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The Bully and the Beast:

Correlations between Psychopathic Traits and Bullying in a Sample of University Students

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New York, NY

January 23, 2019

Abstract

Bullying is a concept mostly investigated in children, teenagers, and adults within the workplace. While there is research on bullying in college in general, gaps in the literature remain considering how personality characteristics in bullies relate directly to psychopathy and specific psychopathy traits. Although the literature suggests bullies have a tendency towards psychopathic traits such as violence, impulsivity, egocentricity, manipulateness, rule-breaking, and intolerance, researchers have yet to assess the connection between college students who bully and psychopathy. The research on psychopathy suggests that those high on psychopathic traits may be more prone to use bullying as an apathetic means to acquire dominance and influence over others in accordance to self-interest and personal gain. The current study seeks to investigate the relationship between the factors and subscales of psychopathy using the Psychopathic Personality Inventory (PPI-R) with respect to bullying behaviors (i.e., cyber, verbal, and emotional/relational bullying) and status (i.e., bully, victim, and bystander) in a sample of university students. Scores on bullying items are expected to have a positive correlation with PPI-R total scores and scores on the three factors, whereas victim and bystander responses are expected to have negative correlations. In addition, verbal, emotional/relational, and cyber bullying responses are expected to be positively associated with the psychopathic subscales and the three factors. Overall, the results provide continued support for the existence of psychopathy variants in college samples. All bullying behavior subtypes were associated with the three factors of psychopathy. Being a victim and bystander was associated with Self-Centered Impulsivity. This study aims to raise awareness of bullying and subclinical psychopathy within college settings, as it offers statistical evidence of the two.

Keywords: bullying, psychopathy, subscales, factors, college students, PPI-R

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The Bully and the Beast:

Correlations between Psychopathic Traits and Bullying in a Sample of University Students

In popular culture, psychopathy is depicted as a unitary construct. Laypersons commonly synonymize the term “psychopath” with a serial killer (Edens, 2006). Looking past this notorious stereotype, psychopathy can and does occur in individuals without criminal convictions or histories of violence (Lilienfeld, 1994); psychopathy can be measured in noncriminal and nonpsychiatric samples (Falkenbach, Balash, Tsoukalas, Stern & Lilienfeld, 2018). Many studies support the idea that psychopathy is best conceptualized dimensionally rather than categorically (Edens, Marcus, Lilienfeld, & Poythress, 2006; Marcus, John, & Edens, 2004), meaning psychopathic traits differ in the extent to which they are present. Thus, there is a need to look at how psychopathy exists along a continuum in community samples in order to get a fuller and better understanding of the construct (Falkenbach, Stern, & Creevy, 2014; Lilienfeld, Latzman, Watts, Smith, & Dutton, 2014).

The phenomenon of bullying also contains misconceptions held by the public, as it is often seen as a single construct rather than being made up of subtypes. Furthermore, bullying behaviors in college settings are underappreciated, as many people believe children “grow out of” being bullies. The current paper will discuss the literature on psychopathic characteristics and bullying across the lifespan. By looking at both concepts simultaneously, we can assess how subclinical psychopathic traits manifest in the context of bullying in adult college students.

Multiple Factors of Psychopathy

Psychopathy is a personality disorder elucidated by a constellation of affective-interpersonal and lifestyle-antisocial symptoms (Kiehl & Hoffman, 2011). Cleckley (1941) established the most influential clinical description for this disorder, which included sixteen

standard personality features as criteria (e.g., lack of empathy, superficial charm, self-centeredness) and today distinguishes the construct from antisocial personality disorder, which deemphasizes personality features and remains largely behavioral-based. Karpman (1941) and Lykken (1995) elaborated on this distinction and noted various subtypes of psychopathy (i.e., primary and secondary psychopathy). When statistical techniques are applied to modern assessment measures, psychopathic traits are parsed into two underlying factors (Falkenbach, Beltrani & Reinhard, 2018), that reflect these subtypes. Factor 1 measures interpersonal (e.g., glibness, grandiosity, pathological lying) and affective (e.g., lack of remorse, lack of empathy, irresponsibility) characteristics associated with primary psychopathy. Factor 2 assess lifestyle (e.g., impulsivity, failure to accept responsibility, need for stimulation) and antisocial (e.g., early behavioral problems, juvenile delinquency, poor behavioral controls) propensities (Hare & Neumann, 2009) associated with secondary psychopathy.

Among the newer measures that assess psychopathy, the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996) emerged as an effective self-report instrument that considers psychopathy as a multifactorial construct; it incorporates affective-interpersonal and lifestyle-antisocial features (Skeem, Polaschek, Patrick, & Lilienfeld, 2011). Now revised, the PPI-R (Lilienfeld & Widows, 2005) was developed to assess personality traits considered central to psychopathy in non-court-involved samples (e.g., university students) samples and does not contain items that explicitly emphasize antisocial and criminal behaviors. Rather, the PPI-R focuses on the personality and behavioral-based traits associated with psychopathy (Lilienfeld, Latzman, Watts, Smith, & Dutton, 2014). The measure is organized into seven subscales with three higher-order factors: Fearless Dominance (PPI-I; Benning, Patrick, Blonigen, Hicks, & Iacono, 2005), Self-Centered Impulsivity (PPI-II; Lilienfeld & Widows, 2005) and

Coldheartedness (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003). The former factor consists of Social Influence, Stress Immunity, and Fearlessness subscales. These subscales are associated with well-being, assertiveness, narcissism, and thrill-seeking, as well as lower anxiousness, depression, and empathy. Self-Centered Impulsivity consists of Impulsive Nonconformity, Blame Externalization, Machiavellian Egocentricity, and Carefree Nonplanfulness subscales, which are associated with impulsivity, aggressiveness, substance use problems, antisocial behavior, negative affect, and suicidal ideation (Benning, Patrick, Salekin, & Leistico, 2005; Lilienfeld & Widows, 2005). Finally, Coldheartedness is a standalone constituent because it does not fall into either of the aforementioned factors (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003). It is defined as a propensity toward callousness, guiltlessness, and lack of sentimentality (Benning, Patrick, Hicks, Blonigen, & Krueger, 2003).

Psychopathy and Aggression

Current research focuses considerable attention on psychopathic traits in clinical populations (Patrick, 2006; Skeem et al., 2011). Since psychopathic criminal offenders often engage in frequent acts of violence, much research is directed towards examining the prevalence of psychopathy and types of aggression. This research is generally conducted using in prison and jail samples (Kiehl & Sinnott-Armstrong, 2013). Despite the popularly held conception that psychopaths are violent criminals, Cleckley (1941) pointed out that different psychopathic personality traits may manifest in varying behaviors. While aggression is still associated with psychopathy in non-criminal samples (Falkenbach, Glakin & McKinley, 2018; Warren & Clarbour, 2009), much can be learned from looking at this construct more broadly, such as how it manifests in youth.

