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Political conservatism, religion, and environmental consumption in the United States

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The role of political conservatism and religion in shaping attitudes toward environmental consumption in the US is examined. Previous research suggests that while there is a mixed relationship between religiosity (measured in various ways) and environmentalism, political conservatives are unlikely to support pro-environment measures. Using nationally representative survey data, mixed results are found regarding the relationship of religiosity and environmental consumption: religious attendance and religious identity are positively related to environmental consumption, while belief in an involved God and biblical literalism are negatively related. Increased levels of religiosity, however, mute the otherwise strong negative effect of political conservatism. This suggests, surprisingly, that Green marketers and activists are likely to face less conservative resistance to environmental consumption among religious Americans.

KEYWORDS Environmental behavior; environmental consumption; religion; religious beliefs; political behavior; political conservatism

Introduction

Caring for the environment is a central concern among world governments and the scientific community. Yet, there is great variation in support for the environment among the general US public (Kahn 2002). How are religiosity (i.e., religious beliefs, religious behavior, and religious tradition) and political conservatism associated with environmental consumption, or 'the purchase of products that benefit or cause less harm to the environment' (Ebreo *et al.* 1999, p. 108)? Environmental consumption is of interest because it represents a behavioral outcome (as opposed to knowledge about or attitudes toward environmentalism) that has the *potential* to yield appreciable benefits for the environment. The survey data analyzed here, rich in measures of religiosity, help chart a direction for this topic.

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Existing research offers multiple explanations for the consistent finding that political conservatives are less environmentally friendly. One such explanation emphasizes that political conservatives tend to prioritize less government regulation (e.g., environmental regulation) over business, contributing to their environmental apathy (Jenkins and Eckert 2000, p. 321). This explanation makes environmental *consumption*, in particular, an interesting outcome to study, given that environmental consumption represents a market solution (as opposed to a government solution) to environmental problems.

In the American context, scholars and the media argue that mixing certain aspects of religion and conservative politics creates a toxic cocktail of environmental apathy, even environmental hostility. Journalist Chris Mooney (2005) argues that political conservatives are waging a war on science, presenting religiously conservative Christians and political conservatives as sharing the same interests on a range of issues, including the environment and blocking efforts at environmental care to protect free enterprise. More rigorous empirical research on religiosity and environmentalism reveals a decidedly murkier picture. Empirical studies have focused on different facets of religiosity (e.g., religious tradition, religious behavior, and religious belief). Taken together, these studies yield inconsistent findings (Guth *et al.* 1995, Sherkat and Ellison 2007, Clements *et al.* 2014a). Here, we carefully conceptualize and measure multiple aspects of religiosity and develop hypotheses regarding their relationships with environmental consumption.

To remedy the previously inadequate scrutiny of the interaction between religiosity and political conservatism, we analyze nationally representative survey data from the Religious Understandings of Science (RUS) study environment module to test whether multiple measures of religiosity are significantly associated with consideration of the environment when making 'shopping decisions.' Religiosity has a mixed relationship with environmental consumption: some elements of religiosity are positively associated with environmental consumption, and some are negatively associated with it; and political conservatives are less likely to be environmentally conscious consumers (henceforth, we use 'environmental consumer' as a shorter equivalent). Most surprisingly, we find evidence that religiosity mutes the negative effect of political conservatism on environmental consumption. We discuss the implications of these findings.

Environmental consumption

Diamantopoulos *et al.* (2003) suggest that 'Green consumers' are conceptualized by: knowledge about environmentalism, attitudes toward environmentalism, and environmental behavior. We focus on the behavioral

dimension, analyzing a measure of self-reported environmental consumption and the factors with which it correlates. We acknowledge that self-reported behavior often overestimates actual behavior (Clements *et al.* 2015), but in our case is the best measure available. Diamantopoulos *et al.* (2003) also argue that gender, age, class, number of children, marital status, and education have been the most important socio-demographic variables in profiling the Green consumer, although they find conflicting evidence regarding the importance of each variable. Other studies have found that socio-demographic variables are less effective in characterizing ecologically conscious consumer behavior than psychographic variables (e.g., altruism and political liberalism; Roberts 1996, Straughan and Roberts 1999, Akehurst *et al.* 2012). In this vein, our emphasis on religious tradition, belief, behavior, and identity will be helpful for marketers and activists who wish to bolster interest in environmental consumption in houses of worship, representing a significant contribution to existing literature on profiling the Green consumer.

Political conservatism and environmentalism

Early research on environmental issues predicted bipartisan support for environmental care (Dunlap and Gale 1974). Yet, scholars have consistently found that political conservatism has a negative impact on environmentalism (McCright and Dunlap 2000, Dunlap *et al.* 2001, Antonio and Brulle 2011, Hamilton 2011, McCright *et al.* 2014, Hamilton and Saito 2015, Newman *et al.* 2016). Conservatism has proven to be a particularly difficult concept to define, and scholars have argued that its meaning is consistently in flux as our political and social realities shift (Gross *et al.* 2011, Perrin *et al.* 2014). Although we recognize the complex and contextually specific meanings of 'conservative,' we follow scholarship that conceptualizes conservative as a political orientation that emphasizes small government and places high value on the free market (Dunlap *et al.* 2001, Antonio and Brulle 2011).

Politically charged divisions surrounding environmentalism are particularly entrenched. Conservatives critique the scientific basis for global warming, arguing that efforts to prevent global warming have a negative impact on our society (McCright and Dunlap 2000, Jacques *et al.* 2008). McCright and Dunlap (2003) suggest this depiction of environmental issues affects the political will to address national and international pollution. For these reasons, it is important to understand conservative resistance to environmentalism better. Below, we briefly summarize three theoretical explanations for this resistance.

Researchers have argued that the hostility of conservatives toward environmentalism is explained by their support for the free market and small

government (Dunlap and Gale 1974, Jenkins and Eckert 2000). Efforts to protect the environment often require government intervention in the market and constraints on businesses (Krieg 1998). For example, Krieg (1998) documents the continued growth in the production of toxic waste in commercial and industrial settings. Efforts to increase government regulation of such activity contradict a fundamental conservative value of small government (Dunlap and Gale 1974). In contrast, Samdahl and Robertson (1989) find that liberal (i.e., left) ideology in support of regulation is linked to strong support for environmental regulation.

Researchers argue that conservatives are strongly influenced by elites who provide financial support to disseminate criticism of climate change (McCright and Dunlap 2003, Jacques *et al.* 2008, Guber 2013). The US has become increasingly politically polarized (Layman *et al.* 2006), and the media provide a key outlet through which conservative elites give cues to the general public (Hamilton 2011, Coffey and Joseph 2012, Guber 2013). In particular, conservative criticism of environmentalism is fueled by elites and is detrimental to the adoption of pro-environmental policies and behaviors (Guber 2013, McCright *et al.* 2014).

