



# Parochialism, social norms, and discrimination against immigrants

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**Ingroup bias and outgroup prejudice are pervasive features of human behavior, motivating various forms of discrimination and conflict. In an era of increased cross-border migration, these tendencies exacerbate intergroup conflict between native populations and immigrant groups, raising the question of how conflict can be overcome. We address this question through a large-scale field intervention conducted in 28 cities across three German states, designed to measure assistance provided to immigrants during everyday social interactions. This randomized trial found that cultural integration signaled through shared social norms mitigates—but does not eliminate—bias against immigrants driven by perceptions of religious differences. Our results suggest that eliminating or suppressing ascriptive (e.g., ethnic) differences is not a necessary path to conflict reduction in multicultural societies; rather, achieving a shared understanding of civic behavior can form the basis of cooperation.**

immigration | discrimination | cultural integration | norms | field experiment

**P**arochialism—the tendency to favor ingroup members at the expense of an outgroup—has been identified by observational and experimental research in the social and evolutionary sciences as one of the fundamental tenets of human behavior (1–6). Ingroup bias and outgroup prejudice—two components of parochialism—are pervasive features of intergroup relations across cultures and have been tied to various forms of conflict, ranging from discrimination in the labor market (7, 8), to racial profiling in criminal justice (9), to suicide bombings (10) and mass atrocities such as genocide (11). Parochialism has been shown to coevolve with conditions that favor intergroup conflict (2, 12, 13). Cultural group formation can be explained as a mechanism for a population of heterogeneous individuals to resolve coordination problems (14) so that they can compete more effectively for resources and survival. Among early humans, war solidified altruism toward members of one’s ingroup (12, 15). In contemporary history, conflicts along ethno-religious lines have created salient national identities and have polarized populations.

Any conflict over economic resources, power, or identity could heighten the salience of ingroup–outgroup boundaries, increasing parochialism. Large-scale cross-border immigration can generate such conflicts. Although immigration can be beneficial by addressing labor market needs and forging new networks across societies, it also challenges native social norms and forces societies to adapt to rapid population change. Wars in Syria, Iraq, Afghanistan, and elsewhere have caused the largest refugee crisis since World War II, leading to a sharp rise in immigration from majority Muslim countries to Europe. Populist politicians and many of the media discourses across Europe have emphasized ethnic, religious, and cultural differences between immigrants and the majority population in host countries to mobilize public opinion against immigration.

A survey-based literature in political science has documented opposition to immigration (16, 17) deriving from economic competition between native and immigrant groups (18–20) as

well as a perceived cultural threat (21) and a fear of a multicultural future (22, 23). The idea that discrimination against immigrant populations is by and large a “cultural” phenomenon is no longer contested (ref. 16, p. 231). Whereas competing economic interests between native populations and immigrants can account for anti-immigrant hostility, cultural differences are often at the core of anti-immigrant attitudes (e.g., refs. 24–26). Grounded in seminal theories of social identity (27), prejudice (28, 29), and ethnocentrism (30), many of these studies regard sentiments toward immigrants as a manifestation of the host population’s ingroup identity and the extent to which immigrant groups are perceived to be “distinct,” and therefore “distant,” from their own (31–34). Such “otherness” of immigrant groups can induce natives to develop prejudices and stereotypes that ultimately culminate in negative attitudes and predispositions toward immigrants, whom they consider to pose a sociotropic threat to their own group (ref. 16, p. 232). Both recent immigrant groups and other minority populations of immigrant background are vulnerable to the consequences of this “othering” process.

Despite the consensus on the centrality of cultural explanations, there is a dearth of investigations that examine what types of cultural distinctions between native and immigrant groups most critically influence native attitudes toward immigration (ref. 16, p. 242). Immigrant groups often possess a diverse

## Significance

**As immigration increases due to globalization, wars, and climate change, there is more interaction between native and immigrant populations and more potential for conflict. Policymakers have emphasized the need to better integrate immigrants to forge a common set of norms concerning appropriate behavior. However, there is a lack of evidence to support the hypothesis that a shared understanding of norms can reduce discrimination. We provide experimental evidence that religious differences cause bias and discrimination in everyday interactions between natives and immigrants. Cultural integration signaled through immigrants’ enforcement of local norms reduces, but does not eliminate, bias. As long as public debates and policies heighten the importance of religious differences, cultural integration will not be able to eliminate intergroup conflict.**

D.D.C., M.P., and N.S. designed research, performed research, analyzed data, and wrote the paper.

