

# Religious Faith Promotes Selective Exposure to Attitude-Congruent Political Information

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## **Abstract**

Prior research has demonstrated that, when seeking political information, people are motivated to selectively seek information that is congruent with their prior attitudes. This paper investigates the effect of religious faith on individual differences in selective exposure to attitude-congruent political information. Many religions teach the importance of faith, the idea that beliefs must be held firmly and not doubted. This could lead adherents to prefer to read information that strengthens their beliefs and avoid anything that might challenge their beliefs. Being frequently exposed to faith messages could cause the development of a habitual tendency toward motivated reasoning and selective exposure, which might then be applied as a side effect to beliefs and attitudes outside the context of religion. In this study, an information-search task on a controversial non-religious political issue is used to measure the degree to which subjects prefer to read a greater proportion of information that is congruent with their prior attitudes on the issue. A measure of rigid religious conviction is used to show that this effect of prior attitudes on information-search behavior is stronger among individuals with stronger religious convictions. A scrambled-sentence task is used experimentally to prime half of the subjects with religious concepts to demonstrate that the salience of faith messages has a direct causal effect on information-search behavior.

## **Motivated Selective Exposure**

A large body of research has shown that, when searching for political information, people prefer to seek information that will support their prior beliefs or attitudes and avoid information that might challenge them. For example, Taber and Lodge (2006) conducted an influential study in which subjects were given an opportunity to learn about a controversial issue by reading arguments from political parties and other organizations known to be supporters or opponents of the policy in question. Most subjects, especially those with strong attitudes on the issue, chose to view a disproportionate quantity of arguments from sources that would support their own prior opinions on the issue. Other research has suggested that people with strong attitudes are more likely to view an article when the headline indicates that the information contained in the article is congruent with their prior attitudes (Garrett 2009; Knobloch-Westerwick and Meng 2009; Westerwick, Kleinman, and Knobloch-Westerwick 2013). In an experimental setting Republicans and conservative individuals are more likely to read news stories from Fox News and to avoid stories from CNN and NPR, while Democrats and liberals are more likely to read items from CNN or NPR and to avoid Fox (Iyengar and Hahn 2009). In a survey of people who read political blogs, most respondents reported that they often visit blogs that provide information with which they agree, while fewer than a quarter of respondents said they read blogs with which they disagree (Johnson, Bichard, and Zhang 2009).

(Taber and Lodge 2006) argue that this phenomenon of selective exposure to attitude-congruent information, or confirmation bias as they call it, is an aspect of motivated reasoning. Individuals are motivated to maintain and support their prior beliefs and attitudes (Kruglanski and Webster 1996), and selectively attending to attitude-congruent information can help a motivated reasoner achieve this goal. Selective exposure can also lead to increased attitude polarization (Taber and Lodge 2006) and may thus be highly consequential to aggregate public opinion and discourse. If supporters of a particular policy or candidate read primarily information and arguments in support of that policy or candidate, and opponents of that policy or candidate read only oppositional information, supporters will tend to become stronger supporters and opponents will tend to be-

come stronger opponents. Selective exposure is an important topic worthy of attention especially in the current day as the rise of cable and internet has made it easier for individuals to selectively expose themselves to information that is congruent with their opinions and beliefs (Stroud 2008). This increased selective exposure is potentially one of the causes of the increased polarization in 21st Century American politics (Lelkes, Sood, and Iyengar 2017).

Although selective exposure to attitude-congruent information seems to be common, there may be differences in the degree to which individuals engage in selective exposure (Kruglanski, Webster, and Klem 1993; Chen et al. 2014). Among two individuals who have equally strong opinions on a given issue, one may be more likely than the other to seek only attitude-congruent information on that issue. The question of what factors may influence the development of such individual differences is an important one. If we wanted to make an open-minded person who is willing to seek and consider all available information when forming judgments, how would we do it? Alternatively, if we wanted to produce the opposite behavior, how would we do it? This paper investigates just one possible factor, among many, that might influence the development of such behavioral tendencies: religious faith.

## **Religious Faith and Motivated Selective Exposure**

The great religious philosopher William James spoke of the importance of, or at least the legitimacy and propriety of, a "will to believe". Many religions include teachings that promote the importance of faith, or an effort to maintain a strong belief even in the absence of clear evidence. In his letter to the Hebrews, the Apostle Paul states that "faith is confidence in what we hope for and assurance about what we do not see" (Heb 11:1, NIV). The virtue of faith is a central tenet in the messages of clergy to their followers in many places of worship. That is, the message the very religious frequently receive is to cling to a belief even if the evidence is weak. This message of faith is essentially a message of the virtue of motivated reasoning. The powerful motivation to maintain religious beliefs is likely driven in part by the fact that scriptural writings often proclaim that maintaining faith in the doctrines of the religion is essential for gaining eter-

nal rewards. Speaking of Christ, John writes, "Whoever believes in Him shall not perish but have eternal life" (John 3:16 NIV). The Quran similarly links faith to supreme rewards or punishments: "The chastisement of Hell awaits those who disbelieve in their Lord... Forgiveness and a mighty reward await those who fear Allah without seeing Him" (Quran 67:6-12). In his famous wager, Pascal reasoned that the potential reward for religious belief is infinite and the potential loss from failing to believe is thus also infinite. Since nothing could be more important than eternal salvation or eternal damnation, religious individuals should feel especially motivated to maintain their beliefs. For believers of this type of religion, any search for greater knowledge or understanding in relation to their religious beliefs should be considered valuable only as far as such a search is likely to lead them to maintain the beliefs they already hold, since they are taught that any loss of faith could lead down the path toward eternal damnation. The stakes are high.

Because maintenance of religious beliefs is so important, some clergy exhort their followers to engage in behaviors that strengthen their faith and to avoid behaviors that weaken it (see, for example, Graham 2015; Osteen 2014). Selective exposure is one type of behavior that could be effective in maintaining one's faith. If a religious believer is frequently exposed to messages of the importance of maintaining faith, this could lead to habits of selectively reading things that support the doctrines of the religion in which they believe and avoiding any literature that might challenge their faith. An example of religious believers endorsing selective exposure can be seen in an advice forum in a Latter-Day-Saint ("Mormon") magazine. When questions about the benefits of reading anti-Mormon literature are submitted to the magazine, the vast majority of readers' responses recommend that such literature should not be read (New Era 1973, 2007). Explicit messages from elites endorsing selective exposure may not even be necessary for habits of selective exposure to develop among followers, since messages that simply encourage faith-promoting behavior in general could be sufficient to result in selective reading more specifically. Selective reading should be effective in strengthening beliefs, and because religious followers have been taught that strengthening their beliefs is desirable and virtuous, when they engage in selective reading and feel their beliefs being strengthened as a result of that behavior, this should

make them feel good about what they are doing. Such positive reinforcement should thus lead to the development of habits of selective reading.

A habit of selective exposure developed in the context of religion need not be forever confined to the context of religion. Habitual behaviors in one area of life, once they become instinctive, can spill into other areas of life. For example, Brady, Verba, and Schlozman (1995) note that skills learned through participating in church or synagogue organizations can help individuals become better equipped to participate effectively in politics. Similarly, habits of information seeking learned in the context of religion might be applied to the context of political information seeking. Suppose a person with strong religious beliefs also has strong opinions about gun legislation, believing that the government is not doing enough to control access to firearms. This is not an issue on which religion has told this person what to believe. However, the habits developed in learning to protect religious beliefs are now instinctively applied to protecting other beliefs and attitudes outside the context of religion without any conscious awareness that this is happening. In the context of religion, the person learned that having their beliefs reinforced feels good. When encountering a pro-gun-control opinion article, the person reads it and feels a similar sense of satisfaction from having prior beliefs and opinions reinforced. When encountering an anti-gun control article, the person does not read it.

Faith messages could thus promote habits of motivated reasoning and selective exposure in the context of religion which may, as a side-effect, be applied to other contexts such as political information seeking. If this theory is correct, we should expect to find that patterns of selective exposure to attitude-congruent political information are stronger among more religious individuals, especially those who have effectively internalized the message of faith and hold their religious beliefs with rigid conviction.

