



Individualism and racial tolerance

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Abstract

This paper explores how cultural values associated with individualism versus collectivism affect attitudes toward racial tolerance. Individualism refers to social norms and cultural values that support individual rights and self-determination. Therefore, individualism is inherently egalitarian and should transcend racial identities, fostering attitudes of racial tolerance. To empirically examine the correlation between values associated with individualism and attitudes favoring racial tolerance, individual-level data from the Integrated Values Surveys is collected across multiple countries and over a span of time (1981–2021). The results indicate a positive association between individualism and racially tolerant attitudes. Furthermore, this conclusion remains robust after controlling for demographic and socio-economic variables such as income, education, religious affiliation and attendance, social trust, as well as country and time fixed effects. The within-country analysis enables the isolation of the impact of individualism from other potential confounding factors.

Keywords Culture · Individualism · Racial tolerance · Political economy

JEL Classification D02 · J15 · J2 · O5 · Z1

1 Introduction

Tolerance and respect for others are crucial social norms that enable individuals to pursue their desired lives without facing social, economic, or legal condemnation. By embracing tolerance, which encompasses openness and inclusiveness for all individuals, regardless of their ethnic or racial background, society fosters an environment that values and celebrates diversity (Corneo & Jeanne, 2009; Florida, 2003). Therefore, in tolerant societies, individuals are primarily evaluated based on their merit rather than solely on demographic or physical characteristics. In such societies, subjective well-being and happiness tend to be higher, not only for minority groups but for the majority of people as well (Inglehart et al., 2008; Inglehart et al., 2013; Berggren et al., 2017, 2018).

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Economic and social coordination necessitate a spirit of tolerance towards others, even those who are different from oneself. Tolerance, therefore, carries economic consequences. Mokyr (1990) asserts that innovation and economic advancement rely on tolerance. Florida (2003) echoes this viewpoint by hypothesizing that tolerance towards others is fundamental to fostering economic growth, as openness attracts individuals from diverse backgrounds, resulting in a gain in creativity. Empirical studies further reinforce these theoretical arguments, demonstrating a positive association between tolerance and economic outcomes (Berggren & Elinder, 2012a, 2012b; Das et al., 2008; Gani, 2016; Ottaviani & Peri, 2006; Qian, 2013; Jha et al., 2023)

Racial tolerance, which refers to the absence of prejudice based on race, is linked to significant economic and social consequences (for a summary, see Lang & Spitzer, 2020). Such attitudes affect labor markets (Becker, 1957; Borowczyk-Martins et al., 2017; Kahn-Lang, 2018), access to credit and banking (Black et al., 1997, 2001; Ladd, 1998), voting behavior (Williams, 2022), policing (Fryer, 2019; Hoekstra & Sloan, 2022), criminal justice (Arnold et al., 2018, 2022), and economic growth (Berggren & Elinder, 2012a, 2012b; Jha et al., 2023).

Given the documented links between racial tolerance and economic and social outcomes, it is natural to ask: What determines attitudes toward people of another race? This paper explores the cultural roots of racial tolerance, examining how characteristics associated with individualism-collectivism shape one's attitudes towards those from different racial backgrounds.

The literature on determinants of racial tolerance is relatively limited.¹ Glaeser (2005) provides a theoretical framework demonstrating that hate, including hatred of Blacks, is generated by politicians spinning hate-created stories. Hate is supplied by both anti- and pro-distribution platforms that target poor minorities or rich minorities, respectively. The willingness to accept such stories is evidence of a demand side of hatred. Consequently, Glaeser argues that education should reduce an individual's willingness to accept hate-supplied information *if* more education makes it easier to distinguish truth from fiction. Akerlof and Kranton (2005) model racism as a function of income and identity, which are substitutes. Higher income, therefore, allows an individual to afford to deviate from a prescribed identity behavior, such as racism.

Mocan and Raschke (2016) find empirical support for prior theoretical claims where feelings of racism and intolerance are mitigated if an individual is more educated and their economic well-being is improved. Berggren and Nilsson empirically show that economic freedom positively relates to racial tolerance across countries (2013) and U.S. states (2016).²

This paper presents an alternative hypothesis for predicting racially tolerant attitudes, positing that cultural values linked to individualism cultivate racial tolerance. The hypothesis suggesting that individualism fosters racial equality draws upon ideals rooted in the Enlightenment, such as autonomy and self-determination. According to this perspective, the principles of individual rights and liberty should be extended to all individuals, irrespective of their race, gender, or ethnicity (Locke 2005([1690])).³ Davis and Williamson

¹ For a summary of public choice literature on anti-discriminatory theory, see Magness (2020).

² Berggren and Nilsson (2015) find that globalization fosters general social tolerance.

³ Related, Enlightenment ideals also argued that when you trade with other people you become more tolerant of their differences because mutual understanding increases with greater contact. Tolerance is in most people's individual self-interest because the truly intolerant forgo economic benefits. As commerce increases, discrimination and prejudice should diminish.

(2019, 2022) provide theoretical and empirical support to this hypothesis by demonstrating that individualism underpins gender equality and women's economic rights.

Individualism and collectivism both represent the significance of social relationships in an individual's core perception of self. In individualist societies, the self is typically regarded as independent, emphasizing personal autonomy and self-reliance. On the other hand, in collectivist societies, the self is viewed as interdependent, intimately connected to and influenced by a network of social relationships and obligations (Gorodnichenko & Roland, 2012). Schwartz (2006, p. 140) elaborates by describing individualistic cultures as those comprised of individuals who are autonomous, bounded entities. Such individuals tend to prioritize and freely express their own emotions, preferences, ideas, and abilities. They also place value on the diversity and uniqueness of individuals. In contrast, collectivist cultures consist of individuals who are deeply connected to the collective. They place importance on social relationships, working together towards shared goals, and participating in shared ways of life.

