Research Report

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Psychological assessment of risk in a county jail: implications for reentry, recidivism and detention practices in the USA

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Jail detention rates and challenges

Each year, more than 12m Americans are booked into local jails for crimes ranging from misdemeanor traffic violations to felony serial homicide, with more than 740,000 people held in these facilities in the USA at any given time (Turney and Conner, 2019; Zeng, 2018). By comparison, about 575,000 individuals are admitted to state prisons in the USA every year (Minton and Zeng, 2015). Across the country, jail incarceration rates have increased over the past few decades, with considerable growth occurring in rural and suburban areas (Henrichson and Fishman, 2017; Zeng, 2018). As a secondary challenge, jails, unlike prisons, house those serving sentences less than a year or awaiting trial, and therefore most jail inmates face quicker reentry and the challenges it may present (Petersilia, 2001; Zeng, 2018). As such, the rate of jail re-incarceration is substantially elevated, even compared to prison populations (Williams *et al.*, 2010). This has led many jails to seem to have a "revolving door" (Baillargeon *et al.*, 2009), often with very high turnover rates (Zeng, 2018). Therefore, the gains to be made from evidence-based policies that reduce incarceration, improve reentry planning and stem recidivism are especially large when focusing on jail populations. There are several key issues that contribute to current problems of jail overcrowding, detention rates and recidivism that can be targeted in research and policy.

First, the increase in incarceration rates across the USA is due, in large part, to longer pre-trial detentions (Jones, 2013; Rabuy and Kopf, 2016; Subramanian *et al.*, 2015; Turney and Conner, 2019). That is, despite a consistent and significant drop in crime across the USA, 95 percent of the increase in jail incarceration rates since 2000 was due to the sizable growth in the number of individuals in jail awaiting trial, many unable to pay bail (Minton and Zeng, 2015). In fact, analyses by the US Department of Justice revealed that 47 percent of all those in jail with a financial bond were unable to afford their bail (Reaves, 2013). This often results in jail overcrowding and almost no commensurate increase in public safety (Jones, 2013; Pinto, 2015; Sullivan, 2010). The length of pre-trial detention is also linked to recidivism risk. Multiple studies have found that the longer persons are detained in jail, the more likely it is that they will receive a harsher sentence (Gupta *et al.*, 2016); experience lasting psychological impact[1] (Sugie and Turney, 2017); lose housing, employment and prospects in the labor market (Dobbie *et al.*, 2018; Freudenberg *et al.,* 2005); and reenter the justice system post-release (Aiken, 2017; Lowenkamp *et al.,* 2013; Subramanian *et al.*, 2015).

Second, jails now detain a large number of persons with mental illness, substance abuse and neurodisability (e.g. brain injury, cognitive decline), compared to rates in the general population (Irwin, 2013; Mulvey and Schubert, 2017; Sarteschi, 2013; Silver *et al.*, 2001). Indeed, the hospital deinstitutionalization that transpired in the USA since the 1960s has led correctional facilities, most notably short-term detention centers (i.e. jails), to encounter a substantially larger proportion of individuals with psychological and emotional problems, cognitive disabilities, substance use and co-occurring disorders than ever before. In fact, over half of those in US jails have been diagnosed with or have shown symptoms of a mental illness within the past 12 months (James and Glaze, 2006; Trestman *et al.*, 2007), and over 75 percent of those have co-occurring substance use disorders. An additional 26 percent showed symptoms of post-traumatic stress disorder (PTSD; Bronson and Berzofsky, 2017), and up to 87 percent of

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jail inmates reported at least one head injury in their lifetime (Slaughter *et al.*, 2003). At least, 44 states in the USA are housing more people with serious mental illness in correctional facilities than in state psychiatric hospitals (Torrey *et al.*, 2014). Further, individuals with mental health disorders and neurodisability have a significantly higher risk for multiple incarcerations and recidivism (Baillargeon *et al.*, 2009; Feder, 1991; Williams *et al.*, 2010), are more likely to be charged with rules violations while incarcerated (Bronson and Berzofsky, 2017; James and Glaze, 2006), and have a substantially decreased time between incarcerations (Cloyes *et al.*, 2010). This cycle of incarceration, exacerbation of symptoms, engagement in ever more risky behaviors and re-incarceration needs to be thwarted.

