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Mutually attracted or repulsed? Actor–partner interdependence models of Dark Triad traits and relationship outcomes



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ABSTRACT

Although the Dark Triad traits – narcissism, Machiavellianism, and psychopathy – have been studied in individuals, little is known about their roles in dating relationships. Forty-five heterosexual undergraduate couples (N = 90) reported measures of the Dark Triad and relationship commitment and satisfaction. Within couples, assortative mating was slightly negative for narcissism, marginally positive for Machiavellianism, and significantly positive for psychopathy. Using actor–partner interdependence models, we explored the extent to which satisfaction mediated the direct associations between the Dark Triad and commitment. Men's satisfaction marginally mediated the women's Dark Triad \rightarrow men's commitment negative association. Among the three Dark Triad subscales, satisfaction marginally mediated both of the actor–effect-based psychopathy \rightarrow commitment negative associations. We discuss possible implications for couples' relationship strategies.

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1. Introduction

In Pierre Choderlos de Laclos' novel *Les Liaisons Dangereuses*, the Marquise de Merteuil and the Vicomte de Valmont are former lovers with unmistakable Dark Triad traits – both characters are self-centered (narcissism), manipulate and sexually seduce others for sport or revenge (Machiavellianism), and have little empathy for their victims (psychopathy). Indeed, that the two were once lovers, that Valmont seeks sexual reunion with Merteuil, and that both ultimately betray one another begs the question of whether people high on Dark Triad traits are mutually attracted or repulsed-or both-in romantic relationships. Moreover, how do men's and women's Dark Triad traits relate to their own (actor effects) and their partners' (partner effects) relationship satisfaction and relationship commitment? And are the associations between Dark Triad traits and commitment mediated by satisfaction?

The Dark Triad describes a constellation of three subclinical, socially undesirable personality traits: narcissism, psychopathy, and Machiavellianism (Paulhus & Williams, 2002). Although research on the Dark Triad has grown rapidly in the past decade (see

* Corresponding author. Tel.: +1 662 915 1075. *E-mail address:* csmith4@olemiss.edu (C. Veronica Smith). Furnham, Richards, & Paulhus, 2013, for a review), in the context of romantic relationships, most research has focused on characteristics associated with the Dark Triad and how they affect attraction. For instance, people scoring high on Dark Triad traits have limited executive control (Jonason & Tost, 2010), have a ludic (game-playing) love style (Jonason & Kavanagh, 2010), pursue a short-term mating strategy (Jonason, Li, Webster, & Schmitt, 2009), and are low on conscientiousness (Jonason & Webster, 2010). Prior research suggests that some of these correlates are associated with poor relationship quality. For example, a ludic love style relates to more negative relationship maintenance behaviors (e.g., spying) and decreased satisfaction and commitment (Goodboy & Myers, 2010). In addition, both men and women in dating and married relationships reported less relationship satisfaction if both they and their partners lacked conscientiousness (Decuyper, de Bolle, & de Fruyt, 2012). Research on assortative mating-pairing with others who share similar characteristics or attitudes (Gonzaga, Carter, & Buckwalter, 2010; Luo & Klohnen, 2005) - suggests people who score high on Dark Triad traits are likely to pair with others who also score high (and low with low).

While some research has examined how narcissism (Brunell & Campbell, 2011; Foster & Twenge, 2011) and psychopathy (Savard, Sabourin, & Lussier, 2011) relate to relationship outcomes, none

has examined all three Dark Triad traits in the same study. Our study seeks to examine the separate and joint influences of narcissism, Machiavellianism, and psychopathy on relationship commitment and satisfaction in couples.

Given the literature reviewed above, we made three specific predictions. First, given that prior research has shown positive assortative mating on some traits – even socially undesirable ones, such as psychoticism (Dubuis-Stadelmann, Fenton, Ferrero, & Preisig, 2001; Russell & Wells, 1991; Savard et al., 2011) – Dark Triad traits should show positive assortative mating for both men and women.