The values emphasized by individualism, such as autonomy, self-expression, tolerance, creativity, and a commitment to individual rights, are inherently egalitarian and extend beyond racial identities. The principles and norms of individualism promote the recognition of all individuals as autonomous beings and moral equals. These values are expected to diminish the significance of demographic identities and social obligations linked to race, thereby fostering attitudes of racial tolerance.

In contrast, the interwoven relationships and obligations found in collectivist societies may assign an individual's value based on collective identities, including race. In these societies, personal aspirations and individual identity are often overshadowed by the obligations that uphold the group identity and collective objectives. Consequently, individuals may begin to perceive others primarily as either members of their own collective, such as their racial group, or as outsiders. This mindset can contribute to the development of racial biases, prejudices, and intolerance.

If my hypothesis is correct, I anticipate that individuals who embrace values associated with individualism will also exhibit beliefs that align more closely with racial tolerance. I test this hypothesis using data collected from all seven waves of the Integrated Values Surveys (merger of the European Value Survey and the World Value Survey), which comprise over 645,000 individual surveys from 115 countries from 1981 to 2021 (Haerper et al., 2021). All variables are collected at the individual level.

Racial tolerance is measured by examining responses to the question: on this list of various groups of people, could you mention any that you would not like to have as neighbors? If a respondent selected 'people of a different race,' that individual holds racially intolerant beliefs. If a respondent did *not* select 'people of a different race,' that individual holds racially tolerant beliefs. To create an individual-level measure of individualism, I use questions that capture characteristics of individualism as described by Hofstede (2001): individual accountability, autonomy, the right to a private life, weak family ties, less conformity behavior, and market capitalism and competition. These variables are aggregated to create an individualism index.

The results suggest that individualism is positively associated with racial tolerance. This finding is robust to individual-level demographic and socio-economic controls, as well as controls for variables that are emphasized in the culture literature, including religious affiliation, political ideology, and social trust. All regressions control for country and wave fixed effects. Therefore, the findings do not capture potential associations between individualism and racial tolerance that may operate through the influence of culture on national-level variables, such as the level of economic development

(Davis, 2016; Gorodnichenko & Roland, 2011, 2017) and the quality of national political institutions (Licht et al., 2007; Davis & Abdurazokzoda, 2016). The results also eliminate national-level channels that directly affect racial tolerance. For example, prior works find that democracy relates to racial equality (Leach, 2002; Myrdal, 1944). Despite missing these channels of influence, the inclusion of country-fixed effects provides a higher level of confidence in attributing the observed associations to culture. By conducting a within-country analysis, the study more effectively isolates the specific impact of individualism while minimizing potential confounding factors.

This paper represents a first attempt to empirically explore the cultural factors that shape racial tolerance. The findings offer a partial explanation for the enduring existence of racial intolerance by connecting it to deeply ingrained and persistent cultural values. This suggests that individualist-collectivist values, which originated in the distant past, continue to impact contemporary social outcomes. Moreover, the study raises questions about how to interpret the empirical associations between racial inequality and economic and social outcomes. It suggests that these relationships may be influenced by shared cultural values related to individualism and collectivism, rather than representing a direct link between racial inequality and outcomes.

My paper contributes to a substantial body of evidence documenting the social roles of individualism and collectivism, which social psychologists view as the most important dimension of culture (Heine, 2010; Triandis, 1995). Individualism is related to political and economic institutions (Licht et al., 2007; Cline & Williamson, 2017; Nikolaev & Salahodjaev, 2017; Pitlik & Rode, 2017; Gorodnichenko & Roland, 2021), economic development (Davis, 2016; Gorodnichenko & Roland, 2011), innovation (Gorodnichenko & Roland, 2017), regulation (Cline et al., 2021; Davis & Williamson, 2016, 2018), the taste for social status (Davis & Wu, 2020), the strength of family ties (Davis & Williamson, 2020), and gender equality (Davis & Williamson, 2019, 2022).

Considering the existing evidence that links racial inequality with economic development, the findings of this study provide an additional pathway through which individualism can impact economic progress. By establishing a connection between individualism and racial tolerance, the results suggest that fostering individualistic values may contribute to reducing racial inequality, which, in turn, can have positive implications for economic development.

2 Data description

This section describes key variables of interest, including racial tolerance and individualism. All variables are collected at the individual level from the Integrated Values Survey (IVS), which is a joint merger of the European Value Survey (EVS) and the World Value Survey (WVS) (Haerpfer et al., 2021). The EVS and the WVS are two large-scale, cross-national, and repeated cross-sectional longitudinal survey research programs that include the same questions over time and across countries. Such repeated questions comprise the Integrated Values Surveys (IVS), spanning from 1981 to 2021.

The combined surveys are conducted in 115 countries across seven waves from 1981 to 1984, 1990–1994, 1995–1998, 1999–2004, 2005–2009, 2010–2014, and 2017–2021. Appendix 1 lists each variable and the corresponding IVS question.

2.1 Racial tolerance

Racial tolerance is measured by examining responses to the question: on this list of various groups of people, could you mention any that you would not like to have as neighbors? If a respondent did *not* select 'people of a different race,' data are coded as equal to 1 to represent racially tolerant attitudes; zero otherwise. This question is asked in all seven waves of the surveys. Data are standardized for ease of comparison and interpretation. This particular survey question to measure tolerance toward a group of persons is utilized by prior studies (Berggren & Elinder, 2012a, 2012b; Berggren & Nilsson, 2013, 2014; Das et al., 2008; Johansson et al., 2022).⁴

Averaging across all waves and countries, 16% of respondents indicate that they do not want people of a different race as a neighbor, suggesting that a large degree of respondents have racially *intolerant* beliefs. For comparison, 21% of individuals mention Muslims, 20% mention immigrants, 15% list evangelists, and 75% indicate they do not want drug addicts as a neighbor. Racial tolerance varies tremendously across countries. For example, over 70% of individuals in Myanmar list those of a different race as someone they would not like as their neighbor compared to respondents in Brazil, where only 3% of respondents indicate such preference.⁵

2.2 Individualism

The main independent variable is individualism. The most commonly used measures of individualism tend to be at the national level, capturing the overall cultural orientation of a country rather than individual-level variations (Hofstede, 1980; Schwartz, 1994). To create an individual-level measure of individualism, I use questions from IVS that capture characteristics of individualism as described by Hofstede (2001): individual accountability, autonomy, the right to a private life, weak family ties, less conformity behavior, and market capitalism and competition.

