

Negative traits, positive assortment: Revisiting the Dark Triad and a preference for similar others

Journal of Social and
Personal Relationships
1–20

© The Author(s) 2021

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/0265407521989820

journals.sagepub.com/home/spr



Cameron S. Kay 
University of Oregon, USA

Abstract

Across two studies ($N_{\text{TOTAL}} = 933$), a person's willingness to engage in a relationship with those scoring high in each of the Dark Triad traits (i.e., Machiavellianism, narcissism, and psychopathy) was examined as a function of their own levels of the Dark Triad traits and the relationship type in question (i.e., a one-night stand, a dating relationship, or a marriage). There were three notable findings. First, those scoring high in Machiavellianism, narcissism, and psychopathy were more willing to engage in a relationship with a person who was also high in Machiavellianism, narcissism, and psychopathy, respectively. Second, as the commitment level of the relationship increased, so did a narcissistic individual's willingness to engage in a relationship with a fellow narcissist. Third, psychopathic people were generally interested in having one-night stands, seemingly without concern for the personality traits of the other person involved. Results are discussed in relation to assortative mating.

Keywords

Dark Triad, long-term relationships, Machiavellianism, narcissism, personality, positive assortment, psychopathy, short-term relationships

Introduction

A considerable amount of research has suggested that people date, marry, and ultimately procreate with people who are similar to themselves—or what is known as *positive*

Corresponding author:

Cameron S. Kay, Department of Psychology, 1227 University of Oregon, Eugene, OR 97403, USA.

Email: ckay@uoregon.edu

assortment (see Buss, 1984). Previous work has, for example, shown that couples tend to be more similar in terms of their ages (Spuhler, 1968), political beliefs (Byrne & Blaylock, 1963), cognitive abilities (Mascie-Taylor, 1989), levels of education (Stevens et al., 1990), and even dietary habits (Price & Vandenberg, 1980) than would be expected by chance. Whether positive assortment is the case for the *Dark Triad* traits (i.e., Machiavellianism, narcissism, and psychopathy; Paulhus & Williams, 2002), however, remains somewhat unclear. On the one hand, it is conceivable that the Dark Triad would be similar to other personality traits (e.g., McCrae et al., 2008; Rammstedt & Schupp, 2008) and show evidence of positive assortment. On the other hand, it is easy to imagine that people would find manipulation, self-centeredness, and callousness objectionable, irrespective of their own levels of those traits. The present study aims to clarify this issue by examining whether those scoring high in the Dark Triad traits are more interested in having one-night stands, dating relationships, and marriages with people who are also high in the Dark Triad traits.

Machiavellianism and positive assortment

Jonason et al. (2015) found little evidence for positive assortment in the context of Machiavellianism. Participants completed self-report measures of the Dark Triad traits and then evaluated sets of dating advertisements that were written to be representative of each trait. The results indicated that people scoring high in Machiavellianism were not interested in having one-night stands, marriages, or parenting children with those high in Machiavellianism. The one exception to this was that Machiavellian women had a pronounced interest in marrying Machiavellian men ($r = .41$).

It is worth noting that many of the relationships identified in Jonason and colleagues' (2015) study were in the moderate-to-large range (see Funder & Ozer, 2019; Gignac & Szodorai, 2016). As the authors acknowledge in their conclusion, the study may have suffered from diminished power. This leaves open the possibility that the non-significant results were a consequence of a smaller sample size rather than the absence of a meaningful effect.

In line with this notion, several researchers have shown that couples tend to have similar levels of Machiavellianism (Kardum et al., 2017; but see also Buss, 1984). There is, likewise, evidence to suggest that those scoring high in Machiavellianism discount warmth and agreeableness in their partners (Ináncsi et al., 2016)—traits that they, themselves, do not seem to possess (e.g., Collison et al., 2018).

Narcissism and positive assortment

Considering the etymology of narcissism—that it is derived from the name of a mythological figure who died because he became infatuated with his own reflection in a pool of water—it would not be surprising to find that narcissistic people are drawn to people who have similar features to themselves. Those high in narcissism do seem to be attracted to or, at the very least, tolerant of narcissism in others (Grosz et al., 2015; Hart & Adams, 2014; Lyons & Blanchard, 2016), and this relationship can be explained by a perceived similarity with the other person (Burton et al., 2017). Potentially as a result of

this attraction, narcissistic people also seem to couple with other narcissistic people (Keller et al., 2014).

That said, narcissism is not free of the inconsistencies that afflict the other aversive personality traits. For instance, some researchers have found relatively meager evidence for positive assortment among narcissistic individuals (Lavner et al., 2016), and others have even found the opposite effect. Namely, narcissistic people have been shown to be less likely to couple with narcissistic people (Veronica Smith et al., 2014) and narcissistic men have been shown to rate narcissistic women as less attractive for long-term relationship partners (Jonason et al., 2015).

Psychopathy and positive assortment

Among the Dark Triad traits, the most consistent evidence for positive assortment has been with respect to psychopathy. For instance, people high in psychopathy rate others who are also high in psychopathy as more attractive overall, more attractive as marriage partners, and more attractive as potential parents for their children (Jonason et al., 2015). Psychopathic women (but not men) also evaluate psychopathic people as being more attractive for one-night stands. These findings align with previous work showing that psychopathic people tend to couple with people who are also psychopathic (Savard et al., 2011; Veronica Smith et al., 2014).

There is also substantial incidental evidence to suggest that positive assortment would hold true for psychopathy. Psychopathic women have been shown to be less interested in being romantically involved with people who are kind and chaste (Atari & Chegeni, 2017)—characteristics that are nearly antithetical to the definition of psychopathy (e.g., Jonason et al., 2010; Patrick et al., 2009). Moreover, early research on positive assortment indicated that couples tend to have similar levels of empathy (Price & Vandenberg, 1980) and psychoticism (Dubuis-Stadelmann et al., 2001; Mascie-Taylor, 1989). A lack of empathy has long been considered a core feature of psychopathy (e.g., Hare, 1980) and psychoticism demonstrates an appreciable association with psychopathy (Lilienfeld et al., 2015). Finally, Krueger and colleagues (1998) found evidence for positive assortment in terms of the number of crimes a person commits. Criminality may not be a central component of psychopathy (see Hare & Neumann, 2010; Skeem & Cooke, 2010), but the two are highly associated (e.g., Hemphill et al., 1998).

The current study

Despite the respectable number of studies that have looked at positive assortment in the context of the Dark Triad traits, the picture, unfortunately, remains murky. Part of this murkiness may be a consequence of the numerous methods that have been used to operationalize positive assortment. The present study takes a decidedly direct tack to assessing preferences for these traits. Namely, participants are asked to indicate their willingness to engage in a one-night stand, dating relationship, and marriage with a person exhibiting each of the items from the *Short Dark Triad* (e.g., “I would be willing to date someone who believes payback needs to be quick and nasty”; Jones & Paulhus, 2014). Although this does not have the same ecological validity as many of the methods

used in previous studies (e.g., dating advertisements; trait correlations between partners), it is an important alternative method to consider for at least three reasons.

First, this method ensures the content of the traits are represented in the stimuli. For example, we can be relatively certain that the item, “I would be willing to marry someone who likes to use clever manipulation to get their way,” is capturing similar content to the item, “I like to use clever manipulation to get my way.” Second, it decreases the likelihood that the stimuli are double-barreled. If, for example, a dating advertisement describes a person as always telling the truth *and* always being a team player, it is unclear what aspect of the stimulus the participant is actually responding to. Third, it avoids the possibility that the participants are responding to aspects of a person that are related (but not central) to a trait. For instance, people tend to rate narcissistic individuals as more attractive for short- and long-term relationships, but this effect appears to be driven by the overlap between narcissism and physical attractiveness in women and between narcissism and extroversion in men (Jauk et al., 2016). The present methodology obviates this possibility.

