



Challenging Evolution in Public Schools: Race, Religion, and Attitudes toward Teaching Creationism

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Abstract

Researchers argue that white evangelical Christians are likely to support teaching creationism in public schools. Yet, less is known about the role religion may play in shaping attitudes toward evolution and teaching creationism among blacks and Latinos, who are overrepresented in U.S. conservative Protestant traditions. This study fills a gap in the literature by examining whether religious factors (e.g., religious affiliation and Biblical literalism) relate to differences in support for teaching creationism between blacks and Latinos compared to whites and other racial groups. Using a nationally representative survey (N = 9,425), we find that although black and Latino Americans support teaching creationism more than other groups, religion plays a stronger role among blacks in shaping support for teaching creationism instead of evolution. Results add an important racial dimension to scholarly discussions on religion and science and suggest further exploration of race alongside other factors that may contribute to support for teaching creationism.

Keywords

creationism, evolution, race, black, Latino

Research examining debates about creationism link support for its teaching in U.S. public schools to religious factors (Binder 2007; Haider-Markel and Joslyn 2008; Evans and Evans 2010; Baker 2013; Hill 2014). These studies indicate that religiosity and affiliation with conservative Protestant traditions, in particular, are among the strongest and most consistent predictors of evolution skepticism—even more than educational attainment. In particular, those who are evangelical Christians and those who have higher levels of religious service attendance seem to show higher levels of evolution opposition and higher support for teaching creationism (Woodrum and Hoban 1992; Haider-Markel and Joslyn 2008; Hill 2014). While existing studies establish the importance of religion for understanding attitudes toward teaching creationism in the classroom, they largely focus on attitudes among white conservative Protestants or evangelical Christians. Few studies have given specific attention to how attitudes toward teaching creationism may vary across racial- and ethnic-minority groups, such as black Americans and those who are Latino.¹

¹We use *Latino*, *Latino American*, and *Hispanic* interchangeably.

This gap in the literature is puzzling given that black and Latino Americans are overrepresented among the theological traditions most opposed to evolution. For instance, black Americans overwhelmingly identify as conservative Protestant more than any other religious tradition (Pew Research Center 2009). In fact, a 2009 Pew Research Center report indicates that 78 percent of black Americans are Protestant, compared to only 51 percent of the overall U.S. population. Similarly, Latinos in the United States represent a growing demographic with high levels of religious adherence. Although Latinos have largely affiliated themselves with Catholicism (D'Antonio, Dillon, and Gautier 2013), they are also increasingly identifying with evangelical Protestant traditions (Pew Research Center 2007, 2014; Mulder, Ramos, and Marti 2017). In 2014, 22 percent of U.S.

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Latinos identified as Protestant compared to 20 percent in 2007 (Pew Research Center 2007, 2014). Moreover, Latino evangelicals, in particular, show higher levels of religious commitment than their white evangelical counterparts (Pew Research Center 2007, 2014; Mulder et al. 2017). These trends among racial- and ethnic-minority groups are particularly relevant to the creationism–evolution debate given that previous studies indicate that membership in a conservative Protestant tradition may be linked to evolution skepticism (Haider-Markel and Joselyn 2008; Evans and Evans 2010; Baker 2013; Hill 2014).

There are differences in the way that religion operates among black Americans and Latinos that lead us to believe these groups could vary from white conservative Protestants in terms of how they view science education and support for teaching evolution or creationism, in particular. For racial and ethnic minorities in the United States, religion has long been a cornerstone for solidarity and mobilization (Morris 1984; Lincoln and Mamiya [1990] 2001; Cadge and Ecklund 2007; Wilson 2008; Shelton and Emerson 2012). Church spaces and theological frameworks continue to shape the identities and moral decision-making processes of Latinos and black Americans, making religion particularly salient among these groups (McDaniel 2008; Matovina 2012). Moreover, the religious traditions that are prominent among Latino and black Americans also have tension with some aspects of science—notably, evolution (Espinosa 2008; Pew Research Center 2009; Korver-Glenn, Chan, and Ecklund 2015). Still, the prevalence of creationist beliefs among these groups as well as preference for teaching creationism instead of or alongside evolution is underexamined. Recently a small number of studies have begun to explore racial and ethnic differences in perceptions of science education using in-depth interviews (Korver-Glenn et al. 2015; Bolger and Ecklund 2018). Thus far, fewer studies have explored this question using nationally representative survey data to examine attitudes toward education on human origins.

This study seeks to fill a lacuna in the literature by examining how, among whites, black Americans, Latinos, and those of other races, religion shapes attitudes toward teaching creationism. Using a nationally representative survey, we compare the extent to which religious affiliation, religious service attendance, and Biblical literalism are associated with racial and ethnic differences in attitudes toward teaching creationism. Our results indicate that both those who identify as black and those who identify as Latino have higher odds than whites and other races of supporting the teaching of creationism instead of evolution. In addition, religion plays a stronger role among black Americans than among those who are Latino in explaining support for teaching creationism instead of evolution. We also found that Latinos have higher odds than whites of supporting teaching creationism alongside evolution, patterns that are explained in part by education, acculturation, and political conservatism as well as religious characteristics.

Race, Religion, and Science Education

Evolution Skepticism and Science Education

Studies consistently indicate that evolution skepticism in the United States remains relatively high (Keeter and Horowitz 2009; Baker 2013; Pew Research Center 2013; Gallup 2016). Some studies estimate that nearly half of Americans give credence to the literal Biblical account of creation (Keeter and Horowitz 2009; Gallup 2016) and that 46 percent of Americans believe evolutionary theory is inconsistent with their religious beliefs (Gallup 2016).

However, percentages representing public opinion on evolution vary across studies and polls based on question framing (Ecklund and Scheitle 2018). For example, evangelicals are more likely than other religious groups to be young-Earth creationists, who believe that the world as we know it was created in six literal days as described in the Biblical book of Genesis. However, depending on question wording, many religious people, even evangelicals, are likely to affirm evolution if it does not conflict with their beliefs about God’s sovereignty and involvement in the world (Ecklund and Scheitle 2018).

