technical violations, which

TABLE 3: Constructs Table

Category	Construct	Operationalized/measured	Count	% cat	% tot
Criminal legal					
	Recidivism			95	58
		New arrest (reoffending)	31	32	
		Return jail/prison (re-incarcerated)	24	25	
		Technical (parole) violation	13	13	
		Days in jail or prison	10	10	
		Reconvictions	9	9	
		Annual criminal charges	2	2	
		Type of arrest	2	2	
	Crime			5	3
		Type of conviction	4	4	
		Criminal activity	1	1	
	Compliance			<1	<1
		Attendance parole outpatient	1	1	
Total CJ			*97*		*59*
Behavioral health					
	Linkage to services			8	2
		Engagement or completion	3	8	
	Treatment			75	18
		Outpatient MH services	12	30	
		Hospitalization	7	18	
		Medication	3	8	
		Hospital days	2	5	
		ER visits	2	5	
		Outpatient SA services	2	5	
		Inpatient SA services	1	3	
		Crisis stabilization services	1		
	Symptomatology			15	4
		Psychiatric symptoms	2	5	
		Alcohol or drug misuse	3	8	
		Risk of harm (to self and others)	1	3	
	Recovery			3	<1
		Functioning	1	3	
Total BH			*40*		*24*
Quality of life (QOL)					
	Housing			21	4
		Housing status or stability	6	21	
	Employment			7	1
		Employment	2	7	
	Public assistance			25	4
		Any type of benefit	2	7	
		Medicaid	2	7	
		General assistance	1	3	
		Food stamps	1	3	
		Any cash assistance	1	3	
	QOL			11	2
		QOL measure	3	11	
	Physical health			21	4
		Health status	1	3	
		Outpatient medical treatment	3	11	
		Medical inpatient	2	7	
	Social functioning			7	1
		Social support	2	7	
	Income			7	1
		Income	2	7	
Total QOL			*28*		*17*
Total of all constructs			*165*		

Note. %cat = percentage within the category; %tot = percentage across all categories; ER = emergency room; MH = mental health; SA = substance abuse.

may or may not result in a return to jail or prison, were also reported in about half of articles reporting on reoffending and reincarceration, meaning that very few studies distinguished between reincarceration due to new offenses or technical violations.

Within the behavioral health category, outpatient mental health treatment and hospitalizations were the most commonly reported outcomes. The focus was primarily on treatment modality with no reporting of accessibility, quality of treatment, and effectiveness of treatment. Engagement or completion of services was reported only three times. Similarly, outcomes of different treatment modalities like symptom reduction and substance misuse were minimally addressed.

Within the quality of life category access to financial support (reported as entitlements, employment, or income) and housing/housing stability were the most reported outcomes and are important for supporting community reentry; however, these outcomes were only reported, collectively, 19 times. With 160 total conceptualizations of constructs reported across 61 studies, these outcomes comprised only 12% of reported outcomes. In addition, physical health and treatment were reported on only six times and social support only two times across all studies.

Gaps within criminal legal outcomes include those on criminal risk, particularly dynamic risk factors, and constructs that capture desistance processes, like engaging in prosocial activities of parenting, working, or partnering. While some criminal risk factors were used as predictor variables in studies that used survival analyses, none were conceptualized or operationalized as outcomes in reentry research. Notable gaps in behavioral health outcomes are those that go beyond type of treatment modality and also report not only on quality and length of treatment but outcomes of treatment like psychiatric symptoms and substance misuse.

In general, quality of life outcomes were reported with low frequency, but should be included as a focus of reentry research as stable housing and income are the foundation of reentry (Pleggenkuhle et al., 2016). Furthermore, very few indicators of recovery were reported across studies as functioning, quality of life, and social support were reported only six times collectively. Other recovery-oriented outcomes such as engagement in meaningful activities, quality of relationships, and collaboration in health services could be included as indicators of individual functioning and well-being.

