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Outgroup Prejudice from an Evolutionary Perspective:
Survey Evidence from Europe

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“The *tabula* of human nature was never *rasa*, and is now being read.” W.D. Hamilton

Abstract

This study investigates the root causes of outgroup prejudice. The literature explains prejudice primarily as a result of the perception of threat or the lack of optimal intergroup contact. The literature also emphasizes that individuals who are prejudiced against one outgroup are more likely to be prejudiced against other outgroups as well. This study does not react to these established theories. Instead, it argues from an evolutionary social psychological perspective that the root cause of outgroup prejudice is an activated sense of distrust and caution. In ancestral environments, higher levels of distrust and caution helped humans better protect themselves and their offspring from outside dangers, especially that posed by other humans. Prejudice is thus a function of this general protective outlook rather than a function of the particular characteristics of outgroups. To test this hypothesis, the paper specifies six multilevel regression models and analyzes the factors that lead to prejudice against six salient minority groups: immigrants, Muslims, Jews, homosexuals, the Roma, and the people of different races. Data come primarily from the latest wave of the European Values Study, covering 43 European countries. In all six cases of outgroup prejudice, findings indicate a strong and consistent support for the proposed theoretical perspective.

Keywords: *outgroup prejudice, evolutionary social psychology, minorities, Europe*

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Why are some individuals prejudiced against outgroups, while others are tolerant? When answering this question, the social psychology literature emphasizes various aspects of intergroup relations. For example, experiments that employ the minimal group paradigm repeatedly underline that humans develop group perceptions very quickly. People tend to assume group identities for trivial reasons and discriminate against outgroup members even in non-zero-sum situations (Tajfel, 1970; Tajfel et al., 1971). In other words, an individual can start perceiving complete strangers as ingroup or outgroup members in a very short period of time and treat outgroup members unjustly without having a meaningful reason to do so.

Social identity theory attributes humans' tendency to identify ingroup and outgroup membership to the individual pursuit of positive distinctness (Tajfel & Turner, 1979). That is, human beings are inclined to maintain a positive self-image (Abrams & Hogg, 1988), and they derive positive self-images primarily from their group membership (Tajfel, 1981; Tajfel & Turner, 1985). Some scholars build on this general perspective of social identity theory by demonstrating how (real or perceived) threats to realistic/material or symbolic/ideal group interests intensify intergroup conflict (Kinder & Sears, 1981; Sherif et al., 1961). Others distance themselves from the processes of identity construction and instead emphasize the human predisposition to essentialize ingroups and outgroups (Gelman, 2003; Hirschfeld, 1996; Tsukamoto, Enright, & Karasawa, 2013). For example, Gil-White (2001) considers the human tendency to link group membership with descent a social-learning adaptation. According to this perspective, shared norms make human interaction and coordination more efficient and less costly. The human brain thus evolved so as to avoid significant fitness costs that derive from cross-cultural differences in norms, but did so at the cost of "naively processing ethnic groups as species" (Gil-White, 2001).

This study, too, focuses on the evolutionary roots of group perceptions, but it emphasizes the human need for security, rather than coordination. It argues that all outgroup prejudice stems from the human tendency to distrust others. In ancestral environments, distrust was key for survival, given that it led humans to be cautious against their most deadly enemies: other humans. Individuals who considered other humans to be potentially dangerous and exploitative were more likely to stay alive and pass on their genes to future generations, gradually rendering them more common in the gene pool.¹ Outgroup prejudice is thus a generalized phenomenon.² It has less to do with the particular characteristics of any outgroup and more to do with an individual's general outlook on people. In less abstract terms, individuals with activated feelings of distrust toward other people in general should be more likely to be prejudiced against their salient outgroups in particular.

To test this hypothesis, this paper specifies six multilevel regression models and analyzes the factors that lead to prejudice against six salient minority groups: immigrants, Muslims, Jews, homosexuals, the Roma, and the people of different races. Data come primarily from the fourth wave of the European Values Study in 2008, which covers 43 European countries.