Research offers several explanations for conservative Christian skepticism of evolution (Mazur 2004). Several studies find that individuals who hold a literal view of the Bible are more likely than non-Biblical literalists to believe that humans have not evolved (Mazur 2004; Miller, Scott, and Okamoto 2006). As Miller et al. (2006:765) explain, the Biblical literalist “sees Genesis as a true and accurate account of the creation of human life that supersedes any scientific finding or interpretation.” Other measures of religious conservatism, such as religious service attendance, are also correlated with evolution skepticism (Woodrum and Hoban 1992; Mazur 2004; Haider-Markel and Joslyn 2008). In essence, those who attend religious services more often are considerably more likely to hold creationist views (Deckman 2002; Mazur 2004; Haider-Markel and Joslyn 2008; Hill 2014). For instance, Mazur (2004) finds that only a third of those who attended church at least weekly believed in evolution, compared to two thirds of those who attended church services two or fewer times a year. Hill (2014), in addition, finds that embeddedness within a strong social network of co-religionists who also hold creationist views moderates the effects of personal religiosity with long-term beliefs in creationism. In other words, individuals who display high personal religiosity and who are also part of a homogenous religious social network have higher odds of maintaining creationist beliefs over time (Hill 2014).

Evolution skepticism beyond conservative Protestantism is reflected in views involving science education. In U.S. public schools, the debate surrounding teaching evolution and creationism remains largely unresolved (Woodrum and Hoban 1992; Haider-Markel and Joslyn 2008; Plutzer and Berkman 2008; Long 2011; Baker 2013). Nearly a century after the notorious 1925 Scopes Monkey Trial, religion

continues to take center stage in science education cases and discussions of anti-evolution legislation (Moore and Miksch 2003; Superfine 2009; Johnson, Scheitle, and Ecklund 2016). Several of these court cases and several social science studies focus on the specific role conservative Protestants have played in attempting to move forward non-evolutionary curriculum. For instance, in cases such as *Freiler v. Tangipahoa* and the highly publicized *Kitzmiller v. Dover* case, the courts ruled against the inclusion of intelligent design in public school science education, equating it to “creation science” and associating it with the broader creationist movement (Moore and Miksch 2003; Superfine 2009). In a study of “anti-evolution” legislative attempts across 49 states from 2000 to 2012, Johnson et al. (2016) found that the conservative Protestant composition of a state influences anti-evolution public opinion within the state and indirectly influences curricular policy legislation against evolution through conservative Protestants serving in a state’s Republican Party.

In contrast to conservative Protestants, the Catholic Church has taken a more accepting stance when it comes to evolution, with prominent Catholic figures from Cardinal John Henry Newman in the mid-eighteenth century to recent popes expressing support for the theory of evolution (Newman 1868; John Paul II 1996; Francis 2014). Nevertheless, the Church tends to avoid making official pronouncements on scientific matters, and studies indicate that support for teaching creationism varies between conservative and liberal Catholics (Deckman 2002; Sherkat 2011). These studies underscore tensions—even among Catholics—about teaching evolution.

Scholarship examining attitudes on theories of human origins finds varying mechanisms through which religious individuals navigate discourse on creationism/evolution teaching in public schools (Binder 2007; Haider-Markel and Joslyn 2008; Plutzer and Berkman 2008; Berkman and Plutzer 2010; Ecklund 2010; Jelen and Lockett 2010; Levesque and Guillaume 2010; Evans 2011; Baker 2013). For instance, Evans (2011) notes that the intelligent-design movement reflects conservative Protestant ideas that scientific methods can substantiate literalist readings of the Bible. Religious actors defend creationist tenets by incorporating scientific data to show mutual support between scripture and science. This phenomenon still has traction in the U.S. conservative Protestant community, although contemporary research on the science–faith interface indicates that it is not as widespread as previously posited (Espinosa 2008; Jelen and Lockett 2010; Baker 2013; Ecklund and Scheitle 2018).

Race, Religion, and Science

Despite a burgeoning literature examining the relationship between religious conservatism and evolution skepticism, fewer studies closely examine racial and ethnic differences in attitudes related to evolutionary theory and teaching

evolution in U.S. public schools (Korver-Glenn et al. 2015). Yet, studies consistently show that religion plays a central role in racial- and ethnic-minority communities in the United States. Moreover, when it comes to religion and attitudes toward science education, there are historical and social differences that characterize black and Latino Americans apart from their white counterparts (Lincoln and Mamiya [1990] 2001; Espinosa 2008; Korver-Glenn et al. 2015).

Racial and ethnic minorities are among the most highly religious groups in the United States. Nearly 60 percent of black Americans affiliate themselves with historically black Protestant churches, while another 15 percent affiliate themselves with evangelical denominations (Pew Research Center 2009). Both of these groups show high levels of religious observance. For instance, 58 percent of historically black church members and 66 percent of black members of evangelical churches report attending services weekly (Pew Research Center 2009). Moreover, more than four fifths of historically black and evangelical church members indicate religion is “very important” in their lives (Pew Research Center 2009). Similarly, Latinos in the United States report high levels of church attendance and religious adherence. A Pew Research Center report (2014) indicates that among Latino Catholics and Protestants, 40 percent report weekly church attendance, with considerably higher rates of church attendance for Latino Protestants (62 percent) compared to Latino Catholics (40 percent). Further, 60 percent of Latino Christians indicate that religion is “very important” in their lives (Pew Research Center 2014). Interestingly, national surveys reveal that Latinos are increasingly shifting from Catholicism to Protestant evangelical traditions, which show higher levels of religious and social conservatism (Espinosa 2004; Lugo 2007; Pew Research Center 2007, 2014; Mulder et al. 2017). For both of these communities, religious institutions could serve as socializing agents that bear considerable influence in shaping attitudes toward teaching creationism (Haider-Markel and Joslyn 2008; Wilson 2008; Jelen and Lockett 2010).

There is reason to consider the views of black and Latino Christians apart from white Christians. Scholars argue that members of largely black churches find in the Christian narrative tools for resisting racial oppression (Morris 1984; Shelton and Emerson 2012). This racially specific approach to Christianity not only abides by core evangelical beliefs, such as Biblical authority and a personal relationship with God, but also is concerned with the black community’s struggles for socioeconomic justice and racial equality (Baer and Singer 1992; Patillo-McCoy 1998; Lincoln and Mamiya [1990] 2001; Pinn 2003). Black conservative Protestants, therefore, are viewed as distinct from the larger white conservative Protestant body in the United States (Woodberry et al. 2012). When it comes to teaching of human origins, we anticipate that black Americans will hold a stronger stance against teaching evolution given black Christians’ higher levels of religious commitment.