### **Potential problems for causal inference**

A direct effect of religiosity on habitual selective exposure may not be the only way in which a correlation between these two variables could be found. Having a predisposition toward moti-

vated reasoning and selective exposure could cause individuals to be more likely to select into religious belief. Indeed there would be little reason for religions to promote selective exposure among their followers if habitual selective exposure were not effective in increasing religious belief. If possessing a habit for selective exposure causes stronger religious beliefs, this could produce a correlation between religious conviction and selective exposure even if religious conviction has no effect on selective exposure. The possibility of reverse causality is thus a major concern when attempting to identify the effect of religious faith on selective exposure.

It is also possible that some other predispositional variable could have an effect on religious belief and could have a separate effect on selective exposure. This is another way in which a correlation between religious belief and selective exposure could be produced even in the absence of a direct causal relationship between the two. Such possible confounding variables could include, for example, a need for cognitive closure or a tendency to rely on intuition more than effortful reflection.

The Need for Closure Scale (Webster and Kruglanski 1994) is one variable that has been found to be associated both with religiosity (Saroglou 2002) and with selective exposure (Chen et al. 2014). The Need for Closure Scale was developed to measure individual differences in desire for predictability, preference for order and structure, discomfort with ambiguity, closed-mindedness, and decisiveness (Webster and Kruglanski 1994). Individuals who have this type of motivation might be more likely to close their minds to new information as a means of accomplishing this goal of maintaining closure (Kruglanski and Boyatzi 2012). This theory has been supported in recent empirical work. (Chen et al. 2014) find that when subjects have been exposed to information incongruent with their prior attitudes, they more often choose to read stories from news sources that are likely to agree with their own pre-existing ideological biases, but this effect is found only among subjects who score high on the Need for Closure Scale. An attitude-polarization effect is also found only among individuals high in Need for Closure. Individuals with a strong Need for Cognitive Closure may also be more religious (Saroglou 2002). Having a greater Need for Closure could cause individuals to be more drawn to religious belief, especially to fundamentalist religious

belief, since the doctrines of such faiths may provide certainty of belief and provide rigid structure through strict behavioral requirements, which could help to satisfy a desire for predictability, preference for order and structure, and discomfort with ambiguity. Saroglou (2002) found that the Need for Closure Scale is indeed associated with measures of religiosity, both with the Religious Fundamentalism scale of Altemeyer and Hunsberger (1992) and with a more general measure of religiosity. Duriez, Fontaine, and Hutsebaut (2000) found that higher Need for Closure scores predict higher scores on the components of their Post-Critical Beliefs Scale that measure Literal vs. Symbolic interpretation of religious content and Exclusion vs. Inclusion of Transcendence (Duriez, Fontaine, and Hutsebaut 2000). As the Need for Closure Scale is correlated with various measures of religiosity, it could be that a need for cognitive closure is a product of religiosity or it could be that religiosity is a product of need for closure. If the need for closure increases affinity for religious belief and the need for closure also increases the tendency toward selective exposure, then a correlation between religious belief and selective exposure could be found even in the absence of any direct effect of religious belief on selective exposure or any effect of selective exposure on religious belief.

Another potential confounding variable could be the tendency toward a reflective or intuitive cognitive style. Individual differences in these types of cognitive styles are known to exist (Frederick 2005; Toplak, West, and Stanovich 2011). Some individuals are more likely to go with the first intuitive response that jumps to mind, and others are more likely to reflect on those intuitions effortfully and override them when it is appropriate to do so. The Cognitive Reflection Test (Frederick 2005) is a set of three simple but tricky math questions that are designed to elicit a particular intuitive but incorrect answer. This test can thus be used as a measure of preference for reflection over intuition. Performance on this test has been shown to predict levels of religious belief, with those who give the intuitive answers rather than the correct answers reporting higher levels of belief in a god (Shenhav, Rand, and Greene 2012; Gervais and Norenzayan 2012). Belief in a god can be increased by experimentally inducing intuitive thinking (Shenhav, Rand, and Greene 2012) or decreased by inducing reflective analytic thinking (Gervais and Norenzayan

2012). A preference for intuition rather than reflection has also been found to predict susceptibility to various types of partisan motivated reasoning (Arceneaux and Vander Wielen 2017). Since selective exposure is believed to be closely related to motivated reasoning (Taber and Lodge 2006), it may be reasonable to suspect that individual differences in reflection and intuition could similarly be a factor for individual differences in selective exposure. If greater reliance on intuition increases religious belief and greater reliance on intuition also increases selective exposure, a positive correlation between religious belief and selective exposure could be found even in the absence of any causal relationship between the two.

Either of these two variables, a need for cognitive closure or a preference for intuition rather than reflection, could thus be confounding variables when attempting to identify the effect of religious belief on selective exposure. If either of these variables, or some other unknown predispositional variable, has an effect on religious belief and has a separate effect on selective exposure, it could generate spurious correlation between religious belief and selective exposure. Identifying a causal effect of religious belief on political information-search behavior could thus be problematic.

An experimental priming manipulation could be useful for identifying the effects of salience of religious faith messages. If the theory presented in this paper is correct, experimentally increasing the salience of a religious individual's faith could momentarily increase selective exposure. The effects of faith messages may depend not only on the habitual nature of exposure to the message, but also on the recency of such exposure. A religious individual who has regularly been exposed to faith messages should possess a close cognitive association between the concepts of religious faith and any behavioral patterns that have been produced by such faith messages. When the salience of the individual's religious beliefs is increased, any associated behaviors should also be momentarily increased. An individual who attends religious services on Sundays, for example, might feel more faithful on Sunday night than on Saturday night and might be more likely to engage in any religiously learned behaviors. If religious individuals, as a result of exposure to faith messages, have learned to have greater faith in their political beliefs as well as their religious



beliefs and have learned to engage in selective exposure to information that is congruent with their political beliefs, then any increased salience of their religious faith should also produce a momentarily increased faith in their political beliefs and an increase in selective exposure. We might thus expect to find that subjects who have been primed with religious concepts would be more likely to engage in selective exposure when seeking information on non-religious political topics.

## **Overview of Current Study**

I conducted a study to investigate whether selective exposure to attitude-congruent political information is greater among individuals with rigid religious convictions and to test whether experimentally increasing the salience of religious faith increases selective exposure. Subjects participated in an information-search task on a controversial non-religious political issue: gun policy. Subjects were required to read a certain quantity of arguments on the issue but were allowed to choose how many pro-gun-control arguments to read and how many anti-gun-control arguments to read. Subjects also reported their pre-task attitudes toward gun-control. I predicted that those with stronger pro-gun-control attitudes would choose to read more pro-gun-control items, and those with stronger anti-gun-control attitudes would read more anti-gun-control items. Rigid religious conviction was measured using a six-item scale to determine whether the correlation between pre-task attitudes and information-search behavior is stronger among those with stronger religious convictions. Several other variables were also measured to be used as control variables, including performance on a modified version of the Cognitive Reflection Test and a subset of items from the Need for Closure Scale. To identify the direct causal effects of religious faith messages, I used a scrambled-sentence task prior to the information-search task as an experimental manipulation to prime half of the subjects with religious concepts.

## Hypotheses:

1. **Selective exposure:** When seeking information on the issue of gun control, subjects with higher pre-task levels of support for gun control should choose to read a greater proportion of pro-gun-control items and those with higher levels of opposition to gun control should choose to read a greater proportion of anti-gun-control items.
2. **Correlation between rigid religious conviction and selective exposure:** The tendency for pro-gun-control subjects to read more pro-gun-control items and for anti-gun-control subjects to read more anti-gun-control items should be stronger among individuals with firm religious convictions.
3. **Effect of experimental prime on selective exposure:** Among subjects who already have at least some level of religious belief, experimentally increasing the salience of religious faith by means of conceptual priming should increase the tendency to read attitude-congruent arguments.