Further, jails present significant barriers to successful reentry and efforts to reduce recidivism among those they incarcerate, particularly those with mental health or other needs. Jails often lack sufficient funding, resulting in a dearth of adequate services and treatments in custody (Gonzales and Dayak, 2006), and jail environments are considered iatrogenic and exacerbating of mental health symptoms (Cloyes *et al.*, 2010). Housing of inmates with mental illness or neurodisability complicates classification and housing decisions and diverts resources from the public safety functions of the jail to psychiatric management, for which they are not adequately resourced. As a consequence, many inmates with mental illness are housed in isolation or medical units with limited freedom of movement, with the concomitant health-debilitating consequences of low social engagement and isolation (Adams and Ferrandino, 2008; Dietz *et al.*, 2003; Smith, 2006). It is also difficult to provide effective and empirically supported treatments during short-term detention in jails, and reentry programs rarely exist in the jail system. In short, jails are often ill-equipped to treat individuals with mental health, substance use and co-occurring disorders that have been shown to contribute to recidivism.

Third, about 20 percent of inmates in short-term detention facilities are located in rural areas, and another 33 percent are in small/medium towns, which face their own set of challenges (Kang-Brown and Subramanian, 2017). Although crime rates in rural or small metro jurisdictions are typically lower than state averages, these areas report major increases in jail incarceration rates, higher than state and national averages and more than urban areas, which have shown decreases (Kang-Brown and Subramanian, 2017). Many of the social, geographic and economic characteristics of rural areas, for example, contribute to increased risk for jail incarceration, including below average household incomes, higher percentages of persons living in poverty, higher unemployment rates and a shrinking labor force (Cromartie, 2018; Roscigno and Crowle, 2001). The lack of public transit and reduced access to transportation also contributes to difficulties in attending court dates or finding/keeping employment (Ward and Merlo, 2016). Health-related factors are also relevant, in that reduced healthcare access and higher uninsured rates in rural areas contribute to unaddressed needs that can increase risk of crime or incarceration (Robert Wood Johnson Foundation, 2019; Lutfiyya *et al.*, 2012).

Finally, the recent opioid epidemic has posed a public health and criminal justice crisis in the USA and has disproportionately impacted rural areas (Blanco *et al.*, 2007; Compton *et al.*, 2016; Paulozzi, 2006; Rigg and Monnat, 2015). In a recent meta-analysis of 41 studies on nonmedical opioid use, 40 found a higher prevalence of prescription opioid misuse in rural areas compared to urban and metropolitan areas (Palombi *et al.*, 2018). Research indicates that the lack of access to alternative treatments for chronic pain and injury, as well as cultural acceptance of opioid misuse, were the leading reasons for why rural Americans engage in prescription opioid misuse (Palombi *et al.*, 2018). As a consequence, overdose and overdose fatality rates among rural Americans are substantially higher than their urban counterparts (Cauley *et al.*, 2017; McDonald *et al.*, 2012; Palombi *et al.*, 2018).

Empirical evidence also indicates that illicit drug use is associated with higher rates of violent crime in the community (Rosenfeld *et al.*, 2017), and that narcotics users and sellers are at higher risk of committing violence, including homicide, compared to non-drug users (Farrington *et al.*, 2012; Gordon *et al.*, 2014; Seffrin and Domahidi, 2014). Furthermore, persons involved in the use and distribution of opioids, including nonmedical use of prescription opioids as well as heroin and fentanyl, recidivate at rates far higher than those of other types of offenders (Hunt and Dumville, 2016). Indeed, a meta-analysis from 2008 indicates that heroin users are 3.5 times more likely to commit other crimes compared to all other offenders (Bennett *et al.*, 2008), underscoring the

substantial burden that opioid use and sales put on criminal justice agencies and the community at large. Given the disproportionate impact of opioid drugs on rural communities, as well as the high carceral rates and low resources available in these areas, there is a significant need to understand and develop more effective prevention and treatment programs to reduce crime and recidivism, particularly in rural America.