Second, because the Dark Triad as a whole functions to facilitate an exploitative short-term mating strategy (Jonason et al., 2009), it should be negatively related to relationship satisfaction and commitment, for both actor and partner paths, both because its traits are often viewed as socially undesirable and because commitment and relationship satisfaction are hallmarks of longterm mating strategies rather than short-term ones. In line with **Rusbult's** (1980, 1983) investment model, which proposes that satisfaction is a predictor of commitment, we expected satisfaction to mediate the direct effect of the Dark Triad mean on commitment; however, we remained agnostic as to whether this would be more likely for men or women, or for which combination of actor and/or partner effects, for both this and subsequent predictions. As such, these analyses were exploratory.

Third, we sought to examine the links between the individual Dark Triad traits and various outcomes. For instance, Machiavellians may be adept at cultivating feelings of commitment and satisfaction in their partners. In addition, because attractive partners are valued and because narcissists are more physically attractive (Holtzman & Strube, 2010) and sexually appealing (Dufner, Rauthmann, Czarna, & Denissen, 2013), narcissism may be positively associated with partner commitment and satisfaction. On the contrary, although psychopathy may have some positive associations with relationship guality (Ali & Chamorro-Premuzic, 2009), it should be negatively related to commitment and satisfaction, in part because a key component of psychopathy is lack of interpersonal empathy, which is arguably a *sine aua non* of relationship quality. Because of these inconsistencies, we view our analyses as largely exploratory; however, we also believe that the potential negative consequences of the Dark Triad traits on relationship satisfaction and commitment likely outweigh the potential positive ones and we predicted negative associations between each Dark Triad trait and both relationship satisfaction and commitment.

2. Method

2.1. Participants and procedure

Participants were 45 heterosexual exclusive dating couples (90 individuals) from undergraduate psychology classes at a mediumsized mid-Atlantic American university. Participants ranged from 18 to 25 years old. The average relationship duration was 55 weeks (SD = 62). The sample was fairly homogeneous regarding race/ethnicity, with 79% being White/Non-Hispanic.

To be eligible, participants needed to be in a self-defined committed relationship and have a romantic partner who was willing to participate. We compensated couples by entering them into several raffles for gift cards (US\$25) to area businesses. We also compensated participants from psychology classes with extra credit. Participants arrived at the lab with their romantic partner for the first session. Couple members completed questionnaires at computers on opposite sides of the room, to prevent contamination or communication of their responses. Upon their completion, we thanked, debriefed, and dismissed participants.

2.2. Measures

2.2.1. Dark Triad

We measured narcissism using the 40-item Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). The NPI presents respondents with two statements; one representing a narcissistic attitude ("have a natural talent for influencing people"), and its opposite ("I am not good at influencing people"). Respondents choose the statement that best applies to them. Narcissistic responses were averaged; larger numbers indicated more narcissism (range: 0–1).

The Self-Report Psychopathy Scale-II was used to measure subclinical psychopathy (Hare, Harpur, & Hemphill, 1989). Respondents indicate their agreement with 31 statements (e.g., "I think I could beat a lie detector") using a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). Items were averaged to create an index of psychopathy.

We measured Machiavellianism using 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". The items were averaged to create an index of Machiavellianism.

2.2.2. Relationship outcomes

We measured relationship satisfaction with the Quality of Relationships Index (QRI; Knee, 1998). This scale measures how satisfied participants are in their romantic relationships. Participants rated six items about how much they liked their relationship (e.g., "My relationship with my partner makes me happy") on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree).

We measured relationship commitment in two ways. One was a 5-item measure (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991) that asked participants to consider the likely duration and commitment to their relationship (e.g., "How likely is it that you will date someone other than your partner within the next year?) using a 9-point scale (each question had unique anchors). The other was an unpublished 7-item measure that asked participants to consider various aspects of commitment, such as obligation (e.g., "We feel a responsibility toward each other") and loyalty (e.g., "I am faithful to my partner") using a 7-point scale (1 = very strong disagreement, 7 = very strong agreement). We then standardized (*z*-scored) both measures and averaged them to form a composite measure called "commitment mean."

