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# The Costs and Benefits of the Dark Triad: Implications for Mate Poaching and Mate Retention Tactics

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# The costs and benefits of the Dark Triad: Implications for mate poaching and mate retention tactics

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ABSTRACT

The Dark Triad – narcissism, Machiavellianism, and psychopathy – have traditionally been considered to be undesirable traits. However, emerging work suggest that not only may there be a positive side to possessing these traits but they may also serve important adaptive functions, even if the strategies associated with them are viewed as socially undesirable. In an online survey ($N = 336$), we investigated the costs and benefits of the Dark Triad within the domain of mating psychology. The social style and lower order personality traits of the Dark Triad traits facilitated increased mateships in the form of poaching mates from others and being poached oneself to form mateships, pointing to possible benefits of possessing the Dark Triad traits. However, the costside was evidenced with rates of mates abandoning their current relationship for a new one. Mate retention is a problem faced by those with these traits and the tactics used to retain mates were characteristic of the Dark Triad: aggressive and narcisstic. Results are discussed using an adaptionist paradigm.

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## 1. Introduction

Machiavellianism, narcissism, and psychopathy – collectively known as the Dark Triad – are traits that are linked to negative personal and societal outcomes and have been considered undesirable (e.g., Bushman & Baumeister, 1998; Hare, 1996; Morf & Rhodewalt, 2001). However, the persistence of these traits over time (Foster, Campbell, & Twenge, 2003) and across various world regions like North America, Oceania, and Asia (Schmitt, 2008), as well as links to positive traits such as emotional stability (Paulhus & Williams, 2002), resilient self-esteem (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004), and increased sexual success (Jonason, Li, Webster, & Schmitt, 2009) suggest that the Dark Triad can also be potentially advantageous to individuals, especially for mating purposes. Therefore, in the current study we attempt to understand both the benefits and the costs associated with the Dark Triad within the mating domain.

The Dark Triad is characterized by low rates of conscientiousness (Jonason, Li, & Teicher, in press) and at least two parts of the Dark Triad – narcissism and psychopathy – are associated with high rates of impulsivity (Mealey, 1995; Vazire & Funder, 2006) and risk-taking (Jonason, Koenig, & Tost, in press). It may be that individuals who are high on the Dark Triad pursue novelty in their lives. Indeed, with regards to mating, high scorers on the Dark Triad have more sexual partners and a less restricted mating style (Jonason et al., 2009). The possession of these traits may translate to a particular mating style. First, when in relationships, high scorers on the Dark Triad may be especially likely to leave mating relationships to begin relations with new mates (Foster, Shrira, & Campbell, 2006). Second, disagreeableness, duplicitiousness, and aggressiveness link all three of the Dark Triad traits (Paulhus & Williams, 2002). Accordingly, to satisfy both novelty and the competitive and aggressive nature that underlie these traits as well (Jonason et al., in press), scores on the Dark Triad may be correlated with one's tendency to adopt a strategy of mate poaching (Schmitt & Buss, 2001).

Although these strategies may increase access to new partners, the novelty-seeking and aggression that characterize the Dark Triad may come at the expense of relationship costs. Research on macaques, baboons, and chimpanzees suggests that "acquisition and maintenance of high rank [narcissism] is a costly reproductive strategy" (Rodriguez-Llanes, Verbeke, & Finlayson, 2009, p. 643). First, mating effort allocated elsewhere creates lapses in mate guarding, which could open up opportunities for infidelity by current mates. Second, to the degree that romantic partners are aware that mating effort is being allocated elsewhere, they may be less committed and prone to desert the relationship. Third, to the degree that assortative mating occurs, the mates of opportunistic maters should themselves be more inclined to infidelity (Simpson

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& Gangestad, 1992). Therefore, we predicted that scores on the Dark Triad would be correlated with rates of losing mates.

Although the Dark Triad is linked by a short-term, exploitive sexual style (Jonason et al., 2009), individuals live in a world where monogamy is held out as a socially desirable state and is socially enforced to some degree (Kanazawa & Still, 1999; McDonald, 1995). Thus, such individuals may engage not only in short-term but also medium-term or long-term pairbonding (Campbell & Foster, 2002). Consequently, they face the adaptive problem of mate retention (Buss, 1988; Buss & Shackelford, 1997). Narcissism is associated with attempts to influence others in close relationships (Buss, 1992). Given that mate retention is a form of such influence, we expected scores on the Dark Triad to be positively associated with the use of tactics for mate retention. More specifically, because the Dark Triad is associated with an agentic and aggressive manner (Paulhus & Williams, 2002), we expected the Dark Triad to be related to aggressive (i.e., punishment and threats) and narcissistic-style tactics (i.e., self-enhancement and resource display).