Researchers have drawn on 'systems justifying tendencies' to explain limited support for environmentalism among conservatives (Feygina *et al.* 2010). This explanation attempts to explain why people support policies and practices that affirm the existing social order even when they run counter to their own interests, arguing that these tendencies occur because they reduce feelings of guilt, discomfort, uncertainty, and so on (Jost and Hunyady 2002, Jost *et al.* 2004). For instance, conservatives have a much stronger tendency than liberals to support the system in place (Jost *et al.* 2004). McCright and Dunlap (2011) apply the notion of the systems justifying tendencies of conservatives to the issue of climate change denial. Feygina *et al.* (2010) argue that political conservatives are more likely to resist environmental claims because of the substantial changes to the *status quo* needed to remedy environmental problems.

Religion and environmentalism

Compared with the firm expectation that political conservatives are less interested in environmentalism, the verdict on the relationship between religion and the environment is murkier because religion consists of multiple components, including religious beliefs, behavior, and religious tradition; each of these components may have an independent relationship to environmentalism (Kilburn 2014). Furthermore, people may identify as non-religious but still maintain some religious beliefs or practices. Even after acknowledging the different ways the term 'religion' can be conceptualized and measured, scholars nonetheless conclude that the evidence

surrounding the relationship between religion and attitudes toward environmental care yields mixed results (Guth *et al.* 1995, Sherkat and Ellison 2007, Clements *et al.* 2014a).

Religious tradition

While early scholarly work pointed to specific religious traditions as anti-environmental because of their human-centered beliefs (White 1967), studies testing these assertions provided weak or no empirical support (Kanagy and Willets 1993, Berry 2013). For example, Starr (2009) studies ethical consumption and finds that although ethical consumption is less common among fundamentalist Christians, overall there is little variation by religious tradition. Other scholars, however, show that religious tradition is linked to environmentalism (Clements *et al.* 2014a, 2014b, Eckberg and Blocker 1996). These scholars often discover that members of conservative Christian denominations are less supportive of the environment (Eckberg and Blocker 1996). Non-religious people (i.e., those who identify as not belonging to a religious tradition) are often found to be strong supporters of the environment (Hayes and Marangudakis 2000). For example, Doran and Natale (2010) show that those who identify as atheist, agnostic, non-religious, or secularist are more likely than those who claim a religious tradition to buy fair-trade products. They also find, however, that people who claim to use their 'religious beliefs' as a criterion for their purchasing decisions are most likely to buy fair-trade goods.

Religious beliefs

Researchers have pointed to specific Christian beliefs associated with anti-environmentalism (Hand and VanLiere 1984, Guth *et al.* 1995, Eckberg and Blocker 1996). Holding a more gracious image of God is linked to support for environmentalism (Greeley 1993), while the belief that God is sovereign is related to lower levels of concern about climate change. Belief in God's sovereignty means that God has the ability to take care of the world, including the ability to influence the climate (Peifer *et al.* 2014). Belief in an involved God who intervenes in worldly affairs is also characteristic of people who are highly involved in their religion and closely follow religious scripture (Froese and Bader 2007).

Scholars consistently find that biblical literalism is tied to negative attitudes toward the environment (Hand and VanLiere 1984, Eckberg and Blocker 1989, Kilburn 2014). Guth *et al.* (1995), however, show that the relationship between biblical literalism and environmentalism is shaped by adhering to a 'dispensational theology,' which is associated with limited support for the environment and linked to pessimism about the possibility of reform in this world, thus little concern for environmental issues. All of

these beliefs are typically associated with fundamentalism (Guth *et al.* 1993, p. 377).

Another belief associated with fundamentalism is dominion over nature (Eckberg and Blocker 1996). White (1967) argues that this attitude is characteristic of Christianity as a whole and claims that it developed in early Christian communities, who framed the world as something for humans to rule over, leading to a lack of concern for the environment. Since White published his article, some researchers find support for his thesis. Hand and VanLiere (1984) show that religious tradition predicts belief in dominion over nature and that this framework is most common among Jews and Christians. Eckberg and Blocker (1996, p. 353) find, however, that 'stewardship' is not related to environmentalism, whereas the notion that humans have dominion over the world is negatively related. In sum, scholarship offers some support for White's thesis. However, researchers consistently display great variation across Christian denominations (Hand and VanLiere 1984), questioning White's (1967) contention that Christianity *as a whole* is linked to low levels of environmental support.

Researchers also emphasize aspects of Christian theology that support a positive relationship with the environment (Kearns 1996, Shibley 1997, Woodrum and Wolkomir 2001, Sherkat and Ellison 2007). Kearns (1996) examines the extent to which the notion of stewardship affects Christians' views about the environment, showing religious environmentalism increases from the 1980s onwards. Three frameworks emerge from Christianity and favor protecting the environment: Christian stewardship, eco-justice, and creation spirituality. These theological perspectives tend to be associated with conservative, mainline, and liberal Christian denominations, respectively (Kearns 1996). Similarly, Taylor (2002) studies environmental consumption and finds that among a group of Catholic nuns, environmental consumption and sustainable behaviors are integrated with their religious identity and are in fact inseparable from it.

Religious behavior

Scholars have different opinions about the connection between religious behaviors and environmental care. Some show that prayer is positively related to environmentalism (Eckberg and Blocker 1996, Boyd 1999). Others find that there is no relationship between frequency of prayer and environmentalism (Greeley 1993). Sherkat and Ellison (2007) argue that while religious attendance can have a positive effect on certain forms of non-political environmental behavior, it has a negative effect on political environmental behavior. Other research, however, would suggest that religious service attendance may encourage environmentalism because those who attend religious services are more likely to get involved in organizations and activities (Wuthnow 1991, Curtis *et al.* 2001).

In sum, the existing literature on religion and the environment highlights multiple perspectives on the environment in various religious traditions and shows that these perspectives can support and oppose environmentalism at various times. We now turn to hypothesizing how different conceptualizations of religiosity (i.e., beliefs, practice, and identification) and political conservatism relate to environmental consumption.

Hypotheses

A large body of literature finds that political conservatives are less likely to care about the environment (Guth *et al.* 1995, Dunlap *et al.* 2001, McCright and Dunlap 2011, Coffey and Joseph 2012), leading to the following negative political conservatism effect.

H1: Political conservatives are less likely to be environmental consumers than political liberals.

Research on the impact of religious determinants on environmentalism suggests that religious beliefs help predict environmental outcomes. The belief that God is sovereign is linked to lower levels of concern about climate change (Greeley 1993, Peifer *et al.* 2014), based on the assumption that God is concerned with earthly affairs and quick to intervene, meaning that humans have less responsibility.

H2a: Individuals who believe in an involved God are less likely to be environmental consumers.

In order to consider how religion and politics 'mix' on this issue of environmental consumption, we test for interaction effects for political conservatism and each religiosity measure used to test our hypotheses here and below. Given our expectation that both political conservatism and belief in an involved God will depress environmental consumption, we anticipate conservatives with strong beliefs in an involved God will be especially unlikely to be environmental consumers.

H2b: Belief in an involved God intensifies the negative political conservatism effect.