2.3. Actor-partner interdependence model (APIM)

Given the dyadic nature of our data, couples were the unit of analysis (N = 45), and we used actor-partner interdependence models (APIMs) to test simultaneously actor and partner effects (Kenny, Kashy, & Cook, 2006). Actor effects describe the associations among a target person's own traits and outcome variables (e.g., men's Dark Triad means predicting their own commitment means). In contrast, *partner* effects describe the association among a target person's own traits and their partner's outcome variables (e.g., men's Dark Triad means predicting women's commitment means). Using an APIM framework, we also tested the extent to which satisfaction mediated the relationship between the Dark Triad (both as a composite and as three traits) and commitment. APIM mediation models are increasingly common in the relationships literature (e.g., Brunell & Webster, 2013; Brunell et al., 2010).

3. Results

Correlations and descriptive statistics appear in Table 1. All measures had adequate internal consistency. Although small, our

Table 1

Correlations and descriptive statistics for all variables.

Variable	Men									Women						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Men																
Narcissism	-															
Machiavellianism	.28	-														
Psychopathy	.50	.45	-													
Dark Triad mean	.76	.74	.84	-												
Satisfaction	10	29	41	34	-											
5-item commitment	.00	07	30	16	.67	-										
7-item commitment	03	04	23	13	.74	.71	-									
Commitment mean	01	06	28	15	.76	.93	.93	-								
Women																
Narcissism	23	06	.11	08	24	14	16	17	-							
Machiavellianism	.14	.28	.15	.24	09	17	05	12	.08	-						
Psychopathy	.23	.34	.39	.41	35	27	34	33	.17	.39	-					
Dark Triad mean	.07	.27	.31	.28	33	28	27	30	.60	.71	.75	-				
Satisfaction	08	.09	26	11	.40	.45	.37	.44	.06	.00	23	08	-			
5-item commitment	09	.08	.02	.00	.33	.38	.32	.38	.11	.02	22	04	.83	-		
7-item commitment	17	06	46	30	.53	.44	.43	.47	.02	05	27	14	.85	.68	-	
Commitment mean	14	.01	24	16	.47	.45	.41	.47	.07	01	27	10	.92	.92	.92	-
Descriptive statistics																
Mean	0.51	3.04	2.49	0.00	5.79	6.08	6.10	0.00	0.48	2.81	2.14	0.00	5.79	6.30	6.03	0.00
SD	0.17	0.42	0.55	0.78	1.13	1.71	0.92	0.93	0.16	0.33	0.38	0.69	1.05	1.73	1.07	0.92
Cronbach's ?	.85	.64	.90	.67	.91	.87	.90	.83	.79	.58	.82	.45	.94	.89	.89	.81

Note. N = 45 couples. Assortative mating correlations are boldfaced. $|r|s \ge .25$ have ps < .10; $|r|s \ge .30$ have ps < .05.

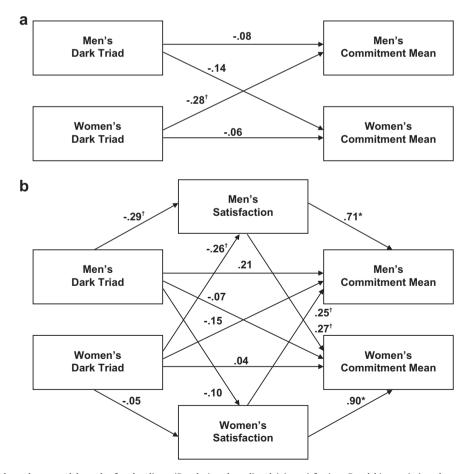


Fig. 1. Actor-partner interdependence model results for the direct (Panel a) and mediated (via satisfaction; Panel b) associations between the Dark Triad mean and commitment for 45 couples. Numbers are standardized regression coefficients (see Table 2 for unstandardized coefficients and Table 3 for indirect effects tests). $^{\dagger}p < .10$. $^{*}p < .05$.

Table 2

APIM results for Dark Triad (Top) and subscales (Bottom) for both direct ("Model 1") and mediation ("Model 2") models.