Although those who are Latino bear a different historical experience in the United States when compared to black Americans, religion plays a similar role in shaping attitudes regarding social issues and social activism (Espinosa 2008; Ecklund et al. 2013; Espinosa 2014; Mulder et al. 2017). Scholarship on the adaptation of the U.S. Latino population highlights the vital role of religion, describing it as a “powerful wellspring of Latino identity, cultural cohesiveness, and social organization” (Diaz-Stevens and Stevens-Arroyo 1998:33–34; see also Espinosa 2004; Wolfinger, Wilcox, and Hernández, 2009; Matovina 2012). Indeed, contemporary accounts of Latino activism note the prominent role Latino Catholics and Protestants have taken in advocating for religiously conservative and socially progressive stances at the state and national levels (Espinosa, Elizondo, and Miranda 2005; Espinosa 2014; Mulder et al. 2017). For example, on social issues, religiously conservative Latino Catholics and Protestants who attend church regularly overwhelmingly identify themselves in opposition to same-sex marriage and abortion (Ellison, Echevarria, and Smith 2005; Ellison, Acevedo, and Ramos-Wada 2011; Ellison, Wolfinger, and Ramos-Wada 2013). When it comes to the creationism–evolution debate, the scant research that exists suggests that Latinos show support for teaching creationism only or coupled with evolution (Espinosa 2008). Given the high levels of religious conservatism and religiosity among Latinos, we anticipate that Latinos will also be more supportive of teaching creationism in public schools. Bearing in mind the influence of Catholicism, we anticipate that Latinos will display higher odds of support for teaching creationism alongside evolution compared to their black American, white, or other-race counterparts.

Our analysis in this article fills an important gap in the literature. Although evolution and creationism are highly contested within the United States, we know little about how racial-ethnic groups differ on the subject. In fact, in quantitative research into views on human origins, scholars generally view race and ethnicity as a control variable (Haider-Markel and Joslyn 2008; Levesque and Guillaume 2010; Baker 2013; Ecklund and Scheitle 2018). The closest attempts at discussing racial and ethnic differences about human origins explanations are Evans and Evans (2010) and Lac, Hemovich, and Himelfarb (2010). In their 2004 General Social Survey analysis of attitudes regarding evolution, Evans and Evans (2010) find that being evangelical or black Protestant serves as a stronger predictor of evolution skepticism than educational attainment, gender, or living in the South. Further, Lac et al., studying creationism-only supporters, found that Latino respondents were 1.54 times more likely than white respondents to favor creationism-only education.

This study explores the extent to which race, ethnicity, and religion are linked with attitudes toward teaching creationism in public schools. Using a unique nationally representative sample of U.S. adults, we examine how black Americans and those who are Latino, the latter of whom

represent the fastest-growing student population in the nation, may differ from one another and from other racial groups in their views of teaching creationism, either as a substitute for or alongside teaching evolution.

Hypotheses

While studies to date do not directly examine the relationship between religion and views on science among racial and ethnic minorities, they suggest important directions for inquiry. Research suggests that religious observance is one of the strongest predictors of evolution skepticism (Haider-Markel and Joslyn 2008). Given higher levels of religiosity and Biblical literalism among Latinos and respondents who identify as black (Espinosa, Elizondo, and Miranda 2003; Pew Research Center 2007, 2009, 2014), we expect greater support for teaching creationism either alongside or instead of evolution among Latinos and blacks compared to whites and other racial groups.

Previous literature finds that Latinos show overwhelming support for teaching creationism in public schools (Espinosa 2008), and black Americans are overrepresented in Christian religious traditions that oppose evolution (Kosmin, Keysar, and Lerer 1992; Ellison and Musick 1995; Evans 2013). Thus, we expect blacks will show the highest levels of skepticism toward evolution and endorse creationist teaching instead of evolution in the classroom when compared to other racial groups. We also anticipate that Latinos will display high levels of support for creationism-and-evolution teaching. Given Catholicism’s influence among Latinos, we expect Latinos will be more supportive of teaching creationism alongside evolution compared to other racial groups.

Data and Method

Sample

The study uses data from a nationally representative survey of American adults. Conducted by the firm GFK, the survey was administered to its online research panel called KnowledgePanel. Panel members were recruited using a statistically valid sampling method with a published sample frame of residential addresses that covers 97 percent of U.S. households, reflecting the U.S. Census. Sampled non-Internet households were provided a netbook computer and free Internet service to participate in the survey. Data collection took place from December 27, 2013, through January 13, 2014. The survey randomly selected 16,746 panel members from the KnowledgePanel, of which 10,241 completed the survey, yielding a final-stage completion rate of 62.7 percent.²

²Taking into account stages of recruitment into the panel and the completion of a panel profile, the cumulative response rate for the

For the analyses used in this article, after listwise deletion of cases with missing data across variables used in the analyses and of cases identified as unreliable,³ we rely on a sample of $N = 9,425$, representing a random sample of the general U.S. English- and Spanish-speaking adult population.⁴

Analytic Strategy

We use logistic regression techniques to explain the differences among racial and ethnic groups in supporting creationist teaching in classrooms. Specifically, we examine whether racial and ethnic minorities show greater support for teaching creationism in school, either alongside or instead of evolution, and whether this support is explained by religious factors. We estimate three models: the first examines the bivariate effects of race and ethnicity, the second introduces controls, and the third introduces religious factors.

Dependent Variables

Teaching creationism in schools. We analyze two survey questions to capture an important nuance in the relationship between support for creationism and evolution: “Would you generally favor or oppose teaching creationism along with evolution in public schools?” and “Would you generally

survey was 5.6 percent. Although this response rate may appear lower than that of other surveys, it is important to recognize that comparing response rates for a long-term panel and a one-time survey involves different dynamics and demands upon individuals. There are also significant advantages to surveys derived from online panels. In research comparing sample representativeness and response quality between a random-digit-dial telephone survey and an online panel survey, Chang and Krosnick (2009) found that the latter provided the representativeness of the former while reducing measurement error, survey satisficing, and social desirability response bias. In short, online panels provide an ideal balance between representativeness and response quality.

³The survey presented respondents with six different theories about the origin and development of the universe and life on Earth and measured how likely they thought each of them was true or false. Brief descriptions were given for each of the following theories: (1) creationism, (2) recent human creation, (3) God-guided evolution, (4) intelligent design, (5) God-initiated evolution, and (6) natural evolution. Respondents were not forced to choose one view, as individuals are often unsure of what they think regarding theories of human origins and may report inconsistent views (Ecklund and Scheitle 2018). Responses were measured on a five-point Likert scale from *definitely false* to *definitely true*. We dropped from our analysis 102 cases of unreliable data—those who had selected *definitely true* for all six accounts of evolution.

⁴There were no systematic differences by race, gender, education, or income among those who refused to answer questions. The only notable difference is that 40 percent of those who refused to answer questions about teaching creationism in schools fall into the “other religion” category and listed *refused* or *something else* for religious affiliation.

favor or oppose teaching creationism instead of evolution in public schools?” This latter item represents a stronger stance against teaching evolution. Response categories to both questions were on a five-point Likert scale from *strongly favor* to *strongly oppose*. We recoded these responses for our analysis into binary categories indicating whether or not the respondent supports this option either “strongly” or “somewhat.”