DISCUSSION AND IMPLICATIONS

INCREASING SPECIFICITY AND PRECISION IN RECIDIVISM MEASUREMENT

The three most common conceptualizations of recidivism (i.e., reincarceration, reoffending, and technical violations) have different meanings of individual behavior and varying implications for measuring the effectiveness of reentry interventions. Reincarceration indicates a return to jail or prison and could be the result of new offending or a technical violation. Reoffending typically indicates a new arrest or conviction and may indicate an individual's return to criminal behavior. Finally, technical violations result from not following rules of parole or probation (e.g., missing appointments) rather than committing new crimes and may not indicate either reoffending or reincarceration. These three indicators of recidivism have different implications for individuals, programs, and policies. Yet, they are commonly reported on collectively as a single outcome. This imprecision may lead to over or underestimating the effectiveness of interventions. The conflation of outcomes also

makes it difficult to compare across studies and to know specifically what is being measured.

Most studies did not provide a rationale for conceptualizing and measuring one type of recidivism as opposed to another. Conceptualizations were commonly used interchangeably and universally reported as "recidivism" even though operationalizations varied from study to study. In addition, there was little indication that these operationalizations were theoretically driven nor were these many operationalizations treated as indicators of different phenomena. In the studies that did report why a particular type of recidivism was used (Duwe, 2015; Matejkowski & Ostermann, 2015) a clear rationale was given for why researchers utilized specific conceptualizations. Rationale for why a specific type of recidivism is measured and reported should be related to the goals of the research, the intervention being measured, or the population being studied. Terminology needs to be more precise; researchers should avoid using recidivism as an umbrella term when they mean reoffending, reincarceration, technical violation, or other measures of recidivism. Within these conceptualizations, the types of reoffending, reincarceration, or technical violations need to be reported.

Much reentry research relies on administrative data sets. Measures of recidivism may be more of a function of data availability rather than theoretical or evidence-based conceptualizations. Furthermore, when utilizing existing data sets, researchers rarely report how data was cleaned or extracted, making this process more transparent would aid in rigor. Recidivism, in all of its forms, as measured through administrative datasets is a functional indicator of the system rather than the individual (Butts & Schiraldi, 2018). It shows how well systems function in apprehending, prosecuting, and incarcerating individuals, but it does not capture individual level functioning, motivations, or behaviors that may indicate individuals' orientation toward not reoffending. Acknowledgment and consideration of the context in which communities of color are over-policed, and Black and Brown men are disproportionately arrested, particularly as compared to White communities, is not accounted for in existing measures of criminal recidivism. Reliance on administrative data to measure individual and community level behaviors obscures the impact of racial and economic injustices within the criminal legal system.

Other forms of data collection within reentry research would allow dynamic risk factors, like procriminal attitudes, procriminal associates, and antisocial personality patterns, to be measured and reported. This data could be collected by the researcher or accessed through record reviews of probation/parole officers, treatment providers, and program records. Interestingly, only one study asked individuals about their involvement in criminal activity (Sacks et al., 2012). This is a better measure of individual behavior than the system's ability to capture and punish individuals. While there may be concern about the validity of self-reported criminal activity, Nieves et al. (2000) showed high concordance between self-report and official records of criminal offending. Community-level data, including neighborhood characteristics like policing, safety, and social climate, are equally valuable in describing facilitators of offending and rearrest. Looking at both community factors and individual level behaviors can provide more robust information than what administrative records can provide. Asking about behaviors also uncovers the processes by which individuals may return to criminal offending or may stop their involvement in criminal activity. This approach is better suited to developing socio-behavioral interventions that promote desistance.

