The role of ingroup threat and conservative ideologies on prejudice against immigrants in two samples of Italian adults

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15 July 2024

Abstract

This research investigated the relationship among perception of ingroup threats (realistic and symbolic), conservative ideologies (Social Dominance Orientation and Right-Wing Authoritarianism) and prejudice against immigrants. Data were collected with a cross-sectional design in two samples: non-student Italian adults (n = 223) and healthcare professionals (n = 679). Results were similar in both samples and indicated that symbolic and realistic threats as well as SDO and RWA positively and significantly predicted anti-immigrant prejudice. Moreover, the model considering SDO and RWA as mediators of threats' effects on prejudice showed a better fit than the model in which ingroup threats mediated the effects of SDO and RWA on prejudice against immigrants. Accordingly, SDO and RWA partially mediated the effect of both symbolic and realistic threat which, however, maintained a significant effect on prejudice against immigrants.

Keywords: prejudice, immigrants, ingroup threat, conservative ideologies, social dominance orientation, right-wing authoritarianism

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Introduction

Migratory flows are increasing worldwide, especially in Oceania and European countries, albeit the annual increase of migrants has slowed down after the economic crisis (United Nations, 2013). In recent years, for example, many immigrants from African countries arrived in Europe, especially via Italian coasts, often with dramatic endings. Higher deployment of military and healthcare forces have been necessary to face this dramatic migratory flow, and this has generated a large political and social debate about the way in which migrants should be rescued and who must be burdened by the costs of these rescue operations. These aspects seem to reflect well the psycho-social concepts of realistic and symbolic threats, that is to say, people's perception that an outgroup (i.e., migrants) menaces the ingroup at both material and symbolic levels. These threats have been found to be strongly linked to prejudice and discrimination against several outgroups (e.g., Stephan, Ybarra, & Rios Morrison, 2009).

Accordingly, the principal aim of this study was to investigate the role of perception of realistic and symbolic threats on prejudice against migrants, considering also the role of conservative belief (i.e., social dominance orientation and right-wing authoritarianism). An important contribution of this paper is to demonstrate these relationships in new and relatively novel samples, i.e., Italian adults and healthcare professionals.

Individual predictors of prejudice

Several research projects have shown that, at the individual level, prejudice is predicted by social dominance orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994), right-wing authoritarianism (RWA; Altemeyer, 1981). SDO refers to the people's desire to see the social group disposed along an iniquitous social hierarchy in which some groups dominate other groups. SDO is considered as a proxy of ideologies supporting social inequality (Sidanius & Pratto, 1999). RWA, instead, refers to the desire for social order and protection of the ingroup's worldview (Altemeyer, 1981). A number of research projects have supported the expectation that both SDO and RWA are positively associated with prejudice against foreign immigrants and ethnocentrism (e.g., Bourhis & Dayan, 2004; Cohrs & Asbrock, 2009; Craig & Richeson, 2014; Dhont & Van Hiel, 2009; Duckitt & Sibley, 2007; Esses & Hodson, 2006; Hodson & Esses, 2005; Hodson, Hogg, & MacInnis, 2009).

Other individual variables associated with ethnic prejudice are realistic and symbolic threats (Stephen, Stephan, & Gudykurst, 1999). The concept of ingroup threat is rooted in social identity theory (SIT; Tajfel & Turner, 1979) and refers to people's belief that an outgroup can harm or menace the ingroup's distinctiveness and then the members' positive social identity. Specifically, realistic threat refers to the belief that the outgroup can harm the ingroup's power, material resources and general welfare (see also realistic conflict theory, Levine & Campbell, 1972; Sherif, 1966). Symbolic threat, instead, refers to the belief that the outgroup can menace the ingroup's values, worldview, morality and ideology (Stephan et al., 2009). Also, in this case, research has demonstrated that perception of both realistic and symbolic threats from an outgroup increases prejudice and negative attitudes toward that outgroup (Cohrs & Stelzl, 2010; Doosje, Zimmermann, Kupper, Zick, & Meertens, 2009; Green, Fasel, & Sarrasin,

2010; Pereira, Vala, & Costa-Lopes, 2010; Stephan, Renfro, Esses, Stephan, & Martin, 2005; for a meta-analysis see Riek, Mania, & Gaertner, 2006).

