



Dark and immoral: The links between pathological personality features and moral values



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ABSTRACT

Recent research on morality has highlighted important individual differences in moral judgment and reasoning. The present study extends these findings by examining the connections between moral concerns and pathological personality features. This was accomplished by asking 447 community participants to complete self-report measures concerning their pathological personality features and moral concerns. The results showed that pathological personality features differ in their associations with moral concerns as measured by individualizing values (i.e., sensitivity to harm and fairness) and binding values (i.e., reflecting in-group loyalty, respect for authority, and sanctity). For example, negative affect was associated with stronger individualizing and binding values, whereas antagonism was associated with weaker individualizing values. Discussion focuses on the implications of these results for understanding the connections between pathological personality features and moral concerns.

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1. Introduction

Moral psychology is an area of inquiry that has received considerable attention in recent years because social psychologists, neuroscientists, and behavioral economists have begun to focus their efforts on attempting to understand moral judgments and decision making (see Haidt, 2008, for a review). Despite the recent surge of interest in morality, the vast majority of studies concerning moral judgments and decision making have focused exclusively on issues of harm or fairness (e.g., asking participants to consider moral dilemmas in which they can save one group of people by directly or indirectly causing the deaths of other people; e.g., Cushman, Young, & Hauser, 2006). Although issues concerning harm and fairness are certainly important aspects of moral reasoning, it has been recognized in recent years that morality encompasses a much broader range of concerns that include issues such as spiritual purity and loyalty (see Graham et al., 2011, for a review).

Recent shifts in the conceptualization of morality have led to the development of the Moral Foundations Theory (Haidt & Graham, 2007; Haidt & Joseph, 2004). Moral Foundations Theory expands the traditional view of morality by arguing that

individuals make moral judgments based on the relative importance they place on two forms of moral values: *individualizing values* and *binding values*. Individualizing values refer to more traditional views of morality which pertain to issues regarding the rights and welfare of individuals. The individualizing value system is comprised of two basic moral foundations: harm/care (i.e., approving or condemning behaviors on the basis of whether the behavior alleviates or causes pain or suffering) and fairness/cheating (i.e., condemning behaviors that are unjust, deceitful, or coercive toward others). In contrast, binding values refer to concerns regarding group cohesion and the maintenance of social order which include issues such as the importance of respecting authority and abiding by social norms. The binding value system is comprised of three basic moral foundations: ingroup/betrayal (i.e., concerns about the cohesion or well-being of the group), authority/disrespect (i.e., the desire to create and maintain social hierarchies), and purity/degradation (i.e., prompts emotions of disgust toward biological and social contaminants). It is important to note that although individualizing and binding values are not mutually exclusive, there are differences in the extent to which individuals endorse, value, and use each set of values when they make decisions about moral behavior. This individual variability in the basis of moral reasoning will be the focus of the present research because we are interested in the associations that some potentially aversive personality features have with moral values.

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Moral Foundations Theory has been used to address and explain individual variation regarding moral concerns and their impact on important life outcomes. This research has focused largely on political ideology (e.g., [Haidt & Graham, 2007](#); [Koleva, Graham, Ditto, Iyer, & Haidt, 2012](#)), but studies have recently begun to examine the connections between moral concerns and personality features. Previous studies have provided support for connections between moral concerns and personality features such as those included in the Five-Factor Model of personality (e.g., [Hirsh, DeYoung, Xu, & Peterson, 2010](#); [Lewis & Bates, 2011](#)). For example, [Lewis and Bates \(2011\)](#) found that individuals with high levels of agreeableness, neuroticism, and openness reported relatively strong individualizing values, whereas individuals with high levels of extraversion, conscientiousness, and neuroticism reported relatively strong binding values.

