



## Interpersonal Guilt and the Dark Triad<sup>☆</sup>

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### ABSTRACT

Research on the Dark Triad of personality has supported the notion that Machiavellianism, narcissism, and psychopathy represent distinct but related traits. This study investigated the relation between each of the Dark Triad traits and scores on the Interpersonal Guilt Questionnaire (IGQ; O'Connor, Berry, Weiss, Bush, & Sampson, 1997). Each of the Dark Triad traits was found to have significant negative associations with survival and omnipotent responsibility guilt. Interestingly, Machiavellianism and psychopathy were found to be positively associated with self-hate guilt, while narcissism was negatively correlated with self-hate. Rumination was found to mediate the relation between Machiavellianism and self-hate, whereas the relation between psychopathy and self-hate was only partially mediated by rumination. Multiple regression analyses revealed that narcissism, psychopathy, and rumination each significantly added to the prediction of self-hate guilt, Machiavellianism and narcissism added to the prediction of survival guilt, and psychopathy and rumination added to the prediction of omnipotent responsibility guilt. These results provide further support for the distinct but related nature of the Dark Triad. They also offer greater insight into the behaviours associated with these subclinical antisocial tendencies.

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For decades the Five-Factor Model of personality (FFM; Costa & McCrae, 1992) has dominated individual differences research. While this theory has greatly advanced our understanding of normative personality traits, the FFM has also been the subject of much criticism in recent years (Paunonen & Jackson, 2000). In particular, researchers have argued that the FFM is not able to capture adequately the full range of personality traits, especially those that reflect socially malevolent behaviours (Veselka, Schermer, & Vernon, 2012). For this reason, alternative models, such as the Dark Triad, have been proposed for investigation of such antisocial personality traits.

### 1. The darker side of personality

First cited by Paulhus and Williams (2002), the Dark Triad describes a set of three subclinical maladaptive personality traits: *Machiavellianism*, *narcissism*, and *psychopathy*. In general, these traits are reflective of deceptive and self-serving tendencies. In particular, Machiavellianism is characterized by being manipulative of others (Christie & Geis, 1970), whereas narcissistic individuals tend to possess grandiose self-views and display a sense of entitlement

(Raskin & Hall, 1979). Finally, impulsive behaviour and a lack of remorse are highly indicative of psychopathy (Hare, 1985).

Numerous studies have investigated the association between these Dark Triad traits and a series of antisocial behaviours, including cruelty against animals (Kavanagh, Signal, & Taylor, 2013), gambling (Crysel, Crosier, & Webster, 2013), aggression (Muris, Meesters, & Timmermans, 2013), bullying (Baughman, Dearing, Giammarco, & Vernon, 2012), and preference for short-term mating strategies, including one-night stands (Jonason, Li, Webster, & Schmitt, 2009; Jonason, Luevano, & Adams, 2012). Attempts to explain these malevolent tendencies have focused largely on the role of empathy (Paulhus & Williams, 2002). Research suggests that a lack of empathy is characteristic of individuals high in the Dark Triad traits, especially Machiavellianism and psychopathy (Jonason, Lyons, Bethell, & Ross, 2013). In particular, Wai and Tiliopoulos (2012) found that Machiavellianism, narcissism, and psychopathy were associated with deficits in emotional aspects of empathy, but not cognitive. That is, it seems that these individuals are able to identify and assess the emotional reactions of others, but they refrain from experiencing emotional discomfort caused by another person's suffering. Wai and Tiliopoulos (2012) argue that this may allow for these antisocial individuals to manipulate others for their own personal gain, without feeling remorse for whoever is hurt in the process.

A recent study by Giammarco and Vernon (2014) found partial support for this hypothesis. Self-report measures administered to a

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sample of undergraduate students revealed that each of the Dark Triad traits was negatively correlated ( $r = -.22$  to  $-.57$ ) with empathic concern, as measured by the Interpersonal Reactivity Index (IRI; Davis, 1980). Empathic concern is defined as the tendency to report feelings of concern for others who have experienced a negative life event. As expected, Machiavellianism and psychopathy had the strongest associations. However, they were also significantly negatively correlated with perspective-taking, defined as the tendency to recognize another's point of view, which appears to be a more cognitive aspect of empathy. As such, these results support the notion that those with Dark Triad tendencies do not experience personal distress at the expense of others, but it remains unclear whether or not they also experience cognitive deficits. Furthermore, whether or not this leads these "dark" individuals to manipulate others for their own benefit remains untested.