SDO, RWA, threat and prejudice against immigrants

Albeit the role of SDO, RWA and ingroup threat on prejudice against immigrants has been extensively demonstrated, a debate exists about whether SDO and RWA must be considered as antecedent to threat or instead its consequences. Several authors, for example, considers SDO and RWA as results of perceived threat; that is to say that the more people perceive ingroup threat from an outgroup, the more they would be oriented to support group-based dominance ideologies and social order (e.g., Jost, Glaser, Kruglanski, & Sulloway, 2003). Supporting this view, it has been shown that events that are perceived as threatening to the ingroup increase members' conservative ideologies. For example, Echebarria-Echabe and Fernandez-Guede (2006) found an increasing of authoritarianism and conservative ideology after the March 11, 2004, terrorist attacks on Madrid's railway. Similarly, Bonanno and Jost (2006) found an increasing of political conservatism following the World Trade Center terrorist attacks. These results seem to sustain the idea that ingroup threat would increase conservative ideologies such as SDO and RWA. This is also consistent with research evidence that SDO is context-dependent and follows the interests of the social category which is activated in a particular context or situation (Guimond, Dambrun, Michinov, & Duarte, 2003; Huang & Liu, 2005; Lehmiller & Schmitt, 2007) and with Cohrs and Stelzl's (2010) meta-analytic results showing that RWA is predictive of anti-immigrant attitudes in countries where migrants were perceived as increasing the crime rate and not beneficial for the economy (e.g., Germany, Italy), and SDO is predictive of anti-

immigrant attitudes in countries with a high unemployment rate of immigrants (e.g., Belgium, Sweden).

Another approach, instead, considers SDO and RWA as dispositional and relatively stable individual traits (e.g., Sidanius, Pratto, van Laar, & Levin, 2004). In this view, SDO and RWA are seen as antecedent to ingroup threat; that is, the more people that are social dominance oriented and/or right-wing authoritarian, the more they should perceive ingroup threat and then increase prejudice against immigrants (e.g., Cohrs, 2013; Feldman & Stenner, 1997; Hodson et al., 2009; Stephan & Renfro, 2002). This view is supported also by intergroup threat theory (ITT; Stephan et al., 2009) which considers SDO and RWA as antecedent to perception of ingroup threat.

Another relevant approach to exploring the relationship between conservative ideologies and prejudice is the dual-process model (DPM) of ideology and prejudice (Duckitt, 2001) that posits that RWA and SDO are rooted in particular worldviews and personality dimensions. More precisely, RWA is expected to be linked to a dangerous worldview which in turn is connected with a social conforming personality. SDO, instead, is expected to be influenced by a competitive worldview which in turn is linked to a tough-minded personality. In such a way, RWA and SDO are connected with threats (e.g., Matthews, Levin, & Sidanius, 2009; Morrison & Ybarra, 2008). DPM, however, is less clear about the causal link between perception of threat and prejudice. On the one hand, indeed, DPM poses threatening and competitive worldviews as causes of RWA and SDO respectively. In such a way, it seems reasonable to suppose that such worldviews affect ingroup threat perception and so increase the support for conservative ideologies (e.g., Morrison, Fast & Ybarra, 2009). On the other hand, Duckitt (2006) showed that the effects of RWA and SDO on prejudice were mediated by the perception

of the outgroup's threat and competitiveness respectively. However, the causal role was attributed to the threatening and/or subordinated nature of the group that participants had to assess. In such a way, albeit mediations were tested, these were more clearly framed as moderation than mediation. That is to say, RWA and SDO were expected to predict prejudice depending on the extent that a group was perceived as threatening or competitive. Accordingly, Duckitt and Sibley (2010) showed that conservative ideologies predicted anti-immigrant feelings to the extent that immigrants were described as competitive, deviant or economically disadvantaged.

Trying to solve this inconsistency of results from different studies, some longitudinal investigations suggest that the relation between right-wing ideologies and threat is bidirectional rather than unidirectional. For example, Matthews et al. (2009) found that the perception of realistic threat and intergroup anxiety in the first year of college increased SDO in the third year of college but identified also a reverse path between SDO in the first year of college and realistic threat in the third year. Similarly, Sibley, Wilson and Duckitt (2007) found a bidirectional 5-month longitudinal relationship between dangerous and competitive worldviews and RWA and SDO. Also Rippl and Seipel (2012) reported a bidirectional relationship between cultural and material threat perceptions and authoritarianism. Finally, Onraet, Dhont and Van Hiel (2014), in a 3-wave longitudinal study, found that RWA and SDO at time 1 increased external threat at time 2 which, in turn, increased RWA and SDO at time 3.

However, these studies did not consider the direct effect of RWA, SDO and threat on prejudice and used several operationalizations of threat. For example, Onaret et al. (2014) considered external threat (i.e., threat coming from society) and internal threat (i.e., threat coming from an individual's private life). Thus, albeit there is some

evidence that RWA, SDO and threat can reinforce reciprocally, the relationship among these variables on the prejudice against immigrants is still not clear.