Variable	Satisfac	tion					Commitment (composite)						
	Men			Women			Men			Women			
	b	t	r _p [90% CI]	b	t	r _p [90% CI]	b	t	r _p [90% CI]	b	t	r _p [90% CI]	
Dark Triad Model 1 Men DT	d mean					_	-0.09	-0.50	08 [32, .17]	_0 17	-0.93	14 [38, .11]	
Women DT	_	_	-	_	_	-	-0.37	-1.88 [†]	28 [49,03]	-0.08	-0.39	06 [30, .19]	
Model 2 Men DT Satis.	- 0.39 -	− 1.93 † -	29 [50,04] -	-0.13 -	-0.64 -	–.10 [–.34, .15] –	0.16 0.58	1.36 6.46*	.21 [–.05, .44] .71 [.56, .82]	-0.03 0.09	-0.43 1.74 [†]	–.07 [–.32, .19] .27 [.02, .49]	
Women DT Satis.	-0.41 -	-1.76 [†] -	26 [48,01] -	- 0.08 -	- 0.34 -	05 [29, .20] -	-0.12 0.15	-0.93 1.66†	–.15 [–.39, .11] .25 [.00, .47]	0.02 0.76	0.25 14.26*	.04 [22, .29] .90 [.84, .94]	
Dark Triad Model 1 Men	d subscale	25											
Narc. Mach. Psyc.	- -		-	- - -		-	0.86 0.31 0.53	0.97 0.89 −1.76 [†]	.16 [11, .40] .14 [13, .39] 27 [50,01]	0.09 0.47 -0.44	0.11 1.34 -1.45	.02 [24, .28] .21 [05, .45] 23 [46, .03]	
<i>Women</i> Narc. Mach. Psyc.	- -	- -	-	- -	- -	-	-0.22 -0.08 -0.66	-0.26 -0.19 -1.72 [†]	04 [30, .22] 03 [29, .23] 27 [50,01]	0.92 0.18 0.70	1.08 0.43 −1.80 [†]	.17 [09, .41] .07 [19, .32] 28 [50,02]	
Model 2 Men Narc. Mach. Psyc. Satis.	0.55 -0.37 -0.62 -	0.54 0.93 1.78 [†]	.09 [17, .34] 15 [40, .12] 28 [50,02] -	0.69 0.79 0.75 -	0.69 2.00* -2.21*	.11 [16, .36] .31 [.05, .53] 34 [55,09] -	0.46 0.47 -0.08 0.62	0.79 1.91† –0.42 6.64*	.13 [14, .38] .30 [.04, .53] 07 [33, .20] .74 [.59, .84]	-0.49 -0.09 0.21 0.11	-1.42 -0.64 1.67 [†] 2.04*	23 [47, .04] 11 [37, .16] .27 [.00, .50] .32 [.06, .54]	
<i>Women</i> Narc. Mach. Psyc. Satis.	-1.18 0.26 -0.59 -	-1.20 0.53 -1.33 -	19 [43, .07] .09 [17, .34] 21 [45, .05] -	1.20 0.14 -0.69 -	1.25 0.29 1.59 -	.20 [06, .44] .05 [21, .31] 25 [48, .01] -	0.41 -0.25 -0.24 0.08	0.70 -0.89 -0.92 0.85	.12 [15, .38] 15 [40, .12] 15 [40, .12] .14 [13, .39]	0.13 0.05 -0.10 0.77	0.37 0.30 -0.63 13.73*	.06 [21, .32] .05 [21, .31] 10 [36, .17] .92 [.87, .95]	

Note. N = 45 couples. Actor effects are **boldfaced**; partner effects are not. † p < .10. * p < .05.

Table 3

Indirect effects test results for satisfaction mediating the Dark-Triad-mean - commitment (Top) and psychopathy-commitment (Bottom) associations.