## 2. The role of empathy in guilt

Traditional psychoanalytic perspectives on guilt (Freud, 1940 as cited in O'Connor, Berry, Weiss, Bush, & Sampson, 1997) theorized that guilt stemmed from an unconscious desire to hurt others for various reasons (e.g., jealousy, anger, revenge). Consequently, it was believed to be one of the largest contributors to pathology and emotional distress and (Modell, 1965). However, a more modern approach to guilt focuses on the emotions that arise from concern about others and altruistic tendencies (O'Connor et al., 1997). This view highlights the interpersonal nature of guilt, and points to its importance for the maintenance of relationships. Defined as "a painful affect arising from the belief that one has hurt another" (O'Connor et al., 1997, p. 74), researchers have proposed that guilt can serve as a useful mechanism for maintaining relationships. That is, when an individual does something to hurt a friend or family member, and the action cannot be undone, the transgressor experiences guilt for their actions and they are led to apologize. In this way, guilt may increase the likelihood of attempts to repair the relationship. Howell, Turowski, and Buro (2012) found preliminary support for this argument when they noted that individuals who expressed higher levels of guilt reported a greater generalized willingness to apologize.

Howell et al. (2012) also found that empathy was positively associated with the willingness to apologize. An examination of the basic definition of guilt will reveal that this result is not surprising. According to O'Connor et al. (1997) guilt may arise because of the belief that you have hurt someone. It can be argued that a certain level of empathy is necessary to experience guilt because in order to believe you have hurt someone you would need to take their perspective in the situation and imagine how they would feel. This is the very definition of perspective-taking, a component of empathy, provided by Davis (1980). Indeed researchers have found that elements of empathy, including empathic concern, are positively related to experiences of guilt (Joireman, 2004). Therefore, it is evident that empathy plays a very important role in the experience of guilt.

## 3. The measurement of guilt

There is a general consensus among researchers that guilt is largely an interpersonal construct. As such, a common assessment of the tendency to experience feelings of guilt is the Interpersonal Guilt Questionnaire (IGQ; O'Connor et al., 1997). The IGQ is a self-report measure that assesses four distinct types of guilt: *survivor*, *separation*, *omnipotent responsibility*, and *self-hate*.

Traditionally, survivor guilt was a term used to describe those individuals who experienced distress at the fact that they survived

some terrible event while others did not (Glover, 1984). Although this is still a valid definition for the construct, within the context of the IGQ survivor guilt is a more general term used to describe the experience of those who feel bad for their own successes because others do not experience their same good fortune. Modell (1971) suggested that in some cases, individuals who experience survivor guilt may engage in self-destructive behaviours to limit their own success in an attempt to pacify their guilty feelings.

Separation guilt refers to the feelings of guilt that may arise when one is away from, or considers themselves different from, people who are important to them (e.g., parents). According to Weiss (1986) and Bush (1989) this type of guilt arises because the person believes they are harming their loved ones by separating from them. In turn, they experience distress at the notion of being disloyal to family or friends.

An individual who experiences omnipotent responsibility guilt tends to possess an exaggerated sense of responsibility for the success and happiness of others. When these individuals feel they have failed others, they experience strong feelings of guilt. Researchers hypothesize that this type of guilt is derived from a strong sense of altruism (O'Connor et al., 1997). Because of this, individuals high in omnipotent responsibility guilt would be motivated to reduce their personal distress by helping others.

Finally, self-hate guilt arises when individuals comply with a severely critical evaluation of themselves from someone, often a parent, who feels hatred or contempt for them. Although survivor, separation, and omnipotent guilt are directly based on empathy and are largely "other-focused", self-hate guilt can be considered to be indirectly related to empathy and is "self-focused". That is, an individual may adopt these critical evaluations out of loyalty (an empathy-driven experience) to a significant person in their life that holds these negative evaluations. Researchers have found that self-hate guilt tends to be highly elevated among adolescents with anorexia nervosa, compared to non-affected peers (Berghold & Lock, 2002). It has also been noted that this type of guilt is associated with negative thoughts about the self and shame (O'Connor et al., 1997). Since there is little evidence of any social benefit to self-hate, it would seem to be best classified as a maladaptive form of guilt.