The Root Causes of Human Behavior

The evolutionary social psychological approach guides the main argument of this study. This particular approach offers insights into the root – rather than immediate – causes of human behavior.³ For example, many traditionally-oriented studies in the social sciences control for gender and consistently find males to be significantly more likely than females to be prejudiced against outgroup members (Altemeyer, 1998; Scheepers, Gijbbers, & Hello, 2002). However, these findings do not necessarily explain the theoretical relevance between these two phenomena. In other words, although such studies do demonstrate that males tend to be more prejudiced than females, the studies fall short of explaining why this is actually the case. The evolutionary perspective, in contrast, is capable of inquiring into the genesis of human behavior and providing a framework that helps clarify some of the involved mysteries, including but not limited to the specific phenomenon of male prejudice. This approach draws its insights from the history of the past millions of years, during which natural selection has designed the human species.

We now know that hunter-gatherer societies existed for approximately one million years, until about only 12,000 years ago (Lee & Daly, 1999). These societies were typically composed of approximately 500 members (Lee & DeVore, 1968). They lived in a brutal environment, where violence was common, and competition over scarce resources was fierce (Lee & DeVore, 1968). Caution and vigilance against strangers were necessary at all times. Males, more often than females, were in a position to sustain the lives of ingroup members not only by hunting for food but also by protecting all ingroup members – that is, primarily, the women and children – against external threats. The primary threats were the males – and not the females – of other groups. In fact, rather than being physical threats or competitors to males, females were “the precious reproductive source over which males competed with each other” (Sidanius & Kurzban, 2003: 169).⁴ During this one-million-year-period – in which human existence was predicated upon protection and survival – notably following a period of six to ten million years that were likely of an even more brutal nature, natural selection designed males whose inclination to outgroup prejudice is higher in comparison to females.⁵ Put differently:

We are part of a mammalian primate heritage that has existed for more than 65 million years The two hundred years in which industrial societies have existed is a short time Our most recent genes derive from that largest segment of human history during which men and women lived in hunting and gathering societies; in other words, Westernized human beings now living in a technological world are still genetically equipped only with an ancient mammalian heritage that evolved largely through adaptations appropriate to much earlier times. (Rossi, 1977: 3)

This framework helps explain why, in comparison to women, men tend to be more “militaristic, ethnocentric, xenophobic, antiegalitarian, punitive, and positively disposed to the predatory exploitation of outgroups” (Sidanius & Kurzban, 2003: 166). Within this framework, it begins to make sense why men direct their prejudice primarily toward the male members of outgroups (Sidanius & Pratto, 1999).

If the influences of the design by natural selection are ignored, the causal connections between humans’ hunter-gatherer evolutionary history and the current human tendency toward prejudice against outgroups are less evident. Revealing and recognizing hunter-gatherer processes as critical to human survival brings to light some of the core mechanisms of outgroup

prejudice. As such, this study underlines that humans think with ancestral minds.⁶ Accordingly, this study focuses on the ultimate – rather than proximate – causes of outgroup prejudice.⁷

The Evolutionary Approach to Outgroup Prejudice

The evolutionary social psychology perspective does not claim to compete with or replace the more established social psychological approaches (Sidanius & Kurzban, 2003). It argues, however, that the explanation of human behavior must be consistent with the evolutionary framework. Put differently, the evolutionary social psychological studies do *not* test Darwin's (1859) theory of evolution or compare its explanatory value to that of other factors; instead, they consider evolution more factual than theoretical (Mayr 2001) and take into consideration the implications of design by natural selection when raising theoretical arguments about social phenomena.

For example, this study takes into consideration the implication that natural selection has favored individuals who tend to distrust other people, especially strangers. For more than a million years, members of hunter-gatherer tribes needed to protect themselves, their loved ones, and their larger ingroups from serious outside threats (Hamilton, 1964; Sober & Wilson, 1998). More importantly, for humans, outside threats have primarily been posed by their own kind (Lee & Daly, 1999). Under such circumstances, being suspicious of other people and remaining alert to potential dangers were crucial assets. Natural selection designed human nature in these environments by, among other things, rewarding those who took caution against other humans over those who did not (Fishbein, 1996). Put differently, human beings today are equipped with the tendency to feel suspicion, distrust and caution, especially in insecure contexts because of the evolutionary benefit this tendency bestowed upon the species. This tendency may be demonstrated to varying degrees among modern humans. From an evolutionary social psychological viewpoint, prejudice should be more common among individuals with activated feelings of suspicion and distrust. Accordingly, those who consider most other humans to be harmless should be more likely to be tolerant.

