IRIS AperTO

UNIVERSITÀ DEGLI STUDI DI TORINO

AperTO - Archivio Istituzionale Open Access dell'Università di Torino

Predicting right-wing authoritarianism via personality and dangerous world beliefs: Direct, indirect, and interactive effects.

This is the author's manuscript

Original Citation:

Availability:

This version is available http://hdl.handle.net/2318/45889 since 2015-09-13T14:08:08Z

Published version:

DOI:10.1080/00224545.2011.565384

Terms of use:

Open Access

Anyone can freely access the full text of works made available as "Open Access". Works made available under a Creative Commons license can be used according to the terms and conditions of said license. Use of all other works requires consent of the right holder (author or publisher) if not exempted from copyright protection by the applicable law.

(Article begins on next page)

05 March 2025

The Journal of SOCIAL PSYCHOLOGY
heldref PUBLICATIONS

Predicting right-wing authoritarianism via personality and dangerous world beliefs: Direct, indirect, and interactive effects

Journal:	*The Journal of Social Psychology*
Manuscript ID:	17-10-136.R1
Manuscript Type:	Article of Full Length
Key Words:	Right-wing authoritarianism, Big five, Dangerous world beliefs, threat, Moderation

SCHOLARONE™
Manuscripts

For Peer Review Only

RUNNING HEAD: Personality, Dangerous World Beliefs, and RWA

Predicting right-wing authoritarianism via personality and dangerous world beliefs: Direct, indirect, and interactive effects

For Peer Review Only

Acknowledgments. This research was supported by the Italian National Research Council (CNR, Migration Project)

Abstract

In an Italian sample (N = 483, 78.23% women, mean age = 27.61 years old), we used structural equation modeling with latent variables and interactions to analyze the direct, indirect, and interactive effects exerted on right-wing authoritarianism (RWA) by the Big Five factors of personality and by dangerous world beliefs (DWB). Openness, Neuroticism, and Conscientiousness exerted direct effects on RWA; the first two relationships were partially mediated by DWB. Most importantly, the relationship between DWB and RWA was moderated by Openness: DWB significantly influenced RWA solely for participants high in Openness. Limitations and possible developments of this research are discussed.

Abstract word count = 100

Keywords: Right-wing authoritarianism, Big Five, Dangerous world beliefs, Threat, Moderation

For Peer Review Only

Predicting right-wing authoritarianism via personality and dangerous world beliefs: Direct, indirect, and interactive effects

The cognitive-motivational dual process model of the relationship between ideology and prejudice developed by Duckitt (2001; Duckitt, Wagner, du Plessis, & Birum, 2002) is widely used to predict right-wing authoritarianism (RWA). RWA is a construct conceived by Altemeyer (1981, 1988, 1996) as the covariation of authoritarian submission (a strong tendency to submit to authorities, who are perceived as established and legitimate in the society in which one lives), authoritarian aggression (a general aggressiveness directed against various outgroups and perceived to be positively sanctioned by established authorities), and conventionalism (a strong tendency to adhere to social conventions, which are perceived as endorsed by the society and its established authorities). Such a model predicts RWA using two types of variables: personality and dangerous worldview.

In his first studies, Duckitt (2001; Duckitt et al., 2002) showed that personality—assessed *à la* Eysenck (1954) in terms of social conformity, i.e., the tendency to identify with the existing social order and to prefer order, structure, stability, and security in both one's personal and social lives fosters RWA both directly and via the partial mediation of dangerous worldview, assessed *à la* Altemeyer (1988) in terms of dangerous world beliefs (DWB), i.e. believing the world to be dangerous, unpredictable, and threatening. In two studies, respectively conducted on an adult and a student sample, Van Hiel, Cornelis, and Roets (2007) tried to connect the Duckitt model with the mainstream personality research, and tested the model assessing personality in terms of the Big Five factors of personality. In their research, Van Hiel and colleagues detected a direct, positive link between Conscientiousness (the trait leading people to be habitually careful, reliable, hard-working, well-organized, and purposeful) and RWA (in their adult sample only). Moreover, RWA showed to be negatively influenced by Openness (the trait predicting curiosity, imagination, creativity, originality, and flexibility) and Neuroticism (the trait accounting for the tendency to experience negative affect, such as anxiety, depression, hostility, and to be self-conscious and impulsive).

For Peer Review Only

These links were partially mediated by DWB, which, reduced by Openness and fostered by Neuroticism, positively influenced RWA. The other two Big Five factors did not influence RWA. The same results have been recently found by Sibley and Duckitt (2009).

These results are consistent with those stemming from the literatures on personality and on RWA. Indeed, high RWA scorers and very Conscientious people share low levels of tolerance towards people showing beliefs and behaviors different from their own and high levels of aversion to change. Moreover, high authoritarians and people scoring low in Openness tend to show a rigid identification with the dominant social order and to support it, because it gives them an explicit and unambiguous set of moral prescriptions they may use to understand how the society "should" work. Consistently, they both tend to be very radical in considering values and norms of the outgroups as serious threats to their ingroup's values and norms. Finally, those who score high on RWA and neuroticism tend to share the tendency to experience negative affect and hostility, and to be both impulsive and passive (Butler, 2000; Caprara, Barbaranelli, & Zimbardo, 1999; Duckitt & Sibley, 2009; McCrae & Costa, 1987b; McCrae & John, 1992; Stenner, 2005).

Sibley and Duckitt (2008) recently underscored the need for research on the interactions between the predictors of RWA. At present, in the context of the Duckitt model, these interactions have been examined in two published studies. The first one was conducted by Sibley and Duckitt (2009) themselves, who predicted RWA using a partially exploratory approach, adding the 5 interactions between the Big Five and DWB to the Big Five factors of personality and to dangerous world belief. They did not develop precise moderation hypotheses: Analyzing the *F change* of the model with and without the interactions, they concluded that adding the 5 interactions between the Big Five and DWB would have provided too low an increase to justify their inclusion in the Duckitt model. The second one was performed by Dallago and Roccato (2010), who tried to extend the Duckitt model by testing the explicit hypothesis that Openness should moderate the effect exerted by dangerous worldview on RWA. These authors based their reasoning on two different literatures.