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array of attributes that can separately distinguish them from host populations. Questions remain as to whether each of these immigrant attributes contributes equally (or at least similarly) toward determining the perceived distance between native and immigrant populations.

Only recently have scholars begun to isolate the impact of different immigrant attributes on native population attitudes. Adida, Laitin, and Valfort (8), for example, use an audit experiment to examine whether Muslim immigrants are likely to face discrimination in the French labor market. The authors find that holding immigrant ethnicity constant, job applicants with putatively Muslim names are much less likely to receive a job interview callback. These results confirm lessons learned from a large literature on ethnic discrimination in the market (35, 36). Hainmueller and Hopkins (33) parse out the relative weight of different immigrant attributes in the United States to find that an immigrant's labor market qualifications such as level of education and language skills, as well as an immigrant's country of origin, affect hypothetical decisions about immigration admission.

Big questions remain unaddressed or underexplored. For example, while studies have found that immigrants from certain countries are preferred by natives (33, 37), it is less clear what about the information conveyed in the immigrant's country of origin is influencing immigration attitudes. Does the country of origin evoke prejudices against individuals that appear visually different from native populations? Or does it make salient the perceived biases against groups that host populations consider to be socio-culturally incompatible with their own? We lack a full understanding of whether anti-immigrant sentiments are primarily driven by ethnic attributes such as skin tone, phenotypical, or religious difference or other qualities that are considered to be under the control of the immigrants themselves, such as the immigrants' behavior and the degree of cultural integration. If indeed ethnic attributes are important, it remains to be convincingly established whether such effects can be counteracted by the immigrants' acquisition of attributes and skills that signal willingness to integrate into the native society.

Our study targets these gaps in the literature, using a field experiment. While significant efforts have been directed toward capturing immigration attitudes outside the context of surveys or laboratory environments, most of these studies have focused on the labor market or other economic domains (2, 37). What we need is a deeper understanding of why different immigrant groups are treated differently, a question that we are able to address by focusing on how norm assimilation and religious difference affect behavior toward the same immigrant. This question is distinct from the question of whether native populations discriminate against immigrants. Previous experimental studies have presented evidence of discrimination against immigrants (38, 39). Winter and Zhang (40) have shown that German natives are more likely than immigrant minorities to enforce norms and that minorities are more likely to be sanctioned for norm violations than are natives. Our study advances our understanding of the determinants of behavior toward different types of immigrants and helps us consider how to reduce discrimination in typical day-to-day social interactions between native and immigrant populations in the real world. Insofar as native population preferences toward immigration and immigration policy reflect the realization of latent attitudes that natives form in the process of engaging in day-to-day interactions with immigrants, failure to analyze these "everyday" behaviors is an important oversight. Our study is designed to address this void with a field experiment that measures discrimination among individuals who are unaware that their behavior is being observed.

Our research design disentangles the effects of different ascriptive characteristics that can generate ingroup bias and goes

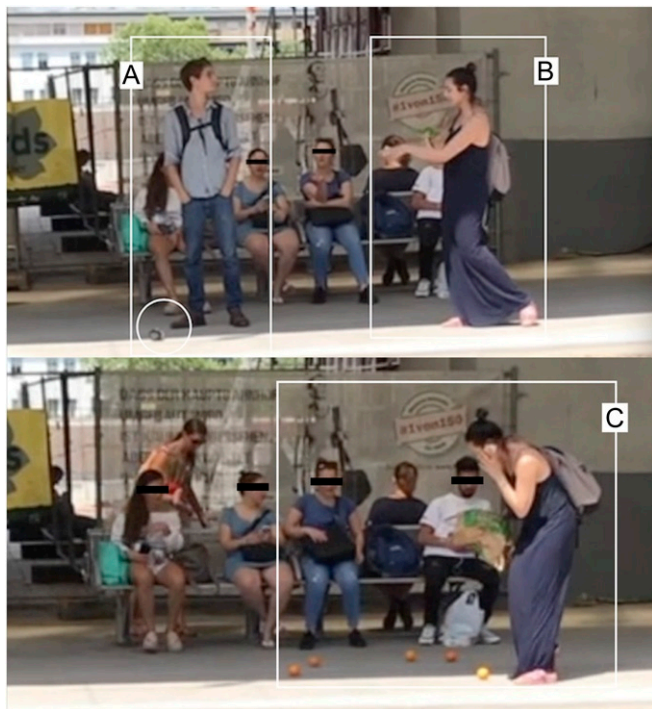
farther than previous studies by exploring whether parochialism can be overcome by cultural integration. Socio-biological and psychological studies of parochialism have established that a human neurobiological architecture evolved to highlight differences between "us" and "them." That architecture is not compatible with the growing multiculturalism of our societies (41) unless governments or powerful societal actors take steps to redefine the ingroup by integrating outgroups such as immigrants. To reduce intergroup conflict, policymakers have emphasized the need to better integrate immigrants not only economically, but also culturally in native societies, to forge a common set of rules and norms concerning the boundaries of appropriate behavior. However, there is a lack of empirical evidence to support the hypothesis that a shared understanding of social norms can reduce prejudice and discrimination. In particular, real-world experimental interventions addressing these issues are rare (42).

