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# The Psychopath's Worldview: How Psychopathy Affects Attitudes Towards Others

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THE PSYCHOPATH'S WORLDVIEW: HOW PSYCHOPATHY  
AFFECTS ATTITUDES TOWARD OTHERS

being

A Thesis Presented to the Graduate Faculty  
of Fort Hays State University in  
Partial Fulfillment of the Requirements for  
the Degree of Master of Science

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## ABSTRACT

Psychopathy has been related to overall negative perceptions of others in past research, but the reason for these negative attitudes is unclear. The current study investigated the relationship between psychopathy and attitudes toward others and attempted to explain these negative attitudes by testing empathy and early maladaptive schemas as mediators and social dominance orientation as a moderator for this relationship. There were 191 participants in the current study; participants first read a short story and took a scale assessing attitudes toward the characters; then, they completed the Interpersonal Reactivity Index, the SDO7, the Young Schema Questionnaire-SF, and the Levenson Self-Report Psychopathy Scale, in that order. Psychopathy was significantly negatively related to empathy and attitudes toward the characters and significantly positively related to social dominance orientation and early maladaptive schemas. Both empathy and early maladaptive schemas partially mediated the relationship between psychopathy and attitudes toward others. These results help to clarify some of the questions surrounding the interpersonal functioning of individuals high in psychopathy and could potentially be used to help create interventions to address these interpersonal deficiencies.

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## INTRODUCTION

Psychopathy is a personality construct that has been studied for quite some time (e.g. Franks, 1956; Hemphill, Hare, & Wong, 1998; Lyons & Jonason, 2015), but it remains as relevant to research today as when the concept was first developed. Because of its relationship with crime and other types of antisocial behaviors (Hare & Neumann, 2009), it is vital to understand psychopathy, including potential treatments for individuals with high levels of these traits. In order to create targeted interventions to improve the functioning of individuals high in psychopathy, the manner by which they are able to behave antisocially toward others must first be better understood. There are still many questions surrounding the interpersonal functioning of individuals with high levels of psychopathic traits.

### **Psychopathy**

Psychopathy as a construct has existed for decades, although the definition has continued to develop over time. Cleckley (1941) created one of the first widely-accepted definitions of psychopathy, listing 16 traits believed to characterize these individuals. These traits included superficial charm and high intelligence, a lack of psychotic symptoms, a lack of anxiety, irresponsibility, dishonesty, a lack of remorse, antisocial behavior without proper motivation, poor judgment, egocentricity and a lack of capacity for love, shallow affect, a lack of insight, unresponsiveness in relationships, problematic and potentially aggressive and inexplicable behavior when drunk, a tendency to not carry out suicide threats, an impersonal sex life, and a lack of a clear life plan (Cleckley, 1955).

Although some of these traits have been adjusted or updated since the time of Cleckley's original work with these offenders, the concept of psychopathy nevertheless remains firmly rooted in Cleckley's original typology.

Today, psychopathy is referred to as a personality construct often considered part of the "dark side" of personality; it is characterized by dominance, grandiosity, manipulation, dishonesty, superficial charm, callousness, impulsivity, and a general lack of empathy, guilt, and remorse, along with a tendency to participate in a wide variety of antisocial behaviors that are harmful to other individuals and to society as a whole (Hare & Neumann, 2009). Changes to this construct since Cleckley's work have come from decades of empirical study, mostly conducted on offender populations. These studies have often focused on the antisocial behavior associated with psychopathy, arguably the most problematic characteristic of these individuals, particularly the subset who find themselves involved with the criminal justice system. Research in this area has shown that the antisocial behaviors associated with psychopathy can take various forms, including, but not limited to, criminal behavior (e.g. Franks, 1956; Grieve & Mahar, 2010; Walters, 2003).

The antisocial behaviors associated with psychopathy all relate to the general tendency of those with high levels of these traits to ignore or violate social norms and the rights of others; these behaviors can often lead to significant harm. Individuals high in psychopathy are often thought to be lifelong criminals, but it is important to note that not all individuals who exhibit high levels of psychopathic traits participate in criminal

activity, preferring instead to only manipulate and control others through legal means. For example, in general populations, individuals high in psychopathy also show a tendency toward interpersonal and emotional manipulation and the exploitation of others (Grieve & Mahar, 2010; Jonason & Webster, 2012). Additionally, psychopathy is related to various types of aggression, particularly physical aggression (Jones & Neria, 2015). Physical aggression is common, but it is not the only type of aggressive behavior these individuals participate in. Individuals with high levels of psychopathic traits also tend to behave in interpersonally aggressive ways in order to control others (Czar, Dahlen, Bullock, & Nicholson, 2011). These types of antisocial behaviors, while not criminal, still tend to take place in settings where the individual is able to gain something from the antisocial behavior. For instance, psychopathy has been shown to predict dishonesty about personal performance in situations where something can be gained by the dishonesty (Roeser et al., 2016). Clearly, not all the antisocial actions perpetuated by individuals high in psychopathy violate laws, but criminal behavior is nevertheless a more common occurrence in this population than the general population as well.

Psychopathy is highly related to many different types of crime and has long been considered an important predictive factor for criminal behavior and recidivism (Edens, Campbell, & Weir, 2007; Franks, 1956; Hemphill, Hare, & Wong, 1998; Walters, 2003). This association between psychopathy and crime does not only exist for violent crime, despite common perceptions of psychopaths by the general public. For instance, psychopathy has been related to theft and other nonviolent crimes (Lyons & Jonason,

2015). Nonetheless, the relationship between psychopathic traits and violence is a well-documented one (Riopka, Coupland, & Olver, 2015; Robertson & Knight, 2014). When individuals high in psychopathy do commit violent crimes, those crimes tend to be *more* violent and sadistic than those committed by non-psychopaths (Porter, Woodworth, Earle, Drugge, & Boer, 2003). These antisocial behaviors are a cause for serious concern, but despite decades of research, little has been discovered to prevent or lessen these behaviors, including violence. In fact, individuals high in psychopathy are still reported to be the cause of disproportionate amounts of violence in society despite their small numbers in the general population (Coid & Yang, 2011).

Psychopathy levels above the clinical cutoff seem to exist in very small percentages in community samples; typically, rates are estimated to be around 1% of the general population, depending on the measurement tool and cutoff score used (Hare [2003] recommends a cutoff score of 30 on the PCL-R to determine true psychopathy) (Coid & Yang, 2011; Neumann & Hare, 2008). This makes psychopathy a fairly rare condition. Despite the fact that this construct is often treated as categorical (with individuals designated psychopathic or non-psychopathic), particularly in research involving antisocial behavior and recidivism, psychopathic traits are actually hypothesized to exist on a continuum, with the majority of individuals showing no such traits (Coid & Yang, 2011; Hare & Neumann, 2008). Therefore, the prevalence of individuals with some psychopathic traits is likely higher than 1%, as this rate is calculated by using a clinical cutoff score. Nonetheless, despite these low rates in

community samples, the prevalence of psychopathy is much higher in forensic settings including prisons, with rates varying widely by study, from 7% to upwards of 30% or higher (Coid et al., 2009; Laurell & Dåderman, 2007). Higher rates in these settings are likely due to the characteristic antisocial and sometimes violent and criminal behavior associated with these traits (Neumann & Hare, 2008). Although rates higher than the 1% expected in the general population continue to be found in forensic settings, these rates do differ somewhat by gender in most reports.