Researchers are interested in identifying the developmental precursors to psychopathy in adulthood. Specifically, children and adolescents with callous-unemotional (CU) traits, such as a lack of guilt or empathy and poverty of emotion, have a heightened risk for psychopathic traits in adulthood (Kimonis, Kennealy, & Goulter, 2016). As with adults, mental health concerns, aggression, delinquency, and violence are associated with CU traits in youth (Epstein, Douglas, Poythress, Spain & Falkenbach, 2002; Longman, Hawes, & Kohlhoff, 2016). Furthermore, Kimonis (2005) found that aggressive youth that scored high on CU traits showed less responsiveness to distressing stimuli, capturing an emotional detachment. On the contrary, aggressive youth low on CU traits displayed higher responsiveness to the aversive stimuli. This study contributes to the growing body of research that suggests certain characteristics related to psychopathy (i.e. CU traits) may exist and lead to similar behavioral outcomes in youth.

Marsee, Silverthorn, and Frick (2005) investigated the association of psychopathic traits with aggression and delinquency in a sample of boys and girls in the fifth through ninth grade. Self-reported and teacher-reported psychopathic traits were associated with higher levels of aggression. Although this study infers that young people possessing more psychopathic traits may present with more aggressive and delinquent behaviors, it does not identify which behaviors manifest as a result. Specifically, bullying is conceptualized as an aggressive behavior, raising the alluring question of how psychopathic traits manifest in the context of bullying.

The Bullying Triad: Bullies, Victims, and Bystanders

Bullying has been redefined by researchers from a triadic (bully-victim-bystander) rather than dyadic (bully-victim) perspective to emphasize the three players typically in a bullying situation (Twemlow, Fonagy, & Sacco, 2005). Olweus (1994) defines it as someone purposefully and repeatedly subjecting another person to unwanted actions such as teasing, social group

exclusion, or physical assaults. This definition can be broken down into three components: firstly, bullying is an aggressive behavior comprising of negative acts; secondly, bullying involves these acts repeating over time; lastly, bullying involves an imbalance in strength (power and dominance). In other words, individuals being targeted and intentionally harmed have a difficult time defending themselves against the bully because they, in some way, are weaker, smaller, or in a more vulnerable situation. Thus, the demonstration of power that a bully has over their target plays a key role in this definition.

Victims are the individuals who are targeted and intentionally harmed by the bully (Davis & Davis, 2007). Various characteristics of victims have been identified in the literature, including being shy, lonely, insecure, scared, depressed, introverted, and anxious (Davis & Davis, 2007; Kohut, 2007; Olweus, 2000). Bystanders are defined as individuals who witness bullying and the subsequent distress of the victim. Rather than intervening, bystanders passively watch and do not attempt to prevent the bullying because they feel fearful and anxious. As a result, having a passive audience may fuel the bully's behavior (Thomas, 2011). In other words, the possibility of being the next victim may encourage bystanders not to intervene and makes them feel powerless (Shore, 2006). Research shows that bullying not only affects the victim, but the bystander as well. Davis and Davis (2007) found several long-term consequences of being a bystander, such as guilt and shame for not stepping in on the victim's behalf, and anger towards themselves and the bully. Thus, it is important to consider each cornerstone that composes the bullying triad.

Subtypes of Bullying

Subtypes of bullying, such as physical, verbal, emotional/relational, and cyber bullying have been identified in previous studies (Cornell, 2012; Crick & Grotpeter, 1995; Olweus, 1994).

Physical bullying involves attempting or causing bodily harm to another person or group (e.g., hitting, kicking, spitting, pushing) or intentionally damaging someone's possessions. Verbal bullying includes spoken insults such as threats, taunts, teasing and hurtful name-calling. Emotional/relational bullying involves the bully attempting to damage someone's reputation (e.g., spreading false rumors or lies, embarrassing someone in public) or ignoring and excluding someone out of a group of friends (Cornell, 2012). Cyber bullying, the most recent form of bullying to emerge, is when the bully uses technology to cause someone harm. It is often referred to as electronic bullying because it can be done on social media, perhaps through the electronic spread of inappropriate photographs of a victim or online harassment (Swearer, Espelage, & Napolitano, 2009). Most studies do not differentiate between the different forms of bullying, and instead measure bullying as a single construct (Li, 2007). This gap in the literature is important to address in order to gain a more complete understanding of the various bullying subtypes.

The Relationship between Psychopathy and Bullying

There is some overlap between the constructs of psychopathy and the behavior of bullies. Like the Fearless Dominance of psychopaths, bullying behaviors may be used as an instrument for the bully to acquire dominance and popularity (Salmivalli & Peets, 2008). Studies continuously find that bullies are characterized by a desire to look 'cool' (Farrington, 1993) and charm and influence others. These traits observed in bullying behavior also seem to mirror the PPI-R subscales of Social Influence.

Beane (2009) suggests bullies display little or no empathy for their victims, mirroring the Coldheartedness factor of the PPI-R. Instead, bullies feel rewarded by their victim's hurt, dejected or angry feelings. This may suggest that there is a relationship between bullies' power-

seeking behaviors, such as their strong need to exert dominance, and their lack of empathy towards the victim.

Bullying has also been indirectly tied to psychopathic traits of Self-Centered Impulsivity. Bullying research suggests they engage in dangerous and reckless behavior (Liang, Flisher, & Lombard, 2007) and an uncaring attitude towards their victims (Jolliffe & Farrington, 2006), like the PPI-R Rebellious Nonconformity scale. The social prominence of bullies and their inflated self-views appear to be consistent with Machiavellian Egocentricity subscale of the PPI-R, which is characterized by narcissistic and ruthless attitudes in interpersonal functioning. A bully's positive self-view may be explained by hostile attribution bias (HAB; DeCastro, Veerman, Koops, Bosch, & Monshouwer, 2002). This bias means the person perceives ambiguous situations as reflecting hostile intent even when none was meant; therefore, bullies' perceptions may allow them to blame their aggressing on hostility from the victim. It is theorized that psychopaths are also less able to recognize differences between ambiguous and hostile situations (Maccoon & Newman, 2006); therefore, situations more frequently get interpreted as hostile. As a result of the perceived hostility, the decision to respond with aggression forms the cycle of HAB. Notably, a recent study by Law and Falkenbach (2017) used an urban college sample and found reactive aggression and HAB (measured by the Attributional Style Questionnaire, Peterson et al., 1982) to be associated with psychopathy, particularly Self-Centered Impulsivity. Hostile attribution is consistent with people who bully and people with psychopathy's inability to take responsibility for one's actions and instead blaming others to justify their behavior, similar to the subscale of Blame Externalization.