For Peer Review Only

The first one is that on Openness. Research showed that very Open people— who under conditions of perceived security and stability are less authoritarian than people low in Openness—tend to be particularly sensitive to perceptual stimuli and inclined to feel vulnerable and unprotected (Hartmann, 1991; McCrae 1994, Van Hiel, & Mervielde, 2004). Research showed they are effective copers (David & Suls, 1999; O'Brien & deLongis, 1996; Penley & Tomaka, 2002), and that they tend to cope with stress with many kinds of reactions: among them, engaging in hostile reactions and perseverance (McCrae & Costa, 1987a). Thus, in stressful circumstances they tend to become more similar to people high in RWA, in that hostility systematically characterizes right-wing authoritarians.

The second one is a brand new line of research, recently launched by Van Hiel and DeClercq (2009). In their ground-breaking article, van Hiel and DeClercq found that high RWA reduced (a) the impact of a distressed personality on depression (Study 1), and (b) the physical and social negative consequences of 21 potentially stressful life events experienced in the 24 months preceding their survey (Study 2). In this light, authoritarianism, far from being a unavoidably dysfunctional trait, should be considered as an efficient mechanism people may use to cope with stress. This new conception is consistent, at least in part, with four different literatures: (a) with the terror management theory (Greenberg, Pyszczynski, & Solomon, 1996; Stone, 2001), in that people may successfully cope with death anxiety by adhering to the values and views which dominate in their society, i.e. raising their conventionalism, which is one of the attitudinal clusters defining RWA; (b) with the social identity theory (Tajfel, 1981), in that people may express prejudice—which is consistently linked with authoritarianism (e.g. Whitley, 1999)—to successfully protect or raise a weak self-esteem; (c) with the frustration-aggression theory (Dollard, Doob, Miller, Mowrer, & Sears, 1939), in that authoritarian aggression—another of the three attitudinal clusters which define RWA—may be successfully used to satisfy one's aggressive drive and thus to relieve the negative affect stemming from his/her frustration; and (d) with the most recent studies on cognitive dissonance, which showed that in threatening times high vs. low RWA scorers aspire

For Peer Review Only

to live in a simpler world, and thus to prefer uniformly pro-attitudinal arguments (Lavine, Lodge, & Freitas, 2005).

Based on the above literatures, Dallago and Roccato hypothesized the interaction between Openness and perceived threat to safety to significantly influence RWA. In particular, they expected that people high in Openness would significantly increase their low RWA level when strongly perceiving a threat to their safety as a defensive reaction against such threat and their feelings of personal vulnerability. From this perspective, their "authoritarian response" could be considered a mechanism for coping with threat. The same coping mechanism ought not to be observed in people low in Openness who, in conditions of perceived security and stability, besides showing high RWA levels (possibly so high to place them at their own ceiling of RWA), tend to feel less vulnerable than people high in Openness. Dallago and Roccato's analyses confirmed such hypothesis. Thus, these authors have been the first to find an interactive effect at the origins of RWA. Interestingly, Sibley and Duckitt's (2009) and Dallago and Roccato's (2010) studies used different personality inventory (the IPIP and the BFQ respectively) and threat measures (DWB and perceived dangerousness of criminality, respectively). Consequently their results have been not directly comparable, and thus not necessarily inconsistent.

However, Dallago and Roccato's research has a relevant limit. Having performed a secondary analysis on an Italian national sample, they could not measure dangerous worldview using the standard DWB scale. Instead, they could use a single four-category item about perceived dangerousness of criminality ("Think of micro-criminality: How would you define the situation regarding this problem in Italy?"). Thus, their results were not fully comparable with those gained using the standard Duckitt model. As a consequence, we do not yet know if the Duckitt model can be actually extended taking into consideration the Openness-dangerous worldview interaction detected by Dallago and Roccato. To examine this, we performed the following study.

Goals and Hypotheses

For Peer Review Only

We sought to extend the Duckitt model, taking into consideration the interactive effect between Openness and dangerous worldview found by Dallago and Roccato (2010). We tested a group of hypotheses concerning the direct and indirect effects exerted by personality and dangerous worldview on RWA, and a single hypothesis on the interactive effect they may exert on our dependent variable.

If our data were comparable with those found by Van Hiel, Cornelis, and Roets (2007) and by Sibley and Duckitt (2009), Openness should negatively influence RWA (HP1.1), Conscientiousness should positively influence it (HP1.2), and Neuroticism should negatively influence RWA (HP1.3). Moreover, DWB should positively influence RWA (HP1.4). Finally, DWB should partially mediate the relation between Openness and RWA (HP1.5) and that between Neuroticism and RWA (HP1.6). We tested these hypotheses in our first mediation model.

Concerning the moderated effects exerted by personality and DWB on RWA, based on Dallago and Roccato (2010) we expected the interaction between Openness and DWB to significantly influence RWA. In detail, according to our HP2, we expected participants scoring high, but not those scoring low, in Openness to significantly heighten their RWA score when scoring high in DWB, as a defensive reaction against perceived threat and their feelings of personal vulnerability. We tested this hypothesis in our second moderated mediation model.

Method

Participants and procedure

The students of the social psychology courses at the Universities of Torino and of Palermo were contacted via an email in which we asked them to answer an online questionnaire and to invite other people in their social networks to do the same. As a whole, a sample of 483 people (78.23% women) residing throughout the whole Italian territory, aged between 18 and 68 years old (M = 27.61, SD = 11.38) participated in our research. Structural equation models with latent variables, performed by the *Mplus* (Muthén & Muthén, 1998) software, were used to test our hypotheses.