In the current study we explored the costs and benefits imposed by the Dark Triad in people's sexual and romantic lives. We assessed how scores on the Dark Triad are correlated with scores on mate poaching and mate retention scales. We interpret these results through the lens of an adaptionist program (Buss, 2009) to attempt to further understand the role that not only the Dark Triad, but individual differences in general, play in solving adaptive goals like mating.

## 2. Method

### 2.1. Participants and procedure

Volunteers ($N$ = 336) from unique IP addresses completed an online survey that informed them of the nature of the study, asked demographic questions, and asked the self-report items described below. The sample consisted of 114 men ($M_{Age}$ = 28, $SD_{Age}$ = 11.14) and 222 women ($M_{Age}$ = 26, $SD_{Age}$ = 9.12). The majority of the sample (92%) was heterosexual, 4% was homosexual, and 4% was bisexual. Thirty-eight percent were single and 62% were involved in a serious relationship, including both married and dating relationships. Upon completion, the participants were debriefed and thanked.

### 2.2. Measures of the Dark Triad

Narcissism was assessed with the 40-item Narcissistic Personality Inventory (Raskin & Terry, 1988). For each item, participants chose one of two statements that they felt applied to them more. One statement reflected a narcissistic attitude (e.g., "I have a natural talent for influencing people"), whereas the other did not (e.g., "I am not good at influencing people"). We summed the total number of narcissistic statements the participants endorsed to measure overall narcissism (Cronbach's $\alpha$ = .87).

The 31-item Self-Report Psychopathy Scale-III (Paulhus, Hemphill, & Hare, in press) was used to assess subclinical psychopathy. Participants rated how much they agreed (1 = *strongly disagree*; 5 = *strongly agree*) with statements such as: "I enjoy driving at high speeds" and "I think I could beat a lie detector." The items were averaged to create an index of psychopathy ($\alpha$ = .74).

Machiavellianism was measured with the 20-item MACH-IV (Christie & Geis, 1970). Participants were asked how much they agreed (1 = *strongly disagree*; 5 = *strongly agree*) with statements such as: "It is hard to get ahead without cutting corners here and there" and "People suffering from incurable diseases should have the choice of being put painlessly to death." The items were averaged to create a Machiavellianism index ($\alpha$ = .57).

We also treated the three Dark Triad measures as a composite measure (Jonason et al., 2009). We first standardized overall scores on each measure. Then we averaged all three together to create a composite Dark Triad score. All three measures loaded well (>.54) on a single factor that accounted for 53.46% of the variance (Eigen > 1.60).

### 2.3. Mate retention tactics and mate poaching rates

Rates of mate retention efforts were measured with the Mate Retention Inventory-Short Form (Buss, Shackelford, & McKibbin, 2008). Participants indicated how frequently (0 = *never*; 3 = *often*) they performed a series of 38 acts in the last year. Because the measure was originally designed for participants currently in a relationship, we slightly altered the instructions so that participants either answered about their current partner or their most recent one.

Mate poaching was measured with a 38-item instrument (Davies, Shackelford, & Hass, 2007) that assesses rates of attempt and success (1 = *not at all*; 5 = *very much*) in poaching others' mates, having been poached by others, and having had their own mates poached. Rates of attempt and success in each of these areas were assessed for the separate contexts of short-term mating (STM), long-term sexual affairs (LTA), and long-term mating (LTM). Two single-item measures asked: "If you are currently in an exclusive relationship, did your current partner obtain you by knowingly poaching you?" and "...did you obtain your current partner by knowingly poaching her/him?"

## 3. Results

Rates of internal consistency should, at a minimum, be above .50 (Schmitt, 1996) but ideally above .70 (Nunnally, 1978). Because of the low level of internal consistency for some of the measures in our study, we corrected for attenuation in any case where at least one internal consistency estimate was below .70. Where correlations were corrected, we reported both the uncorrected and the corrected correlations. Table 1 contains descriptive statistics and gender differences tests.