On Biological or Genetic Determinism

The evolutionary social psychology perspective rejects both biological and genetic determinism. Biological determinism holds that it is solely the genetic make-up of a living organism that determines its behavior. This approach was popular especially during the second half of the nineteenth century (Galton, 1892; Spencer, 1862). Today, however, evolutionary social psychologists, as well as scholars from other fields, find biological determinist arguments highly simplistic and thus reject them (Sidanius & Kurzban, 2003). A more recent approach, genetic determinism, considers social outcomes to be a simultaneous function of both genetic and environmental factors. The evolutionary social psychology perspective rejects this view as well on the grounds that the nature-nurture distinction is a false dichotomy. Evolutionary social psychology argues that environmental factors, such as learning or culture, are not explanations of human behavior in and of themselves (Buss, 1995; Plotkin, 1997) but that they are factors that activate or deactivate certain human inclinations (Buss, 2001; Tooby & Cosmides, 1990, 1992).⁸

Hypotheses

The discussion above outlines why outgroup prejudice is primarily a function of an individual's general outlook on humans. The hypothesis below emerges from that argument:

H1: Individuals who consider most people to be untrustworthy and potentially exploitative should be more likely to be prejudiced against outgroup members.

Table 1. *Intercorrelation table of outgroup prejudice*

	Muslim	Jew	Roma	Gay	Immigrant	Non-white
Muslim	1					
Jew	0.42***	1				
Roma	0.35***	0.34***	1			
Gay	0.27***	0.31***	0.24***	1		
Immigrant	0.49***	0.40***	0.30***	0.25***	1	
Non-white	0.40***	0.42***	0.25***	0.23***	0.46***	1

* $p < .05$, ** $p < .01$, *** $p < .001$

Notes: Each number in the table is the Pearson's correlation value for the prejudice against the two minority groups in the corresponding row and column. See the following section titled *Data and Method* for the measure of prejudice, as well as details on the data in general. Source: European Values Study (2008)

This hypothesis, if supported, explains why prejudice is often a “generalized attitude” (Allport, 1954: 68). If individuals' general outlook on people is the root cause of outgroup prejudice, then it is sensible for that prejudice to be directed at most salient outgroups, rather than only one or two. Table 1 provides the extent to which the prejudices against the six groups under review in this study correlate with each other.

The correlation values in Table 1 confirm that individuals tend to direct their prejudices to multiple outgroups, rather than only one. However, there is also a variation between the strength of these correlations. As MacDonald (1992) demonstrates, individuals tend to vary in their attitudes toward different people – that is, they may be tolerant, empathic, or affectionate toward some but aggressive toward others. Some scholars consider such variation to be a function of personality traits (Adorno et al., 1950) or genes (Kinder & Kam, 2009). However, neither of these explanations is consistent with the evolutionary social psychological perspective, according to which, personality traits are a function of genes, with the variation among personalities at an individual-level being a matter of activation. Therefore, this study turns to the agents of socialization, as such agents are capable of influencing the salience of outgroup identities and, accordingly, activating or deactivating feelings of distrust toward specific groups.⁹ For example, right-wing political ideology upholds values that are traditional, security-conscious, and competition-oriented, and tends to have a cautious approach toward outgroups. In contrast, college education inspires progressive values such as peace and coexistence and leads individuals to appreciate cooperation and diversity. Thus, possessing either right-wing political ideology or having attained a bachelor's degree should shape the ways in which individuals construe their respective salient outgroups and should also, accordingly, relate to individuals' security-oriented judgments. These two socializing agents (ascribing to right-wing ideology or

having earned a bachelor's degree) are hardly unique – let alone exhaustive – in their influence on individuals' outlooks, but many studies confirm the significant influence of these particular agents on intergroup relations.¹⁰ These agents will serve as mediating variables in this study. Two more hypotheses emerge from this socialization aspect of outgroup prejudice:

H2: Individuals with a right-wing political ideology should be more likely to be prejudiced against outgroup members.

