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Personality and Psychopathology Correlates of Institutional Misconduct among Juvenile Offenders

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PERSONALITY AND PSYCHOPATHOLOGY CORRELATES OF INSTITUTIONAL MISCONDUCT AMONG JUVENILE OFFENDERS

by

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ABSTRACT

Juvenile delinquency is a national concern, as delinquent behavior is associated with a host of poor psychosocial outcomes during later adolescence and adulthood. To address delinquency, it is important to understand psychological adjustment among adolescents who have already made contact with the juvenile justice system. One way to explore adjustment within this population involves examining personality and psychopathology correlates of institutional misconduct (i.e., behavioral infractions while incarcerated). While there is a robust body of literature regarding personality and psychopathology correlates of misconduct in adult inmate samples, there has been far less work devoted to these relationships among justice-involved youth. Furthermore, little to no research has been conducted using broadband measures of personality and psychopathology, which may be more time- and cost-efficient tools. The current study sought to examine the relationships between institutional infractions and two underutilized measures of psychopathology and personality – the Personality Assessment Inventory (PAI-A) and the Child UPPS-P Impulsive Behavior Scale (Child UPPS-P) – among a sample of 76 adolescents from a juvenile detention facility. Findings from this study will add to previous research on personality and psychopathology assessment in juvenile justice settings by offering insight into psychological profiles of justice-involved youth and treatment targets for justice-involved youth.

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DEDICATION

This project is dedicated to my deceased father, Robert Floyd. Although he was unable to see my degree through to its completion, his constant mental health battle is the reason I chose to pursue this degree.

This project is also dedicated to my mother, Myra Floyd, who has provided me with unwavering support to obtain my PhD throughout her battle with Stage IV breast cancer. Her resilience and selflessness are an inspiration to me.

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INTRODUCTION

Juvenile delinquency has been recognized as a national issue for decades. Although juvenile arrest rates in the United States have steadily declined since the late 1990s (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2018), there were still 1269.8 arrests per 100,000 adolescents in 2020 (OJJDP, 2022) and the U.S. leads the world in terms of both adult and child incarceration (Wagner & Sawyer, 2018). Delinquent behavior during adolescence is associated with poor academic achievement (Kirk & Sampson, 2013; McLeod, Uemura, & Rohrman, 2012), mental and physical health problems (Alex Mason et al., 2010; Odgers et al., 2007; Piquero, Farrington, Nagin, & Moffitt, 2010), difficulties sustaining employment (Piquero et al., 2010; van der Geest, Bijleveld, Blokland, & Nagin, 2016), and increased risk for violent victimization (DeLisi, Barnes, Beaver, & Gibson, 2009; Schreck, Fisher, & Miller, 2004). Additionally, previous literature suggests that juvenile delinquency is predictive of criminal behavior in adulthood (Alex Mason et al., 2010; Loeber & Farrington, 2012; Trulson, Marquart, Mullings, & Caeti, 2005). Results from these studies highlight a need to better understand behavior and adjustment among adolescents who engage in delinquent behavior, as research in this area can improve both short- and long-term psychosocial outcomes for these individuals.

Juvenile delinquency is a complex issue that has been associated with a host of psychosocial factors. In an early meta-analysis, Loeber and Stouthamer-Loeber (1986) found that problematic family dynamics, such as lack of parental supervision and low parent-child involvement, were the strongest familial predictors of delinquency and conduct problems. A report issued by the Office of the Surgeon General (2001) also

found that negative peer influences, such as weak social connections or peer criminality, are well-established predictors of delinquent behavior during adolescence. These findings support the notion that various environmental factors can contribute to juvenile delinquency.

In research examining individual risk factors for delinquency, impulsivity is one of the aspects of personality that is most strongly associated with risk for delinquency (Agnew, Brezina, Wright, & Cullen, 2002; Jolliffe & Farrington, 2009; Lipsey & Derzon, 1998; Nagin & Tremblay, 1999; White et al., 1994). The term "impulsivity" has also been closely related to and used somewhat interchangeably with a range of similar constructs such as poor executive functioning (Diamond, 2013), low effortful control (Eisenberg et al., 2013), behavioral disinhibition (Kagan & Snidman, 2004), risk-taking (Luciana, 2013), poor self-control (Rothbart, 2011), and poor self-regulation (Nigg, 2017). Generally, impulsivity is an overarching term that represents a tendency to respond in a way that is immediately gratifying when multiple response options are present (Nigg, 2017). One study found that high impulsivity significantly interacted with low family warmth, a lack of parental knowledge of the child's whereabouts, poor school connectedness, and weak neighborhood cohesion to predict self-reported delinquent behavior (Chen & Jacobson, 2013). A meta-analysis including studies that have tested Gottfredson and Hirschi's General Theory of Crime found substantial empirical evidence to support the relationship between impulsivity and criminal behavior (Pratt & Cullen, 2000). In addition to poor self-control, other individual risk factors have long been identified as markers for delinquency. Such factors include low IQ or academic achievement (Aguilar, Sroufe, Egeland, & Carlson, 2000), oppositional or defiant

attitudes toward authority figures (Beerthuizen, Brugman, & Basinger, 2013; Lahey & Waldman, 2017; Nagin & Tremblay, 1999), and teacher-rated acts of aggression toward peers (Nagin & Tremblay, 1999).

A number of theories have been proposed to explain delinquent behavior during adolescence. Some of the earliest theoretical approaches focused heavily on biological determinants for delinquent behavior during adolescence (Shoemaker, 2018). For example, some studies have proposed that the same biological complications underlying neurodevelopmental disorders (e.g., specific learning disabilities, inattention) are responsible for juvenile delinquency (Denno, 1990; Jeffery, 1979). Other research has discussed the potential influence of biological constructs, such as prenatal events like exposure to lead (Dietrich, Douglas, Succop, Berger, & Bornschein, 2001) or exposure to marijuana (Goldschmidt, Day, & Richardson, 2000). Elevated levels of hormones like testosterone and cortisol (Mehta & Prasad, 2015), as well as hormones that stimulate thyroid functioning (Alm et al., 1996), have been linked to juvenile delinquency. Finally, studies have shown that both genetic (Beaver, DeLisi, Vaughn, & Wright, 2010; Kretschmer, Dijkstra, Ormel, Verhulst, & Veenstra, 2013) and brain abnormalities (Meldrum, Trucco, Cope, Zucker, & Heitzeg, 2018; Perron & Howard, 2008) are associated with delinquent behavior.

While there is support in the literature for biological components, it can be argued that environmental factors also offer a partial explanation for delinquency. In his Social Control Theory (1969), Hirschi posited that individuals engage in rule-breaking behavior when their social bonds with others and with society in general are weakened. Other research based on Bandura's Social Learning Theory (Bandura & Walters, 1977)

suggests that delinquency (Akers, 1985) and subsequent offending behavior (Bernburg, Krohn, & Rivera, 2006) are products of observing and learning from one's immediate social environment. Based on their General Theory of Crime (1990), Gottfredson and Hirschi proposed that poor self-control is strongly related to criminality because rule-breaking behaviors (e.g., using illegal substances) often yield immediate gratification (e.g., feelings of euphoria). While the General Theory of Crime is well-supported in adolescent samples (Perrone, Sullivan, Pratt, & Margaryan, 2004; Vazsonyi & Crosswhite, 2004), it does not fully explain delinquent behavior because it emphasizes the roles of parenting and poor self-control in delinquent behavior while ignoring the impact of other contributing factors (e.g., peer influences, poor academic performance; Burt, Simons, & Simons, 2006).

Agnew (1992) proposed the General Strain Theory of crime and delinquency, in which individuals engage in delinquent acts when they experience various forms of strain (e.g., failure to achieve important goals, disconnection between expectation and reality) in their environment. The General Strain Theory has been supported by studies looking at various sources of strain during childhood and adolescence, including bullying victimization at school (Cullen, Unnever, Hartman, Turner, & Agnew, 2008), directly experiencing or witnessing violent victimization (Lin, Cochran, & Mieczkowski, 2011), and financial hardship (Baron, 2004). Recently, more integrative approaches to this theory propose that delinquency is likely initiated and maintained through a combination of biological and environmental components (Agnew, 2003; Farrington, 2017; Shoemaker, 2018).

Although it is necessary to identify factors that contribute to engagement in juvenile delinquency, it is also important to understand behaviors, risk factors, and needs among adolescents who are already involved with the juvenile justice system. In 2019, a one-day count revealed that 36,479 justice-involved youth were held in correctional placements across the United States (OJJDP, 2022). Most delinquent youth are placed in short-term juvenile detention centers or long-term secure facilities (e.g., residential treatment centers, "training schools," "reformatories;" Sawyer, 2018). Long-term facilities house more juvenile delinquents with person (e.g., assault, robbery) or property (e.g., burglary, arson) offenses compared to short-term detention centers. Detention centers are typically reserved for less severe delinquent acts, including minor drug, public order (e.g., disorderly conduct, public intoxication), technical violation (i.e., failing to meet the conditions for parole or probation), and status (e.g., truancy, underage drinking) offenses (Sawyer, 2018). The national average length of stay in juvenile detention centers is approximately 20 days, with many youths spending only a few nights at these facilities (Mendel, 2014). Conversely, delinquents in long-term facilities are often held for longer than one month (67 percent), six months (23 percent), or one year (8 percent; Sawyer, 2018). Much of the existing research on juvenile incarceration has focused on long-term facilities due to the severity of behaviors present in that population and the time needed to deliver evidence-based interventions (Koyama, 2012). However, given that even a brief length of stay in a detention center can negatively impact adolescents' emotional and behavioral functioning (Holman & Ziedenberg, 2006; Lambie & Randell, 2013), it is also crucial to study youths in short-term juvenile detention facilities.