ADDRESSING BEHAVIORAL HEALTH OUTCOMES IN REENTRY RESEARCH

Behavioral health outcomes were rarely measured and reported in the reviewed articles. This finding was unexpected given the predominance of concentrated efforts to direct those involved in the criminal legal system to behavioral health services as a way to reduce recidivism. In addition, behavioral health treatment outcomes were conceptualized and operationalized differently across studies, with most focusing on treatment receipt, with little reporting on accessibility, quality, or effectiveness of mental health services. Likewise, substance misuse was rarely measured as an outcome even though survival analyses consistently demonstrate higher risk of reincarceration and reoffending for individuals with co-occurring disorders (Blank Wilson, Draine, et al., 2014; Blank Wilson et al., 2011). Receipt of treatment, whether through professionally brokered linkage to services or self-initiated treatment involvement, is an important outcome; however, broader indicators of treatment success, including engagement, motivation, psychiatric symptoms, or recovery indicators would enhance our understanding of what works and what does not in reentry research. Indicators of behavioral health, including mental health and addiction recovery, are likely important mediators or underlying mechanisms of change, that will ultimately lead to outcomes of interest, like recidivism or hospitalization. Most of the reentry outcomes in this review tell us little about which mechanisms of change should be targeted and which behaviors may be linked to reoffending, participation in treatment, or quality of life. The lack of reporting on clinical or behavioral outcomes in research on reentry interventions is a missed opportunity to understanding the underlying mechanisms of change that may be linked to reoffending and reincarceration (Chambers et al., 2009). Services aimed at individual change show evidence for reducing recidivism (Visher et al., 2017), but more research is needed to better understand which specific components of interventions impact which individual change mechanisms.

The lack of reporting on behavioral health outcomes could also be related to the overreliance on administrative data in reentry research and behavioral health administrative data may be more difficult for researchers to obtain. One possible solution is to advocate for integrated data systems between criminal legal and mental health systems which would not only improve communication between these systems in practice but also help track both criminal legal and behavioral health outcomes. While this would facilitate administrative reporting on behavioral health outcomes in research, the data would be bound by the same limitations outlined above with criminal legal administrative data. The use of administrative data is appropriate if the goal of the research is to measure system level functioning and understand what policy changes may be needed, but as outcomes for intervention research that aims to change individual and community level behavior, the use of administrative data is lacking.

LIMITATIONS

There are limitations associated with this scoping review. First, despite our best efforts, we may have missed articles that should have been included, specifically anything published before 1988. Second, we excluded articles with populations comprised of substance use disorders only or personality disorders only, because the extensive literatures on these populations indicate that they are worthy of their own scoping reviews, but to some this decision may seem arbitrary. Third, while our grouping of outcomes was an

iterative process and agreed on by our research team, others may have employed a different methodology resulting in a different categories and different groupings of outcomes. While alternate groupings of outcomes may lead to different categorical percentages, our analysis still provides a broad review of reentry research, identifies gaps in the current body of research, and makes recommendations regarding the direction of future research.

INCREASING THE BREADTH OF REENTRY OUTCOMES: IDENTIFYING INDIVIDUAL, INTERPERSONAL, AND STRUCTURAL LEVEL FACTORS

Our results show a lack of reported outcomes on criminogenic and/or dynamic risk factors, both of which have increasingly been a focus of research on this population (Blank Wilson, Farkas, et al., 2014; Gross & Morgan, 2013; Wolff et al., 2013). As we begin to understand the complex interplay between psychiatric symptoms and criminalness (Morgan et al., 2020), these factors need to be measured and reported in reentry research. These criminal risk factors were incorporated in some of the studies that conducted survival analyses and one notable study examined the mediated effect of criminogenic risk on rearrest and technical violations (Matejkowski & Ostermann, 2015). While risk factors can impact recidivism, protective factors also have a direct effect on rearrests (Lowder et al., 2017) and also need to be included in reentry research. Approaches that incorporate psychiatric, criminal risk, and protective factors can capture the complex process of community reentry from jails and prisons. Finally, to fully understand these risk and protective factors, longitudinal designs are warranted, yet much research is cross-sectional or retrospective.

We have very little information on the underlying mechanisms that may contribute to criminal behaviors leading to reoffending. With an increasing interest on developing interventions that target criminogenic needs and behaviors, there needs to be a corresponding increase in operationalizing and measuring these risk behaviors (see Heffernan et al., 2019 for an in-depth discussion of dynamic risk factors and causality). In addition, the focus should not be solely on risk producing behaviors, but there should be a corresponding focus on strengths-based behaviors that may be protective or contribute to developing pro-social behaviors. Reentry research should not solely focus on reducing outcomes like reoffending, reincarceration, and technical violations as (1) these indicators may be better addressed through policy changes and (2) at best they are only indicators that an intervention may work, but not how it works. Instead, incorporating strengths-based measures and outcomes like employment, graduation, and social relationships in reentry research can show individual progress toward desistance (Butts & Schiraldi, 2018). These prosocial activities may be important in extending community tenure, but they have not been examined closely.

