Research article

From prejudice to discrimination: The legitimizing role of perceived threat in discrimination against immigrants

CÍCERO PEREIRA[1,2]*, JORGE VALA[1] AND RUI COSTA-LOPES[1]

[1]*Instituto de Ciências Sociais da Universidade de Lisboa, Portugal*
[2]*Pontifícia Universidade Católica de Goiás, Brasil*

Abstract

This research analyses the mediational role of threat perception in the relationship between prejudice and discrimination (opposition to immigration and opposition to naturalization of immigrants). In the first study, using representative samples in 21 European countries (N = 36 566) from European Social Survey (2002), we showed that the relationship between prejudice and opposition to immigration was more strongly mediated by realistic than by symbolic threat perceptions. In Study 2, using representative samples in two countries with different traditions of immigration (Switzerland, N = 940; Portugal, N = 1514), we showed that realistic threat more strongly mediated the relationship between prejudice and opposition to immigration, while only symbolic threat perception mediated the link between prejudice and opposition to naturalization. The theoretical implications of considering threat perceptions as factors that legitimize discrimination are discussed. Copyright © 2009 John Wiley & Sons, Ltd.

Research on the relationship between prejudice and discrimination (e.g. Lord, Lepper, & Mackie, 1984; McConahay, 1983; Smith & Dixon, 1968; Weitz, 1972) has been carried out within the more general framework of the early studies on the connection between attitude and behaviour (e.g. Kutner, Wilkins, & Yarrow, 1952; LaPiere, 1934; Wicker, 1969). While the literature on the relationship between attitude and behaviour specifies *when* attitudes predict behaviour (e.g. Fishbein & Ajzen, 1975; Zanna, Olson, & Fazio, 1980) and presents some hypotheses on *how* this process occurs (e.g. Fazio, 1990; Snyder, 1982; for a review, see Eagly & Chaiken, 1998), the literature on the prejudice–discrimination link still reveals some shortcomings in these matters (see Fiske, 1998, 2000, for a review). In fact, the few studies concerning the *when* question have shown that the prejudice–discrimination correlation has a moderate magnitude (Dovidio, Brigham, Johnson, & Gaertner, 1996), and that this correlation depends on several moderators (Schutz & Six, 1996). To our knowledge, only the model proposed by Pereira, Vala, and Leyens (2009) has addressed the *how* question, predicting that the psychological processes through which preconceived attitudes lead to discriminatory behaviour involve justifying factors, such as threat perception. In fact, Pereira et al. experimentally showed that symbolic threat perception *mediates* the relationship between infra-humanization of Turkish people and the opposition to the adhesion of Turkey to the European Union (EU). The current paper extends Pereira et al.'s findings by testing whether distinct types of threats differentially mediate the relationship between prejudice and discrimination. Specifically, we tested the hypothesis that the relationship between prejudice and *opposition to immigration* in Europe is more strongly mediated by *realistic* threat (Studies 1 and 2) and that the relationship between prejudice and *opposition to naturalization* is more strongly mediated by *symbolic* threat (Study 2).

*Correspondence to: Cícero Pereira, Instituto de Ciências Sociais da Universidade de Lisboa, Avenida Professor Aníbal de Bettencourt, 9, Lisboa, 1600–189 Portugal. E-mail: cicero.pereira@ics.ul.pt

Legitimizing the Prejudice–Discrimination Relationship

The role of legitimizing factors has often been outlined in the literature on prejudice and discrimination. Allport (1954) underlined the importance of justifying factors, mainly stereotypes, in understanding the nature of intergroup bias, and Tajfel (1984) pointed out the same legitimizing factors of intergroup tensions and social asymmetries. The psychological function of justifying factors such as stereotypes has been empirically shown (e.g. Rutland & Brown, 2001; Yzerbyt, Rocher, & Schadron, 1997), but there are few studies on the role played by justifications in the relationship between prejudice and discrimination. Nonetheless, some theoretical models seem to conceptually support our proposal. For instance, research on aversive racism found that the availability of a non-racist justification facilitates the expression of discrimination by aversive racists (Gaertner & Dovidio, 1986). An explanation to such an effect has been proposed within the justification–suppression model of prejudice (Crandall & Eshleman, 2003), which suggests that people hold genuinely prejudiced beliefs even though they may have internalized unprejudiced values and norms. Since prejudice is usually suppressed by anti-prejudiced norms, personal standards, beliefs and values, its expression depends on a justification that allows the individual to express prejudice without being sanctioned. System justification theory explains that this is possible because there is a general motive to justify the *status quo* and to bolster the legitimacy of the existing social order (Jost & Banaji, 1994). According to social dominance theory (Sidanius & Pratto, 1999), justifications may occur through legitimizing myths, i.e. ideologies used by people to legitimate social hierarchies. Because these myths maintain the hegemony of dominant groups over dominated groups, they function as justifications for opposition to policies that benefit minority groups.

In line with these views, we propose that, in democratic contexts, discrimination is facilitated by the accessibility of a justification seen as unprejudiced (Gaertner & Dovidio, 1986). The reasoning is that this justification helps individuals to resolve the social and psychological conflicts that derive from, on the one hand, the display of prejudiced behaviour, and, on the other hand, the need to be viewed as unprejudiced (Crandall & Eshleman, 2003). We propose this happens through a psychological mechanism based on the general motive of justification (Jost & Banaji, 1994), which leads people to look for legitimizing myths to support existing social arrangements (Sidanius & Pratto, 1999). Extending this process to contribute to the understanding of the relationship between prejudice and discrimination, we build on the idea that prejudice can elicit the search for justifications to legitimize discrimination. Specifically, we consider that the higher the prejudice, the higher should be the motivation to use legitimizing myths as justifications for discriminatory behaviour, i.e. we deem the relationship between prejudice and discrimination to be mediated by these justifications (Pereira et al., 2009).

The Justifying Role of Realistic and Symbolic Threat Perception on the Support to Discriminatory Policies Against Immigrants

Realistic and symbolic threat perceptions constitute examples of justifications for discrimination. Realistic threats are threats to the existence, the (economic and political) power and the (physical or material) well being of the ingroup. Symbolic threats are related to differences between groups in terms of values, morals and standards and how these differences challenge the ingroup's worldview (Stephan et al., 2002). The idea that threat constitutes a justification of discrimination is not in itself a new one (see Crandall & Eshleman, 2003). In fact, one of the first analyses of the justifying role of threat perception in intergroup attitudes was carried out by LaPiere (1936) in his research on the explanations given by the inhabitants of *Fresno County*, California, to justify their antipathy towards Armenian immigrants. LaPierre found that threat perception was the main reason invoked to explain intergroup antipathy. This study is particularly important because it presents threat perception as a justifying factor *deriving* from a negative attitude towards the out-group. The association between (symbolic and realistic) threat and prejudiced attitudes has been exhaustively analysed by several theories and models, such as the group position theory (Blumer, 1958; Bobo, 1999), the realistic group conflict theory (LeVine & Campbell, 1972; Sherif, 1966), the instrumental model of group conflict (Esses, Jackson, & Armstrong, 1998), the sociofunctional threat-based approach (Cottrell & Neuberg, 2005), and the integrated threat theory of prejudice (Stephan & Renfro, 2002; Stephan & Stephan, 2000). Correlational studies have supported these models showing that both realistic (e.g. Bobo, 1983; Esses, Dovidio, Jackson, & Armstrong, 2001; Quillian, 1995; Stephan et al., 2002) and symbolic threat (Esses, Haddock, & Zanna, 1993; Kinder & Sears, 1981; Sears & Henry, 2003; Stephan et al., 2002) predict prejudice. However, even though longitudinal studies have shown that general threat feelings cause dislike towards

outgroups (Schlueter, Schmidt, & Wagner, 2008), the causal relation between symbolic or realistic threat and prejudice is not yet fully supported (for a meta-analysis, see Riek, Mania, & Gaertner, 2006). In fact, it is possible that prejudice can instead predict realistic and symbolic threats because prejudice might lead people to see outgroup members as a threat to the ingroup. In addition, it is likely that the more an outgroup is seen as a threat, the more justifiable discriminatory behaviour against members of this outgroup would appear to be (e.g. Pereira et al., 2009). Hence, threat perceptions should have a mediating role in the relationship between prejudice and discrimination.

Indeed, this threat perception should be a mediator in the relationship between prejudice and discrimination since it can be regarded as a justifying factor of discrimination (see Crandall & Eshleman, 2003; LaPiere, 1936), especially when the social context condemns discrimination. Pereira et al. (2009) provided experimental support for this hypothesis by manipulating an infra-humanized representation of Turkish people, i.e. the denial of uniquely human essences to the outgroup (Leyens et al., 2000). They showed (Study 1) that an infra-humanized representation influenced participants' opposition to Turkey's adhesion to the EU. More importantly, Pereira et al. found that the psychological process through which this effect occurred involved a symbolic threat perception. In this sense, symbolic threat mediated the relationship between infra-humanization and opposition to Turkey's entry into the EU. Furthermore, when participants were placed in an egalitarian normative context (Study 2), they experienced a dilemma and used symbolic threat as a justification for discrimination. This dilemma was absent when the prevalent norms were permissive (i.e. meritocratic). In such a context, no justification was needed to discriminate. Pereira et al. interpreted these effects based on the idea that, if discrimination against minority groups still persists in democratic societies, even under the pressure of a normative standard that condemns prejudiced attitudes, it must then be psychologically incoherent to discriminate against other groups based on prejudice. Thus, in these societies, the relationship between prejudice and discrimination needs to be justified in order to re-establish this 'psychological coherence'.

