



Contents lists available at ScienceDirect

International Journal of Intercultural Relations

journal homepage: www.elsevier.com

Intergroup contact and prejudice toward immigrants: A multinational, multilevel test of the moderating role of individual conservative values and cultural embeddedness

Daniela Barni ^a, Nicoletta Cavazza ^b, Silvia Russo ^{c, *}, Alessio Vieno ^d, Michele Roccato ^e

^a LUMSA University of Rome, Department of Human Sciences, Italy

^b University of Modena and Reggio Emilia, Department of Communication and Economics, Italy

^c University of Torino, Department of Psychology, [Via Verdi 10, 10124, Torino, Italy](https://doi.org/10.10124/Torino)

^d University of Padova, Department of Developmental and Social Psychology, Italy

^e University of Torino, Department of Psychology, Italy

ARTICLE INFO

Keywords:

Contact hypothesis
Intergroup contact
Conservative values
Cultural embeddedness
Ethnic prejudice

ABSTRACT

We performed a multilevel, multinational analysis of the 2014 European Social Survey dataset ($N = 33,597$, nested in 19 countries) to study how individual conservative values and cultural embeddedness moderate the link between contact with immigrants and the attitudes toward them. A combination of frequency and positivity of contact with immigrants showed a negative association with ethnic prejudice while, conversely, participants' conservative basic values were directly and positively associated with prejudice. National cultural embeddedness was not associated with the dependent variable. Neither individual conservative values nor cultural embeddedness moderated the association between contact and prejudice. Strengths, limitations, implications and future directions of this study are discussed.

Introduction

The current rise of migrant and refugee flows mixes more and more people from different countries, religions, cultures and habits, posing serious social and political questions to Western countries. The success of nationalist parties in many countries suggests that an open reception of immigrants and asylum seekers is far from being the default reaction. However, many stories also testify behaviours of solidarity, compassion and support toward immigrants and refugees. What drives people to react in one way or another?

The scientific knowledge about prejudice toward potentially threatening minorities, and about ways of overcoming it, is crucial to answer such a question. This is why prejudice is a key area of research for social psychologists. In this field of study, Allport's (1954) contact hypothesis is a milestone and its impact overflowed out of the restricted scientific community. For instance, according to the UNESCO, intervention programs built on such theory should be the lynchpin of effective approaches to intergroup conflict resolution (Hodson & Hewstone, 2013).

Developed in the United States in the era of racial segregation, the contact hypothesis has a simple and intuitive core: Frequent and positive contacts with people belonging to an outgroup improve the judgments towards the entire outgroup and reduce the prejudice against it. According to Allport (1954), four conditions make contact actually effective: (a) the two groups should have

* Corresponding author.

Email address: silvia.russo@unito.it (S. Russo)

equal status in terms of power, influence, or prestige; (b) they should have shared goals; (c) they should cooperate to pursue such goals; and (d) authorities, law and customs should support positive relations between them.

Over the years, an impressive number of studies have tested the contact hypothesis, with different methods and procedures. For instance, Pettigrew and Tropp's (2006) meta-analysis included 713 independent samples from 515 studies and on February 4, 2020, PsycInfo reported 584 works with 'contact hypothesis' or 'intergroup contact' in their title. Despite their theoretical and methodological heterogeneity, these studies provided a clear answer to a number of questions.

First, consistent with the main idea of the contact hypothesis, prejudice toward the outgroup is negatively associated with: (a) the frequency of contacts (e.g., Dixon & Rosenbaum, 2004), (b) the quality of contacts (e.g., Pettigrew, Christ, Wagner, & Stellmacher, 2007), and (c) the combination of the frequency and the quality of intergroup contact (e.g., Brown, Maras, Masser, Vivian, & Hewstone, 2001). Second, Allport's four conditions of contact amplify, but are not necessary conditions for, the positive effects of intergroup contact (Pettigrew & Tropp, 2006): Intergroup contact *per se* ameliorates attitudes toward the outgroup. Third, intergroup contact proved to be effective in several intergroup domains, including those involving gays and lesbians (e.g., Fasoli, Paladino, & Sulpizio, 2016), physically disabled people (e.g., Keith, Bennetto, & Rogge, 2015), mentally ill people (e.g., Read & Law, 1999), workplaces (Laurence, Schmidt, & Hewstone, 2018) and, most importantly for this study, racial and ethnic minorities (e.g., Lemmer & Wagner, 2015). Finally, longitudinal (e.g., Van Laar, Levin, Sinclair, & Sidanius, 2005) and experimental (e.g., Ensari & Miller, 2002) studies showed that the effects of intergroup contacts on prejudice are stronger than the opposite effects of prejudice on intergroup contacts (Binder et al., 2009).

However, some relevant questions are still unexplored. In particular, even though some evidence of individual and contextual influences on the contact-prejudice link is available (e.g., Hamberger & Hewstone, 1997; Hodson, Costello, & MacInnis, 2013), it is still unclear the role that personality and the contextual features play in modulating the strength and the direction of the contact-prejudice link in different cultural contexts. In this study, we focused on the moderating role of basic personal values (i.e., conservative values) and cultural values (i.e., embeddedness). Using the 2014 European Social Survey (ESS) data, we performed the first multinational, multilevel study to test whether conservative values at individual level and embeddedness at cultural level moderate the association between intergroup contact and prejudice toward immigrants.

Personality differences in the contact-prejudice association

People differ in their tendency to seek or to avoid contact with outgroup members (Pettigrew, 1998). However, avoiding contacts in contexts more and more socially mixed is not always possible. Thus, it is plausible that the attitudinal outcome of intergroup contact would be different for people high vs low in their readiness for it. A few studies addressed the idea that intergroup contact might have different effects based on people's readiness for contact. They mainly operationalized participants' readiness for contact in terms of right-wing authoritarianism (RWA, i.e., the covariation of conventionalism, authoritarian aggression and authoritarian submission: see Altemeyer, 1996) and/or of social dominance orientation (SDO, i.e., the tendency to desire one's ingroup to be superior and even dominate the outgroups: see Pratto, Sidanius, Stallworth, & Malle, 1994). RWA and SDO are effective predictors of prejudice (Hodson et al., 2013). Moreover, they account for people's tendency to be closed to new experiences (Akrami & Ekehammar, 2006), to resist to novelty and change and to perceive the outgroups as threatening social control, order, cohesion and stability (Duckitt, 2006). Thus, it is reasonable that they could account for participants' readiness for intergroup contact.

Several of these studies showed that contact reduces prejudice especially among high scorers on the RWA and the SDO scales, e.g., Dhont & Van Hiel, 2009) when they do not succeed in avoiding intergroup contact, as it happens in constrained contexts (e.g. prisons, Hodson, 2008). Contrary to the original idea that contact will fail 'whenever the inner strain within the person is too tense, too insistent, to permit him to profit from the structure of the outer situation' (Allport, 1954, pp. 280-281), people who are not ready for intergroup contact could benefit from it because contact fosters trust and reduces the threat they perceive to stem from the outgroup (Hodson, 2008; Hodson, Harry, & Mitchell, 2009).

However, the literature on this topic is not entirely consistent (Hodson & Dhont, 2015) and the moderating role of intergroup ideology variables, such as RWA and SDO, on the association between intergroup contact and ethnic prejudice remains unclear (Al Ramiah & Hewstone, 2013): The person-contact interaction effect was not significant for all outgroups, even had opposite direction when targeting extremely disliked outgroups (e.g., AIDS patients, see Hodson et al., 2013; Hodson et al., 2013) or analysing secondary transfer effects of intergroup contact (Schmid, Hewstone, Küpper, Zick, & Wagner, 2012). Moreover, using RWA and SDO as indicators for stable personality differences entails some problems. First, RWA and SDO are ideological variables liable to vary as a function of contextual changes, mainly of societal threat, i.e., from a kind of threat plausibly stemming from exposure to outgroups such as immigrants (Duckitt, 2001; Sibley, Wilson, & Duckitt, 2007). Second, RWA and SDO are conceptually very proximal to prejudice (Hodson, Macinnis, & Busseri, 2017): Using them as predictors of prejudice can violate the precondition of semantic autonomy between the *explanans* and the *explanandum* that genuine predictive models should guarantee (von Wright, 1971).