The use of naturalistic methods to examine positive assortment is, without a doubt, a worthy endeavor. The goal of the present study was, however, to provide as straightforward and as unembellished an estimate of positive assortment in the context of the Dark Triad traits as possible. Armed with an understanding of how this effect operates in highly controlled conditions, future research can then examine how other aspects of the individual (e.g., physical attractiveness; intelligence) and other forms of the traits (e.g., behavior-based versus abstract descriptions; see Adams et al., 2015) act to moderate the effect.

Study 1

Method

Participants and procedure. The sample for Study 1 included 470 undergraduate students (64.68% women; M age = 19.78; SD age = 2.11) enrolled at a large university in the Pacific Northwest. A total of 500 participants completed the survey, but 13 were excluded under suspicion of speeding (i.e., completing the survey in under 10 minutes) and 4 were excluded under suspicion of straight-lining (i.e., response standard deviations under .5). Thirteen additional participants who reported being neither a woman nor a man were also excluded in order to create gender-specific groups that were large enough to compare. Among women, the expected power to detect a moderate effect (Funder & Ozer, 2019; Gignac & Szodorai, 2016) ranged from 94.38% to 99.99%, depending upon the level of dependency in each participants' ratings. Among men, the expected power ranged from 74.36% to 99.52%.

The data for Study 1, as well as the data for Study 2, were previously reported by Kay and Saucier (2020). Specifically, they reported the sample demographics and self-report scores for the Dark Triad traits. As such, two of the analyses reported below—the gender differences in the self-reported Dark Triad traits and the intercorrelations among the self-reported Dark Triad traits—are not new to the present paper. The analyses examining the gender differences in the preferences for the Dark Triad traits; the zero-order correlations

between the self-reported Dark Triad traits and the preferences for the Dark Triad traits; and the linear mixed-effect models examining the associations between the self-reported Dark Triad traits and the preferences for the Dark Triad traits *are* all new to the present paper.

Materials

Self-report Dark Triad. The Dark Triad was assessed using a truncated 12-item version of the Short Dark Triad (see Jones & Paulhus, 2014; Kay & Saucier, 2020). This shortened version of the scale included 4 items assessing each of Machiavellianism ($\alpha = .60$; e.g. “You should wait for the right time to get back at people”), narcissism ($\alpha = .55$; e.g. “People see me as a natural leader”), and psychopathy ($\alpha = .67$; e.g. “People often say I’m out of control”). The items were delivered to the participants in randomized order, and participants responded to each item using a 7-point Likert scale (1 = “do not agree at all”; 7 = “agree very strongly”). Given its brief length, the truncated scale showed lower levels of internal consistency than would have been desired (see Table 1), especially in the case of narcissism ($\alpha = .55$).

Evaluating the Dark Triad in three relationship contexts. The 12-item version of the Short Dark Triad was further adapted to assess a participants’ willingness to engage in three different relationship types with those displaying each of the Dark Triad traits. Specifically, the items were adapted to assess the participants’ willingness to have a one-night stand (e.g., “I would be willing to have a one-night stand with someone who . . . believes it is not wise to tell their secrets”), dating relationship, (e.g., “I would be willing to date someone who . . . likes to get acquainted with important people”), and marriage (e.g., “I would be willing to marry someone who . . . enjoys having sex with people they hardly know”) with people high in Machiavellianism, narcissism, and psychopathy. The items for each relationship type were presented in separate blocks. The items within each block were delivered in randomized order, and the blocks were also delivered in randomized order. Participants responded to each item using the same 7-point Likert scale described above.

As was the case for the self-report measure, the narcissism ratings suffered from particularly low levels of internal consistency ($\alpha = .11-.37$; see Table 1). The exclusion of the single reverse-coded item for narcissism did improve the reliability of the scales, but it did not meaningfully change the results of the models. To preserve as much of the original meaning of the scale as possible, the results including the reverse-coded item are interpreted here.

Analytic strategy. A total of six linear mixed-effects models—three for women and three for men—were constructed to predict a person’s willingness to engage in a relationship with an individual exhibiting high levels of Machiavellianism, narcissism, and psychopathy. The data for women and men were modeled separately because of the well-established gender differences in the Dark Triad traits (Muris et al., 2017) and to allow for easier comparison with previous work examining the relationship between the Dark Triad and positive assortment (e.g., Jonason et al., 2015). The participants’ self-report levels of the Dark Triad traits, the relationship context (i.e., a one-night stand, a dating

Table 1. Descriptive statistics, gender comparisons, and Cronbach's alphas for the self-report and relationship Dark Triad scores in Study 1 and Study 2.

Trait	Study 1 Mean (SD)				Study 2 Mean (SD)				g	t	α	
	Overall	Women	Men	α	Overall	Women	Men	α				
<i>Self</i>												
Machiavellianism	3.51 (1.14)	3.44 (1.11)	3.65 (1.18)	0.18	0.18	2.90 (0.56)	2.83 (0.58)	3.08 (0.49)	-4.70**	0.48	.73	
Narcissism	3.77 (1.08)	3.73 (1.06)	3.85 (1.11)	0.11	0.11	2.91 (0.53)	2.84 (0.55)	3.08 (0.46)	-4.81**	0.50	.68	
Psychopathy	1.90 (0.96)	1.72 (0.84)	2.24 (1.07)	0.52	0.52	2.16 (0.56)	2.03 (0.51)	2.48 (0.57)	-7.85**	0.81	.73	
<i>One-night stand</i>												
Machiavellianism	2.84 (1.58)	2.61 (1.46)	3.27 (1.69)	0.41	0.41	2.47 (0.86)	2.32 (0.84)	2.84 (0.78)	-6.26**	0.65	.92	
Narcissism	3.70 (1.02)	3.62 (1.02)	3.84 (1.02)	0.22	0.22	2.95 (0.45)	2.89 (0.47)	3.08 (0.37)	-4.53**	0.47	.36	
Psychopathy	2.52 (1.59)	2.22 (1.43)	3.06 (1.72)	0.52	0.52	2.34 (0.62)	2.22 (0.58)	2.63 (0.64)	-6.33**	0.65	.70	
<i>Date</i>												
Machiavellianism	2.67 (1.12)	2.52 (1.08)	2.94 (1.15)	0.37	0.37	2.52 (0.64)	2.41 (0.61)	2.82 (0.64)	-6.36**	0.66	.81	
Narcissism	3.95 (0.97)	3.95 (1.00)	3.96 (0.91)	0.00	0.00	3.04 (0.42)	3.02 (0.43)	3.12 (0.38)	-2.51*	0.26	.53	
Psychopathy	1.80 (1.01)	1.59 (0.83)	2.19 (1.18)	0.56	0.56	2.02 (0.57)	1.90 (0.51)	2.34 (0.57)	-7.75**	0.80	.77	
<i>Marry</i>												
Machiavellianism	2.62 (1.19)	2.41 (1.08)	2.99 (1.28)	0.48	0.48	2.41 (0.63)	2.33 (0.62)	2.63 (0.62)	-4.72**	0.49	.80	
Narcissism	4.02 (0.99)	4.04 (1.00)	3.98 (0.98)	0.05	0.05	3.09 (0.42)	3.07 (0.44)	3.15 (0.39)	-1.93	0.20	.51	
Psychopathy	1.65 (0.94)	1.44 (0.75)	2.02 (1.11)	0.58	0.58	1.91 (0.53)	1.81 (0.48)	2.17 (0.58)	-6.46**	0.67	.74	

Note. * $p < .05$; ** $p < .005$. P-values were adjusted for multiple comparisons using the Holm-Bonferroni method. g is Hedges' g. α is Cronbach's alpha. Effect sizes equal to or greater than .50 are bolded.