Table 2 contains correlations between the Dark Triad and measures of mate poaching. First, scores on the Dark Triad were correlated with all measures of poaching mates from others. Having been poached by others and having had mates poached by others. Thus, being high on the Dark Triad was related to not only a higher overall incidence of but also higher success rates for poaching, having been poached, and having had mates poached in short-term relationships, long-term affairs, and long-term relationships.

Table 3 contains correlations between the Dark Triad and rates of overall mate poaching and the use of individual mate retention tactics. Scores on the Dark Triad were associated with most tactics for mate retention, and were associated with ones that should characterize the Dark Triad: *punishing the mate's infidelity threat, resource display, appearance enhancements, verbal possession signals, and violence against rival.*

Additionally, we conducted correlational tests by participant's gender (men vs. women), relationship status (single vs. married/dating), and sexual orientation (heterosexual vs. homosexual/bisexual). The coefficients across these moderator variables generally did not differ from one another. These results were omitted to save space but can be obtained by contacting the first author.

The possibility arises to test two theoretical models through mediation analyses, albeit in a *post hoc* fashion. In the first model (Fig. 1a) we tested whether increased mate poaching mediates the relationship between the Dark Triad and overall mate retention. In the second model (Fig. 1b) we tested whether overall rates

**Table 1**
Descriptive statistics and gender differences tests.

| | Mean (SD) | | | | |
|---|---|---|---|---|---|
| | Overall | Men | Women | *t* | *d* |
| Narcissism | 17.34 (7.52) | 19.99 (8.08) | 15.97 (6.84) | 4.79** | 0.54 |
| Psychopathy | 2.11 (0.38) | 2.21 (0.43) | 2.06 (0.35) | 3.62** | 0.37 |
| Machiavellianism | 2.57 (0.38) | 2.58 (0.39) | 2.57 (0.38) | 0.29 | 0.03 |
| Dark Triad composite | 0.01 (0.72) | 0.22 (0.76) | −0.10 (0.67) | 4.02** | 0.45 |
| *Mate retention* | | | | | |
| Overall mate retention | 1.99 (0.43) | 1.93 (0.47) | 2.02 (0.41) | −1.77 | −0.20 |
| Vigilance | 2.02 (0.77) | 1.83 (0.67) | 2.12 (0.79) | −3.34** | −0.40 |
| Concealment of mate | 1.73 (0.72) | 1.43 (0.63) | 1.89 (0.71) | −5.83** | −0.69 |
| Monopolize mates times | 1.31 (0.57) | 1.39 (0.60) | 1.27 (0.55) | 1.74 | 0.21 |
| Jealousy induction | 1.47 (0.65) | 1.49 (0.63) | 1.46 (0.66) | 0.30 | 0.05 |
| Punish mate's infidelity threat | 1.62 (0.77) | 1.92 (0.84) | 1.46 (0.68) | 5.42** | 0.60 |
| Emotional manipulation | 1.85 (0.84) | 1.50 (0.70) | 2.02 (0.85) | −5.72** | −0.67 |
| Commitment manipulation | 1.63 (0.77) | 1.83 (0.92) | 1.53 (0.67) | 3.36** | 0.37 |
| Derogation of competitors | 1.81 (0.82) | 1.99 (0.83) | 1.73 (0.81) | 2.75* | 0.32 |
| Resource display | 2.16 (0.83) | 2.50 (0.81) | 1.98 (0.79) | 5.67** | 0.65 |
| Sexual inducements | 2.42 (0.80) | 2.25 (0.88) | 2.50 (0.74) | -2.73* | -0.31 |
| Appearance enhancements | 2.32 (0.83) | 2.61 (0.85) | 2.16 (0.78) | 4.84** | 0.55 |