## Methods

### Measurement of Religiosity and Sampling Method

The study was conducted using a sample of United States residents recruited through Amazon Mechanical Turk (MTurk). MTurk is an online labor market in which thousands of workers complete Human Intelligence Tasks for small amounts of money. This service is increasingly being used by behavioral researchers who pay MTurk workers to participate in survey experiments. MTurk samples have been found to reproduce the results of several important political psychology experiments that had previously been conducted on more representative samples (Mullinix et al. 2015; Berinsky, Huber, and Lenz 2012). However, because MTurk workers are a self-selected sample, they may not be representative of the general population, though they may often be more representative than the student convenience samples commonly used in much behavioral

research (Berinsky, Huber, and Lenz 2012). One important difference from the general population is that MTurk samples tend to be much less religious than most people (Clifford, Jewell, and Waggoner 2015; Lewis et al. 2015). A lack of variation in religiosity would be problematic for testing the present research question. For this reason, I used a two-stage sampling procedure to acquire a sample with a sufficient quantity of religious individuals. The religiosity variable was measured for a large sample in a very short, low-cost, first-wave survey. From that first sample, a second sample with a wide range of religiosity was selected to participate in the main part of the study.

In late 2017, 1490 participants were paid \$0.10 each to answer the following six items measuring rigid religious conviction:

1. God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed.
2. Regardless of whether they contain some general truths, scriptures should not be considered completely, literally true from beginning to end. (Reverse scored)
3. All religions in the world have flaws and wrong teachings. There is no perfectly true, right religion. (Reverse scored)
4. Whenever science and sacred scripture conflict, scripture is probably right.
5. It is better for religious beliefs to be held firmly and never doubted.
6. If an honest quest for the truth leads one to the conclusion that one's religious beliefs are not correct, then one should allow those beliefs to change. (Reverse scored)

The first four items are taken, with some minor adjustments, from the 12-item Revised Religious Fundamentalism Scale (Altemeyer and Hunsberger 2004), while the two remaining items are adapted from the Quest Scale (Altemeyer and Hunsberger 1992). For each item, respondents indicate their level of agreement on a seven-point response scale ranging from "strongly disagree" to "strongly agree". Responses are coded as integers from 0 to 6, with items 2, 3, and 6

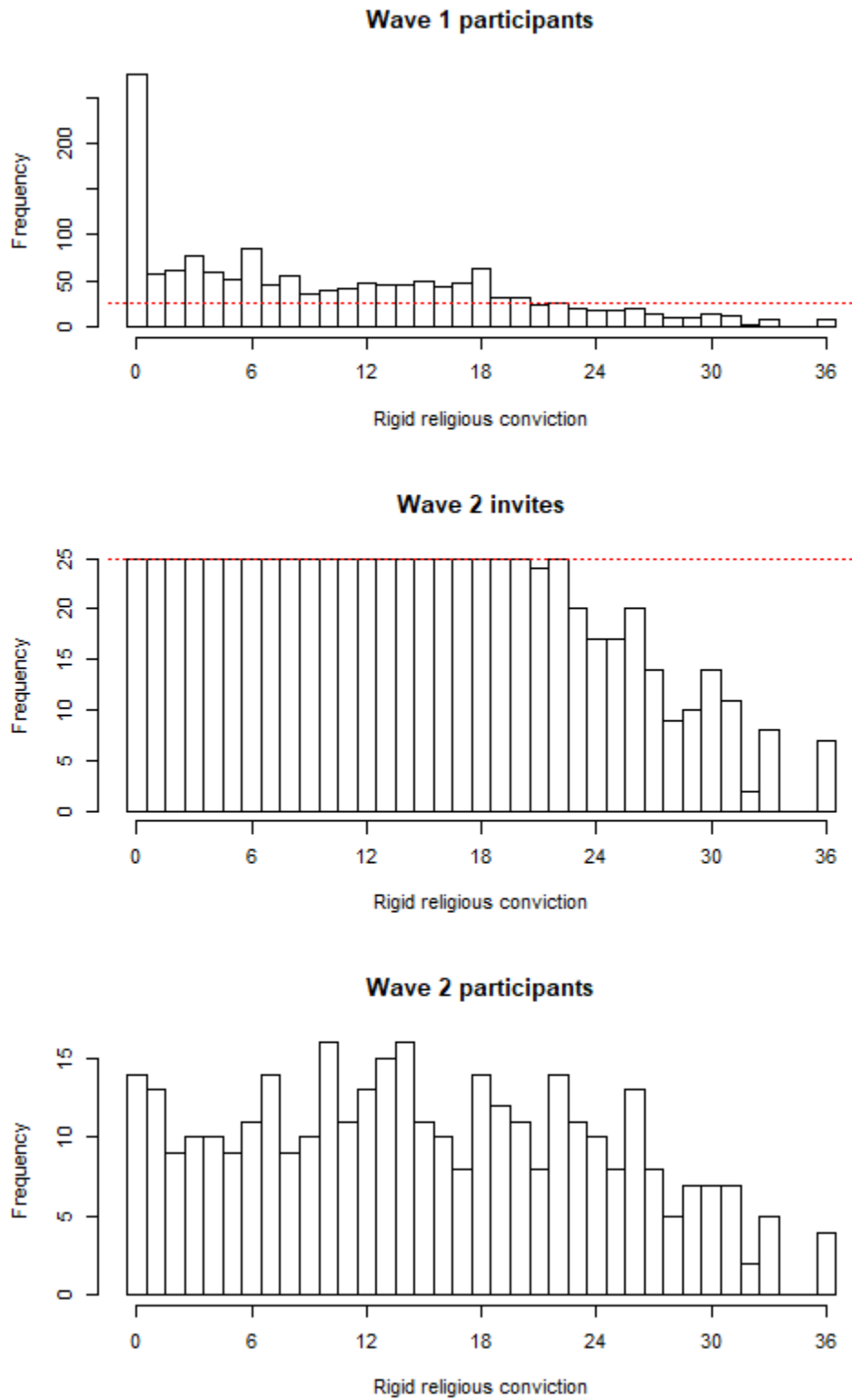


Figure 1: Distribution of Rigid Religious Conviction

being reverse scored to ensure that higher scores always represent greater religiosity. Inter-item correlations for these six items range from .38 to .81, with a mean of .62.

For each respondent, the six items are summed to generate a score of Rigid Religious Conviction ranging from 0 to 36. The frequency distribution of these scores can be seen in the first panel of Figure 1. A large proportion, more than 18%, of the individuals in the first-wave sample had a score of 0, indicating that they strongly disagree with all three of the positively scored statements and strongly agree with all three of the reverse-scored statements. Because so many in the sample had such low levels of religious conviction, a two-stage sampling process was used to generate a sample with a large enough quantity of religious individuals. Subjects were divided into 37 groups, one for each of the 37 possible levels of the variable, 0 through 36. From each group, 25 subjects were randomly selected to be invited to participate in the second wave of the study. For any group that did not have at least 25 individuals, all individuals from that group were invited to the second wave. In total, 723 subjects were invited to the second wave. The second panel of Figure 1 shows the distribution of rigid religious conviction for these invited subjects. Three weeks after the first-wave survey, the 723 selected individuals were sent an email offering to pay them \$0.50 to participate in a second survey. Where necessary, a second reminder email was sent a few days later. This procedure produced a final second-wave sample of 358 individuals. The third panel of Figure 1 shows the distribution of rigid religious conviction scores for all individuals who participated in the second-wave sample. All other data (other than the rigid religious conviction questionnaire) were collected in the second-wave survey.

### **Outcome Variable: Selective Exposure in Information-Search Task**

An information-search task on the topic of gun control was used to measure the tendency to seek attitude-congruent information. This task is similar in design and materials, though not identical, to the task Taber and Lodge (2006) used to detect selective exposure to attitude-congruent information. A demonstration of the task can be accessed at the following URL:

[https://co1.qualtrics.com/jfe/form/SV\\_0TdHolbr4jJ5iLP](https://co1.qualtrics.com/jfe/form/SV_0TdHolbr4jJ5iLP) or this short URL: <https://bit.ly/2LHBRv4>.

