RULE VIOLATIONS IN A COUNTY JAIL: ASSOCIATIONS WITH SPECIFIC SUBSTANCE USE DISORDERS AND OTHER MENTAL HEALTH DISORDERS

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ABSTRACT

Jails process and house the largest number of incarcerated individuals in the United States, yet remain the least studied and understood cog within the criminal justice system. Safety and security within a confinement facility are essential for those residing, working, and visiting these facilities; however, the study of factors that contribute to the likelihood of inmate misconduct have been gleaned from prison populations that don't account for factors that are unique to, or seen in higher proportions, in jail environments. One element that has been identified as being a significant risk factor for rule violations in both jails and prisons has been substance use disorder (SUD) and mental illness. Arguably, mental health disorders, which include SUDs, encompass nearly 300 classifiable disorders according to the Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5), and it is unlikely that all exhibit the same level of risk of offending while incarcerated. The change in classification and diagnosis of substance use disorders from the DSM-IV-TR to the DSM-5 also allows researchers to consider the specific substance and severity of the disorder beyond an abuse/dependence classification. Therefore, using an empirically supported assessment instrument, the Comprehensive Addiction and Psychological Evaluation-5 (CAAPE-5), this study seeks to explore specifically which SUDs and other common mental health conditions contribute to this relationship between having a diagnosis and risk for rule violations while incarcerated.

Keywords: Jail, Misconduct, Rule violation, Substance use, Mental health disorder, Risk assessment

CHAPTER 1: INTRODUCTION

The United States is the global leader in mass incarceration (Kang-Brown et al., 2021; Subramanian et al., 2015). In 2020, approximately 5,500,600 adults were either held in jail or prison or were under probation or parole supervision (Kluckow & Zeng, 2022). Jails have the highest volume of justice involved individuals in the United States compared with other correctional settings (Zottola et al., 2019), with approximately 549,100 adults being held in jail at year end of 2020 (Kluckow & Zeng, 2022). Local jails serve as the entryway to the criminal justice system (Raggio et al., 2017; Vuk & Doležal, 2020). Prisons typically house individuals who have been convicted of a crime and sentenced to incarceration for a year or longer, most often for a felony offense (Riley et al., 2017). Jails on the other hand, house an extensive variety of inmates, facing the full spectrum of offenses in regard to severity. The majority of inmates in jail are awaiting court proceedings (pretrial), however, others are awaiting transports to other facilities, family members to gather funds for bail/bond, and several are serving short sentences of typically less than a year (Binswanger et al., 2010; Kang-Brown et al., 2018; Kang-Brown & Subramanian, 2017; Proctor & Hoffmann, 2012; Subramanian et al., 2015). Some states have restructured legislation to reduce prison sentences by mandating that some lower-level offenses be served in county jails rather than state prisons (with North Carolina being one of those states) (Caudill et al., 2014; Kang-Brown & Subramanian, 2017). This practice adds further heterogeneity to the jail populations, additional strain to strapped resources and personnel, as well as contributing to the continued increase in the number of individuals incarcerated in jails (Kang-Brown et al., 2018). Rule violations within a jail environment impact the safety and security of inmates and correctional staff, necessitating the study of risk factors of misconduct

for better classification and housing of potentially dangerous inmates in these increasingly crowded and chaotic facilities.

A rapid reduction in jail populations was spawned by the impact of COVID-19 (Minton et al., 2021). However, recent data indicates that rural jails saw the greatest initial drop in population in jail facilities (-34% between midyear 2019 and 2020) (Kang-Brown et al., 2021b), but continue to incarcerate people at double the rate of urban and suburban areas (Kang-Brown et al., 2021a). Strikingly, rural jails had an 11% increase in incarcerated populations from midyear 2020 to early 2021, indicating the decrease was not sustained in rural areas (Kang-Brown et al., 2021b). Prisons saw sustained decreases but there were a number of factors contributing to the simultaneous increases in jail populations and decreases in prison populations. Some jurisdictions suspended transfers from local jails to state prisons due to COVID-19 and the majority of courts also paused jury trials or suspended other operations, while refusing to release many people who were detained before trial (Kang-Brown et al., 2021b). These policies likely also increased the strain experienced by those incarcerated in these facilities (Toman et al., 2018).