Juvenile detention centers have historically focused on remediation using punitive methods; however, there has been a movement toward a more rehabilitative approach (Merlo & Benekos, 2010). In 2018, 62 percent of facilities in the United States reported providing on-site treatment services for justice-involved youth (OJJDP, 2022). Prior research has linked an increased focus on rehabilitation to reductions in arrest and recidivism rates (Evans Cuellar, McReynolds, & Wasserman, 2006; Lipsey & Wilson, 1998; MacKenzie, 2006), suggesting that specific interventions can be effective in reducing delinquent behavior when individuals' needs are appropriately identified. Despite efforts to make juvenile justice facilities more therapeutic for delinquents, there are factors that interfere with this goal. One such barrier is institutional misconduct, which is conceptualized as a range of behavioral infractions (e.g., write-ups, rule infractions, incidents, and disciplinary tickets) among individuals while they are in correctional settings (Trulson, 2007). Not only is institutional misconduct an indicator of poor adjustment while incarcerated (Trulson, 2007), but a number of studies have also found that institutional misconduct is related to poor post-release adjustment and higher risk for re-arrest among female-only (Blackburn & Trulson, 2010), male-only (Huebner, Varano, & Bynum, 2007; Lattimore, MacDonald, Piquero, Linster, & Visher, 2004), and general (Trulson, 2007; Trulson, DeLisi, & Marquart, 2011) delinquent samples. Moreover, youths who exhibit problematic behavior in detention centers often face consequences, such as placement on "lockdown" or separation from peers, that can prevent them from participating in rehabilitative activities and can lead to further instances of misconduct (National Institute of Justice, 2016). Because institutional misconduct can limit opportunities to engage in rehabilitative programming and is related

to negative outcomes after youths re-enter the community, it is important to identify and aim specific interventions toward those who are at greater risk for institutional misconduct.

A limited body of research has focused on determining whether there are demographic risk factors for institutional misconduct. In a large sample of juvenile delinquents, Trulson (2007) found that males were significantly more likely than females to engage in dangerous or violent misconduct, with no sex differences for non-violent (i.e., disruptive) types of misconduct. Studies using adult inmate (Steiner & Wooldredge, 2014) and juvenile delinquent (DeLisi et al., 2010a) samples also found that sex was not predictive of misconduct in any form. Interestingly, research has found that other predictors of misconduct vary based on sex. For example, DeLisi and colleagues (2010a) found that self-control only predicted misconduct among male juvenile delinquents. In another study, a number of variables (e.g., being a Youth of Color, having greater gang involvement, and having a history of violence toward family members) were predictive of misconduct among males only (Trulson, 2007). Finally, in a study examining adult inmates (Gover, Pérez, & Jennings, 2008), specific factors were predictive of misconduct only for males (e.g., having drug-related charges, self-control, working while in prison) or females (e.g., lower education level, longer sentences, perceived lack of safety).

Studies have yielded mixed results when examining race as a predictor of misconduct, as some have found that justice-involved Youth of Color are more likely than their White counterparts to engage in misconduct (Blackburn & Trulson, 2010; Trulson, 2007) while one found no racial differences in misconduct among juvenile delinquents (DeLisi et al., 2010b). Other demographic characteristics that have been

predictive of misconduct include older age (Blackburn & Trulson, 2010; Steiner, Butler, & Ellison, 2014), gang affiliation (Blackburn & Trulson, 2010; Trulson, 2007), and a history of delinquency (Steiner et al., 2014; Taylor, Kemper, & Kistner, 2007; Trulson, 2007). Given that studies to date have not established consistent demographic predictors of misconduct among delinquents, it is important to continue testing demographic characteristics and to consider other potentially useful predictors of institutional misconduct.

Much of the research on non-demographic risk factors for misconduct has involved personality and psychopathology correlates. Among these variables, the bulk of the research focuses on antisocial features in adult forensic samples. Antisocial features are characterized by unusual patterns in affect (e.g., anger proneness, lack of remorse), behavior (e.g., impulsivity, risk-taking), and social interactions (e.g., egocentricity, manipulativeness; Hare, 1991; Hare, 1996). Antisocial traits have been closely linked to psychopathy, a condition marked by affective (e.g., lack of guilt, callousness) and interpersonal (e.g., egocentricity, incapacity for intimacy with others) symptoms (Cleckley, 1951; Hare, 1991). In one study, the Antisocial scale on the Millon Clinical Multiaxial Inventory (MCMI-III; Millon, 1994) strongly predicted misconduct in adult male offenders (Kelln, Dozois, & McKenzie, 1998). In another sample of male inmates, the Machiavellian Egocentricity, Impulsive Nonconformity, and Blame Externalization scales on the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996) significantly predicted both aggressive and non-aggressive misconduct (Edens, Poythress, Lilienfeld, Patrick, & Test, 2008a). A meta-analysis by Guy and colleagues (2005) found that psychopathy, as measured by the Psychopathy Checklist-Revised (PCL-R; Hare et

al., 1990) predicted misconduct in U.S. and non-U.S. adult forensic populations. Using a young adult inmate sample, one study found that the PCL-R was not predictive of misconduct; however, psychopathy as measured by the PPI was significantly predictive of misconduct (Edens, Poythress, Lilienfeld, & Patrick, 2008b). Importantly, it has been suggested that there is a "file-drawer issue" within this area of research, in which studies that do not find a significant relationship between antisocial features and misconduct are often inaccessible to the public (Edens & Campbell, 2007).

Antisocial traits and misconduct have also been strongly linked in studies using female delinquents (Bauer, Whitman, & Kosson, 2011), severe male delinquents (Taylor et al., 2007), and general samples of justice-involved youth (DeLisi et al., 2014; Edens & Campbell, 2007; Shaffer, McCuish, Corrado, Behnken, & DeLisi, 2015). Furthermore, intervention research among delinquents has shown that improvements in antisocial characteristics are related to less institutional misconduct (Caldwell, McCormick, Wolfe, & Umstead, 2012). Despite these findings, one recent study found that more antisocial characteristics were not predictive of misconduct while incarcerated (Kingston et al., 2016).

Antisocial features are not the only personality-based predictors of institutional misconduct that have been studied. For example, prior research has shown that impulsivity is related to misconduct in both juvenile detention (DeLisi et al., 2010a) and high school (Vogel & Barton, 2013) settings. These studies are somewhat limited in scope, however, as they conceptualized and assessed impulsivity as a unidimensional construct. Prior research has indicated that impulsivity is comprised multiple, distinct facets (Enticott & Ogloff, 2006; Evenden, 1999). In Whiteside and Lynam (2001), the

authors proposed a five-factor model that reflects the following domains of impulsivity: negative urgency (i.e., the tendency to make rash decisions while in an unpleasant affective state), a lack of planning or premeditation before acting, a lack of perseverance or ability to complete difficult tasks, sensation seeking (i.e., a desire to seek novel stimuli despite the associated risks), and positive urgency (i.e., the tendency to act impulsively while experiencing pleasant affect). The Urgency, Premeditation (lack of), Perseverance (lack of), Sensation Seeking, and Positive Urgency Impulsive Behavior Scale (UPPS-P; Lynam, Smith, Whiteside, & Cyders, 2006) has since been created as a tool to assess impulsivity as a multidimensional construct. A recent study linked positive urgency and sensation seeking with antisocial behavior among adolescents (Maneiro, Gómez-Fraguela, Cutrín, & Romero, 2017). Other studies have linked certain facets of impulsivity, namely positive and negative urgency, with marijuana use (VanderVeen, Hershberger, & Cyders, 2016), alcohol use (Coskunpinar, Dir, & Cyders, 2013), and other risky or problematic behaviors (Billieux, Gay, Rochat, & Van der Linden, 2010). No studies to date have used the UPPS-P to examine the relationship between specific domains of impulsivity and institutional misconduct among justice-involved youth.

Anger and aggression, which is broadly defined as any behavior with the intent to harm an individual who does not desire to be harmed (Anderson & Bushman, 2002), have also been heavily studied as precursors to institutional misconduct. While one study found that aggression was not strongly associated with minor or major misconduct (Mills & Kroner, 2003), much of the existing research supports the opposite conclusion. For example, in a study examining adult inmates, self-reported anger and propensity for physical aggression were predictive of whether an individual had received an infraction

while incarcerated (Diamond & Magaletta, 2006). In another study, Doyle and Dolan (2006) found that anger was the strongest predictor of physical violence and threats of physical violence among a sample of adult inmates with mental disorders. Finally, the Angry-Irritable subscale of the Massachusetts Youth Screening Instrument–Version 2 (MAYSI-2; Grisso & Barnum, 2006) was a significant predictor of institutional misconduct among general (DeLisi et al., 2010b; DeLisi et al., 2010c) samples of juvenile delinquents.