Table 2. Intercorrelations for the self-report Dark Triad traits in Study 1 and Study 2.

	Study 1			Study 2		
	1.	2.	3.	1.	2.	3.
1. Machiavellianism	—	.27**	.43**	—	.22**	.50**
2. Narcissism	.20*	—	.27**	.26**	—	.32**
3. Psychopathy	.46**	.32**	—	.37**	.23*	—

Note. * $p < .05$; ** $p < .005$. P-values were adjusted for multiple comparisons using the Holm-Bonferonni method. Values above the diagonal are for women; values below the diagonal are for men. Correlations equal to or greater than .30 are bolded.

relationship, or a marriage), and the interaction between the participants' levels of the Dark Triad traits and the relationship context were added as predictors to the model. Model intercepts were allowed to vary in order to account for participants making multiple ratings (e.g., they rated Machiavellianism in the context of a one-night stand, in the context of a dating relationship, and in the context of a marriage). The regression coefficients for all models can be found in the Supplementary Materials.

The models' simple slopes (Table 3) serve as the starting point for interpretation, and a pairwise comparison (Tukey, 1949) of the slopes is used to examine whether the associations between the participants' levels of the Dark Triad traits and a preference for those same traits in others differs as a function of the type of relationship (also Table 3). To address the inflated Type I Error rate resulting from the multiple analyses performed on this dataset, a more conservative significance level is used for all analyses (i.e., $\alpha = .005$).

Results

As shown in Table 1 and consistent with prior research (Muris et al., 2017), men scored moderately higher in psychopathy than women. Men also showed a greater interest in engaging in one-night stands, dating relationships, and marriages with people scoring high in Machiavellianism and psychopathy. The size of the zero-order correlations among the Dark Triad traits were also in the expected range (Table 2; see Muris et al., 2017), showing moderate-to-large intercorrelations for both women and men.

Predicting a preference for the Dark Triad traits among women. Machiavellian women showed a greater interest in having one-night stands ($\beta = 0.29$, 95% CI [0.18, 0.40], $t(727) = 5.16$, $SE = 0.06$, $p < .001$), dating relationships ($\beta = 0.42$, 95% CI [0.31, 0.53], $t(732) = 7.41$, $SE = 0.06$, $p < .001$), and marriages ($\beta = 0.43$, 95% CI [0.32, 0.54], $t(727) = 7.63$, $SE = 0.06$, $p < .001$) with people who were also high in Machiavellianism. The pairwise comparison of these slopes indicated that the level of interest did not vary as a function of the type of relationship.

Similarly, narcissistic women were interested in dating ($\beta = 0.41$, 95% CI [0.30, 0.51], $t(668) = 7.40$, $SE = 0.05$, $p < .001$) and marrying ($\beta = 0.45$, 95% CI [0.34, 0.56], $t(667) = 8.18$, $SE = 0.05$, $p < .001$) people who were also high in narcissism. They did

Table 3. Zero-order correlations and simple slopes between the self-reported Dark Triad traits and preferences for the Dark Triad traits in Study 1.

	Machiavellianism (T)			Narcissism (T)			Psychopathy (T)		
	<i>r</i>	β	95% CI	<i>r</i>	β	95% CI	<i>r</i>	β	95% CI
<i>Women</i>									
<i>Machiavellianism (SR)</i>									
One-night stand	.38**	0.29 _a **	[0.18, 0.40]	.11	-0.07 _a	[-0.19, 0.04]	.26**	0.06 _a	[-0.05, 0.17]
Date	.54**	0.42_a**	[0.31, 0.53]	.12*	-0.00 _a	[-0.12, 0.11]	.32**	0.10 _a	[-0.00, 0.21]
Marry	.55**	0.43_a**	[0.32, 0.54]	.15*	0.01 _a	[-0.10, 0.13]	.28**	0.05 _a	[-0.05, 0.16]
<i>Narcissism (SR)</i>									
One-night stand	.12*	-0.03 _a	[-0.13, 0.08]	.20**	0.13 _a *	[0.02, 0.24]	.12*	-0.03 _a	[-0.13, 0.07]
Date	.18**	0.01 _a	[-0.09, 0.11]	.42**	0.41_b**	[0.30, 0.51]	.10	-0.05 _a	[-0.14, 0.05]
Marry	.20**	0.03 _a	[-0.08, 0.13]	.47**	0.45_b**	[0.34, 0.56]	.16*	0.01 _a	[-0.09, 0.11]
<i>Psychopathy (SR)</i>									
One-night stand	.41**	0.37_b**	[0.26, 0.48]	.35**	0.34_b**	[0.23, 0.46]	.51**	0.65_b**	[0.54, 0.75]
Date	.37**	0.15 _a *	[0.04, 0.27]	.15*	0.03 _a	[-0.09, 0.15]	.51**	0.34_a**	[0.24, 0.45]
Marry	.35**	0.11 _a *	[0.00, 0.22]	.17**	0.04 _a	[-0.08, 0.15]	.50**	0.32_a**	[0.21, 0.42]
<i>Men</i>									
<i>Machiavellianism (SR)</i>									
One-night stand	.26**	0.05 _a	[-0.10, 0.20]	.17*	-0.02 _a	[-0.17, 0.12]	.20*	-0.03 _a	[-0.18, 0.11]
Date	.49**	0.34_b**	[0.19, 0.49]	.14	0.05 _a	[-0.09, 0.20]	.34**	0.09 _a	[-0.05, 0.24]
Marry	.55**	0.45_b**	[0.30, 0.60]	.17*	0.05 _a	[-0.10, 0.19]	.22**	-0.02 _a	[-0.16, 0.12]
<i>Narcissism (SR)</i>									
One-night stand	.16*	-0.00 _a	[-0.14, 0.14]	.36**	0.26 _a **	[0.13, 0.40]	.18*	0.04 _a	[-0.10, 0.17]
Date	.23**	0.08 _a	[-0.06, 0.22]	.60**	0.59_b**	[0.45, 0.72]	.19*	0.02 _a	[-0.11, 0.16]
Marry	.12	-0.03 _a	[-0.17, 0.11]	.61**	0.61_b**	[0.48, 0.75]	.18*	0.01 _a	[-0.12, 0.14]
<i>Psychopathy (SR)</i>									
One-night stand	.50**	0.59_b**	[0.44, 0.74]	.40**	0.34_b**	[0.19, 0.49]	.50**	0.63_b**	[0.48, 0.77]
Date	.37**	0.12 _a	[-0.03, 0.28]	.13	-0.09 _a	[-0.24, 0.06]	.53**	0.38_a**	[0.23, 0.53]
Marry	.35**	0.12 _a	[-0.03, 0.27]	.21*	-0.01 _a	[-0.16, 0.14]	.54**	0.42_{ab}**	[0.28, 0.57]

Note. * $p < .05$; ** $p < .005$. SR = Self-report levels of the Dark Triad traits; T = Target levels of the Dark Triad traits. Effect sizes equal to or greater than .30 are bolded. Simple slopes are accounting for the other two Dark Triad traits. Different subscripts indicate differences in simple slopes between relationship types for a given trait.

not, however, show an interest in having a one-night stand with a person high in narcissism, $\beta = 0.13$, 95% CI [0.02, 0.24], $t(667) = 2.34$, $SE = 0.05$, $p = .019$.