Researchers have also started to examine the connections between “dark” personality features and moral judgments (e.g., [Blair, 2007](#); [Djeriouat & Trémolière, 2014](#); [Glenn, Iyer, Graham, Koleva, & Haidt, 2009](#); [Niemi & Young, 2013](#)). Dark personality features refer to aversive aspects of personality that include characteristics such as the tendency to manipulate others, be hostile toward others, or exploit others (see [Zeigler-Hill & Marcus, in press](#), for a review). Many of these studies have focused on a constellation of dark personality features referred to as the Dark Triad of personality (i.e., narcissism, Machiavellianism, and psychopathy; [Paulhus & Williams, 2002](#)). The results of these studies have revealed negative associations between members of the Dark Triad and individualizing values concerning aspects of harm/care (e.g., [Djeriouat & Trémolière, 2014](#); [Glenn et al., 2009](#); [Niemi & Young, 2013](#)) which suggests that individuals with these aversive personality features are less concerned than other individuals about signs of suffering and pain when making moral judgments. In addition, individuals with high levels of psychopathy have been shown to have weaker individualizing values regarding aspects of fairness/cheating ([Glenn et al., 2009](#)).

Although the Dark Triad has generated considerable research interest over the past decade, it primarily captures dark personality features that are at least somewhat antagonistic in nature (e.g., [Paulhus & Williams, 2002](#)). This is potentially problematic because not all dark personality features are characterized by antagonism. For example, individuals with high levels of detachment may engage in socially aversive behaviors but they are not particularly antagonistic. In order to gain a broader understanding of the connections between dark personality features and moral concerns, the present study focused on the pathological personality features captured by the Personality Inventory for the Diagnostic and Statistical Manual of Mental Disorders–Fifth Edition (PID-5; [Krueger, Denninger, Markon, Watson, & Skodol, 2012](#)). The PID-5 is a trait model of pathological personality developed for the *Diagnostic and Statistical Manual of Mental Disorders–Fifth Edition* (DSM-5; [American Psychiatric Association, 2013](#)) which assesses pathological personality features using 25 facets that fall within five broad domains: negative affect (i.e., the tendency to experience an array of negative emotions), detachment (i.e., characterized by introversion, social isolation, and anhedonia), antagonism (i.e., aggressive tendencies accompanied by assertions of dominance and grandiosity), disinhibition (i.e., impulsivity and sensation seeking), and psychoticism (i.e., a disconnection from reality and a tendency for illogical thought patterns). The domains of the PID-5 represent – to varying degrees – maladaptive variants of the basic personality dimensions represented by the Five-Factor Model ([Thomas et al., 2013](#)). That is, the PID-5 can be used to assess maladaptive or extreme ranges of these basic personality dimensions. This is important because existing measures of Five-Factor personality dimensions capture middle range or typical levels of these dimensions but fail to assess extreme or atypical levels (e.g., [Samuel, Simms, Clark, Livesley, & Widiger, 2010](#)).

Recent research has shown that the PID-5 is associated with an array of negative outcomes (e.g., poor interpersonal functioning [[Southard, Noser, Pollock, Mercer, & Zeigler-Hill, 2014](#); [Wright et al., 2012](#)], antisocial behavior and self-harm [[Hopwood et al., 2013](#)], psychopathic tendencies [[Strickland, Drislane, Lucy, Krueger, & Patrick, 2013](#)]). However, it is important to note that these associations differ depending on the domain. For example, [Southard et al. \(2014\)](#) found that individuals with high levels of antagonism and disinhibition possessed interpersonal styles described as cold, uncooperative, and antagonistic. In contrast, those with high levels of negative affect possessed an interpersonal style characterized as timid, fearful, and submissive. Further, [Hopwood et al. \(2013\)](#) found that elevated PID-5 scores were associated with clinically relevant behavior but these behaviors differed depending on the domain such that high levels of disinhibition were indicative of substance abuse and self-harm, whereas high levels of detachment were associated with depressive symptoms. Taken together, these studies suggest that the associations pathological personality features have with negative outcomes differ to some degree depending on the domain. The goal of the present study was to extend these findings to understand the connection between pathological personality features and moral concerns.