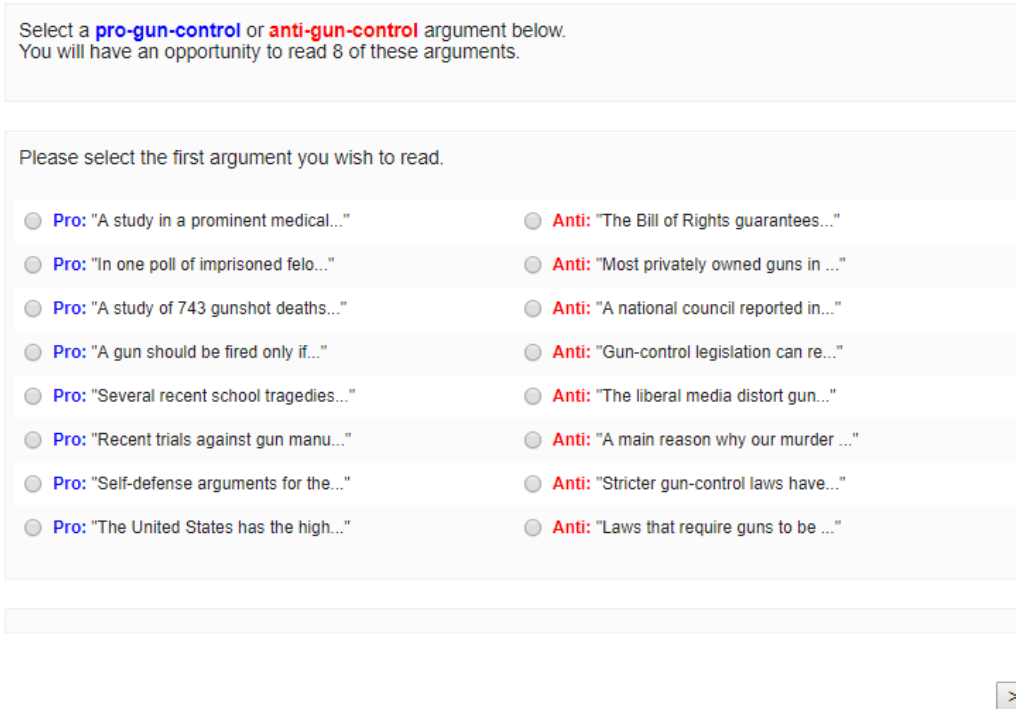


Figure 2: Screen capture of subject interface for gun-control information-search task

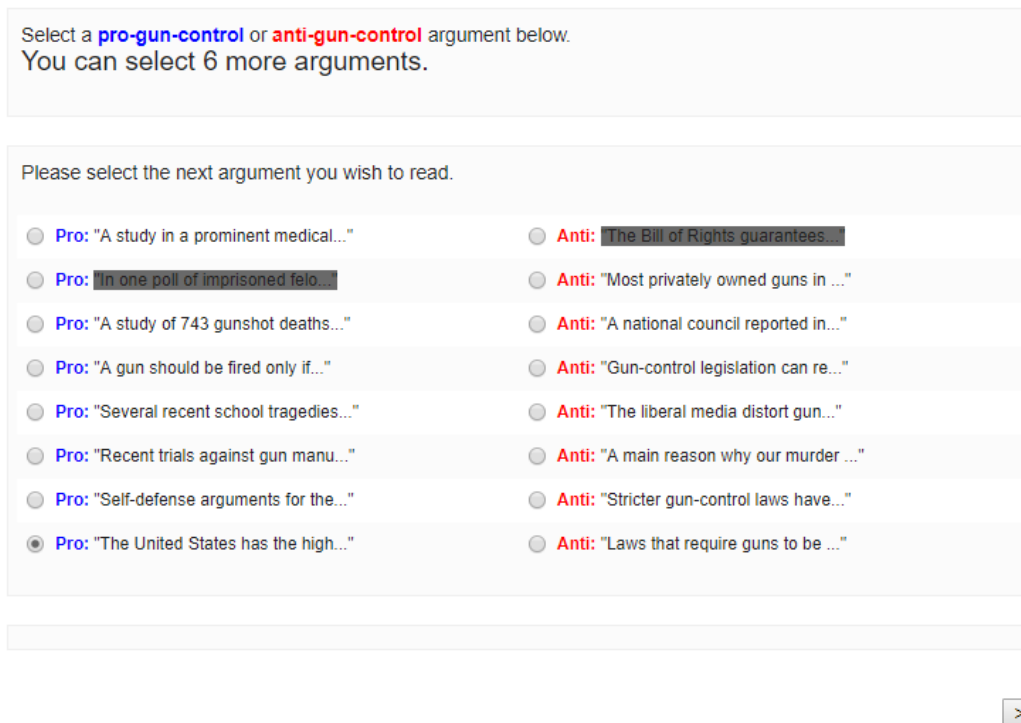


Figure 3: Screen capture of subject interface for gun-control information-search task

Prior to the information-search task, participants are told they will have an opportunity to learn about a controversial issue by reading arguments on both sides of the issue and that after doing so they will be asked to decide which side of the issue they support. The 8 pro-gun-control arguments and 8 anti-gun-control arguments used as stimuli are the same items used by Taber and Lodge (2006). These arguments have been edited for similarity in length and complexity. In the search task, the first few words of each argument are displayed in a two-column list, with the 8 pro-gun-control items in one column and the 8 anti-gun-control items in the other column. Each item is clearly marked as a "pro" or "anti" item. Half the participants see the pro- items on the left side and the anti- items on the right. For the other half of participants, the orientation is reversed. Participants are told they will be able to read 8 of the 16 items. A screen capture of the interface for this task can be seen in Figure 2. When the subject select an item, the full text of that argument is displayed for them to read. They then return again to the list of 16 items to select another item. Any item that was previously selected is blacked out to indicate that the same item cannot be selected twice (see Figure 3). If the same item is selected again, the subject receives an error message instructing them to select a different item. This process continues until 8 items have been selected and read. The behavior of interest is the quantity of pro-gun-control items selected, with a possible range from 0 to 8 (mean=3.99, sd=1.72). The midpoint of 4 would indicate that the participant viewed an equal quantity of pro-gun-control and anti-gun-control items. The distribution of values for this outcome variable can be seen in the left panel of Figure 4.

Prior to completing the information-search task, respondents were asked to report their attitudes on gun control using a continuous slider ranging from "strongly oppose" to "strongly support", and responses were coded to range from -1 to +1. A second item asked to what extent they prefer an increase or decrease in gun-control legislation, using a continuous slider ranging from "large decrease" to "large increase". Responses were again coded to range from -1 to +1. These two items are strongly correlated ( $r=.79$ ). For each respondent, I calculate the mean of these two items to generate a pre-task gun-control attitude score (mean=0.19, sd=0.57). The

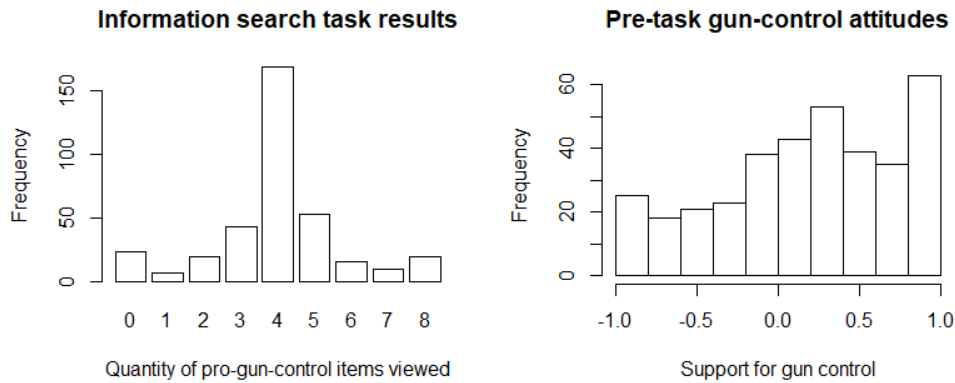


Figure 4: Distribution of outcome variable and pre-task attitudes. Because each participant read 8 gun-control items, a value of 4 for the outcome variable indicates that the participant read equal quantities of pro-gun-control and anti-gun-control items. For gun-control attitudes, positive values indicate pro-gun-control participants and negative values indicate anti-gun-control participants. A positive correlation between these two variables would indicate selective exposure to attitude-congruent information.

distribution of these pre-task attitudes can be seen in the right panel of Figure 4.