According to Hofstede (2001), individualism-collectivism refers to the contrasting expectations regarding the extent of individual autonomy. In an individualistic society, individuals are expected to primarily take care of themselves, emphasizing self-autonomy and personal independence. In contrast, in a collectivist society, individuals are encouraged to form strong and cohesive groups as a means of social support and security. Hofstede associates individualism with concepts such as self-autonomy, the right to privacy, weaker family ties, lesser emphasis on conformity, and a socio-economic system characterized by capitalism and market competition.

Therefore, in this study, specific questions from the Integrated Values Surveys (IVS) are selected that indirectly capture attitudes corresponding to the individualistic values described by Hofstede. These selected questions aim to capture the general sentiment associated with individualistic values within the survey data. I draw from several recent papers that utilize WVS data to construct measures of culture (Tabellini, 2008, 2010; Williamson & Kerekes, 2011) and to measure individualism (Beugelsdijk et al., 2015; Davis, 2016; Davis & Williamson, 2016, 2018, 2019, 2020, 2022; Pitlik & Rode, 2017). To address the limitations and potential biases in prior methodologies, I create multiple individualism

⁴ Norris (2002) argues that this question is more akin to measuring racial prejudice.

⁵ Based on author's cross-country calculations from the Integrated Values Survey (1981–2021).

indices. This approach aims to minimize measurement errors and biases while maximizing the number of observations available for analysis. The construction of these indices is detailed in the following paragraphs.

The first set of questions relates to economic individualism, which captures attitudes toward self-autonomy, capitalism, and market competition. For this purpose, a specific question measuring preferences regarding private versus government ownership is utilized (Beugelsdijk et al., 2015; Davis & Williamson, 2016, 2018, 2019, 2020, 2022). To capture attitudes toward competition, I include the question, ‘do you agree that competition is good versus competition is bad.’ Another question included aims to capture individuals’ feelings of self-autonomy. Respondents are asked to express the extent to which they believe they have control over what happens to them versus feeling a lack of control. This question provides valuable insights into individuals’ perceptions of their personal agency and autonomy in decision-making (Pitlik & Rode, 2017; Tabellini, 2008, 2010; Williamson & Kerekes, 2011).

To construct the economic individualism index, principal component analysis (PCA) is employed. The first principal component is extracted from these questions, capturing the underlying common variance among them. This component represents the overall economic individualism factor. The resulting economic individualism index is then standardized. A higher score indicates a greater level of economic individualism, reflecting a preference for private ownership, a positive view of competition, and a sense of having free choice and control over one’s own life circumstances.

The next set of questions selected from the IVS focuses on social individualism, aiming to capture individualistic attitudes towards social behavior and interpersonal relationships. These values are related to levels of conformity, the right to privacy, and family values. Four questions are included: whether homosexuality is justified (Beugelsdijk et al., 2015; Davis & Williamson, 2016, 2018, 2019, 2020, 2022; Pitlik & Rode, 2017), whether abortion is justified (Beugelsdijk et al., 2015; Davis & Williamson, 2016, 2018, 2019, 2020), if obedience is an important quality to teach children (Pitlik & Rode, 2017; Tabellini, 2008, 2010; Williamson & Kerekes, 2011), and if tolerance and respect is an important quality to teach children (Tabellini, 2008, 2010; Williamson & Kerekes, 2011).

To construct the social individualism index, PCA is applied to the four selected questions. The first principal component is extracted, representing the underlying common variance among these questions. The resulting social individualism index is then standardized. A higher score indicates a greater level of social individualism. This reflects attitudes such as perceiving abortion and homosexuality as justifiable, not placing a high value on obedience, but instead valuing tolerance and respect for others.

To create an overall individualism index, the three questions from economic individualism and the four questions from social individualism are combined using PCA. The resulting overall individualism index is then standardized, where a higher score indicates a greater level of individualistic attitudes. The results are not sensitive to the construction of the indices, as discussed in Sect. 3 below.

2.3 Baseline controls variables

To avoid over-controlling, I include a minimal set of baseline control variables that are clearly exogenous, including age, age-squared, and a dummy variable equal to 1 if female. The average age of our sample is 43, and 53% are female. Attitudes toward other races could relate to age if younger individuals are more open to new ideas, including diversity.

Women may hold more tolerant beliefs about other races compared to their male counterparts. If men benefit materially from racial intolerance, they may hold more prejudicial racial attitudes. I also consider specifications with an extended set of demographic controls, including marital status, educational attainment, and family income. Summary statistics are presented in Table 1.

3 Results

To conduct the empirical analysis, individual-level survey data for up to 113 countries spanning the seven waves of the IVS are collected. Observations are not balanced across countries since not every country is covered in every wave. However, the cross-section time series structure enables panel estimation accounting for unobserved time-constant variables at the country level.

Unless otherwise specified, the estimations include the baseline controls, age, age², and the female dummy variable, along with wave and country dummies in each specification (Alesina & Giuliano, 2014). A key strength of conducting individual-level analysis is that the estimations can control for country-fixed effects and, thus, time-invariant country-level omitted variables. Since this approach controls for the impact of national culture and institutional variables that may correlate with individual cultural values, it likely underestimates the effect of individualism on racial tolerance. By focusing on individual-level data and controlling for confounding factors at the national level, the analysis isolates the specific influence of individualistic values on attitudes towards racial tolerance. The estimates, however, will not reflect the potential impact of individualism on racial tolerance acting through the quality of economic, legal, and political institutions (Cline & Williamson, 2017; Licht et al., 2007), the level of economic development (Davis, 2016; Gorodnichenko & Roland, 2011), or public policy outcomes (Davis & Williamson, 2016, 2018). Nevertheless, the observed effects are more credibly attributed to individualism.

