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Personality and Prejudice: Extension to the HEXACO Personality Model

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Abstract

We modelled the associations between the HEXACO dimensions of personality, Social Dominance Orientation (SDO), Right-Wing Authoritarianism (RWA) and prejudice towards dangerous, derogated and dissident groups (N = 454 undergraduates). Consistent with a Big-Five model, low Openness to Experience predicted RWA and therefore dangerous and dissident group prejudice. As predicted, low Emotionality (and Openness) rather than Agreeableness predicted SDO and therefore derogated and dissident group prejudice. Comparison with meta-analytic averages of Big-Five data supported expected similarities and differences in the association of Big-Five and HEXACO models of personality with ideology. Finally, Honesty-Humility simultaneously predicted increases in RWA but decreases in SDO, and thus opposing effects on prejudice. These opposing effects have gone unidentified in research employing Big-Five models of personality structure. Copyright © 2010 John Wiley & Sons, Ltd.

Key words: attitudes; social groups; personality scales and inventories

INTRODUCTION

There has been a resurgence of interest in the personality dimensions that predict prejudice and related constructs in recent years. This charge was led by Ekehammar and Akrami (2003), among others, in their relatively recent work examining the associations between the widely recognized 'Big-Five' dimensions of personality and generalized prejudice. Historically, research had tended to focus on the construct of Authoritarianism, which was initially described as a personality trait or syndrome capturing individual differences in prejudice proneness (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). Prejudice, according to this earlier perspective, was generally viewed as a unidimensional negative or hostile attitude towards multiple groups. This view was consistent with Allport's (1954)

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insight that it was a fairly good bet that someone who expressed negative attitudes towards one group would tend to also express negative attitudes towards a range of other groups at similar levels of intensity.

Our understanding of the individual difference and personality bases of prejudice has progressed considerably since Adorno et al. (1950) and Allport (1954) published their founding works. For a start, the measurement of Authoritarianism has been refined, and is now commonly assessed using the measure of Right-Wing Authoritarianism (RWA) developed by Altemeyer (1996). In addition, authoritarianism is now viewed as an ideological or social attitude rather than a dimension of personality. A second critical social attitude dimension that predicts prejudice independently of RWA, known as Social Dominance Orientation (SDO), has also been identified (Pratto, Sidanius, Stallworth, & Malle, 1994). SDO and RWA are thought to represent expressions of dual ideological motives underlying individual differences in prejudice, and these dual motives are thought to arise partially from differences in personality and temperament (Duckitt, 2001). Thirdly, although as Allport (1954) observed, people who are prejudiced towards one group do tend to be prejudiced towards other groups, this effect appears to be domain specific (Duckitt & Sibley, 2007) and not always necessarily negative or hostile in content (Glick & Fiske, 1996).

Finally, and of direct relevance to the present investigation, research mapping the structure of personality has also progressed dramatically in the last two decades. This has led to the widespread adoption of a Five-Factor or 'Big-Five' model of personality structure (see Goldberg, 1993, for an early review). The provision of this framework has allowed researchers to map the general dispositions that relate to prejudice while moving beyond the assessment of specific or idiosyncratic trait-like measures that tended to characterize the study of individual differences in prejudice in prior decades.

The HEXACO model of personality structure

It has, however, been recently argued that personality is better represented by a six-factor rather than five-factor structure (see Ashton & Lee, 2007). Evidence for a six-factor model of personality structure stems from cross-cultural analyses of the optimal structure of trait descriptions that occur in natural language, which have consistently recovered six rather than five factors. This six-factor model of personality is referred to as the HEXACO (Ashton & Lee, 2007). The HEXACO contains the following dimensions: Honesty-Humility (common adjectives include: sincere and honest versus greedy and pretentious), Emotionality (sentimental and oversensitive versus brave and self-assured), eXtraversion (outgoing and sociable versus shy and quiet), Agreeableness (patient and tolerant versus ill-tempered and quarrelsome), Conscientiousness (organized and disciplined versus negligent and lazy), and Openness to Experience (intellectual and creative versus shallow and unimaginative).

The HEXACO shares certain features with Big-Five models. Extraversion, Conscientiousness and Openness to Experience are operationalized similarly in both models. Ashton and Lee (2007) also emphasized critical differences between the Big-Five and HEXACO models of personality structure: First, the Emotionality dimension of the HEXACO is similar in some respects to Neuroticism but excludes traits relating to anger and includes aspects of sentimentality that have tended to be located in Big-Five Agreeableness. Second, HEXACO Agreeableness excludes sentimentality and focuses on traits relating to patience and tolerance (versus anger). The HEXACO thus tends to

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operationalize Emotionality and Agreeableness as rotational variants of Big-Five Neuroticism and Agreeableness.

Finally, the HEXACO adds a sixth dimension, Honesty-Humility, which contains some elements that are often (imprecisely) represented in Big-Five Agreeableness as well as other previously missed or excluded traits that seem to be optimally modelled as representing an independent dimension. This sixth dimension reflects an orientation towards fairness and sincerity in social relations versus the tendency to manipulate and use people for whatever one can get from them. These differences between the Big-Five and HEXACO models have important implications for understanding the origins of individual differences in prejudice and ideology.

In this paper, we seek to integrate insights from the HEXACO model of personality structure in order to extend Duckitt's (2001) Dual Process Model (DPM) of ideology and prejudice. The DPM emphasizes that SDO and RWA represent distinct *intermediary ideological motives* that explain how and why individual differences in personality and exposure to systemic differences in intergroup competition and danger generate individual differences in prejudice. However, our earlier reasoning regarding the possible mechanisms by which personality predicts RWA and SDO within the DPM was based in construct definitions derived from the Big-Five model (Sibley & Duckitt, 2008); which as Ashton and Lee (2007) have argued may be sub-optimal in terms of representing the complex structure of personality. Our earlier work thus fails to recognize the potential role of Honesty-Humility in the prediction of ideology and prejudice.

The DPM: personality origins of the SDO and RWA

Sibley and Duckitt (2008) theorized that Openness to Experience predicted RWA, and thus indirectly prejudice, because people low in Openness should be more likely to identify with the existing social order as it provides a normative referent for existing social values and the way things should be. People low in Openness should also tend to value clear, unambiguous (and potentially inflexible) moral prescripts and rules describing how the world should operate. Such persons should therefore support the existing social order to the extent that it facilitates these values and provides an explicit and easily comprehensible set of norms and mores for operating within society. Consistent with this perspective, Flynn (2005), for instance, observed that majority group members who are high in Openness were more swayed by stereotype disconfirming information about minority group members. Conversely, those low in Openness to Experience were less influenced by stereotype disconfirming evidence and were more likely to adhere to conventional negative stereotypes of minority groups.