2. Overview and predictions

The purpose of the present study was to examine the connections that pathological personality features had with the two higher-order forms of moral concerns (i.e., individualizing values and binding values). Personality features reflect the characteristic patterns of behavior that arise from the interplay of psychological mechanisms, thoughts, and emotions. As a result, personality features are intimately connected to how individuals process information about their social environments and often have implications for the values, motives, and goals that individuals adopt (e.g., [McAdams, 1995](#)). We expected that individuals with high levels of negative affect – which is characterized by anxiety and threat-sensitivity – would report strong individualizing values and binding values because these individuals would have stronger concerns about protecting others (both at the individual and group level) from threat and coercion. In contrast, individuals with high levels of detachment were expected to possess relatively weak binding values because these individuals tend to be socially withdrawn and often avoid close relationships. Further, individuals with high levels of antagonism were expected to have relatively weak individualizing values. This prediction is consistent with previous research indicating that antagonistic individuals – who are characterized as hostile, exploitive, manipulative, and lacking empathy ([Miller & Campbell, 2008](#); [Paulhus & Williams, 2002](#)) – are less concerned about situations that entail suffering and unfairness (e.g., [Djeriouat & Trémolière, 2014](#); [Glenn et al., 2009](#); [Niemi & Young, 2013](#)). Our predictions for individuals reporting high levels of disinhibition and psychoticism were less clear. We expected that disinhibition and psychoticism would be associated with moral concerns because they are similar in some respects to other dark personality features that have been shown to be associated with moral values (e.g., psychopathy; [Blair, 2007](#)). However, we were uncertain about the exact patterns that would emerge so we included these pathological personality features for exploratory purposes.

3. Methods

3.1. Participants and procedure

Participants were 447 community members (221 men, 225 women, and 1 undisclosed) from the United States who were recruited using Mechanical Turk (MTurk). Participants were asked to complete measures concerning pathological personality features and moral values – along with other measures that are not relevant

to the present study (e.g., self-esteem level) – via a secure website. The mean age of the participants was 35.36 years ($SD = 10.72$) and their racial/ethnic composition was 75% White, 9% Black, 8% Asian, 7% Hispanic, and 1% other.

3.2. Measures

3.2.1. Pathological personality features

Pathological personality features were assessed with the PID-5 (Krueger et al., 2012). The PID-5 is a 220-item instrument comprised of 25 facets that load onto five higher-order domains: *negative affect* ($\alpha = .94$; anxiousness, emotional lability, separation insecurity), *detachment* ($\alpha = .95$; withdrawal, anhedonia, intimacy avoidance), *antagonism* ($\alpha = .93$; manipulateness, deceitfulness, grandiosity), *disinhibition* ($\alpha = .94$; irresponsibility, impulsivity, distractibility), and *psychoticism* ($\alpha = .96$; unusual beliefs and experiences, eccentricity, perceptual dysregulation). The internal consistencies of the facet scales were adequate to high in the current sample (Median α ; range = .77–.96).¹ Participants were asked to rate how accurately each of the items of the PID-5 described them using scales that ranged from 0 (*very false or often false*) to 3 (*very true or often true*). The PID-5 has been found to possess adequate psychometric properties in previous studies (e.g., Krueger et al., 2012).

3.2.2. Moral concerns

Moral concerns were assessed using the Moral Foundations Questionnaire (Graham et al., 2011). The Moral Foundations Questionnaire is a 30-item, two-part instrument that is designed to assess the five basic foundations of morality: harm/care (e.g., “Compassion for those who are suffering is the most crucial virtue”), fairness/cheating (e.g., “When the government makes laws, the number one principle should be ensuring that everyone is treated fairly”), ingroup/betrayal (e.g., “People should be loyal to their family members, even when they have done something wrong”), authority/disrespect (e.g., “Respect for authority is something all children need to learn”), and purity/degradation (e.g., “People should not do things that are disgusting, even if no one is harmed”). These five domains tend to cluster into two higher-order factors known as *individualizing values* ($\alpha = .80$; harm/care, fairness/cheating) and *binding values* ($\alpha = .90$; ingroup/betrayal, authority/disrespect, purity/degradation). Previous research has shown that these two higher-order factors possess adequate discriminant validity (e.g., Graham, Haidt, & Nosek, 2009).