It was predicted that respondents with more pro-gun-control attitudes would choose to view a greater proportion of pro-gun-control items in the information-search task and respondents with more anti-gun-control attitudes would choose to view a greater proportion of anti-gun-control items. The outcome of interest is the strength of the correlation between respondents' pre-task attitude scores and the quantity of pro- items they choose to view. The correlation for the whole sample was predicted to be positive, indicating that individuals prefer to view a greater proportion of items that are congruent with their prior attitudes. However, the strength of the correlation between pre-task attitudes and information-search behavior was predicted to differ depending on the level of rigid religious conviction and depending on the experimental priming manipulation.

It is worth noting that gun control attitudes and rigid religious conviction are correlated only weakly ( $r = -.14$ ), which means opposition to gun-control policies is not solely the domain of the highly religious and support for gun control is not solely for the less religious. It should thus be possible to test how the behavior of highly religious gun-control supporters differs from that



of less religious gun-control supporters and how the behavior of highly religious gun-control opponents differs from that of less religious gun-control opponents.

### **Experimental Manipulation: Faith Prime**

After reporting their pre-task gun-control attitudes, but before beginning the information-search task, all participants completed a scrambled-sentence task to prime half of them with concepts of religious faith. The scrambled-sentence task (Srull and Wyer 1979; Bargh, Chen, and Burrows 1996) is a method of conceptual priming that has previously been used successfully to modify behavior by priming subjects with religious concepts (Shariff and Norenzayan 2007) (Randolph-Seng and Nielsen 2007) (Ahmed and Salas 2011). In this task, each subject is given 10 four-word sentences, the word order of each of which has been scrambled and to each of which has been added one extraneous word. Using each set of five words, the task is to drop one of the five words and unscramble the remaining four words to write a grammatically correct four-word sentence. Subjects were randomly assigned either to a faith-prime condition or a neutral condition. Five of the ten sentences are identical across the two experimental conditions, while the other five differ. In the faith-prime condition, five of the sentences include faith-related words. The lists of words can be found in the appendix. If salience of religious faith increases susceptibility to selective exposure, then the correlation between a participant's pre-task gun-control attitude and the quantity of pro-gun-control items the participant chooses to read should be stronger among those in the faith-prime condition than among those in the neutral condition.

### **Other variables**

Several other variables were measured to be used as control variables. Measurement methods and descriptive statistics for these variables can be found in appendix. The control variables included age, gender, level of education completed, performance on a political knowledge test, self-assessed level of interest in politics, party preference, and self-placement on a liberal-conservative continuum.

Of special interest are Need for Closure and the Cognitive Reflection Test. Participants answered a subset of six items from the Need for Closure scale. They indicated their agreement with each statement on a 7-point scale ranging from "strongly disagree" to "strongly agree". Responses were coded as integers from 0 to 6. For each participant, the 6 items were summed to generate a need for closure score with a theoretical range from 0 to 36 and an observed range from 6 to 35. The distribution of these scores can be found in the appendix along with the text of the items used.

Due to concerns that some MTurk users may be regular participants in behavioral research and may have had previous experience with the questions in the Cognitive Reflection Test, a modified version of the test was used. For the modified version, the context of some of the questions was changed slightly to make them seem less familiar while maintaining the underlying logic of each question. For each participant, I calculate the quantity of questions on which the participant gave the intuitive but incorrect answer. This forms the participant's CRT-intuitive score.

## Results

From the list of 16 pro-gun-control and anti-gun-control arguments, each participant selects a total of 8 items to read. As predicted, the quantity of pro-gun-control items a participant chooses to read is positively correlated with pre-task level of support for gun-control policies ( $r=.24, p<.001$ ). A linear regression model (Model 1 in Table 1) predicts that individuals with a neutral attitude toward gun control read an average of 3.85 pro-gun-control items (with a 95% confidence interval ranging from 3.67 to 4.04) and that a one-unit increase in gun-control support (e.g. an increase from neutral to strong supporter or an increase from strong opponent to neutral) is associated with a predicted increase of 0.71 pro-gun-control items viewed. The model predicts that individuals with a gun-control-attitude score of +1 (the strongest possible pro-gun-control attitude) read an average of 4.56 pro-gun-control items and 3.44 anti-gun-control items. Individuals with a gun-control attitude score of -1 (the strongest possible anti-gun-control attitude) read an average of 3.14 pro-gun-control items and 4.86 anti-gun-control items.

Table 1: OLS regression models

	<i>Dependent variable:</i>	
	Quantity of pro-gun-control items viewed	
	(1)	(2)
Gun-control attitude	0.709*** (0.155)	0.003 (0.288)
Rigid religious conviction		-0.003 (0.010)
Attitude * Religious		0.050*** (0.017)
Constant	3.853*** (0.094)	3.933*** (0.191)
Observations	358	355
R <sup>2</sup>	0.056	0.084
Adjusted R <sup>2</sup>	0.053	0.076
Residual Std. Error	1.678 (df = 356)	1.655 (df = 351)
F Statistic	20.956*** (df = 1; 356)	10.707*** (df = 3; 351)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

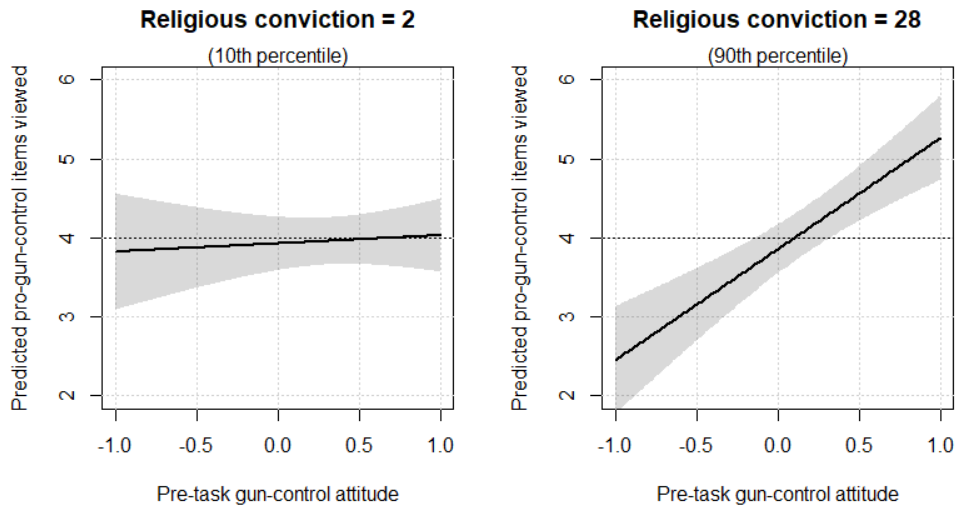


Figure 5: Predictions with 95% confidence intervals based on OLS regression model 2 in Table 1. A positive slope indicates selective exposure to attitude-congruent information.

