



Understanding prejudice in terms of approach tendencies: The Dark Triad traits, sex differences, and political personality traits



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ABSTRACT

We examined whether the Dark Triad traits predict race- and sex-based prejudice or just a generalized anti-sociality. American MTurk workers ($N = 266$) reported their approach tendencies towards targets who were varied by sex (i.e., same sex, other sex) and race (i.e., same race, different race) and responded to questionnaires capturing the Dark Triad traits (i.e., narcissism, psychopathy, and Machiavellianism) and political personality (i.e., social dominance and authoritarianism). Social dominance, narcissism, and psychopathy revealed a generalized pattern of limited approach (i.e., prejudice) towards members of both sexes and racial in-group and out-group members. In contrast, Machiavellianism and authoritarianism were only linked to limited approach towards racial out-group members. Sex differences in approach tendencies towards different race and opposite-sex others were fully and partially mediated by individual differences in the Dark Triad traits and social dominance (respectively), the Dark Triad traits accounted for more variance than social dominance in same sex and different race approach tendencies, and some of the links between personality and approach tendencies were moderated by the sex of the participant. Results were discussed in relation to how personality traits can account for prejudicial attitudes.

Prejudice describes a tendency to evaluate members of out-groups as *less than* in some way than in-group members (Allport, 1954; Turner, 1985) and may manifest itself in many ways that lead to race- and sex-based discrimination (Swim, Aiken, Hall & Hunter, 1995). There are two main sources of variance to account for individual differences in prejudice; the situation and people's personality. Researchers taking a person-centered approach to prejudice have examined the role of the Big Five traits, social dominance, authoritarianism, and the competitiveness or dangerousness of one's life (Ekehammar & Akrami, 2003; Ekehammar, Akrami, Gylje & Zakrisson, 2004). A minority of work, that is limited in scope, has examined the role of darker aspects of personality as person-centered factors to understand prejudice (Hodson, Hogg & MacInnis, 2009; Jonason, 2015; Jonason & Lavertu, 2017; Jones, 2013; Koehn, Jonason & Davis, 2019a).

For the last decade, researchers who wanted to capture darker aspects of personality have turned to the Dark Triad traits (Koehn, Okan & Jonason, 2019b). The traits are characterized by grandiosity and self-

centeredness (i.e., narcissism), manipulation and cynicism (i.e., Machiavellianism), and callousness and impulsivity (i.e., psychopathy). These traits create agentic outcomes (Jonason & Fletcher, 2018) such as counterproductive workplace behavior (Spain, Harms & LeBreton, 2014) and motives for power (Jonason & Ferrell, 2016). Given the empirical overlap between the Dark Triad traits, the Big Five traits, and social dominance (Jonason, 2015; Paulhus & Williams, 2002), conceptual and theoretical links may be expected for race- and sex-based prejudice as well (Hodson et al., 2009; Koehn et al., 2019a). However, this research has been limited in several ways. First, while it is clear the Dark Triad traits account for additional variance over the Big Five traits in prejudice, it is less clear if the Dark Triad traits account for more variance (i.e., incremental validity) than political personality (but see Jonason, 2015; Jones, 2013). Second, measures of prejudice, in relation to the Dark Triad traits, tend to focus on race-based forms and explicit, self-report methods. Third, little consideration is given to the in-group/out-group distinction in relation to prejudice. Therefore, in this study, we conceptualize prejudice as approach-avoidance tendencies towards

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members of one's group (by sex and race) and examine the relative contribution of the Dark Triad traits over political personality traits.

1. The present study

The Dark Triad traits may be related to intergroup biases because of the competitive nature of some of the traits (Jonason, 2015). Realistic conflict theory claims that people are prejudiced against those with whom they feel in competition (Jackson, 1993; Stephan & Stephan, 2000). If race-related prejudice is an expression of intergroup conflict and sex-related prejudice is an expression of intersexual conflict, then they might be correlated with personality traits that predispose people to see the world in competitive terms, especially narcissism and psychopathy (Jonason, Wee & Li, 2015). Some have suggested that sex and race prejudices may be driven by a generalized source of variance (Akrami, Ekehammar & Bergh, 2011). We test this assertion here by examining whether the Dark Triad traits are associated with limited approach (i.e., prejudice) towards others who differ by sex and race.