3.1 Benchmark OLS results

Table 2 presents the initial results analyzing the association between racial tolerance and each measure of individualist attitudes. In Panel A, columns (1)–(3), the results are reported for each component of economic individualism separately. Column (4) includes all three economic individualism measures simultaneously. The findings from all four estimations indicate that each component measure of economic individualism is positively and significantly associated with racial tolerance at the 1% level. These results suggest that preferences favoring private ownership, valuing competition, and feeling a sense of free choice and control over one's life are associated with promoting racially tolerant attitudes.

Panel B, columns (5)–(8), reports the results using the four social individualism measures. Each component's coefficient is significant at the 1% level with the expected positive sign. In column (9), all four social individualism components are included simultaneously. Each measure's coefficient retains its sign and coefficient except for views toward abortion, which loses statistical significance. This could be due to the high correlation between tolerance for abortion and homosexuality (0.54), and, indeed, tolerance for homosexuality and abortion are each significant when the other is omitted from the regression, as seen in columns (5) and (6). Based on the results in column (9), individuals who hold beliefs that

Table 1 Summary statistics

Variables	#Observations	#Waves	Mean	Standard deviation	Minimum	Maximum
<i>Dependent variables</i>						
Racial tolerance	598,235	1–7	0.00	1.00	–2.29	0.44
Muslim tolerance	235,774	1–5	0.00	1.00	–1.94	0.52
Jewish tolerance	222,084	2–5	0.00	1.00	–2.18	0.46
Immigrant tolerance	536,541	1–7	0.00	1.00	–1.98	0.50
<i>Individualism measures</i>						
Private ownership	522,840	2–7	0.00	1.00	–1.68	1.53
Competition good	537,528	2–7	0.00	1.00	–2.46	1.08
Free choice control	585,786	1–7	0.00	1.00	–2.51	1.32
Justifiable: Homosexuality	558,092	1–7	0.00	1.00	–0.79	1.98
Justifiable: Abortion	574,286	1–7	0.00	1.00	–0.94	2.06
Obedience	596,532	1–7	0.00	1.00	–0.73	1.37
Tolerance and respect	598,235	1–7	0.00	1.00	–1.44	0.69
Individualism BMH index	343,236	3–7	0.00	1.00	–1.14	2.80
Economic individualism index	488,351	2–7	0.00	1.00	–3.16	1.94
Social individualism index	541,089	1–7	0.00	1.00	–1.49	2.32
Individualism index	446,837	2–7	0.00	1.00	–1.98	2.55
<i>Demographic controls</i>						
Age	598,235	1–7	43	17	13	108
Age ²	598,235	1–7	2,135	1,606	169	11,664
Female	598,235	1–7	0.53	0.50	0.00	1.00
Married	368,869	1–7	0.57	0.49	0.00	1.00
Income scales	368,869	1–7	4.77	2.37	1.00	11.00
Edu: lower (excluded)	368,869	1–7	0.27	0.45	0.00	1.00
Edu: middle	368,869	1–7	0.45	0.50	0.00	1.00
Edu: upper	368,869	1–7	0.28	0.45	0.00	1.00
Employed	361,880	1–7	0.55	0.50	0.00	1.00
Urban	231,477	2–7	0.46	0.50	0.00	1.00
Social class: lower class (excluded)	253,673	1, 3–7	0.12	0.33	0.00	1.00
Social class: working class	253,673	1, 3–7	0.28	0.45	0.00	1.00
Social class: lower middle class	253,673	1, 3–7	0.38	0.48	0.00	1.00
Social class: upper middle class	253,673	1, 3–7	0.20	0.40	0.00	1.00
Social class: upper class	253,673	1, 3–7	0.02	0.13	0.00	1.00
<i>Social controls</i>						
Trust	351,819	1–7	0.28	0.45	0.00	1.00
Trust other nationality	216,609	5–7	0.44	0.50	0.00	1.00
Religious attendance	352,096	1–7	4.31	2.57	1.00	8.00
Relig: do not belong (excluded)	349,986	1–7	0.22	0.41	0.00	1.00
Relig: Roman Catholic	349,986	1–7	0.27	0.44	0.00	1.00
Relig: Protestant	349,986	1–7	0.12	0.33	0.00	1.00
Relig: Russian orthodox	349,986	1–7	0.12	0.33	0.00	1.00
Relig: Jewish	349,986	1–7	0.002	0.05	0.00	1.00
Relig: Muslim	349,986	1–7	0.15	0.36	0.00	1.00
Relig: Hindu	349,986	1–7	0.02	0.15	0.00	1.00

Table 1 (continued)

Variables	#Observations	#Waves	Mean	Standard deviation	Minimum	Maximum
Relig: Buddhist	349,986	1–7	0.02	0.15	0.00	1.00
Relig: other Christian	349,986	1–7	0.02	0.14	0.00	1.00
Relig: Other	349,986	1–7	0.05	0.21	0.00	1.00
National pride	350,012	1–7	3.41	0.76	1.00	4.00
Job preference nationals	291,279	2–7	0.70	0.46	0.00	1.00
Men better leaders	287,638	3–7	0.44	0.50	0.00	1.00
Political ideology	361,880	1–7	5.59	2.31	1.00	10.00

homosexuality is justifiable, place less importance on obedience, and value tolerance and respect are more likely to have racially tolerant attitudes.

Lastly, in Panel C, column (10), all seven individualism subcomponents are included in the regression estimation. Similar results are reported where individualism's subcomponents' coefficients are significant with the expected sign except for attitudes toward abortion. The results indicate that the independent variation in the subcomponents of the individualism index is significantly related to racial tolerance. This finding supports the argument that individuals apply a consistent set of individualistic values across different aspects of life, including both economic and social domains. Moreover, the results provide further confidence that the observed associations are related to individualism as a comprehensive construct, rather than being driven by one specific component of the individualism indices.