Independent Variables

We measured race and ethnicity using a four category variable: white, black, Latino, and other. To assess the effects of religion, we include variables for religious tradition, religious service attendance, personal religiosity, and Biblical literalism. Religious tradition was measured using a modified version of the RELTRAD variable (Woodberry et al. 2012), resulting in dummy variables for conservative Protestant, other Christian, Catholic, other religion, and non-religious. We collapse evangelical and black Protestant into the category “conservative Protestant.”⁵ We also collapse mainline Protestant and Christians who are neither evangelical nor Catholic into the category of “other Christian.”

We measured religious service attendance as a nine-category variable ranging from *never* to *more than once a week*. We also included a four-category measure of whether the respondent considers himself or herself a religious person (*not religious at all* to *very religious*). We also included a binary variable indicating Biblical literalism, that is, whether or not the respondent believes that the Bible is “the actual word of God and is to be taken literally, word for word.”

Control Variables

We also included sociodemographic controls for income, education, gender, age, region, and political ideology. For Hispanics, we included a control for whether respondents took the survey in Spanish and indicated they were Spanish proficient (vs. bilingual or English proficient). We use this combined variable as a measure for primary language and a proxy for acculturation given prior studies that consistently point to language as a reliable measure of acculturation (Cuéllar, Arnold, and Maldonado 1995; Marín and Gamba 1996). Annual household income was a 19-category variable ranging from less than \$5,000 to \$175,000 or more. Education was a 14-category variable indicating the highest degree attained. Gender was coded as a dummy variable with female = 1. Age was measured as a seven-category variable ranging from 18 to 24, to 75+. Region was represented by a variable indicating residence in the South (South = 1).

⁵We collapse black Protestant with evangelicals due to multicollinearity issues with the variable black. In a separate analysis, we separated black Protestant and evangelicals, and results were largely the same.

Table 1. Descriptive Statistics of Variables Used in Analysis.

Variable	Weighted			Unweighted			
	N	M	Linearized SE	M	SD	Min.	Max.
Support for creationism alongside evolution	9425	0.56	0.01	0.56	0.50	0	1
Support for creationism instead of evolution	9425	0.47	0.01	0.47	0.50	0	1
White (reference)	9425	0.68	0.01	0.72	0.45	0	1
Black	9425	0.11	0.00	0.09	0.29	0	1
Latino	9425	0.13	0.01	0.12	0.32	0	1
Other	9425	0.08	0.00	0.07	0.26	0	1
Household income	9425	11.89	0.06	11.63	4.65	1	19
Education	9425	10.07	0.03	10.42	2.07	1	14
Female	9425	0.52	0.01	0.49	0.50	0	1
Age	9425	3.78	0.02	4.06	1.67	1	7
South	9425	0.37	0.01	0.35	0.48	0	1
Political conservatism	9425	4.12	0.02	4.16	1.53	1	7
Spanish	9425	0.04	0.00	0.04	0.19	0	1
Conservative Protestant (reference)	9425	0.25	0.01	0.25	0.43	0	1
Other Christian	9425	0.20	0.01	0.21	0.41	0	1
Catholic	9425	0.24	0.01	0.24	0.43	0	1
Other religion	9425	0.15	0.01	0.14	0.35	0	1
Nonreligious	9425	0.16	0.01	0.15	0.36	0	1
Attendance	9425	4.15	0.04	4.29	2.77	1	9
Religiosity	9425	2.55	0.01	0.59	1.01	1	4
Literalism	9425	0.19	0.01	0.19	0.39	0	1

Source: Religious Understandings of Science Survey 2014.

Political conservatism was measured on a seven-point scale of *extremely liberal* to *extremely conservative*.

Results

Table 1 reports means and standard deviations of all variables included for the analysis. Respondents who identified as black constitute 11 percent of the weighted sample and Latinos constitute 13 percent. We find that 56 percent of the general population supports the teaching of evolution along with creationism, while 47 percent favor the teaching of creationism instead of evolution.

Table 2 presents additional descriptive statistics by racial categories. Looking at the distribution of the dependent variables, we find that a higher percentage of black (58 percent) and Latino Americans (57 percent) compared to whites (44 percent) and other races (42 percent) supported teaching creationism in the classroom instead of (but not alongside) evolution. These differences are statistically significant. Examining religious affiliation, we find that conservative Protestants, who compose 24 percent of the white population, are a sizeable majority among black respondents but a minority among Latino populations (58 percent and 13 percent, respectively). We also find that black Americans report attending church services at significantly higher rates than whites, Latinos, and others, although Latinos also report high rates of church attendance compared to whites and people of

other races. Respondents who identified as black are also significantly more likely than others to be Biblical literalists (31 percent), followed by Latinos (25 percent).

In Table 3, Models 1, 2, and 3 show that black Americans and whites are nearly identical in their support for teaching creationism alongside evolution. Latinos have significantly higher odds than others to support teaching creationism alongside evolution, but once we add controls, such as education, political conservatism, and language (Model 2), we see no statistically significant differences across racial or ethnic groups. Adding religious affiliation, religious service attendance, personal religiosity, and Biblical literalism (Model 3) brings the differences in coefficients to nearly zero. In ancillary analysis (not shown here), we entered the religious tradition variables before demographic controls, and this itself was also sufficient to eliminate the statistical significance of Latinos. Sobel tests for mediation (results available upon request) reveal that patterns observed among Latinos in Model 1 were partially explained by variance in education and political ideology (Model 2).⁶ That is, compared to whites, Latinos had lower levels of education and were more politically conservative, both of which contribute to a less inclusive stance toward teaching evolution. Supplemental analyses suggested that acculturation processes may also be partially explaining

⁶For more information on Sobel tests, see Baron and Kenny (1986).

Table 2. Descriptive Statistics of Weighted Data, Main Dependent and Independent Variables by Race and Ethnicity (N = 9,425).

