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Stepping Beyond the Bars: A Comparative Analysis of Personality Traits in Previously Incarcerated Males and Females

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Abstract

The current study sought to explore differences in a previously incarcerated individual's personality traits based on biological sex. It was posited that within a population of individuals who were formerly incarcerated, males would demonstrate a greater prevalence of personality traits that have been previously associated with involvement in the criminal justice system, compared to females. A total of 2,400 previously incarcerated people from Wave IV of The National Longitudinal Study of Adolescent Health (ADD Health) were asked questions related to personality traits. Previously incarcerated females had significantly higher levels of impulsivity than females not previously incarcerated, whereas previously incarcerated males had marginally lower levels of impulsivity compared to males not previously incarcerated. Previously incarcerated females exhibited significantly more sympathy than male counterparts. More years incarcerated after the age of 18 was correlated to impulsivity in females. Altogether, this research suggests that there are traits specifically associated with formerly incarcerated males or females and should be studied to further understand how criminal and redemptive behaviors correlate.

Keywords: incarceration, personality traits, biological sex, impulsivity, sympathy

Stepping Beyond the Bars: A Comparative Analysis of Personality Traits in Previously Incarcerated Males and Females

Biological, psychological, and social factors can contribute to the reasons why a person may engage in maladaptive or criminal behaviors (Tharshini et al., 2021). In specific, various personality traits can be related to criminality. For example, personality traits of psychopathy, low self-control, and a difficult temperament have been associated with criminality (Tharshini et al., 2021). The current study aims to further explore how various personality traits might be associated with people who have been previously incarcerated. Also, to understand how this could vary based on their biological sex, as females have been understudied in this domain.

Criminality and Personality Traits

Various personality traits have been associated with higher incidences of criminal involvement (Caspi et al., 1994). To determine whether people with specific personality traits were more 'crime prone' than those without those traits, it was found that both males and females who had criminal histories were more likely to be rebellious, impulsive, likely to take advantage of others, and reject conventional values (e.g., honesty and integrity; Caspi et al., 1994). These traits have continued to be identified as related to involvement with the criminal justice system. For example, people with criminal histories scored lower on emotional stability, but higher on levels of independence, recklessness, need for control, and apathy towards others' needs and emotions when compared with those without a criminal history (Sinha, 2016). These traits make a person more 'crime prone' because they lead to other people being viewed solely as entities that can be controlled and manipulated into situations that benefit the 'crime prone' person's desires (Sinha, 2016). Consequently, these traits further adapt and develop into criminogenic ways of thinking (Zeigler-Hill et al., 2017). Criminogenic needs are when certain

aspects of offenders and their circumstance undergo changes, there is typically a decrease in the likelihood of recidivism (Andrews & Bonta, 1998).

Previous literature supports the idea that individuals who exhibit higher levels of impulsivity may be more prone to committing crimes (Heilbrun, 1979). This may be due to the fact that, in general, violent crimes are much more likely to be committed based on impulse and instinct rather than being premeditated. Individuals who tend to be aggressive are more likely to do it in specific situations where they act before they think, which is linked to one's level of impulsivity (Heilbrun, 1979). Additionally, impulsive individuals have been shown to gather less information in a situation where they are likely to become physically aggressive, affecting their social decision-making and creating greater certainty towards their hostile judgements. This specific form of reflection impulsivity has been found within individuals having a significant number of assault charges, suggesting that this trait plays a role in their behavior (Brennan & Baskin-Sommers, 2019). When studying potential predictors of criminal activity, it was found that impulsivity was a better predictor of an individual committing a crime than a low IQ, as much as three times more influential (Block, 1993).

Personality traits including negative affectivity, detachment, antagonism, disinhibition, and psychoticism were related to three major areas of personality that are directly associated with criminogenic thinking patterns (Zeigler-Hill et al., 2017). Negative affectivity refers to the tendency to experience negative emotions as one's inclination or propensity to frequently encounter unfavorable emotional states (Watson & Clark, 1984). Disinhibition refers to difficulty in restraining a dominant response or suppressing an inappropriate or undesirable behavior (Cahn-Weiner & Johnson, 2011). Psychoticism is a dispositional variable or trait that makes individuals more susceptible to various types of functional psychotic disorders (Eysenck, 1995). The three major areas of personal are control, cognitive immaturity, and egocentrism, and are

considered pathological personality traits (Zeigler-Hill, et al., 2017). Understanding how these personality traits fit into common criminogenic thinking styles, would allow not only psychologists, but also criminologists, sociologists, and political scientists to better predict criminal behavior and intervene when the likelihood is high.