Sibley and Duckitt (2008) argued that Agreeableness should predict SDO, and therefore prejudice, because people low in Agreeableness are more likely to pursue hedonistic goals, and to be relatively ruthless in self-interested pursuits while displaying minimal concern when such goals conflict with the interests or desires of other people. As such, the tough-minded, limited concern for others characteristic of people low in Agreeableness (as defined in Big-Five models) should cause them to view the world as a socially competitive Darwinist jungle in which might is right and winning is everything. In our initial formulations regarding the process by which Agreeableness should produce prejudice, we argued that people low in Agreeableness should also tend to value power, and be sensitive to situations that signal resource-scarcity and the possibility of competition with others (Sibley & Duckitt, 2008). People high in Agreeableness should, in contrast, tend to be more

DOI: 10.1002/per

tender-minded towards others, be less likely to perceive competitive situations as zero-sum, and to generally be less ruthless in competitive situations when attempting to achieve self-interested goals—at least when social norms do not explicitly allow for more negative evaluations of others (Graziano, Bruce, Sheese, & Tobin, 2007; see also Crandall, Eshleman, & O'Brien, 2002, for a general discussion of social norms and prejudice).

As we will return to below, this reasoning seems to refer to a process that within a HEXACO framework would be more appropriately represented by low Honesty-Humility (or possibly low Emotionality) rather than low Agreeableness.

The DPM: derivation of distinct dimensions of prejudice

The DPM proposes that RWA represents a threat-driven motivation for social cohesion and security. SDO represents a competitive-driven orientation for dominance and superiority in intergroup relations. A key implication of the model is that because they arise from different processes, SDO and RWA should in turn predict prejudice for different reasons: RWA should predict prejudice towards groups seen as morally deviant or as threatening ingroup norms and values. SDO should predict prejudice towards groups seen as weak or inferior, or as competing for resources with the ingroup (Duckitt, 2001).

The differential association of SDO and RWA with prejudice towards different social groups is indirectly supported by inspection of studies examining more generalized or broad-bandwidth forms of prejudice. As Duckitt and Sibley (2007) argued, many of these studies have measured prejudice by assessing negative attitudes towards different groups that tend to be low in power and status but that are also seen as threatening the ingroup's norms and values. In a recent study supporting a general unidimensional perspective, Zick, Wolf, Küpper, Davidov, Schmidt, and Heitmeyer (2008), for example, extracted a single-factor representing generalized prejudice from scales assessing *racism*, *xenophobia, Islamophobia, anti-Semitism, homophobia, prejudice towards homeless people, sexism* and *endorsement of precedence rights for the established*. The forms of prejudice included in Zick et al.'s (2008) single factor are, however, all arguably directed towards groups that are perceived as threatening social values and security as well as competing and challenging the ingroup's status and power, and hence should result jointly from threat-based (RWA) and competition-based (SDO) motivations.

Duckitt and Sibley (2007) argued that the DPM should predict clearly distinct domains of prejudice that are differentially predicted by SDO and RWA. To test this idea, they factor analysed affect thermometer ratings of multiple groups and social categories that tend to be targets of negative attitudes. They identified three distinct factors representing different types of groups, negative attitudes towards which were differentially predicted by SDO and RWA. These three group domains were labelled *dangerous groups*, *derogated groups* and *dissident groups*. Consistent with predictions, prejudice towards dangerous or socially threatening groups (such as 'drug dealers' and 'people who behave in immoral ways') was predicted by RWA *but not SDO*. Prejudice towards derogated groups that tend to be socially subordinate and seen as legitimately low in social power and status (such as 'unemployed people' and 'obese people') was predicted by SDO *but not RWA*. Prejudice towards *dissident* groups (such as 'protestors' and 'feminists') was predicted jointly by SDO and RWA. These results have also been replicated in recent longitudinal research, which has shown that the differential effects of SDO and RWA hold longitudinally, thus providing promising evidence for the causal roles of SDO and RWA in predicting these different forms of prejudice (Asbrock, Sibley, & Duckitt, in press).

DOI: 10.1002/per

The social groups and categories examined by Duckitt and Sibley (2007) were selected on the basis of their typicality for the stigma of inferiority (derogated groups), threat (dangerous groups) or dissidence. This procedure ensured that the content of each factor represented negative (versus positive) attitudes towards distinct, and theoretically derived, domains of social groups. Some of the groups used to represent these factors might seem rather odd targets of prejudice on a first glance, as they are not typically examined as targets of prejudice in the traditional sense. In particular, the dangerous group factor tends to assess ratings of groups that it is often socially acceptable to dislike, such as drug dealers and gang members. In this regard, ratings of these groups may be seen as reflecting negative attitudes towards a specific cluster of social categories, rather than prejudice as it tends to be traditionally studied (where the assumption is perhaps more likely to be that outgroup dislike is not socially acceptable and therefore constitutes a social problem). Duckitt and Sibley (2007) deliberately excluded common ethnic groups that tend to be recipients of prejudice in the more traditional sense (such as attitudes towards Maori in the New Zealand context) from their generalized prejudice scale precisely because prejudice towards ethnic groups tends to be driven by a combination of threat (RWA-based) and perceived competitiveness (SDO-based). Because of their mixed-motivational underpinnings, negative attitudes towards groups seen as both competitive and threatening (e.g. attitudes towards Maori in New Zealand) should tend to cross-load on the different dimensions of prejudice identified by Duckitt and Sibley (2007).

The DPM: implications derived from the HEXACO

How might the HEXACO model of personality structure extend our understanding of the DPM? And in particular, the personality processes that produce SDO and RWA, and hence prejudice towards different group domains? Research examining the relations between the HEXACO model of personality structure and ideology and social values provides promising initial evidence for the unique effects of Honesty-Humility in the prediction of social attitudes and ideology (Lee, Ashton, Pozzebon, Visser, Bourdage, & Ogunfowora, 2009; Lee, Ashton, Ogunfowora, Bourdage, & Shin, in press).

Recent research by Lee et al. (2009), for instance, suggests that HEXACO and Big-Five models of personality differ in important ways in their prediction of individual differences in Schwartz's (1992) model of values. Lee et al. (2009) reported, in two large samples, that valuing Self-Transcendence (versus Self-Enhancement) was strongly positively associated with Honesty-Humility (rs = .60 and .48), and also moderately positively associated with Agreeableness (rs = .34 and .28) and Openness to Experience (rs = .30 and .24). Self-Transcendence (versus Self-Enhancement) reflects values of humanism and social equality versus power and autonomy, and seems similar in this regard to the social or ideological attitudes expressed by low versus high SDO (Duckitt, 2001). The strong association of Honesty-Humility with this value dimension is particularly interesting given that Sibley and Duckitt's (2008) meta-analysis reported that low Agreeableness was the primary personality trait associated with SDO. Similarly, previous research examining the associations between the Big-Five and Schwartz (1992) values also implicates Agreeableness as the primary dimension of personality in this value domain (Roccas, Sagiv, Schwartz, & Knafo, 2002).