| Love and care | 2.87 (0.75) | 2.89 (0.83) | 2.86 (0.70) | 0.30 | 0.04 |
| Submission and debasement | 2.70 (0.84) | 2.12 (0.74) | 3.00 (0.74) | −10.35** | −1.19 |
| Verbal possession signals | 2.11 (0.76) | 2.12 (0.81) | 2.10 (0.74) | 0.22 | 0.03 |
| Physical possession signals | 2.59 (0.87) | 2.67 (0.88) | 2.55 (0.86) | 1.22 | 0.14 |
| Possessive ornamentation | 2.48 (1.02) | 1.72 (0.89) | 2.87 (0.85) | −11.54** | −1.32 |
| Derogate mate | 1.55 (0.81) | 1.55 (0.67) | 1.55 (0.88) | 0.01 | 0.00 |
| Intrasexual threats | 1.68 (0.73) | 1.77 (0.91) | 1.63 (0.62) | 1.63 | 0.18 |
| Violence against rivals | 1.52 (0.77) | 1.17 (0.51) | 1.71 (0.82) | −6.45** | −0.79 |
| *Mate poaching* | | | | | |
| Overall self-poach | 1.56 (0.70) | 1.79 (0.79) | 1.44 (0.62) | 4.50** | 0.49 |
| Overall poached by another | 2.17 (1.04) | 1.92 (0.99) | 2.30 (1.05) | −3.21** | −0.37 |
| Overall partner poached | 2.03 (0.95) | 1.87 (0.91) | 2.12 (0.97) | −2.32* | −0.27 |
| Overall successful self-poach | 1.92 (0.99) | 1.86 (1.00) | 1.95 (0.98) | −0.80 | −0.09 |
| Overall successful poached by another | 1.71 (0.81) | 1.73 (0.81) | 1.71 (0.80) | 0.19 | 0.02 |
| Overall successful partner poached | 1.52 (0.70) | 1.62 (0.72) | 1.47 (0.69) | 1.86 | 0.21 |
| Self-poach for STM | 1.71 (0.90) | 2.11 (1.05) | 1.50 (0.73) | 6.27** | 0.67 |
| Self-poach for LTA | 1.50 (0.84) | 1.70 (0.98) | 1.39 (0.74) | 3.26** | 0.36 |
| Self-poach for LTM | 1.48 (0.75) | 1.57 (0.77) | 1.43 (0.73) | 1.53 | 0.19 |
| Poached by another for STM | 1.96 (0.93) | 2.16 (0.99) | 1.85 (0.88) | 2.90** | 0.33 |
| Poached by another for LTA | 1.87 (0.87) | 1.72 (0.88) | 1.94 (0.86) | −2.20* | −0.25 |
| Poached by another for LTM | 1.83 (0.83) | 1.70 (0.79) | 1.89 (0.85) | −1.92 | −0.23 |
| Partner poached for STM | 2.26 (1.11) | 2.18 (1.12) | 2.31 (1.11) | −1.00 | −0.12 |
| Partner poached for LTA | 2.16 (1.18) | 1.79 (1.04) | 2.36 (1.21) | −4.26** | −0.51 |
| Partner poached for LTM | 2.08 (1.16) | 1.79 (1.06) | 2.23 (1.18) | −3.37** | −0.39 |
| Successful self-poach for STM | 2.18 (1.07) | 2.07 (1.01) | 2.24 (1.10) | −1.37 | −0.16 |
| Successful self-poach for LTA | 1.97 (1.02) | 1.75 (0.94) | 2.08 (1.04) | −2.88** | −0.33 |
| Successful self-poach for LTM | 1.96 (1.00) | 1.79 (0.96) | 2.05 (1.02) | −2.24* | −0.26 |
| Successful poached by another for STM | 2.01 (1.07) | 2.03 (1.11) | 2.01 (1.04) | 0.16 | 0.02 |
| Successful poached by another for LTA | 1.87 (1.07) | 1.78 (1.04) | 1.91 (1.08) | −1.12 | −0.12 |
| Successful poached by another for LTM | 1.88 (1.05) | 1.78 (1.02) | 1.93 (1.07) | −1.27 | −0.14 |
| Successful partner poached for STM | 1.86 (0.95) | 1.94 (0.95) | 1.82 (0.96) | 1.06 | 0.13 |
| Successful partner poached for LTA | 1.66 (0.87) | 1.65 (0.88) | 1.67 (0.86) | −0.15 | −0.02 |
| Successful partner poached for LTM | 1.61 (0.80) | 1.58 (0.80) | 1.63 (0.80) | −0.51 | −0.06 |

*Note:* STM, short-term mate; LTA, long-term sexual affair; LTM, long-term mate.
*Note: d* is Cohen's *d*.
* $p < .05$.
** $p < .01$.

of mate retention mediate the relationship between the Dark Triad and rates of mates leaving them. We found significant partial mediation for both models.