Bullying Trajectories

Bullying was first seen as a school-related issue involving negative interactions amongst peers (Newman, Holden, & Delville, 2011). To no surprise, research has largely been directed towards understanding why school-age children bully. Juvonen and Graham (2014) found a connection between bullying and popularity by looking at over 2,000 sixth graders. Both students and teachers identified anonymously which kids were victims and bullies, as defined by Olweus (1994), as well as which were the most and least popular kids. Bullies were considered to be the “cool kids” while victims of these bullies were very unpopular. In light of the positive relation between bullying and high social status, many bullies display high self-esteem and inflated self-perceptions (Cairns & Cairns, 1994). For example, peer-identified bullies in middle school rate themselves lower on depression, social anxiety, and loneliness than youth who do not bully (Juvonen, Graham, & Schuster, 2003).

Researchers have also been interested in how bullying during high school relates to adult psychological characteristics. For example, Ragatz, Anderson, Fremouw, and Schwartz (2011) examined college students’ retrospective reports on being bullies, bully-victims or victims during their last two years of high school. Ragatz et al. (2011) found that those who self-identified as being bullies and bully-victims during high school had significantly higher scores on criminal thinking, aggression, psychopathy, and criminal behaviors than victims or controls (i.e., neither victims nor bullies). Even though bullying is typically thought to be reduced as one ages, social forms of bullying have been found to remain relatively stable (Crick, Grotpeter, & Bigbee, 2002).

Researchers have extended their focus on young people by examining the occurrence of bullying amongst adults in the workplace. Bullying at work can include behavior meant to

belittle others by means of humiliation, overworking an employee, threats, violence, and unfair supervision (Dierickx, 2004). Boddy (2010) established the existence of bullying among corporate psychopaths (i.e., psychopaths who work in a corporate organization; Howe, Falkenbach, & Massey, 2014). The findings also show that when managers who are corporate psychopaths are present in the workplace, the level of bullying is reported as significantly higher than when they are not there. Specifically, in their presence, employees reported being treated unfairly and felt as though their supervisors were disinterested in their feelings.

Despite the widely-held misconception that bullying is something that kids do as part of school life, it continues to occur at the higher education level. At the university level, researchers have established statistical evidence on the prevalence of bullying (e.g., 43% of undergraduate students report experiencing some form of bullying while at college; Rospenda, Richman, Wolff, & Burke, 2013). Although bullying behavior decreases from elementary school to college, bullying never fully ceases to exist, and there is evidence that people who bully in childhood will continue with that behavior into adulthood (Chapell et al, 2006). The literature on college student bullying parallels the children' literature in terms of personality and psychological characteristics of the bully (Kim, Catalano, Haggerty, & Abbott, 2011).

Perry and Blincoe (2015) expand upon the existing bullying research by addressing the occurrence of bullying, characteristics of bullies, and motivations for a bully's behavior at the college level. The sample consisted of 221 students at a university in the United States. Participants reported experiencing verbal bullying more commonly than physical, social, and cyber bullying. The majority of the narratives identified a fellow student as the bully. Overall, participants agreed that bully motives include a desire for power and attention. Although not

tested directly, the bully motives display similarities to psychopathic traits; namely, Social Influence, Fearless Dominance, and Machiavellian Egocentricity (Blickle & Schütte, 2017).

A recent study established the prevalence of cyberbullying/victimization in a sample of university students in Greece (Kokkinos, Antoniadou, & Markos, 2014). The most frequently reported cyber bullying behaviors were indirect (e.g., spreading rumors via text), suggesting that bullying may take the form of more subtle attacks in a college environment. Students involved in perpetrating cyberbullying endorsed more psychopathic traits, callous unemotional characteristics, impulsive/irresponsible traits, and sensation seeking behavior on the Youth Psychopathy Inventory (YPI; Andershed, Kerr, Stattin, & Levander, 2002) and had poorer social skills than victims. On the other hand, victims of cyberbullying scored higher on empathy. Psychopathic behavior (i.e., impulsiveness, irresponsibility) and affective (i.e., callousness, unemotionality) traits and a lack of social skills had a predictive association with cyberbullies. This research using the YPI in college students is the only study to consider the relationship between bullying behaviors and psychopathy; however, the YPI is designed to assess psychopathic-like traits in adolescents, rather than adults and the study was conducted on cyber bullying among Greek university students. Thus generalization of this study must be treated cautiously and research is needed not only on cyber bullying, but on verbal and emotional/relational bullying among American college students utilizing the PPI-R, which has been standardized and validated for use in community/college samples.

While there is research on bullying in college in general, gaps in the literature remain considering how personality characteristics in bullies relate directly to psychopathy and specific psychopathy traits. Much of the research thus far has identified personality characteristics and motives in bullies at the university level (Blickle & Schütte, 2017; Gibb & Devereux, 2014;

Kokkinos, Baltzidis, & Xynogala, 2016; Schenk, Fremouw, & Keelan, 2013). While the characteristics identified resemble psychopathic traits, further studies are needed to consider how these traits relate directly to psychopathy and specific psychopathy traits. Such research would contribute to broadening the study of psychopathy to include the general population, with a specific focus on bullying within college settings. Research on college students might improve our ability to eventually predict bullying behavior from assessments of psychopathy and potentially develop targets for intervention that decrease harmful bullying behavior.

Study Overview

This study aims to answer how the characteristics of psychopathic personality in university students relate to bullying. In doing so, the proposed study aims to advance the state of knowledge regarding people with psychopathic traits and their bullying behaviors. Only through a better understanding of the ways in which psychopathy manifests itself can we grasp the spectrum across various settings. The broader aim of this study is to work towards bullying interventions by better understanding the proposed relationships.

The current study aims to evaluate the relationship between psychopathy, as measured by the PPI-R (Lilienfeld & Widows, 2005), and bullying, as measured by the Bullying Scale for Higher Education Students (Dogruer & Yaratan, 2014). The research asks 1) What is the experience and occurrence of verbal, emotional/relational and cyber bullying at the college level? 2) What are the relationships between bully, victim, and bystander scores and psychopathy total scores and the three factors? 3) To what degree do psychopathic subscales and factors relate to bullies perpetrating verbal, emotional/relational, and cyber bullying? 4) Do the psychopathic factors explain more variability in bullying in combination than they do separately?

To answer these questions, several hypotheses are offered. In accordance with the research establishing the prevalence of bullying in college settings, the first hypothesis states that statistical evidence will be found for verbal, emotional/relational, and cyber bullying perpetrated by college students (bullies), experienced by college students (victims), and witnessed by college students (bystanders).

In light of the previously discussed literature, bullies tend to be rule-breaking and intolerant of differences (McGrath, 2007), and may enjoy hurting, manipulating, and dominating vulnerable targets in order to feel themselves in control and superior (Olweus, 1994). This behavior lacks justification and provocation, suggesting that people who bully have an absence of care towards how the victim suffers as a result of their actions. In line with the aforementioned research done on victim characteristics (Davis & Davis, 2007; Kohut, 2007; Olweus, 2000), victims generally display high empathy, high blame internalization, and low self-esteem. Bystanders to bullying may experience feelings of fear, guilt, and helplessness for not standing up to the bully on behalf of the victim (Ayad, 2017). Therefore, the second hypothesis states that scores on bullying items are expected to have a positive correlation with PPI-R total scores and scores on the three factors, whereas victim and bystander responses are expected to have negative correlations with PPI-R total scores and scores on the three factors.