Particularly in forensic settings, psychopathy appears to be much more common in males than in females. Several studies have reported different prevalence rates for these traits for males and females across various samples; for example, Hare (2003) reports that approximately 15% of males and 8% of females in forensic settings score above his cutoff of 30 on the PCL-R. Other researchers have reported that approximately 9% of female offenders score above the cutoff, which is still much lower than the rates typical for males (Vitale, Smith, Brinkley, & Newman, 2002). In addition, males typically score higher on measures of psychopathy than females, including the PCL-R, which has prompted some researchers to use lower cutoff scores for female samples (Cale & Lilienfeld, 2002; de Vogel & Lancel, 2016). It is important to note that these differences may be because the majority of the research used to define and measure this construct has been conducted on male samples, however. Despite these differences in prevalence and presentation of characteristics, the development of psychopathic traits has been shown to be similar for both males and females. Psychopathic traits tend to be

present in childhood and adolescence, and they are mostly stable until older adulthood, as are the associated antisocial behaviors (Lynam, Caspi, Moffitt, Loeber, & Stouthamer-Loeber, 2007). Relationship instability is one of the features of psychopathy that persists throughout most of the lifespan. This pattern of instability raises questions about the interpersonal functioning of psychopaths, one area not often explored when this construct is empirically examined.

Many intricate pieces of the lives and functioning of individuals with high levels of psychopathic traits are still unknown. Some studies have provided insight into the ways that psychopaths view themselves in comparison to others; for instance, past research has shown that individuals high in psychopathy tend to view themselves as more important than others, preferring to look out for their own interests as opposed to others' (Foulkes, Seara-Cardoso, Neumann, Rogers, & Viding, 2014). Several of the still-unanswered questions regarding the interpersonal functioning of individuals high in psychopathy relate to their worldview and how these individuals view others around them, particularly when they have very little information about these individuals. Newberry (2016) found that as psychopathy level increased, so did the level of negative overall relating, as well as the tendency to relate to others in ways that are sadistic and intimidating. In addition, a few studies have revealed that individuals high in psychopathy tend to view others as weak and unthreatening, regardless of their actual level of vulnerability or emotional expression (Black, Woodworth, & Porter, 2014; Brankley & Rule, 2014). While these results provide some insight, particularly as it

pertains to the ability to manipulate and take advantage of others, these results only deal with one aspect of the ways psychopathic individuals may view others.

One study has examined whether these negative perceptions extend beyond characterizations of strength or vulnerability in others; psychopathy has been shown to be related to overall negative attitudes toward others in a past study (Fisher & Hill, 2017). Although almost no information was provided about the personalities of the individuals being assessed, individuals high in psychopathy still assigned more negative characteristics to others across all of the traits assessed in the study. This seemingly “default” negative view of others could potentially help to explain many aspects of psychopathy, particularly those related to the mechanism that allows them to behave antisocially toward others, including strangers. However, the explanation for this negative view is unclear at this time (Fisher & Hill, 2017). Psychopathy has been related in past research to three separate factors that could potentially help to explain these individuals’ pessimistic perceptions of others around them; these three factors are empathy, social dominance orientation, and early maladaptive schemas.

### **Empathy**

Empathy is the first potential factor by which this negative relating might be explained. According to Davis (1983), empathy as it is typically understood includes the ability to understand and experience another person’s observed experiences without those events and the person’s thoughts and feelings about them being explicitly communicated. It is often divided into two separate but related facets: cognitive empathy and affective

empathy. The first, cognitive empathy, is the ability to mentally understand the thoughts and feelings of another, and affective empathy is the vicarious experience of those thoughts and feelings, or the ability to actually feel what someone else is feeling.

Cognitive empathy involves perspective-taking ability and the capacity to mentally transport oneself into the lives of others, including fictional others (Davis, 1980). Both of these processes are important in cognitively processing the experiences of other people. These cognitive pieces of empathy are important in social competence and interpersonal functioning (Davis, 1983). Affective empathy, on the other hand, involves feelings of sympathy and concern for others, as well as personal distress, or tension and unease in uncomfortable and upsetting interpersonal situations. Affective empathy involves actual emotional responses in reaction to someone else's emotional experiences. This type of empathy is important to the ability to express concern for others, personal vulnerability and intimacy, and feelings of sensitivity to the judgments of others (Davis, 1983). This multidimensional construct of empathy is important in understanding both behavior and interpersonal functioning, including poor interpersonal functioning.

Empathy plays an important role in social behavior and relating to others. The relationship between empathy levels and behavior has been demonstrated repeatedly in various populations (e.g. Jolliffe & Farrington, 2007; Jonason & Knoll, 2015). The relationship is fairly simple: as empathy levels decrease, participation in a wide variety of antisocial behaviors increases. For example, low levels of empathy have been related to various types of bullying and aggressive and violent behavior (Jolliffe & Farrington,

2006; Yeo, Ang, Loh, Fu, & Karre, 2011). This includes a relationship between low levels of empathy and intimate partner violence (Ulloa & Hammett, 2016). Additionally, empathy has been studied as it relates to criminal behavior, and low levels of empathy have been shown to relate to more criminal offending in general, more frequent offending, and more violent types of crimes (Jolliffe & Farrington, 2007). Conversely, high levels of empathy have been related to prosocial and altruistic behavior (Eisenberg & Miller, 1987).

Empathy does not only influence behavior; interpersonal functioning and relating to others are also affected by empathy levels. For example, increasing empathy levels has been shown to decrease racial prejudice in past research (Johnson, 2013; Johnson, Huffman, & Jasper, 2014; Johnson, Jasper, Griffin, & Huffman, 2013). Additionally, low levels of empathy are related to more relational aggression and poor interpersonal functioning (Loudin, Loukas, & Robinson, 2003). This impact of empathy on interpersonal relationships could potentially help explain the negative relating associated with psychopathy, which also has a strong relationship with empathy.

The relationship between psychopathy and empathy is a well-documented one; by definition, individuals high in psychopathy have a general lack of empathy for others. This relationship has been demonstrated empirically across cultures and both within and outside of forensic settings (Brook & Kosson, 2013; Dadds et al., 2009; Jonason & Knoll, 2015; Jonason, Lyons, Bethell, & Ross, 2013). Despite this association, when cognitive and affective empathy are examined separately, this relationship becomes less clear.

Because cognitive empathy involves the ability to understand what others are experiencing, it may be a necessary component in the interpersonal manipulation commonly associated with psychopathy. Empirical findings in this area are mixed; some studies have demonstrated both cognitive and affective empathy deficits associated with psychopathy (Brook & Kosson, 2013; Jonason & Krause, 2013; Vyas, Jameel, & Channon, 2016). Other reports have found affective empathy deficits, but have shown weaker patterns for cognitive empathy, or no relationship whatsoever (Brouns et al., 2013; Oliver, Neufeld, Dziobek, & Mitchell, 2016). The difference between these potential types of deficits is important to the construct of psychopathy, particularly as it relates to interpersonal functioning and views of others. Affective empathy is more closely related to perceptions of others, but cognitive empathy is important in functioning socially, even at a shallow, artificial level as is common in the manipulation related to psychopathy (Davis, 1983). This distinction is important to make when using empathy to explain negative relating in individuals high in psychopathy.

A deficit in empathy may influence an individual's perceptions of others around them and their ability to understand the way someone is feeling and thinking. Therefore, this lack of empathy may be one potential pathway through which the negative attitudes toward others associated with psychopathy may develop; if an individual high in psychopathy cannot understand why people feel or behave the way they do, they may be more likely to negatively evaluate them, particularly if they observe behavior or feelings in that individual that do not align with how they would feel or behave in that situation.