Perhaps the competitive-driven motivations for group dominance (SDO), and resulting expressions of prejudice towards groups viewed as derogated or dissident, might be predicted by Honesty-Humility, in addition to, or possibly in place of, the effect of

DOI: 10.1002/per

Agreeableness. Lee et al. (2009) also reported that Emotionality was moderately positively associated with valuing Self-Transcendence ($rs = .20$ and .20), which differs from the extremely weak near-null association between Big-Five Neuroticism and SDO observed by Sibley and Duckitt (2008). This suggests that aspects relating to tenderness and sentimentality included in the Emotionality dimension of the HEXACO may cause this dimension of personality, rather than HEXACO Agreeableness, to be associated with competitive-orientated motivations for group dominance and power indicative of SDO.

The other major dimension of social values, Openness to Change (versus Conservatism) was most strongly predicted by high Openness to Experience ($rs = .37$ and .56) in the two samples examined by Lee et al. (2009). The value dimension of Openness to Change versus Conservatism generally reflects support for values of novelty and social liberalism versus support for tradition and conformity, which Duckitt (2001) argued is similar to the values reflected by low versus high RWA. The association between Openness to Experience and valuing Openness to Change is thus highly consistent with the meta-analysis of samples collated by Sibley and Duckitt (2008). This consistency is to be expected given that HEXACO and Big-Five models of personality structure provide similar operationalizations of Openness to Experience and Conscientiousness. The data reported by Lee et al. (2009, Table 2) also raise another important and possibly unidentified association between personality and valuing Openness to Change: Honesty-Humility was negatively associated with Openness to Change values; this was, however, only apparent in the second sample they examined ($rs = -.04$ and $-.26$).

Opposing effects of honesty-humility in the DPM

The data reported by Lee et al. (2009) suggest that Honesty-Humility has a negative association with values of Openness to Change (which seems consistent with low RWA), but a positive association with values of Self-Transcendence (which seems consistent with low SDO). Lee et al. (in press) also reported bivariate correlations between Honesty-Humility and SDO and RWA that seem consistent with this differential pattern (although their results were less clear with regard to RWA, which was significantly positively correlated with Honesty-Humility in only one of three samples). Research by Hodson, Hogg, and MacInnis (2009) examining the 'dark triad' of personality (narcissism, Machiavellianism and psychopathy) also seems consistent with a differential pattern of effects (Lee and Ashton, 2005, demonstrated that the 'dark triad' are all very closely related to low Honesty-Humility). Hodson et al. (2009) tested a Structural Equation Model (SEM) in which the 'dark triad' predicted SDO, and thus indirectly prejudice, whereas low Openness predicted RWA, and thus indirectly prejudice. Although not included in their model, Hodson et al. (2009) also noted that 'dark triad' personality variables negatively predicted RWA, which is entirely consistent with what would be expected given that the 'dark triad' seems to reflect low Honesty-Humility. Taken together, research by Lee et al. (2009, in press) and Hodson et al. (2009) raise the interesting possibility that Honesty-Humility might exert opposing effects on generalized prejudice by heightening the motivation for collective security-cohesion (RWA) while simultaneously lowering the motivation for group-based dominance and power (SDO).

Why might these opposing effects of Honesty-Humility on SDO and RWA occur? Ashton and Lee (2007, p. 156) defined Honesty-Humility as representing 'the tendency to be fair and genuine in dealings with others, in the sense of cooperating with others even when one might exploit them without suffering retaliation'. Honesty-Humility, in other

DOI: 10.1002/per

words, reflects stable individual differences in the way people respond when the opportunity to exploit others, and possibly other groups, presents itself. In their analysis of the evolutionary bases and adaptive benefits of a high versus low level of Honesty-Humility, Ashton and Lee (2007, p. 156) reasoned that individuals high in Honesty-Humility should increase their potential for gains from cooperation (through mutual help and nonaggression). We argue that this should be most likely to occur with *ingroup members*. Depending upon the social and ecological context, a high level of Honesty-Humility should also increase the risk that one would lose out on potential gains that might be had by cheating or exploiting others, *including outgroups*.

A critical insight of this cost-benefit analysis is that the extent to which Honesty-Humility is adaptive should therefore depend upon the social environment experienced by the individual (Ashton & Lee, 2007). High levels of Honesty-Humility should have evolved as this trait was adaptive when group norms consistently allowed effective policing of those that cheat—when social conditions meant that reputation mattered in the long term. High levels of Honesty-Humility should, however, have been less adaptive when group structure was relatively transient across generations, social norms did not allow or promote effective policing of cheaters, or there was a wide enough pool of people that the long-term effects of reputation, and risk of reprisal, were minimal.

This analysis has important implications for a DPM perspective because it suggests that high (versus low) Honesty-Humility should have been most adaptive when social cohesion was high, and the ingroup was most likely to band together and consistently and strictly follow prescribed norms, values and mores. According to the DPM, this would be most likely to occur in times where the social world is seen as dangerous and threatening, which should result in RWA. In such cases, cheaters should be more likely to be caught because increased social cohesion would presumably increase the ability to police group members. Conversely, those low in Honesty-Humility might garner additional rewards from exploiting others in situations of high competition or resource scarcity. The DPM postulates that these latter conditions should generate perceptions of the social world as a competitive or dog-eat-dog place, which would seem to suit those willing to exploit others.

Our view is that Honesty-Humility should exert opposing effects on competitive-driven motivations for group dominance and the gathering of power and status (SDO) and on threat-driven motivations for social cohesion and collective security (RWA), and hence opposing effects on different dimensions of prejudice. On the one hand, people high in Honesty-Humility should tend to prefer socially cohesive groups with fairly strong norms regulating ingroup behaviour, because in such conditions, a high level of this trait should be most adaptive *for the individual*. Indeed, Lee et al. (2009) reported that people tended to cluster with others similar to themselves in Honesty-Humility and Openness to Experience, which we argue are the two critical personality dimensions predicting RWA. Honesty-Humility should therefore correlate positively with RWA. People do not cluster with others similar to themselves in terms of other dimensions of personality. On the other hand, a low level of Honesty-Humility should cause people to view the world as a competitive place, in which the manipulation and exploitation of others is acceptable if one can get away with it. Honesty-Humility should therefore correlate negatively with SDO.

Thus, specific ecological conditions should shape individual variation in the evolution of this trait, as it should other personality traits within our species—a process Penke, Denissen, and Miller (2007) describe in terms of individual reaction norms of genotypes across environments. For a given individual, however, individual differences in Honesty-Humility should be fairly stable, and we argue, should shape the way the individual

DOI: 10.1002/per

interprets, encodes and selectively processes information about elements of their social world relevant to competition versus cooperation and danger versus safety.