Given that there are numerous empirically supported predictors of institutional misconduct, it may be beneficial to utilize broadband personality and psychopathology measures to examine a broad range of variables in juvenile justice settings. Furthermore, these broadband tests may offer greater efficiency and cost-effectiveness compared to the use of multiple narrowband questionnaires. One example of a broadband personality and psychopathology measure that is designed for adolescents ages 12-18 years is the Personality Assessment Inventory-Adolescent (PAI-A; Morey, 2007). This objective instrument contains 264 items used to derive scales assessing response validity (e.g., Inconsistency [ICN], Positive Impression Management [PIM]), personality and psychopathology domains (e.g., Anxiety [ANX], Antisocial Features [ANT]), important considerations for treatment (e.g., Aggression [AGG], Treatment Rejection [RXR]), and interpersonal style (e.g., Dominance [DOM], Warmth [WRM]). The PAI-A was developed based on the 344-item adult version of the Personality Assessment Inventory (PAI; Morey, 1991). In addition to the scales listed above, the PAI includes indices that determine an individual's risk for suicide-related behavior (Suicide Potential Index [SPI]) and violence (Violence Potential Index [VPI]), as well as their general clinical severity

(Mean Clinical Elevation [MCE]). These indices have not been validated using adolescent samples; however, there is some research that has tested these indices in adolescent samples and found utility in predicting institutional misconduct (Charles et al., 2021) and suicidal or self-injurious behaviors (Floyd et al., 2022).

The PAI-A has not been studied extensively among juvenile delinquents; therefore, it is necessary to review the adult PAI literature to gain a better understanding of how this measure of personality and psychopathology functions in forensic samples. A few studies have sought to examine typical PAI profiles among adult offenders. One study using an male adult inmate sample found that 48.4 percent of participants obtained an elevated score on the Antisocial Features (ANT) scale and over one-third of participants scored within the elevated range on the Alcohol Problems (ALC), Drug Problems (DRG), and Stress (STR) scales (Douglas, Guy, Edens, Boer, & Hamilton, 2007). In terms of interpersonal style, another study found that male inmates had similar Warmth (WRM) and slightly higher Dominance (DOM) scores when compared to community adults but higher WRM and similar DOM scores relative to adults in clinical settings (Edens, 2009). Results of this study also indicated that, compared to community adults, inmates had slightly higher Negative Impression Management (NIM) scores and substantially higher scores on personality scales (i.e., Antisocial Features [ANT], Borderline Features [BOR], Paranoia [PAR]) of the PAI (Edens, 2009). Finally, when comparing a sample of male inmates at a therapeutic community prison to the male inmate sample used in Douglas et al. (2007), Newberry and Shuker (2012) found that male inmates had lower scores on the Positive Impression Management (PIM) validity scale, but higher scores on Negative Impression Management (NIM), Infrequency (INF),

and Inconsistency (ICN) validity scales. Therapeutic community inmates also obtained higher scores on the Anxiety (ANX), Depression (DEP), and Borderline Features (BOR) scales, while scores on the Treatment Rejection (RXR) scale were significantly lower relative to the Douglas et al. (2007) sample (Newberry & Shuker, 2012). Considerably less research has been conducted regarding PAI profiles among female inmates. Compared to female-only community samples, female adult inmates tend to have substantially higher scores on Anxiety-Related Disorders-Traumatic Stress (ARD-T) and slightly higher scores on ANT, BOR, DOM, and AGG scales (Salekin, Rogers, Ustad, & Sewell, 1998; Skopp, Edens, & Ruiz, 2007).

Unsurprisingly, the ANT scale of the PAI has been well-established as a predictor of institutional misconduct among a general sample of inmates (Newberry & Shuker, 2012; Reidy, Sorensen, & Davidson, 2016), severe male inmates (Walters, 2007), female inmates (Skopp et al., 2007), sex offenders (Buffington-Vollum, Edens, Johnson, & Johnson, 2002; Caperton, Edens, & Johnson, 2004; Edens, Buffington-Vollum, Colwell, Johnson, & Johnson, 2002), and adults in a residential substance use facility (Hopwood, Baker, & Morey, 2008). When predicting misconduct, there is also some evidence that ANT may interact with an individual's tendency to present themselves in an overly positive manner. Edens and Ruiz (2009) posited that the predictive ability of the ANT scale is limited when a PAI respondent has a high PIM score (i.e., is attempting to conceal negative aspects of their personality or psychopathology). In another study, the authors found that individuals who have elevated ANT and PIM scores are likely to engage in misconduct more frequently than those with elevated scores in only one domain (Edens & Ruiz, 2006).

In a meta-analysis examining the PAI in treatment and correctional settings, Gardner and colleagues (2015) found that ANT, Aggression (AGG), and the Violence Potential Index (VPI) were strong predictors of institutional misconduct, with larger effect sizes in correctional facilities relative to treatment facilities. These findings have been replicated in a longitudinal study using a large sample of adult inmates (Gardner, Boccaccini, Bitting, & Edens, 2015), as well in a female-only sample of adult inmates (Davidson, Sorensen, & Reidy, 2016). High AGG (Magyar et al., 2012; Walters, Duncan, & Geyer, 2003), High DOM (Edens, 2009), low WRM (Edens, 2009), and high Nonsupport (NON; Edens & Ruiz, 2009) have demonstrated some value in predicting misconduct among adult forensic samples. Finally, PAI scales that have predicted misconduct in adult sex offender samples include RXR (Caperton et al., 2004), as well as Borderline Features (BOR) and Borderline Features-Negative Relationships (BOR-N; Boccaccini, Rufino, Jackson, & Murrie, 2013). Findings from these studies emphasize the predictive ability of the PAI when working with justice-involved samples.

Much of the literature on personality and psychopathology predictors of institutional misconduct has focused on clinically relevant constructs. However, little to no research exists on whether information obtained from response validity scales of personality and psychopathology measures can offer utility in predicting misconduct. Only one study to date has tested PAI validity scales as predictors of institutional misconduct. In this study, Edens and Ruiz (2006) found that an elevated score on the Positive Impression Management (PIM) scale of the PAI was significantly predictive of general infractions and physically violent infractions among adult male inmates. While no other research has focused on predicting misconduct, studies examining treatment

compliance may be considered at least somewhat analogous. Using the Minnesota Multiphasic Personality Inventory-2, Restructured Form (MMPI-2-RF; Ben-Porath & Tellegen, 2008), one study examined profile validity and premature termination of therapy services. In this study, premature terminators were significantly more likely than mutual terminators to obtain higher scores on validity scales assessing response inconsistency (TRIN-r), general overreporting (F-r), overreporting symptoms of psychopathology (Fp-r), overreporting somatic concerns (Fs), overreporting memory complaints (RBS), and underreporting symptoms to present oneself as well-adjusted (K-r; r_{pb} values ranging from .09 to .17; Anestis, Finn, Gottfried, Arbisi, & Joiner, 2015).

While there are a number of studies on the utility of the PAI in predicting misconduct among adult forensic samples, little to no research has been conducted using the Personality Assessment Inventory–Adolescent version (PAI-A; Morey, 2007) or the Child version of the UPPS-P Impulsive Behavior Scale (Child UPPS-P; Cyders, Littlefield, Coffey, & Karyadi, 2014) with justice-involved youth. The current study seeks to expand upon existing literature regarding personality and psychopathology correlates of institutional misconduct by using these two instruments, both of which are understudied yet offer a comprehensive assessment of various risk factors for misconduct. First, it is expected that the ANT and AGG scales of the PAI-A will be significantly (positively) related to the total number of disciplinary infractions, with effect sizes in the medium range based on prior literature (Caperton et al., 2004; Newberry & Shuker, 2012; Reidy et al., 2016; Skopp et al., 2007). Second, it is hypothesized that individuals with elevated scores on the PIM validity scale of the PAI-A will have a significantly higher number of total infractions than those with non-elevated

PIM scores. Based on prior research (Edens & Ruiz, 2009; Skopp et al., 2007), effect sizes are expected to be in the small-to-medium range. Third, when examining the remaining PAI-A scales of interest in a regression model, it is expected that ANT and AGG will be significantly (positively) predictive of the total number of disciplinary infractions above and beyond other variables. Effects are anticipated to be in the medium-to-large range for both ANT and AGG. Fourth, while the VPI was not specifically designed for the PAI-A, it is hypothesized that this index will significantly (positively) predict the total number of infractions. Using literature examining the VPI and misconduct in adult samples (Caperton et al., 2004; Reidy et al., 2016; Skopp et al., 2007), medium effect sizes are estimated for this relationship. Fifth, the current study will test the association between the Child UPPS-P scales and misconduct in a regression model. Although no studies to date have examined the Child UPPS-P with institutional misconduct among adolescents, prior literature suggests that there is a strong relationship between the original UPPS-P scales – particularly Positive and Negative Urgency – and rule-breaking or risky behaviors (Billieux et al., 2010; Coskunpinar et al., 2013; Maneiro et al., 2017; VanderVeen et al., 2016). Therefore, the current study hypothesizes that the Positive and Negative Urgency scales of the Child UPPS-P will significantly (positively) predict the total number of disciplinary infractions, with effect sizes in the medium range based on previous studies.

METHOD

Participants

To determine the sample size required for the current study to have adequate statistical power, a power analysis was performed using *Power 3.1 statistical software (Faul, Erdfelder, Buchner, & Lang, 2009). For the purpose of determining statistical power, the primary analyses of interest were the regressions used to address hypotheses 3 and 5. The primary outcome for both analyses was the total count of disciplinary infractions, which is a count (i.e., ordinal) variable. Prior literature allowed for *a priori* predictions that medium-to-large effect sizes were needed to support current hypotheses. To determine power, a one-tailed Poisson regression analysis was conducted with a power of .80, Exp($\beta 1$) = 1.3, α = .05, a base rate of 0.70, a mean exposure of 1, and parameters set between 0 and 1. Results indicated that a sample size of 124 participants was needed to achieve adequate power. However, due to logistical challenges with data collection that occurred during the COVID-19 pandemic, a smaller sample size was obtained for the current study and the original data analysis plan was slightly altered to account for a lack of statistical power.

