



## Short Communication

## Dark Triad predicts self-promoting mate attraction behaviors



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## ABSTRACT

The Dark Triad is a cluster of aversive traits that includes Machiavellianism, psychopathy, and narcissism. Individuals who score higher on these traits also report more sexual partners, suggesting that the Dark Triad may provide advantages to attracting short-term partners. We investigated the associations between the Dark Triad traits and self-promotion mate attraction tactics in a short-term mating context. We hypothesized that, in this mating context, psychopathy would predict the performance frequency of self-promotion behaviors in men (Hypothesis 1), narcissism would predict these behaviors in both men (Hypothesis 2) and women (Hypothesis 3), and that the relationship between narcissism and the performance frequency of self-promotion behaviors would be stronger in women than in men (Hypothesis 4). Participants were 225 Brazilian undergraduate students, aged between 18 and 45 years ( $M = 21.8$ ;  $SD = 4.80$ ; 58.2% women). Supporting Hypothesis 1, psychopathy positively predicted the performance frequency of self-promotion behaviors in men. Narcissism was positively associated with the performance frequency of self-promotion behaviors in both men (supporting Hypothesis 2) and women (supporting Hypothesis 3), but with similar strength (inconsistent with Hypothesis 4). We situate these results concerning mate attraction within an evolutionary framework and discuss their theoretical and applied utility.

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## 1. Introduction

Over human evolutionary history, the benefits associated with mating success may have “designed” psychological mechanisms that motivate efforts for men and women to strategically perform behaviors to attract a potential mate. Schmitt and Buss (1996) presented the first attempt to identify and assess tactics that individuals use to attract a mate. *Self-promotion* refers to behaviors that increase an individual's attractiveness (e.g., acting provocatively, wearing sexy clothes), and *derogation of competitors* refers to behaviors that decrease the attractiveness of competitors (e.g., spreading rumors about a competitor, calling a competitor boring).

Extensive literature has investigated the effects of individual differences in psychological features on the performance of mate attraction behaviors (e.g., Bleske-Rechek & Buss, 2006; Fisher & Cox, 2009),

including personality traits (e.g., Gonçalves & Campbell, 2014). In particular, previous research has suggested that “dark” personality traits may affect a person's mating success (e.g., Carter, Montanaro, Linney, & Campbell, 2015). Personality traits considered dark are “socially aversive and linked with various sorts of interpersonal difficulties and potentially destructive behaviors” (Zeigler-Hill & Marcus, 2016, p. 3). For example, individuals who score higher in dark personality traits (more specifically, the Dark Triad traits) also report having more sexual partners and a preference for short-term mating relationships, reflecting an exploitative mating strategy that facilitates short-term mating success (e.g., Jonason, Li, Webster, & Schmitt, 2009). This suggests that specific dark personality traits may provide advantages to attracting short-term partners.

Among the dark personality traits, the Dark Triad has received the most empirical attention (Paulhus & Williams, 2002). The Dark Triad consists of *psychopathy*, *narcissism*, and *Machiavellianism* (Paulhus & Williams, 2002). Psychopathic individuals are reckless, thrill-seeking, and aggressive (Patrick, Fowles, & Krueger, 2009). Narcissistic individuals present a grandiose self-concept yet are vulnerable to self-concept threats, and they tend to have feelings of superiority over others along with a sense of entitlement (Wink, 1991). Machiavellian individuals

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exploit others for their own benefit (Jonason et al., 2009) and have greater self-control compared to psychopathic and narcissistic individuals (e.g., Jones & Paulhus, 2011).

Previous research has investigated the relationship between the Dark Triad traits and the performance of the derogation of competitors mate attraction tactic (e.g., Goncalves & Campbell, 2014). Additionally, previous research has investigated the relationship between Dark Triad traits and aspects associated with mate appeal (e.g., physical attractiveness and social boldness mediated the positive effect of narcissism on mate appeal; Dufner, Rauthmann, Czarna, & Denissen, 2013). However, no previous research has investigated the specific associations between the Dark Triad traits and the self-promotion mate attraction tactic. Carter et al. (2015) found that women who scored higher on Narcissism performed more sexually competitive behaviors, such as investing in physical attractiveness. However, Carter et al. investigated “sexual competitiveness,” which is a broader concept than self-promotion (see Schmitt & Buss, 1996). Additionally, their results were limited to a female student sample. In the current study, we address these gaps by investigating whether Dark Triad traits are associated with the performance frequency of self-promotion attraction behaviors in a short-term context, and whether these associations are sex-differentiated. Previous research has investigated the relationship between narcissism, self-promotion, and attractiveness in mating contexts (e.g., Carter et al., 2015; Dufner et al., 2013). The current study is the first to address the relationship between all three Dark Triad traits and self-promotion to attract short-term mates.