This reasoning has the interesting and what might seem to be initially counterintuitive implication that Honesty-Humility will tend to be uncorrelated (or only very weakly correlated) with many measures of prejudice at the bivariate level. This is expected because the kind of minority or stigmatized groups that are typically studied as targets of prejudice tend to be low in power and status, and because they are ethnically or culturally different, are also seen as threatening the values and norms of the majority. As Duckitt and Sibley (2007) argued, both RWA and SDO should predict prejudice against such groups, though for very different reasons. Given that Honesty-Humility should predict *increases* in RWA, it should consequently indirectly predict prejudice towards dangerous and dissident groups. Simultaneously, given that Honesty-Humility should predict *decreases* in SDO, it should consequently predict more tolerant attitudes towards groups that tend to be viewed in society as weak or inferior (derogated groups).

Overview and aims of the present study

We examine the following implications of an integrated HEXACO and DPM perspective of ideology and prejudice.

First, the HEXACO locates Agreeableness and Emotionality along slightly different axes than do Big-Five models of personality structure. This suggests that when using the HEXACO, the effect of Agreeableness on SDO, and therefore prejudice, may largely shift to Emotionality. This shift would be consistent with the reasoning outlined by Sibley and Duckitt (2008) for the effect of Big-Five Agreeableness, given that the HEXACO locates elements related to being tender and empathic of others' suffering versus tough-minded or hard-hearted within the Emotionality dimension.

Second, the HEXACO proposes a sixth dimension of personality: Honesty-Humility. This dimension contains some elements that are often partially represented in Agreeableness and also other specific traits missed by the Big-Five. This therefore suggests that in addition to the effect of Emotionality, the correlation of Agreeableness with SDO and hence prejudice, as observed in previous studies, might partially result from Honesty-Humility.

Third, our review of Honesty-Humility suggests that this dimension of personality should exert dual opposing effects on prejudice by both heightening the motivation for collective security-cohesion (RWA) while simultaneously lowering the motivation for group-based dominance and power (SDO).

Fourth, given that the HEXACO operationalizes Openness to Experience and Conscientiousness along very similar lines to Big-Five models of personality structure, we expected the HEXACO to replicate previous research using the Big-Five in this regard. Openness to Experience should be moderately negatively correlated with RWA, and thus indirectly with prejudice; and Conscientiousness should be weakly positively correlated with RWA, and therefore possibly with prejudice. Consistent with Sibley and Duckitt (2008) we also expected that Openness to Experience would be weakly negatively related to SDO.

We tested these predictions in two ways: One, via comparison of effects observed in our current sample using the HEXACO with average effect sizes observed in prior Big-Five samples, and second by testing a SEM extending the DPM to incorporate the HEXACO personality dimensions as distal predictors of prejudice towards different group domains.

DOI: 10.1002/per

The meta-analysis of Big-Five associations with SDO, RWA and generalized prejudice recently compiled by Sibley and Duckitt (2008) presented a novel opportunity to compare and contrast the patterns observed using the HEXACO with sample averages observed in Big-Five samples. We used the weighted mean effect sizes and standard errors reported by Sibley and Duckitt (2008) to calculate single-sample *z*-tests assessing the extent to which the associations observed here using the HEXACO differed from average effect sizes observed in studies using the Big-Five. This analysis therefore provided a novel empirical test of the predicted similarities and differences between the two models of personality structure in their relation to RWA and SDO.

We extended this comparison between the HEXACO and prior Big-Five research by testing a SEM of the predicted effects of the HEXACO dimensions of personality on individual differences in SDO and RWA; and the effects of SDO and RWA, in turn, on prejudice towards derogated, dangerous and dissident groups. We modelled SDO as jointly resulting from three dimensions of personality: low Emotionality, low Openness to Experience and low Honesty-Humility. We modelled RWA as jointly resulting from low Openness to Experience, high Conscientiousness and a high level of Honesty-Humility. We hypothesized that SDO, in turn, would predict prejudice towards derogated groups, whereas RWA would predict prejudice towards dangerous groups. We expected that SDO and RWA would jointly predict prejudice towards dissident groups, as this group domain contains elements relating to both moral deviance and threat but also often dissent relating to challenges to social inequality.

A central tenet of the DPM is that SDO and RWA should act as the intermediary mechanism through which personality and situational factors produce individual differences in prejudice. On this basis, we therefore predicted that low Emotionality would indirectly predict prejudice towards derogated and dissident groups via its effect on SDO. Conscientiousness should predict prejudice towards dangerous and dissident groups via its association with RWA (although this effect has failed to be consistently detected in prior Big-Five research). Low Openness to Experience should indirectly predict generalized prejudice towards all three group domains, via its association with RWA on the one hand, and SDO on the other.

Finally, we predicted that Honesty-Humility would exert opposing effects on prejudice in different domains via a positive association with RWA and negative association with SDO. On the one hand, Honesty-Humility should predict increased prejudice towards dangerous groups mediated by RWA. On the other hand, Honesty-Humility should predict increased tolerance of derogated groups via its negative association with SDO. Duckitt and Sibley (2007) further reported that RWA was more strongly correlated with dissident group prejudice than was SDO. We expected to observe a similar difference in the effect sizes of SDO and RWA in the current model, and therefore a weak positive effect of Honesty-Humility on dissident group prejudice.

METHOD

Participants

Participants were 454 (140 men, 314 women) undergraduate students (233 New Zealand European, 13 Maori, 18 Pacific Nations, 23 European, 90 Asian (primarily Chinese), 24 Indian, 53 other; $M_{age} = 19.74$, $SD_{age} = 4.23$).

DOI: 10.1002/per

Materials

Personality was assessed using the 60-item HEXACO-PI-R (Ashton & Lee, 2009). SDO and RWA were assessed using balanced eight-item scales. The shortened SDO scale included items 2, 3, 5, 7, 9, 10, 11 and 12 from the original 16-item measure (see Sidanius & Pratto, 1999, p. 67). The shortened RWA scale included items 8, 12, 14, 15, 22, 26, 27 and 34 from the original 30-item measure (see Altemeyer, 1996, pp. 12–15). Items were rated from 1 (strongly disagree) to 7 (strongly agree) and averaged to give scale scores.

Prejudice was assessed using the 21-item Asbrock et al. (in press) revision of Duckitt and Sibley's (2007) three-dimensional measure. Participants rated their feelings of warmth-coldness towards social categories representing dangerous groups (e.g. 'people who make our society dangerous for others' and 'violent criminals'), derogated groups (e.g. 'physically unattractive people' and 'unemployed people') and dissident groups (e.g. 'protestors' and 'feminists'). Items were rated from 1 (feel very warm towards this group) to 7 (feel very cold towards this group) and averaged to give scale scores. Asbrock et al. (in press) presented extensive analyses supporting the three-factor structure of this measure using Exploratory and Confirmatory Factor Analysis.

