

Predictors of Criminal Sentiments Scale-Modified Scores in Outpatients with Legal System Involvement

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The Criminal Sentiments Scale-Modified (CSS-M) has been widely used as a measure of criminal attitudes. This analysis examined CSS-M scores in a large sample of outpatients with serious mental illnesses and a criminal legal system history. We compared total and subscale scores in our sample to scores from two other previously published U.S. studies in which the CSS-M was used, and evaluated associations between total CSS-M score and nine variables (age, educational attainment, gender, race, marital status, employment status, diagnostic category, substance use disorder comorbidity, and adverse childhood experiences (ACE) score). Scores were higher than in two prior U.S. studies involving other types of samples. Independently significant predictors of higher CSS-M scores included being younger ($P < .001$), having a higher ACE score ($P < .001$), being male ($P = .03$), not identifying as White ($P < .001$), not having a psychotic disorder ($P < .001$), and having a comorbid substance use disorder ($P = .002$). Future research should test the hypothesis that these factors increase risk for arrest and that arrest events, and subsequent criminal legal system involvement, are characterized by negative experiences and perceptions of poor procedural justice, which in turn underpin the negative opinions referred to as “criminal sentiments” or criminal attitudes.

J Am Acad Psychiatry Law 52:176–85, 2024. DOI:10.29158/JAAPL.230120-23

Key words: criminal justice; criminal legal system; criminal sentiments; law enforcement; police; serious mental illnesses

The overrepresentation of individuals with serious mental illnesses (SMI) in the criminal legal system is

a widely recognized problem, and there have been many calls to “decriminalize” mental illnesses.¹ Those with SMI are more likely to be arrested,² more likely to receive a jail sentence for misdemeanors,³ experience longer jail stays, and are at greater risk of recidivism after release.^{2,4} The overrepresentation has been linked to numerous interacting factors including deinstitutionalization of psychiatric hospital care, the resultant “trans-institutionalization” into jails and prisons, inadequate funding of community-based mental health services, law enforcement officers’ limited options for resolving situations, and the broad array of social adversities (e.g., poverty, unemployment, housing instability) with which both persons with SMI and persons involved in the criminal legal system are known to contend.^{4,5}

Published online April 30, 2024.

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Disclosures of financial or other potential conflicts of interest: None.

The majority of arrests in this population are for minor charges, many of which may be more appropriately addressed by prearrest diversion programs that connect people to behavioral health and other social services. Our group recently reported that 71 percent of 240 patients with SMI in southeast Georgia had been previously arrested and, among those, the mean lifetime number of arrests was 8.6 ± 10.1 , with a mean lifetime number of charges of 12.6 ± 14.6 .⁶ In that sample, number of arrests was associated with male gender, Black or African American race, lower educational attainment, mood disorder (as opposed to psychotic disorder), and the presence of a substance use disorder comorbidity. Among the most common charges were criminal trespass, willful obstruction of a law enforcement officer, disorderly conduct, shoplifting, and probation violation. Another analysis, involving more than two million arrests in New York State from 2010 to 2013, showed that, among those in treatment for an SMI, only 7.3 percent of their arrests were for a violent felony offense, and among the most common misdemeanor charges were petit larceny, criminal possession of a controlled substance, intent to obtain transportation without paying, resisting arrest, and criminal trespass.⁷

Charges and arrests among persons with SMI can be driven by multiple factors. The mental illness, itself, may play a role. For example, among those with SMI, criminal trespass, disorderly conduct, and related charges could be related to psychiatric symptoms that impair social functioning in ways that lead them to violate community norms. The social and economic disadvantages (e.g., unstable family and peer relationships, inadequate education, unemployment or underemployment, housing instability, substance use) resulting from an SMI can also set the stage for misdemeanor charges, such as trespass and shoplifting; these are among the criminogenic needs of the widely promulgated risk-need-responsivity (RNR) model.⁸

Not specific to individuals with SMI, among the criminogenic risks considered particularly potent are having an antisocial personality pattern, holding antisocial or criminal attitudes and values, and associating with antisocial peers.⁹ Antisocial or criminal attitudes are attitudes, values, beliefs, or rationalizations that underpin criminal conduct, and such

attitudes are considered risk factors for crime.¹⁰ While antisocial and criminal attitudes can be present in individuals with SMI, these attitudes are not characteristic phenomena of SMI.

