

AperTO - Archivio Istituzionale Open Access dell'Università di Torino

**What causes prejudice? How may we solve it? Lay beliefs and their relations with classical and modern prejudice and social dominance orientation**

**This is the author's manuscript**

*Original Citation:*

*Availability:*

This version is available <http://hdl.handle.net/2318/142895> since

*Published version:*

DOI:10.1016/j.ijintrel.2013.12.004

*Terms of use:*

Open Access

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

(Article begins on next page)



# UNIVERSITÀ DEGLI STUDI DI TORINO

***This is an author version of the contribution published on:***

*International Journal of Intercultural Relations, 2014*

<http://dx.doi.org/10.1016/j.ijintrel.2013.12.00>

*Miglietta A., Gattino S & Esses V.M, Elsevier, 2014*

***The definitive version is available at:***

[www.elsevier.com/locate/ijintrel](http://www.elsevier.com/locate/ijintrel)

What causes prejudice? How may we solve it? Lay beliefs and their relations with  
classical and modern prejudice and social dominance orientation

Anna Miglietta<sup>a</sup>, Silvia Gattino<sup>a</sup>, Victoria M. Esses<sup>b</sup>

<sup>a</sup>University of Torino, Italy

<sup>b</sup>University of Western Ontario, London, Canada

#### Authors' Note

Anna Miglietta, Department of Psychology, University of Torino, Via Verdi, 10, 10124 Torino, Italy. Phone: ++390116702016 fax: ++390116702061; E-mail: [anna.miglietta@unito.it](mailto:anna.miglietta@unito.it)

Silvia Gattino, Department of Psychology, University of Torino, Via Verdi, 10, 10124 Torino, Italy. Phone: ++390116702055 fax: ++390116702061; E-mail: [silvia.gattino@unito.it](mailto:silvia.gattino@unito.it)  
(corresponding author)

Victoria M. Esses, Department of Psychology, University of Western Ontario, London, ON, Canada N6A 5C2. Phone: (519) 661-2111 ext. 84650; E-mail: [vesses@uwo.ca](mailto:vesses@uwo.ca).

What causes prejudice? How may we solve it? Lay beliefs and their relations with classical and modern prejudice and social dominance orientation

**Abstract:** This research aimed to examine lay beliefs about the causes of and solutions to ethnic prejudice towards immigrant populations in the Italian context. The research had two main goals: (a) to explore in Italy what non-experts think causes ethnic prejudice against immigrants, and how they suggest we combat it; (b) to assess whether lay perceptions of causes of ethnic prejudice mediate the relationship between SDO and ethnic prejudice, and whether such mediational effects would depend on the form of ethnic prejudice considered (classical vs. modern). In particular, we hypothesized that lay beliefs about the causes of (but not lay beliefs about solutions to) prejudice towards immigrants may mediate the relation between SDO and prejudice towards immigrants. 520 Italian high school students participated in the study and completed a set of questionnaires regarding these issues. Results showed that Italian respondents were especially likely to attribute the causes of ethnic prejudice towards immigrants to ignorance and close-mindedness, and to recommend as main solutions open-mindedness and tolerance of others' values. Moreover, as predicted, beliefs about causes of ethnic prejudice significantly mediated the relation between SDO and modern (but not classical) prejudice. Implications of our findings for social dominance theory were discussed.

## 1. Introduction

Ethnic prejudice, particularly toward immigrants and often expressed in terms of discrimination and xenophobia, is a growing reality in European societies. In 2005, Coenders, Lubbers and Scheepers highlighted that resistance to immigrants is shared by half of the population living in Eastern and Western societies. Similarly, the special Eurobarometer report on Discrimination in Europe (2007) stated that "a significant proportion of respondents (from 27% to 42%) voiced the feeling that discrimination is now more widespread than it was five years ago. Regarding discrimination based on

ethnic origin, this share even forms the majority opinion” (p. 10). Specifically, the feeling that discrimination is widespread appeared to be more frequently voiced in countries with higher proportions of foreign-born residents, as already demonstrated in a 2006 study by the European Monitoring Centre on Racism and Xenophobia (EUMC) that found that there is a higher level of support for attitudes of ethnic exclusionism expressed by the majority population in countries with a larger migrant population.

In this context, it is important for social psychologists to examine the role of lay beliefs about the nature of prejudice, particularly toward migrants and ethnic minorities, in driving such effects. The psychosocial literature describes lay theories as “knowledge structures with a causal or explanatory component” (Anderson & Lindsay, 1998, p. 8) that “allow people to explain events that have already occurred...[and] predict possible futures” (p. 11). Thus, we can say that common people, non-experts in the field of behavioural sciences, use lay perceptions and theories to offer causal explanations for phenomena even if they are not based on scientific methods of investigation. Lay beliefs are likely to be influenced by the individual’s culture and hence also by nationality, cover an array of issues, and may play an important role in maintaining and perpetuating ethnic prejudice (Esses & Hodson, 2006). From the perspective of social dominance theory, these knowledge structures may serve as legitimizing myths oriented to the maintenance of social inequalities and the status quo (Jost, Banaji, & Nosek,

2004; Pratto, 1999; Sidanius & Pratto, 1999). That is, lay beliefs may at times serve to support ideological attitudes of group-based dominance and competitive worldviews held by some individuals (Duckitt, 2001, 2005; Sibley, Wilson, & Duckitt, 2007).

In a study on lay perceptions of ethnic prejudice in Canada, Hodson and Esses (2005) found that people's beliefs about prejudice form a relatively coherent and logical structure. Lay themes of ethnic prejudice focused primarily on ignorance as a cause and tolerance as a solution to prejudice. People supporting social inequalities use these beliefs "to legitimize and bolster the prejudicial attitudes" (Esses & Hodson, 2006, p. 464).

In the present paper we were interested in understanding lay beliefs about ethnic prejudice in Italy and how they relate to individual levels of ethnic prejudice, both classical and modern, and with support for social inequalities, in line with social dominance theory.

### *1.1. Maintenance of the status quo: Social dominance theory and ethnic prejudice*

Prejudice and social dominance are not completely overlapping concepts, even if they share a common denominator – the maintenance of the status quo. In these terms, Eagly and Diekmann (2005) consider prejudice as a mechanism that maintains status and role

differences between groups, whilst social dominance is a predisposition to favour existing group-based hierarchies (Pratto, Sidanius, Stallworth, & Malle, 1994). Social Dominance Orientation (SDO) is a general attitudinal orientation toward intergroup relations, reflecting whether one generally prefers such relationships to be equal (low SDO) versus hierarchical (high SDO). Of note, individuals who are high in Social Dominance Orientation favour values of power, dominance, and superiority (Duckitt & Sibley, 2010; see also Esses, Stelzl, & Mihic, 2007).