Antisocial Personality Disorder and Psychopathy

In addition to observing higher prevalence rates of these personality traits amongst the incarcerated population, these traits may also be symptoms of clinically diagnosable disorders amongst those with criminal histories. For example, a study by Kosson and colleagues (2006) found that participants who had been previously diagnosed with both antisocial personality disorder (ASPD) and psychopathy were at a significantly greater risk of participating in criminal activity than if they were diagnosed with either of those disorders separately. Key symptoms of ASPD that directly overlap with the personality traits found to be indicative of involvement with the criminal justice system include impulsiveness, aggression, risk taking, narcissism, hostility, and manipulation (Skeem et al., 2003). Psychopathy is characterized by similar symptoms, such as lack of empathy, poor impulse control, manipulation, and emotional deficiency (Anderson & Kiehl, 2014). Both psychopathy and ASPD symptoms include impulsivity, a personality trait that has been directly linked to criminal offenders. A study by Herrero and others (2008) compared males from the general population to male criminal offenders and found that males with a criminal history scored higher on all sensation seeking questions, which suggests that they were more likely to commit crimes than a male without a criminal history. This seems to persist over time, as demonstrated by a longitudinal study of adult males that found a correlation between psychopathy (including psychopathic and antisocial traits) and criminal behavior; although they stated that criminal justice involvement was not a symptom, but a consequence, of psychopathy (Colins et al, 2015).

Biological Sex and Personality Traits Relating to Criminality

Although research relating psychopathic and antisocial personality traits with criminal behavior in males is common, research on females, and the differences between them is limited. A study by Beaver and colleagues (2015) used ADD Health data, similar to methods used by the current study, and found that psychopathic personality traits predicted the probability of being arrested, being incarcerated, and being sentenced to probation for both males and females. However, the researchers did not compare general trait differences between males and females and relied strictly on psychopathic personality traits. It has also been found that most offenders score high on aggression measures, with females being more strongly associated with aggressive traits (Falk et al., 2017). The presence of certain personality traits has predictive value on a person's potential involvement in the criminal justice system. Although rarely compared, identifying criminogenic personality trait differences between males and females, particularly among people who have been previously incarcerated, has the potential to impact rehabilitation programs, recidivism rates, and other widely studied issues by social scientists within the criminal justice system.

The Current Study

Majority of research on formerly incarcerated people focuses on males. Therefore, the current study aims to expand upon this by exploring personality differences between formerly incarcerated biological males and females. This study used Wave IV of the data from the National Longitudinal Study of Adolescent to Adult Health (ADD Health), which was a nationally representative sample of adolescents in the United States that were measured in five waves through their adulthood. By utilizing this data, the current study sought to determine whether there is a relationship between specific and potentially criminogenic personality traits between biological males and females. It was hypothesized that in a formerly incarcerated

population, males will exhibit a higher incidence of personality traits previously indicated to be related to involvement in the criminal justice system than females.

Method

Participants

The sample was collected from Wave IV of the National Longitudinal Study of Adolescent Health (ADD Health), which is a nationally representative sample of people who were enrolled in grades seven through 12 during the 1994-95 school year. This longitudinal study followed these participants through five different waves of data collection, with the most recent data collection completed in 2018, when the participants were in mid-adulthood. For this study only participants who reported they were previously incarcerated in the ADD Health dataset were included. The data collected from participants during Wave IV occurred when they were ranging in age from 24 to 34 years old.

For analyses that only consisted of previously incarcerated participants, there was a total 2,400 available. However, this number fluctuated by analyses based on issues of missing data. This included juvenile detention centers, as well as correctional facilities, which allows participants of any age to be able to answer yes to this question. Out of these participants, only 29.4% of them reported to be biologically female.

For analyses on impulsivity that only compared previously incarcerated people to those who have never been incarcerated, this sample consisted of 1,450 (665 never incarcerated, 785 previously incarcerated) participants.

Materials

Specific personality traits were assessed through questions developed by the researchers of Wave IV of the National Longitudinal Study of Adolescent Health (ADD Health) regarding the participants' endorsements towards a series of statements on a five-point scale, ranging from

1 (strongly agree) to 5 (strongly disagree). These questions analyzed their responses to various aspects of antisocial and risk-taking personality traits, including anger (“I get angry easily”), mood swings (“I have frequent mood swings”), antisocial behavior (“I don’t talk a lot”), disinterest in others (“I am not really interested in others”), being stressed (“I am relaxed most of the time”), being easily bothered (“I am not easily bothered”), irritability (“I rarely get irritated”), empathy (“I feel other’s emotions”), being upset (“I get upset easily”), temper (“I lose my temper”), interest in others (“I am not really interested in others”), risk-taking (“I like to take risks”), and control (“I have little control over the things that happen to me”).