Based on these limitations and considering that both readiness for outgroup contact and prejudice are value-laden topics (Sagiv & Schwartz, 1995), in this study we focused on the more comprehensive concept of value orientation. Basic personal values are desirable and trans-situational goals, vary in importance, that serve as guiding principles in people's life and as generalized standards for judging actions and situations (Schwartz, 2000a, Schwartz, 1992). They find expression in all domains of life and, unlike attitudinal orientations that usually refer to specific actions, objects or situations and operate in a hierarchy that flows from values to attitudes to behaviours (Rokeach, 1973), values are basic and early interiorized conceptions about what is right and what is wrong (Ball-Rokeach & Loges, 1994). Thus, values are more stable, abstract and superordinate constructs than RWA and SDO and they are likely to

be more distal predictors of prejudice. Moreover, values are central in people's cognitive networks of attitudes and beliefs and they can be considered the motivational underpinnings of RWA and SDO, with the goals of RWA and SDO partly reflecting conservative values (i.e., security and social control: see Cohrs, Moschner, Maes, & Kielmann, 2005).

The literature on personal values suggests that conservative values, emphasizing order, self-restriction, preservation of the past and resistance to change (Schwartz, 1992), are the ones most strongly involved in shaping ethnic prejudice. In general, people who place great emphasis on values such as tradition, conformity and security tend to express negative attitudes toward immigrants and multiculturalism (e.g., Leong, 2008; Ponizovskiy, 2016) and the desire to reduce immigration (e.g., Beaton, Tougas, Clayton, & Perrino, 2003). Conservative values are indeed 'self-protection values', whose pursuit serves to cope with anxiety due to uncertainty in the social and physical world by maintaining the current order and the social control (Schwartz, 2012). The arrival of immigrants may threaten the motivational goals or preferences anchored to conservative values, in that it can question common practices and bring along different traditions and norms, undermining the perception of stability and security (Davidov & Meuleman, 2012; Davidov, Meuleman, Schwartz, & Schmidt, 2014; Feather & McKee, 2008; Sagiv & Schwartz, 1995). In other words, threat perception fuels the prejudice of conservatives.

The more the individual experiences (i.e., perceives, puts attention on and interprets) environmental conditions as threatening for his/her personal values, the more these values are likely to become salient and influential on his/her attitudes and behaviours (Verplanken & Holland, 2002). This could explain why high-conservatives are generally less ready for contact with immigrants than low-conservatives are (Sagiv & Schwartz, 1995). Of central importance here is the fact that a positive contact with outgroup members can reduce the perceived threat related to feelings of insecurity and uncertainty and it can ameliorate outgroup attitudes (e.g., Hodson, 2008; Hodson et al., 2009; Pettigrew et al., 2007). The important question arising is *whether and under what conditions* a positive intergroup contact can reduce ethnic prejudice among high conservative vs low conservative people.

In sum, although Allport's (1954) classic formulation of prejudice and modern theories of racism (e.g., Gaertner & Dovidio, 1986) recognize that personal values may lead to the rejection of outgroups, the impact of values on prejudice has been examined in limited ways (e.g., in terms of direct effects) and for attitudes toward a strict variety of outgroups (e.g., black people, Biernat & Vescio, 2004). A discussion of whether personal values may moderate the impact of the contact with outgroups is missing in the extant literature. Moreover, personal value orientations are shaped, expressed and anchored to structural and cultural characteristics that can make them more or less salient in case of intergroup contact.

Contextual differences in the contact-prejudice association

Many studies documented that the general attitude toward newcomers is affected by some contextual characteristics, mainly crime rates, economic conditions and size of minority groups (e.g., Coenders & Scheepers, 1998, 2008; Quillian, 1996). Rising unemployment and large immigration flows, especially when they are changing rapidly, foster level of perceived threat in the host population, leading to a negative evolution of attitude toward immigrants (Meuleman, Davidov, & Billiet, 2009). These rapid social changes take place in countries characterized by open vs closed cultural value orientations.

According to Schwartz (1999), cultural value orientations 'represent the implicitly and explicitly shared abstract ideas about what is good, right and desirable in a society' (p. 25). Despite of the relations between individual-level and cultural-level values, these constructs are distinct (e.g., Davidov et al., 2014; Schwartz, 2011). Individual values are indeed an aspect of personality and reflect the psychological dynamics of conflict and compatibility that individuals experience to pursue different goals in everyday life. Cultural values are instead basic requirements of societal functioning and reflect the different solutions that societies develop to attain three key goals: (a) defining the relations or the boundaries between the person and the groups; (b) ensuring coordination among people to preserve social fabric; and (c) regulating the use of human and natural resources.

Schwartz (1994) proposed several cultural value dimensions, which are appropriate to identifying societal differences in preferred ways of confronting the three issues. Among these dimensions, cultural embeddedness is the most relevant cultural value orientation in relation to ethnic prejudice as being conducive to prioritization of the ingroup over the outgroup and to opposing attitudes towards members of outgroups, such as immigrants (Schroeder & Graziano, 2015). Embeddedness orientation is indeed one possible response to the issue of the nature of relations and boundaries between the person and the group (the alternative response is autonomy). It calls upon people to find meaning in life through identification with their ingroup, participating in its shared way of life and striving toward its shared goals, and to respect dominant social norms in order to preserve the status-quo and the in-group solidarity. As such, embeddedness partially overlaps with Hofstede's (2001) concept of collectivism, but while collectivism focuses on the way in which individuals and groups are related, embeddedness refers to the norms regulating how they should be related (Davidov et al., 2014). In general, European countries are low in embeddedness as compared to Asian, African and the Middle Eastern countries, but with a substantial variation among them: Most of East European countries (i.e., Bosnia, Czech Republic, Estonia, Georgia, Hungary, Latvia, Poland, Romania, Slovakia and Slovenia) show higher levels of embeddedness than Western Europe and the Americas (Schwartz, 2006a).

Cultural embeddedness is to some extent the cultural counterpart of individual conservative values. Just as individual conservative values—cultural embeddedness prioritises the maintenance of the status quo and the defence of the in-group and of the traditional order (Schwartz, 1994). The findings about cultural embeddedness largely converge with those on individual conservative values. For example, analysing data from 24 countries that were part of the fourth wave of the European Social Survey (ESS 2008–2009), Schiefer (2013) found that prejudice towards immigrants was globally stronger in the embedded (e.g., Israel, Lithuania, Latvia and Greece) than in the autonomous (e.g., Finland, Spain, Switzerland and France) cultures. More importantly for our pur-

pose, in their multilevel analysis of data from the fourth round of the ESS, Davidov et al. (2014) showed that in less embedded cultures conservative values were more strongly associated with ethnic prejudice than they were in countries with more embedded cultures. This is because in embedded cultures people are viewed as entities embedded in the community and their roles in, and obligations to, communities are more important than their individual characteristics and personal experiences. In contrast, in autonomous cultures, people are encouraged to find meaning in life through their own efforts and experiences (Davidov et al., 2014). For this reason, it is likely that embedded cultures reduce the strength of the relations between personal experiences, such as contact experiences with outgroup members, and attitudes and behaviours.

Although conservative values and cultural embeddedness are both related to prejudice to some extent, and cultural embeddedness moderates the relation between individual values and prejudice, no studies have addressed their moderating roles in relation to the contact hypothesis. In other words, we do not know whether individual and cultural values increase or decrease the effectiveness of contact in reducing prejudice.