In contrast to competitive sentiments, those characterized by authoritarianism and Machiavellianism might be more concerned with control over others leading to a fear of outsiders (Fiske, 2000). Authoritarianism is an endorsement of strong central power and limited political freedoms used to protect one's in-group from invaders (e.g., immigrants) and the trait reflects individual differences in such sentiments (Altemeyer, 1996). Machiavellianism derives from advice given to Italian princes about how to control and protect their territories in tumultuous times characterized by invasion from other nation-states (Machiavelli, 1532/2004). Members of the opposite sex can be members of one's in-group, but members of other races are less likely to be. Evolutionary speaking, recurrent conflict between groups (typically by men)¹, which can be distinguished visually on racial traits because of the ancestral homogeneity of groups, might have driven race-based prejudices (Navarrete, McDonald, Molina & Sidanius, 2010) because racial out-group members may pose unique pathogen and physical risks (Park, Faulkner & Schaller, 2003). Therefore, if Machiavellianism² and authoritarianism are about the control and protection of one's in-group, they may be related to limited approach towards racial out-group members only; members of the opposite sex serve reproductive and relational functions that may sidestep these concerns.

There is considerable evidence that men are better characterized by the Dark Triad traits (Jonason et al., 2017) and social dominance (Sidanius & Pratto, 1999) and are more racially prejudiced (Ekehammar, Akrami & Araya, 2002) and misogynistic (Sakalli-Ugurlu & Beydogan, 2010) than women are. We expect to replicate sex differences in the Dark Triad traits and political traits, but not those in prejudice, because we adopt an indirect, approach-avoidance method to assess these prejudices. Both sexes should be willing to approach members of the opposite-sex given the importance of heterosexual relationships in reproductive goals and both sexes should be willing to approach same race others given in-group biases. In contrast, men may be less likely to approach members of the same sex because of (potentially) homophobia (Herek, 2004) or women may be more likely to approach same sex others because they are more affiliative than men are (Jonason & Zeigler-Hill, 2018), especially when it comes to other women. Indeed, one hypothesis might capture both, suggesting that men have experienced special selection pressures based on competition with out-group members and other men (Wrangham & Peterson, 1996)

¹ This might seem like a *just-so story* but, evidence for intergroup warfare in chimpanzees is extensive and is done exclusively by male members of the troupe (see, Wrangham & Peterson, 1996).

² Importantly, this prediction highlights the distinction between Machiavellianism and psychopathy, traits that some consider redundant to one another (Miller, Hyatt, Maples-Keller, Carter, & Lynam, 2016), by illustrating different social consequences of the traits (Rauthmann, 2012).

that lead to prejudicial attitudes (Navarrete et al., 2010). Whatever the reason, we test whether individual differences in the Dark Triad traits and political personality traits act as the proximal mechanisms (i.e., mediation) responsible for sex differences in prejudice.

In this study, we attempt to understand the correlations between the Dark Triad traits and measures of implicit sexual and racial prejudice by assessing people's approach-avoidance tendencies to targets who were varied by sex and race. By using this method, we have a conceptually clear and systematic measurement method for both kinds of prejudice which avoids some of the problematic features of existing measures of sexual (Glick & Fiske, 1997; Spence & Helmreich, 1972) and racial (Ponterotto et al., 1995) prejudices. The method requires only one assumption that prejudice can be evidenced in individual differences in approach tendencies towards others. Given the role of social dominance and authoritarianism in understanding racial prejudice (Hodson & Dhont, 2015), we include those traits to test for incremental variance, to better distinguish each set of traits, and to test the possibility that political traits are the vector that links the Dark Triad traits to prejudice. And last, we replicate sex differences in the traits and test whether they mediate sex differences in prejudice.