Belief in a literal interpretation of the Bible is associated with lower levels of environmentalism (Hand and VanLiere 1984, Eckberg and Blocker 1989). Eckberg and Blocker (1996) find that dominion beliefs (i.e., that humans rule over nature) are negatively related to environmentalism.

While the survey data we analyze here do not contain a measure of dominion beliefs, because biblical literalists interpret the Bible so literally, we anticipate they will be more likely to have dominion beliefs asserted in the early chapters of the Bible. We therefore expect:

H3a: Biblical literalists are less likely to be environmental consumers.

Belief in biblical literalism is closely related to conservatism (Guth *et al.* 1993), and we predict that biblical literalism will intensify the effect of political conservatism:

H3b: Biblical literalism intensifies the negative political conservatism effect.

Some scholars argue that people who frequently attend religious services are 'joiners,' that is, people who are prone to be involved in organizational life (Wuthnow 1991, Curtis *et al.* 2001). Frequent attendance also provides opportunities for individuals to get involved by exposing them to institutional settings that encourage certain types of action, such as charitable giving (Hill and Vaidyanathan 2011). We suggest that frequent religious attendance is positively linked to environmentalism because frequent attenders are more likely to join activities that create a sense of agency. This sense of agency overflows into other realms of life, such as environmental consumption.

H4a: Individuals who attend religious services more frequently are more likely to be environmental consumers.

We think the positive effect of frequent religious service attendance on environmentalism is strong enough to counteract one's political conservatism. Moreover, attending religious services represents the use of a finite resource – time (Iannaccone 1990), and attending religious services reduces the amount of time one has to be exposed to media. Researchers suggest exposure to politicized media helps create political conservatism's anti-environmentalism stance (Coffey and Joseph 2012). Therefore, we predict the following interaction effect:

H4b: Frequent attendance of religious services mutes the negative political conservatism effect.

There is no research that we are aware of on the importance respondents place on religious identity and environmentalism. By religious identity, we are referring to the degree to which a person adopts the 'religious'

label; some people say 'I am not at all religious,' while others say 'I am very religious.' Scholars suggest that identity is linked to behavior (Stets and Biga 2003). Furthermore, identities can vary in type (individuals' position in social structures, or individuals' sense of self), in prominence among multiple identities, and in salience (Festinger *et al.* 1956, Stets and Biga 2003). Generally, people try to match their behavior with their identity, and feel cognitive dissonance when they are unable to do so (Festinger *et al.* 1956, Burroughs and Rindfleisch 2002). Many Green products are deliberately branded and labeled to allow consumers to recognize environmentally friendly qualities quickly, and this effectively broadcasts environmental awareness and pro-social traits to the consumers' peers. To the extent that religious identity and environmental awareness are viewed as pro-social, we expect individuals with a strong religious identity to be more favorable to environmental consumption.

H5a: Individuals who place higher importance on religious identity are more likely to be environmental consumers.

Although Edgell (2012) suggests the impact of religious identity is dependent on particular contexts and other relevant social identities, we predict that a strong religious identity will maintain its positive effect on environmental consumption and counteract the predicted negative effect of political conservatism.

H5b: Religious identity mutes the negative political conservatism effect.

Up until now, we have generated hypotheses as if all religious traditions are similar, which is obviously not the case. We test each of the previous hypotheses while controlling for one's religious tradition (or lack thereof). In thinking about how religious traditions are likely to relate to environmental consumption, the existing literature strongly suggests Evangelicals are least likely to be environmental consumers (Eckberg and Blocker 1989, Guth *et al.* 1995, Smith and Leiserowitz 2013, Peifer *et al.* 2014).

H6a: Evangelicals are less likely to be environmental consumers than people in the remaining religious traditions.

It is well known that Evangelicals tend to be politically conservative (Patrikios 2008, Green 2010). Scholars point out that this confluence of religion and politics helps explain the general negative attitude toward the environment found among evangelicals (Guth *et al.* 1995, Eckberg and Blocker 1996, Sherkat and Ellison 2007, Newman *et al.* 2016). Taken

together, we expect that Evangelicalism will interact with political conservatism to produce lower levels of environmental consumption.

H6b: Evangelicalism will intensify the negative political conservatism effect.

Data

We analyze quantitative data from the RUS study environment module, which focuses on the ways religious people in the US view religion and science. Data were collected from December 27, 2013, to January 13, 2014. The survey was conducted by GFK, using its KnowledgePanel; households in the US are selected as members of the panel in order to create a representative sample of the population of US households. This sample includes households that do not have Internet access as well as cell phone–only households. The final-stage survey completion rate is 62.7%, with a sample size of 10,241. Taking the stages of panel recruitment into account, the cumulative response rate is 5.6%. This rate appears low because of the many stages involved in constructing a panel. However, the response rates of panels and one-time surveys are very different, and online panels have been found to offer representative and high-quality responses (Chang and Krosnick 2009). This study oversampled respondents from occupations that contain a high proportion of people who could be considered scientists. Because these people were oversampled and may not actually represent the general US population, weights are used in the analysis, enabling generalizations to be made to the wider population.

Measures and methodology

Dependent variable

We operationalize environmental consumption with the following question: 'I think about the effect on the environment when making shopping decisions' to which respondents could answer 'never, rarely, occasionally, or frequently.' Weighted descriptive statistics indicate 14% of the US population report 'never' thinking about the effect on the environment (environmental consumption = 1), 24% rarely do (environmental consumption = 2), 44% occasionally do (environmental consumption = 3), and 17% frequently do (environmental consumption = 4). We acknowledge that using this single-item measure of self-reported environmental consumption is a limitation because it likely overestimates actual environmental consumption (Clements *et al.* 2015). One benefit, however, of this

Table 1. Weighted descriptive statistics (N = 10,044).

	Mean	SD	Min	Max
Environmental consumption	2.64	0.93	1	4
Conservative	4.12	1.49	1	7
Belief in involved God	7.33	2.68	0	10.54
Biblical literalism	0.20	0.40	0	1
Attendance	4.16	2.75	0.88	9
Religious person	2.55	1.02	1	4
Religious tradition				
Evangelical Protestant	0.26	0.44	0	1
Mainline Protestant	0.15	0.35	0	1
Black Protestant	0.05	0.22	0	1
Catholic	0.24	0.42	0	1
Jewish	0.02	0.13	0	1
Mormon	0.02	0.13	0	1
Muslim, Hindu, Sikh, Jain	0.01	0.11	0	1
Buddhist	0.01	0.10	0	1
Not religious	0.07	0.26	0	1
Atheist	0.04	0.20	0	1
Agnostic	0.04	0.20	0	1
Other	0.09	0.29	0	1
Interest in environment	2.19	0.65	1	3
Humans cause climate change	3.17	0.88	1	4
Female	0.52	0.50	0	1
Education	2.75	1.01	1	4
Age	47.30	16.97	18	93
Household income	11.75	4.61	1	19
Parent	0.65	0.47	0	1
Racial ethnic group				
White	0.67	0.47	0	1
Black	0.11	0.31	0	1
Other race	0.06	0.24	0	1
Hispanic	0.14	0.35	0	1
Two races	0.01	0.11	0	1
		0		

Source: 2014 Religious Understandings of Science.
Minimum and maximum values of ordinal and indicator variables may take on non-integer values due to imputation of missing values.

measure's wording is its broad and open-ended conceptualization of environmental consumption. Namely, individuals are free to interpret 'effect on the environment' in a wide variety of ways (Tables 1 and 2).