Goals and hypotheses

In this study, we focused on the association between contact and prejudice towards immigrants in 19 European countries from the seventh round of the ESS (2014), with the innovative aim to test whether and the extent to which individual conservative values and cultural embeddedness intervene to moderate this relation. In doing so we accounted for several control variables previously shown to influence prejudice at individual level (i.e., gender, age, years of education and degree of urbanization of the residence area) (e.g., Cummings & Lambert, 1997; Dixon, 2006; Green, Sarrasin, Baur, & Fasel, 2016; Wagner, Christ, Pettigrew, Stellmacher, & Wolf, 2006) or cultural level (i.e., immigration rate, crime rate, unemployment rate and gross domestic product) (e.g., Ceobanu & Escandell, 2010; Coenders, Lubbers, & Scheepers, 2008; Green et al., 2016).

Consistent with the literature (cf., Davidov et al., 2014; Leong, 2008; Pettigrew et al., 2007; Tausch, Tam, Hewstone, Kenworthy, & Cairns, 2007), we expected to observe a negative association between a frequent and pleasant contact with immigrants and prejudice toward them (H1), a positive association between conservative values and prejudice (H2) and between cultural embeddedness and prejudice (H3). Moreover, we hypothesized that the association between contact and prejudice is moderated by both individual conservative values and cultural embeddedness. At the individual level, positive contacts with outgroup members could reduce prejudice especially among high-conservative people (H4). Immigration indeed may threaten the attainment of conservative values because the arrival of immigrants introduces relevant changes to the existing status quo and questions or violates common customs and conventions. However, a positive contact with outgroup members, by reducing uncertainty perceptions and building trust, could question high-conservatives' values till to support countervalue attitudes towards immigrants (i.e., lower levels of prejudice). At the cultural level, the expected negative relationship between positive contact and prejudice should be weaker in high embedded cultures (H5). In high embedded cultures people are viewed as entities embedded in the collective and meaning in life and desirable lifestyle are expected to come largely through identification with the community rather than through individual experiences.

Method

Dataset

We performed a multilevel analysis of the 2014 European Social Survey (ESS7: see www.europeansocialsurvey.org).¹ The dataset included 40,185 participants, integrating large, representative samples of the people over 13 years old living in Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Israel, Lithuania, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland and United Kingdom. Due to our focus on prejudice toward immigrants, like previously done by Schlueter and Wagner (2008), we dropped all respondents who were neither born in the country nor national citizens ($n = 179$). We also dropped respondents from Israel $n = 2553$ and Lithuania $n = 2244$ because of the unavailability of the countries' embeddedness measure see below. Thus, our final sample consisted of 33,597 participants nested in 19 countries.

Measures

Intergroup contact

In the ESS dataset, two measures of intergroup contact were available. The first ('How often do you have any contact with people who are of a different race or ethnic group from most [country] people when you are out and about? This could be on public transport, in the street, in shops or in the neighbourhood', with response categories ranging from 1 = never to 7 = every day) operationalized the *frequency* of intergroup contact. The second ('Thinking about this contact, in general how bad or good is it?', with response categories ranging from 0 = extremely bad to 10 = extremely good) operationalized the *quality* of intergroup contact. Even though, according the literature, answers to these two questions can be independent (Hodson et al., 2009; consistent with this, in our database their association was weak, $r = .15$, $p < .001$), in order to fully exploit their informative power, based on Brown et

¹ Data, codebook, and methodological details are available at www.europeansocialsurvey.org/data/download.html?r=7; the list of publications based on the European Social Survey data is available at www.europeansocialsurvey.org/bibliography/complete.html.

al. (2001); see also Green et al., 2016; Voci & Hewstone, 2003), we used a single index of frequency and positivity of intergroup contact, calculated as their product, after recoding the quality score so that negative numbers indicated negative contact and positive numbers indicated positive contact.²

Conservative values

Participants' individual conservative values were measured using the Conservation scale from the short version of the Portrait Values Questionnaire (PVQ) (Schwartz, 2003). This scale is composed of 6 verbal portraits of a person and his/her objectives or aspirations, which indirectly reflect the importance given to values such as tradition, conformity and security. An item example is: 'It is important to him/her to live in secure surroundings. He/She avoids anything that might endanger his/her safety'. Respondents' conservative values were inferred from their self-reported similarity to people who were described in terms of these values (from 1 = Not like me at all to 6 = Very much like me). Based on $\alpha = .71$, we computed participants' conservative values by averaging the 6 items: the higher the score, the greater the importance given to conservatism.

Cultural embeddedness

We utilized Schwartz's national scores of cultural embeddedness (2006b). These scores were the average ratings in each country of the importance of 15 value items (i.e., social order, tradition, forgiving, obedience, politeness, being moderate, honouring elders, national security, cleanliness, devoutness, wisdom, self-discipline, protection of one's public image, family security and reciprocation of favours), based on responses of urban school teachers and university students to the Schwartz Value Survey.³ In aggregating the individual perceptions at the country level, we cluster-mean centered self-included models enabling the model to decompose the collective effect into its within- and between-group components. When investigating the potential roles of aggregated variables, researchers should carefully explore which type of model—self-included or self-excluded—is suitable for a given situation. However, this recommendation applies when group sizes are relatively small (Suzuki, Yamamoto, Takao, Kawachi, & Subramanian, 2012), which is definitely not our case.

Prejudice towards immigrants

We measured prejudice toward immigrants using a 7-items battery with 10 categories response options on the negativity of immigration ($\alpha = .86$): (a) Would you say it is generally bad or good for [country]'s economy that people come to live here from other countries? (extreme anchors: Bad for the economy and Good for the economy); (b) Would you say that [country]'s cultural life is generally undermined or enriched by people coming to live here from other countries? (extreme anchors: Cultural life undermined and Cultural life enriched); (c) Is [country] made a worse or a better place to live by people coming to live here from other countries? (extreme anchors: Worse place to live and Better place to live); (d) 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? (extreme anchors: Take jobs away and Create new jobs); (e) 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? (extreme anchors: Generally take out more and Generally put in more); (f) Are [country]'s crime problems made worse or better by people coming to live here from other countries? (extreme anchors: Crime problems made worse and Crime problems made better); and (g) Do you think the religious beliefs and practices in [country] are generally undermined or enriched by people coming to live here from other countries? (extreme anchors: Religious beliefs and practices undermined and Religious beliefs and practices enriched).

Given the seemingly heterogeneity of the items included in this battery, we also checked for its unidimensionality via a confirmatory factor analysis. The one-dimension solution fitted the data well ($\chi^2(14) = 1352.84$, $p < .001$, $CFI = .956$, $TLI = .934$, $RMSEA = .053$). We computed individual scores as the mean of the items with high scores expressing high prejudice (e.g., Aberson, 2015).

Control variables

To seize the net effect of our focal factors, we controlled for socio-structural variables previously shown to influence the level of prejudice at the individual level (e.g., Cummings & Lambert, 1997; Dixon, 2006; Green et al., 2016; Wagner et al., 2006): participants' gender (0 = female, 1 = male), age, education and the degree of urbanization of the residence area (0 = low urbanization, 1 = high urbanization). At the macro-level, we controlled for the quota of immigrants living in the participants' country, the unemployment rate, the crime rate and the gross domestic product (e.g., Ceobanu & Escandell, 2010; Coenders et al., 2008; Green et al., 2016). We relied on Eurostat data referring to 2014. Table 1 presents the descriptive statistics and correlations for all the variables we used and Table 2 reports country averages for the variables used in the study.

² Parallel analyses, performed using frequency of contact only, led results analogous to those we presented, available upon request.

³ Teachers' and university students' values are considered a good proxy of society's values as school is expected to convey and disseminate norms and values among young generations and prepares future leaders (e.g., Davidov et al., 2014). The items measuring cultural embeddedness were validated empirically as indicators of cultural embeddedness by means of multidimensional scaling with countries as the unit of analysis (Schwartz, 2006a).

Table 1
Between Individual and Country Level Variables: Descriptive Statistics.