Descriptive statistics and internal reliabilities for all scales are presented in Table 1. All scales evidenced acceptable internal reliability (Cronbach's αs $> .70$). Expectation maximization was used to estimate isolated missing values.

RESULTS

Bivariate correlations

Correlations between scale means are reported in Table 1. SDO was moderately negatively associated with Emotionality ($r = -.22$) and Honesty-Humility ($r = -.24$). SDO was not significantly associated with Agreeableness ($r = -.08$). RWA was moderately negatively associated with Openness to Experience ($r = -.26$), and positively associated with Honesty-Humility ($r = .20$). RWA was not significantly associated with Conscientiousness ($r = -.03$). With the exception of the null association between Conscientiousness and RWA, these results were as expected. These findings support one of the key predictions of our model, that Honesty-Humility would correlate with SDO and RWA in opposing directions, despite the fact that SDO and RWA were significantly positively associated ($r = .20$). Honesty-Humility was also *negatively* associated with prejudice towards derogated groups ($r = -.26$), but *positively* associated with prejudice towards dangerous groups ($r = .10$).

Comparison of the HEXACO with prior Big-Five meta-analytic averages

Weighted mean effect sizes and standard errors (assuming a random-effect model) for the bivariate association between each Big-Five dimension of personality with SDO and RWA based on the meta-analysis conducted by Sibley and Duckitt (2008) are presented in Table 2. The use of a random effects model recognizes unmodelled sources of variation in the estimation of weighted mean effect sizes (and standard errors), such as that resulting from differences in the inventory used to assess the Big-Five. Whereas Sibley and Duckitt (2008) reported weighted mean effect sizes converted back to *r*-values, we report these associations using Fisherized *z*-scores (denoted z_{rm}) so as to allow single-sample

DOI: 10.1002/per

Table 1. Descriptive statistics and bivariate correlations between the HEXACO dimensions of personality, SDO, RWA and the three dimensions of generalized prejudice

Scale	1	2	3	4	5	6	7	8	9	10	11
1. Honesty-Humility											
2. Emotionality	.11*										
3. eXtraversion	.16*	−.10*									
4. Agreeableness	.29*	−.13*	.19*								
5. Conscientiousness	.22*	.13*	.23*	.01							
6. Openness to Experience	.08	.01	.14*	.04	.03						
7. Social Dominance Orientation (SDO)	−.24*	−.22*	−.10*	−.08	−.14*	−.14*					
8. Right-Wing Authoritarianism (RWA)	.20*	.10*	−.03	.15*	−.03	−.26*	.20*				
9. Dangerous groups prejudice	.10*	.27*	.07	−.01	.20*	.00	−.12*	.14*			
10. Derogated groups prejudice	−.26*	−.03	−.06	−.18*	−.02	−.16*	.30*	−.09	.18*		
11. Dissident groups prejudice	.07	.02	−.01	.13*	.02	−.32*	.25*	.50*	.25*	.35*	
M	4.44	4.61	4.65	4.21	4.50	4.93	2.24	3.27	6.18	4.03	4.05
SD	.95	.93	1.01	.93	.95	.95	.86	1.03	.72	.79	.83
α	.72	.74	.82	.74	.79	.76	.78	.74	.80	.77	.71
Skewness	−.11	−.19	−.34	−.19	−.19	−.40	.53	.35	−1.34	−.03	−.03
Kurtosis	.03	−.05	.06	−.10	−.45	−.32	−.27	−.13	2.08	.93	.47

Note: Scale scores ranged from 1 to 7. Higher values represent increased levels of each construct. $n = 454$.
*$p < .05$.

Eur. J. Pers. **24**: 515–534 (2010)
DOI: 10.1002/per

Table 2. Comparison and of the average effects sizes for associations of personality with SDO and RWA in studies using the Big-Five and the current study employing the HEXACO model of personality structure.

	Meta-analysis of associations with Big-Five (from Sibley & Duckitt, 2008)						Current sample (HEXACO)	Difference from Big-Five weighted mean	
			95% CI						
	Weighted mean effect size (z_{rm})	*SE*	Lower	Upper	*k*	*N*	Single-sample effect size (z_r)	Difference ($z_{rm}-z_r$)	*z*-test of difference
Association with SDO									
Emotionality	−.019	.016	−.050	.013	32	11 730	−.227	**−.208**	**−13.00***
eXtraversion	−.038	.014	−.067	−.010	33	11 832	−.096	−.058	−4.14*
Agreeableness	−.318	.017	−.351	−.285	31	11 669	−.077	**.241**	**14.18***
Conscientiousness	−.042	.016	−.073	−.011	31	11 669	−.144	−.102	−6.38*
Openness to Experience	−.209	.020	−.249	−.170	30	11 319	−.140	.069	3.45*
Association with RWA									
Emotionality	.019	.011	−.003	.042	44	15 259	.095	.076	6.91*
eXtraversion	.008	.014	−.019	.036	46	15 545	−.031	−.039	−2.79*
Agreeableness	−.008	.015	−.038	.022	42	14 301	.151	**.159**	**10.60***
Conscientiousness	.153	.018	.118	.188	43	14 383	.030	−.123	−6.83*
Openness to Experience	−.386	.024	−.434	−.339	48	15 570	−.269	.117	4.88*

Note: Weighted mean effect sizes (z_{rm}) were calculated assuming a random-effects model and are reproduced from the data reported in Table 3 of Sibley and Duckitt (2008). *SE* refers to the standard error of effect sizes, assuming a random-effects model. *k* and *N* refer respectively to the number of independent samples and total participants these estimates are based on. $z_{rm}-z_r$ refers to the difference of the effect sizes observed in the current HEXACO study from the weighted mean effect size observed in Sibley and Duckitt's (2008) meta-analysis. Differences greater than .15 units are reported in bold.

*$p < .05$.

Eur. J. Pers. **24**: 515–534 (2010)
DOI: 10.1002/per

significance tests with the z-scored effect sizes (z_r) reported in the current study. This was necessary because r-values are not normally distributed. Having calculated appropriate weighted effect sizes and associated error terms, single-sample tests comparing our observed effect sizes with the mean effect sizes observed by Sibley and Duckitt (2008) were conducted using the standard formula: $z = (z_{rm} - z_r)/se$ of z_{rm}, assuming a z rather than t distribution.

The difference between our HEXACO data and the weighted mean effect sizes observed by Sibley and Duckitt (2008) in their meta-analysis of the Big-Five ($z_{rm} - z_r$) are reported in the right-hand columns of Table 2. All effect sizes observed using the HEXACO differed from the mean effect sizes for analyses using the Big-Five. This is unsurprising given the extremely large sample sizes used to estimate the (correspondingly small) weighted standard errors of the mean. For ease of comparison, we present effect sizes differing by more than .15 z-units in bold.

