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The Relationship of Empathy and Impulsivity to The Dark Tetrad of Personality

Ashlee Justice
Abilene Christian University, akj10a@acu.edu

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ABSTRACT

Though relationships between empathy, impulsivity, and personality traits making up the Dark Tetrad of personality have been studied individually, the relationship of empathy and impulsivity to the Dark Tetrad of personality simultaneously has not been studied. The current study examined the relationship of both empathy and impulsivity to the Dark Tetrad simultaneously, and assessed specific combinations of traits, empathy, and impulsivity. Participants from a private university completed online surveys. Correlations and predictions of variables were examined. Individuals who rated high on Machiavellianism, psychopathy, and sadism had significantly lower scores on empathy subscales, and individuals rating high on these as well as narcissism had significantly high scores on impulsivity subscales. Results also indicated that psychopathy and sadism both predicted lack of empathy, while only sadism significantly predicted poor impulse control. Surprisingly, narcissism was positively correlated with, and predictive of empathy. Overall, it was found that the combination of psychopathy and sadism simultaneously could result in particularly dangerous outcomes.

Keywords: Dark Tetrad, empathy, impulsivity, psychopathy, sadism

The Relationship of Empathy and Impulsivity to The Dark Tetrad of Personality

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Master of Science

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By

Ashlee Justice

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CHAPTER I

INTRODUCTION

While many studies have observed associations between the Dark Triad traits and impulsivity and empathy separately, none have attempted to correlate both empathy and impulsivity with the Dark Triad simultaneously. For example, studies have shown that individuals lacking in empathy, specifically violent offenders, display generally reduced automatic physiological arousal when confronted with distress-inducing cues (Pfabigan et al., 2015). Other studies have found that personality-disordered violent offenders display greater levels of impulsivity compared to samples of healthy controls (Dolan & Fullam, 2004). These individuals also have difficulties in behavioral/response inhibition. Recent research shows that the traits associated with the Dark Triad and Dark Tetrad have also been associated with aggressive and antisocial behaviors, decreased empathy, and greater impulsivity (Buckels, Jones, & Paulhus, 2013; Crysel, Crosier, & Webster, 2013; Giammarco & Vernon, 2015; Jonason & Kroll, 2015; Reidy, Zeichner, & Seibert, 2011). However, no research to date has attempted to examine associations between the Dark Triad and Tetrad traits with both empathy and impulsivity in the same sample. The reason such a study would be valuable to researchers and clinicians is that the specific combination of low empathy and greater impulsivity can combine to produce extreme instances of antisocial behavior.

The Dark Triad

A cluster of specific personality traits has been positively associated with maladaptive impulsive behaviors as well as dysfunctional or deficits in empathic behavior and responsiveness (Jakobwitz & Egan, 2006; Paulhus & Williams, 2002). This cluster is known as the "Dark Triad of Personality," which refers to three interrelated higher-order personality constructs—psychopathy, narcissism, and Machiavellianism (Jakobwitz & Egan, 2006). Despite their diverse origins, the personality traits composing this Dark Triad share a number of features. To varying degrees, all three entail a socially malevolent character with behavior tendencies toward self-promotion, emotional coldness, duplicity, and aggressiveness (Paulhus & Williams, 2002). In general, these traits are reflective of deceptive and self-serving tendencies. In particular, Machiavellianism is characterized by being manipulative of others, whereas narcissistic individuals tend to possess grandiose self-views and display a sense of entitlement. Finally, impulsive behavior and a lack of remorse are highly indicative of psychopathy (Giammarco & Vernon, 2014).

Narcissism

The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; *DSM-V*; American Psychiatric Association, 2013) defines criteria for Narcissistic Personality Disorder (NPD). Individuals diagnosed with NPD are described in the DSM-V to experience impairment in identity and self-direction, including excessive reference to others for self-definition and self-esteem regulation, exaggerated self-appraisal which may be inflated or deflated, need for approval of others, unreasonably high personal standards in order to see oneself as exceptional (or personal standards which are too low based on a sense of entitlement), as well as unawareness of their own motivations.

Individuals diagnosed with NPD also have an impaired ability to recognize or identify

with the feelings and needs of others and tend to over- or underestimate their own effect

on others. Furthermore, pathological traits associated with NPD described by the DSM-

V include antagonism characterized by grandiosity (feelings of entitlement, self-

centeredness, and being condescending toward others) and attention seeking (excessive

attempts to attract and be the focus of the attention of others, as well as admiration

seeking).

  Behavioral traits associated with narcissism include a noticeable emphasis on

one's self in interactions with others, a distinct lack of empathy concerning the plight of

others, extreme sensitivity often resulting in rage, manipulation with no consideration of

cost, and a lack of ability to see reality as others see it (Thomas, 2010). Some scholars

have stated that there are "seven deadly sins involved in narcissism" (Hotchkiss, 2003).

These include shamelessness, magical thinking, arrogance, envy, entitlement,

exploitation, and bad boundaries. Additionally, some scholars have argued that the

foundation for criminal behavior is narcissism, with a hallmark being a scarcity of ethical

standards (Kernberg, 1970).

  One certain type of narcissism, "malignant narcissism", is a specific trait that is

particularly predictive of a person who is pathologically grandiose, lacking in conscience

and behavioral regulation, and with characteristic dimensions of joyful cruelty and

sadism (Smith & Hung, 2013). Though malignant narcissism is not a specific disorder

that can be found in the DSM-V, someone exhibiting these traits would be diagnosed

with narcissistic personality disorder. Some have suggested that malignant narcissism

has been displayed by historical figures such as Hitler, Stalin, and individuals similar to

them (Cheliotis, 2011.)