Because the Dark Triad traits facilitate short-term (vs. long-term) mating success (e.g., Jonason et al., 2009), the current study focuses on short-term mating attraction tactics. Women tend to prioritize the psychological characteristics (e.g., social skills) of men over their physical attributes (e.g., waist-to-hip ratio) in a romantic context (Buss, 2015). This means that men (vs. women) may rely more on social skills to attract potential mates. Because individuals with high levels of psychopathy are likely to be outgoing and superficially charming which may facilitate social interactions, including their ability to approach a potential short-term mate (Patrick et al., 2009), we hypothesize that psychopathy will predict the performance of self-promotion mate attraction behaviors in a short-term context in men, but not in women (Hypothesis 1). Because promoting attractiveness is a common strategy to enhance self-image (e.g., Von Soest, Kvalem, Roald, & Skolleborg, 2009), and because enhancing self-image is particularly common among individuals with high levels of narcissism (e.g., Schröder-Abé, Rentzsch, Asendorpf, & Penke, 2016), we hypothesize that narcissism will predict the performance of self-promotion behaviors in both men (Hypothesis 2) and women (Hypothesis 3). Finally, because men perceive women who display physical characteristics that serve as cues to greater reproductive capacity as more attractive (e.g., Buss, 2015), and promotion of physical attractiveness is particularly characteristic of individuals with high levels of narcissism (Back, Schmukle, & Egloff, 2010), we hypothesize that the relationship between narcissism and the performance of self-promotion behaviors will be larger in women than in men (Hypothesis 4). Finally, because age is a strong predictor of women's fertility and reproductive value (Geldart, 2010) and is correlated with ratings of attractiveness by men (Buss, 2015), we controlled statistically for participant's age.

## 2. Method

### 2.1. Participants and procedure

Participants were 225 undergraduate students at a university in the Northeast region of Brazil, aged between 18 and 45 years ( $M = 21.8$ ;  $SD = 4.80$ ), mostly women (58.2%) and single (76.9%). Only individuals at least 18 years old who provided informed consent were allowed to participate.

### 2.2. Materials

The Dirty Dozen (Jonason & Webster, 2010) is a 12-item measure that assesses the Dark Triad personality traits. Participants indicate the extent to which they agree with each item on a 5-point Likert scale (1 = *Strongly disagree*; 5 = *Strongly agree*). Items include “I have used deceit or lied to get my way” (Machiavellianism;  $\alpha = 0.77$ ), “I tend to be cynical” (Psychopathy;  $\alpha = 0.65$ ) and “I tend to expect special favors from others” (Narcissism;  $\alpha = 0.82$ ).

Mate Attraction Tactics (Buss, 1988) is a 130-item measure that assesses the performance of mate attraction behaviors. Participants answered the question “How often have you done this to attract a member of the opposite sex?” for each item, on a 7-point Likert scale (1 = *Never*; 7 = *Very often*). Following Schmitt and Buss (1996), we computed scores for the self-promotion tactic by averaging the corresponding men's and women's 10 acts judged most effective to attract a short-term mate, resulting in two composite variables. *Male self-promotion* ( $\alpha = 0.71$ ) included the items “He was talkative and outgoing,” “He initiated social communication,” and “He made a good first impression.” *Female self-promotion* ( $\alpha = 0.85$ ) included the items “She flirted with him,” “She made herself look good,” and “She made subtle physical contact” (see Schmitt & Buss, 1996).

## 3. Results

We conducted a multiple regression analysis using data provided by men ( $n = 91$ ), in which scores for narcissism, psychopathy, and Machiavellianism were entered as predictors, and male self-promotion was entered as a criterion variable. We controlled for participant's age. The results for men indicated that the Dark Triad traits predicted the performance of self-promotion behaviors ( $R^2 = 0.24$ ,  $F[4, 86] = 6.70$ ,  $p < 0.001$ ). Specifically, psychopathy ( $\beta = 0.30$ ,  $t = 2.51$ ,  $p = 0.01$ ) and narcissism ( $\beta = 0.40$ ,  $t = 4.18$ ,  $p < 0.001$ ) were positively associated with self-promotion behaviors, which supports Hypotheses 1 and 2, respectively. In addition, Machiavellianism ( $\beta = -0.28$ ,  $t = -2.19$ ,  $p = 0.031$ ) was negatively associated with the performance of self-promotion behaviors in a short-term context.

We next performed a parallel multiple regression analysis for data provided by women ( $n = 128$ ). The results for women indicated that the Dark Triad traits predicted performance of self-promotion behaviors ( $R^2 = 0.11$ ,  $F[4, 123] = 3.76$ ,  $p = 0.01$ ), controlling for participant's age. Specifically, narcissism ( $\beta = 0.41$ ,  $t = 3.35$ ,  $p = 0.001$ ) was positively associated with the performance of self-promotion behaviors (supporting Hypothesis 3).