The current study sample included 76 adolescents (ages 13-17 years; M_{age} = 15.42 years) who resided in a juvenile detention facility in the Southeastern United States at the time of participation. The sample consisted primarily of youth who identified as males (*N* = 58; 76.3%). The sample was also predominantly Black (*N* = 55; 72.4%) and non-Hispanic (*N* = 72; 94.7%). Approximately one-third (*N* = 27; 35.5%) of participants self-reported that they had dropped out of school, with behavioral problems being endorsed as the most common reason for dropping out. Nearly one-half (*N* = 33; 43.4%) of the 75

youth who self-reported academic history reported that they had previously repeated a grade due to reasons such as poor academic performance, behavioral problems, and truancy. Of the 74 youth who reported household size, 75.7% (*N* = 56) reported living with four or more people in the home prior to detainment, with 75.0% endorsing a biological mother in the home and 12% endorsing a biological father in the home. A majority of participants (*N* = 54; 71.1%) self-reported that their biological parents were not in a relationship at the time of the study. Many participants also reported that a parent (*N* = 45; 59.2%) or someone else in the home (*N* = 31; 40.8%) has been arrested. Nearly one-half (*N* = 32; 42.1%) of participants reported being involved in a gang, with 6.76 being the mean level of involvement on a scale of 1-10 for those who endorsed gang involvement. Regarding a history of substance use, participants commonly endorsed regular use of alcohol (*N* = 16; 21.1%), marijuana (*N* = 57; 75.0%), and pills (*N* = 10; 13.2%). Only 11 participants (14.5%) denied any history of substance use. Finally, 71 of 76 participants endorsed arrest history and reported getting arrested between 1 and 30 times in their lifetime, with the mean number of arrests being 3.69 and a majority of participants being arrested once (*N* = 20; 28.2%) or twice (*N* = 21; 29.6%). The most common reasons for participants' most recent arrests included property offenses such as theft or vandalism (*N* = 23; 30.3%), person-related offenses such as assault or robbery (*N* = 25; 32.9%), or "other" offenses such as possession of firearms or running away from home while on probation (*N* = 31; 40.8%). Participants' length of stay in the detention facility ranged from 2 days to 89 days, with the average length of stay being 26.02 days (SD = 20.54).

After obtaining consent from a legal guardian, youths who assented to participate in the study were evaluated prior to participation to identify characteristics that might render them ineligible or inappropriate for inclusion (see Procedure section and Appendix A).

Measures

Demographic Information

All participants provided information on basic demographic variables including age, sex, gender, race, and ethnicity. Individuals also self-reported their education level, household size, parents' marital status, prior substance use, gang affiliation, and delinquent history.

Personality Assessment Inventory-Adolescent (PAI-A)

The PAI-A (Morey, 2007) is an objective self-report measure that assesses a number of personality and psychopathology characteristics in adolescents. This 264-item measure was designed after the adult version of the Personality Assessment Inventory (Morey, 1991). Items are rated on a 4-point Likert scale, with response options including 0 ("*false*"), 1 ("*sometimes true*"), 2 ("*often true*"), and 3 ("*very true*"). Raw scale and subscale scores are calculated by summing response values for corresponding items and converting them into standardized T scores. These T scores have a mean value of 50 (*SD* = 10), with higher T scores indicating higher levels of a characteristic. The PAI-A has demonstrated good validity and reliability in previous psychometric studies (Morey, 2007). Cronbach's alpha coefficients for the current study ranged from "unacceptable" (NON; $\alpha = .391$) to "good" (ANT; $\alpha = .804$) reliability based on standards reported by George and Mallery (2003).

The PAI-A contains four validity scales (Infrequency [INF], Inconsistency [ICN], Negative Impression Management [NIM], and Positive Impression Management [PIM]) that highlight whether participants have engaged in problematic patterns of responding. Individuals with invalid PAI-A profiles, as indicated by an elevation on one or more validity scales that exceeds manual-recommended cutoffs for interpretation, were excluded from data analyses. For those who have valid PAI-A profiles, the current study focused on the following scales and subscales: Antisocial Features (ANT), Aggression (AGG), Nonsupport (NON), Treatment Rejection (RXR), and Dominance (DOM).

Finally, the adult version of the PAI contains the Violence Potential Index (VPI; Morey, 1991), an empirically derived aggregate that is designed to determine an individual's risk of engaging in violent acts. The VPI is calculated using an algorithm based on the following PAI scales and subscales: NIM, ALC, DRG, AGG, AGG-P, AGG-V, SUI, NON, DOM, WRM, ARD-T, ARD-P, MAN-A, MAN-G, PAR-H, PAR-P, SCZ-P, SCZ-S, BOR-A, BOR-N, BOR-S, ANT-A, ANT-E, ANT-S (for specific calculation instructions, see Morey, 1991). While the VPI has demonstrated validity and reliability using the PAI in adult samples (Morey, 1991), to date it has not been calculated and tested using the PAI-A in adolescent samples.

Child UPPS-P Impulsive Behavior Scale

The Child version of the UPPS-P Impulsive Behavior Scale (Child UPPS-P; Cyders, Littlefield, Coffey, & Karyadi, 2014) is a 40-item self-report questionnaire that is used to assess distinct facets of impulsive behavior in children. Designed after the UPPS-P (Lynam et al., 2006), the Child UPPS-P includes both normal and reverse-coded items that examine impulsivity in the following domains: negative urgency (i.e., propensity to

act without thinking when distressed), lack of perseverance (i.e., difficulties completing tasks), lack of premeditation (i.e., limited ability to think about and plan one's actions) sensation seeking (i.e., desire to have novel and potentially risky experiences), and positive urgency (i.e., the tendency to act without thinking while having very positive emotions). All Child UPPS-P items are rated on a 4-point Likert scale, with response values ranging from 1 to 4 (1 = "*not at all like me*," 2 = "*not like me*," 3 = "*somewhat like me*," and 4 = "*very much like me*"). Response values for individual items are summed to create scores for each of the five subscales. The Child UPPS-P has demonstrated good internal consistency (αs ranging from .81 to .90) in a combined community and clinical sample of children ages 7 to 13 (Zapolski et al., 2010). Additionally, the Child UPPS-P obtained adequate-to-good internal consistency (αs ranging from .79 to .95) in a sample of adolescents ages 12 to 18 receiving outpatient substance use treatment (Tomko, Prisciandaro, Falls, & Magid, 2016). See Appendix B for the full Child UPPS-P measure. In the current study, Cronbach's alpha coefficients ranged from "acceptable" (Lack of Perseverance; $\alpha = .748$) to "good" (Positive Urgency; $\alpha = .897$) reliability based on standards reported by George and Mallery (2003).

Official Records

Detention center staff record institutional misconduct in an electronic database immediately following each infraction. After the data collection period concluded, the number of disciplinary infractions, the number of days in the detention facility, and the offense for which they were in detention (i.e., the index offense) at the time of participation was collected from each participant's record.

Procedure

All study procedures were submitted to the University of Southern Mississippi Institutional Review Board for approval. The director of the detention center provided consent to conduct this study at the facility and wrote a letter of support to the IRB.

Informed consent was obtained from a legal guardian upon the youth's entry to the facility. Prior to completing the study, all participants provided written informed assent. Participation was voluntary and youths who completed the study were compensated with $10 gift cards. Next, trained research assistants conducted a brief mental status examination (see Appendix A) with all participants to determine whether they were competent to provide self-reported information at the time of participation. Specifically, all potential participants were evaluated prior to participation to identify characteristics that might render them ineligible or inappropriate for inclusion. All participants in the current study underwent an educational assessment that determined their current level of academic achievement across various domains upon entry to the facility. This assessment was administered by educational professionals within the facility and the facility's director used the information to determine who was eligible to participate. Given that measures included in this study are written at approximately a fourth-grade reading level (Morey, 2007; Zapolski, Stairs, Settles, Combs, & Smith, 2010), youths with a reading level that was below a fourth-grade equivalent were unable to participate in this study. After researchers arrived at the facility to conduct data collection, Mental Status Examinations (MSEs) were administered to eligible participants and individuals who were not mentally capable of attending to questionnaires (e.g., under the influence of substances, floridly psychotic, disoriented to time and/or place) were not

permitted to complete the study. Additionally, youth who indicated that their participation was coerced or involuntary at the time of participation were ineligible to complete the study and their participation status was not shared directly with facility staff to reduce risk of retaliation. Of note, no youth were excluded from the present study due to the above criteria for ineligibility.

Research assistants visited the detention facility on a weekly basis to collect data from new participants. Self-report measures were administered via paper-and-pencil format to groups of participants in a detention center classroom. Once data were collected from each participant, paper questionnaires were transported from the detention center to the affiliated research lab in a locked briefcase. All paper documents were stored in a locked filing cabinet in a locked research lab. To ensure confidentiality, all participants were assigned a unique identification number and assent forms were filed separately from the remaining data. Detention records review took place at the facility after participants had been released. Trained research assistants recorded the de-identified data using SPSS statistical software (IBM Corp, 2017).

Data Analysis Plan

All statistical analyses were performed using SPSS v25.0 (IBM Corp, 2017) statistical computer software. A missing values analysis was conducted to determine whether any patterns of missing data were present. In addition, data were screened for potential outliers that may be unduly influencing the results in the study. Both missing data and outliers were handled using appropriate statistical techniques (see Results section for more information). Descriptive statistics (e.g., means, standard deviations) were calculated for all variables used in the study. Independent variables included

demographic characteristics, PAI-A scales and subscales of interest, and all Child UPPS-P scales. The dependent variable was a count of total disciplinary infractions, which is a nonnegative value that includes zero.