We provide experimental evidence on whether cultural integration through the enforcement of common social norms can reduce bias against immigrants driven by perceptions of ascriptive (religious) differences. By "cultural integration," we mean the adoption of mutually accepted standards of behavior. Such agreement could be the result of acculturation or assimilation (adopting the norms of the native society) or the product of dialogue and fusion between the native society and immigrant communities over time. To test whether cultural integration signaled through norm enforcement reduces discrimination against immigrants, we implemented a field intervention in Germany, which is currently experiencing one of the largest waves of immigration in modern European history; since 2015, more than 1.5 million individuals have applied for asylum in Germany, making it the largest recipient of refugees in Europe (43). Immigration has emerged as a salient issue in German politics, making Germany an ideal setting in which to conduct our study. Germans of immigrant background are also affected by the backlash to the refugee crisis as the crisis has sparked debates about the future of multiculturalism in Europe.

### Research Design

We created a highly realistic and carefully controlled "microenvironment" (44) of intergroup social interactions designed to observe the degree of assistance offered to strangers, some of whom were German and others immigrants. The experiment, depicted in Fig. 1, involved the staged violation of the norm against littering in public spaces\* followed by an interaction that was designed to elicit behavioral responses by unknowing bystanders (see *SI Appendix*, Figs. S1 and S2 for a schematic representation of the experiment). The intervention proceeded as follows: A male German confederate (violation) violates a widely held norm against littering by dropping an empty coffee cup on a train platform. A female confederate (punisher) immediately sanctions the violator by asking him to pick up his trash. The violator unwillingly but promptly complies with the request and leaves the scene. As the violator is walking away, the punisher receives a call in view of bystanders who have witnessed this previous interaction. While engaged in the call, she accidentally drops a bag of her possessions, the contents (oranges) of which disperse on the platform. The confederate appears to be in need of help retrieving her possessions, and we measure whether bystanders provide that assistance.

\*Balafoutas et al. (45, 46) use a related approach to measure direct vs. indirect punishment of norm violators and whether altruistic punishment covaries with the severity of norm violations. We use parts of their design and extend it to address different questions.



**Fig. 1.** Experiment in progress. (A) In the first step, the male confederate violates the norm against littering by discarding an empty coffee cup. (B) The female confederate promptly sanctions the male confederate for the norm violation. (C) The female confederate then drops personal possessions and is in need of assistance.

Two key dimensions of the intervention were manipulated experimentally. First, to vary the female confederate’s perceived membership in the ingroup (natives) or outgroup (immigrants), we randomly assigned the ethnoracial attributes of the confederate to one of four conditions: an immigrant wearing a hijab, the same immigrant in plain attire without a hijab, the same immigrant wearing a clearly visible Christian cross, or a German female, who would serve as our control condition (skin tone and phenotype were the variables that would help the bystanders identify confederates as immigrants in the control condition). Second, we also manipulated the level of cultural integration by randomly varying whether the female confederate enforced the antilittering norm. This action signaled to bystanders that the confederate shared their norms and was a civic-minded person. In roughly half of our sample, the female confederate sanctioned the norm violator before requiring assistance. In the remaining half, a different confederate enforced the norm instead (see Fig. 2 for the matrix of treatment conditions). Apart from these two dimensions, we controlled for social class by having confederates wear similar attire across the different teams and iterations. We minimized the potential for differences in attractiveness to affect assistance rates by having the same minority confederate (immigrant female) play all three roles. Since it is not possible for the same actor to portray immigrant and native, we rotated the person playing the role of the German female confederate in each team. In *SI Appendix*, we also show that our results hold using team fixed effects, which analyze within-team variation in assistance rates across iterations.