Variable	White			Black			Latino			Other Race		
	M	Linearized SE	95% CI	M	Linearized SE	95% CI	M	Linearized SE	95% CI	M	Linearized SE	95% CI
Creationism alongside evolution	0.56	0.01	[0.54, 0.57]	0.55	0.02	[0.51, 0.60]	0.62	0.20	[0.58, 0.66]	0.54	0.03	[0.49, 0.60]
Creationism instead of evolution	0.44	0.01	[0.42, 0.46]	0.58	0.02	[0.54, 0.62]	0.57	0.02	[0.53, 0.61]	0.42	0.03	[0.37, 0.48]
Conservative Protestant	0.24	0.01	[0.22, 0.25]	0.58	0.02	[0.54, 0.63]	0.13	0.01	[0.10, 0.15]	0.16	0.02	[0.12, 0.19]
Other Christian	0.23	0.01	[0.22, 0.25]	0.15	0.01	[0.12, 0.17]	0.11	0.01	[0.08, 0.13]	0.17	0.02	[0.13, 0.21]
Catholic	0.22	0.01	[0.20, 0.23]	0.05	0.01	[0.03, 0.07]	0.54	0.02	[0.50, 0.58]	0.14	0.02	[0.11, 0.18]
Other religion	0.14	0.01	[0.13, 0.15]	0.15	0.02	[0.12, 0.18]	0.12	0.01	[0.09, 0.14]	0.30	0.03	[0.25, 0.35]
Nonreligious	0.17	0.01	[0.16, 0.18]	0.07	0.01	[0.05, 0.09]	0.11	0.01	[0.08, 0.14]	0.22	0.02	[0.18, 0.27]
Attendance	4.03	0.04	[3.94, 4.11]	5.09	0.12	[4.85, 5.34]	4.35	0.11	[4.15, 4.56]	3.64	0.13	[3.38, 3.90]
Religiosity	2.52	0.02	[2.49, 2.55]	2.95	0.04	[2.86, 3.03]	2.53	0.04	[2.45, 2.60]	2.36	0.05	[2.25, 2.47]
Literalism	0.17	0.01	[0.16, 0.18]	0.31	0.02	[0.27, 0.35]	0.25	0.02	[0.22, 0.29]	0.12	0.02	[0.08, 0.15]

Source: Religious Understandings of Science Survey 2014.

Note: CI = confidence interval.

Table 3. Odds Ratios of Logistic Regression Models Predicting Support for Teaching Creationism alongside Evolution.

Variable	Model 1			Model 2			Model 3		
	OR	SE	<i>p</i>	OR	SE	<i>p</i>	OR	SE	<i>p</i>
Race and Ethnicity (reference white)									
Black	0.99	0.10		1.09	0.11		1.01	0.11	
Latino	1.32	0.12	**	1.19	0.13		1.01	0.12	
Other	0.95	0.11		1.04	0.12		1.09	0.13	
Household income				1.00	0.01		0.99	0.01	
Education				0.95	0.02	**	0.95	0.02	**
Female				1.04	0.06		0.97	0.06	
Age				0.97	0.02	†	0.93	0.02	***
South				0.96	0.06		0.94	0.06	
Political conservatism				1.23	0.02	***	1.16	0.03	***
Spanish				1.53	0.31	*	1.63	0.33	*
Religious tradition (reference conservative Protestants)									
Other Christian							1.07	0.10	
Catholic							1.37	0.13	***
Other religion							0.85	0.09	
Nonreligious							0.42	0.05	***
Attendance							0.95	0.01	**
Religiosity							1.39	0.07	***
Literalism							0.57	0.05	***
Constant	1.25	0.04	***	0.97	0.20		1.08	0.27	
Pseudo R ²	0.002			0.022			0.067		
AIC	12674.7			12427.3			11874.7		
BIC	12703.3			12506.0			12003.4		
N	9,425			9,425			9,425		

Source: Religious Understandings of Science Survey 2014.

Note: OR = odds ratio; AIC = Akaike information criterion; BIC = Bayesian information criterion.

†*p* < .10. **p* < .05. ***p* < .01. ****p* < .001.

Hispanics' attitudes toward teaching both creationism and evolution.⁷

For Model 3, Sobel tests also revealed that patterns among Latinos were partially explained by Catholic and nonreligious identity. Specifically, Latinos were more likely to be Catholic and less likely to be nonreligious, which is significant given the Catholic Church's views of religion and science as compatible. Prior research also indicates that Catholics show significantly greater support than conservative Protestants for teaching evolution alongside creationism (Haider-Markel and Joslyn 2008). Further, we found religious service attendance and personal religiosity were significant indirect pathways to support for teaching creationism alongside evolution. It could be that the higher levels of religious service attendance and personal religiosity among Latinos compared to whites increases the salience of

religious narratives, such as those espoused in the Catholic Church, in favor of an integrated human origins curriculum. Interestingly, net of other religious controls, we did not find a significant indirect pathway between Biblical literalism and the support for teaching both creationism and evolution, despite higher levels of Biblical literalism among Latinos. This finding points to the necessity of religious networks, rather than mere religious beliefs, for affecting social attitudes (Hill 2014).

Table 4 displays the results from models predicting support for teaching creationism in public schools instead of evolution (Models 1–3). Models 1 and 2 show that net of demographic controls, black and Latino Americans have significantly greater odds than whites and other races of supporting the teaching of creationism in place of evolution. Introducing religious tradition, religious service attendance, personal religiosity, and Biblical literalism (Model 3) eliminates the statistical significance and magnitude of the coefficient for black Americans, making them nearly identical to whites, but has little effect on attitudes among those who are Latino. Sobel tests indicate significant indirect pathways between black status and a creationism-only stance. Compared

⁷Due to skip patterns, Latino status perfectly predicted Spanish language, limiting our ability to test for the significance of an indirect path using Sobel tests. *T* tests, however, suggested a significant difference in teaching creationism alongside evolution among Spanish-dominant and non-Spanish-dominant Latinos.

Table 4. Odds Ratios of Logistic Regression Models Predicting Support for Teaching Creationism Instead of Evolution.

Variable	Model 1			Model 2			Model 3		
	OR	SE	<i>p</i>	OR	SE	<i>p</i>	OR	SE	<i>p</i>
Race and Ethnicity (reference white)									
Black	1.76	0.17	***	1.92	0.22	***	0.99	0.13	
Latino	1.66	0.15	***	1.62	0.19	***	1.54	0.19	***
Other	0.93	0.11		1.22	0.16		1.32	0.18	*
Household income				0.97	0.01	***	0.97	0.01	***
Education				0.88	0.02	***	0.87	0.02	***
Female				1.34	0.08	***	1.11	0.07	
Age				1.02	0.02		0.96	0.02	*
South				1.24	0.08	***	1.04	0.07	
Political conservatism				1.52	0.03	***	1.25	0.03	***
Spanish				1.29	0.26		0.94	0.20	
Religious tradition (reference conservative Protestants)									
Other Christian							0.56	0.05	***
Catholic							0.55	0.05	***
Other religion							0.60	0.07	***
Nonreligious							0.29	0.05	***
Attendance							1.08	0.02	***
Religiosity							1.58	0.08	***
Literalism							1.80	0.17	***
Constant	0.79	0.02	***	0.50	0.11	**	0.65	0.18	
Pseudo R ²	0.01			0.099			0.207		
AIC	12692.7			11565.7			10190.0		
BIC	12721.3			11644.4			10318.7		
N	9,425			9,425			9,425		

Source: Religious Understandings of Science Survey 2014.

