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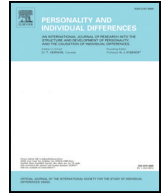
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The Dark Triad and dispositional aggression

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ABSTRACT

Previous research has demonstrated that people who are callous are more likely to be interpersonally aggressive. The present study extends this finding to research on the “Dark Triad” traits (Machiavellianism, narcissism, and psychopathy), which all share a common core of callousness and manipulation. Using crowd-sourcing and student samples, we examined the relationship between the Dark Triad traits with different facets of dispositional aggression. Results indicated that a common Dark Triad factor (i.e., callousness and manipulation) predicted a common aggression factor. However, the individual Dark Triad traits uniquely predicted different facets of aggression. Psychopathy positively predicted physical aggression, narcissism negatively predicted hostility, and Machiavellianism positively predicted hostility. Taken together, the findings shed light on the unique elements of the Dark Triad and their ability to predict unique forms of dispositional aggression.

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The cluster of malevolent traits, known as the Dark Triad of personality (Paulhus & Williams, 2002), has gained increasing attention in the research literature. This Dark Triad consists of erratic and antisocial psychopathy (Cleckley, 1976; Hare, 1999), grandiose and entitled narcissism (Kernberg, 1975; Kohut, 1951), and cynical and strategic Machiavellianism (Christie & Geis, 1970). All three traits are associated with callousness (Jones & Paulhus, 2010b) and dishonesty (Book, Visser, & Volk, 2015; Lee & Ashton, 2005; see also Jones & Figueredo, 2013). Previous cross-sectional research on the Dark Triad has suggested that these traits are universally related to dispositional aggression (Jonason & Webster, 2010). Unfortunately, this research used an assessment of the Dark Triad that lacks validity (Carter, Campbell, Muncer, & Carter, 2015; Maples, Lamkin, & Miller, 2014; Miller et al., 2012). Nevertheless, because callousness is related to dispositional aggression (Hare & Neumann, 2005, 2010; Mahmut, Menictas, Stevenson, & Homewood, 2011; Williams, Paulhus, & Hare, 2007), it seems logical that each Dark Triad trait would be related to self-reported aggression.

Although all three Dark Triad traits are high in callousness and manipulation, it is important to examine the differences in their motivations and behavioral expressions (Jones & Figueredo, 2013). Consequently, there are significant problems with assuming all three Dark Triad traits are similar with respect to aggression. For example, why would a strategic trait such as Machiavellianism (see Jones & Paulhus, 2009) be related to dispositional tendencies toward direct aggression? One answer may lie with misinterpretations due to the spurious overlap among dispositional traits (i.e., Ashton, Lee, Goldberg, & de Vries, 2009).

Ashton et al. (2009) argued that traits sharing an unbalanced overlap may appear as though they are each contributing to an outcome or higher order factor when they are not. Instead, it is the common overlap that may be driving associations with outcomes, but the individual traits may be overall unrelated (Paulhus & Williams, 2002).

In addition to oversimplifications driven by spurious associations (Ashton et al., 2009), behavioral evidence suggests that Machiavellianism has no unique association with aggressive responses to direct or ego-provocation (Jones & Paulhus, 2010a). In contrast, psychopathy has a long history of predicting aggression and violent offending (Hare, 1996). For example, individuals high in psychopathy are quick to anger, yet are just as quick to return to baseline (see Hare, 1999, for review). Additionally, psychopathy is universally recognized, in three (Cooke & Michie, 2001) and four-factor models (Hare & Neumann, 2005), as being associated with an erratic lifestyle and deficits in impulse-control. Their inability to inhibit impulsive urges is associated with dysfunctional forms of impulsivity (Jones & Paulhus, 2011) as well as a host of difficulties associated with attention (Kosson & Newman, 1986) and executive control (Newman, 1987). These additional aspects of the psychopathy trait make such individuals especially predisposed toward aggression (see also Porter & Woodworth, 2006). Finally, aggression is generally considered antisocial (Bettencourt, Talley, Benjamin, & Valentine, 2006), which serves as a moral, ethical, and legal deterrent for most. However, individuals high in psychopathy are dispositional rule-breakers (Hare & Neumann, 2005) and only consider morality in terms of rewards and punishments (Campbell et al., 2009).