Psychopathic women had an elevated interest in having a one-night stand ($\beta = 0.65$, 95% CI [0.54, 0.75], $t(781) = 12.11$, $SE = 0.05$, $p < .001$), dating relationship ($\beta = 0.34$, 95% CI [0.24, 0.45], $t(792) = 6.35$, $SE = 0.05$, $p < .001$), and marriage ($\beta = 0.32$, 95% CI [0.21, 0.42], $t(783) = 5.91$, $SE = 0.05$, $p < .001$) with psychopathic others. This association was greatest in the context of a one-night stand, such that psychopathic women were more interested in having a one-night stand than a dating relationship or marriage with a person high in psychopathy. They also showed a greater interest in having a one-night stand with a person scoring high in Machiavellianism ($\beta = 0.37$, 95% CI [0.26, 0.48], $t(725) = 6.62$, $SE = 0.06$, $p < .001$) and narcissism ($\beta = 0.34$, 95% CI [0.23, 0.46], $t(667) = 5.86$, $SE = 0.06$, $p < .001$).

Predicting a preference for the Dark Triad traits among men. In men, self-report Machiavellianism was only associated with a greater interest in dating ($\beta = 0.34$, 95% CI [0.19, 0.49], $t(425) = 4.46$, $SE = 0.08$, $p < .001$) and marrying ($\beta = 0.45$, 95% CI [0.30, 0.60], $t(424) = 5.98$, $SE = 0.08$, $p < .001$) Machiavellian others. Men high in Machiavellianism were not more interested in having a one-night with a person high in Machiavellianism, $\beta = 0.05$, 95% CI [-0.10, 0.20], $t(425) = 0.69$, $SE = 0.08$, $p = .489$.

As with women, men high in narcissism were most interested in dating ($\beta = 0.59$, 95% CI [0.45, 0.72], $t(428) = 8.41$, $SE = 0.07$, $p < .001$) and marrying ($\beta = 0.61$, 95% CI [0.48, 0.75], $t(421) = 8.97$, $SE = 0.07$, $p < .001$) narcissistic people. To a lesser degree, they were also interested in having a one-night stand with narcissistic people, $\beta = 0.26$, 95% CI [0.13, 0.40], $t(426) = 3.80$, $SE = 0.07$, $p < .001$.

Psychopathic men showed a greater interest in having one-night stands ($\beta = 0.63$, 95% CI [0.48, 0.77], $t(445) = 8.36$, $SE = 0.07$, $p < .001$), dating relationships ($\beta = 0.38$, 95% CI [0.23, 0.53], $t(442) = 5.09$, $SE = 0.07$, $p < .001$), and marriages ($\beta = 0.42$, 95% CI [0.28, 0.57], $t(442) = 5.71$, $SE = 0.07$, $p < .001$) with people high in psychopathy. This preference was greater for one-night stands than for dating relationships. Psychopathic men also showed a greater interest in having one-night stands with Machiavellian ($\beta = 0.59$, 95% CI [0.44, 0.74], $t(427) = 7.52$, $SE = 0.08$, $p < .001$) and narcissistic ($\beta = 0.34$, 95% CI [0.19, 0.49], $t(424) = 4.51$, $SE = 0.08$, $p < .001$) others.

Summary of the results

Overall, three conclusions can be drawn from the results of Study 1. First, those high in each of the respective Dark Triad traits seemed to be more willing, irrespective of gender, to engage in relationships with others who were high in the same traits. Second, there was modest evidence, at least for Machiavellianism and narcissism, that people high in the Dark Triad traits place a greater emphasis on those same traits in relationships that require more commitment. Third, people scoring high in psychopathy were interested in engaging in one-night stands with people scoring high on all three of the Dark Triad traits.

Study 2

The purpose of Study 2 was to replicate the results of Study 1 using a measure of the Dark Triad with greater internal consistency. To that end, the full Short Dark Triad (Jones & Paulhus, 2014) was used to assess both the participants' self-report Dark Triad traits and their preferences for those same traits in others.

Method

Participants and procedure. The sample for Study 2 included 463 undergraduate students (71.71% women; M age = 19.98; SD age = 3.09). The exclusion criteria for Study 2 was the same as Study 1 and involved excluding 22 participants for speeding through the survey, 9 participants for straight-lining the survey, and 5 participants who identified as neither a woman nor a man. Among women, the expected power to detect a moderate effect ranged from 95.98% to 99.99%, depending upon the level of dependency in each of the participants' ratings. Among men, the expected power ranged from 64.02% to 98.11%.

Materials

Self-report Dark Triad. Participants completed the full version of the Short Dark Triad (Jones & Paulhus, 2014). As expected, the measure achieved better inter-item reliability than its truncated counterpart ($\alpha = .68-.73$; see Table 1). A bidirectional 5-point response scale (1 = "Strongly disagree"; 5 = "Strongly agree") was also used instead of the unidirectional 7-point response scale that was used in Study 1. This was done in order to better align with the existing literature.

Evaluating the Dark Triad in three relationship contexts. Using the same 5-point response scale as the self-report measures, participants indicated their interest in engaging in a one-night stand, dating relationship, and marriage with a person scoring high on each of the items from the full Short Dark Triad. Using the full Short Dark Triad improved the internal consistency of the ratings (Table 1), although the reliability for narcissism was still lower than would have been desired ($\alpha = .36-.53$).

Analytic strategy. The linear mixed-effects models for Study 2 were identical to those used in Study 1. Regression coefficients for all models can be found in the Supplementary Materials. As in Study 1, the simple slopes will serve as the starting point for interpretation (Table 4), and a pairwise comparison (Tukey, 1949) of the slopes will be used to examine whether the associations between the participants' levels of the Dark Triad traits and a preference for those traits in others differs as a function of the type of relationship (also Table 4). Again, to address the inflated Type I Error rate resulting from the multiple analyses performed, a more conservative significance level was used for all analyses ($\alpha = .005$).

Results

Gender differences among the variables (Table 1) and zero-order correlations among the Dark Triad traits (Table 2) were generally consistent with Study 1 and with previous

Table 4. Zero-order correlations and simple slopes between the self-reported Dark Triad traits and preferences for the Dark Triad traits in Study 2.