4. Results

The correlation between individualizing values and binding values did not reach conventional levels of significance ($r = .12$, $p = .14$). The associations that the PID-5 facets and domains had with moral values are presented in Table 1. Due to the relatively large sample size, even modest correlations were statistically significant so we will only focus on correlation coefficients of at least a moderate effect size (i.e., .3 or greater). These results revealed that a number of PID-5 facets were negatively correlated with individualizing values (i.e., callousness, deceitfulness, irresponsibility, grandiosity, manipulateness, impulsivity, perceptual dysregulation, and risk taking). The PID-5 higher-order domains of antagonism and disinhibition were also negatively correlated with individualizing values which is consistent with the pattern observed for the facet scales. To account for the associations among the PID-5 facets, we additionally regressed both of the moral concerns onto all 25 facets in simultaneous analyses. A similar

Table 1

Associations between the PID-5 and moral values.

	Individualizing values		Binding values	
	<i>r</i>	β	<i>r</i>	β
PID-5 facets				
Anhedonia	-.14**	.01	-.17***	-.15
Anxiousness	.00	.08	-.10*	-.08
Attention seeking	-.23***	.04	.04	.00
Callousness	-.55***	-.58***	-.08	.10
Deceitfulness	-.41***	-.05	-.11*	-.07
Depressivity	-.16**	.13	-.16**	-.07
Distractibility	-.20***	.04	-.18**	-.10
Eccentricity	-.19***	.08	-.26***	-.38***
Emotional lability	-.09*	.02	.03	.11
Grandiosity	-.36***	.03	.05	.10
Hostility	-.28**	-.02	-.09*	-.07
Impulsivity	-.33***	.00	-.08	.12
Intimacy avoidance	-.23***	-.04	-.04	.00
Irresponsibility	-.40***	-.09	-.14*	-.06
Manipulateness	-.34***	-.01	-.05	-.08
Perceptual dysregulation	-.32***	-.05	-.09*	-.10
Perseveration	-.22***	-.08	-.09*	.08
Restricted affectivity	-.29***	.02	-.19**	-.11
Rigid perfectionism	-.11*	.06	.05	.06
Risk taking	-.31***	-.08	-.12**	-.11
Separation insecurity	-.12**	.03	.06	.05
Submissiveness	-.16**	-.16***	.08	.13**
Suspiciousness	-.17***	.06	-.02	.19***
Unusual beliefs	-.27***	.00	.02	.23**
Withdrawal	-.15**	.06	-.10	.13
PID-5 domains				
Negative affect	-.07	.20***	-.02	.18**
Detachment	-.20***	-.05	-.13**	-.06
Antagonism	-.43***	-.34***	-.06	.06
Disinhibition	-.33***	-.21***	-.16**	-.14
Psychoticism	-.28***	-.06	-.16**	-.16*

* $p < .05$.

** $p < .01$.

*** $p < .001$.

approach was followed for the PID-5 domains such that the moral concerns were regressed onto the five domains in simultaneous analyses. The standardized regression coefficients are presented alongside the zero-order correlations for each PID-5 facet or domain. There was a marked reduction in the associations that many PID-5 facets had with individualizing concerns when controlling for the other facets. In fact, the only facet that had at least a moderate association with individualizing concerns in the regression analysis was callousness. For the PID-5 domains, antagonism and disinhibition largely maintained their associations with individualizing values when controlling for the other domains.