One design feature of the intervention warrants note: The decision to manipulate the religious characteristics of the confederate in addition to her ethnic attributes stemmed from the central role that religious difference plays in political debates on immigration in Germany and Europe (Fig. 3). Given media coverage of cultural conflicts between European Christian and

immigrant Muslim populations, we had reason to believe that religious identity would be central for the delineation of ingroups and outgroups in Germany.

The interventions were conducted in 29 train stations across three German states (North Rhine-Westphalia, Saxony, and Brandenburg). We implemented a total of 1,614 iterations of the intervention, involving 7,142 bystanders, in major train stations of these cities over a 3-wk period between July and August 2018. During each iteration, confederates were tasked with recording the behavior of bystanders who observed the intervention (coders were not blinded; see *SI Appendix* for more discussion). The main outcome of interest, which was coded at the iteration level, was whether any bystanders offered assistance to the female confederate in retrieving her possessions. Confederates also noted the total number and gender of bystanders within a prespecified radius, as well as other characteristics of each iteration.

The research protocol was reviewed and approved by University of Pennsylvania’s Institutional Review Board (IRB Protocol 829824). A waiver of the consent process was obtained (see *SI Appendix* for additional information on ethical and safety considerations).

## Results

*SI Appendix* provides further details regarding the design of the intervention, timelines for the study, data collection locations, and protocols for data collection, as well as auxiliary analyses. Auxiliary analyses in *SI Appendix* include regression-based analysis of treatment effects including state fixed effects, bystander fixed effects, and various controls; comparison of effects in East vs. West Germany; effects of language assimilation on bias toward immigrants; and an online survey to explore Germans’ attitudes toward littering and provide manipulation checks for some of our treatments. All analyses presented in the main text, unless otherwise noted, were prespecified in an analysis plan registered with the Evidence in Governance and Politics (EGAP) network (20180725AB) before commencement of data collection.

We expected that immigrants would receive less assistance than natives and that identity markers (hijabs) that increase the difference (social distance) between natives and immigrants would decrease assistance. Furthermore, since enforcement of local social norms regarding appropriate behavior signals cultural integration, we hypothesized that enforcing the antilittering norm would offset the negative bias toward immigrants. We chose this particular norm because it constitutes a noncontroversial civic norm that is particularly widespread and deeply internalized in Germany (see *SI Appendix*, section 7, for suggestive evidence consistent with this assumption).

Treatment condition	Ethnoracial identity of female confederate	Religious attributes	Norm enforcement
1	Immigrant	Hijab	Yes
2	Immigrant	Cross	Yes
3	Immigrant	None	Yes
4	Immigrant	Hijab	No
5	Immigrant	Cross	No
6	Immigrant	None	No
Control I	Native (German)	None	Yes
Control II	Native (German)	None	No

**Fig. 2.** Treatment assignment matrix. This matrix presents the eight experimental treatment and control conditions corresponding to two confederate ethnoracial categories, three immigrant religious attribute categories, and two norm enforcement conditions.



Fig. 3. Manipulation of confederate identity.

First, our analyses provide strong evidence in support of our hypothesis of bias against immigrants and suggest that religious difference is what defines immigrants as an outgroup. Female German confederates, who serve as our controls, were assisted in retrieving their possessions in 78.3% of all iterations. By contrast, confederates of an immigrant background (immigrant with hijab and immigrants in plain attire) were assisted less, at 71.3% of iterations (see *SI Appendix, Table S11* for further discussion of these analyses using regression with state-fixed effects and bystander fixed effects). The difference between the level of assistance offered to immigrants vs. that to natives is therefore around 7 percentage points and is statistically distinguishable at conventional levels ( $t = -2.11, P < 0.05$ , two-tailed). The results shown in Fig. 4 pool across other conditions (i.e., among norm enforcers and nonenforcers within the native and immigrant groups).