The third hypothesis is that significant relationships will be discovered between the subtypes of bullying and the PPI-R. Verbal, emotional/relational, and cyber bullying responses are expected to be positively associated with the psychopathic subscales, as well positively associated with all three factors. Lastly, the fourth hypothesis is that Fearless Dominance, Self-Centered Impulsivity, and Coldheartedness in combination are expected to explain more variability in bullying than they do separately.

Method

Research Design

This exploratory study employed a correlational design to investigate the relationship between psychopathic traits and bullying behaviors. Specifically, the variables of interest include the seven psychopathy subscales of the PPI-R (i.e., Machiavellian Egocentricity, Rebellious Nonconformity, Blame Externalization, Carefree Nonplanfulness, Social Influence, Fearlessness, Stress Immunity) and the corresponding psychopathy factors (i.e., Fearless Dominance, Self-Centered Impulsivity, and Coldheartedness), as well as three bullying subtypes (i.e., Verbal, Emotional/Relational, and Cyber). Bullying in this study was defined as a repeated pattern of hurtful behavior involving intent to maintain an imbalance of power (Dogruer & Yaratana, 2014).

Recruitment

To recruit participants, the John Jay College of Criminal Justice's SONA system was used. An advertisement with a brief description of the study was posted on the SONA website (<https://jjay.sona-systems.com/>) where users can view and then choose to complete the study (See Appendix A). The use of an online research platform allows participants to take their time and complete the study in a comfortable place of their choice. The inclusion criteria involved being 18 or older and having access to the Internet. There were no exclusion criteria. The rationale for broad inclusion criteria is to increase the likelihood of obtaining more differences and variability via a diverse sample. Participants were compensated with four course credits. This rate was based upon the general SONA compensation of one credit/thirty minutes.

Participants

Participants consisted of a sample of 315 ethnically diverse female ($n = 234$, 72.3%) and male ($n = 81$, 25.7%) undergraduate students recruited from a northeastern college. The mean

age of the sample was 20 years (range 17-40), and 43.5% self-identified as Hispanic or Latino (n = 137), 22.9% Caucasian (n = 72), 13.0% Black or African American (n = 41), 10.8% Asian or Pacific Islander (n = 34), and 9.7% as other racial (n = 31). In regards to education level, 52.7% of participants identified as first-year student (n = 166), 21.9% sophomores (n = 69), 14.6% juniors (n = 46) and 10.5% seniors (n = 33).

Measures¹

Demographic survey. A demographic survey was given, to gather information on participants' gender, age, ethnicity, current GPA, and level of education.

Psychopathy assessment. Psychopathic personality traits were assessed using the Psychopathic Personality Inventory–Revised (PPI-R; Lilienfeld & Widows, 2005), a 154-item self-report measure that can be used in both clinical and non-clinical settings. Participants were asked to respond to items like 'People are impressed with me after they first meet me' (Social Influence) and 'It might be exciting to be on a plane that was about to crash but somehow landed safely' (Fearlessness) on a 4-point Likert scale ranging from *False* to *True*. The Cronbach's alpha (α) of the PPI-R Total Score in a general population is 0.92, with internal consistencies of the content scales ranging from $\alpha = 0.78$ to 0.87. It demonstrates high test-retest reliability ranging from 0.82 to 0.93 over a 19-day retest period. The current study's reliabilities are $\alpha = 0.90$, $\alpha = 0.91$, $\alpha = 0.90$, and $\alpha = 0.90$ for Fearless Dominance, Self-Centered Impulsivity, Coldheartedness, and Total PPI-R, respectively. Numerous studies in college and offender samples provide support for the construct validity of the PPI-R, as its total scores correlate

¹ Data were collected as part of a larger study concerning different factors and their relationship to psychopathic traits. For purposes of this study, only data from the PPI-R and the Bullying Scale for Higher Education Students were used because the hypotheses of the current study focus on a possible association between psychopathy and bullying; additional data are included for subsequent exploratory work.

moderately to highly with other measures of psychopathy (Lilienfeld & Widows, 2005). The factors were related with various clinically and theoretically relevant criterion variables (e.g., empathy, minor delinquency, direct aggression) in a community sample (Uzieblo, Verschuere, Bussche, & Crombez, 2010). This measure is suitable for individuals ages 18 to 86 years and takes approximately 15 to 25 minutes to complete.

Bullying assessment. The Bullying Scale for Higher Education Students (Dogruer & Yaratan, 2014) was used. It is a 71-item self-report measure that assesses verbal, emotional/relational, and cyber bullying behaviors perpetrated by bullies, experienced by victims, and witnessed by bystanders. Twenty-four of these items were for the “Bully” scale (e.g., verbal bullying: ‘I yell at my friends’), 24 for the “Victim” scale (e.g., victim to emotional/relational bullying: ‘Some students try to affect my relationship with my friends’), and 23 for the “Bystander” scale (e.g., bystander to cyber bullying: ‘I witness that some students send anonymous e-mails to others to threaten them’). Each of the items are rated on a Likert scale ranging from *Never* to *Always*. The current study demonstrates good reliability, as each component of the scale has an α value above .90. Confirmatory factor analysis validated the factor structure of the items in each category (bully, victim, and bystander). The Goodness of Fit (GFI) for the bullying items was found to be .954, GFI = .935 for victim items, and GFI = .918 for bystander items (Dogruer & Yaratan, 2014).

Procedure

At the beginning of the study, participants were sent a consent form online (See Appendix B). Since this study was part of a combined project, participants who clicked ‘agree’ to consent to participate were then emailed a link to the eight self-report measures to complete via Qualtrics; however, the current study includes the PPI-R, the Bullying Scale for Higher

Education Students, and a demographic survey. The duration of the entire study was no more than 2 hours. Once participants completed the study, they were provided with an educational debriefing statement (See Appendix C).

Data Analysis

Data were collected for a total of 315 users from the SONA research platform, who participated in our study. The data were transferred to an SPSS (Version 23) file for analysis. To test the first hypothesis examining the experience and occurrence of bullying at the college level, frequencies and percentages were conducted. To test the second hypothesis correlations were run between bully, victim and bystander scores and PPI-R scores; a correlation matrix was generated. To test the third hypothesis, scores of bullying responses were correlated with the PPI-R subscales and three factors; a correlation matrix was produced. Subsequently, the three factors were hierarchically entered in order of the highest correlation into a regression model with bullying as the outcome to test the fourth hypothesis. This helps determine if each psychopathy factor explains more variability in bullying in combination with others than they do separately.

Results

Preliminary Analyses

The current study's total PPI-R mean scores are reported in Table 1. The scores and scales scores are consistent with the community/college female sample in which the instrument is based on (Lilienfeld & Widows, 2005).