A path analysis was performed in AMOS (version 20; Arbuckle, 2010) to examine the unique associations the PID-5 domains had with individualizing and binding moral values. The advantages of using path analysis over multiple regression analyses include the ability to account for shared variance among outcome variables entered simultaneously and the use of fewer inferential tests which reduces the likelihood of committing a Type 1 error (Schumacker & Lomax, 2004). The current model was just-identified (i.e., the model estimates as many parameters as there are data points, resulting in a theoretical perfect fit) so all fit indices were held constant and are not reported (Kline, 2011). The coefficients from this path analysis including pathological personality features and moral concerns are presented in Fig. 1.² The

² Preliminary analyses included separate models for each of the moral values (i.e., individualizing values and binding values). The results of those analyses were similar to what emerged when both moral values were included in a single model. For example, individualizing values were still positively associated with negative affect and negatively associated with antagonism and disinhibition, whereas binding values were positively associated with negative affect and negatively associated with psychoticism.

¹ One item from the callousness facet of the PID-5 (item 153; “I don’t care if my actions hurt others”) was omitted from the present study by mistake. As a result, we scored the facet using the remaining 13 items.

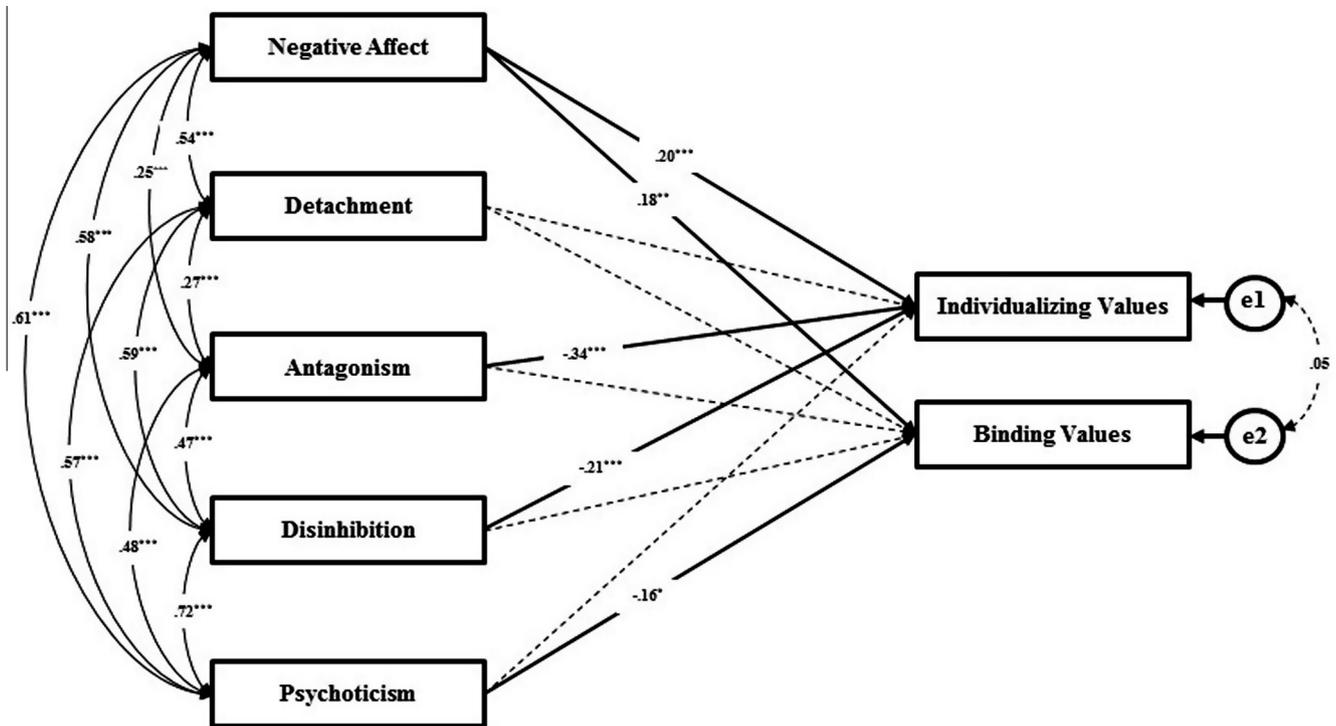


Fig. 1. Path model of the associations that pathological personality features had with individualizing values (i.e., harm/care and fairness/cheating) and binding values (i.e., ingroup/betrayal, authority/disrespect, and purity/degradation). *Note:* Rectangles indicate measured variables and circles indicate disturbance terms. The significant direct effects are indicated by a solid black arrow. The significant correlations are included for the relationships between the predictors (i.e., pathological personality features), as well as among the outcome variables (i.e., moral values) and are indicated by curved bidirectional arrows. The dashed lines represent nonsignificant associations.

model explained 23% of the variance in individualizing values and 5% of the variance in binding values. Results revealed that negative affect had unique significant positive associations with both individualizing values ($\beta = .20$, $t = 3.62$, $SE = .80$, $p < .001$) and binding values ($\beta = .18$, $t = 2.85$, $SE = 1.67$, $p = .004$). Antagonism ($\beta = -.34$, $t = -7.00$, $SE = .80$, $p < .001$) and disinhibition ($\beta = -.21$, $t = -3.23$, $SE = 1.12$, $p < .001$) had unique significant negative associations with individualizing values. Lastly, psychoticism had a unique significant negative association with binding values ($\beta = -.16$, $t = -2.19$, $SE = 2.18$, $p = .03$).

5. Discussion

The purpose of the present study was to examine the moral concerns reported by individuals with certain dark personality features. More specifically, we examined the possibility that pathological personality features would be associated with moral concerns as measured by individualizing values (i.e., sensitivity to harm and fairness) or binding values (i.e., reflecting in-group loyalty, respect for authority, and sanctity). Results revealed that a number of PID-5 facets (i.e., callousness, deceitfulness, irresponsibility, grandiosity, manipulateness, impulsivity, perceptual