### Estimated effects of rigid religious conviction

To test whether this pattern of selective-exposure to attitude-congruent information differs depending on the level of religious conviction, I estimate a second linear regression model of the number of pro-gun-control items viewed, using the following predictor variables: pre-task gun-control attitude, rigid religious conviction, and a multiplicative interaction between the two. Model 2 in Table 1 shows the estimated coefficients for this model. The positive interaction coefficient ( $p=.003$ , two-tailed test) indicates that the effect of prior attitudes on information-search behavior varies with the level of rigid religious conviction. Higher levels of rigid religious conviction are associated with a higher likelihood that pro-gun-control individuals will view a greater proportion of pro-gun-control items and anti-gun-control individuals will view a lower proportion of pro-gun-control items. Rigid religious conviction is clearly correlated with selective-exposure to attitude-congruent information in the gun-control information-search task. The coefficient for the main effect of gun-control attitude shows no significant effect, suggesting that when rigid religious conviction is zero, the arguments people choose to read may not depend on their prior attitudes toward the issue. The theory under investigation does not predict any main effect of religious conviction on the quantity of pro-gun-control items viewed, and no such

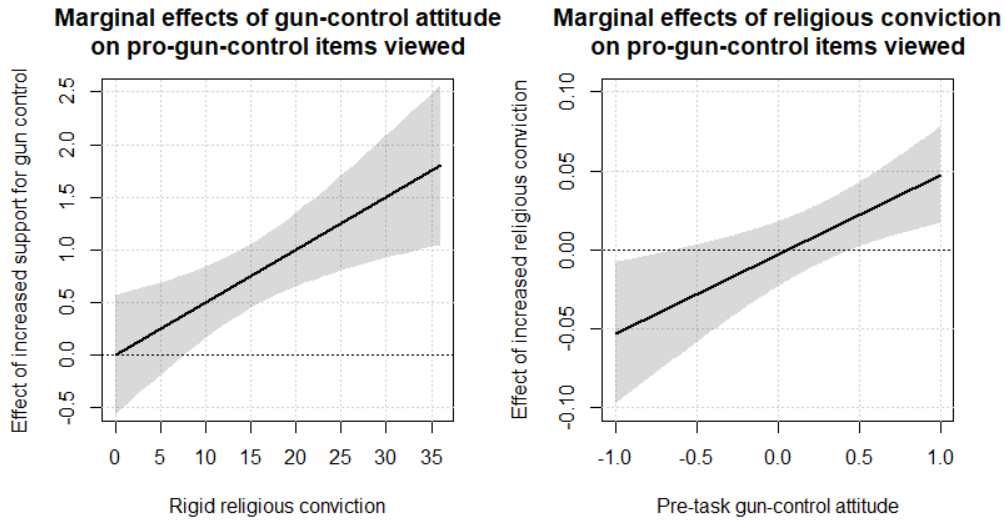


Figure 6: Marginal effects with 95% confidence intervals based on regression model 2 in Table 1

effect is found in the estimated model.

Predicted values of the outcome variable based on this model are plotted in the second panel of Figure 5. Because the vertical axis in these plots is the quantity of pro-gun-control items viewed and the horizontal axis is the pre-task level of support for gun control, a positive slope would indicate selective exposure to attitude-congruent information, i.e. a positive slope would indicate that individuals who are more pro-gun-control view more pro-gun-control items rather than anti-gun-control items and individuals who are more anti-gun-control view more anti-gun-control items rather than pro-gun-control items. The right panel, which represents individuals with a level of religious-conviction score at the 90th percentile, shows a clear positive slope. This suggests that, among the highly religious, the things they choose to read depend heavily on their prior attitudes toward the issue. The left panel, which represents individuals with a low level of religious conviction (10th percentile), shows no significant slope. Among the less religious, information-search behavior does not appear to be driven so much by prior attitudes. Marginal effects are plotted in Figure 6.

Table 2: OLS Regression Models

	<i>Dependent variable:</i>			
	Quantity of pro-gun-control items viewed			
	(1)	(2)	(3)	(4)
Gun-control attitude	-0.370 (0.970)	-1.765 (1.112)	-0.667 (0.968)	-1.842* (1.109)
Age	-0.016* (0.008)	-0.015* (0.008)	-0.017** (0.008)	-0.016** (0.008)
Woman	-0.057 (0.218)	0.094 (0.222)	0.001 (0.219)	0.122 (0.222)
Education	0.083 (0.060)	0.075 (0.059)	0.094 (0.059)	0.086 (0.059)
Political knowledge	-0.001 (0.049)	-0.003 (0.048)	-0.005 (0.050)	-0.005 (0.050)
Political interest	-0.595 (0.389)	-0.590 (0.385)	-0.446 (0.388)	-0.462 (0.386)
Self-assessed conservatism	-0.258 (0.290)	-0.180 (0.290)	-0.286 (0.287)	-0.211 (0.288)
Lean toward Republican	-0.216 (0.275)	-0.193 (0.273)	-0.141 (0.274)	-0.129 (0.272)
Rigid religious conviction	0.005 (0.012)	0.009 (0.012)	0.008 (0.012)	0.011 (0.012)
Need for closure		-0.046** (0.021)		-0.042** (0.021)
CRT intuitive			-0.045 (0.089)	-0.023 (0.088)
Attitude*Age	0.014 (0.012)	0.009 (0.012)	0.013 (0.012)	0.009 (0.012)
Attitude*Woman	-0.077 (0.349)	-0.335 (0.356)	-0.289 (0.353)	-0.486 (0.358)
Attitude*Education	-0.123 (0.100)	-0.109 (0.099)	-0.133 (0.099)	-0.118 (0.098)
Attitude*Knowledge	-0.086 (0.084)	-0.071 (0.083)	0.001 (0.087)	0.002 (0.087)
Attitude*Interest	0.630 (0.647)	0.544 (0.642)	0.393 (0.648)	0.362 (0.644)
Attitude*Conservatism	-0.185 (0.473)	-0.293 (0.469)	-0.210 (0.469)	-0.309 (0.467)
Attitude*Republican	0.518 (0.521)	0.415 (0.517)	0.514 (0.518)	0.431 (0.515)
Attitude*Religious	0.054*** (0.020)	0.045** (0.020)	0.039* (0.020)	0.033* (0.020)
Attitude*Need for closure		0.092*** (0.033)		0.079** (0.033)
Attitude*CRT intuitive			0.467*** (0.153)	0.407*** (0.154)
Constant	4.786*** (0.587)	5.471*** (0.702)	4.621*** (0.590)	5.258*** (0.704)
Observations	354	354	354	354

Note:

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

To test the robustness of the association between rigid religious conviction and selective exposure, I estimate another model, seen in column 1 of Table 2, which includes the following control variables: age, gender, level of education, performance on a test of political knowledge, self-reported level of interest in politics, partisan leaning (Democrat or Republican), and self-assessed position on a liberal-conservative continuum. Even when controlling for all of these variables, the predicted interactive effect of rigid religious conviction and pre-task attitude is still present ( $p=.006$ , two-tailed test).

Because rigid religious conviction is correlated with need for closure ( $r=.213$ ,  $p<.001$ ) and with CRT-intuitive score ( $r=.295$ ,  $p<.001$ ), it is possible that the effects of these variables could account for some of the estimated effects of rigid religious conviction on selective exposure. Adding need for closure and CRT-intuitive score to the model (column 4 of Table 2) decreases the estimated interactive effect of rigid religious conviction by about 40% (from .054 to .033), but some of the estimated effect still remains ( $p=.099$ , two-tailed test).

Additional models were estimated using a different measure of religiosity: self-placement on a continuous slider ranging from "not at all religious" to "extremely religious" and coded to range from 0 to 1. The results using this alternative measure of religiosity are similar to the results using the measure of rigid religious conviction. These alternative models are not reported here but are reported in the appendix.

### **Effects of Experimental Priming Manipulation**

The experimental priming manipulation makes it possible to test whether increased salience of religious faith has a direct causal effect on information-search behavior. To test the effects of the manipulation, I estimate another model of the number of pro-gun-control items viewed, this time using the following variables: the experimental condition, pre-task gun-control attitude, and an interaction between the two. Because the priming manipulation is expected to work by momentarily increasing the salience of religious faith messages among those individuals who have habitually been exposed to religious faith messages, it makes sense to test the effects of the

manipulation primarily among subjects who already have at least some level of religious belief. For this model I remove the 68 subjects who have a rigid religious conviction score of less than 6 on the 0 to 36 scale, i.e. I include in the model only the 290 subjects whose average per-item score across the six items is at least 1. The estimated coefficients for this model using only those religious believers can be seen in Table 3 as Model 1. The coefficient of greatest interest for testing the effects of the priming manipulation is the interaction coefficient. The estimated interaction coefficient is positive ( $p=.008$ , two-tailed test), indicating that the effect of pre-task gun-control attitudes on the number of pro-gun-control items viewed is stronger among those who were primed with religious words. Priming people with religious words increases selective exposure to attitude-congruent information in the gun-control information-search task.