The participants also answered demographic questions regarding their biological sex (“What is your biological sex?”), race (“What is your race?”), and ethnicity (“What is your ethnicity?”). Participants also needed to respond affirmatively when asked whether they have ever been incarcerated (“Have you ever spent time in a jail, prison, juvenile detention center or other correctional facility?”) to be included in the sample.

Procedure

Since this was an archival study, all the data was previously collected and available for the public to download. Therefore, the data and accompanying codebook were accessed from the website for the Wave IV of the National Longitudinal Study of Adolescent Health.

Results

Impulsivity and Incarceration

A one-way between-subjects analysis of variance (ANOVA) was conducted to explore the difference in levels of impulsivity between individuals who have and have not been incarcerated. The ANOVA revealed a significant difference in impulsivity levels, $F(1, 1446) = 8.74$ $p = .003$, such that individuals who have not been incarcerated ($M = 2.83$, $SD = .98$) had a significantly lower level of impulsivity than individuals who have been incarcerated ($M = 2.68$,

$SD = 1.00$). Lower numbers indicate higher levels of impulsivity based on the scale used to gather the data.

A second ANOVA was conducted and further indicated that there was a relationship between the level of impulsivity between individuals who have and have not been incarcerated based on their biological sex. There was a marginally significant difference between males $F(1, 976) = 3.55, p = .06$ and females $F(1, 468) = 3.84, p = 0.051$ who have and have not been incarcerated and their level of impulsivity. Females who were previously incarcerated ($M = 2.82, SD = 1.02$) had significantly higher levels of impulsivity than females who have not been incarcerated ($M = 3.0, SD = .99$). Conversely, males who were previously incarcerated ($M = 2.72, SD = .96$) had marginally lower levels of impulsivity compared to males who have not been incarcerated ($M = 2.62, SD = .99$). Lower numbers indicate higher levels of impulsivity based on the scale used to gather the data.

Impulsivity, Biological Sex, and Years in Jail

A Pearson correlation analysis indicated that there was no significant linear correlation between the amount of time a person spent incarcerated after the age of 18 and their level of impulsivity, $r(758) = -.05, p = .14$. However, a second Pearson correlation further indicated that there was a correlation between the amount of time a person spent incarcerated after the age of 18 and their level of impulsivity, based on their biological sex. Therefore, the amount of time a person spent incarcerated after the age of 18 and their level of impulsivity was significantly moderated by one's biological sex being female, $r(224) = -.14, p = .04$. Females who spent more years in prison after age 18 were reported to have higher levels of impulsivity. This suggests that only 2% (i.e., $r^2 = .02$) of the variance in the impulsivity of biological females can be explained by the number of years spent in prison after the age of 18. On the other hand, being biologically

male did not moderate the relationship between the amount of time incarcerated after the age of 18 and impulsivity levels, $r(533) = -.02, p = .69$. These results suggest that the amount of time someone has been incarcerated and their level of impulsivity is not moderated by being biologically male.

Sympathy and Biological Sex of Incarcerated Individuals

A one-way between-subjects analysis of variance (ANOVA) was conducted to explore the difference in sympathy levels between males and females who have been incarcerated. The ANOVA revealed a significant difference in sympathy based on sex, $F(1, 781) = 54.33, p = .00$. Females ($M = 1.61, SD = .65$) who have been incarcerated had significantly higher levels of sympathy than males ($M = 2.05, SD = .79$) who have been formerly incarcerated. Lower numbers indicated higher levels of empathy based on the scale used to gather the data.

Other Variables

A Pearson correlation coefficient analysis indicated no significant linear correlation between the number of years participants were incarcerated after turning 18 with their level of impulsivity ($r(757) = -.05, p = .14$) and with their level of sympathy ($r(756) = .29, p = .426$).

Discussion

The primary objective of the present study was to investigate differences in the personality traits of formerly incarcerated individuals, with a specific focus on differentiating between biological sexes. The hypotheses were partially supported, such that previously incarcerated males and females exhibited higher levels of impulsivity than those who had not been incarcerated. In addition, biological sex was found to moderate the relationship between the number of years one spent incarcerated after the age of 18 and impulsivity, specifically for

females. However, previously incarcerated females were found to have higher levels of sympathy than their male counterparts.