Researchers have shown that SDO is often one of the primary predictors of prejudice, and the relationship between these two concepts has been demonstrated in many studies (e.g., Altemeyer, 1998; Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Esses, Jackson, & Armstrong, 1998; Guimond, Dambrun, Michinov, & Duarte, 2003). Social dominance theory assumes that people who are strongly identified with high-status groups and who are high in SDO will be especially prejudiced and discriminatory toward outgroups (Pratto & Lemieux, 2001) since the support of inequalities, which implies an unequal distribution of resources among groups, will benefit their own group (see Pratto et al., 1994; Sidanius, Levin & Pratto, 1996). This assumption, based on the consideration that SDO involves “a view of human existence as zero-sum and relentless competition between groups” (Sidanius, Pratto, & Bobo, 1994, p. 999), led to the prediction that people higher in SDO would hold less favourable attitudes toward

immigrants since they see immigrants as competitors for resources. As Esses and colleagues (1998) found, zero-sum beliefs – i.e., beliefs that the more the other group obtains, the less is available for one's own group – lead people who support social inequalities (high SDO) to be “relatively biased against immigrants and immigration *because of* the perception that relations with immigrants have zero-sum outcomes” (Esses, Dovidio, Jackson & Armstrong, 2001, p. 400). The critical role of zero-sum beliefs in producing and sustaining negative attitudes toward immigrants may be due to the implicit assumption that policies that support immigrants' integration utilize common resources that could be employed otherwise, favouring the respondents' own group. Building on this work, Duckitt and Sibley (2010) found a significant interaction between SDO and a manipulation of information about immigrants competing with non-immigrants for economic resources, such that individuals who were higher in social dominance orientation and read about competition from immigrants were especially likely to oppose their immigration (see also Dru, 2007). In addition, a similar interaction with SDO was obtained using a manipulation of immigrant disadvantage and low status, presumably because high social dominance oriented individuals are likely to devalue low status groups in order to justify their own group's relative superiority.

Following this line of reasoning, several types of lay beliefs may mediate the relation between SDO and attitudes toward immigrants and immigration. In particular, we



hypothesized that lay beliefs about the causes of prejudice toward immigrants may mediate the relation between SDO and prejudice toward immigrants such that individuals higher in social dominance orientation may use these lay beliefs to justify their prejudicial attitudes. Thus, for example, beliefs that prejudice is caused by immigrants themselves and real differences between groups may be strongly endorsed by high SDO individuals and play a mediational role in the SDO-prejudice relation. In contrast, beliefs that prejudice is caused by characteristics of the host society, such as ignorance and close-mindedness, may be especially likely to be eschewed by high SDO individuals and also mediate the relation between SDO and prejudice. These beliefs are at the core of justifications for ethnic prejudice because they attribute responsibility for prejudice.

The two forms of ethnic prejudice – blatant and subtle – stand on different theoretical bases. Blatant ethnic prejudice implies a vision of humanity in hierarchized “compartments”, called “races” (Taguieff, 1988); modern ethnic prejudice, instead, is characterized by denial of continued discrimination, antagonism toward minority group demands, and resentment toward “special favours” for minority groups. In these terms, we may expect that people high in SDO may hold blatant and subtle prejudicial attitudes toward immigrants *because of* specific perceptions related to the specific components characterizing the two forms of prejudice. Thus, we expected that the

hypothesized mediational effects would occur similarly for modern and classical prejudice, though perhaps stronger for modern prejudice which, by its nature, is more likely to require cognitive justifications.

In contrast, we expected that although SDO is likely to be related to lay beliefs about the solutions to ethnic prejudice, such that individuals higher in SDO are less likely to endorse any solutions to ethnic prejudice, these beliefs would not mediate the relation between SDO and attitudes toward immigrants and immigration. Unlike beliefs about the causes of ethnic prejudice, which can easily be used as justifications for the existence of prejudice, beliefs about solutions would seem to fall into a different category of potential remedial action once ethnic prejudice exists.

### *1.2. The Italian context*

As social dominance theorists themselves emphasize (e. g. Sinclair, Sidanius & Levin, 1998), SDO has been defined as “a very general individual difference orientation” (Sidanius & Pratto, 1999, p. 61) and it is also situationally induced (Esses et al., 2001). Thus, it is important to consider the social context salient at the time of SDO’s measurement. In a similar way, lay beliefs may be context-sensitive and the strength of ethnic prejudice may be related to the overall social situation (Gattino, Miglietta & Testa, 2010).

There are various factors characterizing the Italian context, starting from the fact that, in the public debate, immigration is still considered a quite recent phenomenon. In reality, Italy has experienced immigration since the 1990's and, at the time of writing, has an immigrant population of approximately 4,570,317 people from over 190 different communities. Italy is now one of the most dynamic countries in Europe as far as immigration is concerned (Caritas/Migrantes, 2010), and immigrants are 7.5% of the total Italian population. However, to date, there are no consistent Italian policies covering the integration of immigrants, and the prevailing political rhetoric portrays immigrants as an "emergency" to be contained and controlled. The exclusionist approach toward immigration is exemplified by the rules about citizenship, which are still dominated by an *ius sanguinis* (i.e., blood right) principle. Immigrants may become Italian citizens through marriage to an Italian citizen (followed by two years of legal residence in the country) or after a set number of years of legal and continuous residence and/or work in the country (10 years for non EU citizens, 4 years for EU citizens; 5 years for refugees and stateless). In the latter case, access to citizenship is submitted to a discretionary decision made by an authoritative committee. Children born in Italy from Non-Italian parents are not considered Italian citizens.

The presence of ethnic prejudice in Italian society<sup>1</sup> is likely encouraged by immigration policies that assume a discriminatory and xenophobic nature. Quoting Human Right First's 2008 *Hate Crime Survey*, Italy has a "legislation that conflated foreigners with criminals and identified the problem of security with specific groups of population" (p. 9). In his 2009 report, the Commissioner of Human Rights of the Council of Europe expressed his concern "about new legislative measures on immigration and asylum which have been adopted or under consideration by Italy, such as those criminalizing the letting of accommodation to irregular migrants and the decision to lift the ban on doctors to report to the authorities irregular migrants who access the health system" (p. 2). In the same report, the Commissioner "reiterates his recommendation that the [Italian] authorities ensure a prompt reaction to and strong condemnation of all racist or intolerant manifestations and to reinforce the anti-discrimination legislation" (p. 2). Thus, in Italy, interethnic relations are based on the opposition between Italians and foreigners.