	Machiavellianism (T)			Narcissism (T)			Psychopathy (T)		
	<i>r</i>	β	95% CI	<i>r</i>	β	95% CI	<i>r</i>	β	95% CI
<i>Women</i>									
<i>Machiavellianism (SR)</i>									
One-night stand	.40**	0.33_a**	[0.23, 0.43]	.28**	0.15 _a *	[0.04, 0.26]	.27**	0.05 _a	[-0.05, 0.15]
Date	.68**	0.53_b**	[0.43, 0.63]	.29**	0.16 _a **	[0.05, 0.26]	.39**	0.10 _a	[-0.00, 0.19]
Marry	.62**	0.45_{ab}**	[0.35, 0.55]	.29**	0.13 _a *	[0.03, 0.24]	.31**	-0.01 _a	[-0.11, 0.08]
<i>Narcissism (SR)</i>									
One-night stand	.14*	0.01 _a	[-0.09, 0.10]	.33**	0.25 _a **	[0.16, 0.35]	.25**	0.12 _b *	[0.03, 0.20]
Date	.15*	-0.03 _a	[-0.12, 0.06]	.55**	0.48_b**	[0.38, 0.58]	.22**	0.01 _{ab}	[-0.08, 0.10]
Marry	.20**	0.02 _a	[-0.07, 0.11]	.56**	0.48_b**	[0.39, 0.58]	.20**	-0.00 _a	[-0.09, 0.09]
<i>Psychopathy (SR)</i>									
One-night stand	.38**	0.29 _b **	[0.18, 0.39]	.31**	0.17 _b **	[0.06, 0.28]	.46**	0.42_a**	[0.32, 0.52]
Date	.46**	0.14 _a *	[0.03, 0.25]	.27**	0.03 _a	[-0.08, 0.14]	.63**	0.53_{ab}**	[0.43, 0.63]
Marry	.48**	0.19 _{ab} **	[0.08, 0.29]	.32**	0.08 _{ab}	[-0.02, 0.19]	.64**	0.56_b**	[0.46, 0.66]
<i>Men</i>									
<i>Machiavellianism (SR)</i>									
One-night stand	.41**	0.39_a**	[0.22, 0.55]	.33**	0.24 _a *	[0.07, 0.40]	.21*	0.02 _a	[-0.14, 0.18]
Date	.49**	0.42_a**	[0.25, 0.59]	.32**	0.23 _a *	[0.06, 0.40]	0.12	-0.08 _a	[-0.24, 0.08]
Marry	.46**	0.43_a**	[0.26, 0.60]	0.16	0.12 _a	[-0.05, 0.29]	0.02	-0.15 _a	[-0.31, 0.01]
<i>Narcissism (SR)</i>									
One-night stand	0.12	-0.02 _a	[-0.18, 0.14]	.26**	0.17 _a *	[0.01, 0.33]	0.12	-0.01 _a	[-0.16, 0.14]
Date	.19*	0.06 _a	[-0.10, 0.22]	.51**	0.48_b**	[0.32, 0.64]	0.17	0.07 _a	[-0.08, 0.22]
Marry	0.05	-0.07 _a	[-0.23, 0.09]	.39**	0.41_b**	[0.25, 0.57]	0.09	0.02 _a	[-0.14, 0.17]
<i>Psychopathy (SR)</i>									
One-night stand	.31**	0.22 _a *	[0.05, 0.38]	.24*	0.11 _b	[-0.06, 0.27]	.53**	0.53_a**	[0.38, 0.69]
Date	.24*	0.06 _a	[-0.11, 0.22]	0.09	-0.11 _{ab}	[-0.28, 0.06]	.48**	0.45_a**	[0.30, 0.61]
Marry	0.16	-0.00 _a	[-0.17, 0.16]	-0.03	-0.17 _a *	[-0.34, -0.00]	.41**	0.43_a**	[0.27, 0.59]

Note. * $p < .05$; ** $p < .005$. SR = Self-report levels of the Dark Triad traits; T = Target levels of the Dark Triad traits. Effect sizes equal to or greater than .30 are bolded. Simple slopes are accounting for the other two Dark Triad traits. Different subscripts indicate differences in simple slopes between relationship types for a given trait.

research (Muris et al., 2017). Men scored higher on all of the Dark Triad traits and were more willing to have a one-night stand, dating relationship, and marriage with people high in Machiavellianism and psychopathy. Unlike Study 1, men were also more willing to have a one-night stand with a person high in narcissism.

Predicting a preference for the Dark Triad traits among women. Consistent with Study 1, women high in Machiavellianism showed a greater interest in having a one-night stand ($\beta = 0.33$, 95% CI [0.23, 0.43], $t(780) = 6.33$, $SE = 0.05$, $p < .001$), dating relationship ($\beta = 0.53$, 95% CI [0.43, 0.63], $t(780) = 10.11$, $SE = 0.05$, $p < .001$), and marriage ($\beta = 0.45$, 95% CI [0.35, 0.55], $t(780) = 8.61$, $SE = 0.05$, $p < .001$) with a person who was also high in Machiavellianism. The pairwise comparison of the simple slopes indicated that women were more interested in dating than having one-night stands with Machiavellian people.

Women high in narcissism were most interested in dating ($\beta = 0.48$, 95% CI [0.38, 0.58], $t(666) = 9.82$, $SE = 0.05$, $p < .001$) and marrying ($\beta = 0.48$, 95% CI [0.39, 0.58], $t(666) = 9.88$, $SE = 0.05$, $p < .001$) narcissistic people. They were also, to a lesser extent, interested in having one-night stands with narcissistic people, $\beta = 0.25$, 95% CI [0.16, 0.35], $t(666) = 5.20$, $SE = 0.05$, $p < .001$.

Psychopathic women were interested in have one-night stands ($\beta = 0.42$, 95% CI [0.32, 0.52], $t(752) = 8.18$, $SE = 0.05$, $p < .001$), dating relationships ($\beta = 0.53$, 95% CI [0.43, 0.63], $t(752) = 10.36$, $SE = 0.05$, $p < .001$), and marriages ($\beta = 0.56$, 95% CI [0.46, 0.66], $t(752) = 11.02$, $SE = 0.05$, $p < .001$) with people high in psychopathy. Unlike in Study 1, psychopathic women were more interested in marrying psychopathic people than having one-night stands with them. Psychopathic women also showed a greater willingness to have one-night stands ($\beta = 0.29$, 95% CI [0.18, 0.39], $t(780) = 5.32$, $SE = 0.05$, $p < .001$) and marriages ($\beta = 0.19$, 95% CI [0.08, 0.29], $t(780) = 3.46$, $SE = 0.05$, $p < .001$) with Machiavellian others. Finally, psychopathic women showed a preference for narcissism in the context of a one-night stand, $\beta = 0.17$, 95% CI [-0.02, 0.35], $t(666) = 3.02$, $SE = 0.06$, $p = .003$.

Predicting a preference for the Dark Triad traits among men. Machiavellian men showed an interest in having a one-night stand ($\beta = 0.39$, 95% CI [0.22, 0.55], $t(345) = 4.52$, $SE = 0.09$, $p < .001$), dating relationship ($\beta = 0.42$, 95% CI [0.25, 0.59], $t(345) = 4.90$, $SE = 0.09$, $p < .001$), and marriage ($\beta = 0.43$, 95% CI [0.26, 0.60], $t(345) = 5.02$, $SE = 0.09$, $p < .001$) with people who were also high in Machiavellianism.

As with women, men high in narcissism were most interested in dating ($\beta = 0.48$, 95% CI [0.32, 0.64], $t(348) = 5.87$, $SE = 0.08$, $p < .001$) and marrying ($\beta = 0.41$, 95% CI [0.25, 0.57], $t(348) = 4.97$, $SE = 0.08$, $p < .001$) narcissistic others. They did not, however, show an interest in having a one-night stand with a person high in narcissism, $\beta = 0.17$, 95% CI [0.01, 0.33], $t(348) = 2.07$, $SE = 0.08$, $p = .039$.

Psychopathic men showed a pronounced interest in having one-night stands ($\beta = 0.53$, 95% CI [0.38, 0.69], $t(276) = 6.64$, $SE = 0.08$, $p < .001$), dating relationships ($\beta = 0.45$, 95% CI [0.30, 0.61], $t(276) = 5.66$, $SE = 0.08$, $p < .001$), and marriages ($\beta = 0.43$, 95% CI [0.27, 0.59], $t(276) = 5.35$, $SE = 0.08$, $p < .001$) with psychopathic people. Psychopathy in men was not associated with wanting Machiavellian ($\beta = 0.22$, 95% CI

[0.05, 0.38], $t(345) = 2.57$, $SE = 0.08$, $p = .011$) or narcissistic ($\beta = 0.11$, 95% CI [-0.06, 0.27], $t(348) = 6.64$, $SE = 0.09$, $p = .216$) one-night-stand partners.