dysregulation, and risk taking) and higher-order domains (i.e., negative affect, antagonism, and disinhibition) were negatively associated with individualizing values. This pattern of associations is consistent with previous research showing strong negative correlations between aversive personality features – especially those that are antagonistic in nature – and aspects of the individualizing values (e.g., moral concerns about harm/care; Djeriouat & Trémolière, 2014; Glenn et al., 2009; Niemi & Young, 2013). Further examination of the unique associations that the PID-5 domains had with moral values revealed that individuals who experienced high levels of negative affect also reported relatively strong individualizing and binding values even when controlling for other pathological

personality features. In addition, individuals reporting high levels of antagonism and disinhibition possessed weak individualizing values, whereas individuals reporting high levels of psychoticism possessed weak binding values.

The results of the present study suggest that pathological personality features differ in their associations with moral values. Negative affect was the only dark personality feature that was associated with stronger moral concerns for either individualizing values or binding values. This finding is consistent with our prediction that individuals with high levels of negative affect would rely on both individualizing and binding values when making moral judgments. Individuals with high levels of negative affect – much like those with high levels of neuroticism – are extremely anxious and highly sensitive to threat which may lead to greater concerns about protecting themselves and others from harm or coercion which, in turn, may translate into greater support for rules and regulations that protect social norms (Oxley et al., 2008).

Consistent with previous research (Djeriouat & Tremolière, 2014; Glenn et al., 2009; Niemi & Young, 2013), antagonism was associated with weaker individualizing values. This suggests that individuals with high levels of antagonism are less concerned with harm avoidance and fairness when making moral judgments. This finding makes sense given that antagonistic individuals tend to be deceptive, manipulative, and aggressive (Paulhus & Williams, 2002). Interestingly, the moral judgments of individuals with high levels of disinhibition were not focused on issues concerning harm and injustice. Although we did not anticipate this finding, individuals high in disinhibition tend to display self-destructive impulsive behaviors while under emotional distress (American Psychiatric Association, 2013) so it seems reasonable that individuals who show these tendencies may be less likely to condemn acts that cause pain or admire those acts that alleviate or prevent harm. Finally, the negative association that emerged between psychoticism and binding values may be explained by the discrepancies

that exist between the odd and unusual behaviors that characterize psychoticism and the importance that binding values place on group conformity and order. It is important to note that contrary to our predictions, detachment was not associated with weak binding values. We believe that this may be due to differential associations with particular aspects of binding values. That is, individuals with high levels of detachment may report relatively low levels of loyalty but may be no more or less concerned about issues of purity than other individuals.