Haney et al. (2016) describe jails as the "first responders" (p. 131) of the criminal justice system. Jails take custody of individuals abruptly and often unexpectedly (Haney et al., 2016). As mentioned, jails house individuals suspected of the full range of criminal activity, as well as those who are mentally ill, emotionally unstable, and in crisis (Haney et al., 2016). In fact, the disproportionate rate at which mentally ill individuals are incarcerated has led to a paradox within the criminal justice and health care systems, where there are more mentally ill individuals incarcerated than there are in mental health facilities (Torrey et al., 2010). The majority of individuals that are booked into jails on any given day are under the influence of drugs (Office of

National Drug Control Policy, 2014) or alcohol (Fiscella et al., 2004), with the withdrawal and detox symptoms likely contributing to destabilized, disoriented, and/or "acting out" behavior seen in high proportions in jail facilities (Haney et al., 2016). Some inmates, especially those experiencing incarceration for the first time, may react especially poorly to the suddenly deprived and controlling conditions of a jail. Being unfamiliar with practices and procedures, combined with anxiety about the consequences of arrest, and survival concerns within a potentially dangerous environment, may lead to rule-breaking or unpredictable behavior (Haney et al., 2016). Researchers have also suggested that jail environments elicit more strain and trauma (Toman et al., 2018) and are more chaotic than prisons (Yasmeen et al., 2021). Jail populations are more transient, and schedules and activities in jails are far less consistent than prisons (Yasmeen et al., 2021). The high turnover rate in jail staff, meaning fewer officers with experience and training, as well as a lack of supports and resources, make it difficult for jail staff to be able to respond to an inmate's disruptive behavior other than through punitive means (Haney et al., 2016).

The strain and chaos imposed by the jail environment impacts inmates and officers alike. It is not uncommon for individuals in people-oriented professions to experience fatigue and passivity. However, within the criminal justice system interactions with people are typically negative in nature, making policing and corrections inherently risky occupations (Castle & Martin, 2006). The added layer of stress imposed by the adversarial nature between the employee and consumer in the criminal justice system is not present in other people-oriented fields. Castle and Martin (2006) argue that "the conditions that cause stress are most severe in the correctional system, where individuals are forced to supervise inmates being held against their will" (Castle & Martin, 2006, p. 66). It is likely that a sense of control is a basic need for most jail staff

(Paoline & Lambert, 2012). According to Paoline and Lambert (2012) "A lack of control can lead to feelings of strain and tension for employees in environments where chaos can lead to opportunities for conflict and even violence" (p. 193). Research has highlighted that as an officer's perception of dangerousness within the jail increases, so too does their levels of both occupational stress and general stress (Castle & Martin, 2006). There is also evidence that there is a much higher rate of PTSD in jail correctional officers (53.4%) than in prison correctional staff (19%) and police officers (35.3%) (Jaegers et al., 2019). PTSD symptom severity is significantly more elevated when an officer has experienced threats or assaults than for officers who have not had those experiences (Ellison & Jaegers, 2022). Clearly, the need for security and control in jail facilities is essential for both the community within and outside the jail walls.

There are two broad types of methods officers use to control inmates; formal and informal methods of control (Santos et al., 2012). Santos and colleagues (2012) define formal methods of control as those that "leave official documentation of the inmate's behavior and the action taken in response to the behavior by the officer, while informal methods do not leave an official record" (p. 486). Correctional officers may turn to informal methods of control for a variety of reasons. They may feel the documentation process is time-consuming and tedious, they may not deem an infraction worthy of an official response, and other duties and requirements may limit the time or ability to respond to every infraction formally (Santos et al., 2012). Informal methods of control may include adding additional assignments outside of the inmate's typical work assignment (e.g., picking up trash in the parking lot, cleaning a holding cell, mopping the booking area, etc.), or taking certain privileges away (e.g., recreation time, tv-watching time, etc.) (Santos et al., 2012). The types of punishment that results from formal methods of control can vary depending on state and local laws and customs, but typically can