2. Method

2.1. Participants and procedure

A sample of 266 American adults (53% male; 79% White; $M_{Age} = 34.29$ years, $SD_{Age} = 9.99$, $Range_{Age} = 18-66$) were paid US\$1 through Amazon's Mechanical Turk (23 participants were removed for not completing all the measures). The minimum sample size was determined based on power analysis for the average effect size in social and personality psychology ($r \approx 0.20$; Richard, Bond & Stokes-Zoota, 2003), which set our minimum sample size at just less than 200, and guidelines ($N \approx 250$) set for reducing estimation error in personality psychology (Schönbrodt & Perugini, 2013). Participants were told the study was about personality and political attitudes. If they consented, they proceeded through several self-report measures (some not reported here), and at completion, were thanked and debriefed. This study was reviewed and approved by the ethics committee at Western Sydney University (H14099).

2.2. Measures

To capture individual differences in political personality, we used a 12-item (Duckitt, 2006; e.g., "Obedience and respect for authority are the most important virtues children should learn.") version of the Right-Wing Authoritarianism scale (Altemeyer, 1996) and a 10-item (Duckitt, 2006; e.g., "To get ahead in life, it is sometimes necessary to step on other groups.") version of the Social Dominance Orientation scale (Sidanius & Pratto, 1999). Participants reported their agreement (1 = *Strongly disagree*; 5 = *Strongly agree*) with the items which were averaged to create scores of authoritarianism (Cronbach's $\alpha = 0.92$) and social dominance ($\alpha = 0.91$), both of which were correlated ($r = 0.54$, $p < .01$).

The 27-item Short Dark Triad (Jones & Paulhus, 2014) was used to measure Machiavellianism (e.g., "Make sure your plans benefit yourself, not others" [$\alpha = 0.83$]), narcissism (e.g., "I like to get acquainted with important people" [$\alpha = 0.79$]), and psychopathy (e.g., "People who mess with me always regret it" [$\alpha = 0.78$]). Participants rated their agreement with each item (1 = *Strongly disagree*; 5 = *Strongly agree*) and items were averaged to create scores of each trait. Narcissism was correlated with Machiavellianism ($r = 0.47$, $p < .01$) and psychopathy ($r = 0.48$, $p < .01$) and psychopathy and Machiavellianism were correlated ($r = 0.64$, $p < .01$).

Prejudice to out-group and in-group members was measured using an approach-avoidance method. Participants were presented with three stem-questions (e.g., "How likely are you to vote/befriend/help

Table 1
Descriptive statistics for the Dark Triad traits, political personality, and approach-avoidance tendencies overall and by participant's sex.

Personality Traits	Mean (SD)			t	d
	Overall	Men	Women		
Authoritarianism	2.24 (0.91)	2.24 (0.90)	2.24 (0.91)	0.02	0.00
Social Dominance	1.91 (0.83)	2.07 (0.87)	1.74 (0.74)	3.31*	0.41
Narcissism	2.53 (0.75)	2.67 (0.76)	2.36 (0.70)	3.42*	0.42
Machiavellianism	2.10 (0.73)	2.26 (0.71)	1.87 (0.71)	4.48**	0.55
Psychopathy	2.86 (0.77)	3.04 (0.76)	2.65 (0.74)	4.18**	0.52

Approach-Avoidance Tendencies					
	Overall	Men	Women	t	d
Same-Sex Others	4.22 (0.80)	4.10 (0.78)	4.36 (0.80)	-2.80*	-0.35
Different-Sex Others	4.11 (0.79)	4.07 (0.71)	4.18 (0.88)	-1.13	-0.14
Same-Race Others	4.21 (0.81)	4.13 (0.81)	4.31 (0.81)	-1.76	-0.22
Different-Race Others	4.10 (0.81)	3.96 (0.81)	4.26 (0.78)	-3.06*	-0.38

Note. d is Cohen's d for effect size (<https://www.uccs.edu/lbecker/>).

* p < .01.