The negative bias against immigrants, however, is only due to intergroup differences in religious identity. Phenotypical (ethnic) differences on their own are not sufficient to cause bias. As shown in column 3 of Fig. 4, immigrant confederates wearing a hijab, which clearly signals that they are of Muslim faith, were assisted only 66.3% of the time (these results pool across other treatment conditions, including norm enforcement). This is 12 percentage points less than assistance offered to German confederates ( $t = -3.22, P < 0.001$ , two-tailed). In the subsample of interventions from the former East German state of Saxony, which was the site of violent far-right anti-immigrant protests in August 2018, this differential increases to almost 22 percentage points (*SI Appendix, Table S9*). Differences in discrimination in East vs. West Germany are explored in *SI Appendix, Table S7*, where we show that bias is larger in the East, although we cannot establish the cause of these differences. We also find that the rise in assistance levels due to good citizenship (i.e., prosocial behavior toward immigrants due to norm enforcement) is significantly larger in the East (*SI Appendix, Table S15*). Economic differences between East and West, the legacy of communism, as well as differences in religiosity and in the degree of contact with immigrants could explain those results. The magnitude of this negative bias is especially noteworthy given the nature of the items dropped in the intervention; the oranges dispersed in a manner that made it seem challenging for our confederates to retrieve them expediently by themselves, which should have created strong pressures for bystanders to offer assistance regardless of the identity of the confederate.

Our analysis provides corroborating evidence for the centrality of religious differences as the basis of parochialism in our context. Specifically, the average rate of assistance to immigrant confederates in the control condition (column 3 in Fig. 4) is statistically indistinguishable from the assistance given to native Germans. Thus, we do not find any evidence of ethnically driven racism or discrimination in the context of our experiment. This is despite the fact that bystanders recognize our immigrant confederates as non-German (see *SI Appendix, section 6*, for evidence

from a follow-up survey). Racial and phenotypical differences alone are not sufficient to induce discrimination in the context of minor everyday interactions in our sample. That might be due to the fact that immigrants in the control condition are dressed similarly to the native confederates and therefore signal some degree of cultural integration. Immigrants who wear a Christian cross (column 2 in Fig. 4) also send a signal of cultural integration. The difference between the level of assistance offered to a German confederate and that to the cross-wearing immigrant confederate is a mere 1.96 percentage points and is statistically indistinguishable from zero ( $t = 0.583, P = 0.56$ , two-tailed). However, there is a decrease of around 10 percentage points in the assistance offered to the immigrant wearing a hijab relative to the immigrant control group or the immigrant group wearing the cross ( $t = 3.29, P < 0.01$ , two-tailed). Given that the level of assistance offered to immigrants in the control and in the cross condition is roughly the same as the assistance offered to natives, we can conclude that negative attitudes toward Muslim immigrants are what drive the results in Fig. 4 and we find no evidence that racial or ethnic differences alone generate discrimination. In *SI Appendix, Table S5*, we conduct analyses using alternate outcome measures and show consistent results with respect to the share of bystanders who provide assistance.

Can a shared understanding of good citizenship—demonstrated through an immigrant's enforcement of local social norms—help partially counteract the bias against Muslim immigrants? Analyses presented in Fig. 5 show that it can. In the first step, we compare between-treatment conditions wherein an immigrant confederate wearing a hijab enforces the antilittering norm (column 3) and conditions in which she does not (column 4); the mean level of assistance provided to immigrant enforcers is more than 12 percentage points higher than that to immigrant nonenforcers (we compare only native Germans to immigrants with a hijab in Fig. 5) and is statistically significant at conventional levels ( $t = 2.772, P < 0.01$ , two-tailed).

The magnitude of the offsetting effects of norms is clearly demonstrated when we examine the difference in assistance rates for immigrant enforcers and native nonenforcers. As