Measures

For Peer Review Only

We assessed RWA using Giampaglia and Roccato's (2002) balanced Italian adaptation of Altemeyer's (1996) RWA Scale (14 items, 4 response categories), $\alpha = .88$. We modeled the construct as a latent variable, measured by three item parcels. The Big Five factors of personality have been assessed using the same short version (20 items, 5 response categories) of the Italian Big Five Questionnaire (Caprara, Barbaranelli, Borgogni, & Perugini, 1993; Caprara, Barbaranelli, & Livi, 1994) previously used by Dallago and Roccato (2010). Exploratory factor analysis (principal axis factoring extraction, varimax rotation) yielded the expected five dimensions (first six eigenvalues: 1.930, 1.779, 1.305, 1.203, 1.156, and .715), corresponding to the Openness ($\alpha = .56$), Conscientiousness ($\alpha = .74$), Neuroticism ($\alpha = .74$), Extraversion ($\alpha = .62$), and Agreeableness ($\alpha = .62$) Big Five factors.[1] We modeled each Big Five factor as a latent variable measured by 4 items. Finally, we assessed DWB using Mirisola, Di Stefano, and Falgares' (2007) balanced Italian DWB Scale, $\alpha = .90$. The scale is composed of 20 items, such as, "There are many dangerous people in our society who will attack someone out of pure meanness, for no reason at all" and "Although it may *appear* that things are constantly getting more dangerous and chaotic, it really isn't so. Every era has its problems, and a person's chances of living a safe, untroubled life are better today than ever before" (con-trait). We modeled DWB as a latent variable, measured by three item parcels.

We tested our mediation hypotheses using the Weighted Least Squares Means and Variance (WLSMV) adjusted estimation, and tested our moderation hypothesis through full-information maximum likelihood with robust standard errors (MLR) using the latent moderated structural equations approach (Klein & Moosbrugger, 2000; Little, Bovaird, & Widaman, 2006; Marsh, Wen, & Hau, 2004). We evaluated the fit of our models using the *RMSEA* (Steiger, 1980), the *CFI* (Bentler, 1990), and the *TLI* (Tucker & Lewis, 1973) coefficients. Based on Hu and Bentler (1998), we considered the *CFI* and the *TLI* as satisfactory if close to or above 0.95, and the *RMSEA* as satisfactory if close to or below 0.06.

Results

Mediation models

For Peer Review Only

Table 1 displays the correlations among the latent variables we analyzed.

We tested our first group of hypotheses in our first mediation model, which showed a satisfactory fit, *TLI* = .954, *CFI* = .945, *RMSEA*= .059. Obtained results are displayed in Figure 1. Consistent with our HP1.1, HP1.2, and HP1.3, RWA was directly influenced by Openness, Conscientiousness, and Neuroticism. Moreover, consistent with our HP1.4, HP1.5, and HP1.6, Openness and Neuroticism predicted DWB, which, in turn, predicted RWA. Bootstrapping showed that dangerous worldview partially mediated the effects exerted by Neuroticism (mean = .11, 99% CI .04, .26, $p < .01$) and Openness (mean = -.23, 99% CI -.34, -.13, $p < .01$) on RWA.

To check the robustness our results, and to further test their degree of overlap with those by Van Hiel et al. (2007) and by Sibley and Duckitt (2009), we tested a second mediation model, in which we added the other additional Big Five factors to explore if they influenced RWA directly and/or via the mediation of DWB. None of these new paths gained statistical significance. Indeed, when these additional paths were included, RWA was significantly predicted by Openness (path = -.43, $p < .001$), Conscientiousness (path = .14, $p < .05$), Neuroticism (path = - .13, $p < .05$), and DWB (path = .47, $p < .001$), but not by Agreeableness (path = .09, $p = .10$) or Extraversion (path = .06, $p = .40$). DWB was predicted by Neuroticism (path = .30, $p < .001$), and Openness (path = -.48, $p < .001$), but not by Conscientiousness (path = .04, $p = .47$), Agreeableness (path = .03, $p = .67$), or Extraversion (path = .13, $p = .09$). In line with previous results (Van Hiel et al., 2007; Sibley & Duckitt, 2009), DWB partially mediated the effects exerted by Neuroticism (mean = .12, 99% CI .05, .27, $p < .01$) and Openness (mean = -.23, 99% CI -.35, -.11, $p < .01$) on RWA.

Thus, concerning the direct and indirect influences exerted on RWA by personality and dangerous worldview, our data were fully consistent with Van Hiel and colleagues' (2007) and with Sibley and Duckitt's (2009) conclusions.

Moderated mediation models

To test our HP2, we added the interaction between Openness and DWB, computed as a latent variable using the latent moderated structural equations approach (Klein & Moosbrugger, 2000;

For Peer Review Only

Little et al., 2006; Marsh et al., 2004), and the path linking this interaction to RWA, to the previous mediation model (see Figure 2). The paths which in our first model reached statistical significance maintained significance. Moreover, consistent with our HP2, the latent interaction between Openness and DWB significantly predicted RWA (path = .36, $p < .001$).[2] A likelihood-ratio test showed that the model which included the latent interaction path as a free parameter displayed a significantly better fit than the model in which the path was fixed to zero, $\chi^2(1) = 7.35$, $p < .01$. A subsequent exploratory analysis, performed adding the latent interactions between the other Big Five dimensions and DWB, showed that these other interactions did not significantly predict RWA (Neuroticism X DWB: path = .15, $p = .21$; Conscientiousness X DWB: path = .05, $p = .56$, Agreeableness X DWB: path = .10, $p = .75$, Extraversion X DWB: path = .13, $p = .56$).