Malignant narcissism has been associated with sadism, taking pleasure inflicting pain on others (Kernberg, 1984). Malignant narcissism is also correlated with a tendency toward criminal behavior, paranoid attributes, and egosyntonic aggression (Smith & Hung, 2013). To put it simply, a malignant narcissist is someone who is grandiose, highly antisocial, and finds pleasure in the infliction of pain and suffering of others.

Machiavellianism

Machiavellianism refers to interpersonal characteristics characterized by self-interest, deception, and manipulation (Paulhus & Williams, 2002). Machiavellianism has also been associated with acts of exploitation of others for selfish or secondary gain of the individual themselves, manipulation of others to achieve desired outcomes of the individual, as well as an absence of conscientiousness for the other person during or after the fact (Paulhus & Williams, 2002).

Individuals with high Machiavellianism are perceived as more intelligent and attractive by their peers, even when those perceptions are not reflective of real differences (Jakobwitz & Egan, 2006). Additionally, high Machiavellianism is also predictive of the ability to outperform individuals with low levels of Machiavellianism on competitive tasks, whether this be bargaining and alliance forming, or assuming leadership in group situations. Finally, high Machiavellianism traits are also related to an exploitation of others accompanied by a lack of concern about other people beyond one's own self-interest (Jakobwitz & Egan, 2006).

Psychopathy

Psychopathy is associated with a lack of empathy, callousness, shallow affect, and a failure to take responsibility for one's actions (Hare, 2003). Psychopathy is also characterized by a pathological interpersonal style involving grandiosity, superficial

charm, and the manipulation of others (De Brito, Viding, Kumari, Blackwood, & Hodgkins, 2013). Psychopathy has been associated with extreme antisocial behaviors, violence, higher rates of incarceration, and increased likelihood of committing crimes (Anton, Baskin-Sommers, Vitale, Curtin, & Newman, 2012).

Individuals displaying psychopathic traits have, in the past, been referred to as sociopaths or psychopaths. Currently, psychopathy is most associated with a diagnosis of Antisocial Personality Disorder (APD). Psychopathy and APD do share common traits, including lack of concern for others, ego-centrism, absence of prosocial internal standards, and manipulation (American Psychiatric Association, 2013). However, there are differences between psychopathy and APD. Psychopathy is distinguished by callous, unemotional traits as well as low levels of anxiety, depression, and general psychopathology. Conversely, APD traits include higher rates of psychiatric disorders, such as depression, anxiety, and even self-injurious behaviors (Anton et al., 2012).

The Dark Tetrad: Everyday Sadism

In recent years, arguments have been made that a new variable, everyday sadism, warrants inclusion in the Dark Triad cluster of personality, thus forming a new cluster labeled the Dark Tetrad (Buckels, Jones, & Paulhus, 2013; Reidy, Zeichner, & Seibert, 2011). Sadism has been defined as cognitions and behaviors associated with pleasure from inflicting physical or emotional pain on another person (Porter & Woodworth, 2006).

It should be noted that sadism is independent of psychopathy. Though persons high on sadism and psychopathy have many common recreational interests (e.g. contact sports or target shooting), individuals with sadistic traits would not be considered to have psychopathic personality based on these common interests (Reidy et al., 2011). For

example, research has shown that men participating in these types of activities who endorse higher levels of psychopathy are 82% more likely to exhibit unprovoked aggression than men who endorse lower levels of psychopathy. Alternatively, men rating high on sadism are 54% more likely to exhibit unprovoked aggression than men rating lower on sadism. These findings suggest that though individuals with sadistic traits may be similar in regards to recreational interests to individuals with psychopathic traits, their activities may simply be a means of acting out severe violent urges and acts without having to face severe consequences (Reidy et al., 2011). Other studies have found that sadistic personality predicted antisocial behavior independently of its overlap with the Dark Triad (Buckels et al., 2013). Overall, findings support the conclusion that sadism is independent of psychopathy, warranting its addition into the construct of dark personalities: the Dark Triad now the Dark Tetrad.

Correlations Between Empathy, Impulsivity, and The Dark Tetrad

Empathy

Empathy is a social awareness through which a person shares an emotional experience with others on both an affective and cognitive level (Wai & Tiliopoulos, 2012). Cognitive empathy involves an individual's ability to understand the emotions of others, while affective empathy involves the ability of an individual to experience the emotions of another as well as the ability to exhibit appropriate emotional reactions in response to others' emotions (Jonason & Krause, 2013; Wai & Tiliopoulos, 2012).

The Dark traits show deficits in both cognitive and affective components of empathy (Jonason & Krause, 2013; Wai & Tiliopoulos, 2012). In fact, all Dark traits are associated with lower levels of cognitive empathy. Research suggests that a lack of empathy is characteristic of individuals high in the Dark Tetrad traits, especially

Machiavellianism and psychopathy. In particular, Machiavellianism and psychopathy are associated with deficits in affective aspects of empathy (Wai & Tiliopoulos, 2012), while narcissism is not (Jonason & Krause, 2013). That is, it seems that these individuals with higher Machiavellianism and psychopathy are able to identify and assess the emotional reactions of others, but they refrain from experiencing emotional discomfort caused by another person's suffering (Giammarco & Vernon, 2014). Little research has been done to examine associations between sadism and empathy. However, because sadism provokes aggression without noticeable conscience, it can be hypothesized that sadism would produce low levels of empathy (Buckels, Jones, & Paulhus, 2013).