## 4. Present study

It is well established that deficits in empathy are associated with each of the Dark Triad traits (Jonason & Krause, 2013) and that empathy is an important aspect of guilt (Joireman, 2004). As such, the goal of the present study is to examine the relation between the Dark Triad and interpersonal guilt at both the dimension and facet level. It is expected that when a series of self-report measures are administered to a sample of undergraduate students, those participants who report a high tendency towards each of the Dark Triad traits will also report a lower tendency to experience overall interpersonal guilt, as assessed by a composite score on the IGQ.

When examining associations with the subscales of the IGQ, it is expected that each of the Dark Triad traits will demonstrate unique patterns of association. In particular, because Machiavellianism and psychopathy have been shown to have stronger negative associations with perspective-taking and empathic concern than narcissism (Giammarco & Vernon, 2014) these two Dark Triad traits are expected to have stronger negative associations than narcissism will with subscales of the IGQ that are directly related to empathy, namely separation and omnipotent responsibility guilt. Because researchers have found a strong relation between guilt and rumination (Orth, Berking, & Burkhardt, 2006), we also assessed the mediating effect of rumination on any significant

relations between the Dark Triad and guilt. In particular we chose to focus on vengeful rumination (rather than depressive or fearful) because it was expected that vengeful rumination would be more prevalent among these manipulative, self-serving individuals.

Excessively high self-esteem and the belief that one is better than others are defining features of narcissism (Zheng & Huang, 2005). Therefore, it is expected that narcissism will be more strongly associated with survivor guilt than any other type of guilt because these individuals tend to enjoy believing that they are better than others. Narcissism is also expected to be more highly negatively correlated with self-hate guilt compared to the other Dark Triad traits. This pattern of results is expected because the narcissist's inflated self-view could prevent them from recognizing faults that others may find in them.

## 5. Methods

### 5.1. Participants

The sample consisted of 219 undergraduate students (46 male, 172 female, and 1 unspecified) recruited from an introductory psychology course, and posters placed around the university campus. Participants ranged in age from 17 to 53 years ( $M = 20.56$ ,  $SD = 6.01$ ).

### 5.2. Measures and procedure

#### 5.2.1. Short-D3

The Short-D3 (Jones & Paulhus, 2014) is a self-report measure of the Dark Triad traits. The Short-D3 has undergone a number of revisions, but the 28-item version was used in the current study. Participants were asked to rate their agreement to a number of self-reflective statements on a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). Example items include: "Make sure your plans benefit you, not others" (Machiavellianism), "I insist on getting the respect I deserve" (narcissism), and "I'll say anything to get what I want" (psychopathy). Cronbach's alphas ranging from .73 to .80 have been reported for each subscale.

#### 5.2.2. Interpersonal guilt questionnaire (IGQ)

The IGQ (O'Connor et al., 1997) is a multidimensional self-report measure of interpersonal guilt. The scale consists of 67-items, assessing four types of guilt: survivor ("I sometimes feel I don't deserve the happiness I've achieved"), separation ("It makes me anxious to be away from home for too long"), omnipotent responsibility ("I worry a lot about the people I love even when they seem to be fine"), and self-hate ("If something bad happens to me I feel I must have deserved it"). Participants responded to items on a 5-point Likert scale, with higher scores reflecting greater feelings of guilt. O'Connor et al. (1997) reported Cronbach's alphas for each subscale ranging from .82 to .87, indicating strong internal consistency.

#### 5.2.3. Dissipation–rumination scale (DRS)

The DRS (Caprara, 1986) is a concise self-report measure of the extent to which individuals tend to think deeply and repeatedly about events when they have been personally wronged. The scale consists of 20 items, but only 15 are used to compute an individual's score. Participants respond to items such as "Sometimes I can't sleep because of a wrong done to me" on a 6-point Likert scale, with higher scores reflecting a greater tendency to ruminate. Cronbach's alphas ranging from .79 to .87 have been reported (Caprara, 1986).