range from loss of time earned off a sentence for good behavior (Santos et al., 2012), loss of visitation privileges (Pierce et al., 2018), or most controversially, solitary confinement (Clark, 2018; Dellazizzo et al., 2020; Luigi et al., 2022; Montagnet et al., 2021). Although correctional officers exercise discretion in types of control methods they utilize (Santos et al., 2012), research comparing self-report to official measures of inmate misconduct found that there were more similarities than differences in these data sources, indicating that researchers and practitioners should be reasonably confident about the validity of findings from studies using either data sources (Steiner & Wooldredge, 2014).

Mass incarceration has started getting more attention in the United States recently, yet prisons remain the focus of that attention, despite the fact that there are far more jails and local jails book more people annually than prisons. Short incarceration stays and high staff turnover rates complicate the study of jails, but other factors, to be discussed in more depth below, further obscure the challenges of studying jail environments and those impacted by them. Reform mandates sparked by the COVID-19 pandemic had a stark initial impact on decreasing this population, but trends changed quickly and now this population continues to increase. Control within a jail environment is important for the safety and well-being of both those residing there as well as for those who work in this environment. This makes the study of inmate misconduct in jail facilities a necessary and warranted endeavor.

CHAPTER 2: LITERATURE REVIEW

Crimes are behaviors that violate the criminal law, whereas inmate misconduct is defined as behaviors that violate the rules of the facility in which the inmate is confined (Steiner & Wooldredge, 2014a). Much of the literature on inmate misconduct has been conducted with prison populations (Steiner et al., 2014) and primarily male populations (Steiner & Wooldredge, 2014b). It is surprising that jails have been overlooked in the research setting because they are the most common correctional facility in the United States, and their annual admission rates are often as high as 17 times that of prison admissions (Cook & Lane, 2014). The nationally representative data on conditions and inmates in the nation's jails are flawed due to the lack of comprehensive, systematic, and reliable data. The Bureau of Justice Statistics gathers data, but they do not oversee quality control over whether and how data are collected and reported to ensure accuracy, reliability, and completeness. The data that they do collect are on a voluntary basis, sporadic, of uncertain reliability, and only focuses on a limited number of issues. The differences in terminology used can also complicate categorization, frequency, and incident rates of variables of interest (Haney et al., 2016). Regrettably, researchers have had difficulty studying jails because they are operated by a multitude of different governing agencies that manage transient populations comprised of individuals whose varied backgrounds and levels of criminal involvement complicate efforts to collect generalizable data (Ellison et al., 2018). Most of the information obtained from jails comes from large jails within urban areas and tends to overlook the large number of small jails in rural areas (Ruddell & Mays, 2007). Misbehavior among inmates may pose a more serious challenge in rural jails where staff turn over is higher and there are fewer social and community resources available (Ruddell & Mays, 2007).

Theoretical Explanations of Misconduct

There have been several theories posited by researchers to explain inmate misconduct. These include deprivation theory, importation theory, management perspectives, or general theories of crime and deviance to identify potential correlates of inmate misconduct (Steiner et al., 2014). Deprivation theory suggests that inmates' behaviors, whether proscribed or prosocial, are reflections of inmates' adaptation and coping with the detention environment, either through participation in a social system, or through individual choices aimed to satisfy certain needs (Vuk & Dolezal, 2020). The applicability of the deprivation perspective may have diminished over time because many of the environmental deprivations described by scholars were lessened as a result of the prisoner rights movement and the evolution of confinement facilities from closed to more open systems. The inmate rights movement also attracted attention to the environmental conditions of detention facilities that can impact inmate life, and researchers still recognize the significance of environmental influences on need satisfaction and inmate adjustment. Consequently, researchers have continued to draw from deprivation theory when examining the relevance of environmental characteristics, such as crowding and architecture of confinement facilities, for predicting inmate misconduct (Steiner et al., 2014).