Pereira et al.'s (2009) experiments provided internal validity for the mediating role of threat perceptions. The current paper extends Pereira et al.'s work in at least three ways: (a) We use representative samples obtained in several European countries in order to provide external validity for the mediating role of threat perception, (b) we show how different types of discrimination require different types of justifications (i.e. symbolic or realistic threat perception) and (c) we use a traditional operationalization of prejudice, i.e. a negative attitude towards outgroups (see Allport, 1954; Pettigrew, 2009).

We consider two types of discrimination that reflect two political measures that are directly linked to discrimination against immigrants: The proposals to reduce immigrant numbers and to make naturalization more difficult. Opposition to immigration has been more closely connected to the idea that immigrants represent both an economic and a security threat, i.e. this opposition is recurrently linked more to the realistic (e.g. Bobo, 1988; Esses et al., 2001) than to the symbolic threat, even though symbolic aspects (such as differences in group values) have also been shown to be positively correlated with support for anti-immigration policies (e.g. Esses et al., 1993; Stephan, Renfro, Esses, Stephan, & Martin, 2005). The psychological principle activated is that people feel threatened because they think that if migration flows increase, competition for scarce resources and crime rates will also increase (Bobo, 1988; Quillian, 1995). Thus, realistic threat may be an important justification for opposition to immigration.

Opposition to naturalization may also involve concerns with realistic aspects since naturalization is objectively related to the increasing of civil, labour and political rights for those who acquire it, providing them with a similar or even equal status to the one native citizens enjoy. Nevertheless, restriction on naturalization may be linked to the protection of cultural aspects of the host society and to the defence of a unique identity, distinct from all others. In other words, opposition to naturalization may involve symbolic threat because if the host country adopts a policy facilitating the naturalization of immigrants (i.e. if it turns 'them' into 'us'), people might infer that, as time goes by, the values and traditions that define their country's cultural identity could be 'contaminated' and 'altered' by mixing it with the values and traditions characterizing the cultural identity of the naturalized people. People may then believe this brings ingroup distinctiveness into question, which is a fundamental aspect in the understanding of 'intergroup' hostility (Branscombe, Ellemers, Spears, & Doosje, 1999; Tajfel & Turner, 1979; Ullrich, Christ, & Schlüter, 2006). Thus, symbolic threat may also be an important justifying factor in opposition to naturalization.

To sum up, when we think about the popular discourse about immigrants and immigration, we notice that it is also structured along these two fundamental lines. The first one refers to identity aspects such as immigrants' different culture, how they resemble (or not) the host society members in terms of personality features, or how native citizens feel about the way immigrants 'rear their children'. The second one refers to the fact that these immigrants may or may not be 'affecting the economy' and the individual native citizen's personal financial situation, and how they are 'taking jobs away' from

people born in the country or even how they 'increase crime rates'. Thus, if the popular discourse about immigrants and immigration is organized according to these two factors, it is quite plausible to think that these two types of factors (symbolic and realistic) will differentially affect discriminatory attitudes towards immigrants. In order to analyse this hypothesis, we carried out two studies.

Study 1

The aim of this study was to analyse the mediating role of justifications in the relationship between prejudice and discrimination. We measured justifications in terms of perceived realistic and symbolic threat. Discrimination was operationalized as opposition to immigration. According to our hypotheses, if threat perception justifies the relationship between prejudice and discrimination, then the effect of prejudice on opposition to immigration should be mediated by threat perception. Furthermore, the link between prejudice and opposition to immigration should be more strongly mediated by realistic threat because the issues concerning opposition to immigration are recurrently associated (in the public discourse) with increased competition for scarce resources and problems connected with crime rates and safety (e.g. Stephan, Ybarra, & Bachman, 1999; Vala, Pereira, & Ramos, 2006).

The analysis was carried out in three phases. First, we tested the mediation hypothesis. Second, we analysed the proposed model's goodness-of-fit, and compared it with the adjustment of two alternative models. In the first alternative model, prejudice was specified as a consequence of threat perception (e.g. Stephan et al., 2002). In the second alternative model threat perception was specified as a consequence of opposition to immigration[1], i.e. threat perception would be a rationalization for discrimination in the sense that it follows and not precedes discriminatory behaviour. In the third phase, we tested the hypothesis that the mediation role of threat perception occurs in countries with clearly different immigration policies. In order to test the invariance of the model's structural parameters between countries with very different policies of immigration, we compared the model's fits using samples from France, Germany and the United Kingdom. Indeed, based on Bourhis, Moise, Perreault, and Senecal's (1997) typology of 'ideologies of integration', Vala et al. (2006) proposed that those countries exemplify three historically different paradigms of immigrant integration coherent with these ideologies: France represents an assimilation paradigm induced by the 'French republican ideology', Germany depicts the 'separation' paradigm and the United Kingdom exemplifies a version of 'mitigated integration' paradigm (see also Kivisto, 2002). Despite these different ideologies of integration, we hypothesized that the proposed model would work equally well among these countries. Therefore, we tested the structural parameters invariance in a multi-group analysis because we consider that the use of justifications is necessary in every democratic country or in any other context where egalitarian values are prominent and, therefore, threat should work as a mediator of the relationship between prejudice and opposition to immigration in all these countries.

Method

Participants   We used the *European Social Survey* database (ESS-Round 1, Jowell & Central Co-ordinating Team, 2003)[2], and selected the probabilistic representative samples in 21 European countries, which amounted to 39 860 participants. We excluded from the analysis those participants who identified themselves as immigrants or who had not been born in the country where the data were collected. This procedure reduced the sample to 36 566 participants that represents the population aged 15 years and older of these 21 countries[3].

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[1]We kindly acknowledge the suggestion made by one of the reviewers on this matter.
[2]The ESS is an international academic research project, the aim of which is to carry out a systematic study of the values, attitudes, beliefs and behaviour patterns within and between European countries. Every 2 years, representative samples of the countries involved fill out this questionnaire. In 2005 the ESS received the European Union Descartes Prize for the Social Sciences for the high quality of their database and for the rigorous methodological procedure used in sampling and measurement of the variables.
[3]To avoid bias in the sampling process, the ESS-1 database provides two weighting factors, *design weight (dweight)* and *population weight (pweight)*. The *dweight* corrects errors in the selection of each individual, balancing the selection probabilities of all those making up the sample. The *pweight* adjusts the country samples so that the differences in sample sizes correspond to the differences in the sizes of their respective populations. To guarantee that the two types of bias were controlled, the *pweight* was combined with the *dweight* (i.e. *pweight × dweight = pdweight*). Therefore, in the analyses carried out in each country, we used *dweight*, whilst for analyses involving all the countries, or in comparisons between them, we used *pdweight*.

Prejudice Measure   ESS-1 includes two indicators classically used to measure blatant prejudice (e.g. Pettigrew & Meertens, 1995). Participants ware asked to think about people from another country, race or ethnic group seen as different from the majority of citizens in their country. They were then asked to indicate to what extent they would be upset if one of these people 'were appointed as your boss' (P-item 1) or 'married a close relative of yours' (P-item 2). The answers varied from 0 (I would not mind at all) to 10 (I would mind a lot).

Realistic Threat Measure   Two indicators were used to measure realistic threat perception: One for security threat and another one for economic threat. These indicators reflect the realistic threat definition as considered in most studies on threat perception (e.g. Esses et al., 1998; Riek et al., 2006; Stephan et al., 2002). The indicator of security threat was as follows: 'Are [country]'s crime problems made worse or better by people coming to live here from other countries? The answers vary from 0 (crime problems made better) to 10 (crime problems made worse), so that higher scores indicate a greater perception of threat to security. The indicator of economic threat is a composed index of the following six items: 'Average wages and salaries are generally brought down by people coming to live and work here'; 'People who come to live and work here generally harm the economic prospects of the poor more than the rich'; 'People who come to live and work here help to fill jobs where there are shortages of workers'; 'Would you say that people who come to live here generally take jobs away from workers in [country], or generally help to create new jobs?'; 'Most people who come to live here work and pay taxes. They also use health and welfare services. On balance, do you think people who come here take out more than they put in or put in more than they take out?'; 'Would you say it is generally bad or good for [country]'s economy that people come to live here from other countries?' The answers to the first three indicators varied from 1 (agree strongly) to 5 (disagree strongly), while answers to the final three varied from 0 (major threat) to 10 (minor threat). When necessary, we reversed these answers so that higher scores would indicate greater threat. A factorial analysis was carried out on the answers to these items. Only one factor was extracted explaining 45% of the variance (eigenvalue $= 2.71$; loadings varying from .38 to .77). Also importantly, only one factor was extracted for each country. We then standardized these scores in order to calculate the composed index of economic threat (Cronbach's $\alpha = .74$ for total sample; Cronbach's α varying from .70 to 78 between countries).