Addressing gaps in knowledge and policy: a research-service partnership

Despite these weighty problems associated with jails across the country, very little scholarly research in criminology or criminal psychology has focused on jail populations and policies, and even less has attempted to examine ways of overcoming obstacles to successful reentry among jail inmates (Turney and Conner, 2019). Given the significant issues outlined above, the following areas of research and evaluation are sorely needed: developing evidence-based and efficient risk assessment protocols to better inform classification and bail/release decisions; evaluating tailored pre-release reentry planning programs in jails; and better addressing needs related to mental health, substance use and neurodisability, all of which compound risk of recidivism, in the context of reentry planning, continuity of services and post-release access to services. See Figure 1 for an illustration of current challenges and potential targets for research and policy.

As a way of addressing existing gaps, our interdisciplinary research team developed a collaborative research effort, referred to as the Psychological Assessment of Risk and Criminality (PARC) project, with the Pasco Sheriff's Office (PSO) and its detention facility (i.e. jail). Pasco County is home to over 525,000 residents and the 12th most populated county in Florida. Although it is considered a suburban metro area, Pasco County faces many of the challenges of smaller and rural jurisdictions. Due to large tracts of rural areas in the county, especially in proximity to the jail, there are fewer and more sparsely located mental health and rehabilitation facilities compared to the neighboring urban areas (see Figure 2). As in many rural counties, Pasco County is currently facing major crime and economic challenges. It has seen a 40 percent increase in the violent crimes and opioid-related offenses in the past five years and was recently named the county with the "worst drug problem" in the state of Florida, driven largely by the high

Figure 1 Challenges for jail incarceration and recidivism rates and ways to target them

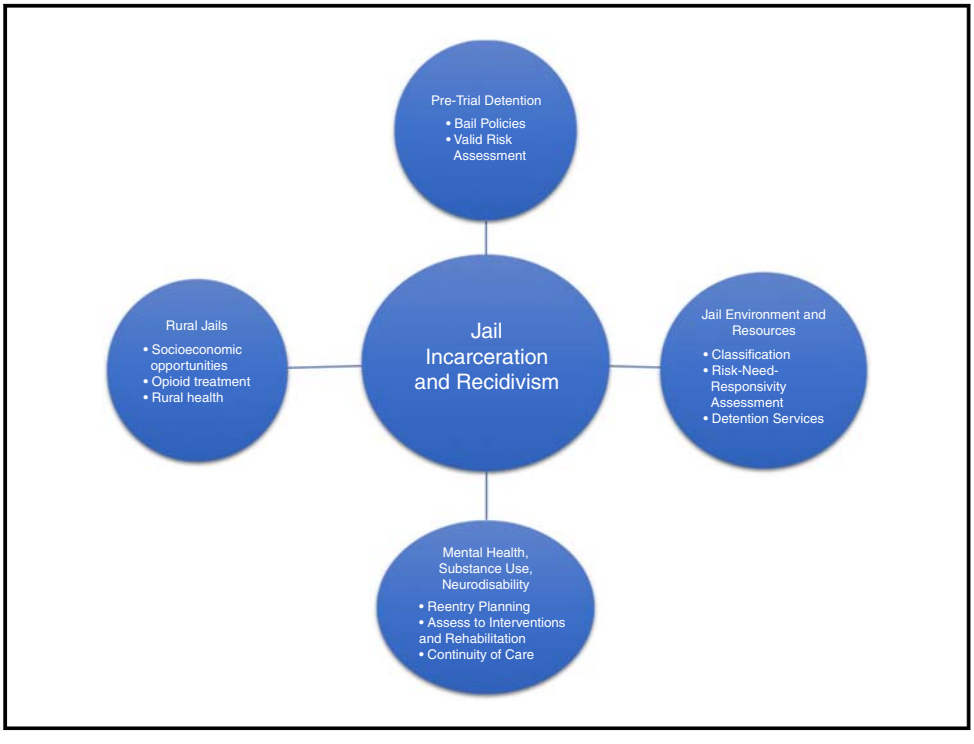
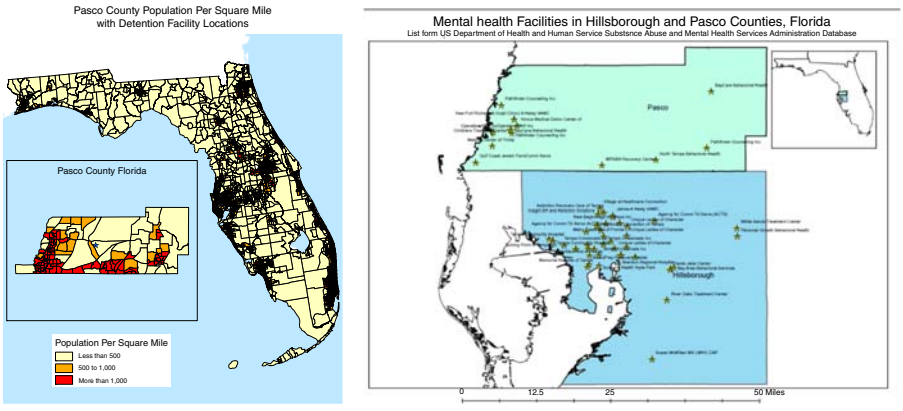