These findings suggest that deficits in empathy along with limited ability or motivation to communicate one's emotions to others facilitates the antagonistic social strategy embodied in the Dark Tetrad traits. Those high on Dark Tetrad traits also appear more capable of forming deficits of empathy from others, meaning an uncaring and callous nature towards others and their well-being, creating a dangerous situation for people close to these individuals.

Impulsivity

Impulsivity has been defined as an inability to inhibit inappropriate behaviors, to wait and to act with forethought (Malesza & Ostaszewski, 2016), and to consider the consequences or look ahead before taking an action (Crysel, Crosier, & Webster, 2013). At higher levels, impulsivity can be maladaptive, leading to personality disorders, substance abuse, and criminality (Jones & Paulhus, 2011). Impulsivity has also been associated with risk-taking behavior and sensation seeking, seeking new and stimulating experiences with the willingness to take risks for these experiences (Crysel et al., 2013). Two types of impulsivity have been revealed in research: dysfunctional impulsivity and

functional impulsivity (Jones & Paulhus, 2011). Dysfunctional impulsivity encompasses a lack of self-control, while functional impulsivity involves an individual being socially adventurous and sensation-seeking (Crysel et al., 2013).

Dark Tetrad traits that have been linked to impulsivity are psychopathy and narcissism (Malesza & Ostaszewski, 2016). Psychopathy is most closely associated with dysfunctional impulsivity while narcissism is associated with functional impulsivity (Crysel et al., 2013; Jones & Paulhus, 2011). Machiavellianism seems to be unrelated to either type of impulsivity (Crysel et al., 2013). The ability for impulse control among individuals with high Machiavellianism may allow them to refrain from counterproductive behaviors despite their selfish intentions (Malesza & Ostaszewski, 2016).

Little research on associations between sadism and levels of impulsivity has been done. However, studies have shown sadism predicts a preference for killing bugs, as well as willingness to hurt innocent others and to incur personal costs for the opportunity to do so (Buckels et al., 2013). Other studies have shown that individuals with high sadistic tendencies exhibit notable antisocial behaviors regularly (Chabrol, Melioli, Leeuwen, Rodgers, & Goutaudier, 2015). This pleasure-driven form of aggression fuels internal needs for excitement as well as personal satisfaction, exhibiting itself in a dangerous form to others surrounding the sadistic individual (Chabrol et al., 2015). These findings show that individuals with sadistic traits have high drive for fulfilling their needs, potentially leading to high levels of impulsivity.

The Dangerous Combination of Low Empathy and High Impulsivity

Overall, it has been noted that low empathy leads individuals to commit acts with no thought of consequences or regard for the feelings of others, and high impulsivity

provokes quick action without forethought of outcomes. However, there is a lack of simultaneous assessment of associations between the Dark Tetrad traits, empathy, and impulsivity. This is a concern because this particular combination of traits has great potential to produce a toxic combination of traits, leading to violent crimes, extreme antisocial behavior, and danger to others.

For example, while a lack of empathy is worrisome, when combined with high impulse control, issues related to low empathy could be held in check. For example, an individual lacking in empathy may have little concern for the emotions and feeling of others, but would be able to control impulses, leading to avoidance of harm to others. Similarly, an individual with low impulse control but a high level of empathy would also not be prone to antisocial behaviors. Individuals with low impulse control may be quick to act on impulses, but due to a high level of empathy would be careful not to harm others. By contrast, the combination of low empathy along with low impulse control has dangerous potential. An individual with this particular combination of traits would be most inclined to commit antisocial acts and would lack the impulse control to inhibit these impulses.

And yet, because empathy and impulsivity have not been simultaneously correlated with the Dark Tetrad traits, we do not know which Dark traits are predictive of this combination. Given past research, it seems that psychopathy and sadism would be most associated with low empathy and decreased impulse control. Therefore, the current study aimed to assess both empathy and impulsivity alongside the Dark Tetrad traits.

The goals of the current study were to (a) assess precise associations between the Dark Tetrad and levels of empathy as well as impulsivity and (b) examine which specific traits within the Tetrad are predictive of both low empathy and poor impulse control.

Overall, it was expected that all of the Dark Tetrad traits would be negatively associated with empathy (Jonason & Krause, 2013; Smith & Hung, 2013; Wai & Tiliopoulos, 2012), and also that narcissism, psychopathy and sadism would be most strongly predictive of impulsivity (Buckels et al., 2013; Chabrol et al., 2015; Crysel et al., 2013; Jones & Paulhus, 2011; Malesza & Ostaszewski, 2016). Overall then, narcissism, sadism, and psychopathy would be the traits predictive of the combination of decreased empathy and poor impulse control.

CHAPTER II

METHOD

Participants

Participants included a sample of 291 college students from a private university. These participants were recruited in a class setting, with extra credit for the class as incentive for completing surveys for this study. This particular sample was between the ages of 18 and 29 years old (with a mean age of 19), mostly Caucasian (61.2%), and was predominantly female (52.9%).

Procedure

The sample was recruited on the campus of a private university. The participation of this sample in the study was approved by the IRB. These students came from an undergraduate level psychology class. Extra credit was offered to the students in exchange for completion of the surveys. Each student was made aware of confidentiality and risks involving participation in the study, as well as procedures involving it such as being asked to answer all questions and anticipated time to complete the survey before beginning the surveys. Each student took the surveys online, all at once, through SurveyMonkey.com. This website recorded all individual answers. Names of students were kept unknown to the researcher, and answers to surveys were kept unknown to the students' professor. After all students were given ample time to choose to participate in the study, the surveys were closed to participation and extra credit was given out accordingly.