Table 3 reports results using the individualism indices. Baseline demographic controls and wave and country dummies continue to be included. As shown in column (1), the economic individualism index is positive and significant at the 1% level. The social individualism index is also positive and significant at the 1% level, reported in column (2). In column (3), both economic and social individualism indices are included. Both indices retain a similar size coefficient and are significant at the 1% level. Column (4) reports the results using the overall individualism index, a combination of all seven measures of individualism. The coefficient on the individualism index is positive and significant at the 1% level. The result suggests that a one standard deviation increase in individualism increases racially tolerant attitudes by almost 8% of a standard deviation.

A potential concern regarding the results in Table 3 is that variables used in constructing the individualism indices reflect attitudes that may codetermine attitudes toward those of a different race. For example, parents who teach children that tolerance and respect for others is an important quality may also teach children to accept people that are different from them, including racial differences.

To minimize this concern, I create an additional individualism index following the methodology in Beugelsdijk et al. (2015) (BMH). BMH uses four questions in the WVS, which relate to the taste for private versus government ownership of business, whether it is a priority to make one's parents proud, and whether homosexuality and abortion are justified. Three of these four questions are included in my individualism indices; however, I include additional measures of individualism and exclude the question regarding making

Table 2 Individualism and racial tolerance, individual components

Dependent variable: racial tolerance	Panel A: Economic individualism			Panel B: Social individualism			Panel C: Individualism			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Private ownership	0.017*** (0.005)			0.009*** (0.004)						0.008* (0.004)
Competition good		0.027*** (0.004)		0.023*** (0.004)						0.021*** (0.004)
Free choice control			0.034*** (0.005)	0.033*** (0.005)						0.032*** (0.005)
Justifiable: Homosexuality					0.066*** (0.009)				0.057*** (0.008)	0.055*** (0.008)
Justifiable: Abortion						0.032*** (0.006)			0.006 (0.005)	0.007 (0.005)
Obedience							-0.034*** (0.006)		-0.024*** (0.005)	-0.020*** (0.005)
Tolerance respect								0.037*** (0.004)	0.034*** (0.004)	0.034*** (0.004)
Age	0.001 (0.001)	0.002* (0.001)	0.002** (0.001)	0.002* (0.001)	0.002** (0.001)	0.002* (0.001)	0.001 (0.001)	0.001* (0.001)	0.002* (0.001)	0.002* (0.001)
Age ²	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
Female	0.009 (0.006)	0.014** (0.005)	0.011* (0.006)	0.016** (0.005)	0.004 (0.005)	0.010* (0.005)	0.008 (0.006)	0.004 (0.006)	0.002 (0.005)	0.009* (0.005)
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wave dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-0.204*** (0.030)	-0.200*** (0.031)	-0.093** (0.030)	-0.192*** (0.029)	-0.054* (0.032)	-0.095** (0.031)	-0.113*** (0.030)	-0.094** (0.030)	-0.039 (0.031)	-0.146*** (0.030)

Table 2 (continued)

Dependent variable: racial tolerance	Panel A: Economic individualism			Panel B: Social individualism			Panel C: Individualism			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
#Observations	522,840	537,528	585,786	488,351	558,092	574,286	596,532	598,235	541,089	446,837
#Countries	113	112	113	112	111	113	113	113	111	109
#Waves	2-7	2-7	1-7	2-7	1-7	1-7	1-7	1-7	1-7	2-7
Adj. R-squared	8%	8%	8%	8%	8%	8%	8%	8%	9%	9%

See Appendix 1 for data description. Robust standard errors are clustered by country and in parentheses. *** $p < 0.001$, ** $p < 0.05$, * $p < 0.10$

Table 3 Individualism and racial tolerance, individualism indices

Dependent variable: racial tolerance					
	(1)	(2)	(3)	(4)	(5)
Economic individualism index	0.033*** (0.005)		0.031*** (0.004)		
Social individualism index		0.072*** (0.009)	0.069*** (0.009)		
Individualism index				0.077*** (0.009)	
Individualism BMH index					0.050*** (0.011)
Baseline controls	Yes	Yes	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes	Yes	Yes
Wave dummies	Yes	Yes	Yes	Yes	Yes
Constant	-0.207*** (0.030)	-0.062** (0.031)	-0.173*** (0.030)	-0.154*** (0.030)	0.135*** (0.037)
#Observations	488,351	541,089	446,837	446,837	343,236
#Countries	112	111	109	109	104
#Waves	2–7	1–7	2–7	2–7	3–7
Adj. R-squared	8%	9%	9%	9%	9%

Baseline controls include age, age squared, and an indicator variable equal to one if respondent is female. See Appendix 1 for data description. Robust standard errors are clustered by country and in parentheses. *** $p < 0.001$, ** $p < 0.05$, * $p < 0.10$

parents proud.⁶ The parents' proud question is available only in waves 3–7, reducing the number of observations by about 23%. To compare my results with prior works and minimize measurement error concerns, I create an individualism BMH index using PCA to extract the first principal from responses to the four WVS questions described above. The index is standardized, where a higher score reflects a greater level of individualism.

Column (10) reports similar results using the BMH individualism index. Individualism's coefficient is positive and significant at the 1% level. This suggests that the link between individualism and racial tolerance is not driven by the way individualism is constructed, as the results are robust to alternative measures. Thus, in the remaining analyses, individualism is measured by the combined individualism index that includes both economic and social aspects of individualism.

3.2 Robustness tests: additional demographic controls

Next, estimations are presented to check for omitted variable bias. First, the baseline specification is augmented to control for additional demographic variables, including marital status, income, education level, employment status, town size, and social class.

⁶ Davis and Williamson (2020) also drop this question from their individualism index.