	1	2	3	4	5	6	Mean	SD	Min	Max
<i>Individual level</i>										
1 Gender (1 = male)	–						0.48	0.50	0	1
2 Age	–.03(<.001)	–					49.63	18.75	14	104
3 Years of education	.01(.270)	–.23(<.001)	–				12.90	3.98	0	50
4 Urbanization	–.02(.004)	–.03(<.001)	.14(<.001)	–			0.63	0.48	0	1
5 Conservative values	–.06(<.001)	.21(<.001)	–.16(<.001)	–.07(<.001)	–		4.34	0.82	1	6
6 Contact	.00(.96)	–.16(<.001)	.16(<.001)	.07(<.001)	–.11(<.001)	–	6.37	9.30	–30	30
7 Prejudice towards immigrants	–.02(<.001)	.10(<.001)	–.26(<.001)	–.07(<.001)	.20(<.001)	–.36(<.001)	5.26	1.69	0	10
<i>Macro level</i>										
1 Cultural Embeddedness	–						3.38	0.24	3.09	3.86
2 Immigration Rate	–.33(.17)	–					8.05	5.41	0.27	23.79
3 Crime Rate	–.42(.07)	.09(.71)	–				284.28	259.61	33.50	906.71
4 Unemployment Rate	.07(.77)	–.16(.49)	–.16(.50)	–			8.62	4.56	3.50	24.40
5 Gross domestic product	–.60(.006)	.59(.006)	.26(.26)	–.42(.06)	–		33.33	17.34	10.60	73.50

Note. *p* values in parentheses.

Table 2

Country averages (standard deviation in parentheses when applicable) for the main variables used in the study.

Country	<i>n</i>	Conservative values	Contact	Prejudice	Cultural embeddedness
Austria	1681	4.52(0.72)	4.94(8.93)	5.87(1.85)	3.11
Belgium	1641	4.35(0.68)	7.58(9.07)	5.53(1.56)	3.25
Switzerland	1276	4.32(0.79)	7.55(8.91)	4.88(1.39)	3.19
Czech Republic	2138	4.49(0.82)	1.84(7.99)	6.31(1.54)	3.59
Germany	2916	4.20(0.81)	7.06(9.69)	4.81(1.61)	3.09
Denmark	1442	4.16(0.81)	8.86(10.10)	4.98(1.61)	3.19
Estonia	1793	4.27(0.76)	5.17(8.43)	5.04(1.53)	3.81
Spain	1820	4.64(0.77)	5.96(8.34)	5.36(1.65)	3.31
Finland	2039	4.20(0.83)	6.56(8.31)	4.72(1.49)	3.37
France	1823	4.07(0.87)	7.83(9.11)	5.35(1.64)	3.20
United Kingdom	2141	4.32(0.82)	8.83(10.25)	5.51(1.88)	3.34
Hungary	1698	4.59(0.72)	0.64(7.21)	5.99(1.67)	3.60
Ireland	2197	4.47(0.81)	4.47(9.48)	5.38(1.80)	3.41
Netherlands	1861	4.10(0.77)	9.02(8.17)	5.20(1.33)	3.19
Norway	1343	4.12(0.77)	5.72(10.13)	4.89(1.43)	3.45
Poland	1614	4.78(0.70)	2.67(5.97)	5.01(1.57)	3.86
Portugal	1237	4.24(0.81)	5.14(8.64)	5.41(1.77)	3.43
Sweden	1726	3.97(0.83)	9.95(10.57)	4.13(1.58)	3.12
Slovenia	1211	4.83(0.63)	7.44(9.88)	5.48(1.58)	3.71

Data analyses

We ran a two-level hierarchical regression model using the Hierarchical Linear Modeling software (Raudenbush & Bryk, 2002). After running a preliminary unconditional model (Model), we examined the association of contact with immigrants, conservative values and their interaction at the individual level (centred at the group level)⁴ with the dependent variable by partialling out the effects of our control variables (Model 1). We used a listwise deletion method to handle missing responses on the individual variables.

Levels of prejudice manifestations between individuals were modelled at level 1:

$$y_{ij} = \beta_{0j} + \beta_{1j}(\text{gender}) + \beta_{2j}(\text{age}) + \beta_{3j}(\text{education}) + \beta_{4j}(\text{urbanization}) + \beta_{5j}(\text{conservative values}) + \beta_{6j}(\text{immigration contact}) + \beta_{7j}(\text{conservative values} * \text{immigration contact}) + r_{ij}$$

In this equation β_0 's represent the impact of the individual level variables we used. The random effect is represented by r_{0ij} . In this model we verified the variability of the effect exerted by the interaction between conservative values and immigration contact (β_{7j}).

In Model 2 we entered cultural embeddedness, immigration, unemployment, crime rates and gross domestic product in order to control for the macro-level variables. At level 2 we controlled for the effects of the macro-level variables (expressed at the second level as the effects exerted by those variables on the variability of the intercepts: effects on β_{0j}):

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{cultural embeddedness}) + \gamma_{02}(\text{immigration rate}) + \gamma_{03}(\text{crime rate}) + \gamma_{04}(\text{unemployment rate}) + \gamma_{05}(\text{gross domestic product}) + u_{0j}$$

Moreover, we verified the cross level interaction between cultural embeddedness and the individual effect of contact.

$$\beta_{6j} = \gamma_{60} + \gamma_{61}(\text{cultural embeddedness}) + u_{4j}$$

In these equations, the u 's represent the random coefficients.

Finally, we used the component variance at each level and the variance explained after introducing the predictors as indicators of effect sizes. Although previous research has discussed an effect size estimator for partially nested cluster randomized designs, the existing estimator is not efficient when used with primary data, as it can be biased when the homogeneity of variance assumption is violated, and has not yet been empirically evaluated for its finite sample properties (Lai & Kwok, 2016).

Results

A preliminary unconditional model showed a significant variation of the dependent variable at the country level (Table 3, Unconditional Model) indicating that part of the variance of prejudice towards immigrant was attributable to country level characteris-

⁴ Group mean centring removed all between-country variation in conservative values. At the conceptual level centring at the group mean yields a pure estimate of the moderating influence that a level-2 predictor exerts on the level-1 association between two variables and cannot be distorted by the presence of an interaction that involve the cluster mean of the independent variable (Enders & Tofghi, 2007). That is why Hofmann and Gavin (1998) and Raudenbush (1989) recommended group mean centring when cross-level interactions are of substantive interest, as in our case.

Table 3
Multilevel Correlates of Prejudice towards Immigrants.

	Unconditional Model		Model 1		Model 2	
	Coef. (SE)	t(p)	Coef. (SE)	t(p)	Coef. (SE)	t(p)
Intercept	5.26(.11)	47.13(<.001)	6.48(.15)	42.83(<.001)	6.48(.16)	41.75(<.001)
Individual level						
Gender (1 = male)			-.04(.04)	-1.12(.26)	-.04(.04)	-1.17(.26)
Age			-.00(.00)	-1.35(.18)	-.00(.00)	-1.35(.18)
Years of education			-.08(.00)	-17.62(<.001)	-.08(.00)	-17.59(<.001)
Urbanisation			-.08(.04)	-2.31(.02)	-.08(.04)	-2.31(.02)
Conservative values			.23(.02)	10.42(<.001)	.23(.02)	10.42(<.001)
Immigration contact			-.05(.00)	-17.63(<.001)	-.05(.00)	-18.52(<.001)
Cons.Values*Contact			.05(.01)	4.19(<.001)	.04(.01)	4.09(<.001)
Macro Level (for β_{0j})						
Cultural embeddedness					.50(.44)	1.14(.27)
Immigration rate					.00(.01)	0.28(.79)
Crime rate					.00(.00)	1.39(.25)
Unemployment Rate					-.01(.01)	-0.62(.55)
Gross domestic product					-.00(.01)	-0.54(.59)
Macro Level (for β_{6j})						
Cultural embeddedness					.02(.01)	1.19(.25)
Var. Comp. (for β_{0j})						
Within country	2.613		2.116		2.116	
Between country	0.248		0.242		0.257	
χ^2 (p)	3184.85(<.001)		3447.36(<.001)		2977.82(<.001)	
% Between country	8.6 %					
Explained variance						
Individual			19.0 %			
Country β_{0j}					-	
Var. Comp. (for β_{6j})						
Between Country			.000		.000	
χ^2			198.23***		184.80***	

tics. A model in which we fixed to zero the slopes of the individual-level independent variables was subsequently run (Table 3, Model 1). Among the control variables, we found that the higher the education and the degree of urbanization of the place where respondents live, the lower the prejudice towards immigrants. In line with H1, we found that contact with immigrants was negatively related to prejudice towards immigrants, while, consistent with H2, individual conservative values correlated positively with it. Although the interaction term conservative values*contact was significant, the plot of this interaction did not reveal any substantial interactive effect (Fig. 1). Consistent with this, a simple slope analysis showed that the association between contact and prejudice towards immigrants were equal among participants low, $\beta = .050$, $SE = .01$, $p < .001$, and high, $\beta = .05$, $SE = .01$, $p < .001$, in conservatism, $t(67,190) = .07$, $p = .94$. In other words, contrary to H4, it was not possible to observe any meaningful variation in the association between contact and prejudice for different levels of individual conservative values.