Measures

The Dirty Dozen

The Dirty Dozen (Jonason & Webster, 2010) is a concise, self-report measure of the Dark Triad personality traits. The measure consists of 12 items assessing three different subscales: narcissism, Machiavellianism, and psychopathy. Participants were asked to respond to statements and rate their agreement on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Example items include: "I tend to manipulate others to get my way" (Machiavellianism), "I tend to lack remorse" (psychopathy), and "I tend to want others to admire me" (narcissism). Reported Cronbach's alpha for this measure ranged from .77 to .84 for each subscale (Jonason & Webster, 2010). The complete scale can be found in Appendix A.

Interpersonal Reactivity Index

The Interpersonal Reactivity Index (Davis, 1983) is a 28-item self-report measure consisting of four 7-item subscales measuring facets of empathy. Each of these scales measure a different concept of empathy, including (a) perspective-taking, which is the tendency to quickly adopt the psychological views of surrounding others, (b) fantasy, which encompasses an individual's tendency to transpose themselves mentally into the feelings and actions of fictional characters found in books and movies, (c) empathic concern, which involves feelings of concern for the pain or unfortunate circumstances of others, and (d) personal distress, which measures feelings of anxiety during interpersonal situations. Participants will be asked to indicate how well each statement describes them using a 5-point Likert scale (1 = does not describe me well, 5 = describes me very well). Typical items from this scale include: "I often have tender, concerned feelings for people

less fortunate than me" (empathic concern), "I really get involved with the feelings of the characters in a novel" (fantasy), "In emergency situations, I feel apprehensive and ill-at-ease" (personal distress), and "I sometimes find it difficult to see things from the 'other guy's' point of view" (perspective taking). Reported reliabilities range from .62 to .77 across subscales (Davis, 1983). The complete scale can be found in Appendix B.

Short Sadistic Impulse Scale

The Short Sadistic Impulse Scale (O'Meara, Davies, & Hammond, 2011) is a 10-item self-report inventory that aims to place respondents along a continuum of generalized sadism, which is the degree to which an individual finds pleasure in the physical or mental harm of others. Scores are recorded in a dichotomous form using categories "like me" and "unlike me," resulting in a maximum score of 10 and a minimum score of zero. An example from this scale is, "I enjoy seeing people hurt." O'Meara et al. (2011) reported internal consistency of 0.86. The complete scale can be found in Appendix C.

Impulsivity-Venturesomeness-Empathy Inventory

The Impulsivity-Venturesomeness-Empathy Inventory (or I7) (Eysenck, Pearson, Easting, & Allsopp, 1985) is a 54-item yes or no answer questionnaire. It was designed to assess three subscales: the personality traits of impulsivity, venturesomeness, and empathy. The authors of the questionnaire first thought that impulsiveness was a constituent part of extraversion (together with liveliness and sociability); however, it later became clear that there are in fact two distinct components of impulsivity. One of these corresponds to extraversion (Venturesomeness), while the other is aligned with psychoticism (Impulsiveness) (Eyesenck et al., 1985). Example items from this scale

include "Do you often long for excitement?" (impulsivity), "Would you enjoy water skiing?" (venturesomeness), and "Do you often get emotionally involved with your friends' problems?" (empathy). Reported Cronbach's alpha scores range from .40 to .83 across subscales (Eysenck & Eysenck, 1978). The complete scale can be found in Appendix D.

CHAPTER III

RESULTS

The Dark Tetrad Correlated with Empathy

As noted above, past studies have indicated that individuals who score high on the

Dark Tetrad also exhibit low levels of empathy. This study hypothesized that all of the

Dark tetrad traits would be negatively associated with empathy, meaning that individuals

scoring high on Dark Tetrad traits would also score low on empathy scales. Correlation

analyses were run on scales measuring the Dark Tetrad traits and empathy. The results of

this analysis can be found in Table 1.

Table 1

Correlations of the Dark Tetrad with Empathy Subscales

| Dark Tetrad Variables: | Interpersonal Reactivity Index | | | | I7 |
	Fantasy	Empathic Concern	Perspective Taking	Personal Distress	Empathy
Machiavellianism	.06	-.34*	-.08	.03	-.21*
Psychopathy	-.13	-.61*	-.20*	-.08	-.42*
Narcissism	.20*	-.11	-.17*	.19**	.06
Everyday Sadism	.00	-.32*	-.17*	-.06	-.18*

*$p < .01$

As expected, many of the Dark Tetrad traits correlated negatively with empathy.

As can be seen in Table 1, Machiavellianism correlated negatively with Empathic

Concern and the Empathy subscale of the I7 scale. Psychopathy correlated negatively

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with these two subscales as well (Empathic Concern and the I7 Empathy subscale), as well as correlating negatively with perspective taking. Everyday sadism correlated negatively with these three subscales as well (Empathic Concern, Perspective Taking, and the I7 Empathy subscale).

Unexpectedly, Narcissism correlated positively with some of the empathy subscales. For example, Narcissism was positively correlated with Fantasy and Personal Distress. The only negative correlation found was between Narcissism and Perspective Taking.

The Dark Tetrad Correlated with Impulsivity

Because previous studies have shown that Dark Tetrad traits accompany poor impulse control as well, associations of the Dark Tetrad with impulsivity were also analyzed. This study hypothesized that narcissism, psychopathy and sadism would be most strongly positively predictive of impulsivity. Correlational analyses were run on scales measuring the Dark Tetrad and impulsivity. The results of this analysis can be found in Table 2.