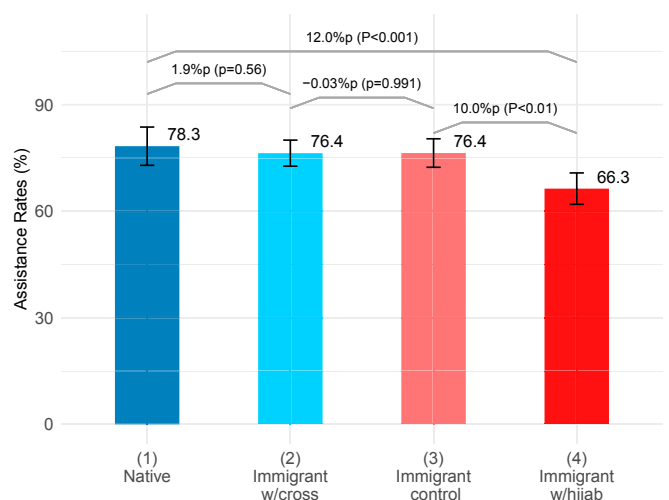
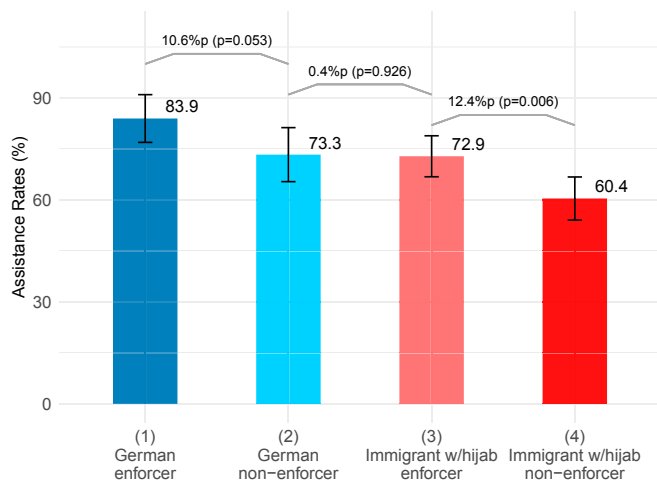


Fig. 4. Parochialism in the level of assistance offered to strangers. Bars represent the mean rates of assistance for the treatment conditions. The error bars present 95% confidence intervals for the means. The brackets and accompanying information report results of a standard two-tailed difference in means test of treatment conditions with  $P$  values in parentheses. Bystanders provided significantly more assistance to perceived natives than to immigrants.



**Fig. 5.** Offsetting effects of norm enforcement on bias. Bars represent the mean rates of assistance for the treatment conditions. The error bars present 95% confidence intervals for the means. The brackets and accompanying information report results of a standard two-tailed difference in means test of treatment conditions with  $P$  values in parentheses.

columns 2 and 3 in Fig. 5 demonstrate, norm enforcement brings the assistance provided to an immigrant confederate within 0.4 percentage points of that to a native who did not enforce the norm; the difference is statistically indistinguishable from zero ( $t = 0.093$ ,  $P = 0.926$ ).

While the evidence presented above highlights the capacity of cultural integration to counteract bias against immigrants generated by ascriptive (religious) differences, it nonetheless suggests that norm enforcement is unable to eliminate the bias in its entirety; the  $t$  test between assistance offered to native (column 1 in Fig. 5) and immigrant (column 3 in Fig. 5) enforcers reveals a substantial difference of 11 percentage points, which is statistically significant at the  $P < 0.05$  level ( $t = 2.211$ ,  $P < 0.05$ , two-tailed).

## Discussion

A common social identity can serve as the foundation of democratic citizenship. Nationalism often creates that common identity, but in an increasingly multicultural world, adherence to national identities is supplanted by parochial attachments. Our study, set against the backdrop of increasing intergroup conflict between native and immigrant populations in Germany, was designed to measure the effect of shared norms on discrimination against immigrants and minorities of immigrant

background. Theories of social psychology and political science suggest that a common set of norms can unify individuals who would otherwise be divided by their ethnic or religious identities. Importantly, we explore voluntary adherence to norms rather than forced assimilation by immigrants into the native society. Norms need not reflect the one-sided imposition of cultural practices that immigrant communities find foreign or threatening to their own identities; rather, they could emerge as the result of a dialogue and mutual adaptation by host and immigrant communities. Our experiment is focused on measuring responsiveness to the norm against littering—a norm that is both broadly shared among Germans and not inherently antithetical to cultural values or religious practices of immigrant groups. Adherence to this norm by immigrants signals that they care about their local environment and that they consider themselves part of their German communities.