Figure 2 Pasco County



Notes: (a) Rural Tracts; (b) mental health facilities (relative to more urban Hillsborough County, below it)
Source: Images © Kenneth Copenhaver (used with permission)

rate of opioid drug use and overdoses among its residents[2] (Comen, 2018). As a result, the detention facility operated by PSO is consistently overcrowded, often housing over 1,700 inmates despite being approved for fewer than 1,500. Unfortunately, while this county experiences many of the crime and social problems of large metropolitan jurisdictions, it does not have a comparable tax base to address these issues[3]. In fact, 17 Census tracts in the county have been designated Economically Distressed Communities/Qualified Opportunity Zones by the US Department of the Treasury. Recidivism rates are unfortunately very high. Specifically, according to PSO data, 42.3 percent of the 16,043 individuals released from the county jail in 2017 were re-incarcerated in Pasco County within one year.

For these reasons, our research-service partnership was established in 2017 to collect data that would inform the implementation of cost-efficient and evidence-based crime prevention and recidivism reduction strategies for law enforcement and corrections agencies in the USA. The goals of the PARC project include the following: evaluate the risk factors and needs among inmates booked and housed in the jail across various domains; improve risk assessment/housing classification decisions; and flag those who may need higher levels of monitoring and treatment by medical and/or mental health staff in jail and post-release. To achieve these goals, we are currently screening and assessing individuals and evaluating their criminogenic risks, mental health needs and structural barriers using empirically validated assessment tools.

The PARC project involves two phases: Phase 1, where incoming inmates at booking are screened for criminal history background, sociodemographic factors and various criminogenic risk factors (e.g. pro-criminal attitudes/violence potential, risky personality traits, mental health symptoms, traumatic brain injury and adverse events) using validated tools; and Phase 2, implemented to a subset of inmates to further characterize the high-priority risks and needs using assessments of intellectual and cognitive functioning and clinical and diagnostic interviews. Measures employed in Phase 2 will be used to assess risk for violence and suicide as well as the severity and range of symptoms of psychopathic personality, trauma and PTSD, substance use disorders, depression, bipolar disorder and psychotic disorders. These multi-method assessments allow us to thoroughly characterize the inmates; consider sociodemographic, criminological and psychological factors; and identify the range of needs and risks to be incorporated in enhanced evidence-based classification, risk assessment and reentry planning practices.

To date, the PARC team has collected risk assessment data on 626 people during Phase 1 at booking in the Pasco county jail, screening an average of about 57 participants per month. Of these, 124 inmates have been interviewed during Phase 2 to collect additional diagnostic and

clinical data. As shown in Table I, the sociodemographic features of the PARC study participants are largely reflective of jail inmate populations, as the majority (52.6 percent) self-reported employment as laborers, untrained or manual workers, while 13.9 percent were in semi-professional or professional careers. More than a third (37.7 percent) reported an annual income under $15,000, and 60.5 percent earned less than $30,000 per year. However, in contrast to many other forensic jail samples, especially in urban areas, these participants were predominantly White/Caucasian (72.1 percent), with 13.0 percent identifying as Black/African American and 15.0 percent identifying as Hispanic. The average age of the participants was 36.5 years old, and while most were male (68.1 percent), nearly a third (31.8 percent) of the participants were female.