More general implications from this scoping review suggest that research needs to capture the context surrounding individual outcomes. Successful reentry is dependent upon factors beyond individual characteristics and behaviors, including family support, available resources, and characteristics of communities to which individuals return (Solomon et al., 2006). Measuring family support or community safety may help explain why individuals return to jail or prison. At a macro level, future research should consider more thoughtfully and methodically the structural mechanisms contributing to offending and reoffending, including risk environments, institutionalized racism, and laws and policies criminalizing poverty and addiction. Identifying whether a person recidivates is important but without the context of why recidivism occurs, interventions may not be targeting the right mechanisms.

As an example, while employment may lengthen time to recidivism, it does not decrease the likelihood of recidivism (Tripodi et al., 2009). Without consideration of context, institutional barriers, or even social network support, this finding only provides a preliminary understanding of a larger problem.

Finally, we reiterate a point raised earlier that recidivism is more reflective of the system and how well it is functioning and less reflective of individual intention and functioning. This is particularly true in Black and Brown communities that are over-patrolled by law enforcement. These communities experience high recidivism rates; however, these rates do not reflect the success of the individual (or not) but rather the targeted policing of certain neighborhoods. Future research and reviews need to address race and ethnicity more directly. In addition, other structural conditions associated with neighborhoods (concentrated disadvantage and racial stratification) that impact on social conditions like social capital necessary for community integration need to be addressed in reentry research (Olusanya & Cancino, 2012). Acknowledging the underlying racist structures informing who is and who is not arrested and how reentry landscapes differ is critical to developing interventions that account for these inequities. These steps will help to change the systems that perpetuate the overrepresentation of people of color and those with mental illnesses within the criminal legal system.

ORCID iDs

Stacey L. Barrenger https://orcid.org/0000-0002-0761-9821

Kelli E. Canada https://orcid.org/0000-0002-2747-8675

SUPPLEMENTAL MATERIAL

Supplemental Material is available in the online version of this article at http://journals.sagepub.com/home/cjb

REFERENCES

Baillargeon, J., Hoge, S. K., & Penn, J. V. (2010). Addressing the challenge of community reentry among released inmates with serious mental illness. *American Journal of Community Psychology*, *46*(3–4), 361–375. https://doi.org/10.1007/s10464-010-9345-6

Barrenger, S., Draine, J., Angell, B., & Herman, D. (2017). Reincarceration risk among men with mental illnesses leaving prison: A risk environment analysis. *Community Mental Health Journal*, *53*, 883–892. https://doi.org/10.1007/s10597-017-0113-z

Blank Wilson, A., Draine, J., Barrenger, S., Hadley, T., & Evans, A. (2014). The role of substance abuse in explaining time to re-incarceration among people with serious mental illness. *Administration and Policy in Mental Health and Mental Health Services Research*, *41*(3), 293–301. https://doi.org/10.1007/s10488-013-0467-7

Blank Wilson, A., Draine, J., Hadley, T., Metraux, S., & Evans, A. (2011). The role of mental illness and substance abuse in explaining jail recidivism. *International Journal of Law and Psychiatry*, *34*, 264–268. https://doi.org/10.1016/j.ijlp.2011.07.004

Blank Wilson, A., Farkas, K., Bonfine, N., & Duda, J. (2018). Criminogenic interventions for justice involved persons with serious mental illnesses: A targeted service delivery approach. *International Journal of Offender Therapy and Comparative Criminology*, *62*(14), 4677–4693. https://doi.org/10.1177/0306624X18759242

Blank Wilson, A., Farkas, K., Ishler, K., Gearhart, M., Morgan, R., & Ashe, M. (2014). Criminal thinking styles among people with serious mental illness in jail. *Law and Human Behavior*, *38*(6), 592–601. https://doi.org/10.1037/lhb0000084

Bonta, J., & Andrews, D. A. (2017). *The psychology of criminal conduct* (6th ed.). Routledge.