Table 3: OLS regression models testing the effects of the priming manipulation. Model 1 includes only participants with a rigid religious conviction score of at least 6 on the 0 to 36 scale.

	<i>Dependent variable:</i>	
	Quantity of pro-gun-control items viewed Religious believers	Full sample
	(1)	(2)
Gun-control attitude	0.472* (0.251)	0.371 (0.226)
Faith priming manipulation	-0.073 (0.201)	-0.113 (0.189)
Attitude * Prime	0.909*** (0.342)	0.640** (0.310)
Constant	3.987*** (0.149)	3.925*** (0.142)
Observations	290	358
R <sup>2</sup>	0.120	0.067
Adjusted R <sup>2</sup>	0.110	0.059
Residual Std. Error	1.639 (df = 286)	1.672 (df = 354)
F Statistic	12.943*** (df = 3; 286)	8.451*** (df = 3; 354)

*Note:*

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$



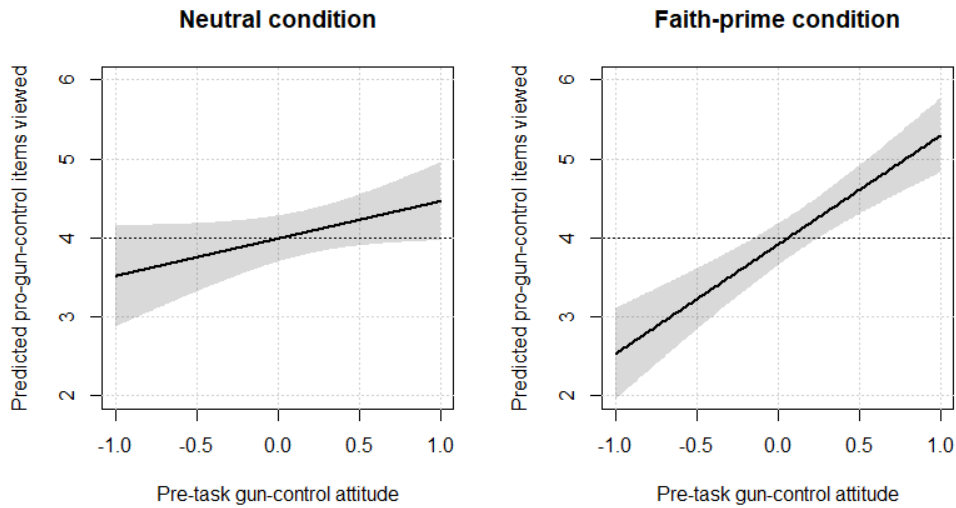


Figure 7: Predictions with 95% confidence intervals based on OLS regression models in Table 3. A positive slope indicates selective exposure to attitude-congruent information.

Predicted values of the outcome variable based on this model are plotted in Figure 7. In these plots, a positive slope indicates selective exposure to attitude-congruent information, and a steeper slope indicates greater levels of selective exposure. The slope for the faith-prime condition is clearly steeper than that of the neutral condition. Pre-task gun-control attitudes have a greater effect on gun-control information-search behavior among those who have been primed with religious words than among those who have not. Estimated marginal effects are plotted in Figure 8.

Although the effect of the priming manipulation among religious believers is of greatest interest, I estimate another model using the full sample rather than just the religious believers (Model 2 in Table 3). As in the previous model, the interaction coefficient for gun-control attitude and treatment group is positive ( $p=.039$ ). Note that these models are not designed to test whether the effect of the priming manipulation differs depending on the level of religious belief. Such a test would involve a three-way interaction, and the current sample size would not provide adequate power for such a test.

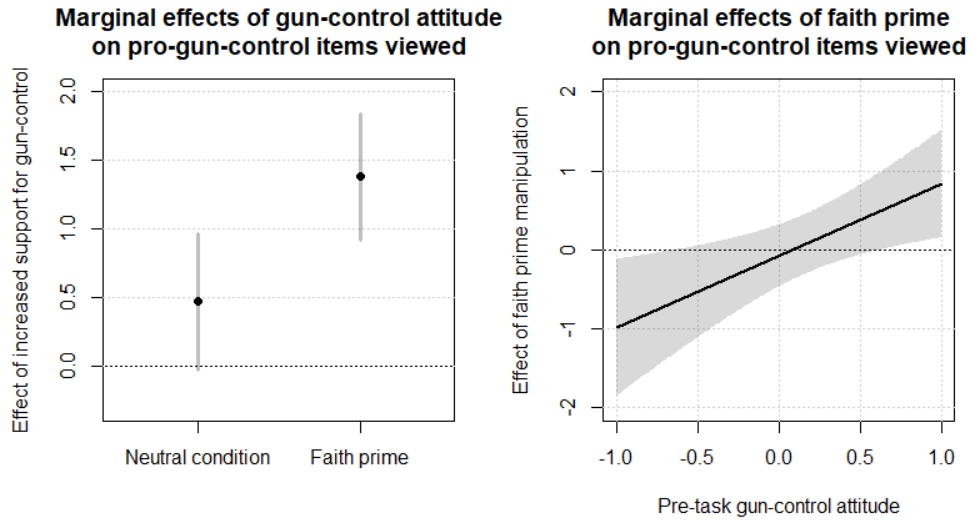


Figure 8: Marginal effects with 95% confidence intervals based on regression model 1 in Table 3

## Discussion

In this paper, I present correlational and experimental evidence for an effect of religious faith on selective exposure to attitude-congruent information. In an information-search task on the topic of gun control, the proportion of pro-gun-control arguments an individual chooses to read is positively correlated with the individual's pre-task level of support for gun-control policies, and this correlation is stronger among subjects who score higher on a measure of rigid religious conviction. Among pro-gun-control individuals, those with rigid religious convictions are more likely to read pro-gun-control arguments than those without rigid religious convictions. Among anti-gun-control individuals, those with rigid religious convictions are more likely to read anti-gun-control arguments than those without rigid religious convictions. In other words, when seeking information on a non-religious political issue, individuals with rigid religious convictions are more likely than others to read arguments that are congruent with their prior attitudes on the issue. There are multiple possible explanations for an observed correlation between rigid religious conviction and selective exposure to attitude-congruent political information. I will discuss three possibilities here.

**First, having a greater predisposition to selective exposure might make people more**

**likely to firm rigid religious convictions.** Individuals who have a general tendency to read things that are congruent with their beliefs and avoid reading incongruent information should tend to read things that will strengthen their religious beliefs and avoid reading things that will challenge their faith. Just as selective exposure to attitude-congruent political information can lead to increased attitude strength and polarization (Taber and Lodge 2006), selective exposure to information congruent with one's religious beliefs might lead to stronger religious belief. If this is true, it would result in a correlation between the level of rigid religious conviction and the tendency toward selective exposure, as was observed in the correlational part of the current study.

**Second, some other predispositional variable, such as a need for cognitive closure, a preference for intuition over reflection, or some other unknown variable, could cause individuals to be more religious and could have a separate effect on political-information-search behavior.** Individuals with a strong need for closure could be more drawn to religious belief, especially to fundamentalist religious belief, because the doctrines of such faiths may provide rigid structure and certainty and eschew ambiguity. Consistent with this idea, prior research has found that the Need for Closure Scale (Webster and Kruglanski 1994) is correlated with various measures of religiosity (Saroglou 2002; Duriez 2003). The current study replicates this finding: Individuals who score higher on a measure of rigid religious conviction also tend to score higher on a subset of items from the Need for Closure Scale. Independent of its effect on religiosity, a strong need for cognitive closure could also cause individuals to engage in selective exposure to attitude-congruent political information. Individuals with a motivation to maintain closure in their attitudes and beliefs would prefer to avoid encountering any information that might reduce their certainty on any given topic. Consistent with this idea, prior research has found selective exposure to occur primarily among individuals who score high on the Need for Closure Scale (Chen et al. 2014). The current study replicates this finding: the correlation between pre-task gun-control attitudes and gun-control information-search behavior is stronger among individuals who score higher on a subset of items from the Need for Closure Scale. A preference for

intuition rather than effortful reflection is another variable that could generate a correlation between religious conviction and selective exposure. Previous research suggests that individuals who are more intuitive rather than reflective are more likely to hold religious beliefs (Gervais and Norenzayan 2012; Shenhav, Rand, and Greene 2012) and are more susceptible to partisan motivated reasoning (Arceneaux and Vander Wielen 2017), which is closely related to selective exposure (Taber and Lodge 2006).