Preliminary analyses of the Phases 1 and 2 data revealed notable patterns of risks and needs experienced by individuals incarcerated in this county jail. A key facet of the project is to identify levels of criminogenic risk; as such, we developed a criminogenic risk scale composed of items representing standard risk factors of criminal peer association (Burgess and Akers, 1966), low self-control (Gottfredson and Hirschi, 1990), adherence to the "street code" (Stewart and Simons, 2010), neighborhood disorganization (Fox *et al.*, 2010) and weak social bonds (Sampson and Laub, 1993). As shown in Table II, the mean score on this scale across all Phase 1 participants was 33.9 (SD = 7.4, min. = 14.0, max. = 56.0), indicating an overall high prevalence of classic criminogenic risk factors among this sample. Additional risk domains and mental health

Table I Sociodemographic features of PARC study participants in the Pasco County jail

	Total (n)	*Prevalence (%)*	*Mean (M)*	*SD*
Age	626	–	36.5	11.8
Gender				
Male	426	68.1		
Female	199	31.8		
Non-binary	1	0.2		
Race				
White/Caucasian	454	72.1		
Black/African American	82	13.0		
Asian American	1	0.2		
Native American	9	1.4		
Mixed Race	30	4.8		
Other	54	8.6		
Ethnicity				
Hispanic	94	15.0		
Non-Hispanic	532	85.0		
Annual income				
Less than $15,000	235	37.7		
$15,000–$30,000	142	22.8		
$30,001–$45,000	112	18.0		
$45,001–$60,000	70	11.2		
$60,001–$75,000	31	5.0		
More than $75,000	33	5.3		
Occupation				
Laborer/Service worker	114	18.1		
Skilled Manual worker	117	18.6		
Untrained worker	52	8.3		
Machine operator/Semi-Skilled worker	48	7.6		
Clerical/Sales worker	27	4.3		
Technician/Semi-professional	19	3.0		
Manager/Other professional	35	5.4		
Administrator/Technical professional	19	3.0		
Executive/Major professional	16	2.5		
Homemaker	24	3.8		
Other/Retired	160	25.4		

Table II Criminogenic and psychological risk factors of PARC study participants in the Pasco County jail

Phase 1: measures ($N = 626$)

	M	SD	Min.	Max.	Max. possible score
Criminogenic Risk Scale – total score					
Total score	*33.9*	*7.4*	*14.0*	*56.0*	*56.0*
Criminal peer association	6.7	4.3	2.0	14.0	14.0
Low self-control	6.0	2.2	3.0	12.0	12.0
Street code adherence	7.6	2.5	4.0	16.0	16.0
Neighborhood disorganization	7.5	1.8	3.0	12.0	12.0
Weak social bonds	6.1	1.6	2.0	8.0	8.0

	M	SD	Caution range/Medium risk (%)	Warning range/High risk
Massachusetts Youth Screening Instrument (MAYSI) – adapted				
Alcohol and drug use	2.9	2.5	22.5	21.3
Angry-irritable	3.1	2.7	21.3	8.3
Depressed-anxious	2.9	2.4	32.8	17.1
Somatic complaints	3.2	2.0	44.6	16.6
Suicidal ideation	0.7	1.3	7.2	11.1
Thought disturbance	0.6	0.9	19.5	14.1
Traumatic experiences	2.8	1.7	na	na

	M	SD	Min.	Max.	Max. possible score
Adverse child experiences (ACEs)					
Total score	*4.2*	*2.8*	*0.0*	*10.0*	*10.0*
ACEs: 0 or 1 (%, *n*)	20.2	126			
ACEs: 3+ (%, *n*)	68.5	427			
ACEs: 5+ (%, *n*)	45.9	286			
ACEs: 7+ (%, *n*)	23.9	149			
	%	*N*			
Comprehensive Health Assessment Tool					
Head injury: 1+	54.7	347			
Head injury: 3+	23.5	149			

Phase 2: measures ($N = 124$)

	M	SD	Min.	Max.	Max. possible score
Lifetime History of Aggression (LHA)					
Total score	*21.7*	*8.4*	*6.0*	*39.0*	*55.0*
Aggression	9.1	3.9	2.0	19.0	25.0
Consequences	9.3	4.0	2.0	18.0	20.0
Self-directed (suicide attempt)	1.2	1.9	0.0	7.0	na

