

**Shedding Light on  
the Dark Triad of Personality:  
Narcissism, Machiavellianism, and Psychopathy**

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## **Introduction**

Although the personality constructs of narcissism, Machiavellianism, and psychopathy had different origins, there are striking similarities. To varying degrees, all three entail a dark, socially destructive character with behavior tendencies such as grandiosity, emotional coldness, manipulation and aggressiveness. In the clinical literature, the link between narcissism and psychopathy has been noted for some time (for a review, see Hart & Hare, 1998). The recent development of non-clinical measures of narcissism (Raskin & Hall, 1979) and psychopathy (Forth et al., 1998) has permitted direct comparison of the three dark traits in normal populations. For example, there is now empirical evidence that, in non-clinical populations, Machiavellianism and psychopathy may coincide (McHoskey et al., 1998). Similarly, there is evidence that narcissism and psychopathy overlap (Gustafson & Ritzer, 1995).

In this report, we took three approaches to teasing apart the triad of constructs. First, we developed two experimental measures of self-enhancement. One was a signal-detection measure of bias calculated from the Over-Claiming Questionnaire (OCQ)(Paulhus & Bruce, 1990). The other was a residual measure of discrepancy between self-reported intelligence and scores and a performance IQ test (see Paulhus & John, 1998). We wondered whether the substantial self-enhancement observed in narcissists (John & Robins, 1994; Paulhus, 1998; Raskin et al., 1991) would also be associated with Machiavellianism and psychopathy.

Second, we evaluated the verbal/nonverbal discrepancy to determine whether this special indicator of psychopathy (Forth et al., 1996) would also appear in narcissism and Machiavellianism. Our third approach was to map the triad onto the Big Five traits to examine similarities and differences.

## Method

Two hundred and forty-four UBC undergraduate psychology students participated in the present study for extra course credit. The procedure involved two steps. First each participant was given a take home anonymous questionnaire package that included the SRP II, the Mach IV, the NPI and the BFI. The participant later came back to the lab for an additional half hour of testing that included the administration of the OCQ and the IQ test.

The Narcissistic Personality Inventory (NPI) (Raskin & Hall, 1979) was used to measure narcissism. The NPI is a 40 item forced choice questionnaire is the most commonly used measure of normal narcissism. The Mach-IV (Christie & Geis, 1970) inventory was used to measure Machiavellianism: It consists of 20 5-point scales. To measure psychopathy we used the Self Report Psychopathy scale II (SRP II) (Forth et al., 1998). Respondents rated the 31 5-point items.

Also included in the take home package was the Big Five inventory (BFI) -- a 44 item questionnaire intended to measure the Big Five personality traits (extraversion, conscientiousness, agreeableness, and emotional stability , openness) (John & Srivastava, 1999).

The Wonderlic Personnel Test Form IV (Wonderlic, 1979) was used to measure performance intelligence. This is a 50 item test that assesses both verbal and nonverbal IQ. The Over Claiming Questionnaire (OCQ) (Paulhus & Bruce, 1990) was designed as an unobtrusive measure of both intelligence and self enhancement bias. The procedure involves rating the familiarity of 90 persons, events, and things, 20% of which do not exist. Signal detection formulas are then used as indexes of accuracy and bias.

## *Analysis and Results*

Note from Figure 1 that the standard measures of the dark triad overlap considerably. Nonetheless, the maximum inter-correlation of .50 suggests that they cannot be considered equivalent. Even disattenuated, the correlation of psychopathy and narcissism reaches only .63.

### *Self-Enhancement Bias*

Over-claiming bias was operationalized as the signal detection parameter indexing any kind of familiarity with an OCQ item, regardless of its true existence (i.e., combining the number of 'hits' with the number of 'false alarms'). Note from Table 1 that over-claiming correlated significantly with narcissism (.29), and psychopathy (.19) but not with Machiavellianism.

Self-enhancement on intelligence was calculated by partialing IQ scores out of self-rated intelligence using regression analysis. This residual represents the discrepancy between self-ratings and objective performance. This residual correlated significantly with narcissism (.22), marginally with psychopathy and not at all with Machiavellianism.

### *Verbal vs. Nonverbal Measures of Intelligence*

IQ scores were separated into verbal and nonverbal scores. A difference score was then calculated by subtracting standardized nonverbal IQ scores from standardized verbal IQ scores. Correlations revealed negative relations between verbal/nonverbal IQ discrepancy for narcissism, Machiavellianism, and psychopathy (-.02, -.25, and -.22, respectively). Negative associations indicate a tendency for the latter characters to have higher nonverbal IQ scores relative to their verbal IQ scores.

### *Big Five Traits*

In Table 3, relations between Big Five scores and the dark triad measures revealed significant and substantial negative correlations with the Big Five factor of Agreeableness (-.32, -.44, and -.24, respectively). Narcissists and psychopaths tended to have higher Extraversion (.44 and .40) and Openness scores (.34 and .27). Machiavellians showed low scores on Conscientiousness (-.27). Finally, Machiavellianism correlated positively (.17) and psychopathy correlated negatively with Neuroticism (-.35).

## *Discussion*

Our goal was to evaluate the similarities and differences among three dark triad of personality traits -- narcissism, Machiavellianism, and psychopathy. Some have argued that, when measured in normal populations, these three constructs coincide. We compared the three by examining their associations with (a) experimental measures of self-enhancement, (b) to the amount of discrepancy between verbal and nonverbal IQ ratings, and to (c) their location in the Five-Factor model.

The findings showed that high narcissists showed the highest degree of self-enhancement, followed by the psychopaths. In contrast, Machiavellians showed no significant self-enhancement. This difference is consistent with previous evidence that the Machiavellians are more grounded, or reality-based, in their sense of self (Christie & Geis, 1970), whereas the high narcissists have a strong self-deceptive component to their personality (Paulhus, 1998). To a lesser extent, grandiosity is also an aspect of psychopathy (Hart & Hare, 1998).