** p < .001.

someone...”) rotated for the sex and race of the target (e.g., “...of the same vs. different sex/race”) to create a total of twelve questions (same sex [$\alpha = 0.87$]; opposite sex [$\alpha = 0.82$]; same race [$\alpha = 0.89$]; different race [$\alpha = 0.87$]). Participants reported their behavioral intentions (1 = *Extremely unlikely*; 5 = *Extremely likely*) to these items which were averaged to create scores of each “bias” all of which were correlated ($r_s = 0.68$ to 0.84 , $p_s < 0.01$).

3. Results

We began (see Table 1 for descriptive statistics) by testing a 2 (participant's sex) \times 4 (approach-avoidance tendencies) mixed model ANOVA, revealing that women had generally greater approach tendencies than men did ($F[1, 264] = 6.31$, $p < .01$, $\eta_p^2 = 0.02$) but this was mostly a function of their greater approach towards same sex and other-race others ($F[3, 792] = 2.84$, $p < .05$, $\eta_p^2 = 0.01$). When comparing rates of approach-avoidance in general ($F[3, 792] = 6.30$, $p < .01$, $\eta_p^2 = 0.02$), people had greater approach tendencies towards same-sex others than opposite-sex ($p < .01$) and different race others ($p < .01$); same-sex others than opposite-sex others ($p < .01$); and same race than different race others ($p < .01$). We found a tendency to approach in-group members more than out-group members for target's sex ($p < .01$) and race ($p < .01$); effects that were only present for men in case of race ($p < .01$) and sex for women ($p < .01$). Unsurprisingly, men scored higher than women did in social dominance and the Dark Triad traits.

Authoritarianism and Machiavellianism were correlated with limited approach towards those of a different race, social dominance and narcissism were correlated with limited approach towards targets regardless of race or sex, psychopathy was correlated with limited approach towards people based on sex but only a limited approach towards people of a different race (see Table 2). Given that authoritarianism ($r_s = 0.04$ to 0.12 , $p_s > 0.05$) was uncorrelated with the Dark Triad traits but social dominance ($r_s = 0.26$ to 0.32 , $p_s < 0.01$) was, we tested the incremental variance the Dark Triad traits accounted for beyond social dominance for all four approach tendencies with independent hierarchical multiple regressions. The Dark Triad traits did not account for additional variance in approach-avoidance tendencies for same-sex ($\Delta R^2 = 0.02$) or different race ($\Delta R^2 = 0.01$) others, but did account for more variance in opposite-sex ($\Delta R^2 = 0.03$, $F[3, 261] = 3.13$, $p < .05$) and same race ($\Delta R^2 = 0.03$, $F[3, 261] = 3.06$, $p < .05$) others.

Individual differences in approach-avoidance tendencies were negligibly moderated by the sex of the participant (see Table 3). When considering target's sex, women who were low in social dominance were slightly more likely to have within-sex approach tendencies,

Table 2

Correlations between the approach-avoidance scores with the Dark Triad traits and political personality traits.

	Sex Approach			Race Approach		
	Same	Different	z	Same	Different	z
Authoritarianism	-0.05	-0.05	0.00	0.01	-0.17**	2.08*
Social Dominance	-0.23**	-0.22**	-0.12	-0.17**	-0.37**	2.45**
Narcissism	-0.15*	-0.21**	0.71	-0.16**	-0.15*	-0.12
Machiavellianism	-0.11	-0.10	-0.12	-0.09	-0.19**	1.17
Psychopathy	-0.13*	-0.13*	0.00	-0.12	-0.24**	1.41

Note. z is Steiger's z to compare dependent correlations (<http://quantpsy.org/corrttest/corrttest2.htm>).

* p < .05.

** p < .01.

Table 3

Correlations between the Dark Triad traits, political personality, and approach-avoidance scores by participant's sex.