The importation theory stemmed from criticisms of deprivation theory because it places too much importance on structural deprivations resulting from incarceration. The importation perspective theorizes that the inmate social system is merely a reflection of a larger criminal subculture that is not unique to the detention environment. This theory holds that inmate behavior is not necessarily the result of the imprisonment experience, but rather, a manifestation of latent culture or pre-incarceration experiences. In other words, the importation standpoint

maintains that inmates with values and beliefs endorsing or tolerating deviant behavior may be more likely to engage in rule breaking while they are incarcerated (Steiner et al., 2014).

There have been several different theories proposed by researchers that broadly fit within managerial perspectives that have included measures of various aspects of management practices in studies of inmate misconduct. Researchers have proposed that within confinement facilities there exists a naturally occurring social order among the inmates. When administrative actions, such as crackdowns or abrupt changes in disciplinary procedures affect the distribution of benefits to the leaders of the inmate social system, the equilibrium of the inmate social system can become disrupted. When this equilibrium is upset, the inmate leaders' ability to control the other inmates is undermined. This leads to more inmates adopting other roles within the social system, many of which may result in deviant behaviors in order to satisfy their needs. This is the basis for the inmate balance theory, which predicts that inmate misconduct and disturbances are a reaction to a disruption of the inmate social system resulting from abrupt actions of prison officials to tighten control. Another similar theory that has been proposed is the administrative control theory, which predicts that collective violence or higher rates of misconduct are the result of inadequate or weak facility management. What the managerial models highlight is the impact management has on inmate behavior (Steiner et al., 2014).

Since inmate misconduct is a reflection of inmate offending while incarcerated, many researchers have also looked to general theories of crime and deviance to describe inmate misconduct. Strain theories have been utilized to describe inmate misconduct in prisons. Strain theories presume that individuals are naturally rule abiding, but experiencing strain generates pressure to offend. It is theorized that this strain is caused by individuals' social experiences. Scholars have observed that many concepts often considered under deprivation theory might also

reflect types of strain (e.g., inability to obtain privileges) (Steiner et al., 2014). In addition, it has been noted that antisocial values and associates, considered to be relevant based on importation theory, could amplify the effects of strains, while exposure to supportive relationships or coping resources could reduce the impact of strains on inmates' odds of offending (Pierce et al., 2018). Hence, general strain theory could be used to integrate measures considered relevant under importation or deprivation theory (Steiner et al., 2014). Another general theory of crime that has been used to describe inmate misconduct is control theory. A control perspective presupposes a relatively constant motivation to deviate from rules across individuals. Variations in levels of offending across individuals and across areas are explicated by differences in the effectiveness of controls. Controls are actual or potential rewards and punishments that amass from conformity to, or deviation from, the norms of society. This is another theory that can easily incorporate concepts from deprivation theory and importation theory in framing predictors of inmate misconduct (Steiner et al., 2014).

Overall, the theme throughout these theories of misconduct illustrate that there are multiple sources of inmate misconduct. There are facility-level factors (e.g., crowding, methods of control), individual-level factors (e.g., age, race, criminal history), context dependent factors (e.g., amount of time incarcerated, program participation, time in work assignments) and socio-cultural-level factors (e.g., tough on crime policies, economics) that give rise to deviance. Some research only reviews violent misconduct (Steiner & Wooldredge, 2013; Wood, 2018), while others seek to investigate a more broad definition of inmate misconduct (Pierce et al., 2018). As theories and methodological advances have evolved, studies have elucidated that some inmates who engage in misconduct may exhibit a degree of offending specialization. Thus, highlighting

the necessity of evaluating predictors of misconduct based on broad categories of types of misconduct (Steiner & Wooldredge, 2013).