Symbolic Threat Measure   ESS-1 has one indicator to measure the perception of symbolic threat: 'Would you say that [country]'s cultural life is generally undermined or enriched by people coming to live here from other countries?' The answers vary from 0 (cultural life enriched) to 10 (cultural life undermined), so that higher scores would indicate greater perception of symbolic threat. This indicator operationalizes the core features of symbolic threat as a feeling that the simple presence of another group jeopardizes the ingroup's values and traditions that define its cultural life (e.g. Sears & Henry, 2003; Stephan et al., 2002).

Opposition to Immigration Measure   Two indicators were used. Participants were asked to indicate to what extent they thought their country 'should allow people of a different race or ethnic group from most [country nationality] people to come and live here?' (OI-item 1) and 'should allow people from the poorer countries outside Europe to come and live here?' (OI-item 2). The answers were registered on a scale ranging from 1 (allow many to come and live here) to 4 (allow none).

Results

In this study (as in Study 2), hypotheses were tested on a series of structural equation models estimated on the variance–covariance matrix of the indicators that was obtained using *pairwise* deletion for missing data. Initially, we estimated the parameters of the model for the whole sample considering all countries. We then repeated the procedure within each individual country. In all the analyses, parameters were estimated according to the method of maximum likelihood.

Preliminary Analyses   Table 1 presents the descriptive statistic and the correlations between the indicators used. All the correlations are positive ranging from weak to strong. The strongest correlations are between the items used as indicators of the latent variables of the model. The correlations between the indicators of different latent variables are only moderate, which indicates that they are measuring different constructs, avoiding any multicolinearity issues. However, there are substantial correlations between the indicator of symbolic threat perception and those of realistic threat perception, suggesting that, as a whole, these items may be measuring only one latent variable. We assume that although

Table 1. Means, standard deviations and correlation matrix of the items used in Study 1

Items	M	SD	Correlation matrix					
			(1)	(2)	(3)	(4)	(5)	(6)
Prejudice								
P-item 1 (1)	3.18	3.19						
P-item 2 (2)	3.50	3.35	.74					
Realistic threat								
Economic threat index (3)	0.00	0.67	.36	.33				
Security threat item (4)	6.81	2.07	.19	.21	.43			
Symbolic threat item (5)	4.42	2.41	.36	.35	.54	.34		
Opposition to immigration								
OI-item 1 (6)	2.48	.82	.39	.38	.50	.31	.44	
OI-item 2 (7)	2.48	.82	.36	.36	.49	.30	.44	.83

Note: Correlation matrix's diagonal was omitted. All coefficients are significant at $p < .001$.

realistic and symbolic threats are strongly related concepts, each taps a different aspect of threat perception with distinct functions in the justification of discrimination.

To test this hypothesis, we conducted a Confirmatory Factor Analysis (CFA) with the indicators of threat perception in which we specified a solution with two correlated latent variables (symbolic threat and realistic threat). We compared the goodness-of-fit of this solution with the goodness-of-fit of a unifactorial solution[4]. Results indicate a strong correlation between the factors ($r = .52$, $p < .001$) on the bi-factorial solution with the followings fit indices: $\chi^2(1, N = 33\,038) = 1140.98$, $p < .001$, CFI $= .94$, GFI $= .98$, AGFI $= .87$, RMSEA $= .19$, AIC $= 1150.80$. Results of the unifactorial solution show an unsatisfactory goodness-of-fit: $\chi^2(2, N = 33\,038) = 4424.75$, $p < .001$, CFI $= .76$, GFI $= .93$, AGFI $= .78$, RMSEA $= .26$, AIC $= 4432.75$. In fact, the bi-factorial solution shows better fit than the unifactorial one, $\Delta\chi^2(1, N = 33\,038) = 3283.77$, $p < .001$. Thus, the solution that specifies symbolic threat perception as a latent variable different from realistic threat perception is more appropriate than the solution that specifies threat perception as a single factor.

We also used CFA in order to check the construct validity of the proposed measurement model. In this model, we specified four conceptual latent variables (i.e. prejudice, realistic threat, symbolic threat and opposition to immigration) that were allowed to correlate. In order to guarantee the statistical identification of the models, the factorial loadings of one of the indicators of each latent variable were constrained at 1.00. Because symbolic threat has only one indicator, its error variance was fixed at 0.00[5]. Results showed very good fit to the data: $\chi^2(10, N = 33\,038) = 555.83$, $p < .001$, CFI $= 1.00$, GFI $= 1.00$, AGFI $= .99$, RMSEA $= .04$, AIC $= 591.83$. Moreover, factorial loadings were high on their respective factor (loadings varying from 0.45 to 1.00). These results were compared to an alternative measurement model in which all items loaded on a general factor, meaning that all items can measure only one latent variable. Result for this model showed a very poor fit to data, $\chi^2(14, N = 33\,038) = 29\,673.31$, $p < .001$, CFI $= .72$, GFI $= .80$, AGFI $= .61$, RMSEA $= .25$, AIC $= 29\,701.31$. Thus, the proposed measurement model fits better than the alternative one, $\Delta\chi^2(1, N = 33\,038) = 29\,117.48$, $p < .001$. Furthermore, we repeated these analyses in each country and results showed that our model fits better in all countries ($\Delta\chi^2_1\text{s} > 10.83$, $p < .001$). Therefore, this set of results is sufficiently strong to support the construct validity of the proposed measurement model.

Mediation Analysis   To test the hypothesis that the relationship between prejudice and discrimination is mediated by both realistic threat and symbolic threat perceptions, we followed the procedures commonly recommended for the analysis

[4]In order to guarantee the statistical identification of the first factorial solution, we constrained at 1.00 the variances of the latent variables. Also, we constrained at 0.00 the variance of indicator error of the symbolic threat and the two indicators loadings of realistic threat were set equal to each other. The correlation between the two latent variables was freely estimated. We used the same strategy in the specification of the second factorial solution.
[5]At the suggestion of a reviewer we examined alternative strategies regarding the error variance when we had only one item to measure a latent variable. In this study and in the subsequent one, we estimated each model constraining at 15% and to 20% the error variance of the single items. Results showed that neither the unstandardized effects, nor the significance of these effects or even the models' goodness of fit indices were altered. Only the magnitude of the standardized effects involving the single item latent variable changed when the error variance was constrained to a value greater than zero, i.e. standardized effects improved to the extent that these increased the proportion of constrained error variance. Thus, we adopted the most conservative of the strategies by constraining the single items' error variance to zero.

of mediation within structural equations models (e.g. Kenny & Judd, 1984). As one can see in Figure 1, results show that the total effect of prejudice on opposition to immigration is strong and significant ($\beta = .47$, $p < .001$): The greater the level of prejudice, the greater the opposition to immigration. The relationship between prejudice and the two types of threat is also positive and significant: Greater prejudice implies greater perception of realistic and symbolic threat. The effects of realistic and symbolic threat on opposition to immigration are significant. Finally, the direct effect of prejudice is also significant. Of greater importance for the mediation test, the analysis of the decomposition of the effects of prejudice on opposition to immigration indicates that both realistic threat perception ($z_{Sobel} = 39.10$, $p < .001$) and symbolic threat perception ($z_{Sobel} = 7.62$, $p < .001$) mediated this relationship. However, this effect is far more strongly mediated by realistic (Mediated Effect $= .24$) than by symbolic threat (Mediated Effect $= .03$). This difference occurs because the effects of realistic threat on opposition to immigration is significantly stronger than those of symbolic threat (the difference between the betas is significant, $z = 35.89$, $p < .001$).

Table 2 presents, for each of the 21 countries, the estimated parameters standardized for the effects of prejudice on the two types of threat and for the effects of these threats on opposition to immigration. Prejudice significantly predicts the two types of threat in all countries and realistic threat perception predicts opposition to immigration in all countries. The relationship between symbolic threat perception and opposition to immigration is, however, only positive and significant in Austria, Belgium, Finland, Germany, and Sweden. And, even then, these relationships are very weak.