In order to shed further light on the mechanisms affecting prejudice against immigrants, the aim of the present work was to investigate the role of SDO, RWA and ingroup threat on the prejudice against immigrants, extending results to relatively underinvestigated samples of adults and health professionals. The principal expectation is that SDO, RWA, realistic and symbolic threats increase prejudice against immigrants (hypothesis 1). Moreover, ~~we expect that some kinds of mediation between right-wing ideologies and ingroup threats appear (hypothesis 2). Hypothesis 2 is general and does not specify the strength and the direction of expected mediation intentionally. Indeed,~~ given contrasting evidence in literature, the second aim of this research was to determine what kind of mediation would better fit the data. More precisely, we were interested in analyzing whether the prejudice was better predicted by a model in which SDO and RWA are the antecedent (model 1) or a model in which realistic and symbolic threats are the antecedent (model 2). Before proceeding, it is worth noting that there is general consensus about the fact that SDO and RWA are distinct, albeit related, constructs which are linked to prejudice in different ways and have different motivational bases (Duckitt, 2001; Cohrs & Stelzl, 2010). In particular, SDO, as belief about group-based dominance in a competitive world, is expected to be associated principally with realistic threat, regardless of cause or consequence. In the same way, RWA, as a belief about the social order and maintenance of ingroup integrity, is expected to be mainly linked with symbolic threat.

Figure 1 shows the two alternative models. As one can see, the first model considers SDO and RWA as antecedents (i.e., causes) of realistic and symbolic threats

respectively. Thus, in this model, the effect of SDO and RWA on prejudice is expected to be mediated by realistic and symbolic threats respectively. The second model, instead, considers SDO and RWA as consequences (i.e., results) of realistic and symbolic threats. In this case, the effect of both threats on prejudice against immigrants is expected to be mediated by SDO and RWA respectively.

Overview of the study

The alternative models were tested in two different samples. The first sample was composed of lay, non-student, people. The second sample was composed of healthcare professionals (i.e., nurses and physicians) working in a large hospital in northern Italy. This particular kind of sample was chosen in order to increase the ecological validity of the results. The healthcare setting is, in fact, a context in which, at least in Italy, the number of immigrant patients is increasing (ISTAT, 2014). Secondly, health resources are highly burdened by migratory flows, and healthcare personnel are particularly hit by the humanitarian emergency and new diseases linked to immigration. This makes the healthcare context an especially important setting in which to analyze prejudice against immigrants.

Method

Design, participants and procedure

A survey questionnaire design was used, and the same measures were collected in both samples. The first page of the questionnaire clearly stated the participation was voluntary and that data collection was anonymous. The return of the questionnaire was assumed as the consent to participate.

The first sample was composed of 226 participants, enrolled through quota convenience sampling. Three questionnaires were excluded because participants

declared not having Italian citizenship. This left a sample of 223 individuals, of whom 110 (49.3%) were men and 113 (50.7%) were women. Forty-five (20.3%) individuals were aged between 18 and 35 years, 45 (20.3%) between 36 and 45, 47 (21.2%) between 46 and 55, 43 (19.4%) between 56 and 65 and 42 (18.9%) were more than 65 years of age (one participant did not report his/her age).

In the healthcare professional sample, 800 questionnaires were distributed in a large hospital in central-northern Italy, and 702 were returned (response rate = 87.8%). However, only questionnaires completed by Italian citizens were considered. This left a sample of 679 professionals of whom 227 (33.4%) were men and 452 (66.6%) were women. Eleven participants (1.7%) were aged 25 years or less; 215 (31.3%) were aged between 26 and 35 years, 355 (52.7%) between 36 and 50 years and 97 (14.3%) were more than 50 years of age. One participant did not report his/her age. Finally, 141 were physicians (20.8%); 396 were nurses (58.3%) and 142 were healthcare assistants (20.9%). Questionnaires were hand-delivered inside each care-unit.

Measure

Given the peculiarity of the involved samples and the need to make questionnaire administration as little demanding of time as possible, short versions of the measurement instruments were used when possible.

Social dominance orientation was measured with the 4-item Short Social Dominance Orientation (SSDO) scale used by Pratto et al. (2013). Items were on a 5-point Likert-type scale (1 = totally disagree, 5 = totally agree; e.g., 'Superior groups should dominate inferior groups'). The internal reliability was satisfactory (Cronbach's $\alpha = 0.67$ and 0.61 for lay people and health professionals respectively) given the low number of items and similar to that found in the original work ($\alpha = 0.65$).

Right-wing authoritarianism was measured with the Italian short version (Manganelli Rattazzi, Bobbio, & Canova, 2007) of the RWA scale. The scale was composed of 14 items (e.g., 'Obedience and respect for authority are the most important values children should learn') on a 5-point Likert-type scale (1 = totally disagree, 5 = totally agree). A total score of RWA was computed as the mean of items score ($\alpha = 0.80$ and 0.71 for lay people and health professionals respectively).