Table 1

Descriptive Statistics of Psychopathy and Bullying Scale for Higher Education Students

	<i>R</i>	<i>M</i> (<i>M</i> *)	<i>SD</i> (<i>SD</i> *)
Psychopathy			

Total	185.00-369.00	286.27 (276.75)	34.33 (31.14)
Fearless Dominance	67.00-155.00	110.60 (111.31)	19.11 (25.08)
Social Influence	20.00-70.00	45.32 (48.62)	9.73 (9.37)
Stress Immunity	14.44-51.00	31.41 (31.13)	7.13 (7.08)
Fearlessness	14.00-56.00	33.85 (31.56)	8.79 (8.63)
Self-Centered Impulsivity	88.00-212.00	144.16 (136.07)	23.97 (29.96)
Carefree Nonplanfulness	20.00-55.00	33.78 (34.40)	7.80 (7.25)
Rebellious Nonconformity	18.00-61.00	34.10 (31.71)	7.93 (7.38)
Machiavellian Egocentricity	23.00-69.00	42.18 (40.80)	9.16 (7.94)
Blame Externalization	16.00-54.00	34.07 (29.16)	8.22 (7.39)
Coldheartedness	16.00-54.00	31.50 (29.37)	7.30 (5.83)
Bully, Victim, Bystander	.00-63.00	6.74	10.52
Bully Total			
Verbal	.00-25.00	4.58	5.11
Cyber	.00-19.00	.92	3.31
Relational/Emotional	.00-24.00	1.63	3.75
Victim Total	.00-73.00	8.57	11.42
Bystander Total	.00-69.00	15.75	14.52

*M** means for females 18-24 years old (Lilienfeld & Widows, 2005)

*SD** standard deviations for females 18-24 years old (Lilienfeld & Widows, 2005)

Experience and Occurrence of Bullying

Frequencies and percentages of Verbal, Emotional/Relational, and Cyber bullying perpetrated by college students (Bullies), experienced by college students (Victims), and witnessed by college students (Bystanders) are presented in Table 2. In accordance with the first hypothesis, statistical evidence is found for the experience and occurrence of all three bullying subtypes.

Table 2

Frequencies and Percentages of Endorsing 'Always' on Bullying Scale for Higher Education Students

	Frequency	Percent
Bullying		
Verbal	28	8.9
Cyber	4	1.2
Emotional/Relational	14	4.4
Victim		
Verbal	20	6.3
Cyber	4	1.2
Emotional/Relational	19	5.9
Bystander		
Verbal	33	10.3
Cyber	15	4.8
Emotional/Relational	33	10.5

PPI-R and the Bullying Triad

The Pearson correlations of PPI-R total scores and Bully, Victim, and Bystander total scores are presented in Table 3. In accordance with the second hypothesis, Bully total scores were significantly correlated with PPI-R total scores ($r = .34, p = .01$), Self-Centered Impulsivity ($r = .41, p = .01$) and Coldheartedness ($r = .21, p = .01$) scores. In contrast to the second hypothesis, Victim total scores were significantly correlated with PPI-R total scores ($r = .28, p = .01$) and Self-Centered Impulsivity ($r = .41, p = .01$) and Bystander total scores were significantly correlated with PPI-R total scores ($r = .15, p = .01$) and Self-Centered Impulsivity ($r = .28, p = .01$).

Given the significant overlap between Bully and Victim Total scores ($r = .92, p = .01$) as well as Bully and Bystander Total scores ($r = .55, p = .01$) partial correlations were considered when the bully subtypes were correlated with the other study variables. When the influence of Victim and Bystander Total was controlled, Bully Total was significantly correlated with PPI-R Total ($r = .27, p = .01$), Fearless Dominance ($r = .22, p = .01$) and Coldheartedness ($r = .31, p = .01$), but no longer significantly correlated with Self-Centered Impulsivity. When the influence

of Bully and Bystander Total was controlled, Victim Total was significantly negatively correlated with PPI-R Total ($r = -.14, p = .01$), Fearless Dominance ($r = -.22, p = .01$) and Coldheartedness ($r = -.21, p = .01$), as well as no longer significantly correlated with Self-Centered Impulsivity ($r = .05, p = .35$). When Bully and Victim Total was controlled, Bystander Total was no longer significantly correlated with PPI-R Total ($r = .04, p = .47$) and Self-Centered Impulsivity ($r = .03, p = .62$).

Table 3

Correlations Between PPI-R Total Scores/Factors and Bully, Victim, and Bystander Total Scores

	Bully Total	Victim Total	Bystander Total
PPI-R Total Scores/Factors			
PPI-R Total	.34** (.27**)	.28** (-.14**)	.15** (.04)
Fearless Dominance	.02 (.22**)	-.04 (-.22**)	-.04 (.06)
Self-Centered Impulsivity	.41** (.10)	.41** (.05)	.28** (.03)
Coldheartedness	.21** (.31**)	.08 (-.21**)	-.07 (-.07)
Bully, Victim, Bystander			
Bully Total	1	.92**	.55**
Victim Total		1	.73**
Bystander Total			1

* $p < .05$ ** $p < .01$

Note. The numbers in parentheses represent partial correlations.

PPI-R and Bullying Subtypes

To determine the relationship between the psychopathic subscales on the PPI-R and bullying behaviors and totals, Pearson's correlations were conducted. Findings are presented in Tables 4 and 5. In regards to the third hypothesis, Verbal, Cyber, and Relational/Emotional Bullying were significantly correlated with Self-Centered Impulsivity ($r = .45, p = .01, r = .33, p = .01, r = .36, p = .01$, respectively), and all of its subscales. Verbal, Cyber, and Relational/Emotional Bullying were significantly correlated with Coldheartedness ($r = .24, p = .01, r = .17, p = .01, r =$

= .14, $p = .01$, respectively). Victim total scores were significantly correlated with Self-Centered Impulsivity, Carefree Nonplanfulness, Rebellious Nonconformity, Machiavellian Egocentricity, and Blame Externalization ($r = .41, p = .01, r = .26, p = .01, r = .24, p = .01, r = .32, p = .01, r = .36, p = .01$, respectively). Bystander total scores were significantly negatively correlated with Stress Immunity ($r = -.14, p = .05$) and significantly positively correlated with Self-Centered Impulsivity, Rebellious Nonconformity, Machiavellian Egocentricity, and Blame Externalization ($r = .28, p = .01, r = .24, p = .01, r = .32, p = .01, r = .36, p = .01$, respectively).