In contrast to psychopathy, Machiavellian individuals are neither erratic nor impulsive (Jones & Paulhus, 2011). Machiavellian individuals are strategic, and will break rules cautiously to avoid negative repercussions (Cooper & Peterson, 1980; Jones, 2014). Furthermore, narcissistic individuals tend to be non-aggressive when praised, included, or

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rewarded but will aggress when insulted (Bushman & Baumeister, 1998), excluded (Twenge & Campbell, 2003), or when feeling deprived (Bushman, Bonacci, Van Dijk, & Baumeister, 2003). Thus, a direct association between narcissism and dispositional aggression seems unlikely.

Thus, with respect to direct physical aggression, psychopathy appears like it would be a strong predictor. However, given their cynical worldview, individuals high in Machiavellianism may have a hostile worldview. This assertion comes from the fact that individuals who are Machiavellian tend to see others as aggressive and ruthless (Brankley & Rule, 2014).

1. The present study

There exists a body of research demonstrating that the Dark Triad traits may predict aggression under different circumstances (e.g., Baughman, Dearing, Giammarco, & Vernon, 2012; Jones & Paulhus, 2010a; Kerig & Stellwagen, 2010; Lau & Marsee, 2013), however little work has been done to investigate the different aspects of aggression that might be associated with the different Dark Triad traits. Although the Dark Triad traits are all associated with callousness and manipulation, the present study will investigate the degree to which each of the Dark Triad traits are associated with different aspects of aggression, above and beyond their common overlap. Furthermore, the Dark Triad personality traits are all multifaceted, so a secondary investigation will examine the relationship between the facets of the Dark Triad and different types of aggression.

First we expect that the common overlap among the Dark Triad (callousness & manipulation) will predict a common factor of aggression. Next, however, we predict that there will be additional variance accounted for by each Dark Triad trait with respect to unique facets of dispositional aggression. First, and foremost, psychopathy is a trait that is linked to direct and unprovoked physical aggression (e.g., Reidy, Zeichner, & Martinez, 2008; Reidy, Zeichner, Miller, & Martinez, 2007; Reidy, Zeichner, & Seibert, 2011). Thus, there should be a direct link between physical aggression and psychopathy. Next, because of their cynical worldview, individuals high in Machiavellianism should report increased levels of hostility. This prediction stems from the fact that Machiavellian individuals are dispositionally cynical and satisfy their antisocial desires via political, rather than violent, means (Jones, 2013). Finally, no strong predictions about narcissism and unique aspects of dispositional were made.

At the facet level, given the latent profile of manipulative vs. antisocial tendencies in psychopathy (e.g., Mokros et al., 2015), we predicted that *manipulation* that is associated with psychopathy would *not* be related to physical aggression, unlike the other three facets of psychopathy. Further, we predicted that cynical worldview would drive the association between Machiavellianism and hostile worldview. Finally, because entitlement is traditionally considered the “problematic” facet of narcissism (Emmons, 1987), we predicted that narcissistic entitlement would be associated with aggression as well.

2. Method

2.1. Participants

All participants were recruited for a larger survey study on personality traits. Participants were drawn from two separate sources. Participants in Sample 1 consisted of 192 adults from Amazon's Mechanical Turk (MTurk; 57% women; Mean Age = 34.96, SD = 12.75). These participants were recruited from across the United States who reported an ethnic heritage of: 73% European; 6% African; 3% East Asian; 4% South Asian; 6% Latino (a); 3% Native North American; 7% other or mixed ethnicities. Participants in Sample 2 consisted of 133 students (75% women; Mean Age = 20.62, SD = 2.46). These participants were recruited from The University of British Columbia and reported an ethnic heritage of: 60% East Asian, 28% European, 8% South Asian, 4% mixed

ethnicities. MTurk participants were paid \$0.50 for the participation, and extra credit was given to student participants.

The details and benefits of combining student and MTurk samples have been described elsewhere (e.g., Buhrmester, Kwang, & Gosling, 2011; Paolacci, Chandler, & Ipeirotis, 2010). Specifically, MTurk is a reliable crowdsourcing website with a diverse and reliable subject pool of workers willing to participate in surveys for payment. In fact, recent surveys have found that the reliability, validity, and interest in taking surveys are all greater in MTurk samples when compared to students (Rand, 2012). Moreover, the variation in responses and subjects is far greater because the pool of subjects is not limited to those enrolled in a university (e.g., Buhrmester et al., 2011).