Bronson, J., & Berzofsky, M. (2017). *Indicators of mental health problems reported by prisoners and jail inmates, 2011-12*. U.S. Department of Justice, Bureau of Justice Statistics. http://www.bjs.gov/index.cfm?ty=pbdetail&iid=5946

Butts, J., & Schiraldi, V. (2018, March 15). *Recidivism reconsidered: Preserving the community justice mission of community corrections*. Program in Criminal Justice Policy and Management, Harvard Kennedy School. https://www.hks.harvard.edu/sites/default/files/centers/wiener/programs/pcj/files/recidivism_reconsidered.pdf

Canada, K. E., Barrenger, S. L., & Ray, B. (2019). Bridging mental health and criminal justice systems: A systematic review of the impact of mental health courts on individuals and communities. *Psychology, Public Policy, & Law*, *25*(2), 73–91. https://doi.org/10.1037/law0000194

Chambers, J. C., Yiend, J., Barrett, B., Burns, T., Doll, H., Fazel, S., Jenkinson, C., Kaur, A., Knapp, M., Plugge, E., Sutton, L., & Fitzpatrick, R. (2009). Outcome measures used in forensic mental health research: A structured review. *Criminal Behaviour and Mental Health*, *19*, 9–27. https://doi.org/10.1002/cbm.724

Draine, J., Salzer, M. S., Culhane, D. P., & Hadley, T. R. (2002). Role of social disadvantage in crime, joblessness, and homelessness among persons with serious mental illness. *Psychiatric Services*, *53*(5), 565–573. https://doi.org/10.1176/appi.ps.53.5.565

Drake, R. E., Mueser, K. T., Brunette, M. F., & McHugo, G. J. (2004). A review of treatments for people with severe mental illnesses and co-occurring substance use disorders. *Psychiatric Rehabilitation Journal*, *27*(4), 360–374. https://doi.org/10.2975/27.2004.360.374

Duwe, G. (2015). Does release planning for serious and persistent mental illness offenders reduce recidivism? Results from an outcome evaluation. *Journal of Offender Rehabilitation*, *54*(1), 19–36. https://doi.org/10.1080/10509674.2014.974854

Epperson, M. W., Wolff, N., Morgan, R. D., Fisher, W. H., Frueh, B. C., & Huening, J. (2014). Envisioning the next generation of behavioral health and criminal justice interventions. *International Journal of Law and Psychiatry*, *37*(5), 427–438. https://doi.org/10.1016/j.ijlp.2014.02.015

Gross, N. R., & Morgan, R. D. (2013). Understanding persons with mental illness who are and are not criminal justice involved: A comparison of criminal thinking and psychiatric symptoms. *Law and Human Behavior*, *37*(3), 175–186. https://doi.org/10.1037/lhb0000013

Heffernan, R., Wegerhoff, D., & Ward, T. (2019). Dynamic risk factors: Conceptualization, measurement, and evidence. *Aggression and Violent Behavior*, *48*, 6–16. https://doi.org/10.1016/j.avb.2019.06.004

Hopkin, G., Evans-Lacko, S., Forrester, A., Shaw, J., & Thornicroft, G. (2018). Interventions at the transition from prison to the community for prisoners with mental illness: A systematic review. *Administration and Policy in Mental Health and Mental Health Services Research*, *45*(4), 623–634. https://doi.org/10.1007/s10488-018-0848-z

Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288. https://doi.org/10.1177/1049732305276687

Jacobs, L., & Panichelli, M. (2020). From criminalized patients to risk exposed agents: Reconceptualizing carceral involvement among individuals with psychiatric diagnoses. *Deviant Behavior*, *41*(12), 1540–1558. https://doi.org/10.1080/01639625.2019.1631067

