



Brief Report

The role of “dark personalities” (narcissism, Machiavellianism, psychopathy), Big Five personality factors, and ideology in explaining prejudice

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ARTICLE INFO

Article history:

Available online 20 February 2009

Keywords:

Dark Triad
Big Five
Authoritarianism
Social dominance orientation
Prejudice
Group threat

ABSTRACT

The so-called Dark Triad (narcissism, Machiavellianism, psychopathy) represent correlated subclinical personality traits capturing “dark personalities”. How might darker personalities contribute to prejudice? In the present study ($n = 197$), these dark personality variables correlated positively with outgroup threat perceptions and anti-immigrant prejudice. A proposed two-stage structural equation model, assuming indirect personality effects (Dark Personality, Big Five) on prejudice through ideology and group threat perceptions, fit the data well. Specifically, a latent Dark Personality factor predicted social dominance orientation, whereas (low) Openness to Experience predicted right-wing authoritarianism; these ideological variables each predicted prejudice directly and indirectly through heightened intergroup threat. The authors recommend that personality models of prejudice incorporate both normal-range and subclinical personality predictors, in addition to ideological and social psychological mediators.

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1. Introduction

Researchers have recently expressed interest in “dark personalities” (Paulhus & Williams, 2002, p. 561) and “socially aversive personality traits” (Lee & Ashton, 2005, p.1572). For instance, the Dark Triad framework (Paulhus & Williams, 2002) highlights associations between subclinical psychopathy, Machiavellianism, and narcissism (Lee & Ashton, 2005; Vernon, Villani, Vickers, & Harris, 2008). We explore how subclinical (“dark”) traits, in conjunction with normal-range personality variables, explain intergroup threat perceptions and prejudice.

Psychopathy is now recognized as a subclinical variable, exhibiting meaningful variation within “normal” populations (Hare, 1991). Subclinical psychopathy is characterized by high impulsivity, callousness, interpersonal manipulation, exploitation, and stimulation-seeking, and by low empathy, anxiety, and remorse (Hare, 1991; Paulhus & Williams, 2002). Those higher in psychopathy are anti-social and express negativity toward others. At least two psychopathy factors typically emerge: primary psychopathy (Factor I), characterized by callous affect (low empathy) and interpersonal manipulation, and secondary psychopathy (Factor II), expressed through erratic lifestyles and anti-social behaviors (e.g., crime).

Machiavellianism is characterized by the manipulation and exploitation of others, cunning, cold affect, and a lack of sincerity or ethical concern (Christie & Geis, 1970). Machiavellians score low in Honesty–Humility (Lee & Ashton, 2005), maximizing self-

interests via deception and disregard for others. Although Machiavellianism and psychopathy might represent a single construct (Lee & Ashton, 2005; McHoskey, Worzel, & Szyarto, 1998), these constructs differ in heritability (Vernon et al., 2008), and some theorists consider them distinct (Paulhus & Williams, 2002). Given these alternative viewpoints, we first explore how each construct predicts prejudice, then consider their influence (with narcissism) as a latent “Dark Personality” factor. Related to psychopathy and Machiavellianism, narcissism represents an exaggeration of self-worth and importance, superiority over others (i.e., grandiosity), and attention-seeking (Raskin & Terry, 1988). Put simply, narcissism is an “excessive love for one’s self” (Vernon et al., 2008, p.445). Given that ingroup-love fuels prejudice, exaggerated self-love may likewise predict outgroup dislike.

Relatively ignored by intergroup researchers, darker personality variables may prove valuable in understanding prejudice. Prejudice was originally conceptualized as irrational and unjustified (1920s–1930s), resulting from unconscious psychological defenses (1930s–1940s), or pathological needs (1950s), clearly emphasizing individual maladjustment. Prejudice explanations subsequently became increasingly social, emphasizing norms, group interests, and categorization that typify everyday psychological functioning (Duckitt, 1992). Contemporary personality theorists similarly approach prejudice-explanation in terms of normal-range personality factors. For instance, Flynn (2005) found that Openness to Experience negatively predicted prejudice even after statistically controlling for other Big Five factors (Extraversion, Conscientiousness, Agreeableness, Neuroticism).