When the influence of Victim and Bystander Total was controlled, Bully Total was significantly correlated with Social Influence, Stress Immunity, and Fearlessness ($r = .16, r = .21, r = .13$, respectively), as well as Carefree Nonplanfulness, Machiavellian Egocentricity and Blame Externalization ($r = .11, r = .23, r = .12$, respectively). When the influence of Bully and Bystander Total was controlled, Victim Total was significantly negatively correlated with Social Influence, Stress Immunity, Fearlessness and Coldheartedness ($r = -.17, r = -.20, r = -.14, r = -.21$, respectively), positively associated with Blame Externalization ($r = .21$), and no longer significantly correlated with Carefree Nonplanfulness, Rebellious Nonconformity, and Machiavellian Egocentricity ($r = .04, r = .00, r = -.09$, respectively). When Bully and Victim Total was controlled, Bystander Total was significantly negatively correlated with Carefree Nonplanfulness ($r = -.12$), and not correlated with any other scale.

Table 4

Correlations Between PPI-R Factors/Subscales and Bullying Behaviors

	Verbal Bullying	Cyber Bullying	Relational/Emotional Bullying
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Psychopathy Factor/Subscale			
Fearless Dominance	.06	.01	.00
Social Influence	.07	-.03	-.03
Stress Immunity	-.05	.03	-.00
Fearlessness	.09	.04	.05
Self-Centered Impulsivity	.45**	.33**	.36**
Carefree Nonplanfulness	.27**	.33**	.27**
Rebellious Nonconformity	.23**	.18**	.22**
Machiavellian Egocentricity	.46**	.24**	.29**
Blame Externalization	.33**	.19**	.25**
Coldheartedness	.24**	.17**	.14**

* $p < 0.5$ ** $p < 0.01$

Table 5

Correlations Between PPI-R Factors/Subscales and Bully, Victim, and Bystander Totals

	Bully Total	Victim Total	Bystander Total
Psychopathy Factor/Subscale			
Fearless Dominance	.02 (.22**)	-.04 (-.22**)	-.04 (.06)
Social Influence	.07 (.16**)	-.03 (-.17**)	-.03 (.06)
Stress Immunity	-.05 (.21**)	-.08 (-.20**)	-.14* (.03)
Fearlessness	.09 (.13**)	.02 (-.14**)	.05 (.10)
Self-Centered Impulsivity	.45** (.10)	.41** (.05)	.28** (.03)
Carefree Nonplanfulness	.27** (.11**)	.26** (.04)	.06 (-.12**)
Rebellious Nonconformity	.23** (.04)	.24** (.00)	.17** (.06)
Machiavellian Egocentricity	.46** (.23**)	.32** (-.09)	.23** (.09)
Blame Externalization	.33** (.12**)	.36** (.21**)	.32** (.04)
Coldheartedness	.24** (.31**)	.08 (-.21**)	-.07 (-.07)

* $p < 0.5$ ** $p < 0.01$

Note. The numbers in parentheses represent partial correlations.

To determine the degree each psychopathy factor explains variability in bullying in combination with others, multiple regression analysis was performed to test the fourth hypothesis. The results of the regression indicated that Fearless Dominance, Coldheartedness, and Self-Centered Impulsivity explained 20% of the variance ($R^2 = .20$, $F(1, 279) = 55.04$, $p = .00$). It was found that Self-Centered Impulsivity significantly predicted bullying scores ($B = .17$, $p < .001$), as did Coldheartedness ($B = .26$, $p < .001$). Findings are presented in Table 6.

Table 6

Regression of PPI-R Factors and Bullying as Outcome

	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Model 1	-2.01	4.07		-.49	.62
Fearless Dominance	-.00	.03	-.01	-.25	.80
Coldheartedness	.30	.08	.21	3.61	.00
Model 2	-23.63	4.73		-4.9	.00
Fearless Dominance	-.02	.03	-.05	-.91	.36
Coldheartedness	.26	.07	.18	3.33	.00
Self-Centered Impulsivity	.17	.02	.40	7.41	.00

a. Dependent Variable: Bully Total Scores

Discussion

The purpose of this research was to evaluate the relationship between bullying and psychopathic traits in a college population. The findings reveal that bullying is not simply a school-age phenomenon, as it occurs at the university level as well, which supports the related literature (Chapell et al., 2006; Kokkinos, Antoniadou, & Markos, 2014; Perry & Blincoe, 2015). In the current study's sample, 14.5% of the undergraduate students studied reported partaking in bullying behaviors, 13.4% revealed being victims of bullying, and 25.6% reported to be bystanders 'always.' The overlap between bullies and victims suggests college students may be victimized and perpetrate bullying. In other words, being a bully or a victim are not independent of each other.

The data were investigated to see how Bully, Victim, and Bystander status associate with PPI-R total scores and factors. As hypothesized, psychopathy was related to being a Bully; specifically, Self-Centered Impulsivity and Coldheartedness. Closer examination of partial correlations suggests bullying behaviors are not associated with the Self-Centered Impulsivity factor, but specifically related to Carefree Nonplanfulness, Machiavellian Egocentricity and Blame Externalization. In addition, testing of the third hypothesis revealed that Verbal, Cyber,

and Relational/Emotional bullying were all related to Self-Centered Impulsivity and Coldheartedness. The association between bullying and Coldheartedness relate to the research findings that cyberbullies endorse more callous unemotional traits than victims (Kokkinos et al., 2014). Furthermore, this finding is in line with Beane (2009) who suggests that bullies display little to no empathy for their victims, as well as Boddy (2010) who found a significant relationship between corporate psychopaths and their disinterest in employees' feelings. Thus, the various bullying techniques (Verbal, Cyber, and Emotional/Relational) may be used to degrade and demean the victim while the bully remains unsympathetic. In other words, the three subtypes of bullying are all related to psychopathic traits. The association between the Self-Centered Impulsivity subscales suggests a bully's willingness to manipulate others for selfish goals by bending rules and taking advantage of victims (Machiavellian Egocentricity) and a tendency to act before thinking with little forethought to long-term goals (Carefree Nonplanfulness). The association with Blame Externalization suggests a bully being unable to take responsibility for one's actions and instead blaming others as the fault for their problems.

When partial correlations were considered due to the overlap with victim and bystander scores, a significant association emerged between Bullying and all Fearless Dominance subscales. This association is in line with previous research which found that bullying behaviors may be used as a means for the bully to gain dominance and popularity (Salmivalli & Peets, 2008). In addition, this factor has been implicated in socially adaptive behaviors (Falkenbach, Balash, Tsoukalas, Stern, & Lilienfeld, 2018; Smith, Lilienfeld, Coffey, & Dabbs, 2013; Perry & Blincoe, 2015; Salmivalli & Peets, 2008). Qualities of Fearless Dominance such as fearlessness and boldness tend to be rewarded in most corporate environments and high-risk occupations (Lilienfeld et al., 2012), suggesting that bullies may also feel gratified in university settings when

gaining dominance amongst peers. The significant association between Bullying and seven of the eight psychopathy subscales suggests students may bully more because they tend to ignore long-term consequences such as punishment or perhaps they ‘act without thinking’ when bullying others.