	M	SD	Min.	Max.	Max. possible score
Psychopathy (PCL-R)					
Total score	*18.6*	*8.5*	*3.0*	*40.0*	*40.0*
PCL-R: 0–19 (%, *n*)	49.6	60			
PCL-R: 20–29 (%, *n*)	42.1	54			
PCL-R: 30–40 (%, *n*)	8.3	10			
	%	*N*			
Mini-International Neuropsychiatric Interview (MINI)					
Lifetime major depressive episode	55.5	61			
Lifetime psychotic disorder	13.6	15			
Lifetime manic episode	18.6	18			
Columbia Suicide Severity Rating Scale					
Lifetime passive suicidal ideation	40.9	45			
Lifetime active suicidal ideation	36.4	40			
Past Suicide attempt – any	32.7	33			
Past suicide attempt – aborted	20	19			
Past suicide attempt – interrupted	20.2	22			
Texas Christian University Drug Screen[a] (past year use and disorder)					
Alcohol use	71.0	125			
Marijuana use	65.9	116			

(continued)

Table II		
Cocaine use	26.1	46
Crack Cocaine use	14.8	26
Hallucinogens use	11.9	21
Methamphetamine use	33.0	58
Heroin use	18.2	32
Nonmedical prescription opioids use	37.5	66
Nonmedical prescription depressants use	33.5	59
Alcohol use disorder – past year	3.9	7
Substance use disorder – past year	27.3	48

Notes: The TCUDS was originally administered in Phase 2, but was recently added to the Phase 1 screenings. Thus, the sample size for that measure differs from those of other measures in Phases 1 and 2

concerns were assessed using the Massachusetts Youth Screening Instrument (Grisso and Barnum, 2000), which was adapted for use in adults among this sample (see Grisso *et al.*, 2003). Table II shows that a high proportion of participants score in the caution (i.e. medium risk) and warning (i.e. high risk) range on several of the domains. In particular, approximately one in five scored in the warning range for alcohol and drug use (21.3 percent, $n = 131$) and in the caution range for thought disturbance (19.5 percent, $n = 121$), confirming high rates of mental illness and substance use problems. Further, one in ten scored in the warning range for current suicidal ideation (11.1 percent, $n = 70$), which heavily burdens resources in the jail, and between one-third and one-half scored in the caution range in regard to somatic, depression and anxiety symptoms. Other indicators of need and risk include high rates of childhood trauma and abuse assessed using the Adverse Childhood Experiences (ACE) questionnaire (Felitti *et al.*, 1998) and substantial risk of neurodisability, an emerging risk factor for criminal behavior in the recent literature (Schwartz *et al.*, 2018; Slaughter *et al.*, 2003), measured using the Comprehensive Health Assessment Tool (Chitsabesan *et al.*, 2015). As noted in Table II, 68.5 percent ($n = 427$) of the sample reported three or more ACEs, and over half reported at least one instance of head injury with substantial loss of consciousness in their lifetime (54.7 percent, $n = 347$).

In Phase 2, a subset of participants was further assessed in 3 h interviews for clinical risk factors and needs. In particular, risk assessments shown to predict recidivism and violence risk included the Lifetime History of Aggression (LHA; Coccaro *et al.*, 1997), assessing prior violent acts, and the Psychopathy Checklist-Revised (PCL-R; Hare, 1991, 2003), which is one of the most commonly used clinical instruments to gauge risk of recidivism and dangerousness in correctional settings. The mean score on the LHA ($M = 21.7$, SD = 8.4, min. = 6.0, max. = 39.0) is on par with scores found in previous work with forensic samples (Hofvander *et al.*, 2011), and higher than those found within community samples (Manuck *et al.*, 1998). Mean total score on the PCL-R in this sample is similar to that of homicide offenders (Fox and DeLisi, 2019). For the latter, nearly half of the participants scored in the low range in psychopathy (49.6 percent scored 0–19), 42.1 percent fell in the moderate psychopathy range ($n = 54$) and 8.3 percent met or exceeded the high score cutoff ($n = 10$). Psychological diagnoses and suicide risk were assessed using validated diagnostic interviews, including the Mini-International Neuropsychiatric Interview (Sheehan, 2014) and the Columbia Suicide Severity Rating Scale (Posner *et al.*, 2008). The rates of mental health problems in the sample were two to three times greater than the general population. Over half of the participants endorsed criteria for at least one major depressive episode in their lifetime ($n = 61$), 18.6 percent endorsed at least one lifetime manic episode ($n = 18$), and 13.6 percent screened positive for a possible lifetime psychotic disorder ($n = 15$). Importantly, 36.4 percent indicated lifetime passive suicidal ideation ($n = 40$).