Table 4 Individualism and racial tolerance, demographic controls

Dependent variable: racial tolerance				
	(1)	(2)	(3)	(4)
Individualism index	0.063*** (0.010)	0.062*** (0.010)	0.046*** (0.013)	0.046*** (0.012)
Married	-0.001 (0.007)	-0.000 (0.007)	0.003 (0.007)	-0.001 (0.008)
Income ^a	0.004* (0.002)	0.004* (0.002)	0.005 (0.003)	0.006* (0.003)
Education (middle)	0.069*** (0.014)	0.067*** (0.014)	0.066*** (0.018)	0.065*** (0.018)
Education (upper)	0.120*** (0.018)	0.119*** (0.018)	0.120*** (0.021)	0.128*** (0.021)
Employed		0.004 (0.008)		
Urban			0.014 (0.020)	
Social class: working class				0.055*** (0.014)
Social class: lower middle class				0.043** (0.015)
Social class: upper middle class				0.006 (0.021)
Social class: upper class				-0.119*** (0.035)
Baseline controls	Yes	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes	Yes
Wave dummies	Yes	Yes	Yes	Yes
Constant	-0.318*** (0.073)	-0.272*** (0.069)	-0.225** (0.092)	-0.135** (0.045)
#Observations	368,869	361,880	231,477	253,673
#Countries	109	109	95	95
#Waves	2-7	2-7	2-7	3-7
Adj. R-squared	9%	9%	10%	10%

Baseline controls include age, age squared, and an indicator variable equal to one if respondent is female. See Appendix 1 for data description. Robust standard errors are clustered by country and in parentheses. *** $p < 0.001$, ** $p < 0.05$, * $p < 0.10$

^aIncome scales are reported

Results are nearly identical if income dummies are included instead

Marriage could shift attitudes toward those of another race. Higher-income and education levels may promote equal opportunities for everyone in society, decreasing racially intolerant attitudes (Berggren & Nilsson, 2013, 2015; Glaeser, 2005; Mocan & Raschke, 2016). Married is a dummy variable equal to 1 if the respondent is married. Income is coded as a scale from one to eleven, where one indicates the lowest scale of income and

eleven is the highest. Education is classified into low, middle, and upper. Two dummy variables equal to 1 for middle and upper education are included, excluding the low education group.

Table 4, column (1) reports the results including married, income, and education variables. Individualism's coefficient retains its sign and significance, although its size is slightly reduced. Married is insignificantly related to racial attitudes. This suggests that people tend to marry those with similar cultural norms, including racial tolerance. Income is positive and marginally significant.⁷ The coefficients for both education variables suggest that a more educated individual has racially tolerant beliefs.⁸

Next, employment status is included in the analysis. Labor market outcomes and one's ability to find work are shown to determine tolerance toward others (Mocan & Raschke, 2016). Employed is measured as a dummy variable equal to one if the respondent indicates full-time, part-time, or self-employed employment status. A respondent's employment status does not significantly relate to racial tolerance. More importantly, however, individualism's coefficient is positive and significant.

In column (3), a respondent's town size is included as living in an urban center versus a rural community relates to social tolerance, including racial tolerance (Berggren & Nilsson, 2013). Urban is coded as a dummy variable equal to one if the respondent's town size is greater than 50,000.⁹ As shown, the results are not sensitive to the inclusion of an urban control variable. Urban insignificantly relates to racial tolerance, suggesting that other factors, such as education and culture, matter more than exposure to individuals who may look different than you.

Lastly, social class is included. How individuals view their social standing in society can affect perceptions toward others, including racial biases. Furthermore, social class determines social interactions and can influence attitudes toward race. Social class is classified into five groups, lower class, working class, lower middle class, upper middle class, and upper class. Four dummy variables equal to one to indicate working class, lower middle class, upper middle class, or the upper class are included, with lower class being the excluded group.

Column (4) reports the findings with the inclusion of social class variables. Individualism's relation to racial tolerance is unaltered, as individualism's coefficient is positive and significant. Interestingly, based on the social class indicator variables' coefficients, those self-identifying as holding a lower social class (working class or lower middle class) have significantly more racially tolerant attitudes than those identifying as upper class. Furthermore, the working and lower middle-class coefficients are significantly different from the upper-class coefficient.

3.3 Robustness tests: additional social controls

I further check the sensitivity of the results by including social variables that the literature highlights as being associated with racial biases. This includes generalized trust, trusting those of another nationality, religious attendance, religious affiliation, national pride, job

⁷ Results are unchanged if income is included as a set of dummy variables. Results are available upon request.

⁸ The education coefficients are significantly different from each other. This suggests that the response is nonlinear in education.

⁹ An urbanized area is defined as a population greater than 50,000 by the U.S. Census Bureau.

preferences for nationals, patriarchal attitudes, and political ideology. Baseline controls, including age, age², female, country and wave dummies, as well as demographic controls for married, income, education, and employed, are included in the estimations.¹⁰

Trust, measured as an indicator variable equal to one if most people can be trusted, can influence social attitudes, including racial tolerance. Furthermore, individualism's effect on social outcomes is magnified when conditioning on trust (Dutta et al., 2022). As reported in Table 5, column (1), individualism's coefficient is unaffected by the inclusion of generalized trust. Trust's coefficient is positive and significant at the 5% level, as expected.

I also examine a specific type of trust, trust in people of another nationality, measured as a dummy variable equal to one if trust is indicated. Attitudes toward others that are different from you, including race, nationality, and ethnicity, for example, may correlate. It is plausible that if you trust others of another nationality, you will also trust someone of a different race and hold racially tolerant beliefs. I control for this in column (2). Individualism remains significant with a reduced coefficient. Trusting someone of another nationality is positive and significant.