Key independent variables

We measure political preference using the following question: 'Would you describe your political views as extremely liberal, liberal, slightly liberal, moderate, slightly conservative, conservative, or extremely conservative?' We treat conservative as an ordinal variable that ranges from 1 (extremely liberal) to 7 (extremely conservative). While this measure fails to capture the more nuanced details of political orientation, it is nonetheless

Table 2. Weighted correlation matrix (N = 10,044).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Environmental consumption	1.00														
2. Conservative	−0.17	1.00													
3. Belief in involved God	−0.08	0.32	1.00												
4. Biblical literalism	−0.10	0.18	0.33	1.00											
5. Attendance	0.01	0.29	0.54	0.29	1.00										
6. Religious person	−0.00	0.32	0.70	0.32	0.69	1.00									
7. Evangelical Protestant	−0.07	0.26	0.31	0.29	0.26	0.31	1.00								
8. Mainline Protestant	0.07	0.02	0.07	−0.07	0.00	0.05	−0.26	1.00							
9. Black Protestant	−0.08	−0.07	0.11	0.09	0.08	0.10	−0.13	−0.09	1.00						
10. Catholic	−0.02	−0.00	0.12	−0.03	0.07	0.08	0.34	−0.24	−0.12	1.00					
11. Jewish	0.02	−0.05	−0.08	−0.07	−0.04	−0.06	−0.09	−0.07	−0.03	−0.09	1.00				
12. Mormon	−0.00	0.07	0.08	−0.00	0.12	0.12	−0.08	−0.06	−0.03	−0.08	−0.02	1.00			
13. Muslim, Hindu, Sikh, Jain	0.02	−0.04	0.01	−0.04	0.02	0.03	−0.05	−0.04	−0.02	−0.05	−0.01	−0.01	1.00		
14. Buddhist	0.04	−0.04	−0.09	−0.04	−0.04	−0.05	−0.06	−0.04	−0.02	−0.05	−0.01	−0.01	−0.01	1.00	
15. Not religious	−0.02	−0.11	−0.30	−0.13	−0.28	−0.37	−0.17	−0.12	−0.06	−0.15	−0.04	−0.04	−0.02	−0.03	1.00
16. Atheist	0.05	−0.12	−0.27	−0.10	−0.20	−0.26	−0.13	−0.09	−0.04	−0.12	−0.03	−0.03	−0.02	−0.02	−0.06
17. Agnostic	0.06	−0.17	−0.49	−0.10	−0.21	−0.31	−0.12	−0.09	−0.04	−0.11	−0.03	−0.03	−0.02	−0.02	−0.05
18. Other	0.03	−0.05	−0.02	−0.06	−0.07	−0.03	−0.19	−0.13	−0.06	−0.17	−0.05	−0.04	−0.03	−0.03	−0.08
19. Interest in environment	0.44	−0.20	−0.05	−0.07	−0.02	0.01	−0.10	0.03	−0.01	0.04	0.02	−0.002	0.02	0.03	−0.03
20. Humans cause climate change	0.30	−0.37	−0.14	−0.14	−0.12	−0.13	−0.16	0.004	−0.01	0.04	0.01	−0.03	0.03	0.03	0.05
21. Female	0.09	−0.05	0.17	0.07	0.10	0.12	0.02	0.01	0.06	−0.00	−0.02	−0.02	−0.01	−0.00	−0.03
22. Education	0.17	−0.07	−0.17	−0.18	0.01	−0.06	−0.07	0.06	−0.05	−0.07	0.09	0.03	0.06	0.03	0.00
23. Age	0.09	0.11	0.09	0.02	0.10	0.15	−0.01	0.13	0.01	0.03	0.05	−0.04	−0.05	−0.02	−0.08
24. Household income	0.11	0.04	−0.12	−0.16	0.01	−0.06	−0.05	0.07	−0.10	0.02	0.08	0.00	0.02	−0.00	−0.02
25. Parent	0.01	0.15	0.19	0.08	0.18	0.19	0.06	0.04	0.02	0.05	0.01	0.03	0.01	−0.05	−0.10
26. White	0.09	0.15	−0.11	−0.10	−0.07	−0.05	0.08	0.13	−0.32	−0.09	0.07	0.04	−0.11	−0.07	0.00
27. Black	−0.1	−0.11	0.14	0.10	0.10	0.12	−0.04	−0.05	0.61	−0.14	−0.04	−0.03	−0.01	−0.01	−0.01
28. Other race	0.00	−0.04	−0.07	−0.05	−0.03	−0.04	−0.04	−0.04	−0.03	−0.03	−0.03	−0.02	0.30	0.21	0.04
29. Hispanic	−0.05	−0.07	0.07	0.08	0.04	0.01	−0.07	−0.11	−0.07	0.29	−0.04	−0.00	−0.02	−0.01	−0.04
30. Two races	0.00	−0.00	−0.03	−0.02	−0.03	−0.02	−0.04	−0.02	−0.03	−0.03	0.00	−0.01	0.00	0.01	0.03

(*Continued*)

Table 2. (Continued).

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
16. Atheist	1.00														
17. Agnostic	−0.04	1.00													
18. Other	−0.06	−0.06	1.00												
19. Interest in environment	0.04	0.05	0.01	1.00											
20. Humans cause climate change	0.06	0.08	0.03	0.33	1.00										
21. Female	−0.05	−0.08	0.04	0.01	0.05	1.00									
22. Education	0.09	0.09	−0.03	0.10	0.09	−0.09	1.00								
23. Age	−0.02	−0.08	−0.06	0.16	−0.03	−0.03	−0.06	1.00							
24. Household income	0.06	0.07	−0.08	0.05	0.02	−0.12	0.44	0.03	1.00						
25. Parent	−0.07	−0.10	−0.04	0.04	−0.05	0.06	−0.12	0.37	0.05	1.00					
26. White	0.05	0.05	−0.01	−0.01	−0.07	−0.05	0.14	0.17	0.21	0.01	1.00				
27. Black	−0.05	−0.05	0.03	−0.03	0.00	0.07	−0.05	−0.04	−0.16	−0.00	−0.51	1.00			
28. Other race	0.01	0.01	−0.01	−0.01	0.02	−0.01	0.11	−0.06	0.05	−0.04	−0.32	−0.07	1.00		
29. Hispanic	−0.03	−0.02	−0.02	0.04	0.08	0.01	−0.21	−0.14	−0.17	0.02	−0.58	−0.12	−0.08	1.00	
30. Two races	0.01	0.01	0.01	0.01	−0.01	0.00	0.01	−0.04	−.02	−0.02	−0.29	−0.06	−0.04	−0.07	1.00

commonly used in analysis of nationally representative survey data and is sufficient for our purposes here.