### **Early Maladaptive Schemas**

Schemas are cognitive patterns that are thought to develop early in childhood and are reinforced and adjusted based on experiences throughout life; these are the frameworks through which individuals see and interpret the world and their experiences (Young & Brown, 1994). Schemas can be either adaptive or maladaptive, depending on their effect on functioning in the individual's life (Young & Brown, 1994). Early maladaptive schemas are defined as "chronic, maladaptive patterns of cognition and affect that originate in adverse childhood experiences and early temperament that, in combination with maladaptive coping responses, influence interpersonal interactions and guide behavior" (Chakhssi, Bernstein, & de Ruiter, 2014, p. 359). The Young Schema Questionnaire-Short Form (second version) (Young & Brown, 1994) assesses 15 of the 18 identified early maladaptive schemas developed by Young in his schema theory. The 18 established early maladaptive schemas are abandonment/instability, mistrust/abuse, emotional deprivation, defectiveness/shame, social isolation/alienation, dependence/incompetence, vulnerability to harm or illness, enmeshment/undeveloped self, failure to achieve, entitlement/grandiosity, insufficient self-control/self-discipline, subjugation, self-sacrifice, approval-seeking/recognition-seeking, negativity/pessimism, emotional inhibition, unrelenting standards/hypercriticalness, and punitiveness. Different combinations of these maladaptive schemas are found in many individuals with certain behavioral patterns.

Specific patterns of early maladaptive schemas are thought to interfere with functioning in ways that are associated with certain symptoms of mental health conditions. For example, social anxiety has been related to high levels of abandonment, failure to achieve, self-sacrifice, approval-seeking, and emotional inhibition schemas (Calvete, Orue, & González-Diez, 2013). Other disorders show their own distinct patterns as well, and these patterns are often focused on when schema-based therapy is used to treat these conditions. In addition to mental illnesses, individuals with personality disorders have also shown specific patterns of early maladaptive schemas (Bach, Simonsen, Christoffersen, & Kriston, 2015). Individuals with borderline personality disorder, for instance, have shown very high levels of nearly all 18 early maladaptive schemas, *except* emotional inhibition, unrelenting standards, entitlement, and approval-seeking. These patterns can be very helpful in understanding the possible worldview of an individual with a specific condition (e.g. Bach et al., 2015). Certain sets of schemas have also been identified in individuals with psychopathy.

Psychopathy and early maladaptive schemas have been related in past research as well, and the findings are mixed. Some studies have demonstrated patterns of schemas for these individuals; for instance, one study showed high levels of mistrust/abuse and insufficient self-control and low levels of subjugation have been found to predict psychopathy levels (Chakhssi et al., 2014). These three particular schemas may indicate that individuals high in psychopathy do not allow others to dominate them, but do believe that others may hurt them or that others cannot be trusted. One other study has revealed

higher levels of certain schemas (i.e. emotional deprivation, mistrust/abuse, social alienation/isolation, defectiveness/shame, dependence/incompetence, vulnerability to harm or illness, enmeshment/undeveloped self, emotional inhibition, subjugation, insufficient self-control/self-discipline, and entitlement/grandiosity) in offenders with high levels of psychopathy as opposed to both non-psychopathic offenders and noncriminal controls (Gullhaugen & Nøttestad, 2012). Some of these results are directly contradictory, and in addition, one study found decreased positive schemas associated with psychopathy, but no relationship with negative or maladaptive schemas (Wilks-Riley & Ireland, 2012). A deficit in positive schemas may help explain the negative lens through which individuals with psychopathy tend to view people, but the patterns that have been shown in past studies could also help to explain this negative relating.

The specific patterns of early maladaptive schemas that have been demonstrated several times in the past with individuals high in psychopathy indicate an overall worldview that includes expectations that needs will not be met regularly, that the individual cannot function independently and successfully, and that the individual does not have a responsibility to others or to think about things in a long-term manner. These types of patterns may be related to negative evaluations of others. If individuals high in psychopathy are predisposed to develop a certain set of maladaptive or harmful schemas (particularly those that include the world and people being unreliable or dangerous), this may influence their perceptions of others around them and cause them to assign more negative characteristics to people overall, rather than waiting to receive behavioral

information to indicate whether an individual does indeed show these traits.

### **Social Dominance Orientation**

Social dominance orientation is an individual difference variable that involves an overall preference for inequality among groups in society; specifically, individuals who score high in social dominance orientation want their in-group to be superior over all other outgroups and desire hierarchy in social relations as opposed to equality (Pratto, Sidanius, Stallworth, & Malle, 1994). According to social dominance theory, this type of social dominance ideology is used in societies as a way to legitimize discrimination and minimize conflict between groups by indicating how hierarchy should be set up in that society. When the majority of the individuals in a society accept a specific promoted hierarchy, group conflict is lessened because this hierarchy is thought of as the way it should be, and members of groups both at the top and all the way throughout the hierarchy accept this societal formulation as natural and necessary. The widespread acceptance of this type of ideology allows for discriminatory allocation of things of value in a society and the maintenance of oppression and discrimination against certain groups that are deemed less valuable. Social dominance orientation, then, assesses an individual's acceptance or rejection of ideas and policies that contribute to that type of hierarchy-maintaining ideology, called "hierarchy-legitimizing myths" (Pratto et al., 1994). Social dominance orientation also influences the roles that individuals play in society, including whether those roles assist in maintaining the social hierarchy or promoting social equality.

Social dominance orientation is related to several specific ideological outlooks and constructs that are inherently hierarchy-maintaining themselves (Pratto et al., 1994). First, social dominance orientation is positively related to ethnic prejudice and sexism (in the form of the endorsement of rigid gender role adherence and natural differences between males and females). In the past, studies have found positive relationships between social dominance orientation and hostile sexism, aggression, unfavorable attitudes toward homosexuality, negative attitudes toward female and minority leaders, and endorsement of traditionally masculine norms for males (Hoyt & Simon, 2016; Kilianski, 2003; Lee, 2013; Swami et al., 2013). All of these attitudes involve prejudice against individuals who are not at the top of the social hierarchy, particularly in western society. Individuals who endorse negative attitudes toward members of oppressed groups would likely also endorse ideas that contribute to the continued oppression of these same groups.

Social dominance orientation is also negatively related to altruism, empathy, and concern for others (Pratto et al., 1994). These three factors may stop an individual from wanting to dominate others to maintain their own status, which could explain the negative relationship. In addition, several personal factors seem to influence an individual's score on social dominance orientation measures. For instance, males tend to score higher on social dominance orientation than females, likely because the hierarchy in most societies favors them over females (Pratto, Stallworth, & Sidanius, 1997; Sidanius, Levin, Liu, & Pratto, 2000). Social dominance orientation has also been studied as it relates to other

personality variables, including psychopathy (e.g. Jonason, 2015).

Past studies on general populations have indicated that psychopathy is significantly positively related to social dominance orientation (Hodson, Hogg, & MacInnis, 2009; Jonason, 2015; Jones & Olderbak, 2014). This relationship is fairly well-documented, and these results are consistently found across populations outside the United States as well (e.g. Lee et al., 2013; Yokota, 2012). Individuals high in psychopathy value themselves over others, and their tendency to manipulate and dominate others to maintain their status fits well with the hierarchy-maintaining beliefs associated with social dominance orientation. These attitudes may be another method through which individuals high in psychopathy may assign negative characteristics to others, including strangers.