### *1.3. The present research*

The current research had two main aims. The first one was to explore, in Italy, what non-experts think causes ethnic prejudice against immigrants to occur and how they

---

<sup>1</sup> In the 2007 Eurobarometer on Discrimination in the EU, it was reported that 77% of Italians perceived ethnic discrimination as a widespread phenomenon in their country and 59% affirmed that it had increased in the last 5 years.

suggest we combat it. The second aim was to assess whether lay perceptions of causes of ethnic prejudice mediate the relationship between SDO and ethnic prejudice (see Esses et al., 2001), and whether such mediational effects would depend on the form of ethnic prejudice considered (classical vs. modern).

## **2. Method**

### *2.1. Participants*

Participants in the study were 520 Italian adolescents ( $M_{\text{age}} = 19.19$ ;  $SD = 0.52$ ; Males = 48%, Females = 52%) attending high schools. Participants were contacted during their school lessons and were informed that they were participating in a study of relevant social problems in Italian society.

### *2.2. Instruments and procedure*

Data were collected by the researchers themselves and by research assistants trained by the researchers. Data collection involved completion of a structured questionnaire; all participants were informed that participation was voluntary and that their responses were anonymous. All questionnaires were group-administered in classrooms, with the teachers' permission. The questionnaire assessed a wide range of variables related to ethnic prejudice and SDO; for all the measures assessed, response options ranged from "strongly disagree" (1) to "strongly agree" (5).

*2.2.1. Perceptions of the causes of and solutions to ethnic prejudice.* Following Hodson and Esses (2005), to assess beliefs about causes of ethnic prejudice, participants were asked “To what extent is each of the following factors responsible for *causing* ethnic prejudice?” followed by 17 closed-ended items (e.g. close-mindedness, lack of contact between groups, parental influence). To fit the Italian context, two additional items were included among the possible causes: “Italian population” and “Immigrant population”. A similar procedure was employed to assess beliefs about solutions to ethnic prejudice. The lead-in question “To what extent would each of the following factors serve as a useful *solution* to ethnic prejudice?” was followed by 19 closed-ended solutions (e.g., tolerance of others’ values, legislation and laws, increased familiarity between groups).

*2.2.2. Classical and Modern Ethnic Prejudice.* To assess ethnic prejudice itself, Akrami, Ekehammar & Araya’s (2000) Classical and Modern Racism Scale was employed. The scale has been validated in the Italian context (Gattino, Miglietta, & Testa, 2011) and dimensionality tests demonstrated its bidimensional structure assessing classical and modern ethnic prejudice as different constructs. The Italian version of the scale contains 15 items grouped together into two subscales and generally assesses prejudice toward immigrants: the Classical Racial Prejudice Scale (CRPS 7 items; e.g., “Generally speaking, immigrants have high moral principles”) and the Modern Racial Prejudice

Scale (MRPS 8 items; e.g., “Immigrants are getting too demanding in the push for equal rights”). Items of each scale were reversed when needed and summed to obtain total scores; the measures demonstrated good internal consistency ( $\alpha = .88$  for CRPS;  $\alpha = .79$  for MRPS).

*2.2.3. Social Dominance Orientation.* SDO was assessed using 7 items from the Social Dominance Orientation Scale (Pratto, et al., 1994). A sample SDO item reads, “In getting what you want, it is sometimes necessary to use force against other groups”. Again, items were reversed when needed and summed to calculate the total score. The scale demonstrated good internal consistency ( $\alpha = .84$ ).

### *2.3. Data analysis*

Maximum Likelihood analysis (Oblimin rotation) was performed to define factors for causes and solutions to ethnic prejudice. The mediations of lay beliefs about causes of ethnic prejudice in the SDO-CRPS and SDO-MRPS relations, and the mediations of lay beliefs about solutions in the same relations, were tested through SEM models, and the test for indirect effects was done applying the bootstrap procedure (Shrout & Bolger, 2002).

## **3. Results**

### 3.1. *Perceived causes of ethnic prejudice*

Overall, the variables related to the perception of factors causing ethnic prejudice diverge slightly from the value of 3, representing the scale midpoint. Ethnic prejudice toward immigrants was mostly attributed to ignorance ( $M = 4.05$ ), closed-mindedness ( $M = 3.97$ ), negative experiences with other groups ( $M = 3.63$ ) and the immigrant population ( $M = 3.48$ ). Competition for resources ( $M = 3.05$ ) and fear of the unknown ( $M = 3.03$ ) fell around the scale midpoint, while lesser emphasis was placed on factors such as Italian society ( $M = 2.57$ ) and population density ( $M = 2.01$ ).

In order to understand how the items assessing the perceived causes of ethnic prejudice fit together, we conducted a maximum likelihood factor analysis, which extracted 4 factors with eigenvalues  $> 1$ . The scree plot suggested the extraction of three or two factors. In the three-factor solution, the first factor was saturated by only one item (close-mindedness). Thus, we chose the two-factor solution for further analysis (see Table 1).

Table 1. Rotated factor matrix for causes of ethnic prejudice

	Factor 1 Ignorance	Factor 2 Intergroup diversity
Ignorance	<b>.65</b>	-.28
Closed-mindedness	<b>.62</b>	-.26
Fear for unknown	<b>.58</b>	-.13
Parental influence	<b>.50</b>	.03
Lack of contact	<b>.48</b>	.04



Culture	.35	.12
Lack of familiarity	.33	.22
Italian population	.28	-.00
Discomfort or unease	.26	.09
Realistic conflict	.09	.02
Immigrant population	-.10	<b>.67</b>
Real differences between groups	-.04	<b>.54</b>
Groups striving to be distinct	-.02	<b>.52</b>
Different world views	.17	<b>.49</b>
Population density	-.17	.39
Human nature	.15	.33
Negative experiences	.12	.31

*Note:* Maximum-Likelihood factor analysis. Oblimin rotation. Loadings  $\geq .40$  in boldface.  $N = 520$ .

The first factor, labelled *Ignorance* (16.5% of explained variance), centers on ignorance and closed-mindedness (e.g., ignorance, closed-mindedness, fear of unknown) as causes of ethnic prejudice. The second factor, labelled *Intergroup diversity* (14.8% of explained variance), was mostly saturated by items related to group differences and intergroup processes (e.g., real differences between groups; different ways of viewing the world). It should be noted that the item with the greatest loading on this factor refers to immigrants, suggesting that immigrants carry the diversity that causes ethnic prejudice.

### 3.2. Perceived solutions to ethnic prejudice

Consistent with perceived causes of ethnic prejudice, participants recommended as main solutions to ethnic prejudice open-mindedness ( $M = 4.19$ ) and tolerance of other's values ( $M = 3.89$ ), followed by an effort by immigrant groups ( $M = 3.70$ ). Increased familiarity between groups ( $M = 3.20$ ) and a focus on similarities between groups ( $M = 3.10$ ) fell around the scale midpoint, while participants were less likely to recommend encouraging cross-ethnic marriages ( $M = 2.14$ ), non-interference with current ethnic relations ( $M = 2.10$ ), or reduction of contact between groups ( $M = 1.30$ ) as solution to ethnic prejudice.