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Others have considered how normal-range personality relates to authoritarian ideologies associated with prejudice. Altemeyer (1998) right-wing authoritarianism (RWA) construct emphasizes submission, conventionalism, and aggression purportedly resulting from social learning (Altemeyer, 1998), conforming personality, and danger-themed worldviews (Duckitt, 2005). An additional “authoritarian” variable, social dominance orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994), taps endorsement of intergroup hierarchies and inequalities resulting from a tough-minded personality and competitive worldviews (Duckitt, 2005). Both RWA and SDO correlate negatively with Openness, but RWA also correlates positively with Conscientiousness and SDO correlates negatively with Agreeableness (Heaven & Bucci, 2001).

These ideological variables are believed to occupy psychological space at the interface between personality and social psychology (Ekehammar, Akrami, Gylje, & Zakrisson, 2004). In support, Conscientiousness, Extraversion, and (low) Openness predict prejudice via RWA, whereas (low) Agreeableness predicts prejudice through SDO (Ekehammar et al., 2004). Relatedly, SDO mediates relations between tough-mindedness and prejudice, whereas RWA mediates relations between social conformity and prejudice (Duckitt, 2005). Ideological variables (RWA/SDO) therefore lie psychologically between normal-range personality and prejudicial attitudes.

Do ideological variables similarly lie between darker personalities and prejudice? Suggesting this possibility, RWA and SDO independently mediate relations between clinically-relevant interpersonal disgust sensitivity and anti-immigrant attitudes (Hodson & Costello, 2007). Expanding personality explanations to include subclinical variables could address concerns that existing approaches are overly narrow (Jackson & Poulsen, 2005). Considering that correlations between normal-range personality factors and prejudice are modest (Ekehammar et al., 2004; Flynn, 2005), additional personality variables, particularly darker traits, may be important overlooked predictors.

Encouragingly, intergroup researchers have begun investigating clinical/maladaptive personality variables. Among pathologically-diagnosed participants, Compulsive-Dependent personality predicts prejudice indirectly through RWA (Schlachter & Duckitt, 2002). Van Hiel, Mervielde, and De Fruyt (2004) found that Compulsiveness correlated positively with right-wing ideology, yet maladaptive personalities did not predict beyond Big Five factors. These studies offer promise for subclinical prejudice-explanations such as those rooted in psychopathy, Machiavellianism, and narcissism. Characterized by disregard for others' well-being, exploitation, and interpersonal manipulation, psychopathy presumably translates to intergroup relations. Callous affect, central to psychopathy, presumably contributes to outgroup biases. Consider also that SDO is related to meanness (Altemeyer, 1998), a probable psychopathy correlate. Machiavellianism is expected to predict prejudice considering that SDO and Machiavellianism are positively related (Carnahan & McFarland, 2007), and low empathy (expressed by such individuals) predicts elevated prejudice (Batson et al., 1997).

Narcissism is a less obvious potential contributor to prejudice. Being self-focused, narcissists care less about others, and outgroups exemplify “others”. Narcissists are therefore expected to express disapproval and negativity toward outgroups (by definition different to the self). Although self-esteem, a healthier cousin of narcissism, does not consistently predict intergroup bias (Rubin & Hewstone, 1998), narcissism might. After all, SDO correlates with narcissism (Carnahan & McFarland, 2007), and narcissists are problematically self-focused and relatively higher in “meaner” Dark Triad variables.

We propose two indirect routes to prejudice, one from Dark Personalities (a latent factor comprising Dark Triad variables) and one from the Big Five. Defined within the Big Five space, Agreeable-

ness correlates (negatively) with Dark Triad variables, whereas Openness does not (Lee & Ashton, 2005; Vernon et al., 2008; but see Paulhus & Williams, 2002), consistent with observations that Openness has no maladaptive counterpart (Van Hiel et al., 2004). Therefore Openness might predict prejudice *independently* from dark personalities. In contrast, (low) Agreeableness, a stronger Dark Triad correlate, may not predict prejudice beyond these dark personality traits. These two routes are expected to map onto dual-route systems predicting prejudice through RWA and SDO. These ideological variables have unique origins (Duckitt, 2005), often predicting prejudice independently (Altemeyer, 1998; Hodson & Costello, 2007) and operating on prejudice through different personality factors (Ekehammar et al., 2004). In our framework, we anticipate parallel paths of prejudice prediction from Dark Personalities and Openness through SDO or RWA, respectively. Specifically, Dark Personalities were expected to predict the relatively “mean” and hierarchical SDO construct. In contrast, SDO was expected to be less associated with Big Five factors except (low) Agreeableness (see Ekehammar et al., 2004). RWA, on the other hand, was expected to relate primarily to Big Five factors, especially (low) Openness and Conscientiousness (Ekehammar et al., 2004; Heaven & Bucci, 2001). Because RWAs consider themselves moral (Altemeyer, 1998), we expected RWA to be unassociated or negatively associated with darker personality variables.