The influence of a society's dominant religion on racial tolerance is already accounted for by including country-fixed effects. Still, an individual's religiosity and religious affiliation may also be important. A substantial literature finds that religion is associated with tolerant attitudes toward race (Berggren et al., 2019). Religion is also significantly correlated with individualism (Davis, 2021) and with income (Bettendorf & Dijkgraaf, 2010), raising the possibility that the initial results are spurious. Column (3) controls for religious attendance, how often one attends religious services, and religious affiliation. Religious affiliation is measured as a set of dummy variables equal to one if an individual belongs to a major religious denomination: Roman Catholic, Protestant, Russian Orthodox, Jewish, Muslim, Hindu, Buddhist, other Christian, or Other. Non-religious is the reference group. Individualism's impact on racial tolerance is unaffected by controlling for religion. The only religious affiliations significantly correlated with racial tolerance are Jewish (negative) and other Christian (positive).¹¹

A measure of national pride, a dummy variable equal to one if proud to be of nationality, is included in column (4). Nationalism can affect attitudes toward race and may also correlate with collectivist attitudes. Individualism's coefficient is unaffected by this inclusion; national pride is negative but insignificant.

Labor market competition can reduce tolerance (Mocan & Raschke, 2016). To minimize concerns that job competition from immigrants may influence racial attitudes, I include a measure of job preference, a dummy variable equal to one if the respondent agrees that when jobs are scarce, employers should prioritize nationals over immigrants. Results reported in column (5) support this concern where job preference is negative and significantly related to racial tolerance. Importantly, individualism remains positive and significant.

Individuals who hold patriarchal attitudes toward women may have racially intolerant views. Patriarchal beliefs, emphasizing traditional gender roles and the subordination of women, can contribute to the reinforcement of power dynamics and hierarchies, including

¹⁰ Selection of included demographic control variables is based on data availability and the effect on sample size.

¹¹ Results for religious dummy variable affiliations are not reported in the table to save space but are available upon request.

Table 5 Individualism and racial tolerance, social controls

Dependent variable: racial tolerance	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Individualism index	0.062*** (0.009)	0.041*** (0.011)	0.063*** (0.010)	0.063*** (0.010)	0.060*** (0.010)	0.051*** (0.011)	0.059*** (0.010)	0.059*** (0.008)
Trust	0.029** (0.013)							
Trust other nationality		0.154*** (0.019)						
Religious attendance			-0.001 (0.002)					
Religious affiliation ^a			Yes					
National pride				-0.003 (0.007)				
Job preference nationals					-0.068*** (0.014)			
Men better leaders						-0.105*** (0.011)		
Political ideology							-0.015*** (0.002)	
Baseline controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Married, income, education, employed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Wave dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Country*Wave dummies	No	No	No	No	No	No	No	Yes
Constant	-0.274*** (0.071)	0.101*** (0.028)	-0.254*** (0.075)	-0.264*** (0.074)	-0.216** (0.071)	0.109*** (0.047)	-0.178** (0.076)	0.143*** (0.025)
#Observations	351,819	216,609	352,096	349,986	350,012	291,279	287,638	361,880

Table 5 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variable: racial tolerance								
#Countries	109	96	107	109	107	101	104	109
#Waves	2-7	5-7	2-7	2-7	2-7	3-7	2-7	2-7
Adj. R-squared	9%	11%	9%	9%	9%	10%	9%	12%

Baseline controls include age, age squared, and an indicator variable equal to one if respondent is female. See Appendix 1 for data description. Robust standard errors are clustered by country and in parentheses. *** $p < 0.001$, ** $p < 0.05$, * $p < 0.10$

^aReligious denominations include Roman Catholic, Protestant, Russian Orthodox, Jewish, Muslim, Hindu, Buddhist, Other Christian, and Other

Table 6 Individualism and tolerance toward other groups

Dependent variable	Muslim tolerance (1)	Jewish tolerance (2)	Immigrant tolerance (3)
Individualism index	0.116*** (0.008)	0.104*** (0.008)	0.079*** (0.007)
Baseline controls	Yes	Yes	Yes
Country dummies	Yes	Yes	Yes
Wave dummies	Yes	Yes	Yes
Constant	0.090** (0.044)	- 0.022 (0.039)	0.136*** (0.033)
#Observations	201,004	188,370	443,124
#Countries	66	64	109
#Waves	2–5	2–5	2–7
Adj. R-squared	8%	12%	10%

Baseline controls include age, age squared, and an indicator variable equal to one if respondent is female. See Appendix 1 for data description. Robust standard errors are clustered by country and in parentheses. *** $p < 0.001$, ** $p < 0.05$, * $p < 0.10$

those based on race. Individuals who adhere to patriarchal norms may perceive racial differences through a lens of superiority, which can influence their level of racial tolerance.

To control for this possibility, I include a dummy variable equal to one if the respondent agrees that men make better political leaders than women. As reported in column (6), individualism remains positive and significant. Patriarchal attitudes are negative and significantly correlated with racial tolerance, suggesting that individuals who believe men are better leaders also do not want someone of another race as their neighbor.

In column (7), a measure of political ideology is included, which helps to distinguish between individualism and a general preference for government intervention. Furthermore, right- versus left-leaning individuals may hold differing views toward race. The results suggest that this may indeed be true as a political ideology, coded from 1 (left) to 10 (right), is negative and significant, suggesting that individuals identifying as politically right are less racially tolerant. The impact of individualism on racial tolerance remains the same.

Lastly, country*wave dummies are included in column (8) to control for dynamic cross-country and time series effects. The results are similar to prior findings, where individualism is positive and significant.

3.4 Robustness tests: tolerance toward other groups

To provide robustness to the main finding that individualism promotes racial tolerance, Table 6 presents estimations using different dependent variables related to tolerance. Specifically, tolerance toward Muslims, Jews, and immigrants are examined. These variables are measured with the same IVS question as racial tolerance, where respondents indicate whom they do not want as a neighbor. Muslim, Jewish, and immigrant tolerance is coded as a binary indicator equal to one if each respective group is *not* selected. Baseline demographic controls and country and wave dummies are included in the estimations.