Finally, in light of research on substance use and abuse among jail inmates and rural populations as a strong risk factor for offending and recidivism (Canales *et al.*, 2014), the Texas Christian University Drug Screen (Knight *et al.*, 2018) was used to evaluate use of various substances in the past year and possible diagnoses of substance use disorders. The self-reported prevalence of use indicated typically high rates of past year use of alcohol (71.0 percent, $n = 125$) and marijuana (65.9 percent, $n = 116$), followed by a third of participants endorsing nonmedical use of prescription opioids (37.5 percent, $n = 66$), nonmedical prescription depressants (33.5 percent, $n = 59$),

methamphetamine (33.0 percent, $n = 58$) and cocaine (26.1 percent, $n = 46$). Consistent with these rates of recent use, 27.3 percent of the participants screened positive for a possible current substance use disorder ($n = 48$), and only 3.9 percent ($n = 7$) qualified for a possible alcohol use disorder.

In summary, these data indicate the magnitude and nature of the risk factors and needs experienced by jail inmates in our sample, especially in regard to criminogenic risk factors (e.g. adherence to code of the street, antisocial peers, psychopathic personality and violence history), mental illness (e.g. depression, psychosis and suicidality) and neurodisability, and substance use. Despite these risks and needs that almost guarantee re-incarceration, limited resources are available in jail settings to address these factors, and typically case management or post-release treatment/services are not offered to mitigate these issues and reduce recidivism.

Opportunities to inform correctional practice and criminal justice policy

The data collected in the PARC project, and others like it, offer the rare opportunity of gaining insight into and better informing jail correctional practices and services for inmates, many of who are rural-dwelling and have scarcely been considered in the previous literature. One way we hope to address challenges in jail systems involves developing and evaluating efficient and cost-effective classification and risk assessment protocols. First, our data will be used to evaluate alternative ways to classify inmates as low, medium or high risk for housing in the jail, using established criminogenic risk factors and needs, above sociodemographics and criminal history, as previously used. This initiative can potentially increase the attention and services received by certain inmates to improve rehabilitative, and reduce iatrogenic, effects of the jail environment during detention. Importantly, risk assessment protocols can also be evaluated for use in pre-trial detention decision making, improving the evidence base for bail policies and remand. For example, such tools can help identify low-risk persons who do not pose risks to public safety and can be released or diverted, or should have no or low bail fees. Given the detrimental effects of long pre-trial detentions (Levin and Haugen, 2018), and the costs of housing inmates each day, the use of evidence-based classification would ultimately help in reducing recidivism among low-risk offenders, the economic burden of incarceration for local jurisdictions and jail overcrowding. As well, the success of such policies could motivate other jurisdictions to incorporate evidence-based and more equitable criminal justice policies.

Another initiative that would be a next step for the PARC project is the use of the data to help develop a risk/needs responsivity (Andrews and Bonta, 2010) intervention and reentry program that is tailored to jail inmates. A Risk and Needs Report will be developed following Phase 2 assessments to delineate areas of highest priority in addressing and recommending services. Recommendations for a treatment plan and services can be made during detention and revisited with a case manager prior to release to enhance the reentry plan. Indeed, we believe jails present opportunities for successful reentry, given that persons generally are not away from their communities for extended periods of time. Thus, it is possible for jails to become part of a community network of service providers. Integrating informed reentry planning with inmates before release can directly address individual needs, risks and connections to services in an effort to reduce rearrests. We intend to evaluate the effectiveness of the enacted reentry program to improve outcomes, such as post-release treatment engagement (attendance, medication compliance, dropout), improvement in the identified individual risks and needs, housing/employment stability and reduction in recidivism, using a randomized controlled trial experimental design.