Realistic and symbolic threats were measured through ten items (five for realistic threat and five for symbolic threat) taken from Stephan et al.'s (1999) scale. Items were on a 5-point Likert-type scale (1 totally disagree, 5 = totally agree) and asked participants to express their agreement with some statements referring to realistic (i.e., "I think that immigrants occupy jobs that should be reserved for Italians") and symbolic (i.e., "Foreign immigration is undermining Italian culture") threats from immigrants. Both scales had good internal reliability (0.73 and 0.68 and $\alpha = 0.90$ and $\alpha = 0.73$ for realistic and symbolic threats respectively among lay people and healthcare professionals).

Prejudice against immigrants[1] was measured through the modern prejudice subscale of Akrami, Ekehammar and Araya's (2000) classic and modern racial prejudice scale, translated and adapted in Italy by Gattino, Miglietta and Testa (2011). The subscale measuring modern racial prejudice (MRP) is composed of eight items (e.g., 'Immigrant are getting too demanding in the push for equal rights', and 'A multicultural Italy would be good', reversed) on a 5-point Likert-type scale (1 = totally disagree, 5 = totally agree). Internal consistency was good ($\alpha = 0.74$ and 0.78 for lay people and health professionals respectively).

For all measures, higher scores indicate higher levels of the measured construct.

Plan of the analysis

We performed the same statistical analyses in both samples. More precisely, we tested the effects of SDO, RWA and group threats on prejudice against immigrants through a multiple regression analysis, after having checked for multicollinearity.

In order to test whether SDO and RWA effects on MRP would be mediated by realistic and symbolic threats or whether, instead, they would mediate the effect of group threats, we used a structural equation modelling (SEM) approach. More precisely, we tested and then compared the two alternative models. Models were tested with maximum likelihood estimation with robust standard error. A model can be said to have a satisfactory fit when the CFI and TLI are close to .95 and the SRMR and RMSEA values are smaller than .08 (e.g., Kline, 2005). Given that the models are non-nested, comparison through chi-square is not possible. For this reason we used Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) indexes in order to compare models. Moreover, we used the procedure suggested by Merkle, You and Preacher (2015), which is an extension of Vuong's (1989) likelihood ratio tests of non-nested models to structural equation models. This model is a formal test of the null hypothesis that compared models are indistinguishable and have the same fit. In other words, this test is similar to the likelihood ratio test but applied to non-nested models.

All analyses were performed with R software (R Core Team, 2015).

Results

Sample 1 (lay people)

Table 1 reports descriptive statistics and zero-order correlations among considered variables for sample 1. As one can see, all variables were significantly and

positively correlated, albeit no correlation was as strong as to menace discriminant validity among measures.

Insert Table 1 about here

Multicollinearity was checked and no concerns appeared (tolerance ranged from 0.49 to 0.79, and variance inflation factor ranged from 1.26 to 2.04). The regression model was significant ($F(4,218) = 83.16$, $p < .001$) explaining a substantial part of variance in MRP (adjusted $R^2 = 0.60$). As expected by hypothesis 1, all predictors had positive and significant effects. Stronger effects were due to realistic ($\beta = 0.32$, $p < 0.001$) and symbolic threats ($\beta = 0.30$, $p < 0.001$), while SDO ($\beta = 0.26$, $p < .001$) and RWA ($\beta = 0.10$, $p = 0.05$) had weaker but significant effects on MRP. Comparing regression results and zero-order correlation (Table 1), it appears that all effects, albeit still significant, were reduced when controlled for by other considered variables, suggesting that, as expected by hypothesis 2, some kind of mediation might have occurred.

Comparing models of predictors of prejudice

The results of models estimation are shown in Figure 1. The first model, in which SDO and RWA are causes of threats, showed a poor fit: $\chi^2(2) = 85.37$, $p < .001$, CFI = 0.800, TLI = 0.002, RMSEA = 0.432, $p < .001$, 90% CI = 0.355-0.515 , SRMR = 0.184, AIC = 2214.695, adj. BIC: 2218.980. Results indicated that all but RWA on MRP ($\beta = .11$, $p = 0.08$) paths were statistically significant. Realistic threat mediated the effect of SDO on prejudice (indirect effect: $\beta = .10$, $p < .001$, 95%CI = .037 - .153), and symbolic threat completely mediated the effect of RWA (indirect effect: $\beta = .10$, $p =$

.001, 95%CI = .033 - .114). The model explained a substantial portion of variance in prejudice as indicated by the R-squared = .52.

The second model, in which realistic and symbolic threats were considered as antecedents of SDO and RWA, showed a better fit: $\chi^2(2) = 26.79$, $p < .001$, CFI = 0.940, TLI = 0.742, RMSEA = 0.236, $p < .001$, 90% CI = 0.161-0.320 , SRMR = 0.065, AIC: 2159.200, Adj. BIC = 2163.485. Also in this case, significant mediations appeared. More precisely, SDO mediated the effect of realistic threat on prejudice (indirect effect: $\beta = .11$, $p < .001$, 95%CI = .042 - .127), but RWA did not mediate the effect of symbolic threat (indirect effect: $\beta = .06$, $p = .09$, 95%CI = -.01 - .11). This model explained a higher percentage of prejudice variance than the previous model ($R^2 = .59$).