This strong relationship between psychopathy and social dominance orientation could also potentially explain the negative relating associated with psychopathy. Because of social dominance orientation's strong connections with rigid gender role adherence and endorsement of traditional gender norms, particularly for males, individuals high in psychopathy may perceive particularly negative characteristics in people who are members of outgroups or who do not conform to traditional gender expectations in various ways. Additionally, because individuals high in psychopathy are dominant and likely view themselves as the top of their own social hierarchy, they may be more likely to assign negative characteristics to others in order to justify dominating them to maintain their own status.

## **The Current Study**

Additional research is necessary to address several gaps that exist within the literature surrounding these constructs and how they relate to one another. It is vital to understand the interpersonal functioning of psychopaths in order to reveal the mechanisms that allow them to engage in harmful behavior toward others. If these methods could be uncovered, treatment plans that focus on these particular factors could be implemented. This population is considered extremely difficult to treat and rehabilitate (Hare & Neumann, 2009); therefore, if discovered, treatments that target the psychopathic individual's interpersonal functioning by addressing the cause of this negative relating could be one of the first highly successful ways to lessen, and possibly even prevent, the harm they cause to others around them.

Taking into account all of the information from prior research, the current study investigated the relationships between psychopathy and attitudes toward others. Additionally, if psychopathy is related to negative attitudes toward others, as in prior research (e.g. Fisher & Hill, 2017), three potential variables that may explain these negative perceptions will be investigated in order to measure whether one factor is more suitable than another in explaining this relationship. If either empathy or number of early maladaptive schemas is found to mediate the relationship between psychopathy and attitudes toward people, or if social dominance orientation is found to moderate this relationship, this could help answer some of the questions surrounding the interpersonal functioning of individuals high in psychopathy and could also potentially help focus

treatment strategies for this population.

### **Hypotheses**

For this study, relationships will be tested between psychopathy, social dominance orientation, empathy, early maladaptive schemas, and interpersonal relating in the form of attitudes toward people. Attitudes toward people will be measured using a scale to assess ratings of characters in a short story.

**Hypothesis one.** First, consistent with past research, psychopathy is hypothesized to be significantly positively related to social dominance orientation and total early maladaptive schemas and significantly negatively related to overall empathy.

**Hypothesis two.** Psychopathy is hypothesized to be significantly negatively related to baseline attitudes toward others, as assessed by their attitudes toward two characters in a short story with almost no information provided about those characters' personalities.

**Hypothesis three.** Based on the strength of previous research, empathy and early maladaptive schemas are hypothesized to mediate this relationship between psychopathy and attitudes toward people (if it is indeed found). Social dominance orientation will be investigated as a moderator in an exploratory analysis as well because of its *potential* connections.

## METHOD

### Participants

Participants were recruited from an online survey administration system, Amazon's Mechanical Turk™. There were 191 participants in the current study, 76 males, 114 females, and one participant who identified as "other," with an age range from 22-65 ( $M_{age} = 40.27$ ,  $SD_{age} = 11.64$ ). The majority of the participants identified as white/Caucasian (82.2%), followed by Asian/Pacific Islander (7.9%), black/African American (4.7%), Hispanic/Latino/Latina (2.6%), Other (1.6%), and Native American/Alaskan Native (.5%). One participant did not specify their ethnicity (.5%). Because of the content in the short story, participants were asked whether they worked in an educational setting with children. This type of work may cause over-identification with the characters and lead to inaccurate measures of empathy and attitudes. Only 12 participants (6.3%) reported that they did work in this type of setting, while 179 participants (93.7%) reported that they did not; because this was such a small portion of the sample, all participants were included in the analyses. All IRB procedures and ethical guidelines were followed for the recruitment of these participants and for the duration of the study.

### Materials

**Short story.** Participants read a short story written by Stephanie Schmidt Johnson (Johnson, Cushman, Borden, & McCune, 2013). The story involves a student from a troubled home who is unable to go with their friends to play after school because they do

not have a bike to ride with them. They are very distressed by the loss of this escape from the problems of their home. One of their teachers learns of this situation, and they give the student their bike to alleviate some of their stress and sadness. Past research has shown that this story elicits interesting responses from participants scoring high in psychopathy (Fisher & Hill, 2017); namely, individuals who score high in psychopathy tend to report overall negative attitudes toward the characters in the story, even without any information provided about the characters' personalities. The negative baseline attitudes elicited by this story are the impetus for using it in the current study. Both the teacher and the student character are given gender-neutral names and pronouns in the story in order to prevent any gender bias from influencing results.

**Levenson Self-Report Psychopathy Scale.** Additionally, participants took the Levenson Self-Report Psychopathy Scale (Levenson, Kiehl, & Fitzpatrick, 1995). The Levenson Self-Report Psychopathy Scale consists of 26 questions rated on a 1-4 Likert scale (1 being disagree strongly, 4 being agree strongly) ( $\alpha = .91$ ) and has been found to be a reliable and valid measure (Levenson et al., 1995; Salekin, Chen, Sellbom, Lester, & MacDougall, 2014). Participants are asked to rate their level of agreement with statements like “success is based on survival of the fittest; I am not concerned about the losers” and “I enjoy manipulating other people’s feelings.” A total psychopathy score was created by summing participants’ responses. This sample had a range of psychopathy scores from 26-86.

**Interpersonal Reactivity Index.** Participants also took the Interpersonal

Reactivity Index (Davis, 1980) to measure empathy. This scale has 28 items that participants rate on a 1-5 Likert scale (with 1 being does not describe me very well and 5 being describes me well) ( $\alpha = .88$ ). The scale contains items like “I believe that there are two sides to every question and try to look at them both” and “when I watch a good movie, I can very easily put myself in the place of a leading character” and is considered a reliable and valid measure of the four dimensions of empathy (Davis, 1980; Davis, 1983). A total empathy score was calculated by summing participants’ responses. Additionally, scores for each subscale and for cognitive and affective empathy were created by summing participants’ responses to the items that make up each dimension and subscale.

**Social Dominance Orientation 7.** The Social Dominance Orientation 7 (SDO7) scale (Ho et al., 2015) was also included; the measure was found to be reliable and valid by Ho and colleagues, but as this is a relatively new version of this scale, additional reports of its psychometric qualities are not available. This scale includes 16 items that participants rate on a 1-7 scale (1 being strongly oppose and 7 being strongly favor) ( $\alpha = .96$ ). It contains items such as “some groups of people must be kept in their place” and “we shouldn’t try to guarantee that every group has the same quality of life.” A total social dominance orientation score was created by summing participants’ responses.

**Young Schema Questionnaire-Short Form 2.** Participants also completed the Young Schema Questionnaire-Short Form 2 (Young & Brown, 1994), a 75-item scale to assess various early maladaptive schemas. These items are rated on a 1-6 Likert scale (1

being completely untrue of me and 6 being describes me perfectly) ( $\alpha = .97$ ) and include statements such as “for the most part, I have not had someone who really listens to me, understands me, or is tuned into my true needs and feelings” and “I’m unworthy of the love, attention, and respect of others.” This scale is considered a reliable and valid measure for research purposes (Oei & Baranoff, 2007). A total score for early maladaptive schemas was created by summing participants’ responses. In addition, a total for each individual early maladaptive schema was created by summing participants’ responses to the items that make up each individual dimension of the YSQ-SF2.