Summary of the results

The conclusions that can be drawn from the results of Study 2 are similar to those from Study 1. First, people high in Machiavellianism, narcissism, and psychopathy seem to be particularly receptive to those who are also high in Machiavellianism, narcissism, and psychopathy. Second, people high in the Dark Triad traits (and particularly narcissism) appear to place a premium on those same traits when it comes to relationships that involve more commitment (i.e., dating relationships and marriages). The third general finding from Study 1—that people high in psychopathy seem to be interested in having one-night stands with people high in Machiavellianism, narcissism, and psychopathy—was only found among women in Study 2. Among men, self-reported psychopathy was associated with wanting a psychopathic (but not a Machiavellian or narcissistic) one-night-stand partner.

General discussion

The current study examined how preferences for the Dark Triad traits differ as a function of a person's own levels of the Dark Triad traits. In Study 1, participants completed a truncated version of the Short Dark Triad (Jones & Paulhus, 2014) and then indicated their willingness to enter into a one-night stand, dating relationship, and marriage with a person exhibiting the same traits. Study 2 used the same methodology but substituted a full version of the Short Dark Triad for the truncated version. Overall, the results of the two studies support three general conclusions.

First, those high in each of the Dark Triad traits seem to be more willing to engage in relationships with people who are high in the same traits. In fact, there were only three instances in the present results where this was not the case: (a) Machiavellian men were not interested in having one-night stands with other Machiavellian people (Study 1); (b) narcissistic women were not interested in having one-night stands with other narcissistic people (Study 1); and (c) narcissistic men were not interested in having one-night stands with other narcissistic people (Study 2). However, it is worth noting that each of these exceptions was identified in only one of the studies and only when the participants' levels of psychopathy were also accounted for. It is possible that controlling for psychopathy—which appears to be associated with a general interest in one-night stands—may have effectively removed the association of self-report Machiavellianism and narcissism with wanting a Machiavellian and narcissistic one-night-stand partner, respectively.

These exceptions notwithstanding, the overall pattern of results provides support for the idea that those with aversive personality traits prefer others who are also high in aversive personality traits (i.e., positive assortment; Buss, 1984). This is consistent with some (e.g., Kardum et al., 2017), but not all (e.g., Jonason et al., 2015; Veronica Smith et al., 2014), of the prior literature. One reason for the relatively straightforward effects identified in the present study is the highly-controlled, albeit ecologically-limited,

method used. By having participants respond directly to the items from the Short Dark Triad, it was ensured that the stimuli (1) accurately mapped onto each trait, (2) conveyed only one aspect of a trait at a time (i.e., it was not double-barreled), and (3) did not assess content that may be related to—but distinct from—the trait (e.g., physical attractiveness; Jauk et al., 2016).

The second conclusion that can be drawn from the results of the present study is that those scoring high in narcissism (and, potentially, Machiavellianism) seem to place a greater emphasis on those same traits when it comes to long-term relationships. For instance, across both studies, women and men high in narcissism showed a greater preference for narcissism when it came to dating and marriage relationships than when it came to one-night stands. Given that people seem to be less concerned with personality traits when it comes to short-term relationships (e.g., Kenrick et al., 1993), non-narcissistic people may simply be less critical of narcissism when it comes to choosing a one-night-stand partner than when it comes to choosing a dating or marriage partner. In other words, narcissistic individuals may be more tolerant of narcissism (e.g., Hart & Adams, 2014) and antagonism (e.g., Lamkin et al., 2018) in general, but this increased tolerance is most pronounced in relationships that involve a fair bit of commitment.

The third and final conclusion is that self-report psychopathy seems to be associated with an increased preference for having one-night stands with people high in Machiavellianism, narcissism, and psychopathy. This may be because psychopathic people are interested in having one-night stands, irrespective of the personality traits of the other person involved. Considerable theoretical and empirical work has supported the notion that the Dark Triad—and psychopathy in particular—is an instantiation of a life strategy that places an emphasis on short-term mating opportunities (see Jonason & Tost, 2010). Psychopathic individuals do appear to have a greater preference for booty-call relationships (Jonason et al., 2012), report having more past sexual partners (Jonason et al., 2010), and engage in more acts of infidelity (Jones & Weiser, 2014), as well as being more interested in sex generally (Baughman et al., 2014). When it comes to romantic partners, those scoring high in psychopathy may be less interested in who the person is and more interested in the opportunity for a sexual encounter.

That said, it is important to note that, in Study 2, this pattern of results was primarily restricted to women. Men high in psychopathy only showed an interest in having one-night stands with other psychopathic people. It could be the case that, since there were fewer men in Study 2 than in Study 1 (131 versus 166), the second study simply did not have enough power to detect an effect. However, that would not explain why the associations between self-report psychopathy and wanting Machiavellian, narcissistic, and psychopathic one-night-stand partners were consistently stronger in Study 1 than in Study 2. A more plausible explanation for the difference between the two studies is that the abridged version of the Short Dark Triad contained a greater proportion of content related to pursuing a short-term mating partner than did the full version of the Short Dark Triad. Specifically, in the context of the abridged Short Dark Triad, the item “I enjoy having sex with people I hardly know” constituted 25.00% of the subscale. In the context of the full Short Dark Triad, the item constituted only 11.11% of the subscale. It may very well be the case that psychopathy is associated with a greater interest in one-night

stands, but that the strength of this relationship varies depending on the specific aspect of psychopathy in question.

Limitations and future directions

As noted above, the primary limitation of the present study is in terms of ecological validity. When a person goes to a bar or nightclub, they don't generally walk around until they find a person who endorses the phrase, "It's not wise to tell your secrets." Instead, there are numerous factors (e.g., other personality traits, physical attractiveness, perceptions of intelligence) that might lead a person to want to pursue a given relationship. That said, the present methodology could actually be leveraged in future studies to examine how the Dark Triad traits interact with those other factors to predict interpersonal attraction.

The present methodology also introduces the possibility that some of the observed associations between the self-report levels of the Dark Triad traits and preferences for those same traits in others is the result of the items being worded in similar ways. For example, a person may provide similar responses to the items "Payback needs to be quick and nasty" and "I would be willing to date someone who believes payback needs to be quick and nasty," in part, because both items contain the phrase *payback needs to be quick and nasty*. Future work could vary the exact wording of the items to address this possibility.

If done in a systematic way, varying the wording of the items could also allow researchers to study how different aspects of these traits influence attraction. Adams and colleagues (2015) have previously shown that people scoring high in narcissism rate narcissistic people as more likeable when they are described in terms of narcissistic traits (e.g., aggression) but not when they are described in terms of narcissistic behaviors (e.g., a person honks or "flips them off" in traffic). One interesting approach would be to examine how evaluations of these traits differ when worded according to Revelle's (2008) four aspects of personality (i.e., feelings, behaviors, cognitions, and desires). For instance, the attractiveness of Machiavellianism could be considered in terms of Machiavellian emotions (e.g., emotional-detachedness), Machiavellian behaviors (e.g., manipulation), Machiavellian thought patterns (e.g., cynicism), and Machiavellian motivations (e.g., the pursuit of materialistic goals) (see Rauthmann & Will, 2011).