Table 2 shows fit indexes of the two models. As indicated, for the lay people sample, model 2 (i.e., realistic and symbolic threats as predictors of SDO, RWA and prejudice) yielded better fit than model 1 (i.e., SDO and RWA as predictors of intergroup threats). Accordingly, a direct test of models comparison indicated that model 2 explained more variance ($w^2 = .174$, $p = .006$) and had better fit ($z = 4.56$, $p < .001$) than model 1.

Insert Table 2 about here

Sample 2 (healthcare professionals)

Table 3 reports descriptive statistics and zero-order correlations among considered variables for the sample of nurses and physicians. Also in this case, all

variables were significantly and positively correlated, but no discriminant validity concerns appeared.

Insert Table 3 about here

Also in this sample, no multicollinearity concerns appeared (tolerance ranged from 0.58 to 0.76, and variance inflation factor ranged from 1.31 to 1.72), and the regression model was significant ($F(4,672) = 188.25$, $p < .001$) explaining a substantial part of variance in MRP (adjusted $R^2 = 0.53$). As expected by hypothesis 1, all predictors had positive and significant effect. As for sample 1, stronger effects were due to realistic ($\beta = 0.34$, $p < 0.001$) and symbolic threats ($\beta = 0.33$, p < 0.001), while SDO ($\beta = 0.16$, $p < .001$) and RWA ($\beta = 0.11$, $p = 0.001$) had weaker but significant effects on MRP. As expected ~~by hypothesis 2~~, comparison of zero-order correlations and regression coefficients suggested that some kind of mediation might have occurred.

Comparing models of predictors of prejudice

The results of models estimation are shown in Figure 1. The first model (i.e., SDO and RWA predict threats) had poor fit: $\chi^2(2) = 108.290$, p < .001, CFI = 0.886, TLI = 0.431, RMSEA = 0.280, $p < .001$, 90% CI = 0.237-0.325 , SRMR = 0.112, AIC = 6889.853, adj. BIC: 6914.073. Results indicated that all paths were statistically significant. Realistic threat mediated the effect of SDO on prejudice (indirect effect: $\beta = 0.12$, $p < .001$, 95% CI = .071- .137), and symbolic threat mediated the effect of RWA (indirect effect: $\beta = .08$, $p < .001$, 95%CI = .057- .133). The model explained a substantial portion of variance in prejudice (R-squared = .48).

The model with realistic and symbolic threats as causes of SDO and RWA (model 2) showed a better fit: $\chi^2(2) = 79.06$, $p < .001$, CFI = 0.918, TLI = 0.588, RMSEA = 0.238, $p < .001$, 90% CI = 0.196-0.283 , SRMR = 0.076, AIC: 6861.688, Adj. BIC = 6885.907. Also in this case, significant mediations appeared. More precisely, SDO mediated the effect of realistic threat on prejudice (indirect effect: β = .05, $p < .001$, 95%CI = .017 - .048), and RWA mediated the effect of symbolic threat (indirect effect: β = .04, $p < .01$, 95%CI = .012 - .059). This model explained a higher percentage of prejudice variance than the previous model ($R^2 = .51$).

Table 2 shows fit indexes of the two models. As indicated, model 2 yielded better fit than model 1. Accordingly, a direct test of models comparison indicated that model 2 explained more variance (w^2 = .078, p = .003) and had better fit (z = 1.93, p = .02) than model 1.

Insert Figure 1 about here

Discussion and conclusion

Present research investigated the role of SDO, RWA and ingroup threat (symbolic and realistic) on prejudice against immigrants. Albeit the role of these variables on prejudice has been already consistently shown, debate exists on whether SDO and RWA must be considered either causes or consequences of ingroup threats. On one hand, indeed, some theoretical accounts, such as intergroup threat theory and social dominance theory, see conservative ideologies as causes of both ingroup threat perception and prejudice against the outgroup. In this sense, SDO and RWA are expected to increase ingroup threat perception and then prejudice against immigrants.

On the contrary, other theoretical accounts, such as motivated social cognition approach (e.g., Jost et al., 2003), posit that conservative ideologies are boosted by perception of ingroup threats. In this sense, then, SDO and RWA are predicted to be caused by ingroup threat. Several works have been conducted on this topic, supplying contrasting evidence (e.g., Cohrs, 2013; Matthews et al., 2009; Morrison & Ybarra, 2008; Sibley et al., 2007) and often failing to take into account conservative ideologies, ingroup threat and prejudice at the same time.