### 5.3. Procedure

Participants who expressed an interest in completing the study were given a URL which allowed them to access the study online. After reading the letter of information, willing participants gave their consent and proceeded to complete the described measures, as well as some additional measures not relevant to the present study. The study took approximately 45 min to complete and all participants received a debriefing form. Those participants recruited from the introductory psychology course received partial course credit for their participation. The remaining participants were entered into a draw for the chance to win one of ten \$50.00 cash prizes.

## 6. Results

### 6.1. Descriptive statistics and sex differences

Means, standard deviations, and Cronbach's alphas for the present study are reported in Table 1. As recommended by O'Connor et al. (1997), a composite IGQ score was also computed. All subscales reached acceptable levels of internal consistency (Kline, 2000). A series of independent samples *t*-tests were conducted to determine if mean scores for men and women differed significantly on any variables. Consistent with previous research, men ( $M = 2.21$ ,  $SD = 0.55$ ) were found to score significantly higher than women ( $M = 1.97$ ,  $SD = 0.56$ ) on psychopathy,  $t(216) = 2.595$ ,  $p < .01$ , but not on any other Dark Triad traits (Webster & Jonason, 2013). No significant sex differences were observed for any of the IGQ subscales, nor for vengeful rumination.

### 6.2. Zero-order correlations

Pearson product-moment correlations are reported in Table 2. As expected, the Dark Triad traits were significantly positively correlated with one another, with Machiavellianism and psychopathy demonstrating the strongest relation. In addition, each of the IGQ subscales was strongly positively associated with the others and with the composite IGQ score.

Interestingly, narcissism was the only Dark Triad trait to be significantly correlated with the composite IGQ score. Facet-level analyses indicated that Machiavellianism, psychopathy, and narcissism were moderately negatively correlated with survivor and omnipotence guilt. However, Machiavellianism and psychopathy were positively correlated with self-hate, whereas narcissism was negatively correlated with this type of guilt. Interestingly, rumination was strongly positively correlated with Machiavellianism and psychopathy but not with narcissism. In addition, rumination was not significantly correlated with any of the IGQ subscales except self-hate.

**Table 1**  
Descriptive statistics and reliability for the Dark Triad, IGQ, and DRS.

	M	SD	Cronbach's $\alpha$
Dark Triad			
Machiavellianism	2.79	0.55	.76
Narcissism	2.91	0.50	.63
Psychopathy	2.02	0.56	.75
IGQ Composite	3.00	0.37	.91
Survivor	3.08	0.41	.84
Separation	2.96	0.55	.78
Omnipotence	3.60	0.53	.74
Self-Hate	2.42	0.67	.87
Rumination	2.66	0.61	.84

**Table 2**

Zero-order correlations between the Dark Triad, IGQ, and DRS.

	1	2	3	4	5	6	7	8	9
1. Machiavellianism		.23**	.58**	-.05	-.25**	.01	-.24**	.22**	.55**
2. Narcissism			.32**	-.22**	-.39**	.16*	-.19**	-.19**	.07
3. Psychopathy				.03	-.19**	.08	-.32**	.35**	.47**
4. IGQ Composite					.79**	.60**	.70**	.71**	.14*
5. Survivor						.22**	.55**	.46**	-.05
6. Separation							.40**	.17*	.07
7. Omnipotence								.18**	-.03
8. Self-Hate									.31**
9. Rumination									

\* Denotes significance at  $p < .05$ .\*\* Denotes significance at  $p < .001$ .

### 6.3. Mediation analyses

Because Machiavellianism and psychopathy showed significant positive associations with self-hate guilt and rumination, and rumination was significantly correlated with self-hate, a series of mediation analyses using multiple regression were conducted to determine if rumination mediated the relation between the Dark Triad traits and self-hate guilt. Mediation analyses were not conducted with any other IGQ subscales because rumination was not significantly correlated with any subscale except self-hate.