Which variables might mediate the influence of Darker Personalities and ideology on prejudice? Social psychological research demonstrates that outgroup threats, the “actions, beliefs, or characteristics [that] challenge the goal attainment or well-being of another group”, exacerbate prejudice (Riek, Mania, & Gaertner, 2006, p.336), especially among SDOs (Esses, Hodson, & Dovidio, 2003) and RWAs (McFarland, 2005). Therefore intergroup threat perceptions were expected to mediate relations between ideology and prejudice, with Dark Personalities predicting heightened SDO-based ideology, and (low) Openness predicting heightened RWA-based ideology.

2. Method

2.1. Participants

Undergraduate students from a Canadian university participated for course credit or \$5. Immigrants ($n = 9$) were unanalyzed, leaving 197 participants (156 women, 41 men). Ages ranged from 17–39 years ($M = 20.06$, $SD = 2.52$).

2.2. Materials

2.2.1. Self-report psychopathy-III (SRP-III; Paulhus, Hemphill, & Hare, *in press*)

This subclinical psychopathy scale contains 60 items ($\alpha = .90$). The scale contains four subscales: Callous Affect (e.g., “It tortures me to see an injured animal” [reversed]), Interpersonal Manipulation (e.g., “I purposely flatter people to get them on my side”), Erratic Lifestyle (e.g., “I’d be good at a dangerous job because I make fast decisions”), and Anti-Social Behavior (e.g., “I have assaulted a law enforcement official or social worker”).

2.2.2. Narcissistic personality inventory (NPI; Raskin & Terry, 1988)

A 20-item version was developed from the 40-item original. A sample item reads: “I am an extraordinary person” ($\alpha = .90$).

2.2.3. Machiavellianism-IV (MACH-IV; Christie & Geis, 1970)

Twenty items tap a manipulative personality (e.g., “Never tell anyone the real reason you did something unless it is useful to do so”; $\alpha = .69$).

2.2.4. Big Five inventory (BFI; John, Donahue, & Kentle, 1991)

Five major personality factors were assessed: Extraversion (sociable, outgoing; $\alpha = .83$), Agreeableness (kind, cooperative; $\alpha = .80$), Conscientiousness (organized, precise; $\alpha = .78$), Neuroticism (anxious, high-strung; $\alpha = .85$), and Openness (intellectual, innovative; $\alpha = .73$). This widely-used 44-item scale taps normal-range personality variation.

2.2.5. Self-esteem (Rosenberg, 1965)

Rosenberg's 10-item global self-esteem scale was employed (e.g., "On the whole, I am satisfied with myself"; $\alpha = .90$).

2.2.6. Social dominance orientation (SDO; Pratto et al., 1994)

The 16-item SDO₆ version was employed (e.g., "Superior groups should dominate inferior groups"; $\alpha = .90$).

2.2.7. Right-wing authoritarianism (RWA; Altemeyer, 1996)

A shortened 12-item version tapped submission, conventionality, and aggression (e.g., "Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs"; $\alpha = .85$).

2.2.8. Conservatism (Skikta, Mullen, Griffin, Hutchinson, & Chamberlin, 2002)

Three items tapped conservatism in general, toward social issues, and economics ($\alpha = .88$).

2.2.9. Intergroup threat (Avery, Bird, Johnstone, Sullivan, & Thalhammer, 1992)

Five semantic-differential items ($\alpha = .95$) tapped perceptions of immigrants as dangerous (vs. safe), bad (vs. good), threatening (vs. non-threatening), violent (vs. nonviolent), and trustworthy (vs. cannot be trusted).

2.2.10. Modern racism scale (MRS; McConahay, Hardee, & Batts, 1981)

This widely-used 7-item prejudice scale substituted "immigrants" for "Blacks". High scorers believe that immigrants push too hard and suffer little societal discrimination ($\alpha = .83$).

2.3. Procedure

Participants privately completed a paper-and-pencil survey package. Before obtaining consent, graduate researchers explained that the study concerned personality, attitudes, and feelings. Participants were debriefed upon completion (approximately 45 min).