Table 3 shows the decomposition of the effects of prejudice on opposition to immigration. As we can see, the total effect of prejudice is significant and greater than that of the direct effect in all countries. Though the direct effect of prejudice on opposition to immigration continues to be significant in all countries, threat perception partially mediates the relationship between prejudice and opposition to immigration in all the countries analysed. Furthermore, the analysis of the mediated effects indicates that realistic threat perception mediates this relationship in all countries. Symbolic threat perception mediates this relationship only in Austria, Belgium, Finland, Germany, and Sweden. The relationship between prejudice and opposition to immigration is thus more strongly mediated by realistic threat perception. This effect appears because

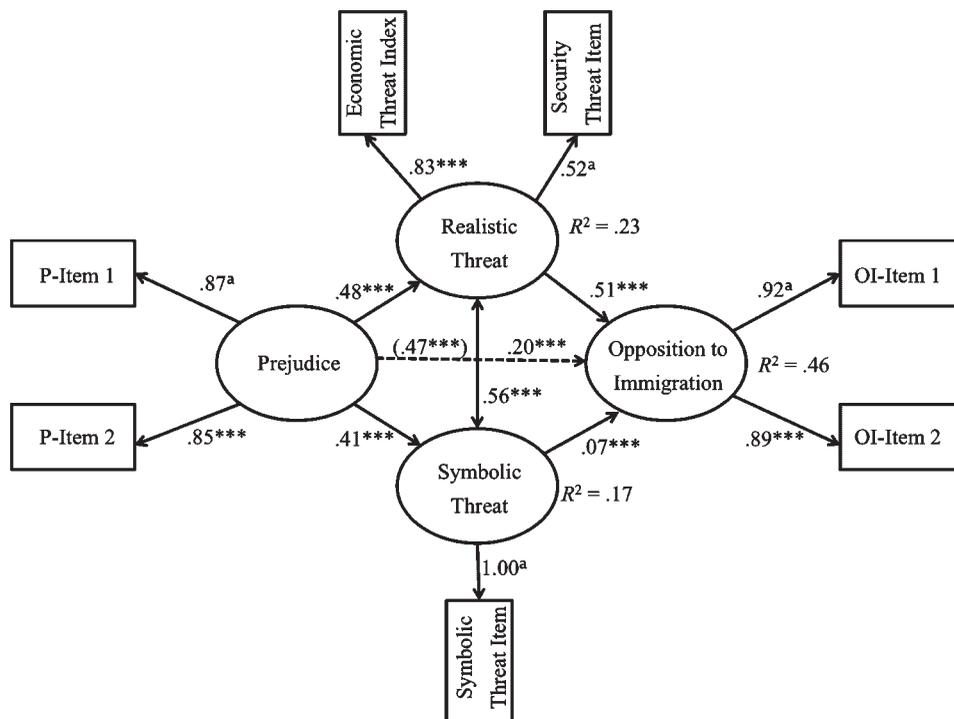Figure 1. Standardized maximum likelihood coefficients for the structural equation model depicting the relationship between prejudice and opposition to immigration, mediated by symbolic and realistic threat perceptions (Study 1). *Note*: Coefficient in brackets is the total effect and it was estimated before considering the two mediators in the model. [a] denotes parameter constrained. ***$p < .001$

Table 2.   Standardized maximum likelihood coefficients estimated for the hypothesized model by country (Study 1)

Country	Prejudice effect on threats		Threat effects on opposition to immigration		Correlation
	β_{P-RT}	β_{P-ST}	β_{RT-OI}	β_{ST-OI}	r_{RT-ST}
Austria	.43***	.38***	.49***	.08*	.68***
Belgium	.54***	.42***	.44***	.10***	.44***
Czech Republic	.53***	.45***	.53***	−.01	.60***
Denmark	.45***	.39***	.46***	.07	.69***
Finland	.48***	.41***	.40***	.10***	.44***
France	.60***	.52***	.62***	.05	.72***
Germany	.52***	.46***	.54***	.07**	.50***
Greece	.52***	.39***	.59***	−.06	.70***
Hungary	.39***	.32***	.55***	−.08*	.52***
Ireland	.43***	.37***	.49***	.01	.62***
Italy	.38***	.26***	.42***	.07	.55***
Luxembourg	.37***	.21***	.45***	−.06	.55***
Netherlands	.55***	.47***	.56***	−.01	.52***
Norway	.56***	.41***	.78***	−.21	.75***
Poland	.37***	.28***	.47***	.00	.45***
Portugal	.50***	.35***	.48***	.05	.73***
Slovenia	.56***	.35***	.60***	.00	.49***
Spain	.46***	.36***	.45***	.08	.59***
Sweden	.49***	.41***	.47***	.08*	.57***
Switzerland	.46***	.33***	.53***	.01	.66***
United Kingdom	.49***	.44***	.58***	−.03	.69***

Note: β_{P-RT} = Prejudice effect on realistic threat; β_{P-ST} = Prejudice effect on symbolic threat; β_{RT-OI} = Realistic threat effect on opposition to immigration; β_{ST-OI} = Symbolic threat effect on opposition to immigration; r_{RT-ST} = Correlation between realistic and symbolic threats. *$p < .05$; **$p < .01$; ***$p < .001$.

Table 3.   Decomposition of the prejudice effects on opposition to immigration by country (Study 1)

Country	Total effect	Indirect effects through		Direct effect
		Realistic threat	Symbolic threat	
Austria	.39***	.21***	.03*	.15***
Belgium	.52***	.24***	.04***	.24***
Czech Republic	.53***	.27***	.00	.26***
Denmark	.52***	.21***	.03	.28***
Finland	.59***	.19***	.04***	.36***
France	.61***	.37***	.03	.21***
Germany	.49***	.28***	.03**	.18***
Greece	.38***	.31***	−.02	.10***
Hungary	.43***	.21***	−.02	.24***
Ireland	.42***	.21***	.00	.21***
Italy	.45***	.16***	.02	.27***
Luxembourg	.48***	.16**	−.01	.33***
Netherlands	.45***	.31***	.00	.14***
Norway	.55***	.42***	−.09	.21***
Poland	.36***	.18***	.00	.17***
Portugal	.35***	.24***	.02	.09*
Slovenia	.42***	.34***	.00	.09*
Spain	.42***	.21***	.03	.18***
Sweden	.54***	.23***	.03*	.28***
Switzerland	.45***	.24***	.01	.20***
United Kingdom	.53***	.28***	−.01	.26***

Note: Indirect effects were calculated according to the Sobel's Test. *$p < .05$; **$p < .01$; ***$p < .001$.

the effect of this threat on opposition to immigration is significantly stronger than the effect of symbolic threat (in all countries, $p_s < .001$).

Goodness-of-fit   Analyses of the goodness-of-fit indices for the proposed model (see Figure 1) show very good fit to the data: $\chi^2(9, N = 33\,038) = 266.49$, $p < .001$, CFI = 1.00, GFI = 1.00, AGFI = .99, RMSEA = .03, AIC = 304.49. We also compared the fit of this model with the fit of an alternative model where symbolic and realistic threat perceptions were specified as two correlated latent variables predicting prejudice which in turn predicted opposition to immigration (Alternative Model 1) and with the fit of another alternative model where opposition to immigration was an antecedent of both symbolic and realistic threat perceptions (Alternative Model 2). The fit of Alternative Model 1 is not as good as that of the model we propose: $\chi^2(11, N = 33\,038) = 7239.73$, $p < .001$, CFI = .93, GFI = .94, AGFI = .86, RMSEA = .14, AIC = 7273.73. Likewise, the fit of Alternative Model 2 is not as good as that of our model: $\chi^2(10, N = 33\,038) = 4484.56$, $p < .001$, CFI = .96, GFI = .96, AGFI = .90, RMSEA = .11, AIC = 4520.56. Indeed, the model we propose fits the data better than Alternative Model 1, $\Delta\chi^2(2, N = 33\,038) = 7007.24$, $p < .001$, and Alternative Model 2, $\Delta\chi^2(1, N = 33\,038) = 4218.07$, $p < .001$. Results also show that the model we propose fits the data better than these alternative models in all countries (see Table 4). These results therefore indicate that it is empirically more consistent to see threat perception as a consequence rather than a predictor of prejudice, or as a consequence of discrimination[6].

Countries With Different Immigration Policies   We carried out a multi-groups analysis to test the hypothesis of model invariance between countries with different immigration policies (Germany, France and the United Kingdom). In the baseline, we specified that the structural parameters would be freely estimated between countries. The goodness-of-fit for this baseline is very good, $\chi^2(27, N = 5748) = 67.28$, $p < .001$, CFI = 1.00, GFI = 1.00, AGFI = .99, RMSEA = .02, AIC = 181.28, showing that the proposed model fits the data very well. We then constrained the parameters of the structural model to assume equality between countries. Results indicate that the fit of the constrained model is also very good: $\chi^2(37, N = 5748) = 89.62$, $p < .001$, CFI = 1.00, GFI = 1.00, AGFI = .99, RMSEA = .02, AIC = 183.62. Although the fit of the unconstrained model is slightly better than the fit of the constrained model, $\Delta\chi^2(10, N = 5748) = 22.34$, $p < .05$, the analysis of the goodness-of-fit indices does not enable us to reject the null hypothesis of the model invariance between countries with different immigration policies.