To measure the extent to which respondents believe in an involved God (to test Hypotheses 2a and 2b), we use two survey questions. The first belief-in-God question reads: 'Which one statement comes closest to your personal beliefs about God? 0, I don't believe in God; 1, I don't know whether there is a God, and I don't believe there is any way to find out; 2, I don't believe in a personal God, but do believe in a Higher Power of some kind; 3, I find myself believing in God some of the time, but not at others; 4, While I have doubts, I feel that I do believe in God; 5, I know God really exists and I have no doubts about it.'

The second question is skipped for respondents who indicate they are atheists (i.e., belief in God = 0). The remaining respondents are asked how strongly they agree (on a scale from 1 to 5) with the following five statements: 'Based on your personal understanding, do you think God is… Removed from the affairs of the world, concerned with the well-being of the world, concerned with my personal well-being, directly involved in the affairs of the world, and directly involved in my affairs.' After appropriate reverse coding, each respondent is ranked from 1 to 5, with 5 indicating strong agreement with God's involvement (or strong disagreement with God's removal). The average score for each respondent is calculated to create a God involvement scale (Cronbach's $\alpha = 0.89$). To avoid dropping all atheists who automatically skipped this question from analysis, we code each atheist as a zero in the God involvement scale.

Each of these measures contains valuable information about the certainty with which each respondent believes in God, and how involved God is believed to be. Although strongly correlated (correlation coefficient = 0.76), we argue each measure is incomplete without the other. We meaningfully combine this information into one measure by summing the belief-in-God measure, which ranges from 0 (atheist) to 5 (I know God really exists and I have no doubts about it) with the God involvement scale, which ranges from 0 (atheist) to 5 (highest level of agreement that God is involved). This combined 'belief in involved God' measure ranges from 0 (atheist) to 10 (Belief in God without a doubt and highest agreement that God is involved). We acknowledge that a value of 5, for example, can derive from multiple combinations, such as God involvement scale = 3 and belief in God = 2, or *vice versa*. This is justified because we have no theoretical reason to give preference to one measure over the other. Furthermore, we test each effect separately (see Appendix 1, Model 1–4) and find using each underlying measure separately yields similar conclusions we present below from the combined measure.

Biblical literalism is measured from the following survey question and answer categories: 'Which of these statements comes closest to describing

your feelings about the Bible? 1, The Bible is the actual word of God and is to be taken literally, word for word; 2, The Bible is the inspired word of God but not everything should be taken literally, word for word; 3, The Bible is an ancient book of fables, legends, history, and moral precepts recorded by man; 4, This does not apply to me.' Respondents who select the first answer category score 1 for biblical literalism, while everyone else scores 0, including respondents who refused to answer the question and respondents who were automatically skipped because they did not identify themselves with a religious tradition whose primary holy scripture is the Bible.

We measure frequency of religious service attendance on a nine-point scale ranging from 'never' to 'several times a week.' 'Religious person' operationalizes religious identity, and is measured by the following question, 'To what extent do you consider yourself a religious person?', with answer categories 'not religious at all' (1), 'slightly religious' (2), 'moderately religious' (3), and 'very religious' (4).

We borrow Steensland *et al.*'s (2000) operationalization of religious traditions in the US, which operationalizes the myriad of Protestant denominations into meaningful categories of Evangelical, Mainline Protestant, or Black Protestant. Catholic and Jewish traditions are also differentiated. Due to the large sample size, we also parse out Mormonism, Buddhism, agnosticism, atheism, and people who selected the 'not religious' answer category. Additional 'non-Western' religious traditions (i.e., Muslims, Hindus, Sikhs, and Jains) are combined in a separate category because of their small sample sizes, although we recognize there are differences across these traditions. There is an 'other' category for respondents who do not cleanly fit the above categories.

Covariates

Importantly, we include two measures of overall attitudes toward the environment. We expect these measures to be positively correlated with environmental consumption, and want to ensure that our predicted effects remain after including them in the model. We measure interest in the environment with the following survey question: 'Please tell me how interested you are in the following things?' Among the 10 topics is 'The environment.' Respondents can answer 'not at all interested' (interest in the environment = 1), 'moderately interested' (2), and 'very interested' (3). We also use the following survey question. 'Which of the following statements best represent your opinion about climate change? The climate is not changing (humans cause climate change = 1); the climate is changing but not because of human actions (humans cause climate change = 2); the climate is changing, but human actions are only partly causing the change (humans cause climate change = 3); the climate is changing, and human

actions are a significant cause of the change (humans cause climate change = 4).'

Female scores 1 for women, and 0 for men. We divide education into four categories: 1 = less than high school, 2 = high school, 3 = some college, and 4 = bachelor's degree or higher. Age is operationalized as a continuous variable. Income is treated as an ordinal variable, with answer categories ranging from 1 (<$5000) to 19 ($175,000 or more). Individuals who have had one child or more are coded as parent = 1; for all others, parent = 0. Race/ethnicity is measured with the five indicator variables: white, black, other race, Hispanic, and two races (for respondents that self-identify with more than one race).

Methodology

We employ ordered logistic regression to analyze these data, which means odds ratios greater than 1.00 represent increased likelihood of environmental consumption, while ratios less than 1.00 represent decreased likelihood of environmental consumption. Our analysis allows us to identify correlations among our key variables of interest. We drop 197 observations due to missing data on our dependent variable. The remaining missing data from independent variables were imputed by predicting values from an appropriate multivariate regression model, causing many imputed values for ordinal and indicator variables to take on non-integer values.

Results

Given our interest in clarifying various effects of religiosity on environmental consumption, we employ multivariate regression, where all other key variables are 'controlled for' in the full model, upon which we focus our interpretation. Interpretation of forthcoming 'net' results should take this into account. We find strong evidence to support Hypothesis 1, both in Model 2 and Model 8 of Table 3. Political conservatives are less likely to be environmental consumers. To interpret the statistically significant log odds ratio of 0.90 (Model 8), we calculate predicted probabilities of the highest answer category of environmental consumption: *frequently* thinking about the effect on the environment when making shopping decisions. For the sake of brevity, we refer to this as a 'frequent environmental consumer.' While maintaining each variable at its mean, we calculate that extreme liberals (conservative = 1) have a 21% predicted probability of being a frequent environmental consumer, while extreme conservatives (conservative = 7) have a 13% predicted probability.

While belief in an involved God is not significant in Model 3, it yields a significantly negative effect in Model 8, the full model. This lends support

Table 3. Ordered logit regression predicting environmental consumption ordinal outcome (N = 10,044).