H3: Individuals with a bachelor's degree should be less likely to be prejudiced against outgroup members.

Data and Method

To measure individual-level variables, this study uses data from the European Values Study (EVS). The EVS is a cross-national longitudinal survey administered by the Tilburg University in the Netherlands and its international partners. Data for this study come from the fourth and latest wave of the EVS in 2008.¹¹

Question six on the EVS questionnaire serves as the measure of outgroup prejudice, which is the dependent variable of this study. It reads, "On this list are various groups of people. Could you please tell me any that you would not, generally speaking, like to have as neighbours?" The corresponding card six lists fifteen¹² social groups and allows respondents to mention as many groups in the list as they like. The survey then codes each response to each of the fifteen groups as "mentioned" or "not mentioned."¹³ To measure the respondents' general outlook on people, the study utilizes the survey question on interpersonal trust: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" The survey codes the answers to this question in binary. Due to the central importance of this question to the analysis, two other indicators are also used in alternation. One is the survey question that reads as follows: "Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?" The other is also in the same vein: "Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?" The answers to these two questions are coded on a 10-scale, from exploitative/selfish to fair/helpful. Two other variables measure the mediating variables. College education variable is coded in binary, while the political ideology variable is on a 10-scale, from the left wing to the right. Two survey questions measure two threat perceptions. Realistic threats are measured by a question that investigates the respondents' views on whether immigrants take jobs away from natives, while symbolic threats are measured by one that asks whether immigrants undermine the cultural life in the country. Both questions are coded on a 10-scale. Finally, there are three control variables: age, gender, and the attendance to religious services. (See the Appendix for question wording and coding information.)

On the country level are five variables, the data for which come from a variety of sources. The first two variables, GDP per capita (purchasing power parity) and unemployment data, control for the economic context. Data for both variables come from the World Bank. The third country-level variable, minority size, is important in that larger groups can pose greater (real or perceived) threats to outgroups than small groups can. Larger group sizes may also facilitate higher levels of intergroup interaction. The study controls for the sizes of three groups: the Roma, immigrants, and Muslims.¹⁴ The data on these groups come from the Roma and Travellers

Division of the Council of Europe (2012), the United Nations, and the Pew Research Center (2011), respectively. The fourth variable is democracy level, and these data come from the Economist Intelligence Unit. Finally, the Eastern European data, which indicates the post-communist states in Central and Eastern Europe, are hand-coded. (GDP, unemployment and democracy data are from 2008 – so as to coincide with the year of the EVS survey. The Muslim minority population data are from 2010, and the Roma population data are from 2012.)

To test hypotheses two and three, this study employs multilevel regression analysis, which clusters the country-level and individual-level data and returns more accurate estimates (Gelman & Hill, 2006; Rabe-Hesketh & Skrondal, 2012; Raudenbush & Bryk, 2002; Snijders & Bosker, 2012). The analysis covers 43 countries in Europe¹⁵ and focuses on six salient minority groups: immigrants, Muslims, Jews, homosexuals, the Roma, and the people of different races.¹⁶ Since the specified models analyze outgroup prejudice, the members of these minority groups under review are also removed from the corresponding analyses, where data allowed for the possibility of doing so.¹⁷ The respondents who are not citizens of the countries they are interviewed in are also removed from the analysis for the same reason.

Results

Table 1 provides the results of six separate logistic multilevel regression analyses, corresponding to the analysis of the prejudice against six salient minority groups in Europe.¹⁸ The number of respondents range between 36,095 and 39,999.¹⁹ Diagnostics tests for the models return favorable values. There is no sign of high multicollinearity. In fact, most VIF values are below 2.0 in all models. These six models are largely identical. They do not include any variables that take into consideration the peculiarities of these different cases of prejudice. This is in an effort to facilitate comparison across cases. Despite this inflexibility, there is a notable degree of consistency in the significances of the individual-level estimates across models. These results support the notion that prejudice is a “generalized attitude” (Allport, 1954; McFarland, 2010).