Discussion

Within the framework of the research on the relationship between prejudice and discrimination, results provided support for the hypothesis that the effect of prejudice on opposition to immigration is mediated by threat perceptions. These mediation effects indicate *how* prejudice leads people to oppose immigration. This means that the greater the participants' level of prejudice, the greater their opposition to immigration. It also means that part of this effect is transferred through threat perceptions: The more prejudice, the greater the perception of realistic and symbolic threat, and greater perception of threat implies greater opposition to immigration. We also showed that the hypothesized model has a better fit than the alternative model, in which threat perception was specified as a predictor of prejudice. Finally, the results support the hypothesis that the model does not vary in terms of countries with different immigration policies. Thus, in France, Germany and the United Kingdom, the relationship between prejudice and opposition to immigration was mediated by threat perceptions.

Importantly, results also showed that this mediation was stronger in the case of realistic threat, consistent with several studies that show that attitudes towards immigration are more related to the economic aspects of threat (e.g. Quillian, 1995; Stephan & Stephan, 1996). In fact, while realistic threat mediated the effect of prejudice in all 21 countries, symbolic threat mediated the same effect in only five countries (Austria, Belgium, Finland, Germany, and Sweden). Even in these countries, the mediated effect was very low and smaller than the effect mediated by realistic threat.

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[6]Additionally, we carried out an exploratory analysis in order to verify if realistic and symbolic threats could also function as moderators of the relationship between prejudice and opposition to immigration. Using a multiple regression approach (see Aiken & West, 1991), we found a large regression coefficient ($R = .60$, $p < .001$) when only main effects were entered in the model. When interaction terms were added to the model (i.e.: Prejudice × Realistic threat; Prejudice × Symbolic Threat; Symbolic × Realistic threats; Prejudice × Symbolic × Realistic threats) the regression's coefficient was unchanged ($R^2_{change} = 0.00$). We also found unchanged R^2 in each country: $R^2_{change} = 0.02$ in Austria; $R^2_{change} = 0.01$ in Switzerland, Czech Republic, and Finland; $R^2_{change} = 0.00$ in all other countries. Therefore, we can conclude that threat perceptions do not moderate the effect of prejudice on opposition to immigration in these samples.

Table 4.   Goodness-of-fit indices for the hypothesized and alternative models by country (Study 1)

Country	χ^2	CFI	GFI	AGFI	RMSEA	$\Delta\chi^2$
Austria						
Hypothesized Model (df = 9)	30.57	1.00	1.00	.99	.04	
Alternative Model 1 (df = 11)	462.59	.93	.94	.84	.15	432.02
Alternative Model 2 (df = 10)	460.29	.93	.94	.83	.16	429.72
Belgium						
Hypothesized Model (df = 9)	14.69	1.00	1.00	.99	.02	
Alternative Model 1 (df = 11)	259.53	.95	.96	.89	.12	244.84
Alternative Model 2 (df = 10)	132.44	.97	.98	.94	.09	117.75
Czech Republic						
Hypothesized Model (df = 9)	17.05	1.00	1.00	.99	.03	
Alternative Model 1 (df = 11)	134.37	.95	.96	.89	.12	117.32
Alternative Model 2 (df = 10)	218.99	.94	.95	.87	.13	201.94
Denmark						
Hypothesized Model (df = 9)	22.78	1.00	1.00	.99	.03	
Alternative Model 1 (df = 11)	279.98	.93	.95	.86	.14	257.20
Alternative Model 2 (df = 10)	306.15	.93	.94	.84	.15	283.37
Finland						
Hypothesized Model (df = 9)	31.62	1.00	1.00	.99	.04	
Alternative Model 1 (df = 11)	319.17	.94	.95	.88	.12	287.55
Alternative Model 2 (df = 10)	187.43	.97	.97	.92	.10	155.81
France						
Hypothesized Model (df = 9)	17.20	1.00	1.00	.99	.03	
Alternative Model 1 (df = 11)	394.86	.92	.92	.80	.16	377.66
Alternative Model 2 (df = 10)	245.59	.95	.95	.86	.14	228.39
Germany						
Hypothesized Model (df = 9)	37.20	1.00	1.00	.99	.04	
Alternative Model 1 (df = 11)	582.29	.93	.94	.85	.14	545.09
Alternative Model 2 (df = 10)	279.61	.97	.97	.92	.12	242.41
Greece						
Hypothesized Model (df = 9)	17.98	1.00	1.00	.99	.02	
Alternative Model 1 (df = 11)	417.51	.95	.95	.88	.13	399.53
Alternative Model 2 (df = 10)	717.90	.91	.92	.79	.18	699.92
Hungary						
Hypothesized Model (df = 9)	7.89	1.00	1.00	1.00	.00	
Alternative Model 1 (df = 11)	241.89	.94	.96	.89	.12	234.00
Alternative Model 2 (df = 10)	235.09	.94	.96	.89	.12	227.20
Ireland						
Hypothesized Model (df = 9)	12.47	1.00	1.00	.99	.02	
Alternative Model 1 (df = 11)	308.71	.94	.96	.89	.12	296.24
Alternative Model 2 (df = 10)	387.03	.93	.96	.85	.14	374.56
Italy						
Hypothesized Model (df = 9)	26.44	1.00	.99	.98	.04	
Alternative Model 1 (df = 11)	207.70	.94	.95	.88	.13	181.26
Alternative Model 2 (df = 10)	181.32	.95	.96	.88	.12	154.88
Luxembourg						
Hypothesized Model (df = 9)	40.53	.99	.99	.96	.06	
Alternative Model 1 (df = 11)	112.34	.96	.97	.92	.10	71.81
Alternative Model 2 (df = 10)	131.11	.95	.96	.89	.12	90.58
Netherlands						
Hypothesized Model (df = 9)	27.52	1.00	1.00	.99	.03	
Alternative Model 1 (df = 11)	316.23	.95	.96	.90	.11	288.71
Alternative Model 2 (df = 10)	234.08	.96	.97	.92	.10	206.56
Norway						
Hypothesized Model (df = 9)	41.50	.99	.99	.98	.04	
Alternative Model 1 (df = 11)	302.91	.94	.95	.89	.12	261.41
Alternative Model 2 (df = 10)	328.88	.93	.95	.87	.13	287.38

(*Continues*)

Table 4. (Continued)

Country	χ^2	CFI	GFI	AGFI	RMSEA	$\Delta\chi^2$
Poland						
Hypothesized Model (df = 9)	43.51	.99	.99	.98	.04	
Alternative Model 1 (df = 11)	323.34	.94	.96	.89	.12	279.83
Alternative Model 2 (df = 9)	256.81	.95	.96	.90	.11	213.30
Portugal						
Hypothesized Model (df = 9)	29.21	1.00	.99	.98	.04	
Alternative Model 1 (df = 11)	272.49	.95	.95	.87	.13	243.28
Alternative Model 2 (df = 10)	409.34	.93	.93	.80	.17	380.13
Slovenia						
Hypothesized Model (df = 9)	13.96	1.00	1.00	.99	.02	
Alternative Model 1 (df = 11)	218.84	.94	.96	.89	.12	204.88
Alternative Model 2 (df = 10)	120.23	.97	.98	.93	.09	106.27
Spain						
Hypothesized Model (df = 9)	68.47	.99	.99	.96	.07	
Alternative Model 1 (df = 11)	331.76	.94	.94	.86	.14	263.29
Alternative Model 2 (df = 10)	296.84	.95	.95	.86	.14	228.37
Sweden						
Hypothesized Model (df = 9)	95.48	.98	.98	.95	.08	
Alternative Model 1 (df = 11)	417.65	.92	.94	.84	.15	322.17
Alternative Model 2 (df = 10)	323.98	.94	.95	.86	.14	228.50
Switzerland						
Hypothesized Model (df = 9)	44.90	.99	.99	.98	.05	
Alternative Model 1 (df = 11)	325.42	.93	.95	.87	.13	280.52
Alternative Model 2 (df = 10)	320.88	.93	.95	.86	.14	275.98
United Kingdom						
Hypothesized Model (df = 9)	12.88	1.00	1.00	.99	.02	
Alternative Model 1 (df = 11)	440.92	.94	.94	.84	.15	428.04
Alternative Model 2 (df = 10)	513.04	.93	.93	.81	.17	500.16

Note: df = degree of freedom. $\Delta\chi^2$ compares each alternative model with hypothesized model. $p < .05$ to $\chi^2 > 16.91$; $p < .01$ to $\chi^2 > 21.66$; $p < .001$ to $\chi^2 > 27.87$.

These results provide initial support to the hypothesis that different types of threat can justify different discriminatory policies against immigrants. In this sense, the relationship between prejudice and opposition to immigration is more easily mediated by realistic threat perception because this threat more easily legitimizes opposition to immigration. However, one might consider that the poor predictive or mediated effect of symbolic threat may be due to the fact that only one item was used to measure this dimension. Study 2 tries to overcome this limitation using more than one item. In order to carry out a test of this hypothesis, we conducted a second study where we examined the differential role of realistic and symbolic threats in the relationship between prejudice, on the one hand, and opposition to immigration and opposition to naturalization of immigrants on the other hand.