Types of misconduct

A review of the literature on inmate misconduct reveals that the operational definition of misconduct varies. Some use a broad dichotomous variable of any disciplinary action/infraction (Moore et al., 2018) or only very serious infractions such as those that would result in a felony charge if committed outside the facility (e.g., drug trafficking, assault, sexual assault, robbery, attempted murder, and homicide) (Berk et al., 2006). Others have used frequency of misconduct as an outcome variable (Yasmeen et al., 2021), and some scholars have argued that predictor variables have different effects on various forms of misconduct (Steiner & Wooldredge, 2013). The methods used to group and classify misconduct, when they do separate them, tends to vary as well. One research team divided misconduct into minor and major infractions. They defined major infractions as those that lead to a formal disciplinary hearing, involving criminal behavior, and minor infractions as violations of rules of the facility, such as disobeying a direct order, failure to clean the cell, entering an unauthorized cell, and disruption of the pod (Pierce et al., 2018). Many researchers also look strictly at violent offending (Caudill et al., 2014; Hastings et al., 2011; Morin, 2016; Wood, 2018), yet most vary on exactly how that is defined. Caudill et al. (2014) used inmate-on staff assaults as a proxy variable for jail violence (Caudill et al., 2014). Hastings et al. (2011) and Wood (2018) used formal charges for physical violence as their metric for violent misconduct (Hastings et al., 2011; Wood, 2018). Morin (2016) used an open-ended, self-report survey question asking if they had ever been in a physical conflict while incarcerated to gauge violence in the jail (Morin, 2016). These would only capture physical violence, where

some researchers also include threats, and will sometimes further separate by inmate-on-inmate assaults and/or threats, and inmate-on-staff assaults and/or threats (Steiner & Wooldredge, 2013).

Predictors of misconduct

Steiner & Wooldredge (2013) argued that the inconsistency in models of predictors and outcome variables have contributed to an increasingly complex picture of inmate misconduct that appears counterproductive for both theory and practice. Through a comprehensive examination of multiple models they came to an overall conclusion that investigation of specific types of misconduct offers unique information beyond a pooled measure of all misconduct. They noted that (a) the predictor variable of age has a stronger effect on assaults relative to other forms of misconduct, (b) there are significant effects, although in opposite directions, of an inmate's race on assault versus substance-related misconduct (captures possession, sale, or use of drugs or alcohol), (c) the type of offense an inmate is charged with, (d) the amount of time the inmate has been incarcerated, and (d) the importance of inmate's prior drug use and the strength of effect for predicting drug/alcohol offenses specifically. They also looked at different models of assault types (inmate-on-inmate assault vs. inmate-on-staff assault vs. combined measure of assaults on staff or inmates) and found no significant differences. Additionally, they found models that separated other minor misconduct, such as property misconduct (e.g., possession of stolen property or an unauthorized item, excluding weapons and drugs), security misconduct (e.g., escape, possession of a weapon, verbal assault), other misconduct, and all misconduct to be redundant with non-violent misconduct (combined variable of security, property, and other misconduct). In other words, when investigating inmate misconduct, models should be estimated separately for physical assaults, drug/alcohol offenses, and all other nonviolent misconduct, while including age, race, amount of time inmate has spent incarcerated, and prior

substance and alcohol use as predictor variables. This will help to refine research on inmate misconduct, facilitate a synthesis of related findings, and inform correctional practice (Steiner & Wooldredge, 2013).

Understanding the factors that increase inmates' likelihood of misconduct is critical for the maintenance of order (Steiner & Wooldredge, 2013). There have been numerous studies looking at these factors in prison populations, but very few using jail populations. Of the few studies on this subject with inmates in jail, there have been additional predictors identified as important predictors and other factors to consider. Bonta & Nanckivell (1980) found that personal characteristics such as employment at arrest, marital status, and criminal history were not able to discriminate between inmates who had committed misconduct from ones who had not (Bonta & Nanckivell, 1980). Pierce et al. (2018) advised that they found no significant relationships between gender, race, marital status, or education for either minor or serious misconduct (Pierce et al., 2018). Vuk & Doležal's (2020) study found that age, race, criminal history, inmates who spent more time in jail, sentenced versus transitional status, and type of current offense had varying levels of impact for the odds of different types of infractions. Additionally, they concluded that substance use disorder and mental illness diagnosis are associated with higher odds of any, violent (defined as physical assault on another inmate, correctional officer, or other staff member, verbal assault on another inmate, correctional officer, or other staff member, and possession of a weapon), security (defined as work slowdowns, food strikes, setting fires, rioting, etc. or the use of abusive language, horseplay, failing to follow sanitary regulations, etc.) and accountability (defined as violations such as disobeying orders, escape or attempted escape, and being out of place) misconduct, all else equal (Vuk & Doležal, 2020). Hastings and colleagues (2011) compared the predictive utility of the Violence Risk