Maximum likelihood factor analysis of the solutions extracted 4 factors with eigenvalues  $> 1$ . The scree plot suggested the extraction of three factors, labelled *Contact and increased familiarity* (32% of explained variance), *Politics and media* (9.5% of explained variance), and *Tolerance and social change* (6.4% of explained variance) (see Table 2).

Table 2. Rotated factor matrix for solutions to ethnic prejudice

	Factor 1 Contact and increased familiarity	Factor 2 Politics and media	Factor 3 Tolerance and social change (absence of)
Positive experiences	<b>.81</b>	-.12	-.02
Increase contact	<b>.72</b>	-.03	-.06
Increase familiarity	<b>.59</b>	.13	-.11
Appreciation of differences	<b>.51</b>	-.02	-.27
Resource equality	<b>.48</b>	.01	-.06
Focus on similarities	<b>.44</b>	-.05	.04

Cross-ethnic marriages	<b>.41</b>	.20	.04
Guidance from politicians	-.01	<b>.79</b>	.06
Legislation and laws	-.02	<b>.56</b>	-.09
Media influence	.09	<b>.40</b>	-.23
Religion	-.02	.35	.07
Tolerance of others' value	.05	.11	<b>-.71</b>
Open-mindedness	.23	.02	<b>-.64</b>
Teaching tolerance	.03	.33	<b>-.58</b>
Effort by society	.18	.09	<b>-.55</b>
Tolerance of different worldviews	.21	.10	<b>-.50</b>
Reduced contact	-.22	.06	<b>.44</b>
Effort by Italian population	.27	.19	<b>-.40</b>
Non interference with ethnic relations	-.00	.07	.37
Effort by immigrants	.04	.10	.16

*Note:* Maximum-Likelihood factor analysis. Oblimin rotation. Loadings  $\geq .40$  in boldface.  $N = 520$ .

The *Contact and increased familiarity* factor identified greater intergroup contact as a possible solution to ethnic prejudice. Items loading on this factor suggest that ethnic prejudice could be reduced through positive intergroup experiences and an increase of contact that leads to greater intergroup familiarity (e.g., increased contact, increased familiarity, encourage cross-ethnic marriages). This factor also includes items focusing on issues of social justice (equal resources among groups) and positive attitudes towards intergroup differences (appreciate differences, focus on similarities). The *Politics and media* factor contained items referring to interventions from policy and politicians (i.e., guidance from politicians, and legislation and laws), and media influence. The *Tolerance and social change* factor contained items mainly concerning the issue of

tolerance and open-mindedness (e.g., tolerance for others' values, teach tolerance, tolerance towards different world-views, open-mindedness) and a reference to an active effort to produce change in social relationships (e.g., effort by society in general, effort by Italian population). One item focused on reduced contact as a possible solution to ethnic prejudice, which loaded in an opposite direction to the other items on this factor.

Mean scores for each cause and solution factor were computed and used in further analysis. When computing these mean scores, we considered only items with loadings  $\geq .40$ . In addition, because the 'reduced contact as a solution to prejudice' item significantly reduced the Cronbach's alpha for the *Tolerance and social change* solution, it was not included in computing this factor score. All factors' internal reliability was satisfactory. Alpha values for factors about causes were .69 for *Ignorance* (5 items) and .63 for *Intergroup diversity* (4 items). Alpha values for factors about solutions were .81 for *Contact and increased familiarity* (7 items), .60 for *Politics and media* (3 items) and .85 for *Tolerance and social change* (5 items). Overall, lower factor scores indicated that the factors were less likely to be considered causes of, or solutions to, ethnic prejudice; higher scores indicated that the factors were more likely to be considered causes of, or solutions to, ethnic prejudice.

The two cause factors were uncorrelated,  $r(518) = -.06, p > .05$ , whereas the three solutions factors were intercorrelated. Specifically, *Contact and increased familiarity* was positively related to both *Politics and Media*,  $r(518) = .23, p < .01$ , and *Tolerance and social change*,  $r(518) = .69, p < .01$ . In addition, *Politics and media* showed a positive correlation with *Tolerance and social change*,  $r(518) = .23, p < .01$ .

### 3.4. Lay beliefs, SDO and ethnic prejudice

The zero-order correlations showed that SDO was significantly and positively related to both classical and modern ethnic prejudice. In addition, all the perceived causes of and solutions to ethnic prejudice were significantly related to SDO and to classical and modern ethnic prejudice. Moreover, the *Ignorance* cause was positively related to the three perceived solutions, while the *Intergroup diversity* cause was significantly and negatively related to the *Tolerance and social change* solution only (see Table 3).

Table 3. Correlations among SDO, CRPS, MRPS, Causes and Solutions mean scores (n= 520)

	1	2	3	4	5	6	7
1. SDO	-						
2. CRPS	.73**	-					
3. MRPS	.66**	.61**	-				
4. Ignorance	-.44**	-.35**	-.42**	-			
5. Intergroup diversity	.37**	.39**	.34**	-.06	-		

6. Contact and increased familiarity	-.62**	-.49**	-.50**	.50**	-.08	-
7. Politics and media	-.13*	-.10*	-.24**	.17**	-.04	.23**
8. Tolerance and social change	-.67**	-.56**	-.55**	.58**	-.24**	.69**

\*\*  $p < .01$ ; \*  $p < .05$ .

### 3.5. Structural Equation Model for Testing Mediated Relations

The hypothesis of mediation was tested via Structural Equation Modelling (SEM). Because we hypothesized that beliefs about what causes ethnic prejudice (*Ignorance* and *Intergroup diversity*) would mediate the relations between SDO and two forms of ethnic prejudice (classical and modern) we tested this model first. We did not expect the three beliefs about solutions to ethnic prejudice (*Contact and increased familiarity*; *Politics and media*; *Tolerance and social change*) to mediate the SDO – prejudice relations. Nonetheless, we also conducted structural equation modeling to test this possible mediation in order to rule it out.

The first structural equation model (Model A) included five latent variables (SDO, the two perceived causes of ethnic prejudice, MRPS and CRPS). The second model (Model B) included six latent variables (SDO, the three perceived solutions to ethnic prejudice, MRPS and CRPS). Because of the intercorrelations among the three perceived solutions, the errors of these latent variables were correlated in the second model.

A partial disaggregating approach (Bagozzi, 1993; Bagozzi & Edwards, 1998) was used for the latent variables by examining groups of aggregated, rather than single items, as latent variable indicators. That is to say, we limited the numbers of indicators to three for each scale – except for latent variables concerning causes where the number of indicators were two – aggregating the items at random. The advantage of this approach is that it reduces the number of variables in the model that may result in an excessive worsening of the fit.