Given theoretical interest in the relationship between criminal attitudes and criminal behavior, criminal attitudes rating scales, such as the 41-item Criminal Sentiments Scale,¹¹ have been found to be predictive of criminal recidivism (e.g., reconviction among probationers¹²). Shields and Simourd¹³ modified the original Criminal Sentiments Scale by clarifying the wording of some items, reversing the scoring of one of the subscales so that higher scores represent greater criminal attitudes like the other subscales, and using a three-point scale instead of the five-point scale. This modified Criminal Sentiments Scale (CSS-M) became the most extensively cited instrument for measuring criminal attitudes. The scale is purported to measure the antisocial attitudes, values, and beliefs directly related to criminal activity¹⁰ and has been used in dozens of studies to measure criminal attitudes among individuals with and without a criminal history around the world (e.g., in the United States,¹⁴ Canada,¹⁵ China,¹⁶ Spain,¹⁷ the Netherlands,¹⁸ the United Kingdom,¹⁹ Ireland,²⁰ and New Zealand²¹). The CSS-M has shown satisfactory validity and reliability in both adult²² and youth²³ populations.

The objective of this analysis was to examine CSS-M scores in a large sample of clinic outpatients with SMI and a criminal legal system history. First, we compared total and subscale scores in our sample to those from two previously published U.S. studies in which the CSS-M was used, respectively, on mental health court-involved outpatients²⁴ and on offenders assigned to probation and parole officers.²⁵ Second, we evaluated associations between scores and nine other variables (age, years of education completed, gender, race, marital status, employment status, substance use disorder comorbidity, adverse childhood experiences (ACE) score, and diagnostic category). Diagnostic categories included mood disorder, psychotic disorder, or both (a mood disorder and a psychotic disorder, or schizoaffective disorder). We hypothesized that factors known to be associated with arrest would also be associated with CSS-M scores. Specifically, male gender, Black race, lower education, unemployment, substance use disorder, higher ACE scores, and being single are all associated with a higher risk of arrest.^{26,27} Age and diagnostic

category were also assessed; although we had no *a priori* hypotheses, one of our prior reports indicated that the presence of a mood disorder (as opposed to a psychotic disorder) was associated with a greater likelihood of arrests.⁶

Methods

Setting and Sample

Baseline data from participants taking part in an ongoing randomized, controlled trial of a potential new form of prearrest jail diversion and reconnection to care were used for this analysis. The study took place in both Atlanta and southeast Georgia. Specifically, participants were recruited from more than 20 clinics operated by four different Community Service Boards (community mental health agencies). These agencies provide services primarily for those with SMI, with either public sector insurance or no insurance. Eligibility criteria included: ability to speak and read English; age 18 years or older; clinical diagnosis of a mood or psychotic disorder (with or without comorbidities), based on the referring clinician's report or electronic medical record documentation; history of at least one prior arrest within the past five years (based on the patient's report); lack of known or suspected intellectual disability or dementia; and capacity to give informed consent, as assessed during an in-depth, consent process approved by the Institutional Review Board (IRB). The sample for this analysis included 1,234 participants. (The parent project is a randomized, controlled trial of a potential new form of prearrest jail diversion and reconnection to care. That project ultimately enrolled 1,400 participants, with success of randomization confirmed in that there were no differences in demographic characteristics between the two groups.)

General Procedures

Recruitment included a variety of means, but was primarily conducted by speaking directly with patients in the clinics' waiting rooms and receiving referrals from clinicians. After eligibility screening and informed consent, participants underwent an approximately one-to two-hour data collection interview before being randomized, as part of the larger study. Here, we used baseline data collected as part of the parent project. All study procedures were

approved by the New York State Psychiatric Institute IRB and the Georgia Department of Public Health IRB.