Finally, the data will also inform implementation of in-custody intervention programs responsive to the needs of high-risk inmates, particularly those showing impulsive behaviors and emotional difficulties. One cognitive-behavioral-based treatment program receiving recent attention as a harm and recidivism reduction approach in correctional populations is dialectical behavior therapy (DBT; Linehan *et al.*, 1991; Linehan, 1993). The skills training groups component of DBT is well-validated and has been shown to successfully reduce aggression, impulsivity, emotional outbursts, substance use and symptoms of distress (e.g. Dimeff and Linehan, 2008; Linehan *et al.*, 2002), curbing many of the factors that ultimately contribute to recidivism post-release.

DBT group skills training has been implemented in different correctional settings, including jails (Drake and Barnoski, 2006; Moore *et al.*, 2018; Shelton *et al.*, 2009), with evaluations indicating significant reductions in participants' overall levels of risk (Sakdalan *et al.*, 2010), violent and impulsive behaviors (Evershed *et al.*, 2003; Nee and Farman, 2005) and criminal recidivism (Gee and Reed, 2013; Rosenfeld *et al.*, 2007).

Our team has previously implemented DBT group treatment for adults with anger control and violence histories in a community mental health setting and with youth in a short-term juvenile detention setting. Using an adaptation suited for correctional samples (Linehan, 2014), DBT group treatment was associated with improvement in coping skills use among detained youth (Walden *et al.*, 2019). Ivanoff and Marotta (2018) recognized how Andrews and Bonta's (2006) risk/needs/responsivity model naturally maps onto DBT, with specific skills developed to address specific risks and needs (e.g. interpersonal effectiveness skills to address antisocial peer influence). Importantly, training inmates to use these skill pre-release can help set the stage for the optimal utilization of services post-release (DeLisi and Berg, 2006).

Summary

Very little psychological and criminological research is conducted in jail settings and with jail inmates, despite the challenges and increased rates of jail incarceration, particularly in rural areas across the country. Further, most treatment and rehabilitative programs and services are designed with the urban offender in mind, despite the large portion of the US jails located in rural areas (Ward and Merlo, 2015). A further advantage of working with the inmate population at a county jail is the range of criminality housed in such facilities. While some may serve misdemeanor sentences in the jail, others are awaiting trial for a range of severe offenses, from drug possession and trafficking up to multiple homicide. The jail population therefore offers the unique opportunity of collecting data on a wide range of individuals in a markedly understudied and underserved population that is at risk for reoffending. It is our aim that the conclusions drawn from this population in Florida can be used to better inform future studies and policies for county jail inmates across the country.

As a whole, extant data on jails and short-term detention facilities indicate that research in these settings is integral to any effort to address issues of mass incarceration and recidivism. This begins with better understanding the rise of pre-trial detention rates and inequitable practices that disadvantage low-income inmates involved in the criminal justice system. The use of evidence-based risk classifications to make decisions on housing, remand and bail will likely to reduce the downward spiral of long pre-trial detention, mental health deterioration, lower prospects in the labor market and re-incarceration among jail inmates, including those who present a low risk to public safety. Cost savings to the local jurisdictions detaining these offenders are likely to be substantial, and necessary funding can instead be diverted to address needs and risks among the high-risk offenders and those with mental health, substance use and other challenges. Reentry programming, more commonly implemented in prisons, can become a mainstay of effective jail practices that can more seamlessly create a safety net of support for inmates upon release, continuity of care and protection from re-incarceration.

Notes

1. Several high-profile and tragic examples include Kalief Browder, who died by suicide during a three-year detainment in jail for allegedly stealing a backpack, after his family was unable to pay bail on a $3,000 bond (Gonnerman, 2014; Schwirtz and Winerip, 2015), and Sandra Bland, who died by suicide in jail after she was unable to pay the bail for allegedly failing to signal a lane change (Chammah, 2016).
2. The county's annual drug overdose death rate in 2017 was 34.1 per 100,000 residents, more than double Florida's average of 17.0 drug overdose deaths per 100,000 residents (Comen, 2018).
3. The 2018 median annual income ($46,264) and property values ($145,000) for county residents are lower than Florida ($50,860/$197,700) and the USA ($57,617/$205,000) (US Census, 2017).

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