Note: OR = odds ratio; AIC = Akaike information criterion; BIC = Bayesian information criterion.

†*p* < .10. **p* < .05. ***p* < .01. ****p* < .001.

to whites, black respondents, on average, had lower incomes and education, each of which related to increased support of teaching creationism instead of evolution, consistent with prior research (Evans and Evans 2010). We also found significant indirect pathways between gender and region for our black American respondents with reference to support for teaching creationism as a substitute for evolution. Black respondents were more likely to be female and to reside in the South compared to their white counterparts. Prior research points to women and those living in the South as more skeptical of evolution (Evans and Evans 2010), which may contribute to a stronger stance among black Americans that supports teaching creationism instead of evolution. In addition, patterns among black respondents were further explained by religious identity as other Christian, Catholic, or nonreligious in Model 3 as well as by religious service attendance, personal religiosity, and Biblical literalism. In short, black respondents tended to be more likely than whites to identify with conservative Protestant traditions, attended church more often, and were more likely to be Biblical literalists. This suggests that religion plays a stronger role among black than among Latino Americans in shaping support for teaching creationism

instead of evolution. We also find that conservative Protestants have significantly higher odds compared to members of other religious traditions of supporting teaching creationism instead of evolution in the classroom. Overall, religious factors are not sufficient to explain away racial differences in support for teaching creationism instead of evolution among Latinos, but religious factors account for such differences for black Americans.

Discussion and Conclusion

We set out to examine whether black and Latino Americans differ from whites and people of other races in their attitudes toward integrating creationism in public schools. In particular, we ask whether the higher religiosity of black and Latino Americans is associated with higher levels of support for its teaching in public schools—either alongside or instead of evolution. Our findings show support for some but not all of our hypotheses.

As expected, we found that in comparison to whites, black and Latino Americans show higher levels of support for teaching creationism in schools instead of evolution. Even

with controls, conservative Protestants show significantly greater support for teaching creationism instead of evolution, whereas Catholics show significantly greater support for teaching creationism along with evolution. In a separate analysis (results not shown), we found that creationists and Biblical literalists account for nearly one half of those who support teaching creationism instead of evolution but make up less than 10 percent of those who support teaching creationism along with evolution. In other words, a significant subset of the population (51 percent) is neither literalist nor creationist and yet supports the teaching of creationism in the classroom. This finding suggests a kind of pluralism among the American population that favors presenting both views to students and letting them decide. Although this conclusion is only speculative, the finding merits further exploration.

On average, we find that blacks and whites are not statistically different in their support for teaching creationism alongside evolution. Although Latinos are significantly more likely than whites to support the integrated creationism–evolution teaching approach, Latinos’ lower levels of education, higher levels of political conservatism and Catholic affiliation seem to mediate this relationship. We find that religious service attendance and personal religiosity also serve as mediators. Given the Catholic Church’s position on religion and science as compatible, we posit that Latinos’ higher levels of religious service attendance and personal religiosity may reinforce narratives that affirm a combined approach to teaching human origins. Previous research indicates that Latinos display high respect for and acquiesce to authority (Triandis 2004; Loi and McDermott 2010). Therefore, we posit that the hierarchical structure of the Catholic Church also makes it plausible that views espoused by Catholic leadership are also accepted and endorsed by Latino lay adherents.

When we examine support for teaching creationism in schools instead of evolution, we find that religious factors, such as religious affiliation, church attendance, and Biblical literalism, explain the statistically significant difference between blacks and whites but do not explain the statistically significant difference between Latinos and whites. Thus, the conventional account that support for teaching creationism in schools is mainly a function of conservative religious affiliation and Biblical literalism may be true for black Americans but not Latinos. Based on these analyses, we can only speculate about the underlying reasons for Latinos’ strong creationism-only position.

Latinos’ support for teaching creationism in place of evolution may be due to second-order cultural factors that we are not able to directly examine. For instance, empirical evidence suggests that Latino Catholic identity is closely intertwined with cultural and ethnic identity (Calvillo and Bailey 2015; Warner, Martel, and Dugan 2012). It may be that conservative stances against teaching evolution are salient among Latinos unfamiliar with the teachings of Catholicism. Further, research indicates that Latinos place a high value on

trust (Loi and McDermott 2010). Although scholarship on Latinos in relation to perceptions of science indicates that Latinos are not distrustful of science itself, other research provides evidence that Latinos may be distrustful of science teachers (Bolger and Ecklund 2018). In essence, Latinos perceive science teachers as authority figures who could potentially have a negative influence on the developing faith of children if teachers hold an anti-religious bias (Bolger and Ecklund 2018). Hence, it may be that these lower levels of trust in science teachers may lead Latinos to oppose the teaching of evolution altogether in preference for a creationist-only curriculum. Similarly, immigration and education may be playing a unique role in determining Latinos’ stance in ways that we are not able to capture in our analysis. Immigrants of Mexican origin, who compose the largest proportion of U.S. Latino immigrants (Zong and Batalova 2018), tend to have lower levels of education than whites and may, therefore, be more reluctant to accept evolution narratives. Our data did not allow us to examine immigration status directly; however, we did include language as a proxy for acculturation, which did not predict support for teaching creationism instead of evolution. Other, more direct measures of immigration status may better determine whether foreign-born status coupled with education determines favoring teaching creationism in place of evolution.

While the association between religious factors and support for teaching creationism instead of evolution do not explain away racial and ethnic differences, it is nevertheless important to address, especially because significant proportions of racial- and ethnic-minority groups also occupy these religious-minority positions. Support for teaching creationism might reflect not simply an epistemological conflict but an identity stance in opposition to dominant cultural views. It may also reflect what in other publications (Ecklund and Scheitle 2018) we have identified as core questions for religious individuals on the relationship between science and the existence and activity of God and the sacredness of human beings. The finding that support for teaching creationism is not simply a function of religious beliefs for Latinos is also a compelling finding that warrants future research.⁸

Our study bears important significance given the division between public science and public opinion. As Baker (2013:225) notes, “[E]volution has won many court battles but has not been able to win a majority in the court of public

⁸In ancillary analyses (available upon request), we examined belief in creationism as an independent and a dependent variable. Including belief in creationism as an independent variable, our core results remained the same. Using belief in creationism as a dependent variable, we found that the statistically significant differences between black Americans and whites can be explained completely by accounting for religious factors, such as literalism, personal religiosity, and evangelical identity, whereas Latino–white differences remain unexplained. This suggests the need for future qualitative research into whether creationism might have different meanings across racial-ethnic groups.

opinion.” Strategies to address concerns surrounding teaching human origins simply through formal educational courses may be ineffective without taking into account the complex factors that generate support for teaching creationism. As the next generations of black and Latino American youth enter and complete their K–12 education, it is important to understand how their parents view teaching evolution. Given the significant religious involvement of Latinos and black Americans, policy makers may want to consider religious organizations as important social spaces for understanding and addressing debates on the teaching of human origins.