Subsequent analyses were chosen based on whether parametric assumptions of normal distribution, homogeneity of variance, interval data, and independence were met. Given that count data are typically non-normally distributed (Gardner, Mulvey, & Shaw, 1995), the following data analysis plan was selected as most appropriate. First, Spearman's bivariate correlations will be conducted to examine the associations between PAI-A scales of interest, Child UPPS-P scales, and total infractions. Second, Mann-Whitney U tests were performed as appropriate to determine whether there are any significant differences in the dependent variable based on demographic characteristics. Variables that differ significantly in terms of misconduct were considered as covariates in later analyses. Third, using the entire sample, separate Mann-Whitney U tests were used to examine whether the number of infractions varies by whether an individual has a valid or invalid PAI-A profile on each validity scale (INF, ICN, NIM, and PIM). Finally, using only participants with valid PAI-A profiles, a series of logistic regressions were planned to test the contribution of (1) remaining relevant PAI-A scales and subscales, (2) the VPI, and (3) Child UPPS-P subscales in predicting the number of total infractions.

RESULTS

Missing Values

Hot deck imputation (Myers, 2011) was used to replace missing values for the 20 (26.3%) cases that contained one or more missing values. This method involves imputing a single value for a missing data point by estimating the value based on donor cases with similar demographic characteristics (in this study, age, gender, and race were used to identify similar cases). Hot deck imputation replaced missing data for all PAI-A scales and all Child UPPS-P scales. There were three missing values on the age variable and no missing values on gender or race variables. Missing data related to infractions was not imputed. After imputation was complete, a final sample of 76 participants was retained for further analyses.

PAI-A Validity

Of the 76 participants in the current study, 23.7% (N = 18) had invalid PAI-A profiles based on the ICN score, the INF score, or both scores. More specifically, 5 (6.6%) participants obtained an ICN score that was at or above the recommended cutoff and 15 (19.7%) participants obtained an INF score that was at or above the recommended cutoff (see Morey, 2007 for information about cutoff scores). Other than analyses examining differences in infractions based on PAI-A validity, only participants with valid PAI-A profiles were included in subsequent analyses using PAI-A variables. Although the Child UPPS-P does not contain validity indices, participants with invalid PAI-A profiles were also excluded from analyses using Child UPPS-P variables, as an invalid PAI-A profile is likely an indicator of how participants responded to the Child UPPS-P.

After excluding participants who exceeded the cutoff scores on either or both validity indices, the total sample size for subsequent analyses was $N = 58$.

Descriptive Statistics

Descriptive statistics were calculated for total infractions, PAI-A scales of interest, and all Child UPPS-P scales. See Table 1 for results. Of note, four participants (6.9%) had behavioral infractions, with each of those individuals receiving one infraction while detained.

Table 1 *Descriptive statistics for all variables*

	Minimum	Maximum	*M*	SD
Total Infractions (*N* = 58)	0.00	1.00	0.06	0.233
PAI-A:				
NIM (*N* = 58)	42.00	109.00	57.74	13.66
PIM (*N* = 58)	24.00	72.00	50.07	12.42
ANT (*N* = 58)	39.00	80.00	56.38	9.40
AGG (*N* = 57)	38.00	80.00	60.91	8.99
NON (*N* = 58)	41.00	79.00	58.17	9.53
RXR (*N* = 58)	19.00	66.00	41.53	10.54
DOM (*N* = 58)	35.00	71.00	53.78	9.00
VPI (*N* = 57)	0.00	15.00	4.19	3.18
Child UPPS-P:				
LPremed (*N* = 57)	8.00	29.00	17.54	5.71
NU (*N* = 57)	8.00	32.00	21.21	6.06
SS (*N* = 57)	10.00	32.00	19.54	5.47
LPersev (*N* = 57)	9.00	29.00	16.91	4.27
PU (*N* = 58)	8.00	32.00	17.62	6.58

Note. NIM = Negative Impression Management. PIM = Positive Impression Management. ANT = Antisocial Features. AGG = Aggression. NON = Nonsupport. RXR = Treatment Rejection. DOM = Dominance. VPI = Violence Potential Index. LPremed = Lack of Premeditation. NU = Negative Urgency. SS = Sensation Seeking. LPersev = Lack of Perseverance. PU = Positive Urgency.

Demographic Differences

All comparisons based on demographic groups are presented in Table 2. Given the non-normal distribution of values within variables, nonparametric means comparisons tests and Spearman's nonparametric correlations were used to test differences on the

primary variables of interest based on age, sex, and race. Nonparametric correlations revealed a nonsignificant negative relationship between age and total infractions. Significant negative relationships were found between age and PIM (r = -.269, p < .05), Lack of Premeditation (r = -.319, p < .05), and Lack of Perseverance (r = -.332, p < .05). Effect sizes for these correlations were in the moderate range based on Cohen's guidelines (Cohen, 1992). Significant positive relationships were found between age and Sensation Seeking (r = .358, p < .05), as well as between age and Positive Urgency (r = .283, p < .05). Effect sizes were in the medium range for these correlations. All other associations between age and other independent variables were nonsignificant.

Independent-samples Mann-Whitney U Tests were used to examine mean differences in independent variables and total infractions based on gender and race. To conduct these tests, gender was a binary variable (none of the participants self-reported a gender other than male or female) and race was recoded as a binary variable (White and Youth of Color). Of note, gender and race differences in total infractions were not able to be computed due to a low base rate of infractions across the sample.

Regarding gender differences across PAI-A variables, males had significantly higher scores than females on PIM (U = 207.0, p < .05, d = .617) and RXR (U = 220.5, p < .05, d = .547), while females had significantly higher scores than males on AGG (U = 460.0, p < .05, d = .653) and the VPI (U = 451.5, p < .05, d = .723). On Child UPPS-P variables, males reported significantly greater Sensation Seeking (U = 183.5, p < .05, d = .665), while females reported significantly greater Negative Urgency (U = 442.5, p < .05, d = .643). Gender differences for all other independent variables were nonsignificant.

Justice-involved Youth of Color reported significantly higher scores on the PAI-A AGG scale (U = 435.0, p < .01, d = .81) than their White counterparts. In contrast, White participants reported significantly higher scores on the Child UPPS-P Sensation Seeking scale (U = 177.5, p < .05, d = .568) than Youth of Color. Race differences for all other independent variables were nonsignificant.

Table 2 *Comparisons of variables based on demographics*

	Age	Sex			Race		
		Male	Female		White	Youth of Color	
	r (*N*)	*M* rank (*N*)	*M* rank (*N*)	*U*	*M* rank (*N*)	*M* rank (*N*)	*U*
Total Infractions	-.220	-	-	-	-	-	-
	(51)	-	-	-	-	-	-
PAI-A:							
NIM	.017	27.13	35.72	435.5	23.62	31.20	369.
	(56)	(42)	(16)		(13)	(45)	0
PIM	-.269*	32.57	21.44	207.0*	30.15	29.31	284.
	(56)	(42)	(16)		(13)	(45)	0
ANT	.224	27.94	33.59	401.5	33.15	28.44	245.
	(56)	(42)	(16)		(13)	(45)	0
AGG	.075	25.78	37.25	460.0*	17.54	32.39	435.
	(55)	(41)	(16)		(13)	(44)	0**
NON	-.161	27.00	36.06	441.0	23.23	31.31	374.
	(56)	(42)	(16)		(13)	(45)	0
RXR	-.260	32.25	22.28	220.5*	26.92	30.24	326.
	(56)	(42)	(16)		(13)	(45)	0
DOM	.173	28.73	31.53	368.5	23.42	31.26	371.
	(56)	(42)	(16)		(13)	(45)	5
VPI	.113	25.99	36.72	451.5*	21.31	31.27	386.
	(55)	(41)	(16)		(13)	(44)	0
Child UPPS-P:							
LPremed	-.319*	27.26	33.87	388.0	32.58	27.94	239.
	(56)	(42)	(15)		(13)	(44)	5
NU	.186	25.96	37.50	442.5*	27.96	29.31	299.
	(56)	(42)	(15)		(13)	(44)	5
SS	.358*	32.13	20.23	183.5*	37.75	26.53	177.
	(56)	(42)	(15)		(13)	(44)	5*
LPersev	-.332*	29.58	27.37	290.5	27.19	29.53	309.
	(56)	(42)	(15)		(13)	(44)	5
PU	.283*	27.18	35.59	433.5	32.69	28.58	251.
	(56)	(42)	(16)		(13)	(45)	0

Note. NIM = Negative Impression Management. PIM = Positive Impression Management. ANT = Antisocial Features. AGG = Aggression. NON = Nonsupport. RXR = Treatment Rejection. DOM = Dominance. VPI = Violence Potential Index. LPremed = Lack of Premeditation. NU = Negative Urgency. SS = Sensation Seeking. LPersev = Lack of Perseverance. PU = Positive Urgency. **p < .01. *p < .05.

Differences in Infractions Based on PAI-A Validity

Due to the low base rate of infractions in the current study, the total infractions variable was recoded into a binary variable (i.e., the presence or absence of behavioral infractions) to examine differences in misconduct based on PAI-A validity. Binary variables were also created for PAI-A invalidity based on ICN (i.e., valid or invalid PAI-A based on ICN) and INF (i.e., valid or invalid PAI-A based on INF) scale scores. Next, exact Fisher's tests were performed since the number of expected cases was less than five for one or more variables included (see Bower, 2003 for additional information).

Of the four individuals who had behavioral infractions, three participants had a valid PAI-A and one participant had an invalid PAI-A based solely on the ICN scale. The difference in infractions across those with valid and invalid PAI-As based on ICN was nonsignificant (p = .258). When conducting the same analyses with the INF scale, all four participants had a valid PAI-A based solely on the ICN scale. The difference in infractions across those with valid and invalid PAI-As based on ICN was nonsignificant (p = .572).