Study 2

The aim of this study was to analyse the mediating role of different justifications in the relationship between prejudice and different types of discrimination. We used representative samples of the populations of two European countries: Portugal and Switzerland. These countries have contrasting traditions of migration. Portugal has traditionally been a country of emigration and has only recently become a destination for immigrants. Switzerland, in contrast, has a long tradition of immigration. Despite these differences, we tested the hypothesis that the model we propose fits equally well in both countries. Indeed, the two countries are democratic in form and blatant discrimination is forbidden, requiring justification for its expression.

As in Study 1, we measured justification in terms of realistic and symbolic threat perceptions. We operationalized discrimination as two types of support for discriminatory policies: Opposition to immigration and opposition to naturalization of immigrants. According to our model, if threat perception justifies the relationship between prejudice and

discrimination, then the effects of prejudice on opposition to immigration and naturalization of immigrants should be differentially mediated by realistic and symbolic threat perceptions.

If these different types of threat serve as different justification strategies, then the mediation effects should be stronger for realistic threat when discrimination is operationalized as opposition to immigration and for symbolic threat when discrimination is operationalized as opposition to naturalization. Specifically, if symbolic threat perception justifies discrimination because naturalization threatens the ingroup's cultural identity and realistic threat perception justifies this discrimination because it activates the idea that migration flows increase competition for scarce resources, then opposition to naturalization should be more strongly predicted by symbolic threat perception, while opposition to immigration should be more strongly predicted by realistic threat perception.

The analysis was carried out in three phases. First, we tested the mediation hypotheses. Second, we compared the fit of the proposed model with the fit of an alternative model that specified threat perceptions as predictors of prejudice and with the fit of another alternative model specifying threat perception as a consequence of both opposition to immigration and opposition to naturalization. In the third phase, we tested the hypothesis that, despite the different traditions concerning migration phenomena, the mediation role of threat perceptions would hold in both countries, since both Portugal and Switzerland are democratic countries with strong laws condemning discriminating behaviours.

Method

Participants   We used the International Social Survey Programme database (ISSP-2003)[7]. The Portuguese probabilistic representative sample was made up of 1602 participants. The data of the 88 participants without Portuguese nationality were excluded from the analysis, thus leaving data from 1514 participants who represented the Portuguese population aged 15 years and over. The Swiss sample had 1037 participants. This was reduced, as 97 participants were not Swiss nationals, leaving data from 940 participants who represented the Swiss population aged 15 years and older.

Prejudice Measure   The ISSP questionnaire used in Portugal and Switzerland has one indicator measuring prejudice: 'Imagine that one of your children had children with someone of a different colour. In other words, imagine that your grandchild was a different colour from you. Would you have difficulty in accepting this?' The answers vary from 1 (no difficulty in accepting) to 4 (great difficulty in accepting), so that higher values indicate greater prejudice. This item is one of the most traditional examples used in past research to measure blatant prejudice. Pettigrew has successfully used it since 1958 in USA, and in South Africa (Pettigrew, 1958), as well as in Europe in its current version of the blatant prejudice scale (Pettigrew & Meertens, 1995).

Realistic Threat Measure   Realistic threat perception was measured with the following indicators that tap core features of conceptual definitions for this threat (Esses et al., 1998; Stephan et al., 2002): 'Immigrants increase crime rates' (RT-item 1) and 'Immigrants take jobs away from people working in [country]' (RT-item 2). Participants indicated their degree of agreement with each of these items. The answers ranged from 1 (total disagreement) to 5 (total agreement), so that the highest values indicated greater perception of threat.

Symbolic Threat Measure   Symbolic threat perception was measured using the following indicators: 'Immigrants improve [country nationality] society by bringing in new ideas and cultures' (ST-item 1) and 'Our society would be richer if we shared customs and traditions with the immigrants' (ST-item 2). The answers ranged from 1 (total agreement) to 5 (total disagreement). These indicators are in line with the symbolic threat perception definition (see Sears & Henry, 2003; Stephan et al., 2002). By using two items, we are better able to analyse the relationship between this threat and other variables (comparing with Study 1) since measurement error can now be taken into account.

Opposition to Immigration Measure   The ISSP questionnaire has an indicator of opposition to immigration: 'Do you think the number of immigrants to [country] nowadays should be...' The participants' answers were codified to range from 1 (increased a lot) to 5 (reduced a lot). Higher scores indicate greater opposition to immigration.

Opposition to Naturalization of Immigrants' Measure   Two indicators were used: 'Children born in [Country], of foreign parents, should have the right to acquire [Country nationality]' (ON-item 1) and 'Children born outside [Country]

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[7]The ISSP is an academic and a methodologically rigorous survey about contemporary social issues. The ISSP has carried out a continuing annual programme of cross-national collaboration on surveys covering social topics.

should have the right to acquire [Country nationality] if at least one of their parents is [Country nationality]' (ON-item 2). The answers ranged from 1 (total agreement) to 5 (total disagreement). Higher scores indicate greater opposition to naturalization.

Results

Preliminary Analyses   Table 5 shows the descriptive statistic and the correlations between the indicators used. The only non-significant correlation is the one between RT-item 2 (an indicator of realistic threat) and ON-item 2 (an indicator of opposition to naturalization). All the other correlations are positive and significant. The strongest correlations are between the items used as indicators of the model's latent variables.

The correlations between the indicators of different variables are low or moderate, indicating that they are measuring different constructs avoiding, once more, the problem of multicolinearity. However, similarly to the previous study, substantial correlations were found between the indicators for symbolic and realistic threat perception. Therefore, we applied a CFA to the indicators of threat perception, specifying a solution with two correlated latent variables (symbolic threat and realistic threat). We compared the goodness-of-fit of this solution to that of a unifactorial solution[8]. As in Study 1, results indicate that the bi-factorial solution has a very good fit, $\chi^2(1, N = 2411) = 40.34$, $p < .001$, CFI = .97, GFI = .99, AGFI = .92, RMSEA = .13, AIC = 58.34, with a very strong correlation between the two factors ($r = .71$, $p < .001$). The unifactorial solution has an unsatisfactory fit: $\chi^2(2, N = 2411) = 119.41$, $p < .001$, CFI = .92, GFI = .98, AGFI = .88, RMSEA = .16, AIC = 135.72. In fact, the bi-factorial solution fits the data better than the unifactorial model: $\Delta\chi^2(1, N = 2411) = 79.07$, $p < .001$. Therefore, the solution specifying symbolic threat perception as a different latent variable from realistic threat perception is more appropriate than the solution that specifies both threat perceptions as just one factor.

We also analysed the construct validity of our measurement model specified with five conceptual latent variables (i.e. prejudice, realistic threat, symbolic threat, opposition to immigration and opposition to naturalization) that were allowed to correlate. In order to ensure the statistical identification of the models, the factorial loadings of one of the indicators of each latent variable were constrained at 1.00. Because prejudice has only one indicator, its error variance was constrained at 0.00. CFA results showed large factorial loadings for each item on their respective factor (loadings varying from 0.47 to 1.00) and a very good fit to the data: $\chi^2(12, N = 2411) = 105.31$, $p < .001$, CFI = .97, GFI = .99, AGFI = .97,

Table 5.   Means, standard deviations and correlation matrix of the items used in Study 2

Items	*M*	*SD*	Correlation matrix						
			(1)	(2)	(3)	(4)	(5)	(6)	(7)
Prejudice item (1)	1.61	.88							
Realistic threat									
RT-item 1 (2)	3.40	1.08	.21						
RT-item 2 (3)	3.04	1.17	.19	.36					
Symbolic threat									
ST-item 1 (4)	2.45	.96	.24	.31	.36				
ST-item 2 (5)	2.35	.88	.26	.30	.21	.47			
Opposition to immigration									
OI-item (6)	3.63	.84	.24	.39	.40	.40	.34		
Opposition to naturalization									
ON-item 1 (7)	1.90	.93	.23	.16	.14	.28	.29	.24	
ON-item 2 (8)	1.82	.79	.07	.11	.00	.16	.20	.11	.43

Note: Correlation matrix's diagonal was omitted. All coefficients are significant at $p < .001$, except between (3) and (8).

[8]In order to guarantee the statistical identification of the first factorial solution, we constrained at 1.00 set the variances of the latent variables, resulting in an over-identified model to be tested with one degree of freedom. For the unifactorial solution, we constrained at 1.00 set the variance of the factor, resulting in a solution with two degrees of freedom.

RMSEA = .05, AIC = 153.31. As in Study 1, we compared this model to an alternative measurement model in which all items measure only one latent variable. Results for this model showed a poor fit to the data, $\chi^2(20, N = 2411) = 659.13$, $p < .001$, CFI = .81, GFI = .94, AGFI = .88, RMSEA = .12, AIC = 691.13. Hence, our measurement model fits better than the alternative one, $\Delta\chi^2(8, N = 2411) = 653.82$, $p < .001$. Importantly, furthermore, our model fits better both in Portugal ($\Delta\chi^2_8 = 375.86$, $p < .001$) and in Switzerland ($\Delta\chi^2_8 > 136.68$, $p < .001$). In sum, CFA's results support the validity of our measurement model.