As expected, the most dramatic differences between effect sizes observed using the HEXACO and the averages observed using the Big-Five were those of Agreeableness and Emotionality (or Neuroticism). As shown in Table 2, the association between Agreeableness and SDO was more substantial in studies using Big-Five weighted ($z_{rm} = -.32$) than in our HEXACO sample ($z_r = -.08$). This difference was highly significant ($z = -14.18$, $p < .001$). The opposite effect occurred when comparing the association between Emotionality and SDO, which was trivial in studies using the Big-Five ($z_{rm} = -.02$), but small-to-moderate in our HEXACO sample ($z_r = -.21$). This difference was also highly significant ($z = -13.00$, $p < .001$). Finally, HEXACO Agreeableness ($z_r = .15$) was more strongly positively associated with RWA than the effect observed in Big-Five samples ($z_{rm} = -.01$; $z = 10.60$, $p < .001$).

Testing a DPM of ideology and prejudice

We tested a SEM model of the hypothesized structure of associations between HEXACO personality, SDO and RWA, and different prejudice dimensions. In order to construct latent variables, the items contained in each scale were parceled to form three manifest indicators. Item parcels were randomly selected, but where possible contained a balanced number of pro and contrait items. In all analyses, the three manifest indicators created for a given scale were allowed to relate solely to the latent variable assessing that particular construct. Note that paths from latent to manifest indicators are excluded from Figure 1 for ease of interpretation (paths from each latent variable to its manifest indicators were all highly significant, zs > 12.00). The estimation of latent variables is superior to estimates based simply on scale means because it controls for measurement error (between parcels) and thus provides more precise estimates of the associations between constructs.

When evaluating model fit, Hu and Bentler (1999) suggested that reasonably well-fitting models should generally have a standardized Root Mean Square Residual (sRMR) of below .080, a Root Mean Square Error of Approximation (RMSEA) of below .060, and values of above .95 for the population-corrected Goodness of Fit Index (pGFI), Non-Normed Fit Index (NNFI), Comparative Fit Index (CFI) and Incremental Fit Index (IFI). We first examined the measurement model, which took the form of a Confirmatory Factor Analysis in which each of the 11 latent variables were (a) allowed to freely correlate with one another and (b) were each allowed to relate only to their three hypothesized manifest indicators (item parcels). This measurement model provided a reasonable fit according to the rules-of-thumb outlined by Hu and Bentler (1999), with fit indices as follows: χ^2 (440;

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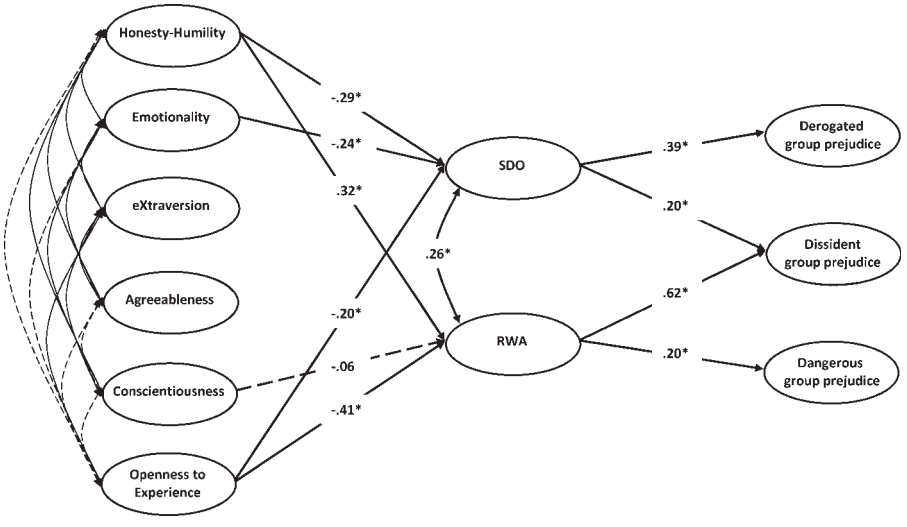

Figure 1. Structural equation model testing the predicted effects of different HEXACO dimensions of personality on SDO and RWA, which in turn are modelled as predicting different aspects of generalized prejudice. Paths from latent to manifest indicators are not depicted for ease of presentation. Dashed lines indicate non-significant paths. * $p < .05$.

$n = 454) = 866.17$; $\chi^2/\mathrm{df} = 1.97$; sRMR = .052; RMSEA = .046; NNFI = .94; CFI = .95; population GFI = .95; IFI = .95.

We next tested a model allowing only the hypothesized associations between latent variables (shown in Figure 1). The hypothesized model performed reasonably, with fit indices falling within or closely approaching Hu and Bentler's (1999) rules of thumb: χ^2 (469; $n = 454) = 1125.71$; $\chi^2/\mathrm{df} = 2.40$; sRMR = .077; RMSEA = .056; NNFI = .91; CFI = .92; population GFI = .92; IFI = .92. The model performed fairly well in terms of the RMSEA and sRMR, with both of these values falling within the range outlined by Hu and Bentler (1999).

As shown in Figure 1, the hypothesized effects were significant and in the expected direction except for that of Conscientiousness on RWA (represented by a dashed line). Emotionality ($\beta = -.24$, $z = -4.36$, $p < .01$), Openness to Experience ($\beta = -.20$, $z = -3.36$, $p < .01$) and Honesty-Humility ($\beta = -.29$, $z = -5.06$, $p < .01$) all negatively predicted SDO. Importantly, and consistent with our predictions, Agreeableness did not predict SDO when this pathway was included in a revised model ($\beta = -.07$, $z = -1.17$, $p = .24$). Moreover, the inclusion of Agreeableness did not alter any other paths in the hypothesized model. Openness to Experience negatively predicted RWA ($\beta = -.41$, $z = -6.90$, $p < .01$), whereas Honesty-Humility positively predicted RWA ($\beta = .32$, $z = 5.38$, $p < .01$). Unexpectedly, Conscientiousness did not significantly predict RWA ($\beta = -.06$, $z = -1.17$, $p = .24$).

The effects of SDO and RWA on the different dimensions of prejudice were also as expected. SDO predicted prejudice towards derogated groups ($\beta = .39$, $z = 6.39$, $p < .01$), RWA predicted prejudice towards dangerous groups ($\beta = .20$, $z = 3.42$, $p < .01$), and SDO ($\beta = .20$, $z = 3.75$, $p < .01$) and RWA ($\beta = .62$, $z = 9.03$, $p < .01$) both predicted prejudice towards dissident groups.