**Social desirability scale.** In order to control for social desirability, participants additionally filled out a social desirability scale (Crowne & Marlowe, 1960), consisting of 33 items rated either true or false ( $\alpha = .90$ ) with statements such as “I never hesitate to go out of my way to help someone in trouble.”

**Attitudes scale.** Finally, a self-constructed measure of attitudes toward the characters in the story was included (Fisher & Hill, 2017). The self-constructed attitudes scale asks participants to rate each of the main characters in the story on 10 pairs of opposite adjectives (e.g. unintelligent/intelligent, weak/strong) with lower ratings indicating more negative assessments of the characters ( $\alpha_{\text{student}} = .83$ ,  $\alpha_{\text{teacher}} = .94$ ). This scale was used in a prior study by this author, and individuals high in psychopathy showed overall negative attitudes toward others on this scale. A total attitudes score was created by summing participants’ responses, and the same procedure was used to create total scores for both the student and the teacher character.

## **Procedure**

Participants had the option to participate in this study by selecting it from a list of a number of other surveys on their Mechanical Turk worker accounts. First, participants read the informed consent statement and were told that by continuing with the study, they were providing their consent. This was done because the study was conducted online, and therefore, written consent was waived. Then, participants read the short story. After reading the short story, participants completed the attitudes toward the characters scale, then the social desirability scale, the Interpersonal Reactivity Index, the SDO7, the Young Schema Questionnaire-SF, and the Levenson Self-Report Psychopathy Scale. Because randomization is not possible on MTurk, participants completed the scales in that order.

After finishing the scales, participants completed a demographics form that asked their age, ethnicity, gender, and whether or not they worked in an educational setting with children. The final question was intended to control for any increased feelings of empathy or more positive attitudes that may have arisen from individuals feeling more connected to the character of the teacher in the story. Finally, participants were debriefed and provided with the contact information for the principal investigator and the faculty advisor, as well as the department ethics chair and the university IRB. Their payment of \$1.00 was deposited into their Mechanical Turk worker accounts after the study was completed.

## RESULTS

### **Data Cleaning**

Participants' data were removed from the analysis if they were missing more than one response on any one questionnaire within the study. If participants were only missing one response, their mean for that survey was inserted in place of the missing response. This resulted in the removal of 81 participants. Additionally, 12 participants' data were removed from the analysis for spending less than ten minutes on the survey; this was the minimum amount of time judged necessary to read the short story and respond to all questions without responding randomly. Finally, five participants' data were removed because they were outside of the age limit of 18-65 approved by the IRB for this study. Because MTurk does not allow restrictions based on age to prevent these individuals from selecting the study, these participants were dropped from analysis. After data cleaning, a final total of 191 participants were included in the analysis.

A preliminary analysis of the data revealed that all variables were normally distributed with the exception of attitudes toward the teacher, which was slightly negatively skewed, but was considered approximately normal with a skewness statistic of only -2.07. There were also no outliers of concern for any of the variables, tested using the z-score method.

### **Main Analysis**

**Test of hypothesis one.** To test hypothesis one, a series of Pearson correlation coefficients was calculated. As expected, psychopathy was significantly negatively

correlated with overall empathy,  $r(189) = -.36, p < .001$ . Psychopathy was also significantly positively correlated with social dominance orientation,  $r(189) = .37, p < .001$ , and total early maladaptive schemas,  $r(189) = .56, p < .001$ , as hypothesized.

**Test of hypothesis two.** To test hypothesis two, a second series of correlations was calculated (see Table 1). As expected based on Fisher and Hill (2017), psychopathy was once again significantly related to negative attitudes toward both the student and the teacher character on all dimensions tested with the exception of happiness, morality, and optimism in the student character (happiness and psychopathy have a significant positive relationship; morality and psychopathy still have a negative relationship with a value of  $-.13$ , albeit not a significant one, and optimism and psychopathy have a very slightly nonsignificant positive relationship with a value of  $.09$ ). These results mimic those found in the Fisher and Hill (2017), which is an interesting effect. However, it is important to note that although these are intended to be baseline judgments of character, these are also the only traits for which at least a small amount of information about expression is actually given in the short story. This could make the results for these specific traits slightly different from baseline attitudes, which could be the reason for the lack of a negative effect with these particular traits.

Table 1		
<i>Correlation Matrix for Reported Attitudes</i>		
	Psychopathy	
Student	Strong	-.23**
	Intelligent	-.29**
	Kind	-.15*
	Moral	-.13
	Successful	-.18*
	Hardworking	-.26**
	Trustworthy	-.28**
	Happy	.21**
	Generous	-.24**
	Optimistic	.09
Teacher	Strong	-.25**
	Intelligent	-.30**
	Kind	-.28**
	Moral	-.22**
	Successful	-.22**
	Hardworking	-.29**
	Trustworthy	-.24**
	Happy	-.27**
	Generous	-.21**
	Optimistic	-.27**

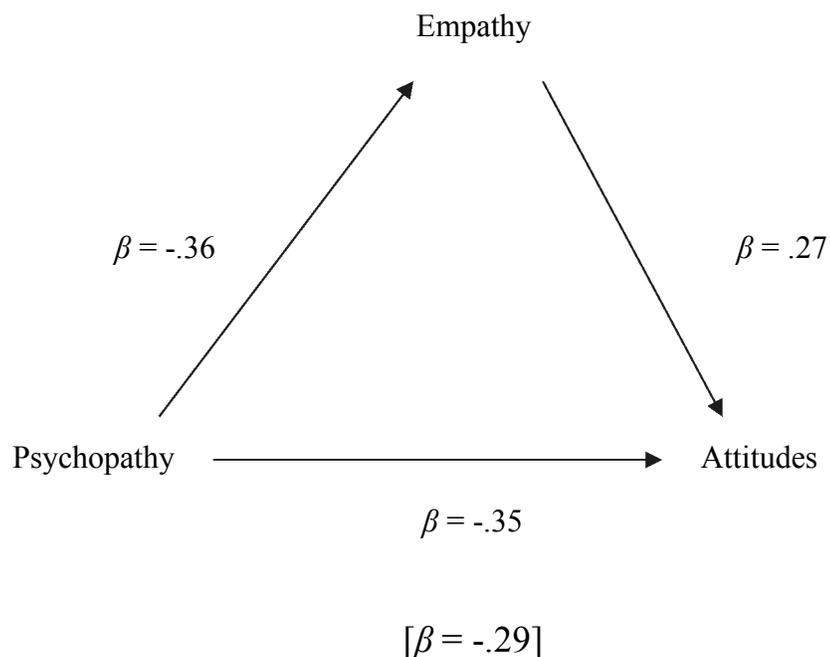
\*\* - correlation is significant at the .01 level

\* - correlation is significant at the .05 level

**Test of hypothesis three.** The Baron and Kenny (1986) approach to testing for mediation was used to assess the possible mediating relationships outlined in hypothesis three. The first analysis tested empathy as a mediator for the relationship between psychopathy and attitudes toward others. Psychopathy was a significant negative predictor of attitudes toward others,  $\beta = -.35$ ,  $t(189) = -5.13$ ,  $p < .001$ , and empathy,  $\beta = -$

.36,  $t(189) = -5.25, p < .001$ . Empathy was a significant positive predictor of attitudes toward others,  $\beta = .27, t(189) = 3.89, p < .001$ . In order to test for a mediation effect, attitudes toward others was regressed onto both empathy and psychopathy. After controlling for the overlapping variance with empathy, psychopathy was not as predictive of attitudes toward others,  $\beta = -.29, t(188) = -4.02, p < .001$ . This indicates that empathy partially mediates the relationship between psychopathy and attitudes toward others.