The Aroian version of the Sobel test was conducted to test for significant mediation, as recommended by Baron and Kenny (1986). It was found that rumination mediated the relation between Machiavellianism and self-hate, such that the correlation between Machiavellianism and self-hate was no longer significant after removal of its shared variance with rumination,  $c = .269$ ,  $c^* = .086$ ,  $Z = 3.328$ ,  $p < .001$ . However, rumination only partially mediated the relation between psychopathy and self-hate,  $c = .419$ ,  $c^* = .314$ ,  $Z = 2.523$ ,  $p = .01$ .

### 6.4. Multiple regression analyses

A series of multiple regression analyses were conducted to determine if the Dark Triad traits and rumination added significantly to the prediction of interpersonal guilt scores. All predictors were entered simultaneously. The results of these analyses are reported in Table 3. As is evident from this table, the model predicting self-hate accounted for the largest amount of variance, with narcissism, psychopathy, and rumination adding significantly to the prediction.

**Table 3**

Dark Triad and rumination predicting IGQ scores.

Dependent Variable	Adjusted $R^2$	$F$	Significant predictors	Standardized $\beta$	$t$
Composite IGQ	.075	5.424***	Machiavellianism	-.171	-1.962*
			Narcissism	-.231	-3.327***
			Rumination	.203	2.520**
Survivor	.174	12.476***	Machiavellianism	-.233	-2.831**
			Narcissism	-.351	-5.347***
Separation	.019	2.059 <sup>ns</sup>	Psychopathy	-.307	-3.370***
			Rumination	.205	2.616**
Omnipotence	.127	8.905***	Narcissism	-.323	-5.105***
			Psychopathy	.390	5.046***
			Rumination	.163	2.214*

Note. All predictors were entered simultaneously. Due to limited space, only predictors that reached acceptable levels of significance are reported here.

\* Denotes significance at  $p < .05$ .\*\* Denotes significance at  $p < .01$ .\*\*\* Denotes significance at  $p < .001$ .

## 7. Discussion

The results of the present study offer a number of interesting insights into the attitudes of individuals with Machiavellian, narcissistic, and psychopathic tendencies. Our first hypothesis was that each of the Dark Triad traits would be significantly negatively correlated with overall guilt. However, narcissism was the only trait to exhibit such an association. Importantly, facet-level investigations of guilt revealed that Machiavellianism and psychopathy were negatively correlated with some types of guilt, but positively associated with others. These results confirm the importance of studying guilt as a multidimensional construct (O'Connor et al., 1997).

It was hypothesized that Machiavellianism and psychopathy would be more strongly negatively associated with separation and omnipotent responsibility guilt than narcissism because of their stronger relation to deficits in perspective-taking and empathic concern (Giammarco & Vernon, 2014). Support for the first part of this prediction was not found. In fact the opposite pattern of results emerged. Machiavellianism and psychopathy were found to not be significantly associated with separation guilt, while a weak but significant association with narcissism was reported. Previous researchers have reported a negative correlation between separation guilt and age (O'Connor et al., 1997). As such, separation guilt may be a more relevant construct to assess in a younger sample.

With respect to the second aspect of this hypothesis, the data seemed to support our prediction. The two "darker" Dark Triad traits (Jonason & Krause, 2013) were more strongly negatively correlated with omnipotent responsibility than narcissism was. In addition, psychopathy had the strongest association with this type

of guilt. Given that psychopathy is the Dark Triad trait that is most strongly associated with deficits in empathy (Wai & Tiliopoulos, 2012), it would be interesting to investigate the extent to which empathy mediates the relation between psychopathy and omnipotent responsibility guilt.

Our third hypothesis was that narcissism would be more strongly negatively associated with survivor guilt than any other type of guilt. This result was anticipated because narcissistic individuals tend to believe that they are superior to others and deserving of everything good that happens to them (Raskin & Terry, 1988). If narcissists take pride in the belief that they are better than others, it follows that they would not feel guilty for such perceptions. Our results supported this prediction.