In the last step, we replicated Model 1, by adding the variables at the macro-level (Table 3, Model 2). We also tested the cross-level interaction between contact with immigrants and cultural embeddedness. Contrary to H3, cultural embeddedness showed a non-significant association with prejudice toward immigrants. Among the control variables considered – immigration rate, crime rate, unemployment rate and gross domestic product – none revealed significant associations with prejudice towards immigrants. Notably, the associations between individual variables and prejudice did not change when controlling for the macro-level variables. Finally, although the relationship between contact with immigrants and prejudice varied significantly between countries, contrary to H5, cultural embeddedness did not explain such variation. In sum, contact with immigrants and conservative values have direct links with prejudice, independently from each other and from the characteristics of the countries where people live.⁵

Discussion

In the last decades, European countries have been facing increasing immigration inflows accompanied by high prevalence of negative attitudes and sentiments toward immigrants among majority members of the host societies. Many psychological studies dealt with the predictors of prejudice against members of different ethnic groups, sometimes focusing on individual differences (e.g., personal values, ideological orientations, religiosity, etc.; see Hodson & Dhont, 2015 for a review) or times giving relevance to situational (e.g., contacts with immigrants; Allport, 1954) or contextual factors (e.g., cultural values; Leong & Ward, 2006). These stud-

⁵ Additional analyses showed that the average country-level political orientation—computed, as previously done by Davidov et al. (2014), using the available left-right scale—neither reached statistical significance ($p = .10$) nor changed the results of our analyses. We also ran other analyses by considering the contextual variables only, and found again that none of them had significant associations with prejudice towards immigrants.

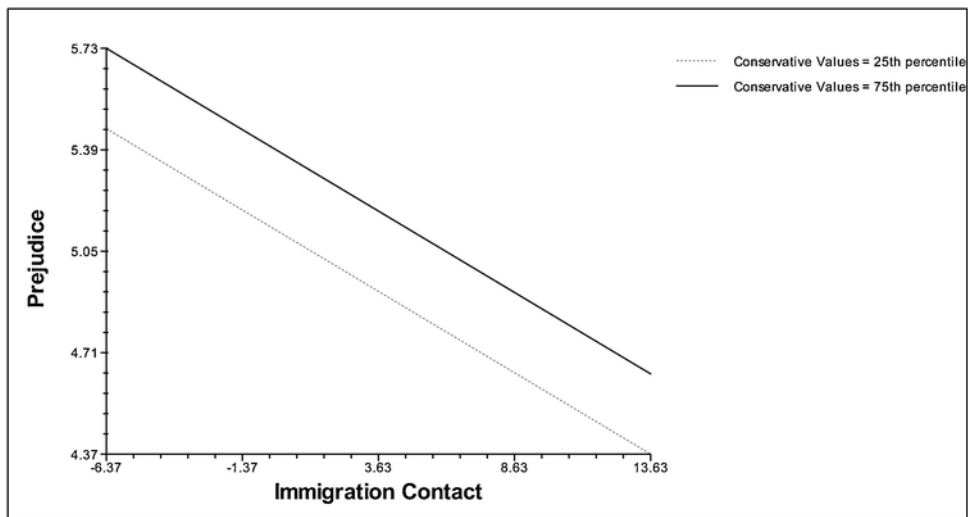


Fig. 1. XXX.

ies have seldom integrated multiple and multilevel factors to analyse their interactions and to account for the complexity of the contact-prejudice link (Davidov et al., 2014; Hodson & Dhont, 2015; Leong, 2008).

By adopting a cross-country multilevel perspective, we tried to contribute to this aim. We focused on sources of individual, cultural and ecological variations in the contact-prejudice link. As done in Davidov et al.'s study (2014), we analysed the direct relation between conservative values, cultural embeddedness and ethnic prejudice across Europe. Values are widely recognized as the organizing and motivational principles or determinants of evaluations and behaviours (Hitlin & Piliavin, 2004; Roccas & Sagiv, 2010), more ingrained, more stable, and more general than attitudes (Parks & Guay, 2009). Being socially endorsed beliefs related to what we ought to do, values seem to be particularly important for understanding evaluations for socially relevant and controversial issues as it is immigration (Boer & Fischer, 2013). However, there is a substantial difference between our study and that by Davidov et al. (2014): While Davidov et al. were interested in identifying possible contextual moderators of individual values-prejudice link, we focused on individual and cultural values as possible moderators of the contact-prejudice link. Specifically, we tested the conditionality of the relation between contact with immigrants and prejudice toward them, as a function of individual conservative values and cultural embeddedness, by controlling for other significant contextual characteristics (i.e., quota of immigrants living in participants' country, unemployment rate and crime rate) as well as other potentially influential individual's socio-demographic characteristics (i.e., gender, age, education, family income and degree of urbanisation of the residence area).

In line with the well-known Allport's contact hypothesis (1954), and consistent with H1, we found that frequent and positive contacts with outgroup members tend to show negative associations with prejudice. Moreover, participants who gave priority to conservative values were more likely to perceive immigrants as threat to their own personal values, such as safety and stability for self and society, and to express prejudiced attitudes (H2). Indeed, people giving importance to conservative values aim at maintaining their cultural traditions and preserving personal and national security, order and structure. Because the arrival of newcomers may threaten the achievement of these aims, people holding conservative basic values have usually negative attitudes toward immigrants and immigration (Davidov & Meuleman, 2012; Davidov et al., 2014) and are reluctant to engage in intergroup contacts (Sagiv & Schwartz, 1995).

Our third hypothesis, however, did not receive empirical support. Controlling for immigration rate, crime rate, unemployment rate and gross domestic product at the macro-level, cultural embeddedness was not associated with prejudice toward immigrants. Similarly, none of the contextual control variables we analysed was directly related to ethnic prejudice. Moreover, the contact*embeddedness cross-level interaction was not statistically significant, while the contact*conservatism Level-1 interaction reached statistical significance only due to the large N of our dataset. However, a substantive moderation did not emerge. Thus, contrary to H4 and to H5, neither conservative values nor the nation's cultural embeddedness moderated the effect of contact on prejudice: The association of frequent and positive contacts with immigrants with a less negative attitude towards them resulted statistically equal both among high- and low-conservative people and both in culturally embedded vs not embedded cultures.

All in all, our results support the power of frequent and positive contact with immigrants for reducing ethnic prejudice. Differently from our expectation, positive contact is not more beneficial for prejudice-prone people –in our case for people who value conservatism and are likely to perceive immigrants as threatening and to become correspondingly hostile to them. Of course, this result does not mean that conservative values cannot intervene at all on the contact-prejudice link, directly or as causes of related attitudes such as RWA and SDO. It is likely that values, which are abstract goals underlying attitudes and ideologies (Boer & Fischer, 2013), might influence the relation between contact experiences and ethnic prejudice through other intervening variables. Given that this is one of the first studies to look at the moderating role of conservative values in contact-prejudice link and that also the wider litera-

ture on the moderating effects of RWA and SDO is not consistent (e.g., Hodson & Dhont, 2015), further studies are indispensable to better understand the complex path of variables influencing the relation between contact and prejudice.