In order to graphically show the moderating effect of Openness, we performed a moderated regression (Aiken & West, 1991; Cohen, Cohen, West, & Aiken, 2003) using latent variables scores. Based on Bauer and Curran (2005), we computed the two roots of Openness which demarcate the boundaries of the region of significance ($M = 0$, $SD = .35$, 95% CI -1.618, -.669). Within region of significance, the relationship between DWB and RWA was not significant. As displayed in Figure 3, for Openness values below -1.91 *SD*s the relationship between DWB and RWA was not significant. For Openness values above -1.91 *SD*s the relationship between dangerous worldview and RWA was positive and significant, and the magnitude of this association was proportional to Openness levels.[3]

Discussion

This research aimed at extending the Duckitt (2001; Duckitt et al., 2002) model of the direct and mediated influences exerted on right-wing authoritarianism by the Big Five factors of personality and by dangerous worldview. Our main goal was to test the hypothesis that, similar to Dallago and Roccato (2010)—who used a nonstandard measure for dangerous worldview—Openness should moderate the relationship between dangerous world beliefs and

For Peer Review Only

RWA: Dangerous world beliefs should foster RWA among participants high, but not among those low, in Openness.

We replicated all the direct and mediated links between personality, dangerous world beliefs, and RWA previously found by Van Hiel and colleagues (2007) and by Sibley and Duckitt (2009). Indeed, RWA was negatively influenced by Openness and Neuroticism and positively influenced by Conscientiousness. The relationship between Openness and Neuroticism and RWA was partially mediated by dangerous world beliefs, while the other Big Five factors did not influence our dependent variable directly or indirectly. Most importantly, our results were consistent with our moderation hypothesis: Dangerous world beliefs significantly fostered RWA among people high, but not among those low, in Openness, while the interactions between the other four Big Five factors and dangerous world beliefs did not influence our dependent variable. Considering these results, three main conclusions may be drawn from this study.

Our first conclusion concerns the origins of RWA. Generally speaking, our research allowed us to extend the Duckitt model, taking into account the interaction between personality and dangerous worldview, and to export to this research context the results concerning moderation recently found by Dallago and Roccato (2010), using a nonstandard measure of dangerous worldview, i.e. the perception of a large spread of criminality in the participants' national territory. This is particularly relevant for researchers into the prediction of RWA, because, according to the methodological literature, the detection of interactive effects between predictors gives sophistication and maturity to the scientific literature (Aguinis, Boik, & Pierce, 2001; Judd, McClelland, & Culhane, 1995).

However—this is our second conclusion—we believe we should not generalize the interactive influence exerted by Openness and dangerous worldview to *any* kind of societal threat. Indeed, Dallago, Mirisola, and Roccato (in press) recently showed that the usual direct and indirect effects exerted by the Big Five and dangerous worldview held when using perceived terrorist threats as a measure of dangerous worldview. Nonetheless, the moderated effect found by Dallago and Roccato

For Peer Review Only

(2010) and in this study did not. For Italian participants, compared to perceived criminality threats (taken into account by Dallago and Roccato, 2010) and to perceived threats due to the deterioration of everyday social life (like those operationalized using Altemeyer's (1988) Dangerous World Beliefs Scale, used in this research and in those by Duckitt), terrorist threats are much more abstract, in that they make little reference to participants' direct experiences and are characterized by rather low probabilities of realistically affecting people's quality of life.

According to Lazarus and Folkman (1984), distal stressful events foster appraisals and coping strategies which are qualitatively different from those fostered by more direct and more realistic threats. Following this line of reasoning, we postulate that the coping strategies predicted by Van Hiel and De Clercq (2009) may be activated only by perceived threats that are proximal and/or that have been directly experienced. Lee, Gibson, Markon, and Lemyre's (2009) study, conducted after September 11th, 2001, utilized citizenship (either American or Canadian) as a proxy variable for dividing participants into groups of people who have and have not had a direct experience of a terrorist attack. Their results were consistent with our hypotheses, but the variable they used to classify their participants was far from satisfactory. Moreover, their approach was non experimental, and thus they could not analyze genuine causal effects. Future experimental research, performed to test this hypothesis by presenting different threatening scenarios to participants and analyzing the strategies used by people to actively cope with different kinds of threat—characterized by different levels of proximity and/or directly vs. non directly experienced—will be welcome.

Our last conclusion concerns the nature of RWA. The literature reveals that perceived societal threat fosters RWA (Altemeyer, 1988; Cohrs & Asbrock, 2009; Feldman & Stenner, 1997; Mirisola, Di Stefano, & Falgares, 2007; Rickert, 1998; Nagoshi, Terrel, & Nagoshi, 2007; Sales & Friend, 1973; Stevens, Bishin, & Barr, 2006). Recently, Van Hiel and De Clercq (2009) demonstrated that RWA may be considered an efficient mechanism people use to cope with threat when they feel particularly vulnerable. In light of this, after those by Dallago and Roccato (2010),

For Peer Review Only

our results should be considered the second indirect confirmation of Van Hiel and De Clercq's (2009) conception of RWA as "good for the self", in that they showed that one should expect RWA to increase for people high in Openness alone—who in "normal" conditions are characterized by low authoritarianism levels—when they tend to feel particularly vulnerable to distress and/or threat. In this light, RWA should be understood as something people rely upon when feeling particularly threatened and/or distressed to defend and/or to promote their wellbeing. Of course, this does not mean that RWA is "good for the others" also. Indeed, "there is ample evidence that authoritarianism is not advantageous for other people, and, without a doubt, interacting with high scoring authoritarians is often an unpleasant and cumbersome event for members of minority groups" (Van Hiel & De Clercq, 2009, p. 47; for a convincing experimental demonstration, see Altemeyer, 2003).