Finally, narcissism was expected to exhibit a stronger negative association with self-hate than Machiavellianism and psychopathy. Correlational analyses partially supported this prediction, but also provided some surprising results. In line with our prediction, narcissism was found to be significantly associated with self-hate guilt. However, it was the only Dark Triad trait to be negatively correlated with self-hate. Although Machiavellianism and psychopathy were both more strongly associated with self-hate guilt than narcissism, the nature of these associations was counter to predictions. Those with Machiavellian and psychopathic tendencies were actually more likely to report that they were not deserving of other people's respect and that they deserved the bad things that happened to them. In contrast, narcissists were less likely to endorse such statements.

The fact that narcissists were less likely to report experiencing self-hate guilt is not surprising. Once again, given their grandiose self-view (Raskin & Terry, 1988) it is unlikely that these individuals see themselves as deserving of any negative treatment from others. In contrast, the positive association of self-hate guilt with Machiavellianism and psychopathy may suggest that these individuals are very aware of the fact that they mistreat and manipulate others. As such, while a narcissists' egocentricity may prevent them from seeing their own faults, the Machiavellian and psychopath appear to be cognizant of their antisocial actions.

To further examine these relations a series of mediation analyses were conducted to determine the role of rumination in experiences of self-hate guilt. It was found that the tendency to ruminate fully mediated the relation between Machiavellianism and self-hate guilt, but the relation of guilt with psychopathy was only partially mediated. These results suggest that different factors may lead to self-hate for Machiavellians versus those high in psychopathy. For individuals high in Machiavellianism, it is evident that the tendency to ruminate is a large factor. While rumination evidently plays a role for psychopathy as well, it only partially mediated the relation between psychopathy and self-hate, indicating that there is something unique about psychopathy that is helping to drive the association. Perhaps the lack of full mediation can be attributed to the "darker" quality of psychopathy compared to Machiavellianism (Webster & Jonason, 2013).

The results of our multiple regression analysis confirmed that there was variance unique to psychopathy that added significantly to the prediction of self-hate guilt, when entered into a model that included narcissism, Machiavellianism, and rumination. The failure of Machiavellianism to add significantly to the prediction of self-hate was expected, given the results of our mediation analysis.

### 7.1. Limitations

As with any research, the present study included several limitations that should be considered. First, as is an increasing trend in psychological research (Jonason, Li, & Czarna, 2013; Toussaint & Webb, 2005), our sample contained a disproportionately large number of females. This composition of participants makes it difficult to

confidently conclude that the lack of sex differences is due to a true lack of difference on the measured construct, or merely an artefact of the sample.

Second, as previously mentioned the present study found some surprising associations between Machiavellianism, psychopathy, and self-hate guilt. Previous researchers have found that self-hate guilt is highly correlated with depression and anxiety (Meehan, O'Connor, Berry, & Weiss, 1996; O'Connor, Berry, & Weiss, 1999), whereas traditionally Machiavellianism and psychopathy have not (Lovelace & Gannon, 1999; Skinner, 1982). As such, the positive association between these Dark Triad traits and self-hate guilt is particularly puzzling. It should be noted that in addition to the rationale previously discussed, it is possible that issues of range restriction are responsible for the puzzling results. Although Machiavellianism scores within the sample covered nearly the full range of the scale and were normally distributed, psychopathy scores were more restricted and significantly positively skewed, as could be expected with an undergraduate sample. As such, future researchers should attempt to replicate these findings in more diverse samples before any concrete interpretations should be made of the unusual findings.

### 7.2. Conclusions

It was the aim of the current study to assess individual differences in interpersonal guilt using a model of socially malevolent personality. The results provided support for the notion of the Dark Triad as distinct traits, with Machiavellianism and psychopathy being more similar to each other than they are with narcissism (Rauthmann & Kolar, 2012). This study also reinforced the importance of facet-level investigations of multidimensional constructs, especially as they pertain to individual differences in personality.

As previously discussed, guilt has been proposed as a mechanism to maintain functional interpersonal relationships (Tangney, 1991). It also seems as if certain types of guilt (i.e., omnipotent responsibility) may be more beneficial than others (i.e., self-hate). Given that research has shown that the Dark Triad traits are associated with lower quality romantic, platonic, and familial relationships (Jonason et al., 2013), it would be interesting to investigate the extent to which these relationships suffer due to a lack of guilt.

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