Correlations between Variables

To test associations between independent variables and total infractions, Spearman correlations were performed (see Table 3 for these results). Given that p-values are highly impacted by sample size, effect sizes were interpreted for these analyses. Effect sizes in this study were affected by variance in methodology (i.e., correlating self-report scores with official records based on others' reports, each having different scales); therefore, standards provided by Funder and Ozer (2019) were used to interpret effect sizes. Based on these guidelines, medium effect sizes were obtained for correlations between total

infractions and the following: PIM (r = .252, p < .069), ANT (rho = -.334, p < .05), AGG (r = -.292, p < .05), DOM (r = -.209, p < .133), and VPI (r = -.211, p < .134).

Table 3 *Correlations between independent variables and total infractions*

	Spearman's rho	*p*
PAI-A:		
NIM (*N* = 58)	-.180	.198
PIM (*N* = 58)	.252	.069
ANT (*N* = 58)	-.334	.015*
AGG (*N* = 57)	-.292	.036*
NON (*N* = 58)	-.145	.301
RXR (*N* = 58)	.123	.380
DOM (*N* = 58)	-.209	.133
VPI (*N* = 57)	-.211	.134
Child UPPS-P:		
LPremed (*N* = 57)	-.028	.846
NU (*N* = 57)	-.163	.250
SS (*N* = 57)	-.094	.509
LPersev (*N* = 57)	.058	.683
PU (*N* = 58)	-.075	.594

Note. NIM = Negative Impression Management. PIM = Positive Impression Management. ANT = Antisocial Features. AGG = Aggression. NON = Nonsupport. RXR = Treatment Rejection. DOM = Dominance. VPI = Violence Potential Index. LPremed = Lack of Premeditation. NU = Negative Urgency. SS = Sensation Seeking. LPersev = Lack of Perseverance. PU = Positive Urgency. *p < 05.

Spearman bivariate correlations were also used to test relationships among all independent variables (see Table 4 for all correlations).

Table 4 *Correlations between independent variables*

		1	2	3	4	5	6	7	8	9	10	11	12
PAI-A:													
1.	NIM												
2.	PIM	-.593**											
3.	ANT	.408**	-.552**										
4.	AGG	.512**	-.502**	.494**									
5.	NON	.223	-.053	.142	.245								
6.	RXR	-.557**	.646**	-.436**	-.376*	.015							
7.	DOM	.223	-.353**	.284*	.341**	-.001	-.129						
8.	VPI	.566**	-.664**	.612**	.740**	.381**	-.432**	.480**					

Table 4 (continued)

Child UPPS-P:												
9.	LPremed	.120	-.003	.142	.211	.336*	.177	-.056	.180			
10.	NU	.432**	-.624**	.469**	.534**	.151	-.526**	.199	.595**	.068		
11.	SS	.065	-.227	.368**	.082	-.420**	-.168	.101	.147	-.239	.221	
12.	LPersev	-.187	.470**	-.280*	-.086	.196	.438**	-.225	-.237	.396**	-.322*	-.163
13.	PU	.374**	-.518**	.411**	.381**	.055	-.413**	.142	.428**	.000	.766**	.321*	-.206

Note. NIM = Negative Impression Management. PIM = Positive Impression Management. ANT = Antisocial Features. AGG = Aggression. NON = Nonsupport. RXR = Treatment Rejection. DOM = Dominance. VPI = Violence Potential Index. LPremed = Lack of Premeditation. NU = Negative Urgency. SS = Sensation Seeking. LPersev = Lack of Perseverance. PU = Positive Urgency. **p <.01. *p < 05.

Alternate Models

Given that infractions occurred at a low base rate, it was not feasible to conduct regression analyses using total infractions as the outcome variable. Therefore, alternate models were tested using other variables of interest. Participants self-reported the number of times they had been arrested (including the arrest leading to their detainment at the time of participation), which was examined in relation to PAI-A and Child UPPS-P variables of interest. Spearman's bivariate correlations indicated medium effect sizes (Funder & Ozer, 2019) for relationships between self-reported number of arrests and ANT (rho = .266, p = .05), VPI (rho = .267, p = .051), and Negative Urgency (rho = .266, p = .052).

Each participant's index offense was recorded as part of data collection; therefore, alternate analyses examined relationships between independent variables and index offense. To conduct these analyses, two variables were created to represent the index offense that was indicated in their detention records. First, index offense was coded as either a drug (e.g., possession of substances or paraphernalia), property (e.g., burglary, theft, arson, vandalism), person (e.g., robbery, assault), status (e.g., truancy, running

away, probation violation), or other (e.g., fraud, discharging a firearm) offense. These categories were based on OJJDP classifications (Harp, 2020), which also informed how participants were asked about their offense history when reporting demographic information during the current study. Second, index offense was coded as a binary variable based on whether the offense was violent (e.g., assault, possession of a firearm) or non-violent (e.g., probation violation, burglary). Using these two index offense variables, non-parametric tests (Kruskal-Wallis tests for the first index offense variable and Mann-Whitney U tests for the binary index offense variable) were conducted to examine means differences in PAI-A and Child UPPS-P variables across index offense type. All of these tests revealed nonsignificant results.

Given that total infractions ranged from 0 to 2, regression analyses could not be conducted as planned. The total infractions variable was recoded into a binary variable (i.e., the presence or absence of infractions while detained) to allow for alternate regression analyses. Due to a small sample size, the current study was underpowered to conduct regression analyses using multiple PAI-A or Child UPPS-P variables in one model; therefore, separate logistic regression analyses focused on testing whether each PAI-A and Child UPPS-P variable predicted the presence or absence of infractions above and beyond demographic variables (i.e., age, gender, and race). All regression models using Child UPPS-P variables were nonsignificant in terms of the overall model and main effects. Of the regression models using PAI-A variables, the model including AGG was significant ($\chi^2(4) = 17.61$, $p < .01$). The model explained 63.5% (Nagelkerke R^2) of the variance in the presence or absence of infractions and correctly classified 98.5% of cases. An increase in the AGG score was associated with a decreased likelihood of having an

infraction while detained (β = -.331, p = .012). Results for this logistic regression are displayed in Table 5. In addition to the AGG model, the regression model for NON approached statistical significance ($\chi^2(4) = 8.55$, p = .073). This model explained 32.8% (Nagelkerke R^2) of the variance in the presence or absence of infractions and correctly classified 94.1% of cases. An increase in the NON score was associated with a decreased likelihood of having an infraction while detained (β = -.185, p = .062).

Table 5 *Logistic regression with AGG predicting infractions*

	β	SE	p	Exp(B)	90% CI
Age	-.141	.676	.835	.869	.286 – 2.64
Male	2.18	2.08	.296	8.84	.287 – 272.08
White	20.87	8853.9	.998	1157727136	.000 – N/A
AGG	-.331	.132	.012*	.718	.578 – .893

Note. AGG = Aggression. β = Log likelihood value. SE = Standard Error of β. Exp(B) = Odds ratio value. 90% CI = 90% Confidence Interval for Exp(B). *p < .05.

DISCUSSION

The current study aimed to explore the relationships between institutional infractions and two measures of personality and psychopathology – the PAI-A and the Child UPPS-P – among a sample of justice-involved youth. This study was the first of its kind to examine these constructs with a juvenile forensic sample, likely due in part to juvenile offender samples being difficult to access for research purposes (Lane et al., 2012). The institutional infraction prevalence rate was 5.3% in the current sample of youths, which is much lower than rates in previous juvenile justice studies (Engstrom & Scott, 2020; Kelly, Novaco, & Cauffman, 2019; McReynolds & Wasserman, 2008). This low base rate may be due to a number of factors, including but not limited to: a short duration of stay in the detention facility (i.e., the mean length of stay was 26.02 days) that did not allow time for many infractions, differences in what constitutes an infraction at this facility versus others in previous studies, and overall decreases in detainment rates or the types of justice-involved youth being detained during the COVID-19 pandemic. It is also possible that the youth with more behavioral problems in the facility were inadvertently excluded from participation due to being on special precautions or restrictions per facility protocol and thus not available for participation. Youth with more severe behavioral problems may also have been more likely to be placed in more intensive, longer-term facilities or transferred to the adult legal system compared to those who were detained in the shorter-term detention facility, which would influence who was available for participation in the current study. Regardless of the reason, low base rates of infractions and overall participation in the study resulted in difficulties conducting the proposed analyses as planned. Thus, the original hypotheses proposed for the current

study are based on very preliminary and underpowered analyses. The interpretations in this section are discussed with extreme caution, as these findings may not be sustained with a larger sample size and a higher prevalence rate of infractions.

Based on prior literature (Caperton et al., 2004; Newberry & Shuker, 2012; Reidy et al., 2016; Skopp et al., 2007), it was hypothesized that PAI-A ANT and AGG scales would be most strongly (positively) associated with the total number of institutional infractions. *Hypothesis 1* was not supported. Specifically, ANT and AGG were significantly correlated with total infractions with medium effect sizes. However, these relationships were not in the expected positive direction. Based on preliminary analyses, it appears that higher scores on ANT and AGG scales were related to fewer institutional infractions. While this may be the result of a low sample size and low base rate of infractions, it is important consider explanations for this relationship should these results persist after more data are collected. Perhaps ANT and AGG do not capture the likelihood of engaging in institutional misconduct in the same way that other variables might in this sample. For example, although not examined in the current study, prior literature suggests that historical variables (e.g., level of gang involvement, number of previous arrests) may be more helpful in predicting future behavior (Cunningham & Sorensen, 2008; Drury & DeLisi, 2010; Trulson, 2007).