Kendall, S., Redshaw, S., Ward, S., Wayland, S., & Sullivan, E. (2018). Systematic review of qualitative evaluations of reentry programs addressing problematic drug use and mental health disorders amongst people transitioning from prison to communities. *Health and Justice*, *6*, Article 4. https://doi.org/10.1186/s40352-018-0063-8

Kriegel, L. (2019). Stranger support: How former prisoners with mental illnesses navigate the public landscape of reentry. *Health & Place*, *56*, 155–164. https://doi.org/10.1016/j.healthplace.2019.01.021

Lamb, H. R., & Weinberger, L. E. (1998). Persons with severe mental illness in jails and prisons: A review. *Psychiatric Services*, *49*(4), 483–492. https://doi.org/10.1176/ps.49.4.483

Lamb, H. R., Weinberger, L. E., & Gross, B. H. (1999). Community treatment of severely mentally ill offenders under the jurisdiction of the criminal justice system: A review. *Psychiatric Services*, *50*(7), 907–913. https://doi.org/10.1176.ps.50.7.907

Loveland, D., & Boyle, M. (2007). Intensive case management as a jail diversion program for people with a serious mental illness. *International Journal of Offender Therapy and Comparative Criminology*, *51*(2), 130–150. https://doi.org/10.1177/0306624X06287645

Lowder, E. M., Desmarais, S. L., Rade, C. B., Coffey, T., & Van Dorn, R. A. (2017). Models of protection against recidivism in justice-involved adults with mental illnesses. *Criminal Justice and Behavior*, *44*(7), 893–911. https://doi.org/10.1177/0093854817710966

Martin, M. S., Dorken, S. K., Wamboldt, A. D., & Wootten, S. E. (2012). Stopping the revolving door: A meta-analysis on the effectiveness of interventions for criminally involved individuals with major mental disorders. *Law and Human Behavior*, *36*(1), 1–12. https://www.jstor.org/stable/43598487

Matejkowski, J., & Ostermann, M. (2015). Serious mental illness, criminal risk, parole supervision, and recidivism: Testing of conditional effects. *Law and Human Behavior*, *39*(1), 75–86. https://doi.org/10.1037/lhb0000094

Morgan, R. D., Flora, D. B., Kroner, D. G., Mills, J. F., Varghese, F., & Steffan, J. S. (2012). Treating offenders with mental illness: A research synthesis. *Law and Human Behavior*, *36*(1), 37–50. https://doi.org/10.1037/h0093964

Morgan, R. D., Scanlon, F., & Van Horn, S. A. (2020). Criminogenic risk and mental health: A complicated relationship. *CNS Spectrums*, *25*(2), 237–244. https://doi.org/10.1017/S109285291900141X

Nieves, K., Draine, J., & Solomon, P. (2000). The validity of self-reported criminal arrest history among clients of a psychiatric probation and parole service. *Journal of Offender Rehabilitation*, *30*(3–4), 133–151. https://doi.org/10.1300/J076v30n03_07

Olusanya, O., & Cancino, J. M. (2012). Cross-examining the race-neutral frameworks of prisoner re-entry. *Critical Criminology*, *20*, 345–358. https://doi.org/10.1007/s10612-011-9043-y

Osher, F. C., & Steadman, H. J. (2007). Adapting evidence-based practices for persons with mental illness involved with the criminal justice system. *Psychiatric Services*, *58*(11), 1472–1478.

Peters, M. D. J., Godfrey, C. M., Khalil, H., McInerney, P., Parker, D., & Baldini Soares, C. (2015). Guidance for conducting scoping reviews. *International Journal of Evidenced Based Healthcare*, *13*, 141–146. https://doi.org/10.1097/XEB.0000000000000050

Pleggenkuhle, B., Huebner, B., & Kras, K. R. (2016). Solid start: Supportive housing, social support, and reentry transitions. *Journal of Crime & Justice*, *39*(3), 380–397. https://doi.org/10.1080/0735648X.2015.1047465

Sacks, S., Chaple, M., Sacks, J. Y., McKendrick, K., & Cleland, C. M. (2012). Randomized trial of a reentry modified therapeutic community for offenders with co-occurring disorders: Crime outcomes. *Journal of Substance Abuse Treatment*, *42*, 247–259. https://doi.org/10.1016/j.jsat.2011.07.011