According to the findings, females who had a longer duration of incarceration after reaching the age of 18 exhibited elevated levels of impulsivity. Conversely, this relationship was not true for biological males. These findings are aligned with those of Pratt and Cullen (2000), such that an inverse relationship existed between deviant behavior and self-control, particularly for women. Wendel et al. (2020) found that not all types of impulsivity are good predictors of antisocial behaviors, which are often associated with criminal tendencies. This study used Dickman's two measures of impulsivity, dysfunctional and functional impulsivity. Functionally impulsive individuals are generally successful in accurately completing tasks and surpassing obstacles, while those who exhibit dysfunctional impulsivity often struggle to perform tasks correctly or accomplish their desired actions (Wendel et al., 2020). It was found that dysfunctional impulsivity was the strongest predictor of deviance, as opposed to functional impulsivity, which agrees with previous research regarding the traits that tend to be predictors of criminal behavior. The current study only tested variables associated with general impulsivity; however, this distinction may have had an impact on the data and how the findings may be interpreted, since previous studies have focused on males and the current one also included previously incarcerated females.

There is a lack of research regarding why biological sex may be related to the number of years one is incarcerated, especially since the research on females and incarceration is scarce. The current study found that females who spent more years in prison after age 18 had higher levels of impulsivity. Women may spend more time in jail due to the high prevalence of drug addiction, major depression, and post traumatic disorder, as reported by these incarcerated

women (Cigrang, 2020). However, there may be of different factors that would affect the amount of time one spends incarcerated, including severity of crime, socioeconomic status, and behavior while incarcerated. Further, the negative psychological impacts of being incarcerated could exacerbate perceived stress and impulsivity for women once they are released from custody (Mooney et al., 2008). This could be especially true because once released, these women are having to deal with the stressors of coping with disruptions in their social support networks and managing with limited resources, along with feeling isolated, stigmatized, and decreased autonomy.

The current study found that previously incarcerated women experienced more sympathy than their male counterparts. Moreover, this could potentially be attributed to the differences in how men and women are socialized. Men who are taught traditional masculinity learn that exhibiting weakness is not favorable, and sympathy is considered a weaker trait and traditionally related to females (Wasylikiw & Clairo, 2018). Further, a lack of sympathy is a tendency relating to antisocial personality disorder, which is diagnosed in males at 3:1 ratio compared to females (Compton et al., 2005). According to this data, more incarcerated males have ASPD traits, including a lack of remorse, than women, which is consistent with the results of this study. As such, men may have less remorse because of the way they are brought up in society, as well as the traits and tendencies that are most often exhibited by their biological differences (Alegria et al., 2013).

Limitations and Future Research

The current study has limitations that need to be further addressed. First, this study was using archival data, factors that could potentially relate to the variables studied were not explicitly measured, including the types of crimes committed by those formerly incarcerated and

personality traits specifically related to ASPD. Since the ADD Health dataset only measured biological sex, future research should measure various gender identities amongst those who have been previously incarcerated and explore how those various identities are related to personality traits that are associated with criminal behavior. Future studies should also include such variables to see how these personality and sex differences vary based on the type of crime a person was incarcerated for. This can serve to identify risk factors that could be associated with higher levels of criminality and as such, intervention plans can be created to mitigate these relationships.

Findings of this study indicate that previously incarcerated females had significantly higher levels of impulsivity than females who have not been incarcerated, whereas previously incarcerated males had marginally lower levels of impulsivity compared to males who have not been incarcerated. Previously incarcerated females were also found to have significantly higher levels of sympathy than incarcerated males. More years incarcerated after the age of 18 was correlated to impulsivity in biological females, but not in biological males. The current study can be used to inform researchers and policy makers in a variety of social science disciplines, including psychology, sociology, criminology and criminal justice, and political science. Understanding the correlation of criminal behavior amongst males and females can help social scientists create tailored early intervention plans for those males and females exhibiting personality traits, like impulsivity. This type of early intervention, including educational and therapeutic, can potentially decrease one's future involvement in the criminal justice system. In addition, social scientists can also create intervention plans for those who are currently incarcerated and exhibiting these personality traits to help them in rehabilitation before re-entry. Early intervention can potentially decrease recidivism rates and lead to more successful completion of one's parole guidelines.

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