As is usually recommended (Bollen & Long, 1993; Hu & Bentler, 1998), we tested the model fit by using different fit indices to reduce the impact of their limits. We used the  $\chi^2$ , CFI (Comparative Fit Index; Bentler, 1990), TLI (Tucker-Lewis Index; Tucker & Lewis, 1973)—also known as NNFI (Non-Normal Fit Index; Bentler & Bonett, 1980), SRMR (Standardized Root Mean Square Residual; Hu & Bentler, 1999) — and RMSEA (Root Mean Square Error of Approximation; Steiger, 1990) indices. For CFI and TLI, values higher than 0.95 were considered satisfactory (cf. Bentler, 1990); a SRMR smaller than 0.08 indicates good fit. As for RMSEA, we followed Browne (1990), who considers values lower than 0.08 to be satisfactory and values lower than 0.05 to be good.

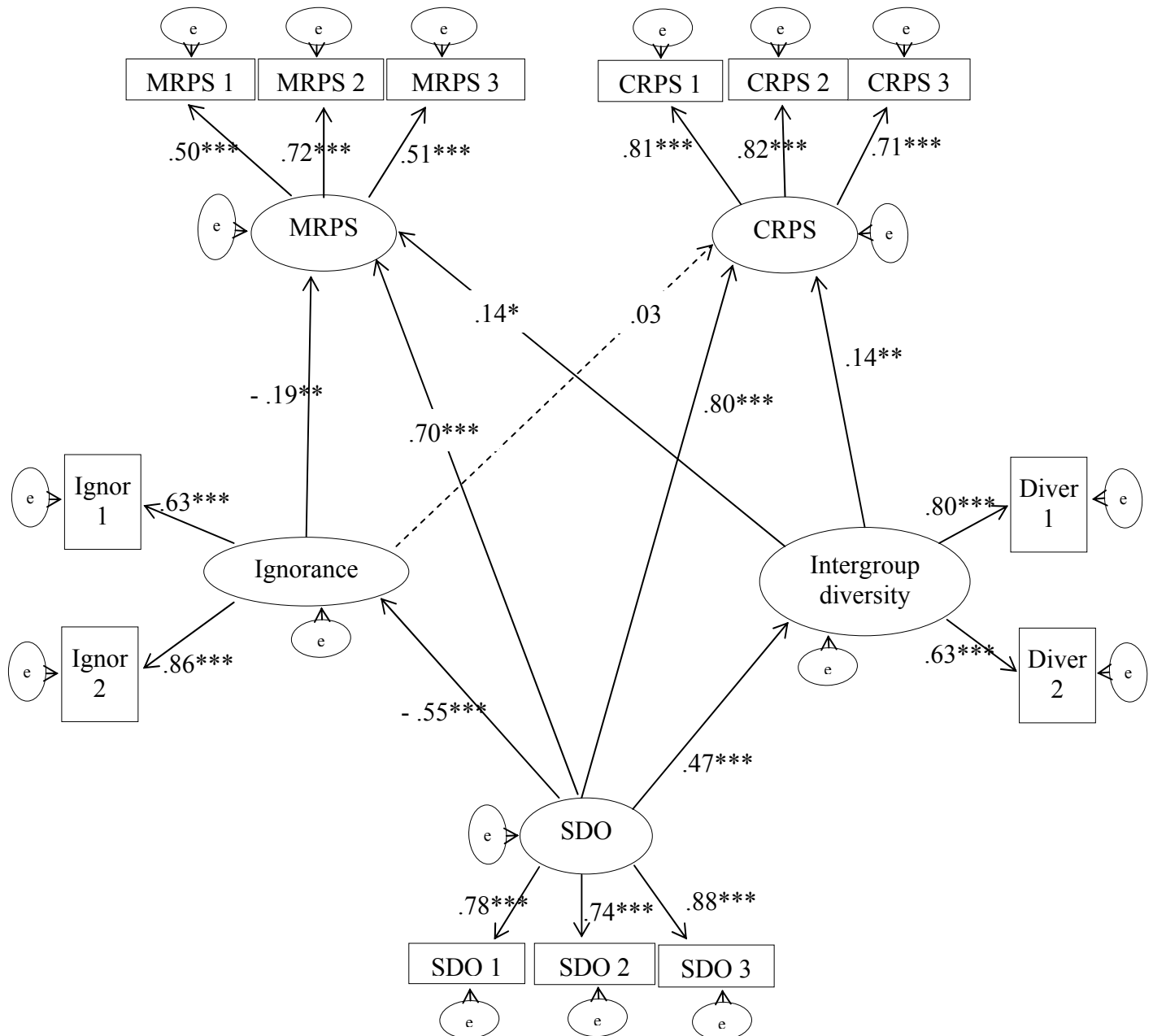
### *3.5.1. The role of beliefs about perceived causes of ethnic prejudice in the SDO – ethnic prejudice relations*

Model A proved acceptable according to all the fit indexes except  $\chi^2$ :  $\chi^2(57) = 152.5$ ,  $p < .01$ , CFI = .97, TLI = .95, SRMR = .04; RMSEA = .057 (90% CL = .046, .068). Given

that the significance of  $\chi^2$  depends on the sample size and that our sample was quite large ( $N = 520$ ), we considered this model to be satisfactory. All estimated parameters were significant, except the one concerning the Ignorance – CRPS relation. Figure 1 shows the validated model.



Figure 1. Model A: Relations among SDO, beliefs about the causes of ethnic prejudice and classical/modern ethnic prejudice



\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ .

Note: The dotted arrow indicates that the relation is not statistically significant.

As expected, results showed that beliefs about what causes ethnic prejudice were differentially related to the two forms of ethnic prejudice. Specifically, it emerged that SDO had an inverse influence on the belief that ethnic prejudice is caused by *Ignorance* ( $\beta = -.55$ ) and a direct influence on the belief that ethnic prejudice is caused by *Intergroup diversity* ( $\beta = .47$ ). Moreover, SDO influenced both modern ( $\beta = .70$ ) and classical ethnic prejudice ( $\beta = .80$ ). *Ignorance* was negatively related to MRPS ( $\beta = -.19$ ) but had no relation with CRPS. On the other hand, *Intergroup diversity* directly influenced both classical prejudice ( $\beta = .14$ ) and modern prejudice ( $\beta = .14$ ). The whole set of predictors explained 79% of MRPS and 75% of CRPS variances.