Our experimental evidence suggests that eliminating or suppressing ascriptive differences is not a necessary path to conflict reduction in multicultural societies. We find no evidence of ethnic discrimination per se. The majority of the subjects in our experiment do behave in a cooperative manner toward both Germans and immigrants and shared norms of civic behavior reduce the differences in the level of assistance offered to the two groups. Our findings suggest that norms can form the basis for the reduction in discrimination and improved cooperation. We present evidence that good citizenship among socially distant immigrant minorities is not discounted by the majority population. Yet we also find that the effectiveness of norms in forging integration is constrained by the salience of intergroup differences. In the German context, religious difference increases social distance between native and immigrant populations, but that distance is not insurmountable. Public policies and political rhetoric have heightened the salience of religious markers so that cultural practices that are perceived foreign increase conflict. It is an open question whether societies will evolve to embrace the pluralism that is the inevitable consequence of ongoing macrolevel processes of globalization. Leaders and opinion makers could help by redirecting the public's attention from the ascriptive differences that divide groups to the importance of cultural integration as the way to promote cooperation.

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- C. K. W. De Dreu et al., The neuropeptide oxytocin regulates parochial altruism in intergroup conflict among humans. *Science* **328**, 1408–1411 (2010).
- S. Bowles, Did warfare among ancestral hunter-gatherers affect the evolution of human social behaviors? *Science* **324**, 1293–1298 (2009).
- R. D. Enos, Causal effect of intergroup contact on exclusionary attitudes. *Proc. Natl. Acad. Sci. U.S.A.* **111**, 3699–3704 (2014).
- G. Bornstein, Intergroup conflict: Individual, group, and collective interests. *Pers. Soc. Psychol. Rev.* **7**, 129–145 (2003).
- H. Bernhard, U. Fischbacher, E. Fehr, Parochial altruism in humans. *Nature* **442**, 912–915 (2006).
- H. Tajfel, M. G. Billig, R. P. Bundy, C. Flament, Social categorization and intergroup behaviour. *Eur. J. Soc. Psychol.* **1**, 149–178 (1971).
- M. Bertrand, S. Mullainathan, Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. *Am. Econ. Rev.* **94**, 991–1013 (2004).
- C. L. Adida, D. D. Laitin, M.-A. Valfort, Identifying barriers to Muslim integration in France. *Proc. Natl. Acad. Sci. U.S.A.* **107**, 22384–22390 (2010).
- K. Antonovics, B. G. Knight, A new look at racial profiling: Evidence from the Boston police department. *Rev. Econ. Stat.* **91**, 163–177 (2009).
- S. Atran, J. Ginges, Religious and sacred imperatives in human conflict. *Science*, **336**, 855–857 (2012).
- J. A. C. Everett, N. S. Faber, M. Crockett, Preferences and beliefs in ingroup favoritism. *Front. Behav. Neurosci.* **9**, 15 (2015).
- S. Bowles, J.-K. Choi, The coevolution of parochial altruism and war. *Science* **318**, 636–640 (2007).
- S. Bowles, Warriors, levelers, and the role of conflict in human social evolution. *Science* **336**, 876–879 (2012).
- C. Efferson, R. Laive, E. Fehr, The coevolution of cultural groups and ingroup favoritism. *Science* **321**, 1844–1849 (2008).
- S. Bowles, Group competition, reproductive leveling, and the evolution of human altruism. *Science* **314**, 1569–1572 (2006).
- J. Hainmueller, D. J. Hopkins, Public attitudes toward immigration. *Annu. Rev. Polit. Sci.* **17**, 225–249 (2014).
- K. Bansak, J. Hainmueller, D. Hangartner, How economic, humanitarian, and religious concerns shape European attitudes toward asylum seekers. *Science* **354**, 217–222 (2016).
- K. F. Scheve, M. J. Slaughter, Labor market competition and individual preferences over immigration policy. *Rev. Econ. Stat.* **83**, 133–145 (2001).
- A. M. Mayda, Who is against immigration? A cross-country investigation of individual attitudes toward immigrants. *Rev. Econ. Stat.* **88**, 510–530 (2006).
- R. M. Dancygier, M. J. Donnelly, Sectoral economies, economic contexts, and attitudes toward immigration. *J. Polit.* **75**, 17–35 (2013).