In all six models, the estimate of the interpersonal trust variable returns a statistically significant result. All significances are on a .001 level. When these six models are re-run with the two alternative indicators for the outlook on people, the analyses return very similar results – which also indicates a high degree of consistency. In total, eighteen multilevel regression analyses are run – that is, six models with three alternating indicators. In all of these models, the three indicators of interpersonal trust are significant on a .001 confidence level.²⁰ These results offer strong support for H1. Secondly, the two mediating variables, political ideology and college education, are consistently significant across models. The estimate of the political ideology variable is significant on a .001 confidence level in all six models, while that of the college education variable is significant on a .001 level in five models, and on a .01 level in the model of anti-Roma prejudice. These results offer strong support for H2 and H3. Third, the results regarding the religious attendance variable return mixed results, as expected. Individuals who regularly attend religious services are significantly more likely to be prejudiced against Jewish and gay people. The variable of religious attendance is significant on a .05 level with respect to prejudice against Jewish people and on a .001 level with respect to prejudice against gay people. The variable is not significant in the model of anti-Muslim prejudice, but the p value is .0995, which is somewhat noteworthy.

Table 2. *Multilevel models of outgroup prejudice*

	Model 1 Non-whites	Model 2 Gays	Model 3 The Roma	Model 4 Immigrants	Model 5 Jews	Model 6 Muslims
	N = 39,771 43 countries	N = 39,999 43 countries	N = 39,922 43 countries	N = 38,871 42 countries	N = 39,747 43 countries	N = 36,095 40 countries
Intercept	-2.585*** (.750)	-0.976 (.982)	-0.328 (.706)	-2.080** (.779)	-1.620 (.841)	-2.806*** (.750)
Individual level						
Interpers. trust	-0.192*** (.036)	-0.386*** (.030)	-0.199*** (.025)	-0.277*** (.033)	-0.275*** (.037)	-0.395*** (.032)
Poli. ideology	0.037*** (.007)	0.038*** (.006)	0.056*** (.005)	0.024*** (.006)	0.011*** (.007)	0.073*** (.006)
College educ.	-0.261*** (.037)	-0.301*** (.031)	-0.076** (.026)	-0.126*** (.034)	-0.273*** (.038)	-0.227*** (.033)
Rel. attendance	0.199*** (.042)	0.319*** (.036)	-0.021 (.032)	-0.007 (.041)	-0.109* (.043)	-0.065 (.039)
Realistic threats	0.052*** (.007)	0.043*** (.006)	0.052*** (.005)	0.082*** (.006)	0.063*** (.007)	0.068*** (.006)
Symbolic threats	0.088*** (.006)	0.051*** (.005)	0.065*** (.005)	0.092*** (.006)	0.065*** (.006)	0.095*** (.006)
Age	0.004*** (.001)	0.012*** (.001)	0.002*** (.001)	0.003** (.001)	0.001 (.001)	0.004*** (.001)
Male	0.127*** (.030)	0.368*** (.026)	0.052* (.022)	0.073** (.028)	0.120*** (.031)	0.175*** (.027)
Country level						
Minority size			-0.002 (.031)	-0.006 (.017)		-0.005 (.013)
Democracy level	-0.164 (.085)	-0.475*** (.112)	-0.091 (.081)	-0.149 (.086)	-0.204* (.095)	-0.177 (.087)
GDP per capita	0.006 (.009)	-0.005 (.012)	-0.006 (.008)	-0.006 (.011)	-0.001 (.010)	-0.001 (.008)
Unempl. rate	0.015 (.015)	-0.020 (.020)	-0.048*** (.014)	-0.013 (.019)	-0.003 (.017)	-0.008 (.016)
Eastern Europe	0.714* (.286)	1.263*** (.375)	0.139 (.277)	0.633* (.278)	0.662* (.322)	0.355 (.254)
AIC	29,738	38,047	49,336	32,852	28,173	35,143
BIC	29,858	38,167	49,465	32,980	28,294	35,270
LogLik	-14,855	-19,010	-24,653	-16,411	-14,073	-17,556
Deviance	29,710	38,019	49,306	32,822	28,146	35,113

* $p < .05$, ** $p < .01$, *** $p < .001$

Source: European Values Study (2008)

The variable of religious attendance is also not significant in the model of anti-Roma prejudice, but that is as expected, since religious teachings in Europe do not target the Roma people. A somewhat interesting result regarding this variable is that its estimate is highly significant in the model of prejudice against different races ($p < .001$) but insignificant in the model of anti-immigrant prejudice. These two groups are far from being mutually exclusive, but it is possible that the respondents construe these identities in different ways, regardless of the groups' actual overlap.