Measures

Basic sociodemographic data were collected using a structured data collection form. Clinical research diagnoses for substance use disorders were made using the *Structured Clinical Interview for DSM-5 Disorders*.²⁸

The CSS-M is a 41-item self-report instrument with three main subscales: Attitudes toward the Law, Court, and Police (LCP, 25 items); Tolerance for Law Violations (TLV, 10 items); and Identification with Criminal Others (ICO, six items). Participants were read these instructions: "Listen to each statement carefully and decide how you feel about it. Respond 'Agree' if you agree with the statement or 'Disagree' if you disagree with the statement. If you are undecided or cannot make up your mind about the statement, respond 'Undecided.' Remember, there are no right or wrong answers." Each endorsement of an antisocial sentiment (or rejection of a prosocial one, for those items that are reverse scored) is scored as a 2. Rejection of antisocial items (or acceptance of prosocial items) is scored 0, and "Undecided" is scored 1. Thus, higher scores represent a higher degree of criminal attitudes. The first subscale (LCP) includes items such as: "The law does not help the average person" and "Pretty much all laws deserve our respect" (Law); "You cannot get justice in court" and "Judges are honest and kind" (Court); and "The police almost never help people" and "The police should be paid more for their work" (Police). The TLV subscale addresses how people may neutralize the influence of norms in justifying their criminal behavior.²⁹ Examples of items from the TLV subscale include: "You should obey only those laws that are reasonable" and "There is never a good reason to break the law." The ICO subscale measures the respondent's evaluative judgments about others who violate laws; e.g., "People who have broken the law have the same sorts of ideas about life as me" and "No one who breaks the law can be my friend." The CSS-M total score demonstrated high internal consistency reliability ($\alpha = .91$), and two of the three subscales exhibited moderate to high internal consistency: LCP $\alpha = .90$ and TLV $\alpha = .73$. The

Table 1 Sociodemographic and Clinical Characteristics of the Study Sample ($n = 1,234$)

	M	SD
Age, years	37.7	10.7
Years of education completed	11.6	2.3
Adverse Childhood Experiences (ACE) scale score	4.5	2.8
	<i>n</i>	%
Sex, male	649	52.6
Ethnicity, non-Hispanic ($n = 1,233$)	1,203	97.6
Race		
Black or African American	773	62.6
White	404	32.7
Native Hawaiian or Other Pacific Islander	5	0.4
American Indian or Alaska Native	4	0.3
Asian	2	0.2
Other (e.g., identified as more than one race)	46	3.7
Marital status ($n = 1,228$)		
Single and never married	789	64.3
Divorced, separated, or widowed	303	24.6
Married or living with a partner	136	11.1
Currently unemployed ($n = 1,226$)	917	74.3
Clinical diagnosis ($n = 1,233$)		
Mood disorder	808	65.5
Psychotic disorder	176	14.3
Both psychotic and mood disorder, or schizoaffective disorder	249	20.7
Substance use disorder	603	48.9

ICO subscale, with only six items, showed low internal consistency reliability ($\alpha = .44$).

Participants were queried about childhood adversity with the widely used Adverse Childhood Experiences (ACE) questionnaire, a 10-item dichotomous (yes or no) scale covering abuse (emotional, physical, and sexual), neglect (emotional and physical), and household dysfunction (domestic violence, parental divorce or separation, household substance abuse, mental illness, and parental incarceration) during the first 18 years of life.^{30–32} Like the CSS-M, the instrument was administered verbally to participants. The total ACE score ranges from 0 to 10.

Data Analyses

Descriptive statistics were examined for all variables. Bivariate analyses were performed to determine associations between CSS-M total score and the nine variables of interest. A multiple linear regression model was built with CCS-M total score as the dependent variable and the variables that were statistically significantly associated in bivariate tests as independent variables. Gender was included as an additional covariate. After the regression model, to

further explore ACE score as a predictor of CSS-M total score, we then added three interaction terms to the model in a *post hoc* analysis: ACE score by gender, ACE score by race, and ACE score by diagnostic category. ACE score was transformed using centralization of the mean, and those three interaction terms were assessed. All analyses were conducted using IBM SPSS 25.