Three main conclusions can be drawn from this study. First, anti-immigrant prejudice was mainly an individual product, stemming from personal experience with immigrants and from basic personal values, but not from contextual variables assessing the cultural priority of the maintenance of the status quo and the defence of the ingroup. Empirically, this attests the importance of including stable individual difference variables in the analyses of the experiential correlates of ethnic prejudice. In relation to prevention, this is consistent with research showing the efficacy of individual-centred anti-prejudice interventions (e.g., Lemmer & Wagner, 2015), also based on voluntary change in the importance given to a specific value (e.g., Maio, Pakizeh, Cheung, & Rees, 2009), while it questions the real potential of complex and expensive programs aimed at changing the features of the context where people live. However, since the historical context underwent profound changes in European societal conditions during the last years, further analyses would be useful to support such a statement. Longitudinal, rather than cross sectional designs, may be appropriate because some issues, such as contextual influences on prejudice, may take long periods of time to develop, and cannot be correctly assessed at a single point in time.

Second, contact and conservative values do not synergise between them in influencing such attitude, nor they interact with the contextual variables we took into account. This finding testifies how difficult it is to find out limiting conditions for the effect of contact, thereby strengthening its beneficial power.

Third, even if this could sound somewhat paradoxical, our results support the relevance of using a multilevel approach in empirical tests of the contact hypothesis. Indeed, the multilevel analysis results showed substantial variation of ethnic prejudice across countries, but not depending on the contextual variables we included in the model. However, only such approach could have led us to discover the non-significance of these effects. In particular, from our study cultural embeddedness was neither related to prejudice nor able to moderate contact-prejudice link. As done for individual conservative values, we could speculate that cultural embeddedness might affect prejudice by interacting with other variables such as right-wing ideological climate (Van Assche, Roets, De Keersmaecker, & Van Hiel, 2017).

Some limitations of this study need to be mentioned. First, consistent with Schwartz (1994), we measured cultural embeddedness based on student and teacher samples and not on responses from representative samples. Moreover, the estimates available date back to 2006, and thus they might not be good proxies for the present cultural embeddedness of the cultures we have analysed. However, parallel analyses, performed using aggregated individual-level scores of conservative values from the ESS data instead of cultural embeddedness scores, led to substantially equivalent results. Thus, we feel confident about the validity of the contextual variables we have used. Second, even though our use of secondary data allowed us to analyse a large, high-quality multinational database, we had to predict *ad hoc* built dependent variables instead of formally validated scales. Also, the ESS dataset did not include data from the European countries that are, at present, the target of the most intense migration flow, i.e., Greece and Italy and do not allow to consider the impact of the political and social changes Europe experienced with the most recent refugee crisis. An extension of this study to these countries, aimed at predicting ethnic prejudice using standard scales that operationalize the three structural dimensions of such attitude, could reveal a different role played by cultural factors. Third, our cross-sectional approach, although sophisticated, did not allow us to deal with causal links (Binder et al., 2009). A longitudinal replication of this study could help overcoming this limitation.

Beyond its limitations, this study had also some strengths. First, its approach, which combined personality and social psychology: To the best of our knowledge, this is the first study in which individual as well as cultural values were considered as moderators of the relation between outgroup contacts and prejudice. Although researchers are consistent in recognizing the direct effect of values on prejudice toward immigrants (e.g., Davidov et al., 2014; Schiefer, 2013), to date there were no studies analysing the moderating role of values in the explanation of the contact-prejudice link. Our findings revealed the fruitfulness of performing joint analyses of individual, situational and macro-societal variables and, even if we did not find significant cross-level interactive effects, of their interactions for advancing our knowledge about individuals' prejudice. Second, we analysed data from multinational wide, representative samples using a multilevel approach. This allowed us to overcome one of the main limitations of many multinational studies, namely the use of small samples (Lee, Ashton, Griep, & Edmonds, 2018). Moreover, we could test the generalizability of our results among different countries and avoid the specular risks of the atomistic fallacy (e.g., generalizing not properly aggregate data to the context) and of the ecological fallacy (e.g., improperly generalizing contextual data to individuals) (Christ & Wagner, 2013). Even more importantly, our multilevel approach, consistent with what Pettigrew (2008) claimed, allowed us to study the role of contact in context, avoiding the standard detachment from everyday life in divided societies that characterizes this field of study (Dixon, 2006). In conclusion, the presents study pointed out that integrating person-, situation- and context-based factors, including their interactions, could help to capture the complexity of the contact-prejudice link.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.ijintrel.2020.02.004>.

References

- Aberson, C.L., 2015. Positive intergroup contact, negative intergroup contact, and threat as predictors of cognitive and affective dimensions of prejudice. *Group Processes & Intergroup Relations* 18, 743–760. <https://doi.org/10.1177/1368430214556699>.