The bootstrap results partially confirmed our hypothesis of the mediational role of the perceived causes of ethnic prejudice in the SDO – MRPS relation ( $a*b = .09$  (95% CI = .03 to .16;  $p < .05$ ; SE = .03). However, since the direct effect of SDO on modern prejudice was still significant ( $c' = .70$ ; 95% CI = .26 to .47;  $p < .05$ ; SE = .08), we found evidence only for partial mediation. The relative strength of mediation effects is given from the product of the two standardized path coefficients. Results showed that the stronger mediational effect involved *Ignorance*  $[(-.55) \times (-.19) = .10]$ , whereas it was lower for *Intergroup diversity*  $[(.47) \times (.14) = .06]$ .

The hypothesis of mediation in the SDO – CRPS was not supported by the empirical evidence ( $a*b = .05$ : 95% CI = -.04 to .14;  $p > .05$ ; SE = .04).

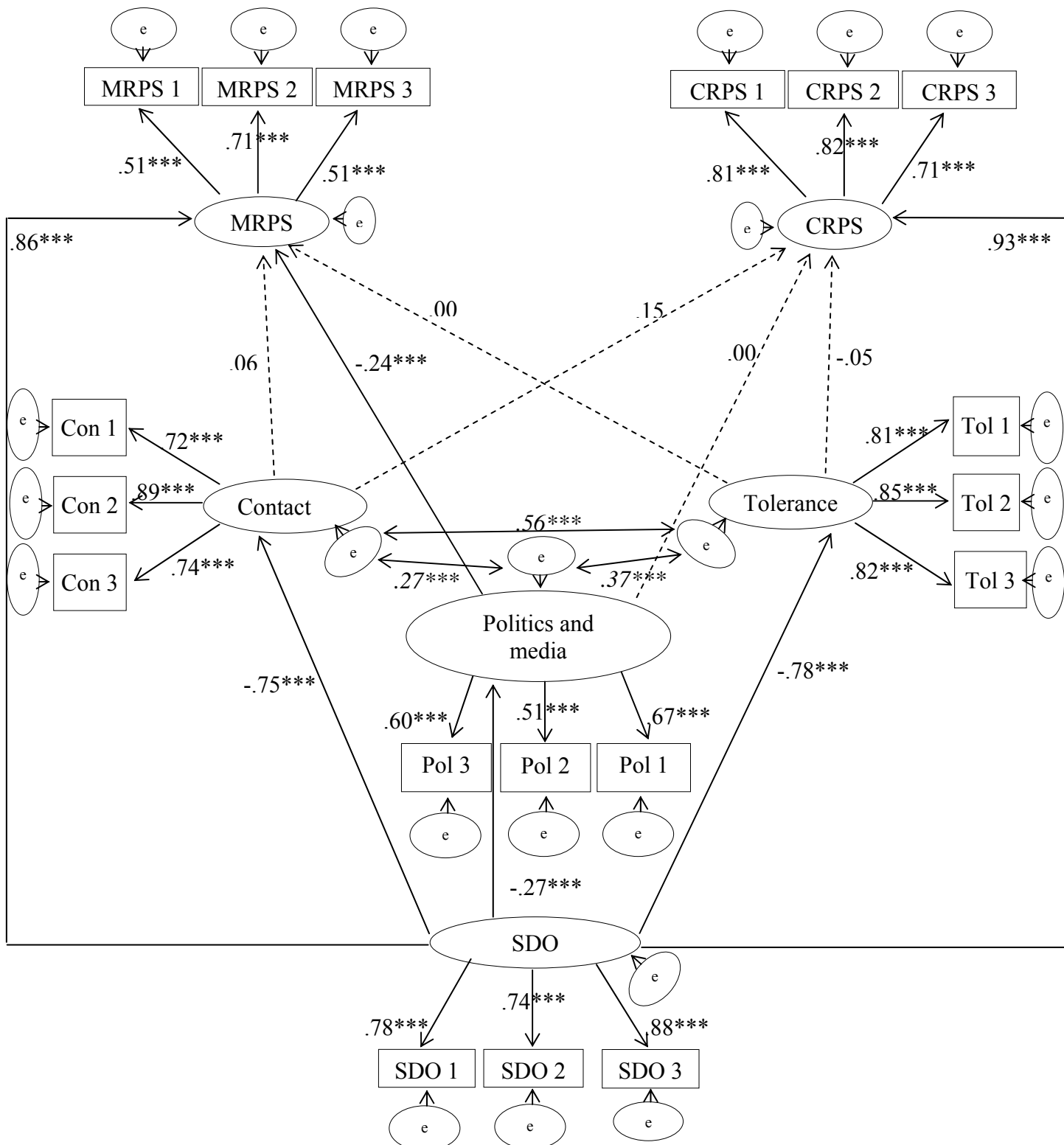
### 3.5.2. *The role of beliefs about perceived solutions to ethnic prejudice in the SDO – ethnic prejudice relations*

In order to rule out a mediational role of perceived solutions to ethnic prejudice in the SDO – ethnic prejudice relations, we tested a second model (Model B; see Figure 2) including *Contact and increased familiarity*, *Politics and media* and *Tolerance and social change* as possible mediators. The model that included all variables proved acceptable according to all the fit indices except  $\chi^2$ :  $\chi^2(121) = 309$   $p < .01$ , CFI = .96, TLI = .95, SRMR = .06; RMSEA = .055 (90% CL = .047, .062).

Results confirmed the unmediated relation between SDO and ethnic prejudice, with SDO exerting a direct influence on both its forms (SDO – MRPS:  $\beta = -.86$ ; SDO – CRPS:  $\beta = -.93$ ). In addition, SDO had an inverse influence on all three solutions to ethnic prejudice: *Contact and increased familiarity* ( $\beta = -.75$ ), *Politics and media* ( $\beta = -.27$ ), and *Tolerance and social change* ( $\beta = -.78$ ). Of note, *Politics and media* as a solution to ethnic prejudice was negatively related to MRPS ( $\beta = -.24$ ), but unrelated to CRPS. No significant relations were evident between the two other solutions (*Contact and increased familiarity* and *Tolerance and social change*) and both forms of ethnic

prejudice. The whole set of predictors in Model B explained 82% of MRPS and 75% of CRPS variances.

Figure 2. Model B: Relations among SDO, beliefs about the solutions to ethnic prejudice and classical/modern ethnic prejudice



\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ .

*Note:* The dotted arrow indicates that the relation is not statistically significant; values in italics refer to correlations. Contact = *Contact and increased familiarity*; Tolerance = *Tolerance and social change*.

The bootstrap results confirmed our prediction that none of the three perceived solutions to ethnic prejudice would mediate the SDO – ethnic prejudice relation. Indeed, the indirect effect of SDO on the two forms of ethnic prejudice was not significant (SDO – MRPS:  $a*b = .015$ ; 95% CI =  $-.09$  to  $.09$ ;  $p > .05$ ; SE =  $.05$ , SDO – CRPS:  $a*b = -.07$ ; 95% CI =  $-.20$  to  $.07$ ;  $p > .05$ , SE =  $.07$ ).