Future work would also likely benefit from using longer, multidimensional measures of the Dark Triad traits. Not only would this allow researchers to examine whether the three findings identified here are present at the facet levels of these traits, but it may also help address the persistent reliability issues encountered in the present studies. For example, the full Short Dark Triad (Jones & Paulhus, 2014), which was used in Study 2, was more reliable than the abridged Short Dark Triad (Kay & Saucier, 2020), which was used in Study 1, but the internal consistencies—especially of the narcissism subscales—still fell short of the often recommended value of .70 (Nunnally, 1978). Using a longer measure, such as the Narcissistic Personality Inventory (Raskin & Hall, 1979), could help address this issue.

Finally, the sample used in the present study was drawn from a Western, educated, industrialized, rich, and democratic society (Henrich et al., 2010). An attraction toward

similar others seems to be present across cultures (Schug et al., 2009), but there are moderating factors that may be especially relevant to the Dark Triad traits (e.g., self-esteem; Heine et al., 2009). Some preliminary evidence suggests that Japanese students scoring high in the Dark Triad traits are more likely to choose to interact with others who are also high in the Dark Triad traits (Tasaki & Nakashima, 2018), but additional efforts should be made to examine whether the results identified here are generalizable to other cultures.

Conclusion

There were three notable findings in the present study. First, people scoring high in each of the Dark Triad traits seemed to prefer others who were also high in the same traits. Second, while narcissistic individuals appeared to be more accepting of narcissism than their non-narcissistic counterparts, this effect was most pronounced in the context of long-term relationships. Third, psychopathic people generally showed a greater interest in having one-night stands with those scoring high in Machiavellianism, narcissism, and psychopathy, potentially because they are indifferent to the personality traits of the other person involved. In sum, the present results suggest that, under highly controlled circumstances, these “birds of the dark” don’t flock apart.

Acknowledgment

I thank Dr. Gerard Saucier for his valuable feedback during the early stages of this project.


Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Open research statement

As part of IARR’s encouragement of open research practices, the author has provided the following information: This research was not pre-registered. The data used in the research are available. The data can be obtained by emailing ckay@uoregon.edu. The materials used in the research are available. The materials can be obtained by emailing ckay@uoregon.edu.

ORCID iD

Cameron S. Kay  <https://orcid.org/0000-0002-5210-427X>

Supplemental material

Supplemental material for this article is available online.

References

- Adams, J. M., Hart, W., & Burton, K. A. (2015). I only like the idea of you: Narcissists tolerate others’ narcissistic traits but not their corresponding behaviors. *Personality and Individual Differences, 82*, 232–236. <https://doi.org/10.1016/j.paid.2015.02.019>
- Atari, M., & Chegeni, R. (2017). The Dark Triad and long-term mate preferences in Iranian women. *Personality and Individual Differences, 104*, 333–335. <https://doi.org/10.1016/j.paid.2016.08.031>

- Baughman, H. M., Jonason, P. K., Veselka, L., & Vernon, P. A. (2014). Four shades of sexual fantasies linked to the Dark Triad. *Personality and Individual Differences, 67*(September), 47–51. <https://doi.org/10.1016/j.paid.2014.01.034>
- Burton, K. A., Adams, J. M., Hart, W., Grant, B., Richardson, K., & Tortoriello, G. (2017). You remind me of someone awesome: Narcissistic tolerance is driven by perceived similarity. *Personality and Individual Differences, 104*, 499–503. <https://doi.org/10.1016/j.paid.2016.09.019>
- Buss, D. M. (1984). Marital assortment for personality dispositions: Assessment with three different data sources. *Behavior Genetics, 14*(2), 111–123. <https://doi.org/10.1007/BF01076408>
- Byrne, D., & Blaylock, B. (1963). Similarity and assumed similarity of attitudes between husbands and wives. *Journal of Abnormal and Social Psychology, 67*(6), 636–640. <https://doi.org/10.1037/h0045531>
- Collison, K. L., Vize, C. E., Miller, J. D., & Lynam, D. R. (2018). Development and preliminary validation of a five factor model measure of Machiavellianism. *Psychological Assessment, 30*(10), 1401–1407. <https://doi.org/10.1037/pas0000637>
- Dubuis-Stadelmann, E., Fenton, B. T., Ferrero, F., & Preisig, M. (2001). Spouse similarity for temperament, personality and psychiatric symptomatology. *Personality and Individual Differences, 30*(7), 1095–1112. [https://doi.org/10.1016/S0191-8869\(00\)00092-1](https://doi.org/10.1016/S0191-8869(00)00092-1)
- Funder, D. C., & Ozer, D. J. (2019). Evaluating effect size in psychological research: Sense and nonsense. *Advances in Methods and Practices in Psychological Science, 2*(2), 156–168. <https://doi.org/10.1177/2515245919847202>
- Gignac, G. E., & Szodorai, E. T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences, 102*, 74–78. <https://doi.org/10.1016/j.paid.2016.06.069>
- Grosz, M. P., Dufner, M., Back, M. D., & Denissen, J. J. A. (2015). Who is open to a narcissistic romantic partner? The roles of sensation seeking, trait anxiety, and similarity. *Journal of Research in Personality, 58*, 84–95. <https://doi.org/10.1016/j.jrp.2015.05.007>
- Hare, R. D. (1980). A research scale for the assessment of psychopathy in criminal populations. *Personality and Individual Differences, 1*(2), 111–119. [https://doi.org/10.1016/0191-8869\(80\)90028-8](https://doi.org/10.1016/0191-8869(80)90028-8)
- Hare, R. D., & Neumann, C. S. (2010). The role of antisociality in the psychopathy construct: Comment on Skeem and Cooke (2010). *Psychological Assessment, 22*(2), 446–454. <https://doi.org/10.1037/a0013635>
- Hart, W., & Adams, J. M. (2014). Are narcissists more accepting of others' narcissistic traits? *Personality and Individual Differences, 64*, 163–167. <https://doi.org/10.1016/j.paid.2014.02.038>
- Heine, S. J., Foster, J. A. B., & Spina, R. (2009). Do birds of a feather universally flock together? Cultural variation in the similarity-attraction effect. *Asian Journal of Social Psychology, 12*(4), 247–258. <https://doi.org/10.1111/j.1467-839X.2009.01289.x>
- Hemphill, J. F., Hare, R. D., & Wong, S. (1998). Psychopathy and recidivism: A review. *Legal and Criminological Psychology, 3*, 139–170.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*, 61–135. <https://doi.org/10.1017/S0140525X0999152X>
- Ináncsi, T., Láng, A., & Bereczkei, T. (2016). A darker shade of love: Machiavellianism and positive assortative mating based on romantic ideals. *Europe's Journal of Psychology, 12*(1), 137–152. <https://doi.org/10.5964/ejop.v12i1.1007>