2.2. General procedure

All measures (unless otherwise indicated) were answered on a 1 (Strongly Disagree) to 5 (Strongly Agree) Likert Scale. When necessary, appropriate items were reverse-scored. All scales were averaged into composites.

2.3. Measures

2.3.1. Psychopathy

In order to measure psychopathy, participants were given the Self-Report Psychopathy scale (Paulhus, Neumann, & Hare, in press; see also Mahmut et al., 2011). The SRP ($\alpha = .92$) measures psychopathy through 4 facets, which were all internally consistent: Manipulation ($\alpha = .77$), Callousness ($\alpha = .79$), Erratic Lifestyle ($\alpha = .83$), and Antisocial Behavior ($\alpha = .78$). In Sample 2, participants were given the 28-item SRP short form (Neumann & Pardini, 2014; Paulhus et al., in press), which is outlined in the larger SRP manual and can be obtained by contacting the SRP manual authors. All four facets were reliable (i.e., α 's > .70), as was the overall scale ($\alpha = .93$). Across the two samples, psychopathy correlated significantly with both Machiavellianism, $r = .56$, and narcissism, $r = .46$.

2.3.2. Machiavellianism

In order to measure Machiavellianism, participants in both samples were given the Mach-IV (Christie & Geis, 1970). The Mach-IV is still the most widely used assessment for Machiavellianism (Jones & Paulhus, 2009). The Mach-IV measures Machiavellianism via two facets: Manipulative Tactics ($\alpha = .61$) and Cynical Worldview ($\alpha = .60$). The items were averaged into an internally consistent composite ($\alpha = .77$). Machiavellianism correlated significantly with narcissism, $r = .38$.

2.3.3. Narcissism

Narcissism was measured using the NPI-16 in both samples (Ames, Rose, & Anderson, 2006). Unlike other measures in the present study, the NPI-16 uses a forced choice response format. Participants are provided with a narcissistic and non-narcissistic option, and are asked to select the statement that is most self-descriptive. The NPI-16 is based off of items from the original NPI (Raskin & Hall, 1979). The NPI-16 had an internally consistent composite ($\alpha = .72$).

2.3.4. Aggression

To measure aggression, participants were given 16 items from the original Buss–Perry Aggression scale (Buss & Perry, 1992). Previous research has shown that using 12 items (three per aggression facet) results in some subscales with alpha scores less than .70 (see Jonason & Webster, 2010; see also Webster et al., 2014). As a result, the next highest loading item from the original article (Buss & Perry, 1992) was added to create four reliable facets (four items per facet) of physical aggression ($\alpha = .78$); verbal aggression ($\alpha = .81$); anger ($\alpha = .88$); and hostility ($\alpha = .82$). The composite of all four scales was reliable as well ($\alpha = .90$).

3. Results

First, raw correlations were computed between the Dark Triad traits and the four aggression factors (Table 1). Next, we ran several analyses using Structural Equation Modeling (SEM) to examine the associations among the Dark Triad and different facets of aggression, based on theory. Following Jones and Figueredo (2013), a common Dark Triad factor was extracted and set to predict a common aggression factor, a unique path to physical aggression was allowed from psychopathy to physical aggression, and a unique path was allowed from Machiavellianism to hostility. Finally, additional variance was accounted for by a unique path from narcissism to hostility (Fig. 1). The model fit ($\chi^2 = 9.46, p > .45; CFI/TLI = 1/1, RMSEA = 0; SRMR = .02$). Psychopathy predicted additional positive variance in physical aggression, and narcissism was negatively related to hostility whereas Machiavellianism was positive with hostility.

Next, the two samples were coded (MTurk = 1; Student = 2) and was tested for structural equivalence across both samples. Results indicated that the constrained model had a borderline fit ($\chi^2 = 72.97, p < .001; CFI = .92, TLI = .89; RMSEA = .09; SRMR = .09$). However, in a multi-sample analysis, (a) all factor loadings were greater than .30 and significant, (b) the Dark Triad common factor predicted the aggression common factor (MTurk: $\beta = .71, p < .001$; Student: $\beta = .70, p < .001$), (c) psychopathy had a unique path to physical aggression (MTurk: $\beta = .24, p < .001$; Student: $\beta = .32, p < .001$) (d) narcissism had a negative relationship with hostility (MTurk: $\beta = -.18, p = .012$; Student: $\beta = -.26, p = .005$), and (e) Machiavellianism had a positive (but non-significant) association with hostility (MTurk: $\beta = .11, p = .173$; Student: $\beta = .09, p = .149$). It should be noted that the multi-sample analysis yielded a “Heywood” case for psychopathy (i.e., loading greater than 1) in the student sample. This case was rectified by constraining the variance of Machiavellianism and narcissism to 1 and allowing the psychopathy variance to vary (e.g., Dillon, Kumar, & Mulani, 1987).