3. Results

All scales demonstrated acceptable reliability and normal variability (skewness < 1.03; kurtosis < 1.58).

3.1. Relations among dark personality variables

Narcissism and Machiavellianism ($r = .27$) were least related, with psychopathy correlating with both narcissism ($r = .49$) and Machiavellianism ($r = .62$) ($ps < .001$). A principal-components analysis revealed a single factor with highest loadings for psychopathy (.90), then Machiavellianism (.80), then narcissism (.70).

3.2. Predictors of prejudice and prejudice-correlates

Table 1 shows correlations between personality (self-esteem, Big Five factors, dark personalities) and ideology (SDO, RWA, conservatism), intergroup threat, and prejudice. Despite correlating with narcissism ($r = .40$, $p < .001$), self-esteem was unrelated to

Table 1

Correlations between personality and prejudice-relevant variables.

	SDO	RWA	Conservatism	Intergroup threat	Prejudice
Self-esteem	.06	-.12	-.07	-.07	.04
<i>Big Five factors</i>					
Extraversion	-.01	-.10	-.12	.05	.02
Agreeableness	-.21**	.21**	.09	-.21**	-.13 [‡]
Conscientiousness	-.11	.24***	.17*	.07	.06
Neuroticism	-.12	.04	.03	.07	.01
Openness	.00	-.22**	-.13	-.12	-.18*
<i>Dark Triad</i>					
Narcissism	.23***	-.02	-.04	.19**	.19**
Machiavellianism	.37***	-.15*	-.10	.19**	.19**
Psychopathy	.38***	-.18*	-.06	.20**	.20**
<i>Subscales</i>					
a. Callous affect	.39***	-.12	.04	.31***	.26***
b. Interpersonal manipulation	.32***	-.11	-.06	.21**	.19**
c. Erratic lifestyle	.25***	-.21**	-.15*	.09	.13
d. Anti-social behavior	.22**	-.09	.01	.02	.02

Note: SDO = social dominance orientation; RWA = right-wing authoritarianism; Primary psychopathy = callous affect and interpersonal manipulation; Secondary psychopathy = erratic lifestyle and anti-social behavior. $N = 196$ –197.

[‡] $p < .06$.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

prejudice and prejudice-correlates, and conservatism was largely unrelated to personality. Self-esteem and conservatism are not further considered.

Extraversion and Neuroticism were not related with prejudice or its correlates. As expected, Agreeableness was negatively related with SDO ($r = -.21$), intergroup threat ($r = -.21$), and prejudice ($r = -.13$), and positively related with RWA ($r = .21$). Openness demonstrated meaningful negative relations with RWA ($r = -.22$) and prejudice ($r = -.18$). Of particular note, SDO correlated (negatively) only with Agreeableness, whereas RWA correlated positively with Agreeableness and Conscientiousness and negatively with Openness (Table 1).

In contrast to minimal Big Five relations, SDO was positively and significantly correlated with Dark Triad variables (Table 1): narcissism ($r = .23$), Machiavellianism ($r = .37$), and psychopathy ($r = .38$). In contrast, RWA correlated only (and negatively) with Machiavellianism and psychopathy ($rs = -.15, -.18$, respectively). Each Dark Triad variable correlated positively with intergroup threat and prejudice (approximately .20, Table 1). Primary psychopathy positively predicted SDO, threat, and prejudice, and Secondary psychopathy correlated positively with SDO (not threat or prejudice).¹

3.3. Regressions comparing personality contributions to prejudice

We considered whether prejudice prediction is improved by adding Big Five factors to dark personalities and vice versa. In the first test, Dark Triad variables were entered at Step 1 and Big Five factors at Step 2. At Step 1, the Dark Triad collectively predicted attitudes ($R = .24$, adj. $R^2 = .043$, $F(3, 193) = 3.91$, $p = .010$), with no variable uniquely predicting ($\beta s .07$ –.12, $ps > .133$). Thus dark personality can be treated as a latent factor when predicting immigrant attitudes. Adding Big Five variables at Step 2 significantly improved prediction ($R = .35$, adj. $R^2 = .086$, $\Delta R^2 = .066$, $\Delta F(5, 188) = 2.82$, $p = .018$); only Openness uniquely predicted ($\beta = -.22$, $p = .002$).