Other complementary explanations and control variables return significant results in expected directions. Both realistic and symbolic threat perceptions lead to outgroup prejudice. That is, individuals who feel threatened by outgroups for material or cultural reasons are significantly more likely to be prejudiced against outgroups than individuals who do not feel threatened. The estimates of those threatened by either material or cultural reasons are significant on a .001 level in all of the six models. In addition, the individual-level controls indicate that older people and males are more likely to be prejudiced against outgroups than are younger people and/or females. The only exception to this rule is the case of anti-semitism, in the case of which age does not seem to have a significant influence.

Of the five country-level variables, the results vary largely across models. The Eastern Europe variable returns significant results in four of the six models. Individuals in Eastern Europe are more likely to be prejudiced against immigrants, Jews, homosexuals, and individuals of different races, but not against the Roma and Muslims. A higher level of democracy seems to make homophobia less likely, which may be attributed to the higher levels of awareness in contemporary democracies on issues related to equality. Anti-semitism also decreases significantly as the democracy level increases. However, the results do not indicate a similar influence toward any of the remaining four outgroups (namely, immigrants, Muslims, the Roma, and peoples of other races) – due probably to the relatively weaker emphasis in contemporary democracies on the past and current grievances of these communities. A lower unemployment rate leads to tolerance only toward the Roma people, but not immigrants, implying that the link between anti-immigrant prejudice and competition for jobs exists in perception, rather than reality and that anti-immigrant prejudice has primarily non-economic causes. This result is in line with the literature that explains anti-immigrant prejudice primarily with symbolic – rather than realistic – threat perceptions (Chong, 2000; Sears, 1996; Sears & Funk, 1990, 1991). Finally, minority size and GDP per capita do not return any significant results in any of the tested models of outgroup prejudice. The insignificance of all three minority size variables are important in that this result does not offer support for or provide significant evidence against the intergroup contact theory, which posits that prejudice results from a lack of meaningful intergroup contact and that interpersonal contact across groups reduces or mitigates prejudice. One important aspect of the contact hypothesis is that it does not apply to cases in which relatively large groups coexist but do not have sufficient levels of contact with each other (Harell & Stolle, 2010). One example is the French suburbs, where minorities take up residence in low-income neighborhoods.... Nevertheless, in cases where intergroup contact does occur, the question of whether it occurs under optimal conditions still stands (Pettigrew, 1998). Due to the limitations of the data, it is not possible to test whether the groups under review have had sufficient and optimal contact with their larger societies. Therefore, the insignificance of the group size variable alone does not constitute strong evidence against the intergroup contact theory.²¹

Conclusion

This study has proposed an explanation to the question of outgroup prejudice from an evolutionary social psychological perspective. It has raised the argument that individuals with a distrustful, cautious, or suspicious outlook on people in general are more likely to be prejudiced against outgroups. The study has offered survey evidence to support its hypotheses.

The findings of this study relate to the literature on outgroup prejudice in primarily two ways. The first has to do with the nature of the evolutionary approach and its capability to bring a larger context to the findings of traditionally-oriented research. The second primary implication of this study on the larger literature concerns social identity perspectives in the social psychology literature. Social identity perspectives (and especially integrated threat theories) tend to draw a thick line between ingroup and outgroup members. However, the strong association between an individual's general outlook on people and his or her prejudice against outgroups raises an important question: Is it theoretically sensible to look primarily at group-level factors (such as competition or security) when explaining outgroup prejudice? The findings of this study suggest that the answer should be no. One possible interpretation of the results of this study is that individuals form alliances with their ingroup members against outgroup members – though

interpersonal competition also certainly exists within the group – and that caution toward outgroups is a part of everyday life.