We then used Fisher's  $r$ -to- $z$  transformation to assess sex differences in the size of the correlation coefficient between narcissism and self-promotion behaviors. The results revealed a similar strength in the relationship between narcissism and the performance of self-promotion behaviors ( $z = 0.79$ ;  $p = 0.21$ ) in men ( $r = 0.41$ ) and women ( $r = 0.31$ ); thus, Hypothesis 4 was not supported. For reportorial completeness, we conducted a MANCOVA to investigate sex differences in the performance frequency of the male and female composite variables of self-promotion behaviors, controlling for participant's age. The results indicated that men (vs. women) scored higher in both composites of self-promoting mate attraction behaviors (*Wilk's lambda* = 0.82,  $F[2, 216] = 23.76$ ,  $p < 0.001$ ).

## 4. Discussion

The current study investigated the relationships that the Dark Triad traits, in general, and psychopathy and narcissism, in particular, had with the performance frequency of self-promotion mate attraction behaviors in a short-term context, and whether these associations were sex-differentiated. The results revealed that men (but not women) who reported higher levels of psychopathy performed more frequently self-promoting mate attraction behaviors, which supported Hypothesis

1. Psychopathic characteristics – such as glibness, persuasion, outgoingness, and superficial charm (Patrick et al., 2009) – may facilitate initiating conversations with potential short-term mates. Moreover, in a short-term context, men prioritize physical attributes in potential female partners more than psychological attributes, such as extraversion or social skills (Buss, 2015). Men therefore need more social skills (relative to women) to successfully attract a mate, and psychopathy has some aspects that may facilitate the ability to approach potential mates (e.g., persuasion, outgoingness; Patrick et al., 2009).

Supporting Hypotheses 2 and 3, narcissism predicted the use of self-promotion mate attraction behaviors in both sexes. Previous research has identified that making a good first impression and enhancing one's physical attractiveness are effective strategies to succeed in a short-term mating context for both sexes (Bleske-Rechek & Buss, 2006; Buss, 1988; Schmitt & Buss, 1996). Accordingly, individuals with high levels of narcissism are likely to make a good first impression and, therefore, they tend to be popular at zero acquaintance (Back et al., 2010). Narcissistic individuals also tend to self-enhance along the domain of physical attractiveness. Accordingly, self-enhancers are more likely to succeed in a short-term context (e.g., Dufner et al., 2013; Schröder-Abé et al., 2016) because physical attributes are more important for both men and women in a short-term context (Buss, 2015).

Contrary to previous findings (e.g., Jonason, Luevano, & Adams, 2012), the results revealed a negative relationship between Machiavellianism and performance frequency of self-promotion mate attraction behaviors in men (but not women). A possible explanation for these contrasting results is that individuals with high levels of Machiavellianism may display a heightened capacity for self-control and the ability to delay gratification which may contribute to their expressed preference for long-term mating due to the risks associated with short-term mating (e.g., exposure to sexually transmitted diseases; Seal & Agostinelli, 1994). Additionally, women find men with masculinized faces to be more attractive in a short-term context (Provost, Troje, & Quinsey, 2008), and men with high levels of narcissism and psychopathy are perceived by women to have more masculinized faces (Lyons, Marcinkowska, Helle, & McGrath, 2015). Nonetheless, future research might compare previous findings by investigating whether Machiavellian individuals invest less in short-term sexual contexts compared to those with other Dark Triad traits.

Finally, the results revealed similar effect sizes for the relationship between narcissism and the performance of self-promotion behaviors in men and women, which was not consistent with Hypothesis 4. Promotion of physical attractiveness is a common attribute of narcissistic individuals (Back et al., 2010). However, promoting one's own physical attractiveness is not the only way in which narcissists can enhance their attractiveness. Narcissists may also enhance their attractiveness by displaying social skills—which is particularly attractive to women (Buss, 2015). This may explain why the relationship between narcissism and performance frequency of self-promotion behaviors was not sex-differentiated.

The current study has several limitations. We did not control for participants' self-perceived attractiveness. For example, derogation of competitors, when performed by attractive women (vs. unattractive women), is more effective in influencing men's evaluations of female attractiveness (Goncalves & Campbell, 2014). Future research might investigate whether similar effects for self-promotion behaviors hold for men and women. Moreover, the measure of self-promotion behaviors, in general, and the male and female self-promotion behaviors in a short-term context, in particular, may be limited by social desirability concerns (e.g., women may underreport performance of acts such as

“She had sex with him”). Although our results are generally consistent with those of previous studies (e.g., Jonason et al., 2009), it may be helpful for future research to better account for socially desirable responding.

This study contributes to the mate attraction literature by documenting that, in a short-term context, performance frequency of self-promoting mate attraction behaviors is associated with certain Dark Triad features, including narcissism and psychopathy. In line with an evolutionarily psychological perspective on mating, the current research provided evidence of associations between personality traits (here, Dark Triad traits) and the performance frequency of self-promoting mate attraction behaviors.

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