Results

Characteristics of the Study Sample

Sample characteristics are shown in Table 1. The mean age was 37.7 ± 10.7 , and the mean years of education was 11.6 ± 2.3 . Just over half were male (649, 52.6%), the vast majority were non-Hispanic (1,203, 97.6%), and nearly two thirds were Black or African American (773, 62.6%) and one-third were White (404, 32.7%). The majority were single and never married (789, 64.3%), and most were unemployed (917, 74.3%). Roughly two-thirds were diagnosed with a mood disorder (808, 65.5%), and the remainder had a psychotic disorder (176, 14.3%) or both a psychotic and mood disorder or schizoaffective disorder (249, 20.7%). About half of the participants (603, 48.9%) had a co-occurring substance use disorder.

CSS-M Scores Compared with Prior Studies

The current sample had a mean CSS-M total score of 32.7 ± 15.0 (Table 2), which is substantially higher than scores reported in the two prior U.S. studies (24.8 ± 9.6 for the preintervention study group and 19.3 ± 10.5 for the comparison group;²⁴ and 25.3 ± 11.3 for the preintervention study group and 25.8 ± 12.1 for the comparison group²⁵). Scores on the LCP, TLV, and ICO subscales were also higher in our sample than in the prior samples.

Bivariate Correlates of CCS-M Total Scores

While male participants present slightly higher scores than females (33.1 ± 15.5 versus 32.2 ± 14.5), the difference is not statistically significant ($t = 1.11$, $df = 1,215$, $P = .35$, $d = .18$) (Table 3). Years of education, marital status, and employment were not significantly associated with CSS-M total score. Age was inversely correlated with CSS-M total score ($r = -.19$, $P < .001$). Participants identifying as White had the lowest CSS-M total score (29.3 ± 14.8)

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Table 2 Total and Subscale Criminal Sentiments Scale-Modified (CSS-M) Scores in the Current Study and Two Prior U.S. Studies

Study	CSS-M, Total Score (41 items)		LCP Subscale (25 items)		TLV Subscale (10 items)		ICO Subscale (6 items)	
	M	SD	M	SD	M	SD	M	SD
Pauselli <i>et al.</i> , 2024 (the current study): $n = 1,234$ outpatients with psychotic disorders or mood disorders, and a history of arrest, in public-sector clinics in Georgia enrolling in a randomized controlled trial of a potential new form of prearrest jail diversion and reconnection to care (53% male, 63% African American)	32.7	15.0	21.1	10.7	7.0	4.3	4.5	2.3
Ashford <i>et al.</i> , ²⁴ 2008: $n = 53$ mental health court-involved outpatients in a study of cognitive skills training targeting criminogenic attitudes; psychotic disorders or bipolar disorder, previously booked with a new charge or a probation violation at the Monterey County (California) Jail, and at least one prior arrest (83% male, 19% African American) (preintervention scores from the completed treatment group on top and comparison group below)	24.8 19.3	9.6 10.5	16.5 11.4	7.6 7.6	4.8 4.4	3.1 3.3	3.6 3.6	2.2 2.3
Labrecque <i>et al.</i> , ²⁵ 2013: $n = 238$ participants from juvenile and adult probation or parole departments in a large Midwestern state, who were on the caseloads of 37 probation and parole officers, 17 of whom were trained in the Effective Practices in Community Supervision (EPICS) model on how to target criminogenic needs (preintervention scores from trained officers on top, scores from untrained officers below)	25.3 25.8	11.3 12.1	15.4 16.4	7.8 8.2	5.7 5.8	3.6 3.7	4.1 4.0	2.0 1.9

Abbreviations: ICO = Identification with Criminal Others, LCP = Law, Courts, and Police, TLV = Tolerance for Law Violations.

compared with the other categories, but only the difference with Black or African American participants' score (34.2 ± 14.9) was significant ($P < .001$). Participants with a diagnosis of psychotic disorder without mood symptoms scored significantly lower (28.2 ± 13.8 ; $F = 9.47$, $df = 2$, $1,212$, $P < .001$) than participants with a mood disorder (33.6 ± 15.0) or both a psychotic and mood disorder, or schizoaffective disorder (32.9 ± 15.5). Participants with a comorbid substance use disorder showed significantly higher scores than those without (34.8 ± 15.4 versus 30.6 ± 14.3 ; $t = 4.92$, $df = 1,215$, $P < .001$, $d = .28$). Finally, ACE score was directly correlated with CSS-M total score ($r = .15$, $P < .001$).