Each Dark Triad trait, however, is multifaceted. In order to determine which aspects of each trait is associated with aggression another SEM was conducted at the facet level. Each Dark Triad trait was broken into facets (SRP: Manipulation, Callousness, Erratic Lifestyle, Antisocial Behaviors; NPI: Leadership, Grandiosity, Exploitation; MACH-IV: Manipulative Tactics, Cynical Worldview; see Jones & Figueredo, 2013). From there, Dark Triad facets were set to load on their respective factor, and each facet was used to predict a common factor of aggression. Finally, the facets of the NPI and MACH scales were set to predict hostility and the facets of the SRP were set to predict physical aggression (see Fig. 2). The overall model had a borderline fit ($\chi^2 = 142.65, p < .001; RMSEA = .082; CFI = .96; TLI = .93; SRMR = .069$). The model itself had loadings greater than one for two of the Dark Triad traits. However, given the interest in simultaneous outcome prediction rather than Dark Triad factor loadings, these cases were ignored.

The findings suggested that, among psychopathy facets, all but manipulation was associated with physical aggression. This finding supports previous research that there are two primary types of psychopathic individuals: conning and aggressive (i.e., Mokros et al., 2015). Whereas the former are low in antisocial behavior and high in manipulative tendencies, the latter are reversed. Findings with respect to hostility found that narcissistic grandiosity and Machiavellian worldview

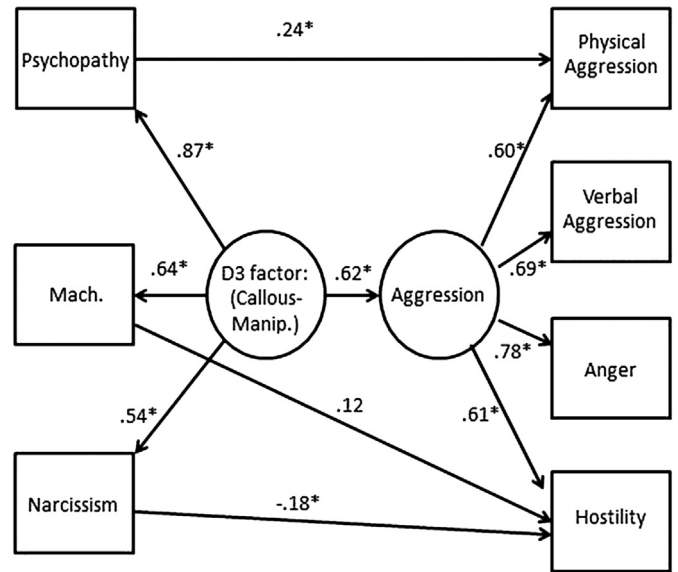


Fig. 1. Basic model SEM of Dark Triad and aggression.

predicted increased hostility. In contrast, Machiavellian tactics and narcissistic exploitation were negatively related to hostility (although Machiavellian tactics was marginally significant, $p = .056$).

4. Discussion

The present research explored the associations between the Dark Triad and dispositional aggression. Overall, the findings support the idea that the common core of the Dark Triad, which is defined as callousness and manipulation (Jones & Figueredo, 2013), was predictive of a general aggression factor (alternatively, the absence of Honesty/Humility may be conceived as the common core of the Dark Triad; see Book et al., 2015). However, there were additional associations that emerged to suggest that each Dark Triad trait is uniquely related to different aspects of aggression. Specifically, psychopathy was positively associated with physical aggression, Machiavellianism was positively associated with hostility, and narcissism was negatively associated with hostility.

A recent article by Glenn and Sellbom (2015) called into question the utility of the Dark Triad as a construct. They found that when the Dark Triad are lumped together, psychopathy generally accounts for the most predictive power. The idea that the Dark Triad can be combined into a composite has been challenged elsewhere (Jones & Figueredo, 2013), and the present findings further demonstrate the problems with combining the Dark Triad traits into a composite. In general, the conclusion that the Dark Triad cannot form a meaningful composite has been supported by other Dark Triad research (O’Boyle, Forsythe, Banks, & McDaniel, 2012; Furnham, Richards, & Paulhus, 2013).