	Same-Sex Approach			Different-Sex Approach		
	Men	Women	z	Men	Women	z
Authoritarianism	-0.02	-0.10	0.65	-0.11	-0.01	-0.81
Social Dominance	-0.11	-0.32**	1.78*	-0.25*	-0.19*	-0.51
Narcissism	-0.04	-0.21*	1.39	-0.05	-0.35**	2.53**
Machiavellianism	0.02	-0.17	1.54	-0.02	-0.14	0.97
Psychopathy	-0.01	-0.18*	1.38	-0.16	-0.08	-0.65

	Same-Race Approach			Different-Race Approach		
	Men	Women	z	Men	Women	z
Authoritarianism	-0.03	0.04	-0.56	-0.16	-0.20*	0.33
Social Dominance	-0.13	-0.20*	0.58	-0.32**	-0.40**	0.74
Narcissism	-0.01	-0.30**	2.40**	-0.03	-0.21*	1.47
Machiavellianism	0.07	-0.21*	2.27*	-0.13	-0.17	0.33
Psychopathy	-0.04	-0.16	0.97	-0.20*	-0.22*	0.17

Note. z is Fisher's z to compare independent correlations (<http://quantpsy.org/corrttest/corrttest.htm>).

* p < .05.

** p < .01.

whereas women who were low in narcissism had stronger approach tendencies towards different-sex others. When considering target's race, women low on narcissism and Machiavellianism had a stronger approach tendency towards members of the same race.

Last, we examined whether sex differences in approach-avoidance

tendencies (i.e., towards same sex and different race others) were mediated by sex differences in personality (i.e., the Dark Triad traits and social dominance). For sex differences in approach-avoidance tendencies towards same sex others ($\beta_{\text{Step 1}} = 0.17, p < .01$), we found partial mediation ($\beta_{\text{Step 2}} = 0.12, p < .05$) by the four personality traits which accounted for 5% more variance ($F[4, 260] = 3.62, p < .01$); only social dominance had a significant residual ($\beta = -0.18, p < .01$). For sex differences in approach-avoidance tendencies towards different race others ($\beta_{\text{Step 1}} = 0.19, p < .01$), we found full mediation ($\beta_{\text{Step 2}} = 0.11$) by the four personality traits which accounted for 12% more variance ($F[4, 260] = 9.03, p < .01$); again, only social dominance had a significant residual ($\beta = -0.33, p < .01$).³

4. Discussion

In this study we took a person-centered approach to understand individual differences in two modern prejudices based in race and sex (Swim et al., 1995). In contrast to prior work (Jones, 2013; Koehn et al., 2019a), we assessed both prejudices simultaneously using an approach-avoidance method, examined the interplay of the Dark Triad traits and political personality traits, and developed mediation models to account for sex differences and personality effects on prejudice. We found (1) evidence of a general source for prejudice (Akrami et al., 2011; Navarrete et al., 2010), (2) unique kinds of prejudice for the Dark Triad traits (Rauthmann, 2012), (3) sex differences in the Dark Triad traits (Jonason et al., 2017), social dominance (Sidanius & Pratto, 1999), and prejudice, and (4) mediation effects for sex differences in prejudice by the Dark Triad traits and social dominance.

A fundamental assertion regarding the Dark Triad traits is that they are related-yet-distinct (Paulhus & Williams, 2002). However, some have gone so far as to assert that psychopathy and Machiavellianism are so similar that they are redundant (Miller, Hyatt, Maples-Keller, Carter & Lynam, 2016). In contrast, we found different associations across the traits. Machiavellianism appears linked to only race-based prejudice of out-group others whereas the other two appear linked to race- and sex-based prejudice regardless of whether the target was an in-group or out-group member. As potential reasons behind these differences, we explored the role of social dominance and authoritarianism, two variables on their own that have been well explored in relation to prejudice (Duckitt, 2006; Ekehammar et al., 2004). We suggest that narcissism and psychopathy may be linked to generalized prejudice because of their competitive nature (Jonason, 2015) and because the pattern of correlations for these traits resembles that of social dominance. In contrast, Machiavellianism, like authoritarianism, may be only linked to out-group, racial prejudice because of the desire to control and protect one's in-group from usurpers over evolutionary time (Navarrete et al., 2010). There was general consistency across the sexes in these correlations, but where we detected moderation, it suggests that low rates of traits like narcissism in women, but not men, drive approach intentions. This might reflect women's greater vulnerability when dealing with out-group males. Women low on these traits may be less predisposed to fight, which should lead them to go towards members of their own sex and race to avoid pathogens and to improve their safety (Park et al., 2003)