The present work tries to put new light on mechanisms that link conservative ideologies, ingroup threat and prejudice against immigrants, by comparing the two alternative paths in which all variables are taken into account contemporaneously. This comparison was done with data collected from two non-student distinct samples: one sample of lay people and one sample of healthcare professionals.

Firstly, results confirm that symbolic and realistic ingroup threats as well as SDO and RWA are positively linked to prejudice against immigrants in both samples. These findings confirm existing literature showing threat and conservative ideologies to be important variables predicting prejudice against outgroups and immigrants, also among lay people and healthcare professionals. Results, however, indicate also that these variables are not independent one from another, since zero-order effects were changed when prejudice was regressed on all variables. The test of two alternative models of the effects of SDO, RWA and threats on prejudice showed that the model in which SDO and RWA mediated the effect of threats on prejudice was better than the model in which ingroup threats mediated the relation between SDO and RWA and prejudice against immigrants, although models did not meet the commonly accepted cut-off criteria. We are aware that more complex paths could have better fit. However,

our goal was to assess which model was better than another and the lack of overall fit is not a primary concern in this case.

Thus, the present results seem to corroborate the hypothesis that RWA and SDO, as proxies of conservative ideology, are predicted, more than predictors, of ingroup threat perception, sustaining thus theories seeing the endorsement of conservative ideologies as a reaction of perception of menace (i.e., System justification theory; Jost & Banaji, 1994). This is also consistent with data from Jost, Napier, Thorisdottir, Gosling, Palfai and Ostafin (2007) showing that threat management is specifically associated with conservative (vs. liberal) ideologies more than with general ideological extremism.

Results of this research indicated also that the effect of ingroup threat on prejudice is only partially mediated by conservative ideologies, and then ingroup threats seem to increase prejudice independently of SDO and RWA. This highlights the importance of emotional aspects on prejudice and confirms the important role that contextual variables eliciting emotions (i.e., the images conveyed by the media) may have on anti-immigrant attitudes. In this sense, the present research corroborates the idea of prejudice as a reaction to perception of ingroup threat, which increases endorsement of conservative ideologies that in turn increase prejudice.

The present results seem also to sustain the idea that SDO and RWA are not principally personality or stable traits (Sidanius & Pratto, 1999), but rather context-dependent variables serving ingroup interests which are activated in a particular situation (Guimond, et al., 2003; Lehmiller & Schmitt, 2007), such as the perception that migrants realistically or symbolically threaten the ingroup. This, of course, does not mean that SDO and RWA have no personality and stable roots that could explain, for

example, the causal relation between SDO/RWA and perception of ingroup threat in model 1. Following the dual process model of ideology and prejudice, in fact, SDO and RWA are expected to result from the interaction among socialization processes, situational factors and personality traits (Duckitt, 2001; 2006; Sibley & Duckitt, 2013). Simply, the present results seem to sustain the idea that, all other things being equal, perception of threat increases both conservative ideologies and prejudice against immigrants.

In our opinion, what has been discussed thus far highlights the need to clearly disambiguate the meaning of both SDO and RWA constructs that are considered sometimes as personality traits (Altemeyer, 1998; Ekehammar & Akrami, 2007), and sometimes as context-dependent attitudes that can be activated by intergroup threat (Duckitt, 2001, see also Sibley et al., 2013), intergroup competition (Esses, Jackson, Dovidio, & Hodson, 2005) or intergroup inequality (Jost & Banaji, 1994). This, indeed, is a contested node that is still partially unresolved in the literature and needs further investigation.

A final remark should be made regarding the association between symbolic and realistic threat and SDO and RWA. Indeed, according to the DPM as well as ITT we considered SDO associated with realistic threat, which derives from the belief that the world is a ruthlessly competitive jungle, and RWA associated with symbolic threat, which derives from the social worldview belief that the world is a dangerous and threatening place (Duckitt, 2001). This was done not only for theoretical motivations but also for empirical reasons (i.e., considering all possible correlations would have saturated the models, and then no comparison would be possible). However, findings indicated that threats and conservative ideologies were all correlated with each other.

This of course may be due to the correlational nature of the present study implying common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), but it may also suggest that RWA and SDO are not as distinguishable, or independent one from another, as the model predicts.

Of course, the correlational and cross-sectional design of the present work, along with the already cited common method bias, does prevent us from inferring causal relationships among variables. In fact, we cannot state that the better fitting model represents the actual relationship among variables. However, the fact that two relatively large samples of common people and healthcare professionals (and not students) were investigated increases the robustness and the generalizability of present results. Nevertheless, to assess causal inference is important not only at theoretical but also at a practical level. Indeed, in a time in which nations are facing dramatic migratory flows and an increasing of prejudice and discrimination against migrants, it would be crucial to know whether people's anti-immigrant feelings are due principally to perception of threat or to ideological conservatism. Present research tries to contribute to reaching this aim, suggesting that perception of threat, more than conservatism, is a strong factor increasing prejudice against immigrants among the non-student population. This result seems also to support the usefulness and the urgency of intervention programs geared to contain those contextual factors, such as mass-media communications, which tend to increase feelings of threat in the population, thereby encouraging, directly and indirectly, prejudice and negative attitudes toward migrants.