Machiavellianism seems to be uniquely related to hostility, which is also not surprising given the cynical worldview that defines Machiavellianism. However, narcissism was negatively and uniquely related to a hostile worldview. Previous research has demonstrated that narcissism is related to dispositional self-deception and positive self-delusions (Paulhus, Harms, Bruce, & Lysy, 2003; Paulhus & Williams, 2002) such that a narcissistic individual can be viewed negatively by others yet still maintain a high level of self-esteem (see Paulhus, 1998). Though there is a large body of research demonstrating the relationship between narcissism and aggression, more recent experiments have demonstrated that narcissism seems to require provocation in the form of an ego-threat before they will aggress (e.g., Bushman & Baumeister, 1998; Jones & Paulhus, 2010a,b; Twenge & Campbell, 2003). The present study, combined with previous research, may suggest that narcissism is

Table 1
Correlational analyses predicting aggression facets from dark personalities.

	Aggression type			
	Physical	Verbal	Anger	Hostility
Psychopathy	.58*	.41*	.42*	.32*
Machiavellianism	.39*	.26*	.29*	.29*
Narcissism	.32*	.28*	.19*	.06

* $p < .05$.

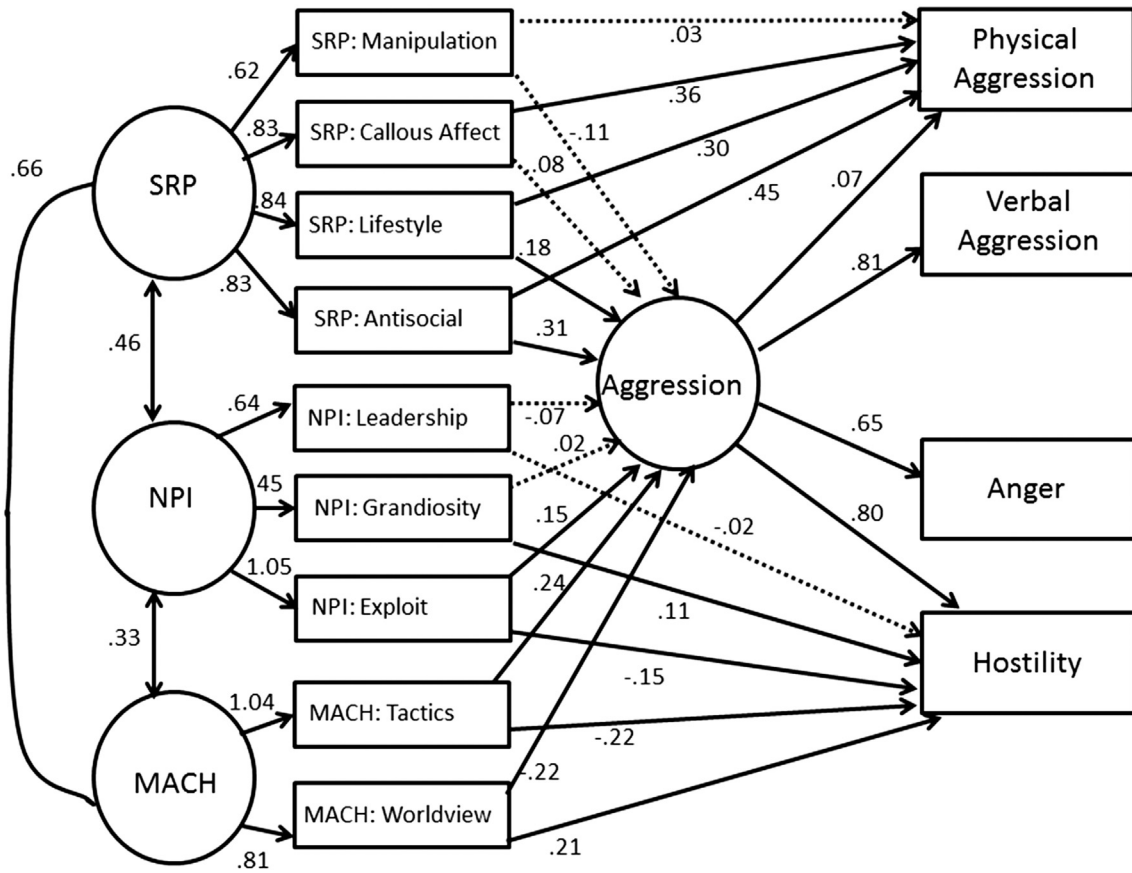


Fig. 2. Facet-level Model SEM of the Dark Triad and aggression.