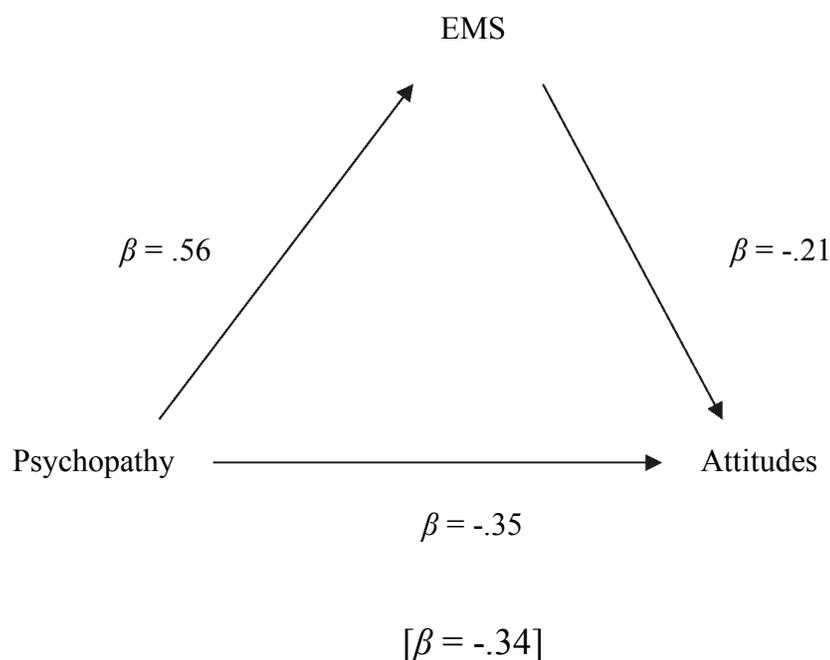
Figure 1: Mediation model—empathy



A second analysis was conducted to test total early maladaptive schemas as a mediator for the relationship between psychopathy and attitudes toward others. Psychopathy was a significant positive predictor of early maladaptive schemas,  $\beta = .56, t(189) = 9.36, p < .001$ . Total early maladaptive schemas was also a significant negative

predictor of attitudes toward others,  $\beta = -.21$ ,  $t(189) = -2.98$ ,  $p = .003$ . After controlling for the overlapping variance with total early maladaptive schemas, psychopathy was not as predictive of attitudes toward others,  $\beta = -.34$ ,  $t(188) = -4.08$ ,  $p < .001$ , indicating that total early maladaptive schemas also partially mediates the relationship between psychopathy and attitudes toward others. These results partially support hypothesis two.

Figure 2: Mediation model—early maladaptive schemas



Social dominance orientation was also investigated for its potential connections to psychopathy and attitudes toward others in a two-step hierarchical regression procedure. At step 1, psychopathy and social dominance orientation were entered as predictors, and at step 2, a product term from the centered variables was entered. Analysis of the model indicated that it was significantly able to predict attitudes toward others,  $F(3, 187) = 8.73$ ,

$p < .001$ ,  $R^2 = .12$ . However, only psychopathy was a significant unique predictor of attitudes toward others,  $t(187) = -4.57$ ,  $p < .001$ . Neither social dominance orientation nor the product term were unique predictors of attitudes toward others, indicating no moderation effect.

### **Exploratory Analysis**

The sample was analyzed to see if the participants differed in their levels of any of the variables according to their gender. Because only one individual did not identify as either male or female, only these two larger groups were included in the following analyses.

First, males and females did differ significantly in their levels of psychopathy. Males ( $M = 49.43$ ,  $SD = 14.23$ ) showed significantly higher levels of psychopathy than females ( $M = 43.34$ ,  $SD = 11.58$ ),  $t(137.99) = 3.11$ ,  $p = .002$ . This is in line with past research, which has consistently shown that males score higher in psychopathy than females (e.g. Hare, 2003; Vitale et al., 2002).

Males ( $M = 37.63$ ,  $SD = 6.85$ ) had slightly more negative attitudes toward the student character than females ( $M = 39.63$ ,  $SD = 6.26$ ),  $t(188) = -2.09$ ,  $p = .038$ . This was also true for the teacher character; males ( $M = 53.95$ ,  $SD = 7.32$ ) also had more negative attitudes toward this character than females ( $M = 56.86$ ,  $SD = 5.03$ ),  $t(121.57) = -3.02$ ,  $p = .003$ . However, given the effect empathy has been shown to have on attitudes toward these characters, these differences may be explained by differences in empathy between males and females. Males ( $M = 89.59$ ,  $SD = 14.95$ ) showed significantly lower levels of

empathy overall than females ( $M = 98.86, SD = 14.68$ ),  $t(188) = -4.23, p < .001$ .

Contrary to past research (Pratto et al., 1997; Sidanius et al., 2000), in this sample, males ( $M = 42.85, SD = 25.72$ ) did not show significantly different levels of social dominance orientation than females ( $M = 37.32, SD = 21.56$ ),  $t(188) = 1.60, p = .111$ . There were also no significant differences between males ( $M = 188.25, SD = 63.14$ ) and females ( $M = 187.43, SD = 57.58$ ) on total early maladaptive schemas  $t(188) = .09, p = .926$ .

The relationship between psychopathy and the two facets of empathy was analyzed to attempt to determine exactly what parts of empathy are deficient in psychopathy. A series of linear regression analyses were conducted to test these relationships. Psychopathy was a significant negative predictor of cognitive empathy,  $t(189) = -6.67, p < .001, \beta = -.45$ . However, contrary to past research, psychopathy was not a significant negative predictor of affective empathy,  $t(189) = -1.84, p = .067, \beta = -.13$ . To further probe these relationships, the four dimensions of empathy were examined separately. Psychopathy was a significant negative predictor of both domains that make up cognitive empathy: perspective taking,  $t(189) = -6.37, p < .001, \beta = -.42$ , and fantasy,  $t(189) = -4.55, p < .001, \beta = -.31$ . Psychopathy was also a significant negative predictor of the empathic concern scale of empathy,  $t(189) = -9.42, p < .001, \beta = -.57$ . However, the opposite was true for the personal distress scale of empathy; psychopathy was a significant *positive* predictor of this domain,  $t(189) = 5.25, p < .001, \beta = .36$ .

In order to test whether cognitive or affective empathy or both were effective

overall at predicting attitudes toward the characters, a multiple regression analysis was conducted using cognitive empathy and affective empathy as predictors and total attitudes toward the characters as the criterion. The overall model was significant,  $F(2, 188) = 7.53, p = .001$ ; however, only cognitive empathy was a unique predictor of attitudes,  $t(188) = 2.33, p = .021, \beta = .18$ . Affective empathy was not a significant unique predictor,  $t(188) = 1.90, p = .059, \beta = .15$ .

To make better sense of these results, the four scales that make up the empathy measure were examined separately for each individual character. For the student character, only the empathic concern scale was a significant predictor of attitudes toward the character,  $t(186) = 5.03, p < .001, \beta = .47$ . The other three scales were not significant predictors, but all had negative  $\beta$  values. For the teacher character, the overall model with all four scales was significant, but none of the four scales was a significant unique predictor. Only personal distress had a negative  $\beta$  value in this case. Although empathic concern was not a significant unique predictor in this case, it was still the strongest predictor in the model for the teacher character as well.