Indirect effects	b	t	r _p [90% CI]
Men's Dark Triad mean \rightarrow satisfaction \rightarrow men's commitment (S)	-0.25	-1.81^{+}	28 [50,03
via Men's satisfaction	-0.23	-1.85^{\dagger}	28 [50,03
via Women's satisfaction	-0.02	-0.59	09 [34, .17]
Women's Dark Triad mean \rightarrow satisfaction \rightarrow men's commitment	-0.25	-1.60	25 [47, .00]
via Men's satisfaction	-0.24	-1.70^{\dagger}	26 [48,01
via Women's satisfaction	-0.01	-0.34	05 [30, .21]
Men's psychopathy \rightarrow satisfaction \rightarrow men's commitment	-0.44	-1.86^{\dagger}	30 [53,0
via Men's satisfaction	-0.38	-1.72^{\dagger}	28 [51,0
via Women's satisfaction	-0.06	-0.75	12 [38, .15]
Women's psychopathy \rightarrow satisfaction \rightarrow men's commitment	-0.42	-1.42	23 [47, .04]
via Men's satisfaction	-0.36	-1.31	21 [45, .06]
via Women's satisfaction	-0.06	-0.75	12 [38, .15]
Men's psychopathy \rightarrow satisfaction \rightarrow women's commitment (S)	-0.64	-2.29*	36 [57,1
via Men's satisfaction	-0.07	-1.34	22 [46, .05]
via Women's satisfaction	-0.58	-2.18*	34 [56,0
Women's psychopathy \rightarrow satisfaction \rightarrow women's commitment	-0.60	-1.66^{\dagger}	27 [50,0
via Men's satisfaction	-0.07	-1.12	18 [43, .09]
via Women's satisfaction	-0.53	-1.58	25 [49, .02]

Note. *N* = 45 couples. S = suppression effect.

[†] p < .10.* p < .05.

sample size had adequate power (.80) to detect marginally significant effects (ps < .10, two-tailed) that explained at least oneeighth of the variance ($\ge 12.5\%$) in the outcomes ($rs \ge .353$). For this reason, and because our analyses were exploratory, we bounded our effects sizes (rs) with 90% CIs (see Funder et al., 2014). Thus, although we report both, we stress effect sizes over null-hypothesis significance testing.

3.1. Assortative mating

The boldfaced correlations in Table 1 show possible evidence of assortative mating on traits (Prediction 1). Assortative mating was just slightly negative for narcissism (r = -.23, 90% CI [-.45,.02]) but tended to be positive for Machiavellianism (.28 [.03,.49]), psychopathy (.39 [.16,.58]), and the Dark Triad mean (.28 [.03,.49]). In addition, couples showed positive agreement on relationship satisfaction (.40 [.17,.59] and commitment (.47 [.25, .64]).

3.2. Dark Triad traits and relationship outcomes

We ran two sets of APIM mediation models. First, we ran models that used the Dark Triad mean (Table 1, top half; Fig. 1; Prediction 2). Second, we ran models that used the three Dark Triad traits independently (Table 2, bottom half; Figs. 2 and 3; Predictions 3 and 4). For each set, we examined the extent to which satisfaction mediated the direct association between the Dark Triad and commitment in couples. Within each set (and following standard mediation procedures), we describe (a) direct effects (Dark Triad \rightarrow commitment), (b) links to the mediator (Dark Triad \rightarrow satisfaction), and (c) the full mediation model (Dark Triad \rightarrow satisfaction \rightarrow commitment). We

end by examining the indirect effects to assess the strength of mediation pathways (Table 3). Note that suppression effects are also possible in mediation models, where the direct effect *increases* in magnitude instead of *decreasing* in strength or magnitude after controlling for the putative mediator – or suppressor (see MacKinnon, Krull, & Lockwood, 2000).

3.2.1. Dark Triad mean

Women's Dark Triad means were marginally negatively related to men's commitment (a partner effect; Table 2, top half, Model 1; Fig. 1a; Prediction 2). Both men's and women's Dark Triad means were marginally negatively related to men's satisfaction (an actor and partner effect, respectively; Table 2, top half, Model 2, left half; Fig. 1b). In the mediation model, in which men's and women's commitment means were regressed onto both their Dark Triad means and their satisfaction scores, both satisfaction \rightarrow commitment actor effects were significantly positive, and both satisfaction \rightarrow commitment partner effects were marginally positive; none of the four Dark Triad \rightarrow commitment effects was noteworthy (ps > .10; Table 2, top half, Model 2, right half; Fig. 1b). Tests of indirect effects showed that men's satisfaction marginally mediated the strength of the link between women's Dark Triad means and men's commitment; however, men's satisfaction also marginally suppressed the strength of the link between men's Dark Triad means and men's commitment (Table 3, top half). In other words, the direct effect of men's Dark Triad on men's commitment diminished in strength - and the direct effect of women's Dark Triad on men's commitment increased in strength - after controlling for men's satisfaction.