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References

- Baer, Hans A., and Merrill Singer. 1992. *African-American Religion in the Twentieth Century: Varieties of Protest and Accommodation*. Knoxville: University of Tennessee Press.
- Baker, Joseph O. 2013. “Acceptance of Evolution and Support for Teaching Creationism in Public Schools: The Conditional Impact of Educational Attainment,” *Journal for the Scientific Study of Religion* 52(1):216–28.
- Baron, Reuben M., and Kenny A. David. 1986. “The Moderator–Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations.” *Journal of Personality and Social Psychology* 51(6):1173–82.
- Berkman, Michael, and Eric Plutzer. 2010. *Evolution, Creationism, and the Battle to Control America’s Classrooms*. New York: Cambridge University Press.
- Binder, Amy. 2007. “Gathering Intelligence on Intelligent Design: Where Did It Come From, Where Is It Going, and How Should Progressives Manage It?” *American Journal of Education* 113(4):549–76.
- Cadge, Wendy, and Elaine Howard Ecklund. 2007. “Immigration and Religion.” *Annual Review of Sociology* 33:359–79.
- Calvillo, Jonathan E., and Stanley R. Bailey. 2015. “Latino Religious Affiliation and Ethnic Identity.” *Journal for the Scientific Study of Religion* 54(1):57–78.
- Chang, Linchiat, and Jon A. Krosnick. 2009. “National Surveys via RDD Telephone Interviewing versus the Internet: Comparing Sample Representativeness and Response Quality.” *Public Opinion Quarterly* 73:641–78.
- Cuéllar, Israel, Bill Arnold, and Roberto Maldonado. 1995. “Acculturation Rating Scale for Mexican Americans-II: A Revision of the Original ARSMA Scale.” *Hispanic Journal of Behavioral Sciences* 17(3):275–304.
- D’Antonio, William V., Michele Dillon, and Mary L. Gautier. 2013. *American Catholics in Transition*. Lanham, MD: Rowman & Littlefield.
- Deckman, Melissa. 2002. “Holy ABCs! The Impact of Religion on Attitudes about Education Policies.” *Social Science Quarterly* 83(2):472–87.
- Diaz-Stevens, Ana Maria, and Anthony Stevens-Arroyo. 1998. *Recognizing the Latino Resurgence in U.S. Religion: The Emmaus Paradigm*. Boulder, CO: Westview Press.
- Ellison, Christopher G., Gabriel Acevedo, and Aida I. Ramos-Wada. 2011. “Religion and Attitudes Toward Same-Sex Marriage among U.S. Latinos.” *Social Science Quarterly* 92(1): 35–56.
- Ellison, Christopher G., Samuel Echevarria, and Brad Smith. 2005. “Religion and Abortion Attitudes among US Hispanics: Findings from the 1990 Latino National Political Survey.” *Social Science Quarterly* 86(1):192–208.
- Ellison, Christopher G., and Marc A. Musick. 1995. “Conservative Protestantism and Public Opinion toward Science.” *Review of Religious Research* 36:245–62.
- Ellison, Christopher G., Nicholas H. Wolfinger, and Aida I. Ramos-Wada. 2013. “Attitudes toward Marriage, Divorce, Cohabitation, and Casual Sex among Working-Age Latinos: Does Religion Matter?” *Journal of Family Issues* 34(3): 295–322.
- Espinosa, Gaston. 2008. “The Influence of Religion on Latino Education, Marriage, and Social Views in the United States.” *Marriage and Family Review* 43(3/4):205–25.
- Espinosa, Gaston. 2004. “Demographic and Religious Changes among Hispanics of the United States.” *Social Compass* 51(3):303–20.
- Espinosa, Gaston. 2014. *Latino Pentecostals in America*. Cambridge, MA: Harvard University Press.
- Espinosa, Gastón, Virgilio P. Elizondo, and Jesse Miranda. 2003. *Hispanic Churches in American Public Life: Summary of Findings*. Notre Dame, IN: Institute for Latino Studies, University of Notre Dame.
- Espinosa, Gastón, Virgilio Elizondo, and Jesse Miranda, eds. 2005. *Latino Religions and Civic Activism in the United States*. New York: Oxford University Press.
- Evans, John. 2011. “Epistemological and Moral Conflict between Religion and Science.” *Journal for the Scientific Study of Religion* 50(4):707–27.
- Evans, John. 2013. “The Growing Social and Moral Conflict between Science and Religion.” *Journal for the Scientific Study of Religion* 52(2):368–85.
- Evans, Michael S., and John H. Evans. 2010. “Arguing against Darwinism: Religion, Science, and Public Morality.” Pp. 286–308 in *The New Blackwell Companion to the Sociology of Religion*, edited by B. S. Turner. Hoboken, NJ: Wiley-Blackwell.
- Francis, Pope. 2014. “Plenary Session of the Pontifical Academy of Sciences,” October 27. https://w2.vatican.va/content/francesco/en/speeches/2014/october/documents/papa-francesco_20141027_plenaria-accademia-scienze.html.
- Gallup. 2016. *Evolution, Creationism, Intelligent Design*. <http://www.gallup.com/poll/21814/Evolution-Creationism-Intelligent-Design.aspx>.