Mediation Analysis Results show that the total effects of prejudice on opposition to immigration and to naturalization are significant (see Figure 2). The relationships between prejudice and the two types of threat are positive and significant. Realistic threat perception significantly predicts opposition to immigration, but is not related to opposition to naturalization. By contrast, symbolic threat perception significantly predicts both opposition to immigration and opposition to naturalization. The direct effect of prejudice on opposition to naturalization is significant, but the effect on opposition to immigration is not. In both cases, the direct effects of prejudice are smaller than the total effects, suggesting the possibility of mediated effects.

The analysis of the decomposition of the effects of prejudice on opposition to immigration indicates that both realistic threat ($z_{Sobel} = 6.87$, $p < .001$) and symbolic threat perception ($z_{Sobel} = 3.48$, $p < .001$) mediate this effect. This effect is, however, more strongly mediated by realistic threat (Mediated Effect = .16) than by symbolic threat (Mediated Effect = .07). This difference occurs because the effect of realistic threat on opposition to immigration is significantly stronger than that of symbolic threat ($z = 2.64$, $p < .01$). The decomposition of the effects of prejudice on opposition to naturalization indicates that only symbolic threat mediates this relationship ($z_{Sobel} = 6.97$, $p < .001$). In fact, the mediated effect by symbolic threat (Mediated Effect = .18) is stronger than the effect mediated by realistic threat (Mediated Effect = −.02). This occurs because the effect of symbolic threat on opposition to naturalization is stronger than the effect
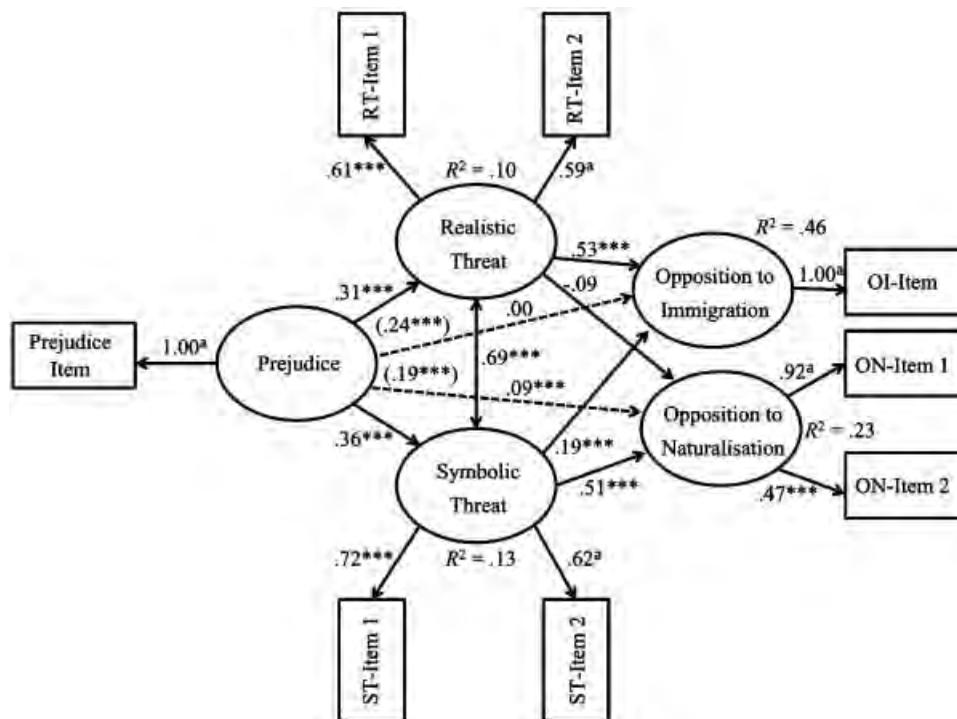

Figure 2. Standardized maximum likelihood coefficients for the structural equation model depicting the relationship between prejudice and opposition to immigration and opposition to naturalization, mediated by symbolic and realistic threat perceptions (Study 2). *Note*: Coefficients in brackets are total effects and they were estimated before considering the two mediators in the model. [a] denotes parameter constrained. ***$p < .001$

Table 6.   Standardized maximum likelihood coefficients estimated for the hypothesized model by country (Study 2)

Country	Prejudice effect on threats		Threat effects on opposition to immigration		Threat effects on opposition to naturalization		Correlations
	$\beta_{P\text{-}RT}$	$\beta_{P\text{-}ST}$	$\beta_{RT\text{-}OI}$	$\beta_{ST\text{-}OI}$	$\beta_{RT\text{-}ON}$	$\beta_{ST\text{-}ON}$	$r_{RT\text{-}ST}$
Portugal	.29***	.37***	.39***	.27**	−.09	.41***	.61***
Switzerland	.30***	.31***	.74***	.19*	.02	.50***	.72***

Note: $\beta_{P\text{-}RT}$ = Prejudice effect on realistic threat; $\beta_{P\text{-}ST}$ = Prejudice effect on symbolic threat; $\beta_{RT\text{-}OI}$ = Realistic threat effect on opposition to immigration; $\beta_{ST\text{-}OI}$ = Symbolic threat effect on opposition to immigration; $\beta_{RT\text{-}ON}$ = Realistic threat effect on opposition to naturalization; $\beta_{ST\text{-}ON}$ = Symbolic threat effect on opposition to naturalization; $r_{RT\text{-}ST}$ = Correlation between realistic and symbolic threats. *$p < .05$; **$p < .01$; ***$p < .001$.

of the realistic threat ($z = 5.37$, $p < .001$). In fact, the mediated effect of realistic threat is not significant ($z_{Sobel} = -1.47$, ns.).

The parameters estimated in each country are presented in Table 6. As we can see, both in Switzerland and in Portugal, prejudice significantly predicts realistic and symbolic threat perceptions. The effect of realistic threat on opposition to immigration is strong, while the effect of symbolic threat is weak, but significant in the two countries. The effect of realistic threat on opposition to naturalization is not significant, while the effect of symbolic threat is strong in both countries.

Table 7 shows the decomposition of the effects of prejudice on opposition to immigration and on opposition to naturalization. In Portugal, the effect on opposition to immigration was mediated both by realistic threat and by symbolic threat. The mediated effect of realistic threat perception was, however, stronger than the one of symbolic threat perception. This occurred because the effect of realistic threat on opposition to immigration is significantly greater than the effect of symbolic threat ($z = 2.64$, $p < .01$).

The prejudice effect on opposition to naturalization was only mediated by symbolic threat. The difference is due to the fact that the effect of symbolic threat on opposition to naturalization is significantly greater than the effect of realistic threat ($z = 4.09$, $p < .001$). In Switzerland, opposition to immigration was only mediated by realistic threat perception. Concerning opposition to naturalization, only the effect mediated by symbolic threat is significant.

Goodness-of-fit   Analysis of the goodness-of-fit indices shows that the proposed model (see Figure 2) fits the data very well: $\chi^2(13, N = 2411) = 119.35$, $p < .001$, CFI = .97, GFI = .99, AGFI = .97, RMSEA = .06, AIC = 165.35. As in Study 1, we compared the fit of the proposed model with the fit of an alternative model where symbolic and realistic threat perceptions were specified as two correlated latent variables predicting prejudice that, in turn, predicts opposition to immigration and opposition to naturalization (Alternative Model 1) and also with the fit of another alternative model where opposition to immigration and opposition to naturalization were specified as antecedents of symbolic and realistic threat perceptions (Alternative Model 2). Alternative Model 1 has a very poor fit, $\chi^2(17, 2411) = 1108.26$, $p < .001$, CFI = .68, GFI = .90, AGFI = .79, RMSEA = .16, AIC = 1146.26, and the fit of Alternative Model 2 is not as good as that of our

Table 7.   Decomposition of the prejudice effects on opposition to immigration and to naturalization by country (Study 2)

Country	Total effects	Indirect effects through		Direct effect
		Realistic threat	Symbolic threat	
Portugal				
Opposition to immigration	.23***	.11***	.09***	.03
Opposition to naturalization	.31***	−.02	.15***	.18***
Switzerland				
Opposition to immigration	.22***	.22***	.01	−.01
Opposition to naturalization	.25***	.06	.16***	.04

Note: Indirect effects were calculated according to the Sobel's Test. ***$p < .001$.