To examine what early maladaptive schemas predict psychopathy, all of the 15 early maladaptive schemas assessed by the YSQ-SF were entered into a multiple regression analysis as predictors with psychopathy as the criterion. The overall model was significant,  $F(15, 175) = 17.32, p < .001$ . Four early maladaptive schemas emerged as significant predictors of psychopathy. First, mistrust/abuse was a significant positive predictor of psychopathy,  $t(175) = 2.60, p = .010, \beta = .20$ . Additionally,

dependence/incompetence,  $t(175) = 2.88, p = .004, \beta = .27$ , and entitlement/grandiosity,  $t(175) = 5.53, p < .001, \beta = .37$ , were significant positive predictors of psychopathy. One significant negative predictor emerged, self-sacrifice,  $t(175) = -4.31, p < .001, \beta = -.27$ .

## DISCUSSION

Hypotheses one and two were supported by this analysis. All of the expected relationships between these variables based on past research were supported in this data. Hypothesis three was partially supported; both empathy and early maladaptive schemas do partially mediate the relationship between psychopathy and attitudes toward others, indicating that both of these may be potential explanations for the negative attitudes toward others associated with psychopathy. However, there was no significant interaction between psychopathy and social dominance orientation that impacted attitudes toward others.

These results point to two potential processes influencing negative attitudes toward others. Empathy as a whole is believed to be a response with biological correlates (Corradini & Antonietti, 2013), which may indicate that the empathy deficits associated with psychopathy also are indicative of biological differences or deficits in this population. A specific biological difference in individuals with high levels of psychopathic traits may be the route through which these empathy deficits, and the subsequent negative attitudes toward others, develop. Indeed, past research has supported the idea that a biological change does account for the differing levels of empathy between individuals high and low in psychopathy. For instance, youth and adults with psychopathic traits have shown reduced activation in the amygdala and other brain areas and reduced electrodermal responses in reaction to depictions of distress in others (Blair, 2013; Blair, Jones, Clark, & Smith, 1997; Decety, Chen, Harenski, & Kiehl,

2013). Although these biological correlates of the empathy response are not yet fully understood, they do lend support to the idea that physical differences of some sort could be the mechanism through which empathy deficits and, according to these results, subsequent negative attitudes toward others, may develop.

In addition, a second process could be influencing these negative attitudes, as evidenced by the fact that total early maladaptive schemas partially mediates the relationship between psychopathy and attitudes toward others as well. Schema development is a neurological process involving the prefrontal cortex (Hebscher & Gilboa, 2016; Spalding, Jones, Duff, Tranel, & Warren, 2015). This is one area that is hypothesized to be different or deficient in individuals with high levels of psychopathic traits (Blair, 2007; Vieira et al., 2014). The neurological deficits in this particular brain area associated with psychopathy may at some level predispose individuals to develop specific types of maladaptive schemas early in life. These maladaptive schemas, strengthened through negative experiences with individuals throughout life, may lead to negative baseline attitudes toward others as shown by Fisher and Hill (2017) and replicated in this study.

Empathy was a stronger mediator than early maladaptive schemas; this may indicate that empathy is a good place to begin to attempt to change the negative attitudes toward others associated with psychopathy. However, this is only partial mediation, so there are other factors influencing this dynamic that still have yet to be discovered. Further investigation into this relationship is required to fully understand why these

negative attitudes toward others exist. However, particularly for empathy, more information about specific deficits can be gleaned from the data in this study.

The exploratory analyses helped to understand the dynamics of these relationships in more depth. First, as in past research, males scored higher in psychopathy than females (Cale & Lilienfeld, 2002; de Vogel & Lancel, 2016). Females also scored higher in empathy than males, as is common in most studies (e.g. Davis, 1983). Males had significantly more negative attitudes toward both the student and the teacher character than females, but these differences may be because of the empathy differences. Interestingly, contrary to past research, males did not score significantly higher than females in social dominance orientation (Pratto et al., 1997; Sidanius et al., 2000). This result may call into question the results of the moderation analysis involving social dominance orientation, which need to be replicated because of this lack of confirmation of the gender differences typically found for this construct. There were also no gender differences in early maladaptive schemas.

The use of the interpersonal reactivity index to measure empathy allowed for deeper insight into the specific empathy deficits in psychopathy itself and those that may be influencing this relationship with attitudes. First, psychopathy was associated with cognitive empathy deficits in this sample. The research in this area has been mixed, so further confirmation such as this is required to understand the nuances of these deficits. However, psychopathy was *not* associated with affective empathy deficits in this sample. This relationship was probed further, and psychopathy was negatively associated with

empathic concern, as would be expected, but positively associated with personal distress. This positive relationship with personal distress has not been found previously to this author's knowledge and may be the result of an error rather than a real effect. Cognitive empathy was also the only significant unique predictor of attitudes. Further investigation into the specific areas of empathy deficits in psychopathy can help create more focused and hopefully more successful interventions for this population.

Additionally, this study lends further clarity to the relationship between psychopathy and early maladaptive schemas. According to this study, psychopathy is associated with higher levels of mistrust/abuse, entitlement/grandiosity, and dependence/incompetence schemas. Additionally, psychopathy is associated with lower levels of self-sacrifice schemas. Other studies have found that high levels of mistrust/abuse and entitlement/grandiosity predict psychopathy, which is supported by this data (Chakssi et al., 2014; Gullhaugen & Nøttestad, 2012). However, the positive relationship with dependence/incompetence and the negative relationship with self-sacrifice has not been demonstrated previously to this author's knowledge. These results, with further confirmation, could provide important new insights into the inner workings of individuals with high levels of psychopathic traits. The presence of these maladaptive schemas suggests a worldview that includes ideas that people are dangerous and untrustworthy, that the individual is superior to others and deserves special treatment, an unwillingness to help others at any personal cost, and that the individual cannot make good decisions and handle the issues of everyday life appropriately. These schemas

together paint a picture of an individual who doubts his or her own abilities while simultaneously feeling that they deserve special treatment and fearing that others will attempt to stop them from receiving that treatment. The acts of abuse and impulsivity associated with psychopathy seem almost reasonable when viewed in this light. Further research to confirm the presence of these schemas in psychopathic individuals could provide a solid starting point for schema-based therapy with these individuals, and this is an important avenue for future research.

There are several strengths and benefits of this study. As previously stated, psychopathy is still a complex construct, and many questions remain to be answered about the inner world and the functioning of these individuals. These results help to provide more nuanced information about some of the previously-identified deficits associated with psychopathy. The better these deficits are understood, the more likely it is that successful treatments can be created for these individuals. More focused treatments could allow psychologists to potentially begin to help individuals high in psychopathy improve their interpersonal and social functioning. This is particularly important because psychopathy is known to be incredibly resistant to most traditional forms of treatment and the capacity for harm associated with these individuals is huge (Hare & Neumann, 2009).

This research is not without limitations. First and foremost, the attitudes scale only assesses two specific individuals, and those individuals are fictional characters in a story. Thus, these results may not generalize to people who show very different

characteristics than those two characters. Furthermore, this research was conducted on a sample that likely consisted mostly of subclinical examples of psychopathy because the sample was taken from a general community population and not a forensic population. Finally, the online administration method required the use of self-report psychopathy measures, which may not assess the levels of these traits as accurately as traditional interview methods such as the PCL-R. However, certain surface limitations of the current study may in reality be strengths because of the unique information they add to our knowledge base of the construct of psychopathy. For example, if psychopathy exists on a continuum, most research tends to focus on the extremely high end, with clinical populations. This study adds depth to our understanding of psychopathy by exploring typical behaviors and cognitive processes for individuals with subclinical levels, which is a much larger proportion of the population.