- Haider-Markel, Donald P., and Mark R. Joslyn. 2008. "Pulpits versus Ivory Towers: Socializing Agents and Evolution Attitudes." *Social Science Quarterly* 89(3):665–83.
- Hill, Jonathan P. 2014. "Rejecting Evolution: The Role of Religion, Education, and Social Networks." *Journal for the Scientific Study of Religion* 53(3):575–94.
- Jelen, Ted G., and Linda A. Lockett. 2010. "American Clergy on Evolution and Creationism." *Review of Religious Research* 51(3):277–87.
- John Paul II. 1996. "Message to the Pontifical Academy of Sciences: On Evolution." <https://www.ewtn.com/catholicism/library/message-to-the-pontifical-academy-of-science-on-evolution-8825>.
- Johnson, David R., Christopher P. Scheitle, and Elaine Howard Ecklund. 2016. "Conservative Protestantism and Anti-evolution Curricular Challenges across States." *Social Science Quarterly* 97(5):1227–44.
- Keeter, Scott, and Juliana Horowitz. 2009. "On Darwin's 200th Birthday, Americans Still Divided about Evolution." Pew Research Center, Washington, DC. <http://www.pewresearch.org/2009/02/05/on-darwins-200th-birthday-americans-still-divided-about-evolution/#teach-evolution-other-approaches>.
- Kosmin, Barry, Ariela Keysar, and Nava Lerer. 1992. "Secular Education and the Religious Profile of Contemporary Black and White Americans." *Journal for the Scientific Study of Religion* 31(4):523–32.
- Lac, Andrew, Vanessa Hemovich, and Igor Himelfarb. 2010. "Predicting Position on Teaching Creationism (Instead of Evolution) in Public Schools." *Journal of Educational Research* 103:253–61.
- Levesque, P. J., and A. M. Guillaume. 2010. "Teachers, Evolution, and Religion: No Resolution in Sight." *Review of Religious Research* 51(4):349–65.
- Lincoln, C. Eric, and Lawrence H. Mamiya. [1990] 2001. *The Black Church in the African American Experience*. Durham, NC: Duke University Press.
- Loi, Claudia X., Aguado, and Robert J. McDermott. 2010. "Conducting Program Evaluation with Hispanics in Rural Settings: Ethical Issues and Evaluation Challenges." *American Journal of Health Education* 41(4):252–56.
- Long, David E. 2011. *Evolution and Religion in American Education: An Ethnography*. New York: Springer.
- Lugo, Luis. 2007. "Here Come 'Los Evangelicos!'" Pew Research Religion and Public Life Project, Washington, DC. <http://www.pewforum.org/2007/06/06/here-come-los-evangelicos/>.
- Marín, Gerardo, and Raymond J. Gamba. 1996. "A New Measurement of Acculturation for Hispanics: The Bidimensional Acculturation Scale for Hispanics (BAS)." *Hispanic Journal of Behavioral Sciences* 18(3):297–316.
- Matovina, Timothy. 2012. *Latino Catholicism: Transformation in America's Largest Church*. Princeton, NJ: Princeton University Press.
- Mazur, Allan. 2004. "Believers and Disbelievers in Evolution." *Politics and the Life Sciences* 23(2):55–61.
- McDaniel, Eric. 2008. *Politics in the Pews: The Political Mobilization of Black Churches*. Ann Arbor: University of Michigan Press.
- Miller, Jon D., Eugenie C. Scott, and Shinji Okamoto. 2006. "Public Acceptance of Evolution." *Science* 313(5788):765–66.
- Moore, Randy, and Karen L. Miksch. 2003. "Evolution, Creationism, and the Courts: 20 Questions." *Science Education Review* 2(1):1–15.
- Morris, Aldon D. 1984. *The Origins of the Civil Rights Movement: Black Communities Organizing for Change*. New York: Free Press.
- Mulder, Mark T., Aida I. Ramos, and Gerardo Martí. 2017. *Latino Protestants in America: Growing and Diverse*. Lanham, MD: Rowman & Littlefield.
- Newman, John Henry. 1868. "John Henry Newman to J. Walker of Scarborough on Darwin's Theory of Evolution." *Interdisciplinary Encyclopedia of Religion and Science*. <http://inters.org/Newman-Scarborough-Darwin-Evolution>.
- Pattillo-McCoy, Mary. 1998. "Church Culture as a Strategy of Action in the Black Community." *American Sociological Review* 63(6):767.
- Pew Research Center. 2007. "Changing Faiths: Latinos and the Transformation of American Religion." Pew Research Hispanic Trends Project, Washington, DC. <http://www.pewhispanic.org/2007/04/25/changing-faiths-latinos-and-the-transformation-of-american-religion/>.
- Pew Research Center. 2009. "A Religious Portrait of African Americans." Pew Research Religion and Public Life Project, Washington, DC. <http://www.pewforum.org/2009/01/30/a-religious-portrait-of-african-americans/>.
- Pew Research Center. 2013. "Public's Views on Human Evolution." Pew Research Religion and Public Life Project, Washington, DC. <http://www.pewforum.org/2013/12/30/publics-views-on-human-evolution/>.
- Pew Research Center. 2014. "The Shifting Religious Identity of Latinos in the United States." Pew Research Religion and Public Life Project, Washington, DC. <http://www.pewforum.org/2014/05/07/the-shifting-religious-identity-of-latinos-in-the-united-states/>.
- Pinn, Anthony. 2003. *Terror and Triumph: The Nature of Black Religion*. Minneapolis, MN: Fortress Press.
- Plutzer, Eric, and Michael Berkman. 2008. "Trends in Evolution, Creationism and the Teaching of Human Origins in Schools." *Public Opinion Quarterly* 72(3):540–53.
- Shelton, Jason E., and Michael O. Emerson. 2012. *Blacks and Whites in Christian America: How Racial Discrimination Shapes Religious Convictions*. New York: New York University Press.
- Sherkat, Darren E. 2011. "Religion and Scientific Literacy in the United States." *Social Science Quarterly* 92(5):1134–50.
- Superfine, Benjamin Michael. 2009. "The Evolving Role of the Courts in Educational Policy: The Tension between Judicial, Scientific, and Democratic Decision Making in *Kitzmiller v. Dover*." *American Educational Research Journal* 46(4): 898–923.
- Triandis, Harry C. 2004. "The Many Dimensions of Culture." *Academy of Management Executive* 18(1):88–93.
- Warner, R. Stephen, Elise Martel, and Rhonda E. Dugan. 2012. "Islam Is to Catholicism as Teflon Is to Velcro." Pp. 46–68 in *Sustaining Faith Traditions: Race, Ethnicity, and Religion among the Latino and Asian American Second Generation*, edited by C. Chen and R. Jeung. New York: New York University Press.
- Wilson, Catherine E. 2008. *The Politics of Latino Faith: Religion, Identity, and Urban Community*. New York: New York University Press.

- Wolfinger, Nicholas H., W. Bradford Wilcox, and Edwin I. Hernández. 2009. "Bendito Amor ('Blessed Love'): Religion and Relationships among Married and Unmarried Latinos in Urban America." *Journal of Latino/Latin American Studies* 3(4):171–88.
- Woodberry, Robert D., Jerry Z. Park, Lyman A. Kellstedt, Mark D. Regnerus, and Brian Steensland. 2012. "The Measure of American Religious Traditions: Theoretical and Measurement Considerations." *Social Forces* 91(1):65–73.
- Woodrum, Eric, and Thomas Hoban. 1992. "Support for Prayer in School and Creationism." *Sociological Analysis* 53(3):309–21.
- Zong, Jie, and Jeanne Batalova. 2018. "Mexican Immigrants in the United States." Migration Policy Institute, Washington, DC. <https://www.migrationpolicy.org/article/mexican-immigrants-united-states>.

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