Multiple Linear Regression Model

Multiple linear regression was used to test if the sociodemographic and clinical characteristics found to be significantly associated with CSS-M total score in bivariate analyses remained independently significant when controlling for the other variables. Gender was included, despite being statistically nonsignificant, for completeness of the model. Race was transformed into a dummy variable and White was assigned a value of one. The psychiatric diagnosis variable was also transformed into a dummy variable

and having a psychotic disorder without mood symptoms was assigned a value of one.

The overall regression model was statistically significant ($R^2 = .11$, $F(6, 1,144) = 24.34$, $P < .001$). As shown in Table 4, all variables entered into the model independently significantly predicted CSS-M total score. Being younger ($B = -.25$, $P < .001$), having a higher ACE score ($B = .76$, $P < .001$), identifying as non-White ($B = -6.16$, $P < .001$), not having a psychotic disorder ($B = -5.82$, $P < .001$), and having a comorbid substance use disorder ($B = 2.57$, $P = .003$) predicted a higher CSS-M total score.

Post Hoc Analyses to Explore ACE Score

All the original variables remained significant, and one interaction term was also significant: ACE score by diagnostic category ($B = .81$, $t = 2.47$, $P = .04$), and the model remained statistically significant ($R^2 = .12$, $F(8, 1,142) = 18.68$, $P < .001$). Specifically, while the presence of ACE scores had an impact on CSS-M scores among those with mood disorders, the impact was even greater among those with psychotic disorders. The mean CSS-M score among 288 participants with a mood disorder and an ACE score less than the median was 32.1 ± 14.9 , compared with 34.5 ± 14.9 among the 507 participants with a mood

Table 3 Bivariate Analysis of CCS-M Total Score and Sociodemographic and Clinical Characteristics

	M	SD	Test Statistics, <i>P</i>
Age			$r = -0.19, P < .001$
Years of education completed			$r = -0.03, P = .30$
Adverse Childhood Experiences (ACE) scale score			$r = 0.15, P < .001$
Sex			$t = 1.11, df = 1,215,$ $P = .35, d = 0.18$
Male	33.1	15.5	
Female	32.2	14.5	
Race			$F = 6.68, df = 5, 1,211,$ $P < .001, Bonferroni's post hoc:$ a-b: $P < .001$
Black or African American	34.2	14.9	
White	29.3	14.8	
Native Hawaiian or Other Pacific Islander	45.8	12.6	
American Indian or Alaska Native	32.5	17.7	
Asian	35.5	26.1	
Other (e.g., identified as more than one race)	34.4	15.3	
Marital status			$F = 2.06, df = 2, 1,213,$ $P = .13$
Single and never married	33.0	15.1	
Divorced, separated, or widowed	31.1	14.6	
Married or living with a partner	33.9	15.5	
Currently employed			$t = 1.13, df = 1,212,$ $P = .13, d = 0.08$
Yes	33.5	14.6	
No	32.4	15.2	
Clinical diagnoses			$F = 9.47, df = 2, 1,212,$ $P < .001 Bonferroni's post hoc:$ a-b: $P < .001$ b-c: $P < .001$
Mood disorder	33.6	15.0	
Psychotic disorder	28.2	13.8	
Both psychotic and mood disorder, or schizoaffective disorder	32.9	15.5	
Comorbid substance use disorder			$t = 4.92, df = 1,215,$ $P < .001, d = 0.28$
Yes	34.8	15.4	
No	30.6	14.3	

disorder and an ACE score at or greater than the median ($t = 2.13, df = 793, P = .02, d = .16$). The mean CSS-M score among 207 participants with a psychotic disorder and an ACE score less than the median was 27.8 ± 14.7 , compared with 34.0 ± 14.7 among the 206 participants with a psychotic disorder and an ACE score at or greater than the median ($t = 4.32, df = 411, P < .001, d = .42$).