Table 2

Correlations of the Dark Tetrad with Impulsivity Subscales

Dark Tetrad Variables:	Impulsivity	Venturesomeness
Machiavellianism	.34*	.19*
Psychopathy	.23*	.18*
Narcissism	.29*	.09
Everyday Sadism	.30*	.21*

*$p < .01$

Consistent with hypotheses, Machiavellianism, psychopathy, and sadism each correlated

positively with impulsivity (on both the Impulsivity and Venturesomeness subscales).

Narcissism also correlated positively, but only with the Impulsivity subscale.

Dark Tetrad Variables Predictive of Empathy Ratings

Another purpose of the analysis was to examine what combination of the Dark

Tetrad traits would be the strongest predictors of low ratings of empathy. It was

hypothesized that narcissism, sadism, and psychopathy would be the traits predictive of

decreased empathy. A regression analysis was run using the Dark Tetrad variables to

predict the various empathy measures. The results of this analysis can be found in Table

3.

Table 3

Standardized Beta Weights and Regression Statistics for Dark Tetrad Variables

Predicting Empathy Ratings

| Dark Tetrad Variables: | Interpersonal Reactivity Index | | | | I7 |
	Fantasy	Empathic Concern	Perspective Taking	Personal Distress	Empathy
Machiavellianism	.09	-.01	.18	-.04	-.08
Psychopathy	-.29***	-.58***	-.21*	-.11	-.44***
Narcissism	.26***	.13*	-.14	.24**	.27***
Everyday Sadism	.00	-.17**	-.15*	-.06	-.08

$*p < .05, **p < .01, ***p < .001$; Fantasy ($R^2 = .10, p < .001$), Empathic Concern ($R^2 = .40, p < .001$), Perspective Taking ($R^2 = .08, p < .005$), Personal Distress ($R^2 = .05, p < .05$), I7 Empathy ($R^2 = .24, p < .001$)

As expected, psychopathy was significantly predictive of low Empathic Concern

as well as predictive of low empathy on the I7. Sadism was predictive of decreased

Empathic Concern and Perspective Taking. Unexpectedly, again, Narcissism resulted in positive predictions on all but one subscale (Perspective Taking). Results in fact showed that narcissism positively predicted Fantasy, Empathic Concern, Personal Distress and Empathy on the I7. Consistent with hypotheses, Machiavellianism showed no indication of being predictive of decreased empathy.

Dark Tetrad Variables Predictive of Impulsivity Ratings

The final purpose of the analysis was to examine what combination of the predictor variables (the Dark Tetrad traits) would be the strongest predictors of high levels of impulsivity. It was hypothesized that narcissism, sadism, and psychopathy would be the traits predictive of heightened impulsivity. Regression analysis was run on impulsivity subscales as they related to Dark Tetrad variables. The results of this analysis can be found in Table 4.

Table 4

Standardized Beta Weights and Regression Statistics for Dark Tetrad Variables Predicting Impulsivity Ratings

Dark Tetrad Variables	Impulsivity	Venturesomeness
Machiavellianism	.19*	.11
Psychopathy	.03	.08
Narcissism	.12	-.04
Everyday Sadism	.23**	.16*

*$p < .05$, **$p < .001$; Impulsivity ($R^2 = .19$, $p < .001$), Venturesomeness ($R^2 = .07$, $p < .005$)

Of the hypothesized variables, only sadism resulted in a significant prediction of heightened impulsivity on both subscales measuring impulsiveness. Contrary to hypotheses, neither psychopathy nor narcissism predicted heightened impulsivity. However, surprisingly, Machiavellianism significantly predicted impulsiveness.

CHAPTER IV

DISCUSSION

The present study examined relationships between the Dark Tetrad traits (Machiavellianism, psychopathy, narcissism, and everyday sadism), empathy, and impulsivity. Most importantly, it was of interest to discover whether any of the Dark traits were specifically predictive of low empathy along with poor impulse control. Because previous studies have shown that all of the Dark traits are predictive of deficits in empathy, (Jonason & Krause, 2013; Smith & Hung, 2013; Wai & Tiliopoulos, 2012), it was hypothesized that each of these traits would be found to be predictive of low empathy. Similarly, due to the fact that the narcissism, sadism, and psychopathy have been found to be accompanied by high impulsivity (Buckels et al., 2013; Chabrol et al., 2015; Crysel et al., 2013; Jones & Paulhus, 2011; Malesza & Ostaszewski, 2016), it was hypothesized that these traits would be predictive of poor impulse control. The goal of the present study was to observe which of the Dark Tetrad traits were associated with decreased empathy and increased impulsivity in the same sample.

The Dark Tetrad as It Relates to Empathy

The first part of the hypotheses, that all of the Dark Tetrad traits would be predictive of low empathy, was partially supported by the results. Psychopathy was strongly correlated with a lack of empathy across subscales. Machiavellianism and sadism were both correlated with a lack of empathy as well, but less strongly than psychopathy.

Overall, these findings were expected. Psychopathy is characterized by a lack of empathy and concern for others, as well as callousness (American Psychiatric Association, 2013; Hare, 2003). Everyday sadism is characterized by cognitions and behaviors associated with pleasure from inflicting physical or emotional pain on another person (Porter & Woodworth, 2006). Finally, Machiavellianism characterizes individuals who are most interested in themselves and are likely to exploit others for their own personal gain, often without concern for the feelings of others. Indeed, it is known that Machiavellianism is characterized by self-interest, deception, and manipulation (Paulhus & Williams, 2002), as well as a lack of concern about other people beyond one's own self-interest (Jakobwitz & Egan, 2006).