Thus, our hypothesis that specific lay beliefs about causes of ethnic prejudice are significant mediators of the relations between SDO and modern ethnic prejudice was supported, though full mediation did not occur. No mediation was evident for classical ethnic prejudice, however. Also, the hypothesis that lay beliefs about solutions to ethnic prejudice do not mediate the same relations was supported.

Evidence partially supported the hypothesis that the relations between the cause and solution beliefs and classical versus modern ethnic prejudice are content-dependent, i.e., specific beliefs justify specific expressions of ethnic prejudice. Indeed, the beliefs that ethnic prejudice is caused by ignorance or by intergroup diversity mediated the relation between SDO and modern ethnic prejudice. In contrast, the same beliefs did not mediate

the relationship between SDO and the classical form of ethnic prejudice. Of interest, though no mediation occurred, modern ethnic prejudice was related to the belief that the problem of ethnic prejudice could be solved by the action of external forces such as politics (legislation and laws) and media, whilst the other hypothesized solutions (*Contact and increased familiarity* and *Tolerance and social change*) were not related to either form of ethnic prejudice.

#### **4. Discussion**

The present research aimed to investigate lay beliefs about ethnic prejudice in Italy and how they relate to individual levels of classical and modern ethnic prejudice. A second aim was to investigate whether lay beliefs about the causes of ethnic prejudice toward immigrants would mediate the relation between SDO and the two forms of ethnic prejudice.

In terms of the first goal, similar to the North American findings of Esses and Hodson (2006), Italian respondents were especially likely to attribute the causes of ethnic prejudice toward immigrants to ignorance and close-mindedness, and to recommend as main solutions open-mindedness and tolerance of others' values. From the factor analysis emerged two factors about causes, and three about solutions.

The two ‘cause’ factors deal with Ignorance and Intergroup Diversity. This diverges slightly from the Hodson and Esses (2005) findings in that the items contributing to the *Intergroup Diversity* factor in the current study loaded on two separate factors in the Hodson and Esses study. The *Ignorance* factor focused on ignorance and closed-mindedness as primary causes of ethnic prejudice. We may understand this factor as an ‘internal’ causal attribution about the roots of ethnic prejudice, assuming that the perpetrators (i.e., ingroup members) have responsibility for the problem. Conversely, the *Intergroup diversity* factor blames immigrants for the presence of ethnic prejudice in societies, suggesting an ‘external’ attribution and discharging the respondents’ ingroup from the responsibility of holding negative attitudes toward an outgroup.

Consistent with our hypotheses, higher social dominance oriented individuals were especially likely to endorse Intergroup diversity and especially unlikely to endorse Ignorance as causes of ethnic prejudice, thereby justifying and disclaiming responsibility for their own prejudices. In addition, as predicted, these beliefs about causes of ethnic prejudice significantly mediated the relation between SDO and modern (but not classical) prejudice. These findings support those of Esses & Hodson (2006) in which it was demonstrated that beliefs that ethnic prejudice is inevitable and justified (i.e, outside of the perpetrators’ control) mediated the SDO-prejudice relation.

In the current study, the differentiation between modern and classical prejudice is perhaps not surprising, given that modern prejudice may be a more “sophisticated” form of prejudice and require more cognitive effort and justification to maintain. The differential mediation for modern and classical prejudice also adds support to the power of the CMRP Scale (Akrami et al., 2000) to differentiate between the classical and the modern forms of ethnic prejudice.

The three components of lay beliefs about the perceived solutions also display an internal/external attributional pattern, though in this case, the attribution of responsibility is for the enactment of strategies for reducing ethnic prejudice. The first and third factors refer to individuals’ willingness to engage in reducing ethnic prejudice (‘internal’ locus) through such actions as increasing contact, appreciating group differences (Contact and increased familiarity), and being more open-minded and tolerant (Tolerance and social change). In contrast, the second factor involves the belief that the way to reduce ethnic prejudice should not be an individual responsibility but instead should involve an intervention that resides external to the individual, such as legislation and laws or media (Politics and media). Once again, the solution factors obtained in the Italian context diverge slightly from those found in North America, with the external factor being quite similar, and the internal factors showing somewhat different patterns of loadings, though in both cases, two internal factors were obtained.



Consistent with our hypotheses, higher social dominance oriented individuals were especially likely to eschew all solutions to prejudice, particularly those which place responsibility for solutions on those who hold prejudicial attitudes. Despite these relations, however, and consistent with our hypotheses, beliefs about solutions to ethnic prejudice did not mediate the SDO-prejudice relation. This fits with our expectation that beliefs about causes of ethnic prejudice are more likely to be used by higher social dominance oriented individuals to maintain the status quo than beliefs about solutions.

## **5. Conclusions**

Overall, this research highlights the relevance of the study of lay beliefs for the understanding of ethnic prejudice, underlines their context-specific nature, and shows how they act as (partial) cognitive justifications to hold specific negative attitudes toward immigrants.

Further research could investigate whether lay beliefs about ethnic prejudice affect also majority members' acculturation attitudes, and whether they are related to specific national identity contents (essentialistic vs. patriotic; civic vs. ethnic; see Pehrson & Green, 2010).

Interpreting our results in the Italian context, they make clear that the lack of reflection on this phenomenon by the general Italian society, and the direction followed by the policies about this issue, lead to a very simple and rough understanding of the Italian – Immigrants relationship. The political and intellectual vacuum has been filled by a populist rhetoric that outlines the immigrant as a “cost” to be controlled and avoided. As a result, interethnic relations in Italian society are mainly understood in terms of the opposition between ‘us’ and ‘them’, preventing the development of a structured representation of Italy as a multicultural society.

## References

- A.H.C.S.(2009). *Report by Thomas Hammarberg, Commissioner for Human Rights of the Council of Europe following his visit to Italy on 13-15 January 2009*.  
Retrieved on March 20, 2011 from <http://habeshia.blogspot.com/2009/05/report-by-thomas-hammarberg.html>
- Akrami, N., Ekehammar, B., & Araya, T. (2000). Classical and modern racial prejudice: A study of attitudes toward immigrants in Sweden. *European Journal of Social Psychology, 30*, 521-532.
- Altemeyer, B. (1998). The “other authoritarian personality”. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 30, pp. 47-92). San Diego, CA: Academic.
- Anderson, C. A., & Lindsay, J. J. (1998). The development, perseverance, and change of naïve theories. *Social Cognition, 16*, 8-30.
- Bagozzi, R.P. (1993). Assessing construct validity in personality research. Application to measures of self esteem. *Journal of Research in Personality, 27*, 49-87.
- Bagozzi, R. P., & Edwards, J. R. (1998). A general approach for representing constructs in organizational research. *Organizational Research Methods, 1*, 45–87.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238–246.