¹ Regressing prejudice onto all psychopathy subscales revealed significant prediction by Callous Affect ($\beta = .26$, $p = .007$; other $ps > .174$).

Notably, Agreeableness failed to predict prejudice beyond darker personalities ($\beta = .09, p = .350$). Thus prejudice prediction by Agreeableness overlapped considerably with Dark Personality, rendering Agreeableness redundant.

Comparable analyses tested the converse pattern. At Step 1, Big Five factors significantly predicted attitudes ($R = .24, \text{adj. } R^2 = .032, F(5, 191) = 2.31, p = .046$), with both Agreeableness ($\beta = -.15, p = .043$) and Openness ($\beta = -.18, p = .011$) being unique predictors. Adding dark personalities at Step 2 significantly improved prediction ($R = .35, \text{adj. } R^2 = .086, \Delta R^2 = .066, \Delta F(3, 188) = 4.72, p = .003$). Individual dark variables were not significant, yet psychopathy was marginal ($\beta = .22, p = .064$).

Overall, dark personalities (collectively) and Big Five personality factors (especially Openness) predicted attitudes toward immigrants uniquely. The darker personality variables loaded on a single factor, with each predicting intergroup attitudes equivalently (Table 1), and no unique predictor emerging from simultaneous regressions. Therefore, we represent Dark Triad variables as a latent subclinical Dark Personality factor in our forthcoming model. Openness consistently predicted intergroup attitudes, even beyond darker personalities. Agreeableness demonstrated relatively strong relations ($ps < .001$) with Machiavellianism ($r = -.56$), psychopathy ($r = -.62$), and narcissism ($r = -.30$), failing to uniquely predict attitudes at Step 2 in regression analyses. Given this conceptual redundancy, Agreeableness is omitted from our model to maximize parsimony.

3.4. Model testing effects of dark personalities and openness on attitudes

We tested our model that personality predicts group threat perceptions via ideology, and ideology predicts prejudice (in part) through intergroup threat perceptions (Fig. 1). A latent Dark Personality factor was defined by the three observed Triad variables. Latent factors for other predictors were created through disaggregation procedures to minimize measurement error and improve prediction. Each predictor was represented by three disaggregated variables, except intergroup threat (predicted by five items); these variables are omitted from the figure. Missing data (<1%) were re-

placed with sample means. A structural equation model (SEM) was tested using AMOS 16.0. Tests of the statistical significance of mediated effects are based on bootstrapping methods; model parameter estimation resulted from bootstrap samples ($n = 1000$) using maximum likelihood procedures. All possible paths were tested (i.e., $df = 0$) to estimate total, direct, and indirect effects and their p -values. Non-significant paths are dropped from the figure for clarity.

According to recognized fit criteria (Kline, 2005), χ^2 values should be non-significant, with χ^2/df values <2, comparative fit index (CFI) values >.95, root-mean-square-error of approximation (RMSEA) values <.06, and standard root-mean-squared residual (SRMR) values <.08. The model tested (Fig. 1) demonstrated strong fit to the data, $\chi^2(115) = 236.65, p < .001, \chi^2/df = 1.527, CFI = .966, RMSEA = .052, SRMR = .056$. Dark Personality and Openness, somewhat related ($\beta = .26$), exerted unique effects on SDO and RWA. Specifically, Dark Personality was uniquely associated with SDO ($\beta = .49$) whereas Openness was uniquely associated with RWA ($\beta = -.29$), as expected. Dark Personality ($\beta = .24$), SDO ($\beta = .20$), and RWA ($\beta = .27$) each uniquely predicted intergroup threat. In turn, threat perceptions predicted increasingly negative attitudes toward immigrants ($\beta = .40$). Of note, Dark Personality and Openness predicted prejudice only indirectly. Bootstrapping analyses revealed that threat perceptions were indirectly predicted by Openness ($p < .01$), and prejudice was indirectly predicted by Dark Personality, Openness, RWA ($ps < .01$) and SDO ($p = .05$). Including mediating ideological and threat variables increased the variance-explained in attitudes from 9% (in regression analyses) to 50%.