The HEXACO dimensions of personality were also indirectly associated with prejudice in the expected manner (with the exception of Conscientiousness). Low Emotionality

DOI: 10.1002/per

exerted a significant indirect effect on prejudice towards both derogated ($\beta = -.09$, $z = -3.70$, $p < .01$) and dissident ($\beta = -.05$, $z = -2.88$, $p < .01$) groups via SDO. Low Openness to Experience exerted a significant indirect effect on dangerous group prejudice via RWA ($\beta = -.08$, $z = -3.15$, $p < .01$), a significant indirect effect on derogated group prejudice via SDO ($\beta = -.08$, $z = -3.22$, $p < .01$), and an indirect effect on dissident group prejudice via its dual effects on both SDO and RWA ($\beta = -.30$, $z = -6.37$, $p < .01$). Conscientiousness was not significantly indirectly related to dangerous ($\beta = -.01$, $z = -1.11$, $p = .27$) or dissident group prejudice ($\beta = -.04$, $z = -1.16$, $p = .25$), which is unsurprising as this dimension of personality was not significantly related to the proposed mediator, RWA.

The predicted opposing indirect effects of Honesty-Humility on different domains of generalized prejudice were also observed. Honesty-Humility exerted a significant *positive* indirect effect on prejudice towards dangerous groups which occurred via RWA ($\beta = .06$, $z = 2.95$, $p = .01$). Simultaneously, Honesty-Humility exerted a significant *negative* indirect effect on prejudice towards derogated groups which occurred via SDO ($\beta = -.11$, $z = 4.09$, $p < .01$). Honesty-Humility exerted a significant positive indirect effect on prejudice towards dangerous groups ($\beta = .14$, $z = 3.09$, $p < .01$), which reflects the sum effect occurring via SDO and RWA on this dimension of prejudice.

DISCUSSION

This study integrated the HEXACO model of personality structure and the Dual Process Motivational Model of ideology and prejudice. We compared personality associations with SDO and RWA for the five dimensions of personality that were similar in both the Big-Five and HEXACO models, that is the 'EXACO' portion of the model. As expected, the associations of HEXACO Openness to Experience, Conscientiousness and Extraversion with SDO and RWA diverged only minimally from mean effect sizes observed in Big-Five samples. However, the Agreeableness dimension of the HEXACO diverged considerably; displaying a weaker association with SDO and a stronger association with RWA than that observed in Big-Five samples. Emotionality also diverged considerably, being more strongly associated with SDO than was Big-Five Neuroticism. These similarities and differences are consistent with Ashton and Lee's (2007) argument that HEXACO Agreeableness and Emotionality represent rotational variants of their Big-Five counterparts. This difference in the location of these axes results in systematic differences in the extent to which Agreeableness and Emotionality relate to ideology and prejudice.

We extended this comparative analysis by testing a model incorporating the HEXACO dimensions of personality as distal predictors of prejudice towards different group domains within the DPM. This analysis used cross-sectional data to test a model of the inferred causal pattern of associations between constructs. Our model therefore does not demonstrate causal relations in the manner which a longitudinal or experimental design might achieve, but it does nevertheless provide evidence that the pattern of associations matches that which would be expected to occur assuming an underlying causal set of relations occurring over some previous timeframe.

We modelled SDO as deriving from the combination of three personality dimensions: low Emotionality, low Honesty-Humility and (weakly) from low Openness to Experience. We modelled RWA, in contrast, as deriving from low Openness to Experience, high levels of Honesty-Humility and weakly from high Conscientiousness. Our model supported these

DOI: 10.1002/per

predicted paths, with the exception of Conscientiousness, which was unrelated to RWA. We modelled SDO and RWA, in turn, as differentially predicting prejudice in different domains. Consistent with Duckitt and Sibley (2007), SDO predicted prejudice towards derogated groups, RWA predicted prejudice towards dangerous groups, and SDO and RWA jointly predicted prejudice towards dissident groups.

Emotionality

As expected, low Emotionality indirectly predicted prejudice towards derogated groups (e.g. physically unattractive people, obese people and mentally handicapped people) mediated by SDO. Low Emotionality also indirectly predicted prejudice towards dissident groups, also mediated by SDO. These findings suggest that low Emotionality predicts prejudice towards groups that tend to be seen as weak, inferior or as deviant or different, which we theorize should occur because elements of tough-minded limited concern for others evidenced by people low in Emotionality causes them be less tolerant of people they view as weaker than, or as competing with, them.

The process indexed by low Emotionality in the HEXACO seems to map directly onto that originally identified for the tough-mindedness dimension in the original formulation of the DPM (Duckitt, 2001). The DPM originally stated that tough-mindedness should cause people to view the social world as a dog-eat-dog place where the strong prosper and there is no place for the weak, which in turn produces a motivation for group-based dominance (SDO) and hence prejudice and discrimination towards groups seen as weak and inferior or as trying to compete with one's reference or ingroup. Ashton and Lee (2007) argued that Emotionality seems to represent kin altruism, which would be beneficial because it should promote survival of one's kin, but carries potential costs associated with increased risks to self (see also Ashton, Paunonen, Helmes, & Jackson, 1998). This definition does not, however, immediately fit the tough-minded, low Emotionality, process specified by the DPM. Perhaps Ashton and Lee's (2007) definition might be revised to reflect not only kin altruism, but also more broadly, altruism directed towards wider kin networks and generalized to ingroup members overall. A high level of Emotionality might therefore engender lessened motivations for dominance and increased empathy towards derogated groups (e.g. obese people), who could easily form part of the broader ingroup, even if they are not necessarily kin. Perhaps Emotionality evidences an association with this domain of prejudice precisely because such groups tend to be discriminated against by other individuals low in Emotionality. This would engender empathy towards disadvantaged members of the wider social group or society in situations where they are seen as not being able to compete or as not threatening or being able to threaten one's own social standing or status, or that of the more distinct sub-groups that individuals high in Emotionality identify as belonging to.

Openness to experience

As expected, low Openness to Experience indirectly predicted prejudice towards dangerous groups mediated by RWA, prejudice towards derogated groups mediated by SDO, and prejudice towards dissident groups jointly mediated by RWA and SDO. Ashton and Lee (2007) argued that a high level of Openness to Experience reflected individual-level variation in the tendency to expend energy pursuing rewards generated by novel ideas or ways of doing things. As Ashton and Lee (2007) emphasized, a high level of Openness to

DOI: 10.1002/per

Experience should have been beneficial for our ancestors to the extent that it resulted in material and social gains (resulting from discovery) for the individual and their group. On the other hand, a high level of Openness to Experience would have caused the individual to expend time and energy, and increased their exposure to risks from the social and natural environment.

The extent to which high Openness to Experience was adaptive should have therefore depended upon the ecological conditions experienced by the individual (Ashton & Lee, 2007). When risk and danger were low and there were novel gains to be had, people high in Openness to Experience should have prospered. However, when risk and danger were high, and the potential for novel gains was low, people low in Openness to Experience may have been relatively better off, evolutionarily speaking. It would therefore seem to make sense that individuals' levels of Openness to Experience should shape their tendency to chronically perceive environments as being more or less conducive to novelty and risk, which should promote RWA, and possibly to a lesser extent SDO, and hence increase prejudice towards groups seen as dangerous, dissident and deviant because in all three cases these group domains represent 'the others.'