- Jauk, E., Neubauer, A. C., Mairunteregger, T., Pemp, S., Sieber, K. P., & Rauthmann, J. F. (2016). How alluring are dark personalities? The Dark Triad and attractiveness in speed dating. *European Journal of Personality, 30*(2), 125–138. <https://doi.org/10.1002/per.2040>
- Jonason, P. K., Koenig, B. L., & Tost, J. (2010). Living a fast life: The Dark Triad and life history theory. *Human Nature, 21*(4), 428–442. <https://doi.org/10.1007/s12110-010-9102-4>
- Jonason, P. K., Luevano, V. X., & Adams, H. M. (2012). How the Dark Triad traits predict relationship choices. *Personality and Individual Differences, 53*(3), 180–184. <https://doi.org/10.1016/j.paid.2012.03.007>
- Jonason, P. K., Lyons, M., & Blanchard, A. (2015). Birds of a “bad” feather flock together: The Dark Triad and mate choice. *Personality and Individual Differences, 78*, 34–38. <https://doi.org/10.1016/j.paid.2015.01.018>
- Jonason, P. K., & Tost, J. (2010). I just cannot control myself: The Dark Triad and self-control. *Personality and Individual Differences, 49*(6), 611–615. <https://doi.org/10.1016/j.paid.2010.05.031>
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A brief measure of dark personality traits. *Assessment, 21*(1), 28–41. <https://doi.org/10.1177/1073191113514105>
- Jones, D. N., & Weiser, D. A. (2014). Differential infidelity patterns among the Dark Triad. *Personality and Individual Differences, 57*, 20–24. <https://doi.org/10.1016/j.paid.2013.09.007>
- Kardum, I., Hudek-Knezevic, J., Schmitt, D. P., & Covic, M. (2017). Assortative mating for Dark Triad: Evidence of positive, initial, and active assortment. *Personal Relationships, 24*(1), 75–83. <https://doi.org/10.1111/perc.12168>
- Kay, C. S., & Saucier, G. (2020). Insert a joke about lawyers: Evaluating preferences for the Dark Triad traits in six occupations. *Personality and Individual Differences, 159*. <https://doi.org/10.1016/j.paid.2020.109863>
- Keller, P. S., Blincoe, S., Gilbert, L. R., Nathan Dewall, C., Haak, E. A., & Widiger, T. (2014). Narcissism in romantic relationships: A dyadic perspective. *Journal of Social and Clinical Psychology, 33*(1), 25–50. <https://doi.org/10.1521/jscp.2014.33.1.25>
- Kenrick, D. T., Groth, G. E., Trost, M. R., & Sadalla, E. K. (1993). Integrating evolutionary and social exchange perspectives on relationships: Effects of gender, self-appraisal, and involvement level on mate selection criteria. <https://doi.org/10.1037/0022-3514.64.6.951>
- Krueger, R. F., Moffitt, T. E., Caspi, A., Bleske, A., & Silva, P. A. (1998). Assortative mating for antisocial behavior: Developmental and methodological implications. *Behavior Genetics, 28*(3), 173–186. <https://doi.org/10.1023/A:1021419013124>
- Lamkin, J., Maples-Keller, J. L., & Miller, J. D. (2018). How likable are personality disorder and general personality traits to those who possess them? *Journal of Personality, 86*(2), 173–185. <https://doi.org/10.1111/jopy.12302>
- Lavner, J. A., Lamkin, J., Miller, J. D., Campbell, W. K., & Karney, B. R. (2016). Narcissism and newlywed marriage: Partner characteristics and marital trajectories. *Personality Disorders: Theory, Research, and Treatment, 7*(2), 169–179. <https://doi.org/10.1037/per0000137>
- Lilienfeld, S. O., Watts, A. L., Francis Smith, S., Berg, J. M., & Latzman, R. D. (2015). Psychopathy deconstructed and reconstructed: Identifying and assembling the personality building blocks of Cleckley’s chimera. *Journal of Personality, 83*(6), 593–610. <https://doi.org/10.1111/jopy.12118>

- Lyons, M., & Blanchard, A. (2016). "I could see, in the depth of his eyes, my own beauty reflected": Women's assortative preference for narcissistic, but not for Machiavellian or psychopathic male faces. *Personality and Individual Differences, 97*, 40–44. <https://doi.org/10.1016/j.paid.2016.03.025>
- Mascie-Taylor, C. G. N. (1989). Spouse similarity for IQ and personality and convergence. *Behavior Genetics, 19*(2), 223–227. <https://doi.org/10.1007/BF01065906>
- McCrae, R. R., Martin, T. A., Hřebícková, M., Urbánek, T., Boomsma, D. I., Willemsen, G., & Costa, P. T. (2008). Personality trait similarity between spouses in four cultures. *Journal of Personality, 76*(5), 1137–1164. <https://doi.org/10.1111/j.1467-6494.2008.00517.x>
- Muris, P., Merckelbach, H., Otgaar, H., & Meijer, E. (2017). The malevolent side of human nature: A meta-analysis and critical review of the literature on the Dark Triad (narcissism, Machiavellianism, and psychopathy). *Perspectives on Psychological Science, 12*(2), 183–204. <https://doi.org/10.1177/1745691616666070>
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
- Patrick, C. J., Fowles, D. C., & Krueger, R. F. (2009). Triarchic conceptualization of psychopathy: Developmental origins of disinhibition, boldness, and meanness. *Development and Psychopathology, 21*(3), 913–938. <https://doi.org/10.1017/S0954579409000492>
- Paulhus, D. L., & Williams, K. M. (2002). The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*(6), 556–563. [https://doi.org/10.1016/S0092-6566\(02\)00505-6](https://doi.org/10.1016/S0092-6566(02)00505-6)
- Price, R. A., & Vandenberg, S. G. (1980). Spouse similarity in American and Swedish couples. *Behavior Genetics, 10*(1), 59–71. <https://doi.org/10.1007/BF01067319>
- Rammstedt, B., & Schupp, J. (2008). Only the congruent survive—Personality similarities in couples. *Personality and Individual Differences, 45*(6), 533–535. <https://doi.org/10.1016/j.paid.2008.06.007>
- Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports, 45*, 590.
- Rauthmann, J. F., & Will, T. (2011). Proposing a multidimensional Machiavellianism conceptualization. *Social Behavior and Personality: An International Journal, 39*(3), 391–403. <https://doi.org/10.2224/sbp.2011.39.3.391>
- Revelle, W. (2008). The contribution of reinforcement sensitivity theory to personality theory. In P. J. Corr (Ed.), *Reinforcement sensitivity theory of personality* (pp. 508–527). Cambridge University Press. <https://doi.org/10.1017/CBO9780511819384.019>
- Savard, C., Sabourin, S., & Lussier, Y. (2011). Correlates of psychopathic personality traits in community couples. *Personality and Mental Health, 5*, 186–199.
- Schug, J., Yuki, M., Horikawa, H., & Takemura, K. (2009). Similarity attraction and actually selecting similar others: How cross-societal differences in relational mobility affect interpersonal similarity in Japan and the USA. *Asian Journal of Social Psychology, 12*(2), 95–103. <https://doi.org/10.1111/j.1467-839X.2009.01277.x>
- Skeem, J. L., & Cooke, D. J. (2010). One measure does not a construct make: Directions toward reinvigorating psychopathy research—Reply to Hare and Neumann (2010). *Psychological Assessment, 22*(2), 455–459. <https://doi.org/10.1037/a0014862>
- Spuhler, J. N. (1968). Assortative mating with respect to physical characteristics. *Biodemography and Social Biology, 15*(2), 128–140.

- Stevens, G., Owens, D., & Schaefer, E. C. (1990). Education and attractiveness in marriage choices. *Social Psychology Quarterly*, *53*(1), 62–70.
- Tasaki, Y., & Nakashima, K. (2018). *Do individuals with high Dark Triad traits prefer others with high Dark Triad traits?* [Poster presentation]. Annual Convention of the Society for Personality and Social Psychology, Atlanta, GA, United States.
- Tukey, J. W. (1949). Comparing individual means in the analysis of variance. *Biometrics*, *5*(2), 99–114.
- Veronica Smith, C., Hadden, B. W., Webster, G. D., Jonason, P. K., Gesselman, A. N., & Crysel, L. C. (2014). Mutually attracted or repulsed? Actor-partner interdependence models of Dark Triad traits and relationship outcomes. *Personality and Individual Differences*, *67*, 35–41. <https://doi.org/10.1016/j.paid.2014.01.044>