Appraisal Guide (VRAG) for male and female jailed inmates and found that although it maintained its well established predictive utility with male inmates on several outcomes of violent and general institutional misconduct as well as post-release recidivism, the pattern did not hold for female inmates. They argue that future research should attempt to identify female-specific valid indicators of risk for violence that can augment or supplement the predictive utility of psychopathy, which was the only variable that significantly predicted future violence and recidivism for both males and females (Hastings et al., 2011). Clearly, there is mixed evidence for indicators of risk for institutional misconduct.

What's missing?

Although a full inspection of all variables that may serve as indicators for risk of misconduct in jail populations is beyond the scope of this study, there are two variables that have been identified that warrant further clarification. Those are the variables of mental illness and substance use disorder. These have been identified as significant predictors of misconduct in both prison (Steiner et al., 2014) and jail (Vuk & Doležal, 2020) populations. However, the methods for collecting this type of information tend to be limited. Both Wood (2018) and Vuk & Doležal (2020) used data from the Bureau of Justice Statistics 2002 Survey of Inmates in Local Jails (Vuk & Doležal, 2020; Wood, 2018). This metric is a self-report survey question asking broadly if they had ever been diagnosed with a mental disorder by a mental health professional (Vuk & Doležal, 2020). Different mental health conditions manifest different behaviors, so it is unlikely that all of them present with the same odds of potential rule-violations. Likewise, the broad category of substance use disorder is very heterogeneous, with each substance class having its own behavioral, criminogenic, and treatment implications; ergo, treating substance use disorder as a unitary construct may obscure important between group differences (Simpson et al.,

2019). Research has also indicated that substance use frequency and number of substance use problems, may be stronger predictors of recidivism than a simple dichotomous presence or absence of an abuse/dependence (DSM-IV-TR) or SUD (DSM-5) diagnosis (Dacosta-Sanchez et al., 2019; Scott et al., 2014). Substance Use Disorder classifications underwent a significant change with the publication of the DSM-5, moving from a categorical assessment of SUDs (i.e., abuse/dependence) to a dimensional diagnostic approach (i.e., substance specific classification based on graded levels of severity) (Dacosta-Sanchez et al., 2019; Kopak et al., 2014). This change has allowed researchers to refine and narrow their approach to studying substance use and substance use problems (Dacosta-Sanchez et al., 2019). It is likely that a more specific understanding of type of substance and severity of a substance use disorder would likewise be beneficial in predictions of institutional misconduct as well.

Purpose of Current Study

The purpose of the present study is to address the dearth of available information on jail populations. It also serves to elucidate and clarify what, if any, mental health disorder and/or specific substance use disorder may be more indicative of potential risk for rule-violations while incarcerated in jail. Since analyses are primarily exploratory in nature, research questions are intentionally broad. Based on the reviewed literature, the following research questions are proposed:

Research Question 1: Which specific mental health disorders are associated with any misconduct, violent misconduct, and/or nonviolent misconduct?

Research Question 2: Which specific substance use disorders are significantly associated with the probability of any, violent, and/or nonviolent misconduct?

CHAPTER 3: METHODS

Data collection for this study was conducted in one county jail in a rural area of western North Carolina. The data collection was occurring as a part of a larger study gathering comprehensive assessment data of behavioral health issues in rural county jails (Raggio et al., 2017a; Raggio et al., 2017b). Although the below described procedure was conducted in multiple jails, misconduct information was only gathered from the Jackson County Detention Center in Sylva, North Carolina and is the only data set used in the present analysis.

According to the U.S. Census Bureau, the estimated population in Jackson County in 2021 was 43,410. The majority of the population reports their race as White (84.6%), with the largest minority race group being Native Americans (9.4%), followed by African Americans (2.4%), and Asian Americans (1.2%). The median household income is \$46,820 and 16.6% of the population live in poverty (United States Census Bureau, 2021).