It should be noted that Van Hiel and De Clercq's (2009) new conception of RWA runs counter to the traditional approaches on authoritarianism in the literature. Indeed, authoritarianism has been systematically conceived as an individual dysfunctional characteristic stemming from personality or character disorders (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Fromm, 1941; Reich, 1933), and thus as an inevitably "bad for the self" construct. In addition to this, the literature traditionally considers authoritarianism as a stable personality trait (Adorno et al., 1950; Altemeyer, 1981, 1988, 1996; Fromm, 1941; Reich, 1933). As a matter of fact, some researchers (i.e. Duckitt , 2001; Duckitt et al., 2002; Jost, Glaser, Kruglanski, & Sulloway, 2003; Mavor, Louis, & Sibley, 2010; Mirisola, Sibley, Boca & Duckitt, 2007) conceive RWA as an ideological variable, not as a personality trait. Given that ideological positions are less resistant to change than personality traits (Kinder & Sears, 1985), Van Hiel and De Clercq's (2009) approach is consistent with this second conceptualization of RWA. Research analyzing the interactive effects exerted by Openness and experimentally induced stress and/or threat on the *changes* of individual levels of RWA from before to after the manipulation of stress and/or of threat will plausibly contribute to further improve the quality of the literature on RWA, giving support to one of these two opposed conceptions of RWA.

For Peer Review Only

We would like to conclude this article with a general comment on the links between threat and RWA. Consistent with the mainstream literature (Altemeyer, 1988; Feldman & Stenner, 1997; Rickert, 1998; Steven, Bishin, & Barr, 2006), we analyzed the effects exerted on RWA by perceived rather than actual threat (Altemeyer, 1988; Cohrs & Asbrock, 2009; Feldman & Stenner, 1997; Mirisola, Di Stefano, & Falgares, 2007; Rickert, 1998; Sales & Friend, 1973; Stevens, Bishin, & Barr, 2006). However, a second line of research on this topic does exist. Researchers examining this alternate area, based on the analysis of aggregated data, demonstrated that authoritarian attitudes and behaviors are widespread in conditions of high societal threat (Doty, Peterson, & Winter, 1991; Peterson & Gerstein, 2005; Sales, 1973). Results stemming from this line of investigation, however, are exposed to the "ecological fallacy," in that the correlations detected at the aggregate level do not necessarily reflect those found at the individual level (Robinson, 1950). Moreover, we do not have any information on the effects exerted on RWA by the interactions between actual and perceived threat and between personality and actual threat. This unanswered question is particularly relevant as the literature systematically shows that the relationship between actual and perceived threat is often much weaker than one may hypothesize (e.g. Hale, 1996).

It is now possible to directly answer research questions like this, thanks to the development of the hierarchical linear models (HLM) approach (Raudenbush & Bryk, 2002). HLMs allow the researcher to predict a dependent variable using, at the same time, independent variables belonging to the individual (in our case, personality and dangerous worldview) and context (in our case, actual dangerousness of participants' life space) levels. Most importantly, such models allow the researcher to use as predictors cross-level interactions, i.e. interactions between variables placed at the individual and the contextual levels. A multilevel mediated-moderated model aimed at predicting RWA using the Big Five factors of personality, Altemeyer's (1988) Dangerous Beliefs Scale and contextual indicators of threat (mainly concerning the spread of criminality), as well as their intra- and cross-level interactions could contribute significantly to the RWA literature, and

For Peer Review Only

may even be considered the “new frontier” of the literature on the relationship among personality, threat, and authoritarianism.

For Peer Review Only

References

Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York, NY: Harper.

Aguinis, H., Boik, R. J., & Pierce, C. A. (2001). A generalized solution for approximating the power to detect effects of categorical moderator variables using multiple regression. *Organizational Research Methods*, *4*, 291-323. doi: 10.1177/109442810144001

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

Altemeyer, B. (1981). *Right-wing authoritarianism*. Winnipeg: University of Manitoba Press.

Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco, CA: Jossey-Bass.

Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.

Altemeyer, B. (2003). What happens when authoritarians inherit the Earth? A simulation. *Analyses of Social Issues and Public Policy*, *3*(1), 15-23,

Bauer, D. J., & Curran, P. J. (2005). Probing interactions in fixed and multilevel regression: Inferential and graphical techniques. *Multivariate Behavioral Research*, *40*(3), 373-400.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238-246.

Butler, J. C. (2000). Personality and emotional correlates of right-wing authoritarianism. *Social Behavior and Personality*, *2*(1), 1-14.

Caprara, G. V., Barbaranelli, C., Borgogni, L., & Perugini, M. (1993). The big five questionnaire: A new questionnaire for the measurement of the five factor model. *Personality and Individual Differences, 15*(3), 281-288.

Caprara, G. V., Barbaranelli, C., & Livi, S. (1994). Mapping personality dimensions in the Big Five model. *European Journal of Applied Psychology, 44*(1), 9-16.

For Peer Review Only

Caprara, G. V., Barbaranelli, C., & Zimbardo, P. (1999). Personality profiles and political parties. *Political Psychology*, *20*(1), 175-197.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.

Cohrs, J. C., & Asbrock, F. (2009). Right-wing authoritarianism, social dominance orientation and prejudice against threatening and competitive ethnic groups. *European Journal of Social Psychology*, *39*, 270-289. doi: 10.1002/ejsp.545

Dallago, F., Mirisola, A., & Roccato, M. (in press). Personalità, minaccia e autoritarismo di destra [Personality, threat, and right-wing authoritarianism]. *Psicologia sociale*.

Dallago, F., & Roccato, M. (2010). Right-wing authoritarianism, Big Five, and perceived threat to safety. *European Journal of Personality*, *24*, 106-122. doi: 10.1002/per.745

David, J. P., & Suls, J. (1999). Coping efforts in daily life: Role of Big Five traits and problem appraisals. *Journal of Personality*, *67*(2), 265-294.

Doty, R. M., Peterson B. E., & Winter, D. G. (1991). Threat and authoritarianism in the United States 1978–1987. *Journal of Personality and Social Psychology, 61*, 629–640. doi: 10.1037/0022-3514.61.4.629

Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 33, pp. 41–113). San Diego, CA: Academic Press.