The Dark Tetrad as It Relates to Impulsivity

The second part of the hypotheses was that narcissism, sadism, and psychopathy would be predictive of poor impulse control. Impulsivity was measured on two subscales. One of these subscales corresponds to extraversion (Venturesomeness), while the other is aligned with psychoticism (Impulsiveness) (Eyesenck et al., 1985). Again, results partially supported the hypotheses. Consistent with some previous findings, with the exception of Narcissism, all Dark Tetrad traits were positively correlated with high impulsivity across both subscales.

However, only two of the traits were predictive of poor impulse control when all the Tetrad variables were collectively used in a regression analysis. Machiavellianism, contrary to previous findings (Crysel et al., 2013; Malesza & Ostaszewski, 2016), was predictive of impulsivity. Sadism was predictive of both impulsivity and venturesomeness.

As mentioned before, though little research on the associations between sadism and levels of impulsivity has been done, studies have shown that sadism does predict willingness to hurt others despite personal costs for the opportunity to do so, exhibiting antisocial behaviors regularly, and a need for excitement as well as personal satisfaction (Buckels et al., 2013; Chabrol et al., 2015). Because these individuals have a high drive to fulfill their needs, they are likely to exhibit high levels of impulsivity to do so. This includes acting before or without thinking, making quick decisions, and other behaviors that may fulfill their specific drive for personal satisfaction and excitement.

The Curious Case of Narcissism

Surprisingly, narcissism produced results that were not expected. In fact, narcissism was correlated positively rather than negatively with empathy on the Fantasy and Personal Distress subscales. What can explain these trends?

Narcissism may have been positively correlated with the Fantasy subscale because, as described in the DSM-V (American Psychiatric Association, 2013), narcissistic individuals experience impairment in identity and self-direction, including excessive reference to others for self-definition and self-esteem regulation. These individuals may be seeking any avenue available to them, especially fictitious characters perceived to be idyllic to the individual, such as those they may come into contact with through things they see or read, to define themselves and establish ideal versions of themselves. Furthermore, the DSM also describes these individuals as attention and admiration seeking. It may be, then, that these individuals tend to transpose themselves into idyllic characters (which are seen in movies or read of in books) in order to become more admirable to others surrounding them, or to be able to gain better attention of

others, by being seemingly more attractive, smarter, seeming to have a good personality or be a good person, and so on. All of this presupposes a desire and ability to fantasize about and imagine how one would like to be perceived by others.

Regarding the Personal Distress associations, this subscale assessed feelings of anxiety during interpersonal situations. Given that narcissism involves a great need for the approval of others, a noticeable emphasis on one's self in interactions with others, and extreme sensitivity (Thomas, 2010), these narcissistic individuals do experience anxiety during interpersonal dealings. These individuals have a need to be seen as desirable, which may lead to focus on oneself and self-centeredness during interpersonal conversations and dealings, as well as extreme sensitivity in the instance that another person does not react to them in an ideal way.

The only significant negative correlation between narcissism and the empathy measures involved Perspective Taking. Individuals rating highly on narcissism may be lacking in the ability to adopt the psychological views of surrounding others due to the fact that they have a tendency toward magical thinking, are entitled, see themselves as exceptional, are manipulative of others, have an impaired ability to recognize or identify with the feelings and needs of others and tend to over- or underestimate their own effect on others, and lack the ability to see reality as others see it (American Psychiatric Association, 2013; Kernberg, 1970; Thomas, 2010).

Overall, then, narcissism may be positively associated with empathy in that these individuals are overly concerned with the feelings and thoughts of others as they pertain to themselves. Therefore, while narcissism may be correlated positively with empathy it is not in a positive light. In fact, it is most likely that individuals are most concerned with

the thoughts and feelings of others only when it pertains to them, and only when they hope to achieve some sort of secondary gain from another person. For example, an individual rating high on narcissism may be empathetic of another person's thoughts and feelings not because they are concerned for that person or feel as that person does, but because they are concerned that the person in question is thinking highly of them, is giving them attention, or is impressed with them. This may be known as *Narcissistic Empathy.*

Implications

Overall, no single trait of the Dark Tetrad robustly predicted both low empathy and high impulsivity. Psychopathy was the most consistent and strongest predictor of decreased empathy. By contrast, sadism was the strongest predictor of increased impulsivity. Overall, then, an individual exhibiting these two Dark traits simultaneously would show little concern for the suffering, feelings, thoughts, and distress of others, as well as have a high drive for excitement and need for personal satisfaction, both which are derived from a willingness to inflict pain on others. At the same time, this individual would have tendencies to be highly impulsive, leading to circumstances in which they would fulfill their needs even when consequences are sure to occur. This combination of Dark traits, psychopathy and sadism, would lead to dangerous situations for others.

Consequently, further research on the combination these two specific traits should be conducted. Since psychopathy and sadism exhibited simultaneously appear to be predictive of both low empathy and high impulsivity, future research could investigate this particular combination, including an examination of gender differences, preventative measures, and treatment options for individuals exhibiting these traits simultaneously.

Specific clinical procedures could be developed to address the issues brought about by this Dark trait combination, and be used to treat clients in outpatient settings or patients in inpatient settings. Issues which may occur due to an individual exhibiting these two Dark traits simultaneously may include danger to others, extreme antisocial behaviors, and incarceration. Another possibility is developing therapies and treatments for already incarcerated individuals who exhibit signs of psychopathy and sadism to be implemented within correctional facilities.