- Akrami, N., Ekehammar, B., 2006. Right-wing authoritarianism and social dominance orientation. *Journal of Individual Differences* 27, 117–126. <https://doi.org/10.1027/1614-0001.27.3.117>.
- Al Ramiah, A., Hewstone, M., 2013. Intergroup contact as a tool for reducing, resolving, and preventing intergroup conflict: Evidence, limitations, and potential. *The American Psychologist* 68, 527–542. <https://doi.org/10.1037/a0032603>.
- Allport, G.W., 1954. *The nature of prejudice*. Addison-Wesley, New York, NY.
- Altemeyer, B., 1996. *The authoritarian specter*. Harvard University Press, Cambridge, MA.
- Ball-Rokeach, S.J., Loges, W.E., 1994. Choosing equality: The correspondence between attitudes about race and the value of equality. *The Journal of Social Issues* 50, 9–18. <https://doi.org/10.1111/j.1540-4560.1994.tb01195.x>.
- Beaton, A.M., Tougas, F., Clayton, S., Perrino, A., 2003. L'impact de valeurs conservatrices et de préjugés racistes sur l'ouverture à l'immigration. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement* 35, 229–237. <https://doi.org/10.1037/h0087204>.
- Biernat, M., Vescio, T.K., 2004. Values and prejudice. In: Crandall, C.S., Schaller, M. (Eds.), *Social psychology of prejudice: Historical and contemporary issues*. Lewinian Press, Lawrence, KS, pp. 191–216.
- Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., ... Leyens, J.P., 2009. Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries. *Journal of Personality and Social Psychology* 96, 843–856. <https://doi.org/10.1037/a0013470>.
- Boer, D., Fischer, R., 2013. How and when do personal values guide our attitudes and sociality? Explaining cross-cultural variability in attitude-value linkages. *Psychological Bulletin* 139, 1113–1147. <https://doi.org/10.1037/a0031347>.
- Brown, R., Maras, P., Masser, B., Vivian, J., Hewstone, M., 2001. Life on the ocean wave: Testing some intergroup hypotheses in a naturalistic setting. *Group Processes & Intergroup Relations* 4, 81–97. <https://doi.org/10.1177/1368430201004002001>.
- Ceobanu, A.M., Escandell, X., 2010. Comparative analyses of public attitudes toward immigrants and immigration using multinational survey data: A review of theories and research. *Annual Review of Sociology* 36, 309–328. <https://doi.org/10.1146/annurev.soc.012809.102651>.
- Christ, O., Wagner, U., 2013. Methodological issues in the study of intergroup contact: Towards a new wave of research. In: Hodson, G., Hewstone, M. (Eds.), *Advances in intergroup contact*. Psychology Press, New York, NY, pp. 233–261.
- Coenders, M., Scheepers, P., 1998. Support for ethnic discrimination in the Netherlands 1979–1993: Effects of period, cohort, and individual characteristics. *European Sociological Review* 14, 405–422. <https://doi.org/10.1093/oxfordjournals.esr.a018247>.
- Coenders, M., Scheepers, P., 2008. Changes in resistance to the social integration of foreigners in Germany 1980–2000: Individual and contextual determinants. *Journal of Ethnic and Migration Studies* 34, 1–26. <https://doi.org/10.1080/13691830701708809>.
- Coenders, M., Lubbers, M., Scheepers, P., 2008. Support for repatriation policies of migrants: Comparisons across and explanations for European countries. *International Journal of Comparative Sociology* 49, 175–194. <https://doi.org/10.1111/j.1540-4560.2008.00561.x>.
- Cohrs, J.C., Moschner, B., Maes, J., Kielmann, S., 2005. The motivational bases of right-wing authoritarianism and social dominance orientation: Relations to values and attitudes in the aftermath of September 11, 2001. *Personality and Social Psychology Bulletin* 31, 1425–1434. <https://doi.org/10.1177/0146167205275614>.
- Cummings, S., Lambert, T., 1997. Anti-hispanic and anti-asian sentiments among African Americans. *Social Science Quarterly* 78 (2), 338–353.
- Davidov, E., Meuleman, B., 2012. Explaining attitudes towards immigration policies in European countries: The role of human values. *Journal of Ethnic and Migration Studies* 38, 757–775. <https://doi.org/10.1080/1369183X.2012.667985>.
- Davidov, E., Meuleman, B., Schwartz, S.H., Schmidt, P., 2014. Individual values, cultural embeddedness, and anti-immigration sentiments: Explaining differences in the effect of values on attitudes toward immigration across Europe. *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 66, 263–285. <https://doi.org/10.1007/s11577-014-0274-5>.
- Dhont, K., Van Hiel, A., 2009. We must not be enemies: Interracial contact and the reduction of prejudice among authoritarians. *Personality and Individual Differences* 46, 172–177. <https://doi.org/10.1016/j.paid.2008.09.022>.
- Dixon, J.C., 2006. The ties that bind and those that don't: Toward reconciling group threat and contact theories of prejudice. *Social Forces* 84, 2179–2204. <https://doi.org/10.1353/sof.2006.0085>.
- Dixon, J.C., Rosenbaum, M.S., 2004. Nice to know you? Testing contact, cultural, and group threat theories of anti-Black and anti-Hispanic stereotypes. *Social Science Quarterly* 85, 257–280. <https://doi.org/10.1111/j.0038-4941.2004.08502003.x>.
- Duckitt, J., 2001. A dual-process cognitive-motivational theory of ideology and prejudice. In: Zanna, M.P. (Ed.), *Advances in experimental social psychology* Vol. 33. Academic Press, San Diego, CA, pp. 41–113.
- Duckitt, J., 2006. Differential effects of right wing authoritarianism and social dominance orientation on outgroup attitudes and their mediation by threat from and competitiveness to outgroups. *Personality and Social Psychology Bulletin* 32, 684–696. <https://doi.org/10.1177/0146167205284282>.
- Enders, C.K., Tofighi, D., 2007. Centering predictor variables in cross-sectional multilevel models: A new look at an old issue. *Psychological Methods* 12, 121–138. <https://doi.org/10.1037/1082-989X.12.2.121>.
- Ensari, N., Miller, N., 2002. The out-group must not be so bad after all: The effects of disclosure, typicality, and salience on intergroup bias. *Journal of Personality and Social Psychology* 83, 313–329. <https://doi.org/10.1037/0022-3514.83.2.313>.
- Fasoli, F., Paladino, M.P., Sulpizio, S., 2016. Conosco persone omosessuali. Una ricerca esplorativa degli effetti del contatto sull'omofobia e sostegno ai diritti LGBT in Italia. *Psicologia Sociale* 11, 263–286. <https://doi.org/10.1482/84665>.
- Feather, N.T., McKee, I.R., 2008. Values and prejudice: Predictors of attitudes towards Australian Aborigines. *Australian Journal of Psychology* 60, 80–90. <https://doi.org/10.1080/00049530701449513>.
- Gaertner, S.L., Dovidio, J., 1986. The aversive form of racism. In: Dovidio, J., Gaertner, S.L. (Eds.), *Prejudice, discrimination, and racism*. Academic Press, New York, NY, pp. 61–89.
- Green, E.G., Sarasin, O., Baur, R., Fasel, N., 2016. From stigmatized immigrants to radical right voting: A multilevel study on the role of threat and contact. *Political Psychology* 37, 465–480. <https://doi.org/10.1111/pops.12290>.
- Hamberger, J., Hewstone, M., 1997. Inter-ethnic contact as a predictor of blatant and subtle prejudice: Tests of a model in four West European nations. *The British Journal of Social Psychology* 36, 173–190. <https://doi.org/10.1111/j.2044-8309.1997.tb01126.x>.
- Hitlin, S., Piliavin, J.A., 2004. Values: Reviving a dormant concept. *Annual Review of Sociology* 30, 359–393. <https://doi.org/10.1146/annurev.soc.30.012703.110640>.
- Hodson, G., 2008. Interracial prison contact: The pros for (socially dominant) cons. *The British Journal of Social Psychology* 47, 325–351. <https://doi.org/10.1348/014466607X231109>.
- Hodson, G., Dhont, K., 2015. The person-based nature of prejudice: Individual difference predictors of intergroup negativity. *European Review of Social Psychology* 26, 1–2. <https://doi.org/10.1080/10463283.2015.1070018>.
- Hodson, G., Costello, K., MacInnis, C.C., 2013. Is intergroup contact beneficial among intolerant people. In: Hodson, G., Hewstone, M. (Eds.), *Advances in intergroup contact*. Psychology Press, New York, NY, pp. 49–80.
- Hodson, G., Harry, H., Mitchell, A., 2009. Independent benefits of contact and friendship on attitudes toward homosexuals among authoritarians and highly identified heterosexuals. *European Journal of Social Psychology* 39, 509–525. <https://doi.org/10.1002/ejsp.558>.
- Hodson, G., MacInnis, C.C., Busserri, M.A., 2017. Bowing and kicking: Rediscovering the fundamental link between generalized authoritarianism and generalized prejudice. *Personality and Individual Differences* 104, 243–251. <https://doi.org/10.1016/j.paid.2016.08.018>.
- Hodson, G., Hewstone, M. (Eds.), 2013. *Advances in intergroup contact*. Psychology Press, New York, NY.
- Hofmann, D.A., Gavin, M.B., 1998. Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management* 24, 623–641. [https://doi.org/10.1016/S0149-2063\(99\)80077-4](https://doi.org/10.1016/S0149-2063(99)80077-4).
- Hofstede, G., 2001. *Cultures consequences: Comparing values, behaviours, institutions and organizations across nations*, 2nd ed. Sage, Thousand Oaks.
- Keith, J.M., Bennetto, L., Rogge, R.D., 2015. The relationship between contact and attitudes: Reducing prejudice toward individuals with intellectual and developmental disabilities. *Research in Developmental Disabilities* 47, 14–26. <https://doi.org/10.1016/j.ridd.2015.07.032>.
- Lai, M.H., Kwok, O.M., 2016. Estimating standardized effect sizes for two-and three-level partially nested data. *Multivariate Behavioral Research* 51, 740–756. <https://doi.org/10.1080/00273171.2016.1231606>.