When conducting correlation analyses to test Hypothesis 1, results revealed that the PAI-A DOM scale was also negatively correlated with total infractions with a medium effect size. Interestingly, individuals with higher DOM scores had fewer infractions. This finding is inconsistent with previous literature (Newberry & Shuker, 2012) that suggests that individuals who are more interpersonally dominant are more likely to become

involved in verbal confrontations, engage in violent behavior, and lack the fear of social repercussions that might deter institutional misconduct. However, it is notable that existing literature focuses on adult offender samples who may possess differing interpersonal skills and who may place differing emphasis on relationships with others compared to justice-involved youth. When considering the results of the current study, it is also possible that interpersonally dominant individuals possess leadership skills that can also allow them to avoid social conflict or that interpersonally dominant individuals are more likely to coerce their peers into engaging in misconduct rather than breaking the rules themselves while detained.

Hypothesis 2 posited that a higher score on the PIM scale of the PAI-A would be significantly and positively associated with a greater number of total infractions. The relationship between PIM and total infractions, while based on preliminary analyses, was in the positive direction as expected with a medium effect size and was approaching statistical significance ($p = .069$). This is consistent with previous literature (Anestis et al., 2015; Edens & Ruiz, 2006). This finding is important to consider, as forensic populations commonly engage in positive impression management (Hildebrand, Wibbelink, & Verschuere, 2018; Kelsey, Rogers, & Robinson, 2015) and the tendency to present oneself in a more positive light may be related to behavioral problems within a facility. The relationship between PIM and total infractions also highlights the need to utilize measures with validity scales in juvenile settings. More specifically, validity scales are commonly used to determine whether an individual is malingering or withholding information (Rios & Morey, 2013; Sellbom et al., 2010). However, validity scales focused on positive impression management may offer some utility in predicting future

behavioral problems and identifying youth who may need more intensive or more specific supports within a facility.

To test *Hypothesis 3*, that ANT and AGG would be the more impactful variables in a regression model predicting total infractions, a much larger sample size than that which was obtained for the current study was needed. As previously mentioned, ANT and AGG were significantly correlated with total infractions (albeit in the opposite direction than expected). During alternate regression analyses looking at the presence or absence of infractions as the binary outcome variable, it is notable that AGG preliminarily emerged as a significant predictor of whether an individual had a behavioral infraction recorded while detained, even after controlling for age, gender, and race. However, the relationship between AGG and infractions in this model was not in the expected positive direction. If these findings persist after more data are collected, then they may offer some evidence against Hypothesis 3 and contradict existing literature suggesting that that aggression plays an important role in determining risk for future misbehavior while detained (Gardner et al., 2015; Magyar et al., 2012; Walters, Duncan, & Geyer, 2003).

The current study also examined the utility of the Violence Potential Index (VPI), an index that was originally created to assess risk for future violent behavior among adults and that has yet to be tested in juvenile justice samples. Findings from the current study revealed that the average VPI scores were higher than those in both community and clinical standardization samples for the adult PAI (Morey, 1991). Contrary to *Hypothesis 4*, VPI scores were negatively related to the total number of infractions while detained and the relationship between VPI and total infractions was nonsignificant. These preliminary findings indicate that the VPI, as applied to the PAI-A, may not function as it

does in adult samples. Apart from low sample size in the current study, one explanation for the difference in VPI results between adult and adolescent samples is that aggression presents differently across the two populations. For example, prior research has shown that adolescents tend to engage in aggressive behavior more impulsively than adults (Jennings & Reingle, 2012). It is also reasonable to assume that adults likely have lengthier and/or more extensive histories of aggressive behavior than adolescents, which could impact the algorithm used to calculate potential for future violence. Another possible explanation for this finding is that the infractions included in the current study were largely non-violent and, therefore, not representative of the construct that the VPI was originally designed to measure. Finally, it is possible that the prediction of future violence is more useful in real-world settings where individuals have greater access to means and opportunity to engage in violent acts, in contrast to more controlled settings such as juvenile justice facilities.

Finally, the current study was the first to examine the Child UPPS-P in relation to infractions among justice-involved youth. Based on previous studies (Billieux et al., 2010; Coskunpinar et al., 2013; Maneiro et al., 2017; VanderVeen et al., 2016), *Hypothesis 5* theorized that Negative Urgency and Positive Urgency would be significantly and positively associated with total infractions. Surprisingly, early anaylses indicated that both Negative Urgency and Positive Urgency scores were negatively and nonsignificantly related to total infractions. While these relationships may not persist with a larger sample size, it is also possible that these two constructs are not explaining a meaningful portion of misconduct while justice-involved youth are detained. These findings would directly contrast previous research which suggests that intense emotional

states, whether positive or negative, can result in greater risky behavior (Cyders & Smith, 2007). Further, given that adolescence is a vulnerable developmental period when emotions are heightened and impulsivity reaches a peak (Romer, 2010), it is important to clarify the roles that different facets of impulsivity may play among justice-involved youth. It is also notetworthy that youth likely have less opportnity to engage in impulsive behaviors in a highly controlled juvenile justice setting, which may offer some evidence that impulsivity traits are less likely to predict impulsive behavior in these settings than in community or clinical settings.

Although the planned anaylses for the present study could not be conducted with a small sample size and very limited number of recorded infractions, the analyses that were conducted revealed some preliminary findings that may have implications for assessment and intervention in juvenile justice settings. For example, correlations revealed that younger participants had significantly higher scores on the PIM scale of the PAI-A. This suggests that younger offenders may be more likely to attempt to present themselves in a positive manner and that they may benefit from interventions aimed at increasing their willingness to be more forthcoming during the assessment process. It is possible that younger individuals are more likely to be detained for the first time, which could be linked to fear or mistrust of the system and greater guardedness. This result may also be in part due to the lack of insight associated with socioemotional immaturity. Given this finding, it may be crucial to consider implementing strategies to: 1) build stronger rapport with younger justice-involved youth, 2) provide psychoeducation on normative versus non-normative adolescent experiences, and 3) validate youths' potential concerns pertaining to the revelation of less desirable information about themselves.

It was also surprising that females obtained significantly higher scores than males on the PAI-A AGG scale and the VPI, as this contradicts prior research findings (Smith, Rose, & Schwartz-Mette, 2010) and societal norms that often portray males as being more aggressive or violent than females. There is some literature to suggest that these gender differences may be in part attributable to how aggression and violence are measured (David & Kistner, 2000). In addition to considering methodological explanations for gender differences in aggression and violence, it is also important to consider clincial implications. Prior research posits that females in juvenile justice settings may view themselves as highly aggressive or violent relative to societal gender role expectations, whereas males may downplay or underrate their aggression and violence based on society's expectations for male behavior (Lagerspetz, Björkqvist, & Peltonen, 1988). It is also possible that females prefer to present themselves as aggressive in correctional settings in an effort to demonstrate their strength to others, while males may not feel that same pressure to assert themselves (Hart et al., 2007). While preliminary analyses in the current study did not offer strong support for AGG or VPI as predictors of misconduct while detained, it may be important to consider the utility of treatment for aggression in female justice-involved youth while they are in the community (e.g., while on probation). It may also be important to explore and address other underlying factors that may be promoting aggression or violence in females (e.g., trauma; Espinosa, Sorensen, & Lopez, 2013).

Strengths

This study offers several strengths and contributions to the current literature on institutional misconduct in juvenile justice facilities. First, the present study contributes

to a body of research involving juvenile delinquents, an understudied population with significant needs (Schubert, Mulvey, & Glasheen, 2011). In addition, prior literature has found that juvenile delinquents are typically more responsive to intervention than adult forensic populations (Monahan, Steinberg, & Piquero, 2015); therefore, research with this population is useful in identifying and refining interventions for this group. Second, while the PAI-A and UPPS-P are well-established measures in psychological research, the current study is the first known study to examine the utility of these measures in the context of institutional misconduct in a juvenile justice setting. Previous literature has generally established personality and psychopathology correlates of rule-breaking and/or risky behavior among justice-involved youth (Charles et al., 2021; DeLisi et al., 2010a; Diamond & Magaletta, 2006; Guy et al., 2005), however, this study aimed to offer insight into how those relationships might look while juveniles are residing in a detention facility. Additionally, many previous studies have examined impulsivity as a unidimensional predictor of misbehavior (DeLisi et al., 2010a; Vogel & Barton, 2013) while this study aimed to identify specific facets of impulsivity that may be driving misbehavior among juvenile delinquents. Finally, this study utilized official records to measure the outcome in addition to participant self-report, which sets it apart from a large portion of psychological research.

Limitations

In addition to its strengths, the current study had multiple limitations that impacted the procedures and the interpretation of the results. First, given that this study was cross-sectional in nature, no inferences could be made about temporal relationships between variables. Second, participants self-reported demographic information and personality

and psychopathology data that were collected in this study. This method introduced potential error related to inconsistent, inaccurate, or careless responding. This is particularly important when considering participants' willingness to report about history of legal involvement, mental health, and other sensitive topics. Third, although the demographic makeup of participants in the current study was consistent with other studies examining juvenile justice populations (Charles et al., 2021; DeLisi et al., 2010a; Diamond & Magaletta, 2006; Guy et al., 2005), participants were primarily homogenous in terms of gender (e.g., majority male) and ethnicity (majority Black). A lack of diversity, along with the unique nature of the sample (i.e., juvenile delinquents), has significant implications in terms of the generalizability of the findings in this study. Finally, due to issues surrounding the recruitment of participants during the COVID-19 pandemic, as well as a substantially lower base rate than expected for institutional misconduct in the current sample, the author was unable to obtain an adequate sample size that would provide statistical power to detect smaller effect sizes.