Social implications of the results of this study include a better understanding of the Dark Tetrad traits and how they associate with empathy and impulsivity in situations regarding others. Though people within a given society may be within close proximity of an individual exhibiting any of the Dark Tetrad traits at any given time, it is of greater interest to know that there is in fact an especially dangerous combination of Dark traits. Individuals exhibiting signs of psychopathy and sadism simultaneously should perhaps be monitored by close family and clinicians for preventative measures or to maintain good psychological health for the wellbeing of themselves and those around them. Procedures and treatment planning may be developed to guide this process both for the individual and their families.

Limitations

As with any research, the present study included multiple limitations to be considered. First, the participant sample was taken from a private, Christian university. The sample included a disproportionately large number of Caucasian individuals, and a larger number of females than males. Also, given that the setting was a private Christian university, it is assumed that mainly religious backgrounds were present, along with

higher levels of socioeconomic status. Another limitation to the present study was an inaccessible incarcerated sample. The accessible sample were not incarcerated, were of limited age range, and came from similar backgrounds, therefore giving less chance of a high level of Dark Tetrad trait presence.

The study may be improved in the future in three ways. One, the study should be given out to a larger, more demographically diverse sample. This can include the same age range among a sample from multiple different colleges, the general public, or even other specific populations such as gender, age, or race. Second, the study may be done with an incarcerated sample, or previously incarcerated sample. This may give more insight into the exact dangers of the combination of psychopathy and sadism within a single individual. And finally, the study may be performed longitudinally, to assess if predicted dangerous individuals (those exhibiting both psychopathy and sadism simultaneously) did in fact become dangerous or behave antisocially in some way during their lives. This would give more accuracy and conclusive evidence of the true extent of potential danger given by the combination of these two Dark traits.

It would be suggested that the combination of psychopathy and sadism exhibited with one another within a single individual continue to be researched. Future conclusions may provide more precise answers and treatment possibilities for these individuals, eventually possibly effecting thought process, recidivistic, and behavioral outcomes. Also, it is suggested that further research focus on the association of narcissism and empathy. These studies may specifically look at motivations, thought processes, and specific relationships between different kinds of empathy and their relationships to narcissism.

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  dark triad of personality. *Personality and Individual Differences*, *52*, 794–799

THE DIRTY DOZEN SCALE

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate number on the scale at the top of the page: numbers 1-7. Answer as honestly as you can.

ANSWER SCALE:

	1	2	3	4	5	6	7
Does not describe me well							Does describe me very well

1. I tend to manipulate others to get my way.
2. I tend to lack remorse.
3. I tend to want others to admire me.
4. I tend to be unconcerned with the morality of my actions.
5. I have used deceit or lied to get my way.
6. I tend to be callous or insensitive.
7. I have used flattery to get my way.
8. I tend to seek prestige or status.
9. I tend to be cynical.
10. I tend to exploit others toward my own end.
11. I tend to expect special favors from others.
12. I want others to pay attention to me.

The total score can range from 12 to 84.

Scores can also break down into three subscales as follows:

Machiavellianism = 1, 5, 7, 10; Psychopathy = 2, 4, 6, 9; Narcissism = 3, 8, 11, 12.

APPENDIX B

INTERPERSONAL REACTIVITY INDEX

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate letter on the scale at the top of the page: A, B, C, D, or E. When you have decided on your answer, fill in the letter on the answer sheet next to the item number. READ EACH ITEM CAREFULLY BEFORE RESPONDING. Answer as honestly as you can. Thank you.

ANSWER SCALE:

     A   B   C   D   E
DOES NOT   DESCRIBES ME
DESCRIBE ME   VERY WELL
WELL

1. I daydream and fantasize, with some regularity, about things that might happen to me. (FS)

2. I often have tender, concerned feelings for people less fortunate than me. (EC)

3. I sometimes find it difficult to see things from the "other guy's" point of view. (PT) (-)

4. Sometimes I don't feel very sorry for other people when they are having problems. (EC) (-)

5. I really get involved with the feelings of the characters in a novel. (FS)

6. In emergency situations, I feel apprehensive and ill-at-ease. (PD)

7. I am usually objective when I watch a movie or play, and I don't often get completely caught up in it. (FS) (-)

8. I try to look at everybody's side of a disagreement before I make a decision. (PT)

9. When I see someone being taken advantage of, I feel kind of protective towards them. (EC)

10. I sometimes feel helpless when I am in the middle of a very emotional situation. (PD)

11. I sometimes try to understand my friends better by imagining how things look from their
     perspective. (PT)

12. Becoming extremely involved in a good book or movie is somewhat rare for me. (FS) (-)

13. When I see someone get hurt, I tend to remain calm. (PD) (-)

14. Other people's misfortunes do not usually disturb me a great deal. (EC) (-)

15. If I'm sure I'm right about something, I don't waste much time listening to other people's
     arguments. (PT) (-)

16. After seeing a play or movie, I have felt as though I were one of the characters. (FS)

17. Being in a tense emotional situation scares me. (PD)

18. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.
     (EC) (-)

19. I am usually pretty effective in dealing with emergencies. (PD) (-)

20. I am often quite touched by things that I see happen. (EC)

21. I believe that there are two sides to every question and try to look at them both. (PT)

22. I would describe myself as a pretty soft-hearted person. (EC)

23. When I watch a good movie, I can very easily put myself in the place of a leading
     character. (FS)

24. I tend to lose control during emergencies. (PD)

25. When I'm upset at someone, I usually try to "put myself in his shoes" for a while. (PT)

26. When I am reading an interesting story or novel, I imagine how I would feel if the events in

the story were happening to me. (FS)

27. When I see someone who badly needs help in an emergency, I go to pieces. (PD)

28. Before criticizing somebody, I try to imagine how <u>I</u> would feel if I were in their place. (PT)

NOTE:(-) denotes item to be scored in reverse fashion

      PT = perspective-taking scale
      FS = fantasy scale
      EC = empathic concern scale
      PD = personal distress scale

      A = 0
      B = 1
      C = 2
      D = 3
      E = 4

Except for reversed-scored items, which are scored:

      A = 4
      B = 3
      C = 2
      D = 1
      E = 0

APPENDIX C

SHORT SADISTIC IMPULSE SCALE

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate number on the scale at the top of the page: numbers 1-5. Answer as honestly as you can.