- Laurence, J., Schmidt, K., Hewstone, M., 2018. Ethnic diversity, inter-group attitudes and countervailing pathways of positive and negative inter-group contact: An analysis across workplaces and neighbourhoods. *Social Indicators Research* 136, 719–749. <https://doi.org/10.1007/s11205-017-1570-z>.
- Lee, K., Ashton, M.C., Griep, Y., Edmonds, M., 2018. Personality, religion, and politics: An investigation in 33 countries. *European Journal of Personality* 32, 100–115. <https://doi.org/10.1002/per.2142>.
- Lemmer, G., Wagner, U., 2015. Can we really reduce ethnic prejudice outside the lab? A meta-analysis of direct and indirect contact interventions. *European Journal of Social Psychology* 45, 152–168. <https://doi.org/10.1002/ejsp.2079>.
- Leong, C.H., 2008. A multilevel research framework for the analyses of attitudes toward immigrants. *International Journal of Intercultural Relations* 32, 115–129. <https://doi.org/10.1016/j.ijintrel.2007.10.002>.
- Leong, C.H., Ward, C., 2006. Cultural values and attitudes toward immigrants and multiculturalism: The case of the Eurobarometer survey on racism and xenophobia. *International Journal of Intercultural Relations* 30, 799–810. <https://doi.org/10.1016/j.ijintrel.2006.07.001>.
- Maio, G.R., Pakizah, A., Cheung, W.Y., Rees, K.J., 2009. Changing, priming, and acting on values: Effects via motivational relations in a circular model. *Journal of Personality and Social Psychology* 97, 699–715. <https://doi.org/10.1037/a0016420>.
- Meuleman, B., Davidov, E., Billiet, J., 2009. Changing attitudes toward immigration in Europe, 2002–2007: A dynamic group conflict theory approach. *Social Science Research* 38, 352–365. <https://doi.org/10.1016/j.ssresearch.2008.09.006>.
- Parks, L., Guay, R.P., 2009. Personality, values, and motivation. *Personality and Individual Differences* 47, 675–684. <https://doi.org/10.1016/j.paid.2009.06.002>.
- Pettigrew, T.F., 1998. Intergroup contact theory. *Annual Review of Psychology* 49, 65–85. <https://doi.org/10.1146/annurev.psych.49.1.65>.
- Pettigrew, T.F., 2008. Future directions for intergroup contact theory and research. *International Journal of Intercultural Relations* 32, 187–199. <https://doi.org/10.1016/j.ijintrel.2007.12.002>.
- Pettigrew, T.F., Tropp, L.R., 2006. A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology* 90, 751–783. <https://doi.org/10.1037/0022-3514.90.5.751>.
- Pettigrew, T.F., Christ, O., Wagner, U., Stellmacher, J., 2007. Direct and indirect intergroup contact effects on prejudice: A normative interpretation. *International Journal of Intercultural Relations* 31, 411–425. <https://doi.org/10.1016/j.ijintrel.2006.11.003>.
- Ponizovskiy, V.A., 2016. Values and attitudes towards immigrants: Cross-cultural differences across 25 countries. *Psychology Journal of the Higher School of Economics* 13 (2), 256–272.
- 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. <https://doi.org/10.1037/0022-3514.67.4.741>.
- Quillian, L., 1996. Group threat and regional change in attitudes toward African-Americans. *The American Journal of Sociology* 102, 816–860. <https://doi.org/10.1086/230998>.
- Raudenbush, S.W., 1989. The analysis of longitudinal, multilevel data. *International Journal of Educational Research* 13, 721–740. [https://doi.org/10.1016/0883-0355\(89\)90024-4](https://doi.org/10.1016/0883-0355(89)90024-4).
- Raudenbush, S.W., Bryk, A.S., 2002. Hierarchical linear models, second edition Sage, London.
- Read, J., Law, A., 1999. The relationship of causal beliefs and contact with users of mental health services to attitudes to the "mentally ill". *The International Journal of Social Psychiatry* 45, 216–229. <https://doi.org/10.1177/002076409904500309>.
- Roccas, S., Sagiv, L. (Eds.), 2010. Values and behavior. Taking a cross-cultural perspective. Springer, Cham, Switzerland.
- Rokeach, M., 1973. The nature of human values. Free Press, New York, NY.
- Sagiv, L., Schwartz, S.H., 1995. Value priorities and readiness for out-group social contact. *Journal of Personality and Social Psychology* 69, 437–448. <https://doi.org/10.1037/0022-3514.69.3.437>.
- Schiefer, D., 2013. Cultural values and group-related attitudes: A comparison of individuals with and without migration background across 24 countries. *Journal of Cross-Cultural Psychology* 44, 245–262. <https://doi.org/10.1177/0022022112444898>.
- Schlueter, E., Wagner, U., 2008. Regional differences matter: Examining the dual influence of the regional size of the immigrant population on derogation of immigrants in Europe. *International Journal of Comparative Sociology* 49, 153–173. <https://doi.org/10.1177/0020815207088910>.
- Schmid, K., Hewstone, M., Küpper, B., Zick, A., Wagner, U., 2012. Secondary transfer effects of intergroup contact: A cross-national comparison in Europe. *Social Psychology Quarterly* 75, 28–51. <https://doi.org/10.1177/0190272511430235>.
- Schroeder, D.A., Graziano, W.G., 2015. The Oxford handbook of prosocial behavior. Oxford University Press, Oxford.
- Schwartz, S.H., 1992. Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In: Zanna, M.P. (Ed.), *Advances in experimental social psychology* Vol. 25, Academic Press, New York, NY, pp. 1–65.
- Schwartz, S.H., 1994. Are there universal aspects in the structure and contents of human values?. *The Journal of Social Issues* 50, 19–45. <https://doi.org/10.1111/j.1540-4560.1994.tb01196.x>.
- Schwartz, S.H., 1999. A theory of cultural values and some implications for work. *Applied Psychology: An International Review* 48, 23–47. <https://doi.org/10.1111/j.1464-0597.1999.tb00047.x>.
- Schwartz, S.H., 2003. A proposal for measuring value orientations across nations. In Questionnaire development report of the European Social Survey. Retrieved from 259–319 https://www.researchgate.net/publication/312444842_A_proposal_for_measuring_value_orientations_across_nations.
- Schwartz, S.H., 2011. Values: Cultural and individual. In: van de Vijver, F.J.R., Chasiotis, A., Breugelmans, S.M. (Eds.), *Fundamental questions in cross-cultural psychology*. Cambridge University Press, Cambridge, pp. 463–493.
- Schwartz, S.H., 2012. An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture* 2 (1) <https://doi.org/10.9707/2307-0919.1116>.
- Schwartz, S.H., 2012. A theory of cultural value orientations: Explanation and applications. *Comparative Sociology* 5, 137–182. <https://doi.org/10.1163/15691330677867357>.
- Schwartz, S.H., 2006. Basic human values: Theory, measurement, and applications. *Revue Française de Sociologie* 42, 249–288. <https://doi.org/10.3917/rfs.474.0929>.
- Sibley, C.G., Wilson, M.S., 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. <https://doi.org/10.1111/j.1467-9221.2007.00572.x>.
- Suzuki, E., Yamamoto, E., Takao, S., Kawachi, I., Subramanian, S.V., 2012. Clarifying the use of aggregated exposures in multilevel models: Self-included vs. self-excluded measures. *PloS One* 7, e51717 <https://doi.org/10.1371/journal.pone.0051717>.
- Tausch, N., Tam, T., Hewstone, M., Kenworthy, J., Cairns, E., 2007. Individual-level and group-level mediators of contact effects in Northern Ireland: The moderating role of social identification. *The British Journal of Social Psychology* 46, 541–556. <https://doi.org/10.1348/014466606X155150>.
- Van Assche, J., Roets, A., De keersmaecker, J., Van Hiel, A., 2017. The mobilizing effect of right-wing ideological climates: Cross-level interaction effects on different types of outgroup attitudes. *Political Psychology* 38, 757–776. <https://doi.org/10.1111/pops.12359>.
- Van Laar, C., Levin, S., Sinclair, S., Sidanius, J., 2005. The effect of university roommate contact on ethnic attitudes and behavior. *Journal of Experimental Social Psychology* 41, 329–345. <https://doi.org/10.1016/j.jesp.2004.08.002>.
- Verplanken, B., Holland, R.W., 2002. Motivated decision making: Effects of activation and self-centrality of values on choices and behavior. *Journal of Personality and Social Psychology* 82, 434–447. <https://doi.org/10.1037/0022-3514.82.3.434>.
- Voci, A., Hewstone, M., 2003. Intergroup contact and prejudice toward immigrants in Italy: The mediational role of anxiety and the moderational role of group salience. *Group Processes & Intergroup Relations* 6, 37–52. <https://doi.org/10.1177/1368430203006001011>.
- von Wright, G.H., 1971. Explanation and understanding. Routledge and Kegan Paul, London.
- Wagner, U., Christ, O., Pettigrew, T.F., Stellmacher, J., Wolf, C., 2006. Prejudice and minority proportion: Contact instead of threat effects. *Social Psychology Quarterly* 69, 380–390. <https://doi.org/10.1177/019027250606900406>.