Surprisingly, being a Victim of a bully was associated with Self-Centered Impulsivity as well as almost completely overlapped with being a Bully. Perhaps this finding is a result of a phenomenon in the literature called “bully-victim,” that describe bullies who have been victimized themselves (Olweus, 1991). Andreou (2004) found that impulsivity was predictive of bully-victim status in a sample of Greek adolescents. A longitudinal study tracking Finnish boys from age 8 to early adulthood found that victimized bullies were at a heightened risk for developing emotional disorders, including anxiety, depression, psychosis, substance abuse, and anti-social personality disorder (Sourander et al., 2007). Ford, King, Priest, and Kavanagh (2017) found that Australian adolescents who identified as bully-victims had the highest rates of self-harm, plans for suicide, and attempted suicide. The traits of bully-victims identified in the literature mirror the associations found with Self-Centered Impulsivity; namely, impulsivity, substance use problems, antisocial behavior, negative affect, and suicidal ideation (Benning, Patrick, Salekin, & Leistico, 2005; Lilienfeld & Widows, 2005). Since both Bullies and Victims were associated with Self-Centered Impulsivity and all of its subscales, as well as with each other, bully-victims in college may tend toward self-centeredness, ruthless use of others, lack of concern regarding social norms, attribute blame to others to rationalize one’s misbehavior, and reckless impulsivity. However, when partial correlations were considered due to the overlap, being a Victim was no longer significantly associated with Self-Centered Impulsivity, except for the Blame Externalization subscale, and was negatively associated with Fearless Dominance and

Coldheartedness, thus interpolations must be made cautiously. The association with Blame Externalization may suggest a bully-victim's propensity towards aggressive behavior externally, at others, rather than turning his or her feelings inward. The negative associations found between being a Victim and psychopathy is in line with the various victim characteristics identified in the literature (Davis & Davis, 2007; Kohut, 2007; Olweus, 2000; Kokkinos et al., 2014).

Being a Bystander to bullying was also associated with Self-Centered Impulsivity, as well as overlapped with being a Bully. Although more research is needed, the finding suggests that being a witness to aggressive behavior such as bullying can result in adverse consequences, such as being a bully yourself. In line with this proposition, Janosz et al. (2018) recently found witnessing school violence predicted psychosocial and academic impairment. In other words, being a bystander of high school violence can be as mentally damaging as being directly bullied. Bystanders of major violence engage in more drug use and delinquency and being a bystander of minor violence was associated with increases in drug use, social anxiety, depressive symptoms and decreases in school engagement (Janosz et al., 2018). These symptoms reflect Self-Centered Impulsivity (Edens & McDermott, 2010; Cutler, 2008; Benning, Patrick, Salekin, & Leistico, 2005; Lilienfeld & Widows, 2005), particularly the subscale of Rebellious Nonconformity, which has largely been implicated with maladaptive functioning (Lilienfeld et al., 2012). Fowles and Dindo (2009) suggest that Self-Centered Impulsivity may be primarily linked to poor emotional and behavioral control. With a weak ability to self-regulate, a bystander to bullying may be more prone to the aforementioned symptoms. However, partial correlations no longer indicated a significant association between being a Bystander and Self-Centered Impulsivity, which is in line with Ayad (2017) who suggests bystanders experience feelings of fear, guilt, and helplessness for not intervening on the victim's behalf. Being a Bystander was negatively and

significantly correlated with Carefree Nonplanfulness, which may suggest a bystander's careful consideration of alternative solutions to problems. Rather than having a tendency to act before thinking, a bystander may be less prone to immediately intervening.

Limitations

When interpreting the results of the current study, it is important to point out its limitations. Firstly, although self-report measurements offer a highly promising method to studying subclinical psychopathy and its correlates in the community (Patrick, 2005), they are not without limitations regarding their reliability and validity. Specifically, self-reported answers may reflect social desirability bias. For example, participants may under-report undesirable behaviors such as bullying. Or, due to the sensitive nature of certain statements on the questionnaires, participants may not feel comfortable answering honestly. Additionally, statements may be misunderstood or interpreted differently amongst participants, ultimately lowering reliability. Thus, the use of self-report measures may overall decrease the likelihood of finding significant differences between the variables.

A second limitation concerning data collection methodology was the use of an online study. Participants were able to choose the setting in which they would complete the questionnaires so long as they had access to the internet. Ideally, chosen environments would be quiet and comfortable. However, since the online platform was uncontrollable, external influencers (e.g., noise levels, distractions, interruptions) were unknown and had the potential to affect responses. This limitation could impact the internal validity of the current study in ways that are difficult to estimate.

Thirdly, an urban college was selected where most students commute to class, as opposed to a campus where the majority of students live within the dormitories. Commuters may not

spend as much time on campus compared to students who attend residential campuses, which may reduce their overall experiences with other students. For example, students residing on campus may have more opportunities to bully others prompted by greater involvement in traditional college life (e.g., hazing as part of fraternities and sororities). Thus, the reported base rate of bullying may be reduced for commuter students compared to students in a peer living environment.

Lastly, correlation coefficients gave no indication of the direction of causality; moreover, it is unclear if psychopathy or bullying came first. The current study's sample had mean Self-Centered Impulsivity scores ($M = 144.16$) that were higher than the college/community sample's mean score ($M = 136.07$) in which the PPI-R is based on, suggesting that the current sample is higher on psychopathy than normal. There are many other measured or unmeasured variables that can affect the results, therefore cause-and-effect cannot be determined. For example, gender (Falkenbach, Reinhard, & Larson, 2017; Falkenbach, Barese, Balash, Reinhard & Hughs, 2015) and ethnic/racial/cultural (Issa, Falkenbach, Trupp, Campregher & Lap, 2017) differences have been noted in the psychopathy literature could moderate the association between psychopathic traits and bullying. This sample in particular had a large percentage of female and Latinx participants which may have influenced the results. Furthermore, while this study generates interesting relationships between the variables, it is important to note that extrapolations cannot be concluded. This sample produced a very large overlap between bullies, victims, and bystanders. Although partial correlations were performed, the results must be interpreted cautiously. The majority of the sample consisting of female and Latinx participants is understudied in the psychopathy literature, so future exploration is important.

Future Research

Despite these limitations, the current study serves as a good starting position for investigating the relationship between psychopathic traits and bullying behaviors, as it establishes links between the two. In terms of psychopathy, the current study found that types of bullying behavior does not seem to matter, as Verbal, Cyber, and Emotional/Relational bullying were all related to psychopathic traits. The findings contribute to an innovative and emerging branch of research concerning psychopathy in its subclinical manifestations, as the results support the notion that psychopathy is not an all-or-nothing phenomenon, but rather falls on a continuum with normality. Perpetuated myths and misconceptions regarding psychopathy have the potential to impede clinical intervention and research; thus, evidence-based practice and research is needed to dispel fictions among colleagues and laypersons. Studying psychopathic personality traits in their less severe forms may help in understanding the developmental course of this disorder.