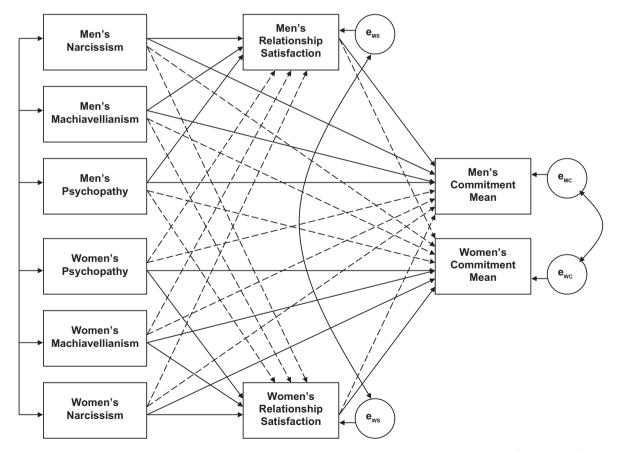


Fig. 2. Actor-partner interdependence model. The direct effect between the Dark Triad subscales and commitment is mediated by satisfaction. Actor effects are solid lines. Partner effects are dashed lines. Lines with two (or more) arrowheads reflect correlations. (See Table 2 for regression results from this model. Fig. 3 shows the psychopathy results from this model, controlling for narcissism and Machiavellianism.)

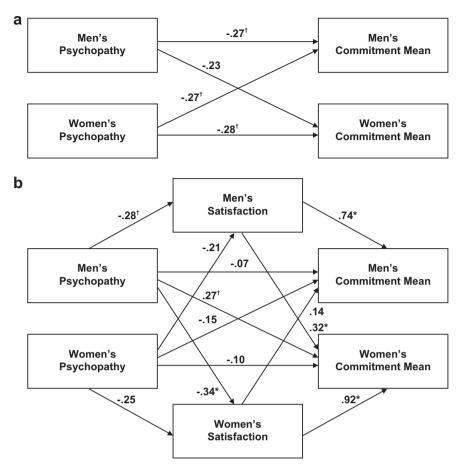


Fig. 3. Actor–partner interdependence model results for the direct (Panel a) and mediated (via satisfaction; Panel b) associations between psychopathy and commitment for 45 couples, controlling for narcissism and Machiavellianism (not shown for simplicity; see Fig. 2 for full model). Numbers are standardized regression coefficients (see Table 2 for unstandardized coefficients and Table 3 for indirect effects tests). [†]*p* < .10. ^{*}*p* < .05.

3.2.2. Dark Triad subscales

For the three Dark Triad traits – narcissism, Machiavellianism, and psychopathy – we ran similar models to those for the Dark Triad mean (Table 2, bottom half; Figs. 2 and 3; Predictions 3 and 4). Both men's and women's psychopathy were marginally negatively related to men's commitment; women's psychopathy was also marginally negatively related to women's commitment (Table 2, bottom half, Model 1; Fig. 3a). Men's psychopathy was marginally negatively related to men's satisfaction. Men's psychopathy (negatively) and Machiavellianism (positively) were significantly related to women's satisfaction (Table 2, bottom half, Model 2, left half; Fig. 3b).

Fig. 2 shows the full mediation model. For simplicity, Fig. 3 shows the standardized coefficients for only the psychopathy (direct and indirect) effects (i.e., Fig. 3b shows one aspect of Fig. 2 – psychopathy effects). In the mediation model, in which men's and women's commitment means were regressed onto both their three Dark Triad traits and their satisfaction scores, both satisfaction \rightarrow commitment actor effects were significantly positive, but only the men's satisfaction \rightarrow women's commitment partner effect was significantly positive; the other partner effect was not (Table 2, bottom half, Model 2, right half; Fig. 3b). After controlling for satisfaction, the only marginal effects were positive links between men's Machiavellianism and men's commitment, and between men's psychopathy and women's commitment. Because neither of these effects was marginal in the direct effects model (see Fig. 3a and b), these effects were likely the result of suppression (MacKinnon et al., 2000). Of the three marginal effects in the direct model, none remained marginal after controlling for satisfaction (ps > .10; Table 2, bottom half; Fig. 3).