The survey analysis in this study had some serious shortcomings. Questions in major surveys are prepared to serve as indicators for established theories – and not the evolutionary perspectives relevant here. Relatedly, and perhaps more importantly, survey analysis as a method is less rigorous than the traditional experimental methods. Still, the consistency of results across the tested models indicates that it is possible to explain outgroup prejudice as occurring as a function of some of the traits humans have acquired in the context of their evolutionary history – rather than as a function of a set of immediate or context-specific factors.

The results of this study raise new questions for the future studies to address. From an evolutionary social psychological perspective, one important question pertains to people's perceptions of other people: What activates people's distrust in others? For example, why do most respondents in the EVS survey report that they consider most people to be untrustworthy, selfish and/or exploitative, as opposed to trustworthy, helpful, and fair?²² Why do others have the opposite view? Another possible area of examination is the contexts that activate or aggrandize distrust against a particular outgroup, as opposed to against people in general. The scapegoat theory of intergroup conflict, which focuses on the conditions that lead majority members (and perhaps also some minorities) to hold a particular minority group responsible for the frustrations of society (Bettelheim & Janowitz, 1949; Poppe, 2001), may offer some insights on that particular question. By inquiring into the processes of scapegoating, future studies may reveal factors that lead to the vilification of a particular minority and whether interpersonal trust plays a role in that process.

Notes

- ¹ Group selection theory also offers an evolutionary explanation to outgroup prejudice, but it emphasizes the design by natural selection on a group level (Sober & Wilson, 1998).
- ² That is not to say that the evolutionary approach offers the only perspective in the literature that is in line with the notion of generalized prejudice. Another major example is the authoritarian personality theory (Adorno et al., 1950), which explains the same phenomenon with the authoritarian state of mind.
- ³ For a review of the evolutionary perspectives on these questions, see Wilson (1998), James and Goetze (2001), and Fasolo (2012).
- ⁴ The literature is not unanimous on the gender roles in early human societies or how universal each particular role was across human societies. For the revisionist perspectives on these issues, see Dahlberg (1975), Endicott (1999), and Biesele and Barclay (2001).
- ⁵ That is for two reasons: (1) the hunter-gatherer societies started to transform only 12,000 years ago and (2) we do not have any evidence of human evolution for the last 40,000 years (Fishbein, 1996).
- ⁶ Taking into consideration the fact that we have been thinking with ancestral minds enhances the way humans approach and explain phenomena. For example, the evolutionary approach illuminates the reason behind the widespread human fear of natural hazards such as snakes, spiders, or heights, as opposed to the relative indifference humans demonstrate to non-natural hazards such as electrical outlets or cars, although the latter pose more significant and immediate dangers for humans today (Navarrete et al., 2012).
- ⁷ For more on proximate/immediate and ultimate causes, along with some examples, see Crawford (1989) and Tooby and Cosmides (1992).
- ⁸ For a classic study that focuses on such an activation/interaction, see Plomin, DeFries and Loehlin (1977), which examines the exposure of different genotypes (children) to varying environments (family and education) and the influence of these contexts on their behavior patterns.
- ⁹ This approach is in line with the social learning theory in that it considers learning a cognitive process that takes place in a social context (Bandura, 1963, 1977).
- ¹⁰ The literature frequently tests for the influence of three other individual-level factors that influence individuals'

attitudes toward outgroups: age, gender, and religiosity (Strabac & Listhaug, 2008; Helbling, 2014). This study includes all five variables in its models.