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Table 1. Descriptive statistics and zero-order correlation among considered variables for lay people sample (n = 223).

	M	*SD*	RWA	SDO	Realistic Threat	Symbolic Threat
MRP	3.07	0.70	.51**	.54**	.68**	.66**
RWA	2.72	0.67	-	.32**	.54**	.53**
SDO	1.99	0.83		-	.43**	.38**
Realistic Threat	3.01	0.91			-	.66**
Symbolic Threat	3.24	0.77				-

** $p < .01$

Table 2. Fit indexes of tested models for both samples.

	χ^2 (df)	CFI	TLI	AIC	BIC adj	R^2
Sample 1 (lay people)						
SDO and RWA as predictors	85.37(2)	.800	.002	2214.695	2218.980	0.52
Realistic and symbolic threats as predictors	26.79(2)	.940	.702	2159.200	2163.485	0.59
Sample 2 (healthcare professionals)						
SDO and RWA as predictors	108.290 (2)	.886	.431	6889.85	6914.07	.48
Realistic and symbolic threats as predictors	79.06 (2)	.918	.588	6861.69	6885.91	.51

CFI = Comparative Fit Index; TLI = Tucker-Lewis index, AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion

Table 3. Descriptive statistics and zero-order correlation among considered variables for healthcare professional sample (n = 679).

|	*M*	*SD*	RWA	SDO	Realistic Threat	Symbolic Threat
MRP	3.13	0.73	.46**	.42**	.64**	.60**
RWA	2.75	0.58	-	.43**	.47**	.38**
SDO	2.11	0.78		-	.39**	.24**
Realistic Threat	2.68	1.08			-	.56**
Symbolic Threat	3.45	0.79				-

** *p* < .01

Footnotes

[1] One reviewer raised the issue that the content of items measuring symbolic and realistic threats may partially overlap the content of those measuring modern prejudice. Given that this may be the case, we assessed through confirmatory factor analysis (CFA) whether a correlated three-dimensional structure (i.e. realistic and symbolic threat and modern prejudice) fitted the data better than a one-dimensional model in which all items were intended to measure the same latent construct. For both samples, CFA evidenced that the three-dimensional model has better fit than the one-dimensional model ($\Delta\chi^2(3) = 21.03$, $p < .001$, and $\Delta\chi^2(3) = 108.50$, $p < .001$ for lay people and healthcare professionals respectively), suggesting that threats and modern prejudice were different, albeit related, measures.
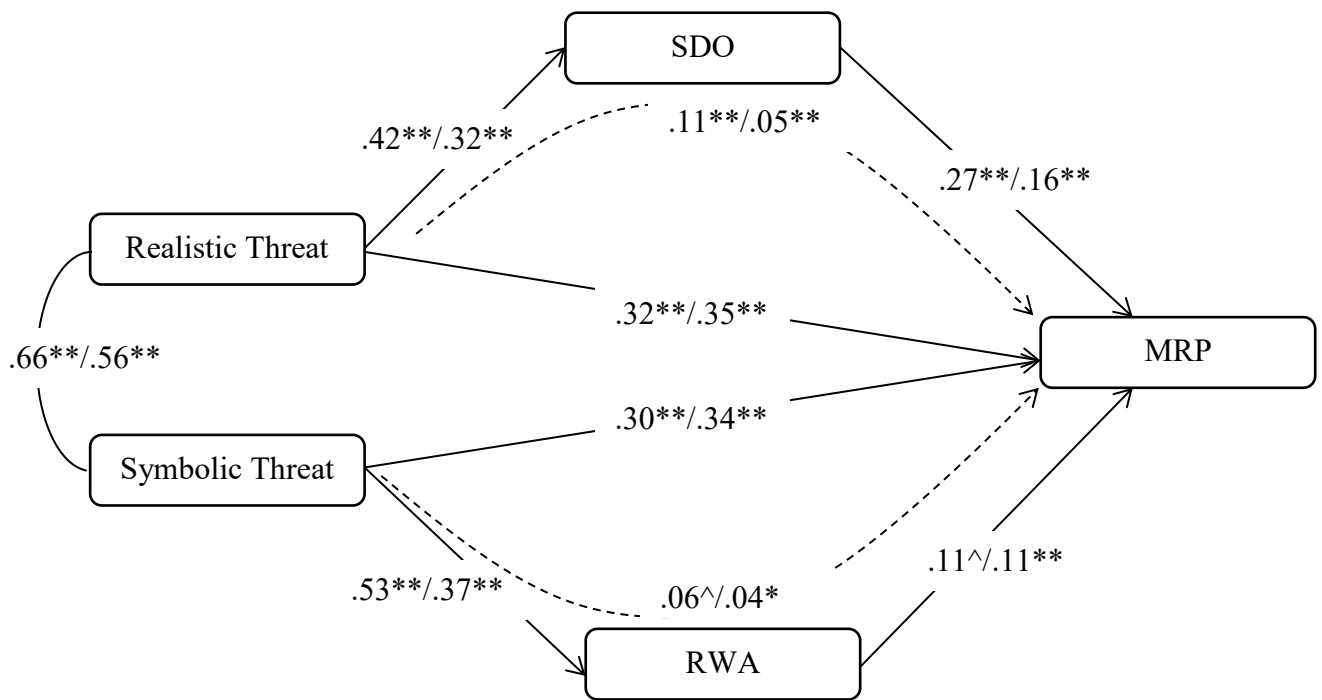
Figure Caption