Duckitt, J., & Sibley, C. G. (2009). A dual-process motivational model of ideology, politics, and prejudice. *Psychological Inquiry*, *20*, 98-109. doi : 10.1080/10478400903028540

Duckitt, J., Wagner, C., du Plessis, I., & Birum, I. (2002). The psychological bases of ideology and prejudice: Testing a dual process model. *Journal of Personality and Social Psychology, 83*, 75–93. doi: 10.1037//0022-3514.83.1.75

Eysenck, H. J. (1954). *The psychology of politics*. London: Routledge & Keegan Paul.

For Peer Review Only

Feldman, S., & Stenner, K. (1997). Perceived threat and authoritarianism. *Political Psychology, 4*(4), 741–770.

Fromm, E. (1941). *Escape from freedom*. New York, NY: Avon Books.

Giampaglia, G., & Roccato, M. (2002). La scala di autoritarismo di destra di Altemeyer: Un'analisi con il modello di Rasch per la costruzione di una versione italiana [Altemeyer's right-wing authoritarianism scale: An analysis using the Rasch model for the construction of an Italian version]. *TPM*, *9*(2), 93-111.

Hale, C. (1996). Fear of crime: A review of the literature. *International Review of Victimology*, *4*(2), 79-150.

Hartmann, E. (1991). *Boundaries in the mind: A new psychology of personality differences*. New York, NY: Basic Books.

Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to undeparametrized model misspecification. *Psychological Methods*, *3*(4), 424-453.

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, *129*, 339–375. doi: l0.1037/0033-2909.129.3,339

Judd, C. M., McClelland, G. H., & Culhane, S. E. (1995). Data analysis: Continuing issues in the everyday analysis of psychological data. *Annual Review of Psychology*, *46*, 433-465.

Kinder, D. R., & Sears, D. O. (1985). Public opinion and political action. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (pp. 659-741). New York, NY: Random House.

Klein, A., & Moosbrugger, H. (2000). Maximum likelihood estimation of latent interaction effects with the LMS method. *Psychometrika*, *65*(4), 457-474.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.

For Peer Review Only

Lee, J. E. C., Gibson, S., Markon, M. L., & Lemyre, L. (2009). A preventive coping perspective of individual response to terrorism in Canada. *Current Psychology, 28*, 69-84. doi: 10.1007/s12144-009-9053-2

Little, T. D., Bovaird, J. A., & Widaman, K. F. (2006). On the merits of orthogonalizing powered and product terms: Implications for modeling interactions among latent variables. *Structural Equations Modeling: A Multidisciplinary Journal*, *13*, 497-519. doi: 10.1207/s15328007sem1304_1

Marsh, H. W., Wen, Z. L., & Hau, K. T. (2004). Structural equation models of latent interactions: Evaluation of alternative estimation strategies and indicator construction. *Psychological Methods*, *9*(3), 275-300.

Mavor , K.I., Louis, W.R., & Sibley, C.G. (2010). A bias-corrected exploratory and confirmatory factor analysis of right-wing authoritarianism: Support for a three-factor structure. *Personality and Individual Differences*, *48*, 28-33. doi: 10.1016/j.paid.2009.08.006

McCrae, R. R. (1994). Openness to experience: Expanding the boundaries of factor V. *European Journal of Personality Psychology*, 8, 251–272. doi: 10.1002/per.2410080404

McCrae, R. R., & Costa, P. T. (1987a). Personality, coping, and coping effectiveness in an adult sample. *Journal of Personality*, *54*, 385-405. doi: 10.1111/j.1467-6494.1986.tb00401.x

McCrae, R. R., & Costa, P. T. (1987b). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*. *52*(1), 81-90.

McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality, 60*(2), 175-215.

Mirisola, A., Di Stefano, G., & Falgares, G. (2007). I processi duali ideologici nel contesto italiano [Ideological dual processes in the Italian context]. In F. Di Maria, G. Di Stefano, & G. Falgares (Eds.), *Psiche e società: La polis siciliana tra conservazione e trasformazione* [Mind and society: The Sicilian polis between conservation and transformation] (pp. 29-435). Milano: Angeli.

For Peer Review Only

Mirisola, A., Sibley, C. G., Boca, S., & Duckitt, J. (2007). On the ideological consistency between right-wing authoritarianism and social dominance orientation. *Personality and Individual Differences*, *43*, 1851-1862. doi: 10.1016/j.paid.2007.06.006

Muthén, L. K., & Muthén, B. O. (1998). *Mplus user's guide*. Los Angeles, CA: Muthén & Muthén.

Nagoshi, J. L., Terrell, H. K., & Nagoshi, C. T. (2007). Changes in authoritarianism and coping in college students immediately after the terrorist attacks of September 11, 2001. *Personality and Individual Differences*, *43*, 1722-1732. doi: 10.1016/j.paid.2007.05.010

Nunnally, J. C. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.

O'Brien, T. B., & deLongis, A. (1996). The interactional context of problem-, emotion-, and relationship-focused coping : The role of the big five personality factors. *Journal of Personality*, *64*, 775-813. doi: 10.1111/j.1467-6494.1996.tb00944.x

Penley, J. A., & Tomaka, J. (2002). Associations among the Big Five, emotional responses, and coping with acute stress. *Personality and Individual Differences*, *32*, 1215-1228. doi: 10.1016/S0191-8869(01)00087-3

Peterson, B. E., & Gerstein, E. D. (2005). Fighting and flying: Archival analysis of threat, authoritarianism, and the North American comic book. *Political Psychology, 26*(6), 887-904.

Raudenbush, S. W. & Bryk, A. S. (2002). *Hierarchical linear models*. London: Sage.

Reich, W. (1933). *Die Massenpsychologie des Faschismus* [Mass psychology of fascism]. Copenhagen: Verlag für Sexualpolitik.

Rickert, E. J. (1998). Authoritarianism and economic threat: Implications for political behavior. *Political Psychology*, *19*(4), 707-720.

Robinson, W. S. (1950). Ecological correlations and the behavior of individuals. *American Sociological Review, 15*(3), 351–357.