As reported, individualism has a similar relation to each measure of tolerance as it does with racial tolerance. Individualism's coefficient is positive and significant at the 1% level

in all three estimations. Interestingly, the size of individualism's impact is larger when predicting Muslim or Jewish tolerance, and the coefficients are significantly different from each other. The size of individualism's impact on immigrant tolerance is roughly the same as with racial tolerance, and the coefficients across the two specifications are not significantly different. One thing to note is the smaller sample size in both Muslim and Jewish tolerance regressions compared to the estimates with either immigrant or racial tolerance as the dependent variable.

Overall, these results suggest that individualism fosters socially tolerant attitudes toward minority groups. This finding provides confidence in the main conclusion that individualism underpins racial tolerance.

4 Conclusion

This paper presents empirical evidence that variations in racial tolerance reflect fundamental differences in cultural values. The results suggest that individualism promotes racially tolerant attitudes.

An important caveat regarding the results is that they may not reflect causal effects. Cultural variables may be endogenous, raising issues related to omitted variable bias and reverse causation. For example, economic development may promote more modern perspectives regarding racial tolerance. While the estimates include country-fixed effects, which capture the impact of modernization on individualism at the national level, they do not control for the impact of differential rates of modernization across subnational regions. More broadly, the individualism index combines information on beliefs about abortion, homosexuality, and obedience that are plausible outcomes of social processes that also influence attitudes toward racial tolerance. Another concern, which applies to any survey-based data, regards the potential impact of measurement error on coefficient estimates.

The results help explain the persistence of racial intolerance and indicate an important channel through which individualistic values formed in the distant past influence contemporary social outcomes. This result implies that prior empirical associations documenting racial inequality and economic and social outcomes may not be well-founded. It is possible that these associations primarily reflect the common influence of cultural values related to individualism-collectivism.

Appendix 1 Data description

Variables	WVS description
<i>Dependent variables</i>	
Racial tolerance	Equal to one if respondent did not indicate that people of a different race is a group of people they do not want as neighbors. Data are standardized
Muslim tolerance	Equal to one if respondent did not indicate that Muslim people group they do not want as neighbors. Data are standardized
Jewish tolerance	Equal to one if respondent did not indicate that Jewish people is a group they do not want as neighbors. Data are standardized

Variables	WVS description
Immigrant tolerance	Equal to one if respondent did not indicate that immigrants/foreign workers is a group of people they do not want as neighbors. Data are standardized
<i>Individualism measures</i>	
Private ownership	Coded from 1 to 10 where 10 indicates completely agree that private ownership of business and industry should be increased versus government ownership of business and industry should be increased. Data are standardized
Competition good	Coded from 1 to 10 where 10 indicates completely agree that competition is good versus competition is bad. Data are standardized
Free choice control	Coded from 1 to 10 where 10 indicates a great deal of free choice and control over life versus feeling no control at all to what happens to them. Data are standardized
Justifiable: Homosexuality	Coded from 1 (never justifiable) to 10 (always justifiable): homosexuality is justifiable. Data are standardized
Justifiable: Abortion	Coded from 1 (never justifiable) to 10 (always justifiable): abortion is justifiable. Data are standardized
Obedience	Dummy variable = 1 if obedience is an important quality that children can be encouraged to learn at home. Data are standardized
Tolerance and respect	Dummy variable = 1 if tolerance and respect for other people is an important quality that children can be encouraged to learn at home. Data are standardized
<i>Individualism indices</i>	
Individualism BMH index	Index created by extracting the first principal component from four individualism questions: (1) private ownership, (2) make parents proud, (3) homosexuality justifiable, (4) abortion justifiable. A higher score reflects a greater level of individualism. Index is standardized
Economic individualism index	Index created by extracting the first principal component from three economic individualism questions: (1) private ownership, (2) competition good, (3) free choice and control. A higher score reflects a greater level of individualism. Index is standardized
Social individualism index	Index created by extracting the first principal component from four social individualism questions: (1) homosexuality justifiable, (2) abortion justifiable, (3) obedience, (4) tolerance and respect. A higher score reflects a greater level of individualism. Index is standardized
Individualism index	Index created by extracting the first principal component from the three economic and the four social individualism questions: (1) private ownership, (2) competition good, (3) free choice and control, (4) homosexuality justifiable, (5) abortion justifiable, (6) obedience, (7) tolerance and respect. A higher score reflects a greater level of individualism. Index is standardized
<i>Demographic controls</i>	
Age	Equal to age of respondent
Age ²	Equal to age squared
Female	Dummy variable = 1 if female
Married	Dummy variable = 1 if married
Income	Income scales coded as a variable going from one to eleven, where one indicates the lower step in the scale and eleven the highest step in income scale
Education	Dummy variables = 1 for low, middle, and upper, respectively. Low education is excluded group

Variables	WVS description
Employed	Dummy variable = 1 if respondent indicated her employment status as full-time employed, part-time employed, or self-employed
Urban	Dummy variable = 1 if town size is 50,000 or greater
Social Class	Dummy variables = 1 for five subjective social class categories, lower class, working class, lower middle class, upper middle class, and upper class, respectively. Lower class is excluded group
<i>Social controls</i>	
Trust	Dummy variable = 1 if answered yes to the question most people can be trusted
Trust other nationality	Dummy variable = 1 if answered trust completely or trust a little to the question how much do you trust people of another nationality
Religious attendance	Coded from 1 (never) to 8 (more than once a week) to the question: How often do you attend religious services? Higher score reflects more religious service attendance
Religious denomination dummies	Dummy variables = 1 if individual belongs to major religious denomination: Roman Catholic, Protestant, Russian Orthodox, Jewish, Muslim, Hindu, Buddhist, Other Christian, or Other, respectively. Do not belong is excluded group
National pride	Dummy variable = 1 if respondent is very proud or proud to be of nationality of their country
Job preference nationals	Dummy variable = 1 if agree that when jobs are scarce employers should give priority to nation people than immigrants
Men better leaders	Dummy variable = 1 if agree or strongly agree that "On the whole, men make better political leaders than women do"
Political ideology	Coded from 1 to 10 to the question: How would you place your views on this scale, left (1) to right (10)? Higher score represents more right leaning ideology

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