Consistent with this reasoning, the DPM states that people low in Openness to Experience should tend to be more sensitive to threats, both realistic and symbolic, to the existing social order and should consequently be more likely to perceive outgroups that espouse values different to their own as threatening ingroup values and norms (Sibley & Duckitt, 2008, 2010). People high in Openness to Experience, in contrast, should be more accepting of alternative points of view and, as Flynn (2005) reported, should be more open to information that is inconsistent with existing normative beliefs regarding outgroup members. Such persons should therefore be less likely to perceive alternative values, ideologies and ways of living as threatening the existing social order. Thus, a low level of Openness to Experience should be most strongly predictive of prejudice towards groups seen as potentially dangerous (mediated by RWA) because such groups would be seen as most likely to represent a risk to the individual and ingroup.

Honesty-humility: A double-edged sword

The most interesting finding to emerge from our integration of the HEXACO and DPM was the identification of opposing effects of Honesty-Humility on (increased) RWA and (decreased) SDO. Honesty-Humility predicted increased prejudice towards dangerous groups resulting from heightened RWA, and decreased prejudice towards derogated groups mediated by lowered SDO. Ashton and Lee (2007) interpreted the Honesty-Humility dimension of personality as reflecting a stable individual difference in the way people respond when the opportunity presents itself to exploit others. Extending this idea, we argue that a low level of Honesty-Humility should be highly conducive to perceiving the world as a dog-eat-dog place where if one has the power to take from others, then one is justified in doing so; which the DPM states should in turn heighten SDO. Conversely a high level of Honesty-Humility should engender perceptions of the world as a stable and fair place, perhaps reminiscent of just-world beliefs, in which the gains from mutual cooperation are seen to outweigh the possible gains from the exploitation of other people, and the exploitation of outgroups. We predicted and found good support for the hypothesis that Honesty-Humility should therefore be negatively correlated with SDO, and in turn, predict increased tolerance towards groups that are seen as weak or disadvantaged, and therefore ripe for exploitation.

DOI: 10.1002/per

Honesty-Humility is, however, a double-edged sword. A high level of Honesty-Humility predicted increased prejudice towards groups viewed as dangerous, and also more weakly prejudice towards those viewed as dissident or as criticizing ingroup authority and norms. This occurred because while Honesty-Humility decreased motivations for group dominance (SDO), it simultaneously increased motivations for collective security and social cohesion (RWA). We theorize that this occurs because people high in Honesty-Humility should tend to prefer socially cohesive groups with fairly strong norms regulating ingroup behaviour. This should occur because in such conditions, a high level of this trait should be most adaptive for the individual. This preference will in turn increase levels of RWA, which in turn predicts prejudice towards groups that are seen as threatening the ingroup in either realistic (danger) or symbolic (value and moral) terms.

The opposing effects of Honesty-Humility on ideological attitudes were equivalent in our research (with β coefficients of $-.29$ with SDO and .32 with RWA). Given that Honesty-Humility exerts equivalent positive and negative effects on SDO and RWA, its net effect on forms of prejudice that are equally predicted by SDO and RWA should tend to completely masked (sum to zero). In cases where prejudice is predicted more strongly by one or the other of these ideological-attitude dimensions, the net effect of Honesty-Humility will change accordingly, being weakly positive in some cases, and weakly negative in others.

One interesting direction for future research would be to evaluate whether Honesty-Humility should relate directly to RWA or be mediated by perceptions of the social world as dangerous and threatening (as we expect low Openness to Experience should). We suspect that Honesty-Humility might have a direct effect on RWA unmediated by dangerous worldview, but be mediated in its effect on SDO by competitive worldview. The effect of Honesty-Humility on RWA might be more appropriately mediated by motivations for cohesion and strength of identification through reciprocal and exclusive ingroup cooperation, rather than outgroup danger per se. Research is also needed to examine the possible moderating effect of worldview and situational factors on the association of Honesty-Humility with SDO and RWA.

Agreeableness

As expected, HEXACO Agreeableness did not significantly predict SDO. Ashton and Lee (2007) argue that Agreeableness is reflective of trait differences in the way individuals respond when they perceive that they have *been* exploited (whereas Honesty-Humility predicts variation in the tendency to be the one doing the exploiting). A high level of Agreeableness, from this perspective, offers similar potential gains from cooperation and help to those that should be experienced by individuals high in Honesty-Humility, but Agreeableness comes with a different set of possible costs: Those of losing out by being the one that is exploited. This view of Agreeableness, then, has little to do with traits like empathy or tender-mindedness, which are instead represented by Emotionality within the HEXACO framework. This view of Agreeableness does not imply, from our perspective, an increased motivation for social dominance in the way that low Honesty-Humility does.

Conscientiousness

We failed to find support for one predicted pathway in our model; that of Conscientiousness leading to increased RWA. In their previous meta-analysis of the Big-Five, Sibley and

DOI: 10.1002/per

Duckitt (2008) reported a weak association between these two constructs ($r = .15$), although they also reported, contrary to expectations, that Conscientiousness did not reliably predict prejudice ($r = .02$). Longitudinal research has also failed to detect a significant cross-lagged effect of (Big-Five) Conscientiousness on RWA; although this research did observe cross-lagged effect of low Openness to Experience on RWA, and low Agreeableness on SDO (Sibley & Duckitt, in press). These findings would seem to suggest that Conscientiousness plays, at best, only a very weak role in predicting RWA, which may not be apparent in all contexts, or might be partially dependent upon the specific instrument used to assess this dimension of personality.

Concluding comments

This study integrated the HEXACO model of personality structure and the Dual Process Motivational Model of ideology and prejudice. First, our findings emphasize impressive consistencies and important differences between the ways in which HEXACO and Big-Five models of personality structure relate to ideology and prejudice. Extraversion, Conscientiousness and Openness to Experience, as assessed using Ashton and Lee's (2009) HEXACO-PI-R, were highly consistent in their pattern of associations with SDO, RWA and prejudice. Low Emotionality replaced low Agreeableness in predicting SDO (and therefore derogated and dissident group prejudice). This finding is consistent with Ashton and Lee's (2007) observation that the HEXACO defines Emotionality (or Neuroticism) and Agreeableness as rotational variants of their Big-Five counterparts. Second, we demonstrated that Honesty-Humility exerted opposing positive and negative indirect effects on different domains of prejudice via opposing positive and negative effects of RWA and SDO. These opposing effects have gone unidentified in research employing Big-Five models of personality structure. Moreover, they occur in addition to the strong and consistent effect of low Openness to Experience on RWA, and low Emotionality (or low Big-Five Agreeableness) on SDO observed both here and in previous research using the Big-Five. A fully articulated model of the opposing threat and competitive-driven processes by which Honesty-Humility exerts its effects on prejudice would therefore seem to be a critical next step for future research.

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