ANSWER SCALE:

     1   2   3   4   5
Strongly agree   Strongly disagree

1. Hurting people would be exciting.
2. I have hurt people because I could.
3. I wouldn't intentionally hurt anyone. (R)
4. I have hurt people for my own enjoyment.
5. I have humiliated others to keep them in line.
6. I would enjoy hurting someone physically, sexually or emotionally.
7. I enjoy seeing people hurt.
8. I have fantasies which involve hurting people.
9. Sometimes I get so angry I want to hurt people.
10. People would enjoy hurting others if they gave it a go.

APPENDIX D

THE IMPULSIVITY-VENTURESOMENESS-EMPATHY INVENTORY (I7)

Instructions: Please answer each question by clicking either 'YES' or 'NO' following the questions. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the question. PLEASE REMEMBER TO ANSWER EACH QUESTION.

1. Would you enjoy water skiing
2. Usually do you prefer to stick to brands you know are reliable, to trying new ones on the chance of finding something better?
3. Would you feel sorry for a lonely stranger?
4. Do you quite enjoy taking risks?
5. Do you often get emotionally involved with your friends' problems?
6. Would you enjoy parachute jumping?
7. Do you often buy things on impulse?
8. Do unhappy people who are sorry for themselves irritate you?
9. Do you generally do and say things without stopping to think?
10. Are you inclined to get nervous when others around you seem to be nervous
11.· Do you often get into a jam because you do things without thinking?
12. Do you think hitch-hiking is too dangerous a way to travel?
13. Do you find it silly for people to cry out of happiness?
14. Do you like diving off the high board?
15. Do people you are with have a strong influence on your moods?
16. Are you an impulsive person?
17. Do you welcome new and exciting experiences and sensations., even if they are a little frightening and unconventional?
18. Does it affect you very much when one of your friends seems upset
19. Do you usually think carefully before doing anything?
20. Would you like to learn to fly an airplane?
21. Do you ever get deeply involved with the feelings of a character in a film, Play, or novel?
22. Do you often do things on the spur of the moment?
23. Do you get very upset when you see someone cry?
24. Do you sometimes find someone else's laughter catching?
25. Do you mostly speak without thinking things out?
26. Do you often get involved in things you later wish you could get out of?
27. Do you get so 'carried away' by new and exciting ideas, that you never think of possible snags?

28. Do you find it hard to understand people who risk their necks climbing mountains?
29. Can you make decisions without worrying about other people's feeling
30. Do you sometimes like doing things that are a bit frightening?
31. Do you need to use a lot of self-control to keep out of trouble?
32. Do you become more irritated than sympathetic when you see someone cry?
33. Would you agree that almost everything enjoyable is illegal or immoral?
34. Generally do you prefer to enter cold sea water gradually, to diving or jumping straight in?
35. Are you often surprised at people's reactions to what you do or say?
36. Would you enjoy the sensation of skiing very fast down a high mountain slope?
37. Do you like watching people open presents?
38. Do you think an evening out is more successful if it is unplanned or arranged at the last moment?
39. Would you like to go scuba diving?
40. Would you find it very hard to break. bad news to someone?
41. Would you enjoy fast driving?
42. Do you usually work quickly, without bothering to check your work?
43. Do you often change your interests?
44. Before making up your mind, do you consider all the advantages and disadvantages?
45. Can you get very interested in your friends' problems?
46. Would you like to go pot-holing?
47. Would you be put off a job involving quite a bit of danger?
48. Do you prefer to 'sleep on it' before making decisions?
49. When people shout at you, do you shout back?
50. Do you feel sorry for very shy people?
51. Are you happy when you are with a cheerful group and sad when the others are glum?
52. Do you usually make up your mind quickly?
53. Can you imagine what it must be like to be very lonely?
54. Does it worry you when others are worrying and panicky?

PLEASE CHECK TO SEE THAT YOU HAVE ANSWERED ALL THE QUESTION

APPENDIX E

IRB APPROVAL LETTER

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
325-674-2885

02/05/2016

Ashlee Justice

Department of Psychology Box 28011

Abilene Christian University

Dear Ms. Justice,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled The relationship of empathy and impulsivity to the dark tetrad of personality

was approved by full board review on 02/05/2016 for a period of one year (IRB #15-114). The expiration date for this study is 02/05/2017 . If you intend to continue the study beyond this date, please submit the Continuing Review Form at least 30 days, but no more than 45 days, prior to the expiration date. Upon completion of this study, please submit the Inactivation Request Form within 30 days of study completion.

If you wish to make **any** changes to this study, including but not limited to changes in study personnel, number of participants recruited, changes to the consent form or process, and/or changes in overall methodology, please complete the Study Amendment Request Form.

If any problems develop with the study, including any unanticipated events that may change the risk profile of your study or if there were any unapproved changes in your protocol, please inform the Office of Research and Sponsored Programs and the IRB promptly using the Unanticipated Events/Noncompliance Form.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs

Our Promise: ACU is a vibrant, innovative, Christ-centered community that engages students in authentic spiritual and intellectual growth, equipping them to make a real difference in the world.

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