In future research, individuals who differ from the characters in this short story should be included to ensure that the overall negative perceptions persist and are not caused by some sort of a bias against individuals showing some particular trait that these characters show. Future research should also attempt to assess the attitudes toward others of individuals high in psychopathy using descriptions or depictions of real individuals rather than characters in a story. Finally, future research should attempt to create intervention programs focused on empathy and the particular early maladaptive schemas that are associated with psychopathy to attempt to alter these overall negative perceptions of others. Some interventions dealing with empathy induction in normal populations do

exist, and these interventions could be tested on individuals with high levels of psychopathic traits as well to begin the search for successful treatments. Future studies could also attempt to see what other variables influence this relationship between psychopathy and perceptions of others, since empathy and early maladaptive schemas only partially mediate this relationship.

This research helps to clarify the specific factors related to psychopathy and how these may work together to create some of the characteristic traits and behaviors associated with this construct. It is important to fully understand this condition, particularly because of its strong association with various harmful behaviors. Most interventions for individuals high in psychopathy have not been particularly helpful in the past, but with more research examining all of these intricate pieces, successful treatments may begin to become a reality.

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**Appendix A****Recruitment Script**

Hello participant,

This is a study conducted by Arianne Fisher at Fort Hays State University. This study will require you to be able to answer questions about yourself and your attitudes toward people. We ask that you take this seriously and take your time reading and answering the questions. The study should take approximately 25 minutes to complete. For participating in the study, you will be compensated \$1.00. If you chose to participate, please continue to read the informed consent.

Arianne Fisher

Fort Hays State University

alfisher5@mail.fhsu.edu

Dr. W. Trey Hill

Fort Hays State University

wthill@fhsu.edu

## Appendix B

### Informed Consent Form

#### CONSENT TO PARTICIPATE IN RESEARCH

*Department of Psychology, Fort Hays State University*

***Study title: Personality and Attitudes Toward People***

*Name of Researcher: Arianne Fisher*

*Contact Information: [alfisher5@mail.fhsu.edu](mailto:alfisher5@mail.fhsu.edu)*

*Name of Faculty Supervisor & Contact Information: Dr. Trey Hill  
([wthill@fhsu.edu](mailto:wthill@fhsu.edu))*

**You are being asked to participate in a research study. It is your choice whether or not to participate.**

Your decision whether or not to participate will have no effect on you.

#### **What is the purpose of this study?**

The purpose of our experiment is to better understand the relationships between certain personality traits and attitudes toward people. Previous research has looked at these traits and attitudes extensively, and this research seeks to expand that knowledge.

#### **What does this study involve?**

As part of the study you will be required to answer questions about yourself and your beliefs. After you complete all necessary parts of the study, you will be debriefed.

**The length of time of your participation in this study is approximately 25 minutes. Approximately 200 participants will be in this study.**

#### **Are there any benefits from participating in this study?**

This research could be used to help understand the effects personality and attitudes can have on behavior. Participants who complete the study will also be

paid \$1.00 for their time and participation.

**Will you be paid or receive anything to participate in this study?**

For participating in this study you will be paid \$1.00 once you have completed your participation.

**What about the costs of this study?**

Other than approximately 25 minutes, there are no costs to you for participating in this experiment.

**What are the risks involved with being enrolled in this study?**

It is unlikely that participation in this project will result in harm to participants. However, if you do experience abnormal stress, you will be able to cease participation at any moment by choosing to exit the internet window.

**How will your privacy be protected?**

Efforts will be made to protect the identities of the participants and the confidentiality of the research data used in this study. Potentially identifiable information about you will consist of your answers to the survey about yourself and your demographics (i.e., age, sex, ethnicity). Your data will be identified by an ID number that will not be associated with your name. This data is collected only for research purposes. Data files which do not contain your identifying information will be kept in electronic format indefinitely. Access to all of the data will be limited to the researchers in the study. Findings from this study may be presented at meetings or published in papers, but your name will not ever be used in these presentations or papers.

**Other important items you should know:**

- **Withdrawal from the study:** You may choose to stop your participation in this study at any time. Your decision to stop your participation is your decision. If you chose to do so, please exit out of the internet window.
- **Funding:** There is no outside funding for this research project. All money is provided by the researcher.

**Whom should you call with questions about this study?**

Questions about this study should be directed to either Dr. Trey Hill (wthill@fhsu.edu) or Arianne Fisher (alfisher5@mail.fhsu.edu). If you have questions, concerns, or suggestions about human research at FHSU, you may call the Office of Scholarship and Sponsored Projects at FHSU (785) 628-4349 during normal business hours.

Please copy and print this form out for your own records.

**CONSENT**

I have read the above information about *Personality and Attitudes Toward People*. By continuing, I agree to participate in this study, and I have been given a copy of this document for my own records. I understand that I can change my mind and withdraw my consent at any time. By continuing, I understand that I am not giving up any legal rights and I am between the ages of 18 and 65.

## Appendix C

### Debriefing Form

#### Personality and Attitudes Toward People Debriefing

The purpose of this study was to observe the relationships between certain personality traits and attitudes toward people. This study attempted to measure relationships between empathy, psychopathy, Social Dominance Orientation, maladaptive schemas, and attitudes toward people.

If after participating in this project you are feeling distressed from any questions on the surveys, or if you have any questions about this project or your rights as a participant in this project, please contact:

Arianne Fisher  
Principal Investigator  
alfisher5@mail.fhsu.edu

Dr. Trey Hill  
Faculty Research Advisor  
wthill@fhsu.edu  
785.628.4405

Dr. Trey Hill  
Chair, Ethics Committee  
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785.628.4405

Leslie Paige  
University IRB  
lpaige@fhsu.edu  
785.628.4349

## Appendix D

### IRB Decision Letter



**FORT HAYS STATE  
UNIVERSITY**

*Forward thinking. World ready.*

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OFFICE OF SCHOLARSHIP AND SPONSORED PROJECTS

DATE: May 10, 2017

TO: Arianne Fisher

FROM: Fort Hays State University IRB

STUDY TITLE: [1062472-1] psychopathy and negative attitudes

IRB REFERENCE #: 17-137

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: May 10, 2017

REVIEW CATEGORY: Exemption category # 2

Thank you for your submission of New Project materials for this research study. The departmental human subjects research committee and/or the Fort Hays State University IRB/IRB Administrator has determined that this project is EXEMPT FROM IRB REVIEW according to federal regulations.

Please note that any changes to this study may result in a change in exempt status. Any changes must be submitted to the IRB for review prior to implementation. In the event of a change, please follow the Instructions for Revisions at <http://www.fhsu.edu/academic/gradsch/irb/>.

The IRB administrator should be notified of adverse events or circumstances that meet the definition of unanticipated problems involving risks to subjects. See <http://www.hhs.gov/ohrp/policy/AdvEvtGuid.htm>.

We will put a copy of this correspondence on file in our office. Exempt studies are not subject to continuing review.

If you have any questions, please contact Leslie Paige at [lpaige@fhsu.edu](mailto:lpaige@fhsu.edu) or 785-628-4349. Please include your study title and reference number in all correspondence with this office.