## 4. Discussion

Consistent with a view that the Dark Triad of traits are characterized by a need for sexual variety (Jonason et al., 2009), an aggressive nature (Paulhus & Williams, 2002), and a competitive and individualistic social style (Jonason et al., in press), scores on the Dark Triad were correlated with rates of poaching mates from others for new relationships and being poached by others for new relationships. Such associations may explain the higher numbers of sexual partners by high scorers on Dark Triad traits (Jonason et al., 2009). That is, by being willing to poach others away from their relationships and by being willing to leave ongoing relationships for new ones, such opportunistic individuals enjoy access to more novel romantic or sexual partners. Risk-taking, novelty-seeking, impulsivity, and the aggressive nature of the Dark Triad traits may facilitate a more exploitive social style. Exploitation may be one means that individuals can solve adaptive tasks like mating (Buss & Duntley, 2008) and simply extracting resources from one's environment more effectively where individuals are guarded and often punish free riders (Jonason et al., in press).

Our study highlights at least one cost associated with enacting such strategies: Dark Triad individuals tend to have their own

**Table 2**
Zero-order correlations among the Dark Triad and mate poaching.

| | *N* | *M* | *P* | Dark Triad |
|---|---|---|---|---|
| Overall self-poach (α = .79) | .36** | −.03 (−.04) | .32** | .30** (.46**) |
| Overall poached by another (α = .79) | .20** | .07 (.10) | .23** | .23** (.35**) |
| Overall partner poached (α = .89) | .20** | .06 (.08) | .22** | .22** (.33**) |
| Overall successful self-poach (α = .92) | .20** | .01 (.01) | .19** | .18** (.27**) |
| Overall successful poached by another (α = .92) | .28** | .02 (.03) | .28** | .27** (.41**) |
| Overall successful partner poached (α = .91) | .33** | .01 (.01) | .34** | .31** (.47**) |
| Self-poach for STM (α = .78) | .35** | .11 (.16**) | .28** | .24** (.36**) |
| Self-poach for LTA (α = .81) | .28** | .00 (.00) | .27** | .25** (.38**) |
| Self-poach for LTM (α = .83) | .28** | .05 (.07) | .27** | .28** (.42**) |
| Poached by another for STM (α = .70) | .27** | .08 (.13*) | .25** | .21** (.32**) |
| Poached by another for LTA (α = .84) | .22** | .02 (.03) | .25** | .23** (.35**) |
| Poached by another for LTM (α = .88) | .24** | .06 (.08) | .23** | .25** (.38**) |
| Partner poached for STM (α = .81) | .17** | .03 (.04) | .25** | .21** (.32**) |
| Partner poached for LTA (α = .87) | .16** | .08 (.11*) | .19** | .20** (.30**) |
| Partner poached for LTM (α = .87) | .21** | .08 (.11*) | .18** | .22** (.33**) |
| Successful self-poach for STM (α = .71) | .17** | .05 (.08) | .25** | .22** (.33**) |
| Successful self-poach for LTA (α = .82) | .17** | .05 (.07) | .16** | .18** (.27**) |
| Successful self-poach for LTM (α = .83) | .23** | .06 (.09) | .19** | .22** (.33**) |
| Successful poached by another for STM (α = .82) | .20** | .08 (.12*) | .21** | .20** (.30**) |
| Successful poached by another for LTA (α = .77) | .17** | .00 (.00) | .16** | .15** (.23**) |
| Successful poached by another for LTM (α = .82) | .19** | .01 (.01) | .15** | .24** (.24**) |
| Successful partner poached for STM (α = .86) | .24** | −.02 (−.02) | .25** | .22** (.33**) |
| Successful partner poached for LTA (α = .89) | .25** | .03 (.04) | .28** | .26** (.39**) |
| Successful partner poached for LTM (α = .92) | .30** | .04 (.06) | .24** | .27** (.41**) |

*Note:* df = 336.
*Note:* STM, short-term mate; LTA, long-term sexual affair; LTM, long-term mate.
*Note: N*, narcissism; *M*, Machiavellianism; *P*, psychopathy.
*Note:* The correlations in the parentheses are corrected for attenuation for measurement error.
* $p < .05$.
** $p < .01$.