Sales, S. M. (1973). Threat as a factor in authoritarianism: An analysis of archival data. *Journal of Personality and Social Psychology, 28*(1), 44–57.

For Peer Review Only

Sales, S. M., & Friend, K. E. (1973). Success and failure as determinants of level of authoritarianism. *Behavioral Science, 18*, 163-172. doi: 10.1002/bs.3830180304

Stenner, K. L. (2005). *The authoritarian dynamic*. New York, NY: Cambridge University Press.

Stevens, D., Bishin, B. G., & Barr, R. R. (2006). Authoritarian attitudes, democracy, and policy preferences among Latin American elites. *American Journal of Political Science, 50*(3), 606-620.

Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review 12,* 248-279. doi: 10.1177/1088868308319226

Sibley, C. G., & Duckitt, J. (2009). Big-five personality, social worldviews, and ideological attitudes: Further tests of a dual process cognitive-motivational model. *Journal of Social Psychology*, *149*, 545-561. doi: 10.1080/00224540903232308

Steiger, J. H. (1980). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research, 25*(2), 173-180.

Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika, 38*(1), 1-10.

Van Hiel, A., Cornelis, I., & Roets, A. (2007). The intervening role of social worldviews in the relationship between the five-factor model of personality and social attitudes. *European Journal of Personality*, *21*, 131-148. doi: 10.1002/per.618

Van Hiel, A., & De Clercq, B. (2009). Authoritarianism is good for you: Right-wing authoritarianism as a buffering factor for mental distress. *European Journal of Personality, 23*, 33–50. doi: 10.1002/per.702

Van Hiel, A., & Mervielde, I. (2004). Openness to experience and boundaries in the mind: Relationships with cultural and economic conservative beliefs. *Journal of Personality, 72,* 659–686. doi: 10.1111/j.0022-3506.2004.00276.x

For Peer Review Only

Footnotes

1. The alpha of the Openness, of the Extraversion and of the Agreeableness factors were under the .70 value, i.e. the threshold below which an α is conventionally considered as satisfactory (Nunnally, 1978). However, like in Dallago and Roccato's (2010) research, these low αs depended more on the small number of items we used to measure the Big Five factors than on a weak correlation among them (Openness mean inter-items correlation: $r = .25$; Agreeableness mean inter-items correlation: $r = .29$, Extraversion mean inter-items correlation: $r = .29$).

2. In Figure 2 we did not report the standardized paths in that they are unavailable for this kind of models.

3. As suggested by an anonymous Reviewer, given the unbalanced distribution of gender in our sample, we performed supplementary analyses keeping gender under control. Obtained results on the relations between personality, DWB, and RWA were analogous to those we chose to publish. Readers interested in examining them may contact the corresponding author.

For Peer Review Only

Table 1.

Correlations among the variables

	1	2	3	4	5	6	7
1.Right-wing authoritarianism	-						
2. Dangerous world beliefs	.52***	-					
3. Conscientiousness	.13**	.06	-				
4. Openness	-.41***	-.33***	.04	-			
5. Neuroticism	.05	.29***	- .03	- .06	-		
6. Extraversion	-.02	-.05	.21***	.24***	- .10*	-	
7. Agreeableness	.05	.01	.08	.11*	- .01	.25***	-

Note. * p < .05; ** p < .01: *** p < .001.

For Peer Review Only

Figure captions

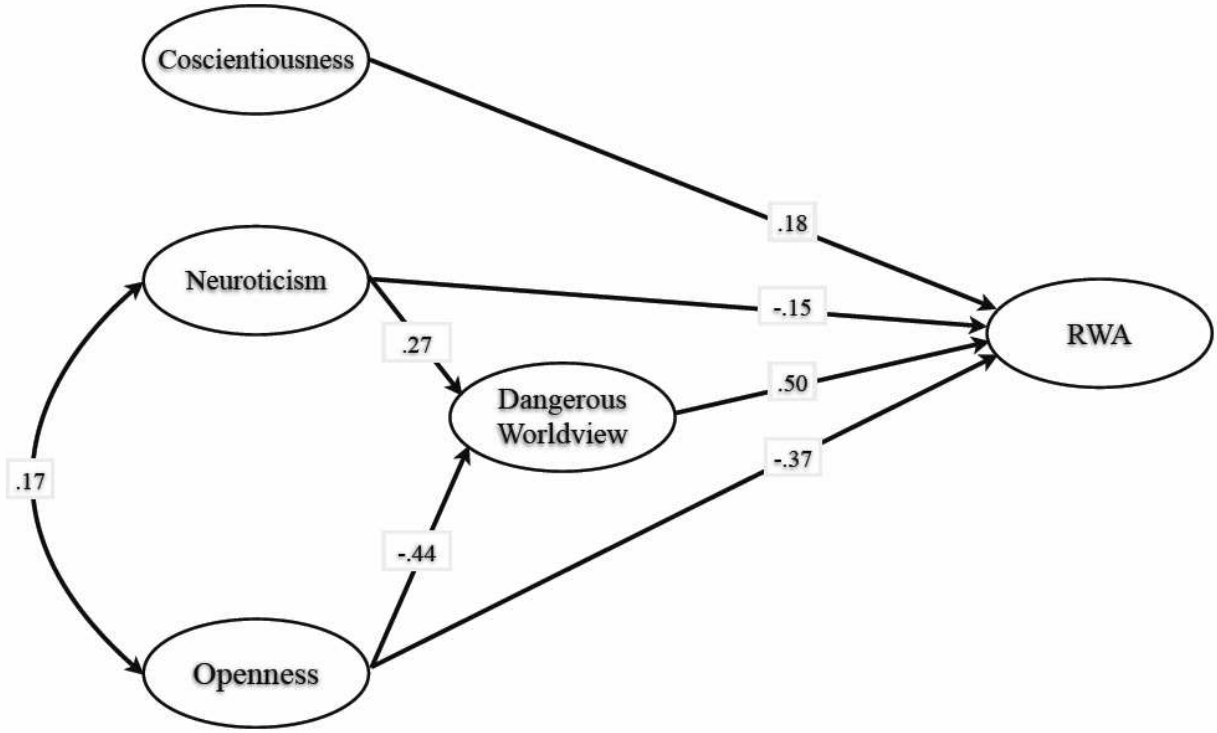
Figure 1. Mediation model predicting RWA.