- 11 Other data alternatives for a cross-country analysis would be the Eurobarometer, European Social Survey, and World Values Survey. However, these survey studies do not have any questions that can be measures of outgroup prejudice, lack some of the important control variables, and/or cover fewer countries.
- 12 The groups included in the list are as follows: (1) "People with a criminal record," (2) "People of a different race," (3) "Left wing extremists," (4) "Heavy drinkers," (5) "Right wing extremists," (6) "People with large families," (7) "Emotionally unstable people," (8) "Muslims," (9) "Immigrants/foreign workers," (10) "People who have AIDS," (11) "Drug addicts," (12) "Homosexuals," (13) "Jews," (14) "Gypsies," and (15) "Christians."
- 13 This question is based on one of Bogardus' (1925) measures of social distance. Data limitations do not allow a multiple-item measure, which would be more ideal.
- 14 The analyses of prejudice against Jewish people do not include the Jewish minority's size even though in most European countries, the proportion of Jewish people in the population is 0.1 per cent or less. The largest proportions of Jewish people are in France and the United Kingdom. The figure is 0.5 per cent in both countries, and constitutes an outlier. It is mathematically possible for the regression analysis to return a significant result for that variation, since, in mathematical terms, 0.5 per cent is five times greater than 0.1 per cent. Theoretically, however, it is difficult to argue that such small differences in the Jewish minority community's size should lead to a significant change in the individual-level likelihood of anti-semitism.
- 15 The 43 countries are Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia, Britain, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, and Ukraine. Due to data limitations, the analysis of anti-immigrant prejudice does not include Macedonia, and thus covers 42 countries. The analysis of anti-Muslim prejudice excludes three Muslim-majority countries in Europe: Albania, Azerbaijan, and Bosnia. The analysis thus covers 40 countries.
- 16 Only six of the aforementioned fifteen groups included in the survey have salient ethnic/minority identities in the context of Europe. The analysis thus covers these six groups.
- 17 Respondents who reported to be Jewish are removed from the analysis of anti-semitism. Similarly, Muslim respondents are removed from the analysis of anti-Muslim prejudice.
- 18 The regression analyses were performed with the lme4 package installed in the statistical software R. The lme4 package fit the multilevel model by maximum likelihood, using Laplace approximation.
- 19 The regression analyses performed a pairwise deletion on 17,727 to 20,083 observations due to missing data – which is higher than usual. However, the difference-of-means tests that compared the survey respondents whose data are missing on certain questions to those whose data are available did not return significant differences in any of the 43 countries in analysis.
- 20 The analysis returns significant estimates when the interpersonal trust variable is included in the model alone.
- 21 Cross-level interactions of the minority size with the two threat perception variables do not return significant results.
- 22 The aggregated results of the EVS survey indicate that 68.9 per cent of the respondents think that most people cannot be trusted. The other two indicators are coded in not binary but 10-scale. When dichotomized, these variables indicate that 52.3 per cent of the respondents think that most people would try to take advantage of others if given the chance, rather than trying to be fair. Similarly, 65.7 per cent think that most people look out for themselves, rather than trying to be helpful to others.

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Appendix: Question Wording and Variable Coding (European Values Study, 2008)**Outgroup prejudice**

“On this list are various groups of people. Could you please tell me any that you would not, generally speaking, like to have as neighbours?” (v53) (0 = not mentioned; 1 = mentioned)

Symbolic threats

“Please look at the following statements and indicate where you would place your views on this scale.” (v269) (1: a country’s cultural life is not undermined by immigrants; 10: a country’s cultural life is undermined by immigrants)

Realistic threats

“Please look at the following statements and indicate where you would place your views on this scale.” (v268) (1: immigrants do not take jobs away from natives in a country; 10: immigrants take jobs away from natives in a country)

Attendance to religious services

“Apart from weddings, funerals and christenings, about how often do you attend religious services these days?” (v109) (0 = Once a month: once a month; About once a year: only on specific holy days; once a year; less often; Never: never, practically never; 1 = Once a week or more: more than once a week; once a week)

College education

“What is the highest level of education you have completed?” (v336) (0 = pre-primary education or none education; primary education or first stage of basic education; lower secondary or second stage of basic education; (upper) secondary education; post-secondary non-tertiary education; 1 = first stage of tertiary education; second stage of tertiary education)

Political ideology

“In political matters, people talk of ‘the left’ and the ‘the right.’ How would you place your views on this scale, generally speaking?” (v193) (1: Left ; 10: Right)

Interpersonal trust (1)

“Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?” (v62) (0 = can't be too careful; 1 = most people can be trusted)

Interpersonal trust (2)

“Using this card, do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair? How would you place your view on this scale?” (v63) (1: Most people would try to take advantage of me; 10: Most people would try to be fair)

Interpersonal trust (3)

“Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves? Please use this card.” (v64) (1: People mostly look out for themselves, 10: People mostly try to be helpful)