The results of the present study suggest the interesting possibility that differences in moral reasoning may play a role in the aversive behavioral tendencies of individuals with dark personality features. Previous research suggests that individuals with dark personality features – particularly those that are antagonistic in nature – are more inclined to manipulate and exploit others which may be at least partially explained by their relatively low levels of concern for the rights and well-being of others when making moral judgments (e.g., Djeriouat & Trémolière, 2014; Glenn et al., 2009; Niemi & Young, 2013). The present results showed a similar lack of interest in moral issues concerning harm or fairness for individuals with high levels of antagonism and disinhibition. However, the results revealed that other pathological personality features had different associations with moral concerns (e.g., individuals with high levels of negative affect reported more concern for individualizing and binding values). These findings are important because they suggest that the motives underlying the socially aversive behaviors of individuals with pathological personality features may be somewhat different. In some cases, these behaviors may be linked to weak individualizing values. For example, this may provide at least a partial explanation for the aversive behaviors perpetrated by those with high levels of antagonism. However, the aversive behaviors that accompany other pathological personality features may be tied to different moral concerns. For example, the odd and unusual interpersonal behavior of those individuals with high levels of psychoticism may be linked with their relatively weak binding values.

Although the present study had a number of strengths (e.g., large community sample, captured a wide array of pathological personality features), it is important to acknowledge some of its potential limitations. The first limitation is that the direction of causality between pathological personality features and moral concerns cannot be determined due to the correlational nature of the data. The underlying process model for the present study was that certain pathological personality features would lead individuals to adopt different moral concerns. However, this causal sequence cannot be established using the present data. For example, it is quite possible that adopting certain moral values may lead to the development of pathological personality features (e.g., people with weak individualizing values may develop more antagonistic personality features over time). Future research should attempt to gain a better understanding of the causal links between pathological personality features and moral values by using experimental designs or longitudinal studies. The second limitation is that the present study relied exclusively on self-report measures of pathological personality features and moral concerns which make it possible that our findings may have been influenced by socially desirable responding. For example, it is possible that some individuals may have been reluctant to endorse some of these aversive personality features and eager to claim that they have different moral concerns than is actually the case. Future research would benefit from utilizing strategies that are designed to capture pathological personality features and moral concerns that are not reliant on self-report (e.g., observer ratings). The third limitation is that the pathological personality features used in the present study capture only a limited range of aversive personality features. The present study was primarily interested in the associations between pathological personality

features and moral concerns but it would be beneficial for future research to consider other dark personality features such as social dominance orientation, greed, and spitefulness.

Despite these limitations, the results of the present study expand the current understanding of the connections between personality and moral concerns by examining the importance of pathological personality features in moral reasoning. In particular, the present results indicate that pathological personality features differ in their associations with individualizing values and binding values. For example, the moral values reported by individuals with high levels of negative affect were quite different than the moral values of those with high levels of antagonism or disinhibition. This suggests that pathological personality features – beyond those that are simply antagonistic in nature – may have important associations with moral concerns.