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
Conservative		0.91***						0.90***	0.76***	0.88***	0.86***	0.78***	0.92*
Belief in involved God			0.98					0.97*	0.89***	0.97*	0.97*	0.97*	0.97*
Biblical literalism				0.82**				0.79**	0.77***	0.58*	0.78***	0.78***	0.78***
Attendance					1.03***			1.05***	1.05***	1.05***	1.01	1.05***	1.05***
Religious person						1.06*		1.17***	1.16**	1.17***	1.17***	0.94	1.17***
Evangelical Protestant (referent)							–	–	–	–	–	–	–
Mainline Protestant							1.13	1.13	1.15	1.14	1.14	1.15	1.50
Black Protestant							0.68*	0.66*	0.68*	0.67*	0.67*	0.68*	0.40*
Catholic							0.98	0.97	0.99	0.98	0.97	0.99	0.98
Jewish							1.21	1.19	1.21	1.19	1.20	1.20	3.16*
Mormon							0.97	0.87	0.86	0.88	0.86	0.85	1.36
Muslim, Hindu, Sikh, Jain							0.97	0.83	0.86	0.83	0.84	0.87	2.27
Buddhist							1.70	1.67	1.70	1.67	1.67	1.67	1.24
Not religious							0.97	1.12	1.11	1.12	1.11	1.09	1.69
Atheist							1.23	1.36*	1.34*	1.36*	1.34*	1.32*	1.74
Agnostic							1.41*	1.40*	1.24	1.39	1.36	1.30	3.24***
Other							1.20	1.21	1.23*	1.22	1.22	1.23*	1.12
Interactions													
Belief in involved God × conservative									1.02***				
Biblical literalism × conservative										1.07			
Attendance × conservative											1.01		
Religious person × conservative												1.05**	
Conservative × Evangelical (ref)													–
Conservative × mainline Protestant													0.94
Conservative × black Protestant													1.16
Conservative × Catholic													1.00
Conservative × Jewish													0.77*
Conservative × Mormon													0.91
Conservative × Muslim, etc.													0.76
Conservative × Buddhist													1.10
Conservative × not religious													0.90

(*Continued*)

Table 3. (Continued).

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
Conservative × atheist													0.94
Conservative × agnostic													0.76**
Conservative × other													1.03
Covariates													
Interest in environment	3.69***	3.61***	3.68***	3.69***	3.69***	3.67***	3.67***	3.55***	3.54***	3.55***	3.55***	3.55***	3.54***
Humans cause climate change	1.54***	1.47***	1.53***	1.52***	1.57***	1.56***	1.53***	1.48***	1.48***	1.48***	1.48***	1.48***	1.48***
Female	1.46***	1.45***	1.48***	1.48***	1.44***	1.44***	1.48***	1.43***	1.42***	1.43***	1.43***	1.43***	1.43***
Education	1.24***	1.23***	1.24***	1.23***	1.23***	1.24***	1.23***	1.19***	1.18***	1.19***	1.19***	1.18***	1.19***
Age	1.01***	1.01***	1.01***	1.01***	1.01**	1.01**	1.01***	1.01***	1.01***	1.01***	1.01***	1.01***	1.01***
Household income	1.02*	1.02**	1.02*	1.01*	1.02*	1.02*	1.02*	1.02*	1.02*	1.02*	1.02*	1.02*	1.01*
Parent	0.97	1.00	0.99	0.98	0.95	0.96	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Racial ethnic group													
White (ref)	–	–	–	–	–	–	–	–	–	–	–	–	–
Black	0.53***	0.50***	0.54***	0.54***	0.51***	0.51***	0.63***	0.56***	0.58***	0.57***	0.57***	0.58***	0.56***
Other race	0.81	0.79*	0.80	0.81	0.82	0.81	0.79*	0.78*	0.79*	0.78*	0.78*	0.79*	0.78*
Hispanic	0.70***	0.68***	0.71***	0.71***	0.69***	0.70***	0.73***	0.70***	0.71***	0.71***	0.70***	0.71***	0.71***
Two races	0.90	0.89	0.89	0.90	0.90	0.90	0.90	0.88	0.89	0.88	0.89	0.89	0.90
F-value	112.76	109.42	104.65	105.79	103.95	103.26	58.28	51.35	50.40	49.54	49.58	49.62	37.75
Prob > *F*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: 2014 Religious Understandings of Science.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

for Hypothesis 2a. Individuals who have a stronger belief in an involved God are less likely to be frequent environmental consumers, after controlling for all variables in our model. Those with the least belief in an involved God (belief in involved God = 0) have a 20% predicted probability of being a frequent environmental consumer, while those who strongly believe in an involved God (belief in involved God = 10) have a 16% predicted probability.

As predicted in Hypothesis 3a, the statistically significant odds ratio of 0.79 in Model 8 shows biblical literalists are less likely to be environmental consumers. To interpret this effect, biblical literalists have a 15% predicted probability of being a frequent environmental consumer, while those who are not Biblical literalists have an 18% predicted probability.

Supporting Hypothesis 4a, we find attendance at religious services increases the likelihood of being an environmental consumer (see Models 5 and 8 in Table 3), with respondents who never attend having a 15% predicted probability of being a frequent environmental consumer, while most frequent attenders have a 21% predicted probability. Similarly, respondents who more strongly identify as a 'religious person' are more likely to be environmental consumers (see Models 6 and 8), supporting Hypothesis 5a. Respondents who identify as 'not at all religious' have a 15% predicted probability of being frequent environmental consumers, while those who identify as 'very religious' have a 20% predicted probability.

Model 8 demonstrates that, relative to Evangelicals, only atheists and agnostics have a statistically significant *higher* likelihood of environmental consumption. Black Protestants, on the other hand, have a statistically significant lower likelihood than Evangelicals do. This means Evangelicals and the remaining religious traditions are not different from one another in terms of likelihood of environmental consumption. This fails to provide convincing evidence to support Hypotheses 6a. Black Protestants have a 12% predicted probability of frequent environmental consumption, and atheists and agnostics have a 20% and 21% predicted probability, respectively. The predicted probability of Evangelicals is 16%, and the remaining religious traditions do not differ significantly from Evangelicals. It is important to emphasize these religious tradition results are net of all covariates in the model, including specific religiosity measures. We also include a regression model with just religious tradition indicator variables in Appendix 1, Model 5. Without the inclusion of covariates in the model, there is more evidence to suggest Evangelicals are less likely to be environmental consumers. In this model, Black Protestants remain less likely to be environmental consumers, and Mormons and the not religious are just as likely as Evangelicals are. The remaining religious traditions are more likely to be environmental consumers. However, in line with our emphasis on

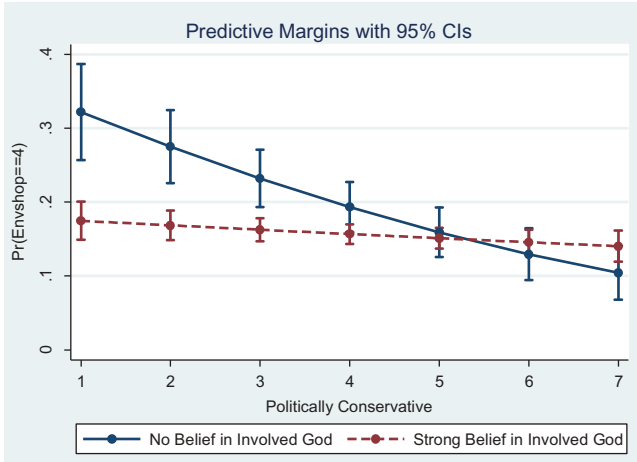

Figure 1. Predicted probabilities (with 95% confidence intervals) of frequent environmental consumption by belief in involved god and political conservative interaction (calculated from model 9 in Table 3). Source: 2014 Religious Understandings of Science. 'No belief in involved God' represents belief in involved God = 0. 'Strong belief in involved God' represents belief in involved God = 10. Only these two values of belief in involved God are displayed to render 95% confidence intervals more interpretable.

capturing multiple components of religiosity, we feel justified in emphasizing religious tradition results net of all other variables.