- Bentler, P. M. & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Bollen, K. A., & Long, J. S. (1993). Testing structural equation models. Newbury Park, CA: Sage.
- Browne, M. W. (1990). *MUTMUM PC: User's guide*. Columbus, OH: Ohio State University, Department of Psychology.
- Caritas/Migrantes (2010). *Immigrazione. Dossier Statistico XIX Rapporto*. Roma: Centro Studi e Ricerche IDOS.
- Coenders, M., Lubbers, M. & Scheepers, P. (2005). Majority's populations attitudes toward migrants and minorities. Vienna: *European Monitoring Centre on Racism and Xenophobia*.
- Dru, V. (2007). Authoritarianism, social dominance orientation and prejudice: Effects of various self-categorization conditions. *Journal of Experimental Social Psychology*, 43, 877–883.
- Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. In M. P. Zanna (ed.), *Advances in experimental social psychology* (Vol. 33, pp. 41–113). San Diego, CA: Academic Press.
- Duckitt, J. (2005). Personality and prejudice. In J.F. Dovidio, P. Glick, & L.A. Rudman (eds.), *On the nature of prejudice: Fifty years after Allport* (pp. 395–412). Malden, MA: Blackwell.

- Duckitt, J. and Sibley, C. G. (2010), Personality, Ideology, Prejudice, and Politics: A Dual-Process Motivational Model. *Journal of Personality*, 78, 1861–1894.
- Eagly, A. H., & Diekmann, A. B. (2005). What is the problem? Prejudice as an attitude-in-context. In J. F. Dovidio, P. Glick, L. A. Rudman (Eds.), *On the nature of prejudice: Fifty years after Allport*. (pp. 17-35). Oxford: Blackwell.
- Efron, B., & Tibshirani, R. (1993). *An introduction to the bootstrap*. New York: Chapman & Hall/CRC.
- Ekehammar, B., Akrami, N., Gylje, M. and Zakrisson, I. (2004), What matters most to prejudice: Big Five personality, Social Dominance Orientation, or Right-Wing Authoritarianism?. *European Journal of Personality*, 18, 463–482.
- Esses, V. M., Dovidio, J. F., Jackson, L. M., & Armstrong, T. L. (2001). The immigration dilemma: The role of perceived competition, ethnic prejudice, and national identity. *Journal of Social Issues*, 57, 389-412.
- Esses, V. M., & Hodson, G. (2006). The role of lay perceptions of ethnic prejudice in the maintenance and perpetuation of ethnic bias. *Journal of Social Issues*, 62, 453-468.
- Esses, V. M., Jackson, L. M., & Armstrong, T. L. (1998). Intergroup competition and attitudes toward immigrants and immigration: An instrumental model of group conflict. *Journal of Social Issues*, 54, 699-724.

- Esses, V. M., Stelzl, M., & Mihic, L. (2007). *Willingness to help immigrants: Direct assistance versus empowerment*. Presentation at the SESP Annual Conference, Chicago, Illinois.
- EUMC (2006). *The annual report on the situation regarding racism and xenophobia in the member states of the EU*. Retrieved on March 20, 2011 from [http://www.fra.europa.eu/fraWebsite/attachments/ar06p2\\_en.pdf](http://www.fra.europa.eu/fraWebsite/attachments/ar06p2_en.pdf)
- Gattino, S., Miglietta, A., & Testa, S. (2010). Italiani brava gente? Un confronto temporale su pregiudizio etnico e autostima collettiva [Italians good people? A temporal comparison of ethnic prejudice and collective self-esteem]. *Polena*, 3, 59-70.
- Gattino, S., Miglietta, A., & Testa, S. (2011). Akrami, Ekehammar, and Araya's Classical and Modern Racial Prejudice Scale in the Italian context. *TPM*, 18, 31-47.
- Guimond, S., Dambrun, M., Michinov, N. & Duarte S. (2003). Does social dominance generate prejudice? Integrating individual and contextual determinants of intergroup cognitions. *Journal of Personality and Social Psychology*, 84, 697–721.
- Hodson, G., & Esses, V. M. (2005). Lay perceptions of ethnic prejudice: Causes, solutions, and individual differences. *European Journal of Social Psychology*, 35, 329-344.

- Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3, 424-453.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling*, 6, 1-55.
- Human Rights First. (n.d.). *II. Individual country overview*. Retrieved on March 20, 2011 from: <http://www.humanrightsfirst.org/our-work/fighting-discrimination/2008-hate-crime-survey/2008-hate-crime-survey-roma-and-sinti/ii-individual-country-overview/>.
- Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology*, 25, 881-919.
- Pehrson, S., & Green, E. G. (2010). Who we are and who can join us: National identity content and entry criteria for new immigrants. *Journal of Social Issues*, 66, 695-716.
- Pratto, F. (1999). The puzzle of continuing group inequality: Piecing together psychological, social, and cultural forces in social dominance theory. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 31, pp. 191-263). San Diego: Academic Press.

- Pratto, F., & Lemieux, A. F., (2001). The psychological ambiguity of immigration and its implications for promoting immigration policy. *Journal of Social Issues*, 57, 413-430.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741-763.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422-445.
- Sibley, C. G., Wilson, M. S. and Duckitt, J. (2007). Effects of Dangerous and Competitive Worldviews on Right-Wing Authoritarianism and Social Dominance Orientation over a Five-Month Period. *Political Psychology*, 28, 357–371.
- Sidanius, J., Levin, S., & Pratto, F. (1996). Consensual social dominance orientation and its correlates within the hierarchical structure of American society. *International Journal of Intercultural Relations*, 20, 385–408.
- Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. Cambridge, UK: Cambridge University Press.
- Sidanius, J., Pratto, F., & Bobo, L. (1994). Social dominance orientation and the political psychology of gender: A case of invariance? *Journal of Personality and Social Psychology*, 67, 998-1011.



Sinclair, S., Sidanius, J. & Levin, S. (1998). The interface between ethnic and social system attachment: The differential effects of hierarchy-enhancing and hierarchy-attenuating environments. *Journal of Social Issues*, 54, 741-757.

Special Eurobarometer 65.4 (2007). *Discrimination in the European Union*, June-July, 2006. Retrieved March 20, 2011 from:

[http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_263\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_263_en.pdf)

Steiger, J. H. (1990). Structural model evaluation and modification. An interval estimation approach. *Multivariate Behavioral Research*, 25, 173–180.

Taguieff, P. A., (1988). *La force du préjugé: Essai sur le racisme et ses doubles* [*The force of prejudice: On racism and its doubles*]. Paris, La Découverte.

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