Figure 1. Coefficient estimation of model 1 and model 2 in both samples.

Figure 1

Model 1. Threats as mediators of SDO and RWA on prejudice
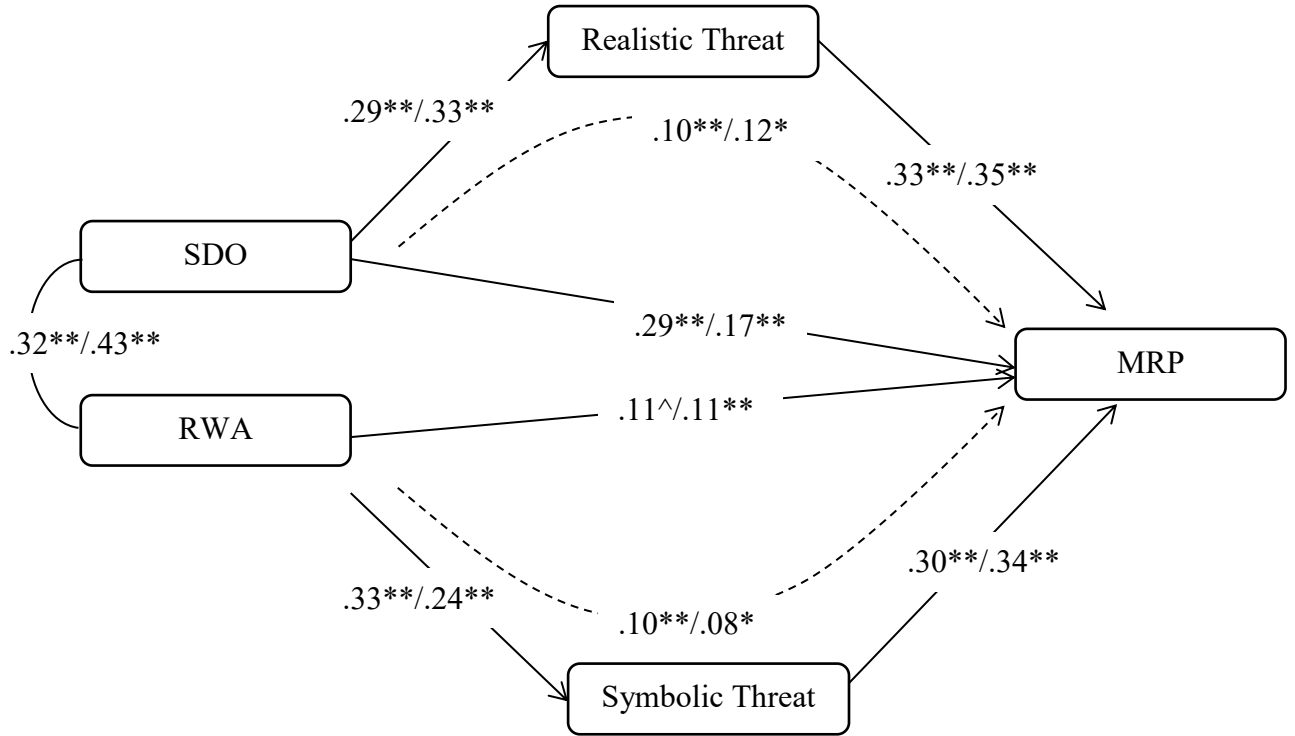
Model 2. SDO and RWA as mediators of threats on prejudice.

Completely Standardized coefficients are reported. Values before slash (/) refer to lay

people sample; values after / refer to healthcare professional sample.

Dotted lines represent indirect effects, and solid lines represent direct effects.

^ *p* < .10; * *p* < .01; ** *p* < .001