Turning now to our tests of interaction effects, Model 9 demonstrates a statistically significant interaction between belief in an involved God and political conservative. Figure 1 visually plots predicted probabilities calculated from Model 9 for respondents at either end of the belief-in-involved-God spectrum. The downward slant of each line reflects the overall negative effect of political conservativism on environmental consumption. Interestingly, this graph shows that the conservative effect is strongest among those with the least belief. This fails to confirm Hypothesis 2b. Instead, belief in an involved God mutes the negative political conservatism effect.

The interaction of biblical literalist and conservative (Model 10) does not reach statistical significance (p = 0.14). Also, the interaction of attendance and conservative (Model 11) does not reach statistical significance (p = 0.13). We therefore fail to generate sufficient evidence to verify Hypotheses 3b and 4b. Visual inspection of both interaction effects, however, suggests that higher levels of religiosity mute the negative political conservatism effect. In other words, there is no evidence to suggest religiosity intensifies the political conservatism effect.

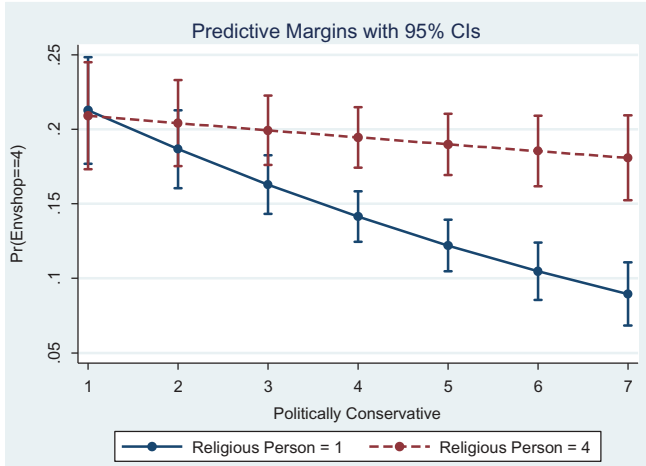

Figure 2. Predicted probabilities (with 95% confidence intervals) of frequent environmental consumption by religious person and political conservative interaction (calculated from model 12 in Table 3). Source: 2014 Religious Understandings of Science. Only these two values of religious person are displayed to render 95% confidence intervals more interpretable.

Model 12 tests whether religious person interacts with political conservative, yielding statistical significance. Again, the negative political conservatism effect is most muted among those with the highest levels of religiosity (see Figure 2). This supports Hypothesis 5b.

Model 13 tests the interaction between each religious tradition indicator and political conservatism, and demonstrates that, relative to Evangelicals, the negative conservative effect is stronger among respondents who identify as Jewish and agnostic, respectively (see Figure 3). The conservative effects of the remaining religious traditions do not significantly differ from Evangelicals. Put another way, the negative conservatism effect is strongest among Jews and agnostics, but not Evangelicals, as we had predicted in Hypothesis 6b.

As expected, those who are more interested in 'the environment' are much more likely to be environmental consumers. Those who are 'not at all interested' have a predicted probability of 4% of being a frequent environmental consumer, relative to a 30% predicted probability among those who are 'very interested.' Belief about the causes of climate change yields a similarly large substantial effect. Those who do not believe in climate change at all have an 8% predicted probability, while those who believe humans are a significant cause of climate change have a 26% predicted probability. Given that our key results presented above remain even after including these important predictors in our models, we gain increased confidence in our findings.

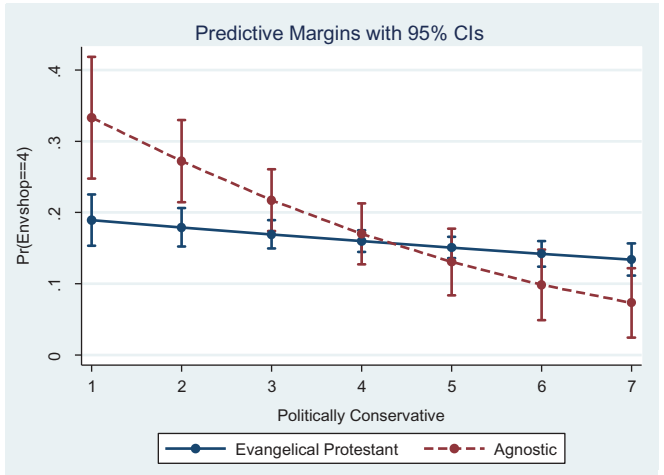

Figure 3. Predicted probabilities (with 95% confidence intervals) of frequent environmental consumption by religious tradition and political conservative interaction (calculated from model 13 in Table 3). Source: 2014 Religious Understandings of Science. Not all religious traditions are represented in this figure to ease visual interpretation. The political conservative effect for Jews (not shown above) is nearly identical to the agnostic effect, but with 95% confidence intervals that overlap with all of the confidence intervals for all levels of political conservatism in the Evangelical Protestant effect.

Across all models, women are more likely than men to be environmental consumers. Women have a 19% predicted probability of being a frequent environmental consumer, relative to 15% for men. Higher levels of education increase environmental consumption, with those who did not earn a high school degree having a 14% predicted probability, and those with a bachelor's degree or higher having a 20% predicted probability. Age is also statistically significant, with 20 year olds having a 15% predicted probability, and 90 year olds having a 20% predicted probability. Household income has a statistically significant positive effect on environmental consumption, ranging from 15% to 19% predicted probability across the full income range. Whites (19% predicted probability) are more likely to be frequent environmental consumers than blacks (12%), other (16%), and Hispanics (15%).[1]

Discussion and conclusion

To our knowledge, this is the first study to measure various aspects of religiosity and their relationship to environmental consumption. In line with others (Clements *et al.* 2014a), we yield mixed religious main effects. Namely, belief in an involved God and biblical literalism decrease the likelihood of environmental consumption, while attendance

and religious identification increase it. Surprisingly, we do not find ample evidence to support the hypothesis that Evangelicals are particularly uninterested in environmental consumption, although it is important to highlight that this result was obtained after including other significant religiosity variables in the model. In other words, Evangelicalism is unremarkable in terms of environmental consumption only after controlling for other key religiosity variables. Only Black Protestants stand out as especially unlikely to be environmental consumers. Our race results also confirm blacks are less likely than whites to be environmental consumers, perhaps because black Americans face more social, economic, and environmental issues than their white counterparts, limiting their ability to be environmental consumers (Mohai 1990).