not related to dispositional aggression but is instead highly and aggressively reactive to ego-threats. It may be the case that aggression is conditionally dependent on a perceived ego-threat for narcissists, or simply that narcissistic individuals have no need to be aggressive so long as their perception of superiority is not disturbed.

A finer look at the facet level suggests that Dark Triad personalities are torn with respect to dispositional aggression. Psychopathic manipulation, for example, did not contribute to aggressive tendencies (either general or physical aggression), whereas callousness, erratic lifestyle, and antisocial behavior were uniquely related to physical aggression. Furthermore, Machiavellian manipulation tactics were negatively associated with hostility whereas Machiavellian worldview was positive with hostility. This situation may set up a “push/pull” relationship within the Machiavellian with respect to hostile actions toward others. Although the Machiavellian cynical worldview suggests that “dog-eat-dog” hostility is appropriate necessary for survival, the manipulative side of Machiavellianism may temper that hostility to allow for less overtly antagonistic strategies to succeed. A similar pattern of mixed associations occurred with the facets of narcissism. Grandiosity predicted greater hostility, which was ostensibly due to their sense of superiority creating a diminished perception of others. These findings further make sense given that narcissistic grandiosity may produce sensitivity toward insult or ego-threat, thus leading to reactive aggression toward others. However, narcissistic exploitation predicted less hostility. This finding, although initially counter-intuitive makes sense when examined in tandem with low levels of hostility also associated with Machiavellian manipulation. In fact, overall, it appears that intentions to exploit, manipulate, or deceive are unrelated to aggressive or hostile dispositions. In this way, it may be the case that psychopathy, narcissism, and Machiavellianism are best described as *callously manipulative*. If we understand callousness to be the absence of empathy or feeling, then it may be the case that Dark Triad personality traits are able to manipulate

people in such a way that is not motivated by feelings of hostility or some other affect, which would be consistent with the present results. In general, there are two ways an antisocial individual can go about getting something dishonestly: manipulation or aggression (Mokros et al., 2015). Thus, these findings demonstrate that manipulation is unrelated to aggression, which makes sense: one would be attempting to ingratiate or charm others when engaging in manipulation, which is a process unrelated to aggression.

In sum, manipulation may be nothing more than an unemotional means-to-an-end for Dark Triad personalities, and need not require any affective disposition to motivate the behavior. In contrast, aggression may also be a means to an end for individuals high in psychopathy. Therefore, of the three, only narcissism would engage in affective-laden aggression, but only when provoked.

These findings add further support to the ideas of Ashton et al. (2009), who pointed out that researchers must use caution in making over-arching generalizations about inter-correlated traits and their predictive power. In all cases, predictions must be driven by theory. In this case, there is no theoretical reason for strategic Machiavellianism or egotistical narcissism to have unique associations with direct physical aggression, verbal aggression, or anger.

There are limitations to the present research. The self-reported and cross-sectional nature of these data limits the external validity of the findings. Further, the sample sizes were somewhat modest given the multi-group comparison made. However, it should be noted the combination of MTurk and student samples provides a more detailed examination of the research question than would only one of these types of samples. Further, psychopathy emerging as the most aggressive among the three Dark Triad traits is consistent with other multi-sample Dark Triad comparisons (Jones & Olderbak, 2014). A second limitation is that the facet scores of the NPI-16 are not reliable, nor was the NPI-16 designed with meaningful facet scores in mind (Gentile et al.,

2013). As a consequence, the facet score results with narcissism should be interpreted with caution.

Taken together, the Dark Triad traits are distinguishable in their relationships with different aspects of aggression. Much like previous research, psychopathy predicts the most overt and aggressive tendencies among the Dark Triad (Jones & Olderbak, 2014), whereas Machiavellianism is not associated with overt or direct aggression. Instead, however, Machiavellianism was associated with hostility associated with a dark worldview. Finally, and consistent with previous research, narcissistic individuals are situationally based in their aggression, only getting aggressive when provoked.

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