Discussion

At least four findings are noteworthy. First, CSS-M scores were higher in this sample than those observed in two other U.S. studies with different samples. There may be several reasons for this. Our data are more recent (the others are from 2008 and 2013). Therefore, our respondents had exposure to coverage of the George Floyd murder, the Black Lives Matter movement, a number of highly publicized instances of police brutality against minorities, and subsequent demonstrations and protests. Furthermore, race is a predictor of CSS-M scores, and our study included 773 Black participants (63%), whereas the one by Ashford and coworkers²⁴ only had 53 participants, of which only 19 percent

were Black. This clearly could have shaped attitudes about the police. The study by Labrecque and associates²⁵ was from a Midwestern state where there may be fewer instances of racism or profiling compared with a southern state. These interpretations are in line with those of a study that used the CSS-M in prison inmates, in which Soyer and colleagues¹⁴ noted that “. . . it may not be coincidental that minority inmates scored higher on the CSS-M than White inmates. Given the recent exposure of police brutality in American inner cities, even a truthful response to statements such as ‘a cop is a friend to people in need’ may say more about the inmate’s race and prior experience with the police than about his or her criminal sentiments” (Ref 14, p 1456).

Second, the ICO subscale showed low internal consistency, which calls into question its reliability and, thus, validity. While it could be that the scale has too few items for an adequate demonstration of internal consistency, a closer examination of this subscale, focusing on “people who break the law,” is warranted. Witte *et al.*³³ also reported low internal consistency for that subscale ($\alpha = .57$ pretreatment and $\alpha = .38$ posttreatment), and hypothesized that it was because fewer items compose the ICO

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Table 4 Multiple Linear Regression Model Results

	B	SE	t	P
Age	-0.25	0.04	-6.36	<.001
Adverse Childhood Experiences (ACE) scale score	0.76	0.16	4.83	<.001
Sex, male	1.61	0.87	-1.85	.07
Race, White ^a	-6.16	0.90	-6.81	<.001
Clinical diagnosis, psychotic disorder ^b	-5.82	1.25	-4.64	<.001
Presence of a comorbid substance use disorder	2.57	0.86	2.98	.003

^aReference group = all other race categories.

^bReference group = those with a mood disorder combined with those with both a psychotic and mood disorder, or schizoaffective disorder.

subscale. Walters,³⁴ in reviewing prior uses of the scale, noted that while the CSS total score and two of its subscales (LCP and TLV) displayed adequate to good internal consistency and mean inter-item correlations, the ICO subscale did neither.

Third, being younger, having a higher ACE score, identifying as African American or another racial minority group, and having a comorbid substance use disorder predicted higher CSS-M total score. As noted above, these variables are known predictors of criminal legal system involvement. Individuals with SMI are known to have high rates of ACEs.³⁵⁻³⁸ Additionally, we observed an interaction between diagnostic category and ACE score, while controlling for other variables, in the regression model of CSS-M scores. While the presence of ACEs had an impact on CSS-M scores among those with mood disorders, the impact was even greater among those with psychotic disorders. This could be because those with psychotic disorders had lower scores and thus the impact of ACEs had more opportunity to appear in that subgroup.

While criminal attitudes may well drive criminal behavior, and ultimately, in some cases, criminal legal system involvement, it could also be that prior negative experiences with the criminal legal system lead to negative attitudes about that system (which are then assessed as “criminal attitudes” by the CSS-M). If that were the case, it would thus make sense that the same predictors of criminal legal involvement (e.g., adversity in childhood, substance use disorder comorbidity) are also predictors of perceptions of the criminal legal system (deemed as criminal attitudes). Higher CSS-M scores are known to predict recidivism³⁴ and have been interpreted as representing a trait-level concept, “criminal thinking,” “criminal attitudes,” or “criminal sentiments.” Rather than assuming that this interpretation is correct, we argue that future research should further investigate whether negative attitudes toward the criminal legal