In the future, researchers can narrow these findings down in order to determine potential causation experimentally. In order to continue to gain a better and fuller understanding, researchers should make use of laboratory tasks that measure the affective, behavioral, and physiological correlates of psychopathy as they relate to bullying. Thus, future empirical studies could combine self-report responses with other measures to obtain more accurate and comprehensive information on participants. Furthermore, researchers can investigate more bullying subtypes (e.g., prejudicial and sexual bullying) as they relate to psychopathy.

Extreme bullying remains pervasive to this day and is often contiguous with tragic consequences. It has strong empirical links to a variety of adverse psychosocial outcomes and has been implicated in school shootings and suicides. Accordingly, we can no longer view

bullying as merely a part of growing up, nor can we ignore it in grown-ups. Bullying interventions can be developed through a better understanding of the relationships the current study put forth. Practitioners in education can become aware of this by looking for traits that serve as risk markers towards identifying psychopathy in bullies. For instance, recent meta-analyses found significant correlations between bullying and CU traits, narcissism, and impulsivity in youth under 20 years of age and went further to suggest bullies may benefit from interventions geared to youth psychopathy (Van Geel, Toprak, Goemans, Zwaanswijk, & Vedder, 2016). Building upon evidence-based research could ultimately decrease harmful bullying behaviors by putting forth effective anti-bullying response strategies tailored to psychopathy. While intervention and prevention efforts geared towards bullies remain important, a more holistic approach inclusive of victims and bystanders may be just as crucial.

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Appendix A

SONA: Online Advertisement of the Study

John Jay College of Criminal Justice undergraduate students are needed to participate within an online research study. This study will take approximately 2 hours of time and will ask questions regarding childhood experiences, behavior, and history, current and past substance usage. Students will be awarded 4 credits for participating within this study.

Requirements to participate:

- 18 years of age or older

Appendix B**CITY UNIVERSITY OF NEW YORK**
John Jay College of Criminal Justice
*Department of Psychology***CONSENT TO PARTICIPATE IN A RESEARCH PROJECT**

Project Title: Investigating the Impact of Early Environmental Factors on Personality Development and Success

Principal Investigator: Nascha Streng
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524 West 59th Street
New York, NY 10019
Phone: (646) 510-0576

Co-Investigators: Esther Kim, Cordelia Chou

Faculty Advisor: Dr. Diana Falkenbach
Professor
John Jay College of Criminal Justice
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New York, NY 10019
Phone: (646) 557-4429

Introduction/Purpose: You are invited to participate in a research study as John Jay students and are between the ages of 18-65. The study is conducted under the direction of Nascha Streng, Esther Kim, Cordelia Chou, Dr. Diana Falkenbach, and John Jay College of Criminal Justice. The purpose of this research study is to examine different factors and their relationship to personality traits.

Procedures: If you agree to be in this study, we will ask you to complete a total of 8 questionnaires. The time commitment is expected to be approximately 2 hours.

Possible Discomforts and Risks: The foreseeable risks of participation in this study are minimal. These include possible eye strain from the computer screen, as well as possible breach of confidentiality. Possible discomfort may arise from answering questions about your childhood and environment. In order to minimize the risk of any potential discomfort, participants may choose to skip any question or survey that they do not wish to answer. Furthermore, in the chance of discomfort, the debriefing form will provide resources with which the participant can seek counseling or support.

Benefits: No direct benefits are anticipated for research participants, although some participants may enjoy taking a moment and self-evaluating themselves.

Voluntary Participation: Your participation in this study is voluntary, and you may decide not to participate without prejudice, penalty, or loss of benefits to which you are otherwise entitled.

Compensation: Participants will receive 4 REP course credits for completing this study. Alternatives to this is to participate in different research projects or completing alternative assignments on REP.

Confidentiality: The collected data will be accessible to the principal investigator, Nascha Streng, co-investigators Esther Kim and Cordelia Chou, and faculty advisor Dr. Diana Falkenbach. You will be asked to enter your name in order to receive REP credit, but your name will never be connected to survey responses at any time. The research team, authorized CUNY staff, and government agencies that oversee this type of research may have access to research data and records in order to monitor the research. Research records provided to authorized, non-CUNY individuals will not contain identifiable information about you. Publications and/or presentations that result from this study will not identify you by name.

Contact Questions/Persons: If you have any questions about the research now or in the future, you should contact the Principal Investigator, Nascha Streng at nascha.streng@jjay.cuny.edu, or the co-investigators, Cordelia Chou at cordelia.chou@jjay.cuny.edu and Esther Kim at esther.kim@jjay.cuny.edu. If you have any questions about your rights as a research participant or if you would like to talk to someone other than the researchers, you can contact CUNY Research Compliance Administrator at 646-664-8918. If you experience any changes in mood after participation in this study, please contact the John Jay Counseling Center at 212-237-8111.

Participant Name:

Appendix C

Debriefing Form Childhood Experiences and Personality Primary Researcher: Nascha Streng, B.A.

Thank you for your participation in this study. The purpose of this study was to explore the effect of early environmental factors, such as substance abuse, interpersonal behaviors, and family influences on adults.

Previous literature has indicated that early environmental factors during childhood and early adolescence can play a role in future outcomes in an individual's life. Research on factors such as early academic performance, peer relationships, family relationships, and environmental factors has indicated the existence of varying trajectories regarding later academic, social, and occupational success in an individual's life. Previous literature has also indicated that early environmental factors play a role in the development of certain personality characteristics in individuals that may contribute to prosocial attributes. There is less research, however, exploring the relationships between the development of personality and individual outcomes.

We are interested in observing how these early environmental factors play a role in developing particular personality characteristics, and if so, how they may contribute to success in adulthood. Success, in this study, is operationalized as academic and occupational achievement and social aptitude. We are exploring the interaction between environmental factors, personality characteristics, and success and investigating etiological factors contributing to various trajectories.

Questions and assessments within this study were aimed to avoid any distress. However, if you experienced any psychological or physical discomfort from the questions asked or from the length of the study, we encourage you to call your primary care physician or contact the John Jay Counseling Department at (212) 237-8111. In the case that you are requiring immediate psychological attention or have thoughts of harming yourself, please call the Crisis Call Center at (800) 273-8355 or text "GO" to 741741 to contact the text line.

Confidentiality: Collected data will be accessible to the primary researcher, Nascha Streng, co-investigators, Cordelia Chou and Esther Kim, the faculty advisor, Dr. Diana Falkenbach, and the Institutional Review Board members. No identifiable or personal information was collected beyond the purposes of obtaining informed consent and awarding REP credits; all survey and questionnaire responses are anonymous and have no identifiable information linking the participant to the responses.

If you have questions or concerns regarding your participation, please contact the primary researcher at nascha.streng@jjay.cuny.edu. If you have any questions about your rights as a research participant or if you would like to talk to someone other than the researchers, you can contact CUNY Research Compliance Administrator at 646-664-8918.

Thank you for your participation.