21. P. M. Sniderman, L. Hagendoorn, *When Ways of Life Collide: Multiculturalism and its Discontents in the Netherlands* (Princeton University Press, Princeton, NJ, 2007).
22. J. Sides, J. Citrin, European opinion about immigration: The role of identities, interests, and information. *Br. J. Polit. Sci.* **37**, 477–504 (2007).
23. P. M. Sniderman, P. Pierangelo, R. de Figueiredo, T. Piazza, *The Outsider: Prejudice and Politics in Italy* (Princeton University Press, Princeton, NJ, 2002).
24. P. M. Sniderman, L. Hagendoorn, M. Prior, Predisposing factors and situational triggers: Exclusionary reactions to immigrant minorities. *Am. Polit. Sci. Rev.* **98**, 35–49 (2004).
25. J. Hainmueller, M. J. Hiscox, Attitudes toward highly skilled and low-skilled immigration: Evidence from a survey experiment. *Am. Polit. Sci. Rev.* **104**, 61–84 (2010).
26. D. Tingley, Public finance and immigration preferences: A lost connection? *Polity* **45**, 4–33 (2012).
27. H. Tajfel, *Human Groups and Social Categories: Studies in Social Psychology* (Cambridge University Press, New York, NY, 1981).
28. G. W. Allport, *The Nature of Prejudice* (Basic Books, New York, NY, 1979).
29. E. L. Paluck, D. P. Green, Prejudice reduction: What works? A review and assessment of research and practice. *Annu. Rev. Psychol.* **60**, 339–367 (2009).
30. D. R. Kinder, C. D. Kam, *Us against Them: Ethnocentric Foundations of American Opinion* (University of Chicago Press, Chicago, IL, 2010).
31. C. Dustmann, I. P. Preston, Racial and economic factors in attitudes to immigration. *The BE Journal of Economic Analysis & Policy* **7**, 62 (2007).
32. D. J. Schildkraut, *Americanism in the Twenty-First Century: Public Opinion in the Age of Immigration* (Cambridge University Press, New York, NY, 2010).
33. J. Hainmueller, D. J. Hopkins, The hidden American immigration consensus: A conjoint analysis of attitudes toward immigrants. *Am. J. Polit. Sci.* **59**, 529–548 (2015).
34. R. Maxwell, Occupations, national identity, and immigrant integration. *Comp. Polit. Stud.* **50**, 232–263 (2017).
35. E. Zschirnt, D. Ruedin, Ethnic discrimination in hiring decisions: A meta-analysis of correspondence tests 1990–2015. *J. Ethnic Migr. Stud.* **42**, 1115–1134 (2016).
36. K. Auspurg, A. Schneck, T. Hinz, Closed doors everywhere? A meta-analysis of field experiments on ethnic discrimination in rental housing markets. *J. Ethnic Migr. Stud.* **45**, 95–114 (2018).
37. J. Hainmueller, D. Hangartner, Who gets a Swiss passport? A natural experiment in immigrant discrimination. *Am. Polit. Sci. Rev.* **107**, 159–187 (2013).
38. J. D. Tjaden, C. Schwemmer, M. Khadjavi, Ride with me: Ethnic discrimination, social markets, and the sharing economy. *Eur. Sociol. Rev.* **34**, 418–432 (2018).
39. R. Koopmans, S. Veit, Cooperation in ethnically diverse neighborhoods: A lost-letter experiment. *Polit. Psychol.* **35**, 379–400 (2014).
40. F. Winter, N. Zhang, Social norm enforcement in ethnically diverse communities. *Proc. Natl. Acad. Sci. U.S.A.* **115**, 2722–2727 (2018).
41. R. J. Crisp, R. Meleady, Adapting to a multicultural future. *Science* **336**, 853–855 (2012).
42. E. L. Paluck, How to overcome prejudice. *Science* **352**, 147 (2016).
43. S. Bundesamt, *Bevölkerung und Erwerbstätigkeit: Bevölkerung mit Migrationshintergrund—Ergebnisse des Mikrozensus 2017* (Statistisches Bundesamt: Fachserie 1, Reihe 2.2, Wiesbaden, Germany, 2018).
44. M. L. Sands, Exposure to inequality affects support for redistribution. *Proc. Natl. Acad. Sci. U.S.A.* **114**, 663–668 (2017).
45. L. Balafoutas, N. Nikiforakis, B. Rockenbach, Direct and indirect punishment among strangers in the field. *Proc. Natl. Acad. Sci. U.S.A.* **111**, 15924–15927 (2014).
46. L. Balafoutas, N. Nikiforakis, B. Rockenbach, Altruistic punishment does not increase with the severity of norm violations in the field. *Nat. Commun.* **7**, 13327 (2016).