Table 8.   Goodness-of-fit indices for the hypothesized and alternative models by country (Study 2)

Country	χ^2	CFI	GFI	AGFI	RMSEA	$\Delta\chi^2$
Portugal						
Hypothesized Model (df = 13)	55.36	.98	.99	.97	.05	
Alternative Model 1 (df = 17)	512.64	.75	.92	.83	.14	457.28
Alternative Model 2 (df = 14)	163.57	.93	.97	.93	.09	108.21
Switzerland						
Hypothesized Model (df = 13)	33.37	.99	.99	.97	.04	
Alternative Model 1 (df = 17)	595.01	.61	.86	.69	.20	561.64
Alternative Model 2 (df = 14)	169.70	.90	.96	.88	.11	136.33

Note. df = degrees of freedom. The $\Delta\chi^2$ compares each alternative model with the hypothesized model. All χ^2 values are significant with $p < .001$.

model, $\chi^2(14, N = 2411) = 376.82$, $p < .001$, CFI = .90, GFI = .96, AGFI = .91, RMSEA = .10, AIC = 420.82. Also replicating Study 1's results, our model fits the data better than the Alternative Model 1, $\Delta\chi^2(4, 2411) = 988.92$, $p < .001$, and better than the Alternative Model 2, $\Delta\chi^2(1, N = 2411) = 257.47$, $p < .001$. Furthermore, results show that the proposed model fits the data better than the alternative models both in Portugal and Switzerland (see Table 8). Therefore, these results reinforce empirical evidence already presented in Study 1, indicating that it is empirically more consistent to construe threat perception as a consequence of prejudice, rather than as its predictor, or as a consequence of discrimination[9].

Comparing Countries   We carried out multi-group analyses to test the hypothesis of model invariance between Switzerland and Portugal. In the baseline, we specified that the structural parameters of the model would be freely estimated between countries. The fit for this baseline is very good: $\chi^2(26, N = 2411) = 88.73$, $p < .001$, CFI = 98, GFI = .99, AGFI = .97, RMSEA = .03, AIC = 180.73. We then constrained the structural parameters to equality between the countries. Results indicate that the constrained model's fit is also very good: $\chi^2(34, N = 2411) = 127.35$, $p < .001$, CFI = .97, GFI = .99, AGFI = .97, RMSEA = .04, AIC = 203.55. Although the fit of the unconstrained model is slightly better than the fit of the constrained model: $\Delta\chi^2(8, N = 2411) = 38.61$, $p < .001$, the analysis of the fit indices does not enable us to reject the null hypothesis that the proposed model is invariant between countries.

Discussion

Based on representative data of the populations of two European countries with different traditions of immigration (Portugal and Switzerland), this study tested the general hypothesis that the relationship between prejudice and discrimination is mediated by perceptions that justify discrimination. In general, results offered support for the main hypothesis that two types of threat would mediate the effect of prejudice on discrimination. In the case of opposition to immigration, the effect of prejudice was more strongly predicted by realistic than by symbolic threat perception, thus replicating the results of Study 1. Results also showed that the proposed model fits better than the alternative model. Finally, we showed that our model fits the data very well in the two samples analysed. These results show that the proposed model is just as applicable in a country traditionally receptive of immigrants as in a country that just recently became a preferred destination for several immigrant groups. What these countries have in common is the fact that they are democratic and have passed laws that strongly punish discrimination, conditions that we deem as sufficient for the application of the justified discrimination model (Pereira et al., 2009).

General Discussion

We presented two studies using methodologically rigorous databases of probabilistic representative samples from 21 European countries that tested the hypothesis that the relationship between prejudice and discrimination is mediated by

[9]As in Study 1, exploratory analyses were carried out to verify if realistic and symbolic threats could be moderators of the relationship between prejudice and opposition to immigration as well as opposition to naturalization. We obtained the same pattern of results as reported for Study 1, indicating that threat perceptions do not moderate the effect of prejudice neither on opposition to immigration nor on opposition to naturalization.

perceptions that can serve to legitimize discriminatory actions. Discrimination was operationalized as opposition to immigration and opposition to the naturalization of immigrants. Justifications were measured based on realistic and symbolic threat perceptions. CFA's results showed strong support for the construct validity of the indicators used to measure these variables. Moreover, the results of the two studies confirmed our hypotheses. In the first study, the relationship between prejudice and opposition to immigration was mediated by realistic threat and symbolic threat perceptions. We furthermore showed that the mediation by realistic threat was stronger than that by symbolic threat perception. To provide further support for the hypothesis that different types of threats are differently used as justifications depending on the type of discriminatory behaviour, we conducted a second study using representative samples of two European countries with different traditions of immigration. Results of this second study replicated the main results obtained in the first study and, more importantly, corroborated the hypothesis that the relationship between prejudice and opposition to immigration is more strongly mediated by realistic threat perception, while the effect of prejudice on opposition to naturalization—defined as a more identity-based aspect of discrimination—was exclusively mediated by symbolic threat perception. Additionally, in all samples, our model was shown to fit the data better than an alternative model that specifies threat perceptions as predictors of prejudice. Therefore, we can argue that it is more probable that prejudice leads to a threat perception than the other way around, which provides us with a supplementary empirical argument for the idea that threat, in fact, mediates the relationship between prejudice and the support of discriminatory policies against immigrants.

Concerning opposition to immigration, results are coherent with the empirical evidence developed within theories depicting real conflicts of interests (Blumer, 1958; Bobo, 1999; LeVine & Campbell, 1972; Sherif, 1966), since attitudes towards immigration are, for the general public and the media, mainly associated with competition for scarce resources and security-related issues (e.g. Quillian, 1995; Stephan et al., 2002; Vala et al., 2006), which are the major components of realistic threat. Concerning opposition to naturalization, the effects presented here seem closer to the literature on the impact of identity processes on intergroup hostility, namely the literature on the role of social identity in these processes (e.g. Branscombe et al., 1999; Ullrich et al., 2006). In fact, these processes are commonly associated with symbolic threat perception (e.g. Sears & Henry, 2003; Stephan et al., 2002; Vala et al., 2006; Zárate, Garcia, Garza, & Hitlan, 2004).

Our proposal goes beyond these earlier studies insofar as it shows that these relationships indicate a legitimizing process of discrimination. In this sense, the model we propose contributes to the understanding of how prejudice leads to discrimination. The model explains, more specifically, how prejudice leads people to reject immigration and the naturalization of immigrants. In fact, results show that the greater the level of prejudice, the greater the opposition (to immigration and to the naturalization of immigrants). In this sense, people are opposed to immigration to the extent that they can justify their discrimination based on the idea that immigrants represent an economic and security threat. Individuals are against naturalization to the extent that they can justify their discrimination based on the belief that immigrants are a threat to the lifestyle, values and the very identity of the host country members. Furthermore, our results showed that threat perceptions may be not only a consequence of prejudice and an antecedent of discrimination, but more importantly that they play a central role in the psychological process of legitimization.

The model also contributes to a greater specification regarding the relationships between the variables considered herein. First, we clearly distinguish three types of variables: prejudice, threat perception and support for discriminatory policies. This distinction has not been presented clearly in the literature about the effect of threat on prejudice (e.g., Esses et al., 2001; Zagefka, Brown, Broquard, & Martin, 2007). Second, the model organizes these variables based on the hypothesis that there is a process that runs from prejudice to discrimination, and that this process is mediated by threat perception. Third, although the relationships observed between the variables of this model have already been studied by a large number of authors, no one had as yet proposed a model construing these relationships in terms of legitimizing mechanisms. Although similar ideas are present in the model proposed by Sidanius and Pratto (1999), namely in its application to attitudes towards immigration (e.g., Pratto & Lemieux, 2001), the model by Sidanius and Pratto (1999) attributes a legitimizing role to threat within the relationship between the motivation to dominate and discrimination, while our model places it within the framework of the relationship between prejudice and discrimination.

Although the results reported here support our hypotheses, these studies have an important limitation: Its correlational nature. The correlational design weakens the evidence in support of the direction of the relationship between prejudice and threat perceptions. In fact, the estimated parameters do not show causal relationships. Those parameters are only estimated covariances depicting the relationships between the variables. These results, however, support both approaches, showing that both mechanisms are possible, i.e. the more classical idea according to which threat can predict prejudice (e.g., Esses

et al., 1998; Schlueter et al., 2008; Stephan et al., 2002) as well as the other hypothesis according to which prejudice can cause perceptions of threat, an hypothesis that has also been experimentally supported in previous work (e.g. Pereira et al., 2009). As Stephan et al. (2002) argued, the fact that the path from threat to prejudice has been experimentally established 'does not rule out the existence of the opposite causal relationship' (p. 1252). Even though our analysis has been based on correlations, the fact that we demonstrate that the feeling of threat derives from prejudice provides a new perspective to look at the relationship between prejudice and threat perception. This result is perhaps the most novel and the most controversial of our results and therefore may have important implications for the study of attitudes towards immigration. Moreover, our studies can contribute to the literature on prejudice and discrimination in several domains: (a) On the prejudice-discrimination relationship, that still lacks a consistent theory to explain 'how' and 'when' this relationship occurs, (b) on the legitimizing processes, by focusing on the role of justifying factors on discriminatory behaviour, (c) on threat perceptions, by describing the functions of symbolic and realistic threats as legitimizing factors of the relationship between prejudice and discrimination and (d) on the understanding of why discrimination still persists nowadays despite the social and legal norms condemning it. The fundamental idea shown here concerns the (mediational) role of threat perception specifying indirect ways through which prejudice prompts justified discrimination in democratic societies, and how different types of discriminations elicit different justifications.

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