References

- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.
- Arbuckle, J. L. (2010). *IBM SPSS Amos 19 user's guide*. Crawfordville, FL: Amos Development Corporation.
- Blair, R. J. R. (2007). The amygdala and ventromedial prefrontal cortex in morality and psychopathy. *Trends in Cognitive Sciences*, 11, 387–392.
- Cushman, F. A., Young, L., & Hauser, M. D. (2006). The role of reasoning and intuition in moral judgments: Testing three principles of harm. *Psychological Science*, 17, 1082–1089.
- Djeriouat, H., & Trémolière, B. (2014). The dark triad of personality and utilitarian moral judgment: The mediating role of honesty/humility and harm/care. *Personality and Individual Differences*, 67, 11–16.
- Glenn, A. L., Iyer, R., Graham, J., Koleva, S., & Haidt, J. (2009). Are all types of morality compromised in psychopathy? *Journal of Personality Disorders*, 23, 384–398.
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96, 1029–1046.
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, 101, 366–385.
- Haidt, J. (2008). Morality. *Perspectives on Psychological Science*, 3, 65–72.
- Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, 20, 98–116.
- Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus*, 133, 55–66.
- Hirsh, J. B., DeYoung, C. G., Xu, X., & Peterson, J. B. (2010). Compassionate liberals and polite conservatives. *Personality and Social Psychology Bulletin*, 36, 655–664.
- Hopwood, C. J., Wright, A. G. C., Krueger, R. F., Schade, N., Markon, K. E., & Morey, L. C. (2013). DSM-5 pathological personality traits and the personality assessment inventory. *Assessment*, 20, 269–285.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: The Guilford Press.
- Koleva, S. P., Graham, J., Iyer, R., Ditto, P. H., & Haidt, J. (2012). Tracing the threads: How five moral concerns (especially purity) help explain culture war attitudes. *Journal of Research in Personality*, 46, 184–194.
- Krueger, R. F., Derringer, J., Markon, K. E., Watson, D., & Skodol, A. E. (2012). Initial construction of a maladaptive personality trait model and inventory for DSM-5. *Psychological Medicine*, 42, 1879–1890.
- Lewis, G. J., & Bates, T. C. (2011). From left to right: How the personality system allows basic traits to influence politics via characteristic moral adaptations. *British Journal of Psychology*, 102, 546–558.
- McAdams, D. P. (1995). What do we know when we know a person. *Journal of Personality*, 63, 365–396.
- Miller, J. D., & Campbell, W. K. (2008). Comparing clinical and social-personality conceptualizations of narcissism. *Journal of Personality*, 76, 449–476.
- Niemi, L., & Young, L. (2013). Caring across boundaries versus keeping boundaries intact: Links between moral values and interpersonal orientations. *PLoS ONE*, 8, e81605.
- Oxley, D. R., Smith, K. B., Alford, J. R., Hibbing, M. V., Miller, J. L., Scalora, M., et al. (2008). Political attitudes vary with physiological traits. *Science*, 321, 1667–1670.
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36, 556–563.
- Samuel, D. B., Simms, L. J., Clark, L. A., Livesley, W. J., & Widiger, T. A. (2010). An item response theory integration of normal and abnormal personality scales. *Personality Disorders: Theory, Research, and Treatment*, 1, 5–21.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling* (2nd ed.). New York, NY: Taylor and Francis Group LLC.
- Southard, A. C., Noser, A. E., Pollock, N. C., Mercer, S. H., & Zeigler-Hill, V. (2014). *The interpersonal nature of dark personality features: Do dark personality features possess similar interpersonal content?* Manuscript submitted for publication.

- Strickland, C. M., Drislane, L. E., Lucy, M., Krueger, R. F., & Patrick, C. (2013). Characterizing psychopathy using DSM-5 personality traits. *Assessment, 20*, 327–338.
- Thomas, K. M., Yalch, M. M., Krueger, R. F., Wright, A. G., Markon, K. E., & Hopwood, C. J. (2013). The convergent structure of DSM-5 personality trait facets and five-factor model trait domains. *Assessment, 20*, 308–311.
- Wright, A. G., Pincus, A. L., Hopwood, C. J., Thomas, K. M., Markon, K. E., & Krueger, R. F. (2012). An interpersonal analysis of pathological personality traits in DSM-5. *Assessment, 19*, 263–275.
- Zeigler-Hill, V., & Marcus, D. K. (in press). *The dark side of personality*. Washington, DC: American Psychological Association.