**Table 3**
Zero-order correlations among the Dark Triad and mate retention.

| | *N* | *M* | *P* | Dark Triad |
|---|---|---|---|---|
| Overall mate retention (α = .91) | .25** | .20** (.28**) | .25** | .32** (.45**) |
| Vigilance (α = .50) | .00 (.00) | .09 (.17**) | .13* (.07) | .10 (.14**) |
| Concealment of mate (α = .65) | .13* (.07) | .12* (.20**) | .14* (.07) | .16** (.23**) |
| Monopolize mates times (α = .65) | .24** (.13*) | .12* (.20**) | .26** (.11*) | .23** (.33**) |
| Jealousy induction (α = .64) | .25** (.14*) | .06 (.10) | .28** (.13*) | .22* (.31**) |
| Punish mate's infidelity threat (α = .65) | .53** (.30**) | .04 (.07) | .58** (.25**) | .40** (.57**) |
| Emotional manipulation (α = .59) | .10 (.05) | .16** (.28**) | .11* (.06) | .15** (.21**) |
| Commitment manipulation (α = .59) | .14* (.07) | .07 (.12*) | .15* (.05) | .11* (.16**) |
| Derogation of competitors (α = .53) | .20 (.14*) | .07 (.01) | .18** (.11*) | .21** (.30**) |
| Resource display (α = .74) | .24** | .10 (.15**) | .20** | .25** (.35**) |
| Sexual inducements (α = .58) | .14* (.07) | .14* (.24**) | .15* (.10) | .18**(.25**) |
| Appearance enhancements (α = .59) | .35** (.18**) | .11* (.19**) | .38** (.12*) | .26** (.37**) |
| Love and care (α = .71) | .22** | .08 (.13*) | .11* | .19** (.27**) |
| Submission and debasement (α = .74) | −.07 | .15** (.23**) | −.07 | .00 (.00) |
| Verbal possession signals (α = .66) | .28** (.16**) | .15** (.24**) | .30** (.12*) | .26** (.35**) |
| Physical possession signals (α = .75) | .06 | .16** (.24**) | .02 | .11* (.16**) |
| Possessive ornamentation (α = .81) | −.08 | .12* (.18**) | −.07 | −.01 (−.01) |
| Derogate mate (α = .65) | .08 (.04) | .11* (.18**) | .09 (.09) | .14* (.20**) |
| Intrasexual threats (α = .68) | .43** (.25**) | .04 (.06) | .47** (.19**) | .31** (.44**) |
| Violence against rivals (α = .85) | .14** | .17** (.24**) | .11* | .19** (.27**) |

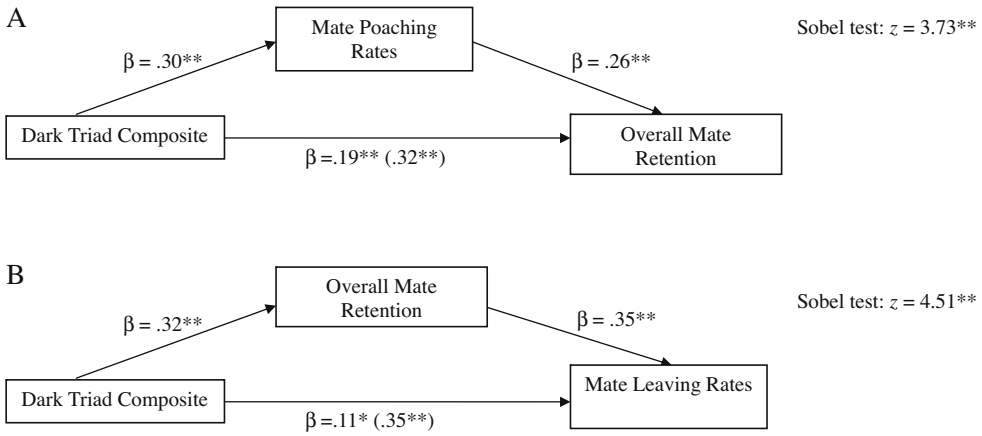
*Note:* df = 336.
*Note: N*, narcissism; *M*, Machiavellianism; *P*, psychopathy.
*Note:* The correlations in the parentheses are corrected for attenuation for measurement error.
* $p < .05$.
** $p < .01$.