Future Directions

While analyses in the current study were preliminary, these findings offer some support for prior research which suggests that assessing personality and psychopathology constructs can be useful in determining not only which youth may need services while detained but also the types of services that may be beneficial. For example, correlation analyses indicated that ANT and AGG were significantly yet negatively associated with total infractions, which suggests that common interventions aimed at targeting constructs like antisocial behavior and aggression (e.g., Moral Reconation Therapy, Aggression Replacement Training) may not always be effective across juvenile justice samples. It is

also important for future research to continue evaluating the effectiveness of interventions aimed at improving constructs like antisocial traits or aggression in reducing institutional misconduct. In short-term facilities such as the detention center in the current study, for example, it may be more helpful to examine the effectiveness of brief interventions that target interpersonal relationships, substance use, or more general emotion regulation. Finally, further research in this area should focus on the relationships between assessment validity and future behavioral problems while detained, as invalid personality and psychopathology profiles can be indicative of a host of problems related to future misconduct (e.g., defensiveness, emotional callousness, deception). Understanding the relationships between profile validity and misconduct can aid in determining not only who may need services while detained but also the types of services that may be beneficial.

Conclusion

The present study provides important information about the assessment process in juvenile justice settings. Specifically, results from the current study highlight the importance of utilizing appropriate assessment tools to understand the needs of detainees and identify juvenile delinquents who may be at higher risk for misconduct. Further, results from this study indicate that it is useful to incorporate assessment tools that assess response validity, as invalid response patterns may function as predictors of misconduct in a way that is similar to personality and psychopathology constructs. By using comprehensive and accurate assessment to predict future risk for violent or inappropriate behavior, it is possible to improve justice-involved youths' overall adjustment to institutions and provide more effective intervention services to offenders.

APPENDIX A – Mental Status Examination

Before you begin the study, I want to ask you a few questions. These are questions that I will ask everyone. It is VERY important that you do your best when answering these questions.

QUESTION	**ANSWER**	✓	✗
Can you name the year? Month? Day of the week?	Can name the correct year, month, and day of the week **Ex:** 2020, February, Tuesday		
Where are we?	Can name the correct location **Ex:** Classroom, detention center, Hattiesburg		
I am going to name three objects. Please say all three words after I finish: car, dog, apple.	Can correctly repeat all three words (not necessarily in the same order) **Ex:** Apple, dog, car		
Spell the following word backward: WATER.	Can correctly spell the word backward **Must answer:** R-E-T-A-W		
Please name the following objects. (point to table, then pencil)	Can correctly name both objects **Must answer:** Table, pencil		
Please repeat the three words I asked you to say earlier.	Can correctly recall all three words (not necessarily in the same order) **Ex:** Dog, car, apple		
Are you currently under the influence of alcohol, marijuana, or other drugs?	**Must answer:** No		
Are you currently seeing things that others cannot see or hearing things that others cannot hear?	**Must answer:** No		

NOTE: If you checked "NO" on any of the above questions, then the participant should NOT proceed with the study. Please inform the participant using the following language:

Based on your responses, it looks like you are currently unable to participate in the study. This has happened to others before and does not mean that you can't participate in the study at all. We may contact you to participate again at a later time point.

NOTE: Do NOT provide any specific comments on which questions participants answered incorrectly. If a participant asks, tell them that you cannot provide that information because it could hurt the results of the study.

APPENDIX B – Child UPPS-P Impulsive Behavior Scale

Below are a number of statements that describe ways in which people act and think. Read each one carefully and think about whether it is like you. For each statement, circle the number that represents how the statement describes you.

Not at All Like Me	**Not Like Me**	**Somewhat Like Me**	**Very Much Like Me**
1	**2**	**3**	**4**

1.	If I feel like doing something, I tend to do it, even if it's bad.	**1**	**2**	**3**	**4**
2.	I like new, thrilling things to happen.	**1**	**2**	**3**	**4**
3.	I like to see things through to the end.	**1**	**2**	**3**	**4**
4.	I tend to blurt out things without thinking.	**1**	**2**	**3**	**4**
5.	I am upset when I am not finished with things.	**1**	**2**	**3**	**4**
6.	I like to stop and think about something before I do it.	**1**	**2**	**3**	**4**
7.	When I feel bad, I often do things I later regret in order to make myself feel better now.	**1**	**2**	**3**	**4**
8.	I would like water skiing.	**1**	**2**	**3**	**4**
9.	Once I get going on something I hate to stop.	**1**	**2**	**3**	**4**
10.	I like to know just what to do before I start a project.	**1**	**2**	**3**	**4**
11.	Sometimes when I feel bad, I keep doing something even though it is making me feel worse.	**1**	**2**	**3**	**4**
12.	I enjoy taking risks.	**1**	**2**	**3**	**4**
13.	It is easy for me to think hard.	**1**	**2**	**3**	**4**
14.	I would like parachute jumping.	**1**	**2**	**3**	**4**
15.	I finish what I start.	**1**	**2**	**3**	**4**
16.	I try to take a careful approach to things.	**1**	**2**	**3**	**4**
17.	When I am upset I often act without thinking.	**1**	**2**	**3**	**4**
18.	I like new, thrilling things, even if they are a little scary.	**1**	**2**	**3**	**4**

19.	I tend to get things done on time.	**1**	**2**	**3**	**4**
20.	When I feel rejected, I often say things that I later regret.	**1**	**2**	**3**	**4**
21.	I would like to learn to fly an airplane.	**1**	**2**	**3**	**4**
22.	I am a person who always gets the job done.	**1**	**2**	**3**	**4**
23.	I am very careful.	**1**	**2**	**3**	**4**
24.	I almost always finish projects that I start.	**1**	**2**	**3**	**4**
25.	I like to know what to expect, before doing something new.	**1**	**2**	**3**	**4**
26.	I often make matters worse because I act without thinking when I am upset.	**1**	**2**	**3**	**4**
27.	I would like to ski very fast down a high mountain slope.	**1**	**2**	**3**	**4**
28.	I tend to stop and think before doing things.	**1**	**2**	**3**	**4**
29.	Before making a choice, I tend to think about both the good things and the bad things about the choice.	**1**	**2**	**3**	**4**
30.	When I am mad, I sometimes say things that I later regret.	**1**	**2**	**3**	**4**
31.	I would enjoy fast driving.	**1**	**2**	**3**	**4**
32.	Sometimes I do crazy things I later regret.	**1**	**2**	**3**	**4**

Following is a group of statements that may describe you to varying degrees. Please answer whether you feel the statement is "very much" like you, "somewhat" like you, "not" like you, or "not at all" like you, using the following scale:

Not at All Like Me	**Not Like Me**	**Somewhat Like Me**	**Very Much Like Me**
1	**2**	**3**	**4**

33.	When I am very happy, I can't stop myself from going overboard.	**1**	**2**	**3**	**4**
34.	When I am really thrilled, I tend not to think about the results of my actions.	**1**	**2**	**3**	**4**
35.	When I am in a great mood, I tend to do things that would cause me problems.	**1**	**2**	**3**	**4**

36.	I tend to act without thinking when I am very, very happy.	**1**	**2**	**3**	**4**
37.	When I get really happy about something, I tend to do things that can lead to trouble.	**1**	**2**	**3**	**4**
38.	When I am really happy, I tend to get out of control.	**1**	**2**	**3**	**4**
39.	I tend to lose control when I am in a great mood.	**1**	**2**	**3**	**4**
40.	When I am very happy, I tend to do things that may cause problems in my life.	**1**	**2**	**3**	**4**

Scoring Information:

- Lack of Premeditation
  - Items – 4, 6, 10, 16, 23, 25, 28, 29 (reverse code all items except 4)
- Negative Urgency
  - Items – 1, 7, 11, 17, 20, 26, 30, 32
- Sensation Seeking
  - Items – 2, 8, 12, 14, 18, 21, 27, 31
- Lack of Perseverance
  - Items – 3, 5, 9, 13, 15, 19, 22, 24 (reverse code all items)
- Positive Urgency
  - Items – 33, 34, 35, 36, 37, 38, 39, 40

APPENDIX C – IRB Approval Letter

IRB-20-9 - Initial: Sacco Committee Letter - Expedited and Full

irb@usm.edu <irb@usm.edu>

Mon 4/20/2020 8:56 AM

To: Nora Charles <Nora.Charles@usm.edu>; Paula Floyd <Paula.Floyd@usm.edu>; Sue Fayard <Sue.Fayard@usm.edu>; Michael Howell <Michael.Howell@usm.edu>; Michaela Donohue <Michaela.Donohue@usm.edu>

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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident template on Cayuse IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.
- NO FACE-TO-FACE DATA COLLECTION WILL COMMENCE UNTIL USM'S IRB MODIFIES THE DIRECTIVE TO HALT NON-ESSENTIAL (NO DIRECT BENEFIT TO PARTICIPANTS) RESEARCH.

PROTOCOL NUMBER: IRB-20-9
PROJECT TITLE: Personality and Psychopathology Correlates of Institutional Misconduct among Juvenile Offenders
SCHOOL/PROGRAM: School of Psychology, Psychology
RESEARCHER(S): Paula Floyd, Nora Charles

IRB COMMITTEE ACTION: Approved
CATEGORY: Full Committee Review Approval

PERIOD OF APPROVAL: April 16, 2020 to **April 16, 2021**
Donald Sacco, Ph.D.
Institutional Review Board Chairperson

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