system, on the part of people with serious mental illnesses in particular, are rooted in prior negative experiences and a perceived lack of procedural justice, in line with the foundations of procedural justice theory.³⁹ Several North American studies examining experiences in police encounters (crisis- and noncrisis-related) indicate that individuals with SMI feel very vulnerable when interacting with police officers and that the officer’s behavior toward them is an important factor in how they feel about the encounter and the extent to which they cooperate.⁴⁰⁻⁴² This is consistent with research originating in social psychology on policing and procedural justice (how people are treated by an authority, in terms of fairness, dignity, and voice) that suggests that experiences in police encounters have implications for cooperation, perceptions of police legitimacy,⁴³ and motivation to comply with the law,⁴⁴ indicating some conceptual overlap with criminal sentiments. Uncooperative subjects are known to have a higher risk of arrest.⁴⁵ Watson and Angell⁴¹ have shown that those at risk of arrest or transport (by police) are most sensitive to perceived procedural justice, in terms of its impact on cooperation during the encounter and immediately thereafter.

Previous investigations using the CSS-M have presented the results of the scale but have not explored why individuals hold these views, or whether there are any possible connections to procedural justice theory. This has shaped the narrative that individuals who have high CSS-M scores are, indeed, “criminals.”⁴⁶ For example, among 3,958 males in 10 adult prisons who were within 24 months of parole eligibility or maximum sentence, Wolff and colleagues⁴⁷ found that those with schizophrenia and bipolar disorder scored significantly higher on CSS-M total, Law, TLV, and ICO than those with depression, anxiety disorders, posttraumatic stress disorder, or no mental disorder. This finding led the authors to recommend

developing interventions to treat the co-occurring matters of “criminality” and mental illness.

Several methodological limitations are noteworthy. First, we only compared scores from our sample to those from other U.S. studies, even though the scale has been used in other countries such as Canada,^{10,29,48–52} and in other types of samples such as college undergraduates.^{53–55} We felt that comparing scores from such disparate samples was not warranted or useful. Second, because our focus was on outpatients with SMI in public-sector community mental health agencies, results cannot be considered generalizable to other populations with different characteristics, such as those in private practices or primary care. Third, our data are cross-sectional, and we were thus unable to observe how scores might vary over time. Fourth, we used the presence of any substance use disorder comorbidity as a predictor variable; future analyses could consider assessing specific types of substances used among those with a comorbid disorder (e.g., alcohol, marijuana, opioids, hallucinogens). Fifth, we unfortunately did not have a measure of the extent of prior criminal legal system involvement (aside from self-reported history of at least one prior arrest within the past five years), which limits our ability to interpret causality between criminal legal system involvement and CSS-M scores. Longitudinal research is needed to test our working hypothesis that, at least among individuals with SMI, repeated experiences with criminal legal system involvement leads to negative perceptions of the law, courts, police, etc., (criminal sentiments), rather than criminal sentiments leading to criminal legal system involvement. Upon completion of the larger parent project, arrest records will be available, which may allow for such analyses. Other studies are needed to prospectively follow cohorts (e.g., over 5 or 10 years) to assess criminal legal system outcomes in relation to CSS-M scores.

In summary, we found that, in a large sample of individuals with SMI and a criminal legal system history, CSS-M scores were driven by known predictors of arrest, including childhood adversities and the presence of a substance use disorder. We urge future research to test the hypothesis that these factors increase risk for arrest and that subsequent negative experiences with the criminal legal system (i.e., in police encounters, during court appointments) are characterized by poor perceived procedural justice, setting the stage for negative opinions of the system,

which are often characterized as criminal attitudes. Qualitative research, as well as longitudinal quantitative research, is warranted.

Acknowledgments

Research reported in this publication was supported by National Institute of Mental Health grant R01 MH117191 (“A Trial of a Police–Mental Health Linkage System for Jail Diversion and Reconnection to Care”) and National Science Foundation grant 1920902 (“Misdemeanor Charges among Persons with Serious Mental Illnesses”) to the last author. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute of Mental Health, the National Institutes of Health, or the National Science Foundation.

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