Tests of indirect effects showed that men's satisfaction marginally mediated the link between men's psychopathy and men's commitment (Table 3, bottom half). In addition, as a set but not individually, men's and women's satisfaction marginally mediated the link between women's psychopathy and women's commitment (Table 3, bottom half). Finally, women's satisfaction significantly suppressed the link between men's psychopathy and women's commitment (Table 3, bottom half). In other words, both direct actor effects linking psychopathy and commitment were marginally diminished in strength after controlling for satisfaction, and the partner effect of men's psychopathy on women's commitment increased significantly in strength after controlling for women's satisfaction.

4. Discussion

Overall, our findings suggested that individual differences in the Dark Triad have multiple implications for relationship commitment in romantic couples, and that some of these links are mediated (or suppressed) by relationship satisfaction. Prediction 1 saw mixed support: there was a trend toward positive assortative mating for psychopathy and Machiavellianism, but also a slight trend toward negative assortative mating for narcissism. Prediction 2 also received mixed support. Supporting our Prediction 2, we found three marginally significant negative associations between the Dark Triad means and relationship satisfaction and commitment, and none of the eight possible associations was positive. The pattern of mediation was less clear, with one marginal mediation effect (women's Dark Triad mean \rightarrow men's satisfaction \rightarrow men's commitment) and one marginal suppression effect (men's Dark Triad mean \rightarrow men's satisfaction \rightarrow men's commitment).

Prediction 3 garnered some support. We found six negative associations of at least marginal significance or greater between psychopathy and relationship satisfaction and commitment (out of a possible eight). Supporting the notion that psychopathy is arguably the most damaging of the three Dark Triad traits to romantic relationships, the other two traits produced no noteworthy negative partial associations with the two relationship outcomes. There was an unexpected positive association between men's Machiavellianism and women's relationship satisfaction (a partner effect), suggesting that some Machiavellian men are adept at cultivating satisfaction in their partners. Exploring psychopathy further, satisfaction marginally mediated the strength of both actor-based associations between psychopathy and commitment; however, and unexpectedly, women's satisfaction served as a suppressor of the link between men's psychopathy and women's commitment.

Although this is the first study we are aware of that examined the influence of the Dark Triad in romantic couples, it is not without limitations. First, our sample was small and consisted of young (18-25 years), educated (at least one partner was a university student) people in dating relationships. Although we see no reason why our findings should not hold across other relationship types or older populations (e.g., married couples), these associations should be tested in larger samples and across broader contexts in future studies. Second, although our participants had been in their relationships for over a year on average, the effects of the Dark Triad in longer relationships and the extent to which Dark Triad traits covary with changes in relationship quality remain to be seen. Indeed, the role of Dark Triad may be different in shorter relationships than longer ones (Foster & Twenge, 2011). Future research should examine the Dark Triad longitudinally, studying change in the traits over time and how the traits may change relationship outcomes. Third, researchers may consider examining the mechanisms responsible for the link between Dark Triad traits and relationship outcomes. Those high in the Dark Triad traits may be less inclined to engage in relationship maintenance behaviors, such as being willing to sacrifice (Van Lange et al., 1997) and adopting a cognitively interdependence mindset (Agnew, Van Lange, Rusbult, & Langston, 1998). Alternatively, people scoring high on the Dark Triad may engage in more negative maintenance behaviors (Goodboy & Myers, 2010), which have been associated with lower satisfaction and commitment.

In sum, the current research showed that the Dark Triad is associated with negative outcomes in romantic relationships, which suggests it may facilitate short-term mating strategies (Jonason et al., 2009). Although those high in the Dark Triad may enjoy romantic success initially, as with *Les Liaisons Dangereuses*' estranged lovers, mutual attraction may be replaced by mutual repulsion as the relationship unfolds. The warm glow of happy relationships may be incompatible with the darker side of personality.

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