Evidence from multiple sources suggests that men are more antisocial than women are, and women are more prosocial than men are. We replicated sex differences in the Dark Triad traits (Jonason et al., 2017) and social dominance (Sidanius & Pratto, 1999). Two potential

hypotheses are worth mentioning here. The Standard Social Science Model suggests this might be driven by men being more rewarded/less punished for being "bad" than women are, especially when both are children. An alternative, evolutionary hypothesis suggests that because of asymmetries in the costs and benefits of engaging in antisocial behavior in each sex, men (on average) may have become better characterized by these traits pressures because ancestral men have reaped more benefits (e.g., status, mates; Jonason & Zeigler-Hill, 2018) than women did. Our evidence suggests sex differences in the Dark Triad are mediated by social dominance (as it was by power motives [Jonason & Ferrell, 2016]) and not authoritarianism. A desire to be socially dominant will have had reproductive payoffs for men that it did not for women (Jonason, Li & Madson, 2012) whereas a fear of out-group others and a desire for control, as captured in authoritarianism, would have kept people safe but not necessarily improved one's reproductive fitness. It seems like our evidence is more consistent with an evolutionary than a learning model for these sex differences.

In addition to sex differences in personality, we tested whether there were sex differences in prejudice. Prior research suggests men are more racially (Ekehammar et al., 2002) and sexually (Sakalli-Ugurlu & Beydogan, 2010) prejudiced than women are; effects we failed to replicate here. Instead, we found that men had a weaker approach to other men and members of different races (i.e., out-group members). This may be evidence of a male-specific competition hypothesis that suggests that over ancestral time men battled other men for limited resources and that prejudice towards other men and out-group members would have facilitated this competition (Navarrete et al., 2010). Alternatively, while women showed a potentially self-protective bias towards same-sex others, they also showed an approach tendency towards others of a different race which may be a function of being more politically liberal than men are (as seen in low rates of social dominance). However, because the latter explanation requires two hypotheses and the former requires just one, we err on the side of parsimony and interpret these effects as consistent with the out-group competition hypothesis.

4.1. Limitations and conclusion

While this study is unique in the way it assessed prejudice, it was nonetheless limited. First, we relied on American MTurk workers which renders our sample W.E.I.R.D. (i.e., Western, educated, industrialized, rich, and democratic; see Henrich, Heine & Norenzayan, 2010). Second, we focused on the Dark Triad traits when there are other "dark" personality traits are emerging that might be worth considering (e.g., spitefulness; Marcus, Zeigler-Hill, Mercer & Norris, 2014). Third, while we measured racial and sexual prejudices in a uniform and indirect way, this method has not been externally validated. However, our correlations between authoritarianism and social dominance and approach-aversion tendencies towards out-group members act as internal validity checks (Hodson & Dhont, 2015). Despite these limitations, we have provided a unique advance in method and results to better understand the role of the Dark Triad traits in prejudice. Future work should address these limitations and examine more real-world *sequelae* of the tendencies we have reported here. For example, whether these personality biases lead to specific voting patterns (or other behaviors) in people's lives that reflect racial or sexual prejudices is less well understood than the patterns we can readily detect in "lab science".

In conclusion, we have provided a test of implicit prejudice to understand person-centered effects with the Dark Triad traits. Those high in social dominance, psychopathy, and narcissism are not necessarily prejudiced along racial or sexual lines, instead, they are just generally antisocial. In contrast, authoritarian and Machiavellian people appear to be biased against—in the form of less approach—racial out-group members. In addition, low rates of these traits seem to facilitate prosocial tendencies (i.e., approach tendencies) in women, in particular, and men. It seems that for narcissism and psychopathy (and men),

³ For the interested reader, we also tested whether sex differences in the Dark Triad traits could be accounted for by sex differences in social dominance. In all three cases, we found only partial mediation, with social dominance accounting for more variance than participant's sex in narcissism (5%), Machiavellianism (7%), and psychopathy (7%).

prejudice is more about competition whereas for Machiavellianism it is more about a fear of outsiders.

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