The Jackson County Detention Center houses both male and female inmates that are under bond awaiting trial, court order contempt charges, sentenced persons, and temporary housing for the North Carolina Department of Corrections. The Center runs four, twelve hour shifts that are covered by one sergeant, and three detention officers. The Center maintains an inmate work release program, inmate work crew, and trustee program. These programs allow for a variety of different supervision techniques that best suits the needs of the inmate and Detention Center. The Detention Center houses up to 72 inmates, and includes solitary confinement, master door releases for emergencies, smoke evacuation fans, and a secured area for prisoner pickup and delivery (Jackson County Sheriff's Office, n.d.). The average daily population (ADP) for the Detention Center in 2019 was 54 (42 male & 12 female) and in total there were 2,493 bookings that year. Like many other jails in the United States, COVID-19 initially lead to a reduction in

jail bookings and then a subsequent increase followed, with 2020 having an ADP of 53 (45 M & 8 F) and 1791 bookings, and 2021 having an ADP of 62 (47 M & 15 F) and 1,999 bookings (T. Paul, Detention Lieutenant, personal communication, August 31, 2022).

{Describe Sample here}

Procedure

Data was collected from a random sample of adults booked into the Jackson County Detention Center. Participants were eligible for inclusion in the study if they had been booked into the facility within the preceding 24–96-hour time period, stated that they spoke English, and were at least 18 years of age. Those booked within this period were divided by gender, then added to the day's eligibility list, names were placed into two envelopes labeled female and male. Inmate names were selected from the female envelope first, and once those names were exhausted, names were randomly selected from the male envelope. Inmates were invited to participate in a study addressing behavioral health issues. Informed consent was obtained in accordance with the Institutional Review Board of the university to which the researcher is affiliated. Interviews were conducted by a researcher who is unaffiliated with the detention center to minimize the likelihood of response bias that has been found among inmates when they are interviewed by jail staff (Proctor et al., 2011). Upon completion of the interview, inmates were thanked for their participation, debriefed on the medical inquiry process should they need to speak with the nurse, and returned to their cell by a detention officer. Inmates were not paid or compensated in any way for their participation in the study.

Instruments

Clinical interviews were conducted utilizing the Comprehensive Addiction and Psychological Evaluation-5 (CAAPE-5), a structured interview covering substance use disorders and common mental health conditions (Hoffmann, 2013) compatible with the Diagnostic and Statistical Manual-5 (DSM-5; American Psychiatric Association, 2013). The CAAPE-5 provides an assessment of SUDs for a number of substances, including alcohol, marijuana, cocaine, heroin, amphetamines, sedatives, hallucinogens, inhalants, and combinations of substances.

Depending on the number of positive findings, the interview can take between 25 and 35 minutes to complete. Inmates were interviewed in a secure but secluded area of the jail that is not subject to constant correctional staff traffic. This encouraged inmates to truthfully report their substance use history with minimal concern that jail staff would overhear the exchange of this information (Proctor et al., 2011). The CAAPE-5 is efficient, and has been found to have acceptable agreement with other instruments, converges well with clinical determinations, and has been validated for use with jail inmates (Gallagher et al., 2006; Proctor & Hoffmann, 2012).

The CAAPE-5 is designed so that demographic categories and responses to the clinical information can be readily coded as numeric values. These coded values were entered into IBM's SPSS Statistics software program (IBM Corp., 2013) where algorithms were developed to determine whether the diagnostic criteria for the various conditions were met in accordance with the designations provided in the DSM-5 (Raggio et al., 2017b). The diagnostic indications presented should be regarded as preliminary. Clinical determinations from the CAAPE-5 require a qualified clinician to evaluate whether any exclusion criteria apply or whether additional information beyond that in the CAAPE-5 substantiates a diagnosis. Since not every criterion for every condition is included in the CAAPE-5, it is possible that there could be some false

negative indications. Although no instrument alone can "make" a diagnosis, the data can provide an indication of the probable prevalence of the conditions covered (Raggio et al., 2017b).