4. Discussion

This paper represents the first known examination of darker personalities (based on the Dark Triad) and prejudice. Narcissism, Machiavellianism, and psychopathy correlated with immigrant threat perceptions and increased prejudice (Table 1), predicting prejudice to the same degree as Openness. The dark personality variables, especially Machiavellianism and psychopathy, demonstrated moderate-to-large relations with SDO, a strong prejudice-predictor (Altemeyer, 1998). RWA was uncorrelated or negatively

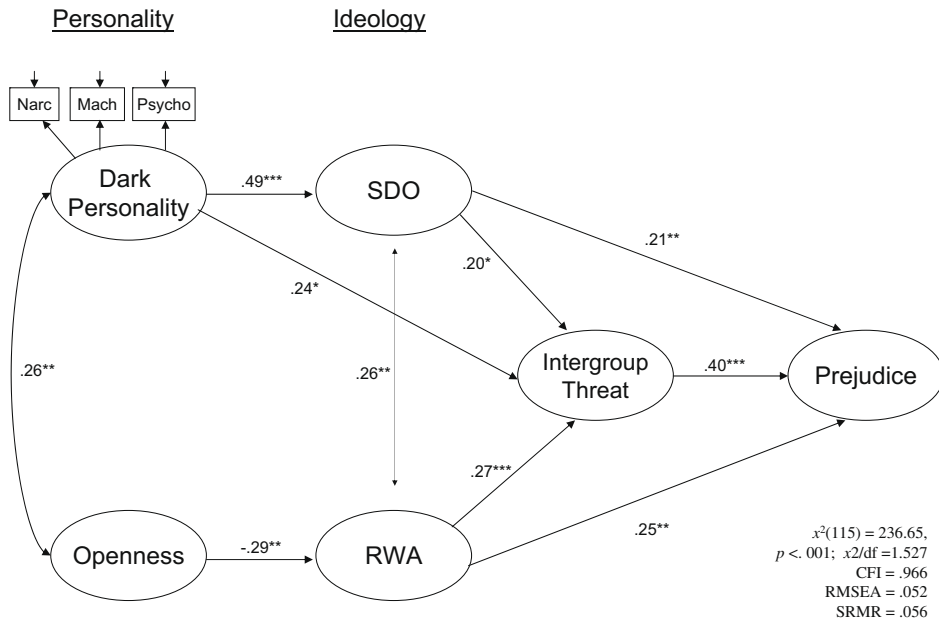


Fig. 1. Structural equation model testing proposed model of the indirect effects of personality on prejudice; $\chi^2(115) = 236.65, p < .001, \chi^2/df = 1.527, CFI = .966, RMSEA = .052, SRMR = .056$. Only significant standardized paths are shown. SDO = social dominance orientation; RWA = right-wing authoritarianism. $N = 197$. * $p < .05$; ** $p < .01$; *** $p < .001$.

correlated with darker personalities, being more clearly related to Big Five factors, unlike SDO (Table 1). Regression analyses revealed that the Dark Triad variables collectively (“dark personalities”) and Openness predicted prejudice independently. Openness apparently has few counterparts on the “dark” side of personality that compete for variance in prejudice-explanation. In contrast, Agreeableness, considered an important prejudice-predictor, was redundant with darker personality variables in predicting prejudice.

Our model was well supported, with personality predicting prejudice indirectly (Fig. 1) through two independent routes, one from dark (subclinical) personalities through SDO and threat perceptions, and another from (low) Openness through RWA and threat perceptions. This dual-route model complements existing dual-route prejudice models (Duckitt, 2005; Ekehammar et al., 2004), incorporating not only subclinical dimensions but a key social psychological construct (intergroup threat) as a proximal prejudice-predictor (Duckitt, 2005; Riek et al., 2006). Recently researchers have called for research exploring individual difference predictors of intergroup threat in light of its importance in fueling prejudice (Riek et al., 2006). Our model clearly illustrates the importance of personality (subclinical and normal-range) and ideology in contributing to threat perceptions.

As a final note, we wish to make clear that we do not consider prejudice a clinical/subclinical “problem” nor prejudiced people to be clinically dysfunctional. Rather, we argue that understanding “prejudiced personalities” benefits by considering a fuller range of personality variation. Incorporating subclinical personality traits, in addition to broader personality factors (especially Openness) and ideology, aids the prediction intergroup threat perceptions and prejudice.

Acknowledgments

Thanks to Mike Ashton for earlier comments. Portions were presented at the Canadian Psychology Association conference (June, 2008). The research was sponsored by a Social Sciences and Humanities Research Council of Canada grant (410-2007-2133).

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