mates poached away by others. A short-term mating style may increase fitness outcomes (Jonason et al., 2009) but it also carries costs. Lapses in mate guarding and a reluctance to engage in medium to long-term relationships may lead to less secure relationship affiliative bonds and thus a greater probability for mates defecting from relationships. Although the Dark Triad may have facilitated some components of reproductive success in the ancestral past, such as sexual access to a variety of partners, those possessing these traits likely also incurred costs in other components of fitness, such as losing mates previously acquired. This pattern of findings supports a balancing explanation for the origins of individual differences in sexual strategies (e.g., Buss, 2009; Penke, Denissen, & Miller, 2007).

We also explored the nature of the mate retention tactics associated with the Dark Triad. Although the Dark Triad was associated with almost all mate retention tactics it appeared to be well associated with tactics that are characterized by aggression towards others or the partner, appearance enhancements, and resource display. All of these are at the core of at least narcissism (Bushman & Baumeister, 1998; Vazire, Naumann, Rentfrow, & Gosling, 2008) and likely psychopathy and Machiavellianism as a function of the considerable overlap between the three. Indeed, the use of these tactics is also consistent with the disagreeable nature underlying all three of the traits (Paulhus & Williams, 2002).

Tentative results from our *post hoc* mediation analyses suggest that effort spent at poaching mates leads to more effort in mate retention. Perhaps less mate guarding and an increased risk of mates leaving them for another partner encourages individuals to increase mate retention effort. However, more effort in mate retention may actually lead to more abandonent by current mates, perhaps because the tactics of mate retention that covary with the Dark Triad actually drive partners away. Alternatively, it may be that by the time individuals who are well-characterized by the Dark Triad start attempting to retain mates, it is too late. These results suggest further costs and benefits and thus, an avenue for future research to explore.

The current study replicated sex differences in mate poaching rates (Davies et al., 2007) and mate retention tactics used (Buss




*Note:* * $p < .05$, ** $p < .01$

*Note:* The coeffecient in parentheses are direct effects

*Note:* Figure 1a, Direct effect of sex: $R^2 = .09$, Indirect effect of sex through the mediator: $R^2 = .14$.

*Note:* Figure 1b, Direct effect of sex: $R^2 = .05$, Indirect effect of sex through the mediator: $R^2 = .16$

**Fig. 1.** Mediation models to account for mates leaving relationship and mate retention rates.

et al., 2008). However, some notable exceptions were present. For instance, women reported a higher degree of using violence against rivals than men. This may be the result of using a short measure. When using short measures, researchers sacrifice some degree of validity (Cronbach & Meehl, 1955). The term "violence" may not be specific enough and thus future work should verify these results with the long inventory. That said, we opted to use the well-validated, short form of the Mate Retention Inventory (Buss et al., 2008) and not the long form (Buss, 1988) to reduce subject fatigue (Burisch, 1984), counteracting the length of the Dark Triad measures.

The most noteworthy limitation pertained to the low levels of internal consistency across the different measures we employed. In the case of the measures of mate retention tactics, this is likely the result of each scale being composed of few items (Schmitt, 1996). In contrast, the low internal consistency of the MACH-IV is more problematic and inconsistent with a recent review demonstrating that the measure is robust (Jones & Paulhus, 2009). We suspect that our inability to replicate the sex difference in Machiavellianism and need to correct for attenuation are symptomatic of these psychometric problems. Secondarily, because the data was correlational we cannot be sure that these obstensible costs and benefits are real nor what are the causal relationships among the Dark Triad and different forms of mate poaching and retention.

Traditionally, the components of the Dark Triad have been studied for their negative outcomes. From an evolutionary perspective, traits that persist in the population are likely linked with reproductive benefits; otherwise, they are likely to have been purged from the population by natural or sexual selection. Indeed, the possession of these traits may have provided benefits historically linked to reproductive success such as being quick to leave a current mate to pursue additional mating opportunities. However, they also create potential costs via the loss of mates to others. In response to this threat, these traits may facilitate a set of mate retention tactics, which reflect the antisocial and disagreeable reputation of the Dark Triad. Evolutionarily, strategies considered by most to be socially undesirable may nonetheless yield benefits in the currency of fitness.

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