Figure 2. Moderation mediation model predicting RWA.

Figure 3. Moderating effect of Openness on the association between Dangerous World Beliefs and RWA.

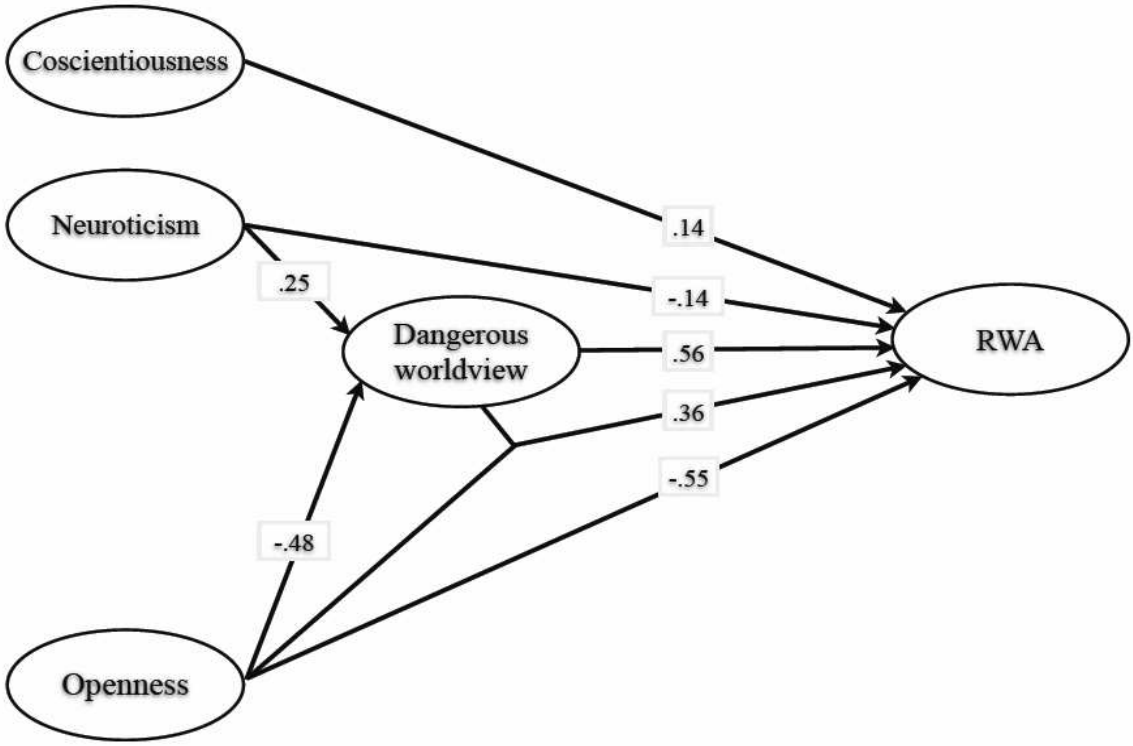
For Peer Review Only

Figure 1 (all paths: $p < .01$. Standardized paths are displayed)



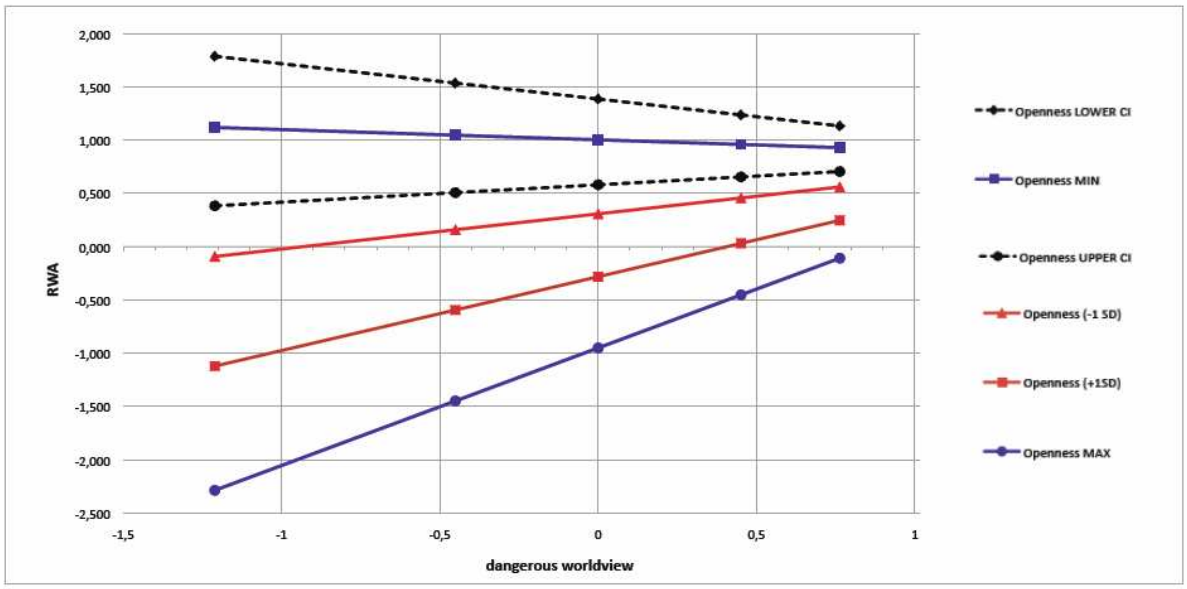
view Only

Figure 2 (all paths: $p < .01$)



view Only

Figure 3



For Review Only