Skeem, J. L., Manchak, S., & Peterson, J. K. (2011). Correctional policy for offenders with mental illness: Creating a new paradigm for recidivism reduction. *Law and Human Behavior*, *35*(2), 110–126. https://doi.org/10.1007/s10979-010-9223-7

Skeem, J. L., Steadman, H. J., & Manchak, S. M. (2015). Applicability of the risk-need-responsivity model to persons with mental illness involved in the criminal justice system. *Psychiatric Services*, *66*(9), 916–922. https://doi.org/10.1167/appi.ps201400448

Smith-Merry, J., Mellifont, D., McKenzie, K., & Clenaghan, P. (2019). A narrative review of mental health support for people during transition from incarceration to community: The grass can be greener on the other side of the fence. *Journal of Mental Health*, *28*(2), 189–197. https://doi.org/10.1080/09638237.2018.1466029

Solomon, A. L., Visher, C., La Vigne, N. G., & Osborne, J. (2006, March 24). *Understanding the challenges of prisoner reentry: Research findings from the Urban Institute's prisoner reentry portfolio*. Urban Institute. https://www.urban.org/research/publication/understanding-challenges-prisoner-reentry

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsely, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., . . . Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, *169*, 467–473. https://doi.org/10.7326/M18-0850

Tripodi, S. J., Kim, J. S., & Bender, K. (2010). Is employment associated with reduced recidivism? The complex relationship between employment and crime. *International Journal of Offender Therapy and Comparative Criminology*, *54*(4), 706–720. https://doi.org/10.1177/0306624X09342980

Veritas Health Innovation. (2018). *Covidence systematic review software*. https://www.covidence.org

Visher, C. A., Lattimore, P. K., Barrick, K., & Tueller, S. (2017). Evaluating the long-term effects of prisoner reentry services on recidivism: What types of services matter? *Justice Quarterly*, *34*(1), 136–165. https://doi.org/10.1080/07418825.2015.1115539

Wolff, N., Morgan, R. D., & Shi, J. (2013). Comparative analysis of attitudes and emotions among inmates: Does mental illness matter? *Criminal Justice and Behavior*, *40*, 1091–1107. https://doi.org/10.1177/0093854813488760

Stacey L. Barrenger, PhD, AM, is an assistant professor of psychiatry at Northeast Ohio Medical University in the College of Medicine. She conducts research at the intersection of the mental health and criminal legal systems, focusing on reentry from prisons, and jails for individuals with mental illnesses. Her multilevel approach examines the environmental factors that put individuals at risk of reoffending and reincarceration and the internal characteristics related to behavioral changes toward stopping offending.

Liat Kriegel, PhD, MSW, is an assistant research professor in the Elson S. Floyd College of Medicine at Washington State University, Behavioral Health Innovations. Her research focuses on the intersection of the behavioral health and criminal legal systems, examining the role of public space and public space interactions for individuals with mental illnesses during reentry from prison. Her current work is focused on opioid prevention, treatment, and recovery in rural communities.

Kelli E. Canada, PhD, LCSW, is an associate professor at the University of Missouri-Columbia, School of Social Work. She worked for more than 15 years in social work direct services and administration. Her research focuses on interventions for people with mental illnesses who become involved in the criminal legal system. She examines interventions throughout the criminal legal system, including prearrest, alternative sentencing, community supervision, and within institutions. She also examines the policies and practices impacting overall health and quality of life.

Amy Blank Wilson, PhD, LSW, is an associate professor and The Prudence F. and Peter J. Meehan Early Career Distinguished Scholar at the University of North Carolina, Chapel Hill, School of Social Work. Her research expertise in qualitative research, intervention research, and secondary analysis of large administrative data is focused on exploring new ways to address complex, interlocking problems of poverty, homelessness, substance use, and criminogenic needs facing people with mental illness involved in the criminal legal system. She is an expert in the development and testing of interventions for people with serious mental illness involved in the criminal legal system.