Interestingly, out of the rather murky portrait of religiosity's main effects, exploring the interaction of political conservatism and religiosity yields a clearer pattern: the negative political conservatism effects are strongest among the least religious. Put another way, increased levels of religiosity mute the otherwise strong conservatism effect on environmental consumption. Notably, the political conservative interaction effects with religious attendance and biblical literalism were insignificant. More modestly, therefore, we can assert that there is no evidence that any of our measures of religiosity *intensify* the negative political conservatism effect. This is a substantial contribution to the literature on environmental consumption. Our results suggest that most of the political divergence of American environmental consumption is not to be found in houses of worship (or among those who otherwise hold religious beliefs or engage in religious practices). Rather, we provide evidence that the strongest negative conservatism effects are found among those who are least religious.

Why does religiosity tend to mute the negative political conservatism effect on environmental consumption? We suspect religious identification encourages people (even political conservatives) to seek out visible behaviors (such as environmental consumption) that confirm their religious identity. More puzzling, and contrary to our prediction, is why belief in an involved God mutes (and does not intensify) the negative conservatism effect. Recall, among those with strong beliefs in an involved God, political conservatism does not seem to help predict variance in environmental consumption. Systems justifying theory (Jost *et al.* 2004, Feygina *et al.* 2010) may help provide a *post hoc* explanation for this intriguing finding. This theory asserts that conservatives are uneasy with change. One might equate environmental consumption with the acknowledgement that the environment is in danger and changes are necessary in order to ameliorate that danger. In other words, by agreeing to take the environment into account when shopping, the consumer acknowledges that things need to

change, including their own consumption practices. A strong belief in an involved God might alleviate this fear of change because an active God is ready to intervene if anything goes astray. Perhaps conservatives with a strong belief in an involved God are less worried about change, alleviating one conservative impediment to environmental consumption. Of course, future research that includes direct measures of resistance to change is necessary to corroborate this *post hoc* explanation.

It is equally puzzling why the negative political conservatism effect is stronger among agnostics and Jews, relative to Evangelicals. One tentative explanation for the difference between agnostics and Evangelicals is that compared with agnostics, Evangelicals may be more involved in church and other civic activities (Cromartie 2003). Research has suggested that exposure to politicized media drives the negative political conservatism effect (McCright and Dunlap 2003, Coffey and Joseph 2012). It would stand to reason that Evangelicals, who tend to be more engaged in civic life (Ecklund 2005), may have less time to be exposed to such media and therefore will be less likely to follow the politicized 'line' with respect to the environment. We did not, however, find a statistically significant interaction between religious attendance and political conservatism, which suggests that future research should consider other measures of civic engagement and look more carefully at the Jewish effect we find in our analysis.

Given political conservatism's pro-business and small government proclivities, we find it interesting that environmental consumption (a market-based solution to environmental problems) remains so unpopular among political conservatives. Recall that political conservatism remains statistically significant even after controlling for general environmental attitudes. Future research might more deliberately test whether political conservatives prefer market-based solutions to environmental problems (such as environmental consumption) over other clearly presented alternatives, such as government regulation. Such an approach would help clarify political conservativism's relationship with environmental consumption.

There are also practical implications of our study's findings. For marketers and activists interested in generating more interest around Green products, our findings suggest overtures to political conservatives will be more fruitful among religious conservatives. Put more colorfully, Americans who are watching Fox News instead of attending church on Sunday morning appear to be particularly uninterested in environmental consumption. Despite common impressions that religion and political conservatism mix to form a toxic cocktail for environmental concerns in America, we find convincing evidence that religion, measured various ways, mutes the otherwise strong negative political conservatism effect on environmental consumption.

Note

1. To alleviate concerns that our model is over-specified with black Protestant and race variables, we include Model 6 in Appendix 1. This model does not include race indicator variables, and the results for our main effects are similar to the results presented in Table 3.

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Appendix 1. Ordered logit regression predicting environmental consumption ordinal outcome (N = 10,044).

	M1	M2	M3	M4	M5	M6
Belief in God	0.93**	0.81***				
Belief in God × conservative		1.04***				
Involved God scale			0.98	0.84**		
Involved God × conservative				1.04**		
Belief in involved God						0.96**
Conservative	0.90***	0.77***	0.89***	0.78***		0.92***
Biblical literalism	0.79**	0.78***	0.78***	0.77***		0.77***
Attendance	1.05***	1.05***	1.05***	1.05***		1.05***
Religious person	1.18***	1.17***	1.14**	1.14**		1.17***
Evangelical Protestant (referent)	–	–	–	–	–	–
Mainline Protestant	1.13	1.15	1.13	1.15	1.52***	1.12
Black Protestant	0.66*	0.68*	0.67*	0.68*	0.60***	0.43***
Catholic	0.97	0.99	0.97	0.99	1.23**	0.92
Jewish	1.18	1.20	1.23	1.25	1.95***	1.21
Mormon	0.86	0.86	0.87	0.86	1.14	0.88
Muslim, Hindu, Sikh, Jain	0.84	0.86	0.84	0.87	1.74*	0.72
Buddhist	1.63	1.65	1.79*	1.82*	2.29***	1.40
Not Religious	1.10	1.08	1.18	1.16	1.07	1.06
Atheist	1.32*	1.29	1.45**	1.43**	2.10***	1.31*
Agnostic	1.38*	1.24	1.58**	1.41*	2.26***	1.35
Other	1.21	1.23*	1.23*	1.25*	1.37**	1.15
Interest in environment	3.54***	3.53***	3.56***	3.55***.		3.53***
Humans cause climate change	1.48***	1.48***	1.48***	1.48***		1.47***
Female	1.44***	1.43***	1.42***	1.42***		1.45***
Education	1.19***	1.18***	1.19***	1.19***		1.19***
Age	1.01***	1.01***	1.01***	1.01***		1.01***
Household income	1.02*	1.01*	1.02*	1.02*		1.02***
Parent	1.00	1.01	0.99	1.00		0.98
White (ref)	–	–	–	–		
Black	0.56***	0.58***	0.55***	0.57***		
Other race	0.78*	0.79	0.78*	0.78*		
Hispanic	0.71***	0.71***	0.69***	0.70***		
Two races	0.88	0.90	0.88	0.89		
F-value	51.29	50.58	51.38	49.94	11.82	60.71
Prob > F	0.00	0.00	0.00	0.00	0.00	0.00

Source: 2014 Religious Understandings of Science.
Note: Models 1–4 replace belief in involved God with original components.
*p < 0.05; **p < 0.01; ***p < 0.001.