One intriguing performance marker of psychopathy is a relatively low verbal relative to nonverbal intelligence (Hare, 1985). Our data show that this intriguing marker is equally true of Machiavellianism. But why would dark traits involve stronger nonverbal than verbal skills? One possibility is that the frustration arising from an inability to communicate one's ideas eventuates in one of several disagreeable personality syndromes. The other possibility is a neurological deficit in psychopaths and Machiavellians.

Another way of comparing constructs is to examine their relative positions in the Five-Factor Model of personality. Both narcissism and psychopathy were associated with extraversion and openness, two agentic traits (Paulhus & John, 1998). On the other hand, Machiavellianism and psychopathy were negatively associated with conscientiousness, a communal trait. All three groups were low on agreeableness. Finally, only psychopaths were low on neuroticism consistent with their traditional characterization as lacking anxiety.

In summary, our findings suggest that, in non-clinical samples, members of the dark triad share a common core of disagreeableness. Thus the root of their social destructiveness is disturbingly normal – even banal. In combination with disagreeableness, the minimal anxiety of psychopaths may make them the most dangerous of the three. The Machiavellian remains most realistic and the Narcissists least realistic about their own character, a trait that may be more of a nuisance than a danger.

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Table 1

***Correlations of Dark Triad with two objective measures of self-  
enhancement:  
OCQ Bias and Overclaiming of Intelligence***

	<i>Narcissism</i>	<i>Machiavellianism</i>	<i>Psychopathy</i>
Overclaiming Bias Index	<b>.29</b>	.06	<b>.19</b>
Residual of Self-Reported Intelligence on IQ scores	<b>.22</b>	-.01	.12

All correlations greater than .15 are significant (.01, two-tailed)

N = 244

Table 2

Correlations of Dark Triad with Intelligence test scores

	Narcissism	Machiavellianism	Psychopathy
IQ	.15	.06	.05
Verbal IQ	.15	-.02	-.07
Non-Verbal IQ	.11	<b>.27</b>	<b>.18</b>
Discrepancy	-.02	<b>-.25</b>	<b>-.22</b>

Discrepancy represents difference between standardized verbal and nonverbal IQ scores

N = 244 All correlations greater than .15 are significant (.01, two-tailed)



**Table 3**

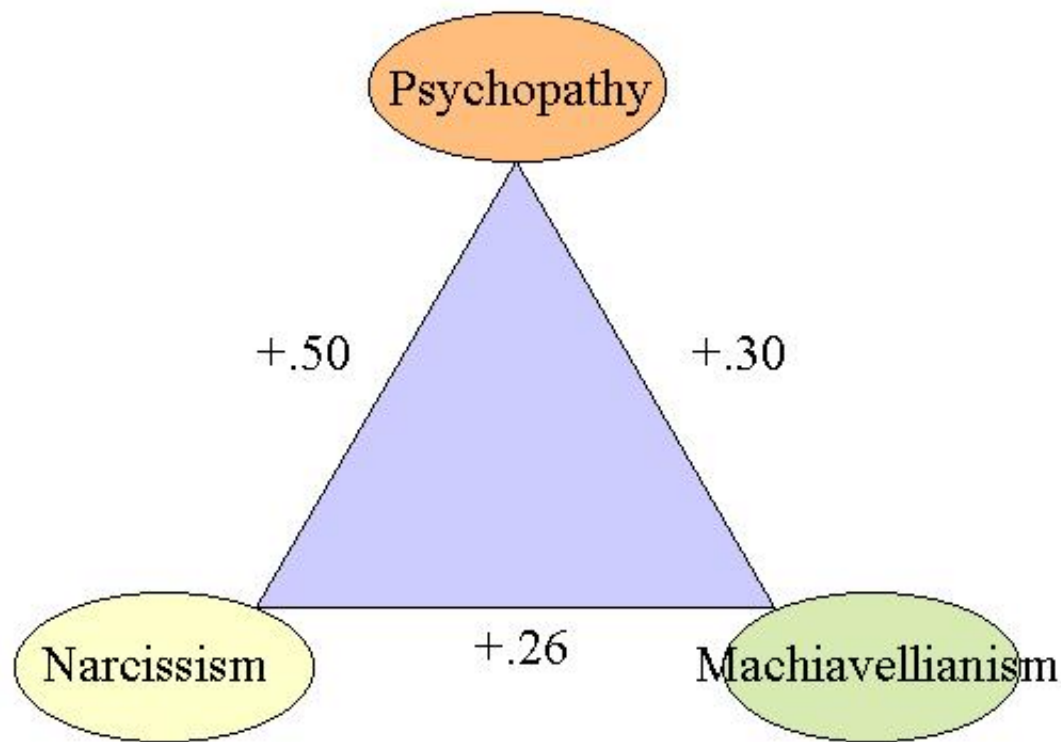
**Correlations of the Dark Triad with Big Five Factors**

BFI FACTOR	Narcissism	Machiavellianism	Psychopathy
Extraversion	<b>.44</b>	-.10	<b>.40</b>
Agreeableness	<b>-.32</b>	<b>-.44</b>	<b>-.24</b>
Conscientiousness	-.07	<b>-.27</b>	<b>-.15</b>
Neuroticism	-.09	<b>.17</b>	<b>-.33</b>
Openness to Experience	<b>.34</b>	-.11	<b>.27</b>

N = 244

All correlations greater than .15 are significant at .01, one-tailed

**Fig. 1. Intercorrelations between Psychopathy, Machiavellianism, and Narcissism**



All correlations significant at  $p < .01$ .  $N = 244$ .