Internal consistency within the CAAPE-5 is acceptable across the various scales contained within the instrument. The subscales vary in terms of the number of items from 6 to 11, depending on the condition. Cronbach's alpha ranged from .71 (for obsessive compulsive disorder) to .98 (for Opioid Use Disorder) (Raggio et al., 2017b). In terms of inter-item correlations, or how strongly each item is related to each other within a scale, the antisocial personality disorder scale has the lowest of any other scale assessed by the CAAPE-5, which is primarily due to the low threshold of diagnostic criteria for a diagnosis and the widely differing criteria (Proctor & Hoffmann, 2012). The CAAPE has also been determined to yield accurate and complete substance use diagnoses (Carkin & Tracy, 2018). The DSM-5 symptom criteria that are reflected in each mental health disorder and substance use disorder measured within the CAAPE-5 demonstrates the content validity of the instrument. The CAAPE-5's ability to quantify responses for determination of a diagnosis and capture two principal components of comorbidity (mental health and substance use disorders), demonstrate its construct validity (Carkin & Tracy, 2018). Recent evidence supports the predictive validity of the CAAPE-5 instrument for the study of recidivism (Carkin & Tracy, 2018). The CAAPE has also been compared with The Structured Clinical Interview for DSM-IV (SCID), which has widely been dubbed the "gold standard" of diagnostic interviews, and concordance has been calculated at 95% agreement (Gallagher et al., 2006).

The final step in the data collection process involved gathering information related to criminal justice involvement from the jail records database. After interviews were completed, inmates' prior booking data was queried within the detention center's records management

system. The information drawn from these records included whether or not the inmate was previously processed into the jail in the past 12 months, the type (i.e., property, violent, drug related) of prior and current criminal charges, severity of criminal charges (i.e., misdemeanor or felony offense), number of days spent in jail, and the number of charges for which inmates were booked. These data were recorded onto extraction forms and matched with inmates' responses obtained from the CAAPE–5 assessments for further analyses. After 12-months had passed from the initial interview, the inmate's records were queried again to gather criminal justice and misconduct information that was recorded in the jail records database since the interview.

Analytic Plan

In the first step of the analytic approach, descriptive statistics will be generated to summarize the final study sample. Bivariate analyses will be conducted to assess for preliminary associations between mental health conditions, substance use disorders, and misconduct.

Multivariate logistic regression models will be used to further assess significant relationships, while accounting for the possible confounding influence of demographic background factors known to be associated with SUDs and jail misconduct (Kopak, Proctor, & Hoffmann, 2017).

Correlational analyses will also be conducted with symptom count of mental health and substance use conditions and frequency of misconduct to explore this relationship further.

Independent Variables. Diagnostic designations will be converted to binary categorial variables based on if the participant endorsed enough criteria, based on diagnostic determinants of the DSM (American Psychiatric Association, 2013), to be classified as having the sufficient number of symptoms associated with a specified diagnosis. Previous studies with this data found that substance use disorder (SUD) distributions based on severity level displayed bimodal distributions. The majority of the sample that would qualify for a specific SUD would be

classified as moderate or severe and most others had no symptoms of SUD, with very few participants that would classify as having a mild SUD (Moody, 2020; Raggio et al., 2017). Therefore, the binary categorizations of SUDs will be moderate-to-severe (yes/no), with the few mild classifications being considered as no diagnosis.

Dependent Variables. Outcome or dependent variables will be either any misconduct, violent misconduct, or nonviolent misconduct. Other researchers have recommended more specificity in misconduct variables; however, the small sample size and methodological differences barred that level of distinction in this study (Steiner & Wooldredge, 2013). Misconduct variables will be a binary categorization of having documentation of any misconduct (yes/no), violent misconduct (yes/no), or nonviolent misconduct (yes/no). Violent misconduct is defined as verbal or physical aggression toward officers or other inmates. Nonviolent misconduct is defined as violation of jail rules that is formally documented in the jail's records management system.

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