This second possible explanation for a correlation between rigid religious conviction and selective exposure, in which some other predispositional variable, such as need for closure or a preference for intuition, has separate effects on religious faith and on selective exposure, does not require any direct causal connection between religious faith and selective exposure. However, the empirical results of the current study seem to suggest that, if this mechanism is present, it is probably not the only mechanism driving the correlation between religiosity and selective exposure. Although the estimated effect of religious conviction on selective exposure is slightly reduced when controlling for measures of Need for Closure and intuitiveness in the model, as would be expected if some of the correlation between religiosity and selective exposure is driven by the effects of these variables, some of the estimated effect still remains. Even if controlling for these variables were found to eliminate all of the estimated effect of rigid religious conviction on selective exposure, that would not necessarily demonstrate that the correlation between rigid religious conviction and selective exposure is driven entirely by the effects of predispositional variables on religious faith and on selective exposure, since it could be possible that religious faith also affects need for closure and preference for intuition. However, models using the observational measure of rigid religious conviction are not sufficient to demonstrate conclusively that the correlation between religious conviction and selective exposure is not driven entirely by the effects of predispositional variables. If the operational measures of need for closure and of preference for intuition used in this study do not capture all aspects of the conceptual variables of interest, it could still be possible that the correlation between religious conviction and selective exposure is driven entirely by these conceptual variables. It is also possible that there is some

other unknown variable that affects religious faith and selective exposure and is responsible for the observed covariation between them.

**Third, religious faith could cause individuals to become more likely to engage in selective exposure.** Religious faith messages could convince religious individuals that maintaining their beliefs is desirable and could thus encourage them to engage in motivated reasoning and selective exposure in order to increase the likelihood that they will maintain their religious beliefs. This could lead to the development of a habit for selective exposure which could then be applied more broadly to other non-religious contexts such as the context of political information seeking. This theory is supported by the results of the experimental part of the current study. Priming half the subjects with words related to religious faith demonstrates that increased salience of religious faith causes an increase in selective exposure when seeking information on a non-religious political issue. The correlation between pre-task gun-control attitudes and gun-control information-search behavior is stronger among subjects primed with religious words than among those primed with neutral words.

All three of these options are plausible, and the results of the current study do not provide evidence against any of them, but the third option, in which religious faith messages have a direct causal effect on selective exposure, is the only one that is clearly demonstrated by the results of this study. However, it seems unlikely that this third mechanism would be active without the first mechanism also being active. Religions would not have much reason to promote selective exposure if a tendency toward selective exposure did not have some effect on the strength of religious belief. It is possible that all three of these mechanisms are at work simultaneously. The interplay between religious faith and selective exposure may be complex.

## **Limitations and future work**

This study has some important limitations. First, the MTurk sample may not be representative of the general population. It is reasonable to suppose that the level of religious faith and the level of selective exposure may be different in this sample than in the general population. Fortunately

though, this study is not primarily interested in estimating the level of religious faith or the level of selective exposure. This study is interested primarily in the association between the two. I have no reason to suspect that the effect of religious faith on selective exposure would be different in the general population.

Second, this study uses only one type of measure of selective exposure and uses it on only one political topic. I have no reason to suspect that the topic of gun policy would be special in terms of the effect that religious faith has on the tendency to seek attitude-congruent information on the issue, but future studies should test the theory using multiple political topics and using other types of measures of selective exposure. Future studies should also expand the investigation from selective exposure to other aspects of motivated reasoning.

While it appears that religious faith may be a factor for individual differences in selective exposure to attitude-congruent political information, it surely is not the only factor, and it may not even be the most important factor. Further research should seek to discover what other variables can lead people to be more or less likely to seek information that challenges their beliefs and opinions and what variables can lead people to process the information they encounter in a biased or unbiased manner. If such variables can be discovered, then we may some day have an answer to this important question: how do we make an open-minded person?

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# Online Appendix: Religious Faith Promotes Selective Exposure to Attitude-Congruent Political Information

Table 4: Summary descriptive statistics

Statistic	N	Mean	St. Dev.	Min	Max
Rigid religious conviction	355	15.085	9.254	0	36
Self-assessed religiosity	358	0.468	0.378	0.00	1.00
Pro-gun-control items viewed	358	3.992	1.724	0	8
Pre-task gun-control attitude	358	0.195	0.573	-1.00	1.00
Age	358	39.771	13.476	20	79
Woman (dichotomous)	358	0.589		0	1
Lean Republican (dichotomous)	358	0.425		0	1
Self-assessed conservatism	358	-0.029	0.546	-1.00	1.00
Political knowledge test	358	5.221	2.308	0	8
Political interest	358	0.602	0.267	0.00	1.00
Education	357	3.535	1.672	0	8
Need for closure	358	22.584	4.872	6	35
Cognitive Reflection Test (CRT) correct	358	1.285	1.208	0	3
CRT intuitive answers	358	1.416	1.178	0	3

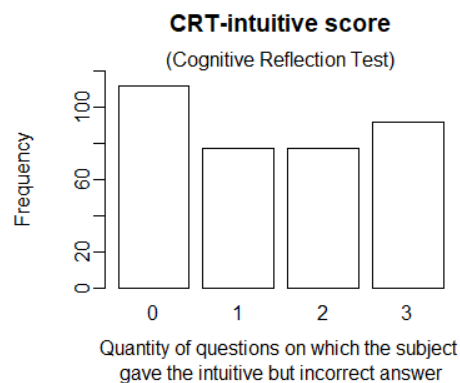
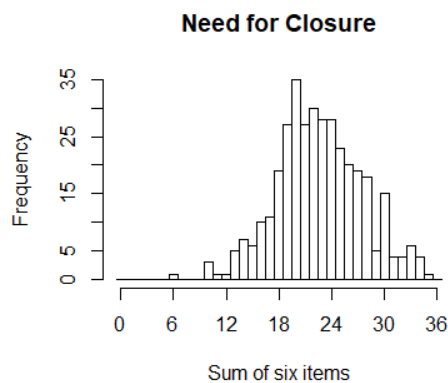


Table 5: OLS regression models using self-assessed religiosity rather than scale of rigid religious conviction

	<i>Dependent variable:</i>			
	Quantity of pro-gun-control items viewed			
	(1)	(2)	(3)	(4)
Gun-control attitude	0.446 (0.905)	-1.036 (1.094)	-0.206 (0.915)	-1.384 (1.091)
Age	-0.014* (0.008)	-0.013 (0.008)	-0.016** (0.008)	-0.015* (0.008)
Woman	-0.027 (0.215)	0.098 (0.218)	0.004 (0.215)	0.102 (0.217)
Education	0.092 (0.060)	0.081 (0.060)	0.102* (0.060)	0.093 (0.059)
Political knowledge	-0.011 (0.048)	-0.017 (0.048)	-0.012 (0.050)	-0.014 (0.050)
Political interest	-0.607 (0.389)	-0.612 (0.385)	-0.462 (0.387)	-0.484 (0.384)
Self-assessed conservatism	-0.202 (0.273)	-0.102 (0.274)	-0.223 (0.270)	-0.135 (0.272)
Lean toward Republican	-0.214 (0.270)	-0.223 (0.268)	-0.162 (0.268)	-0.171 (0.266)
Self-assessed religiosity	-0.085 (0.280)	0.005 (0.280)	0.003 (0.281)	0.064 (0.281)
Need for closure		-0.045** (0.021)		-0.041* (0.021)
CRT intuitive			-0.015 (0.088)	0.008 (0.088)
Attitude*Age	0.009 (0.012)	0.005 (0.012)	0.009 (0.012)	0.005 (0.012)
Attitude*Woman	-0.096 (0.347)	-0.312 (0.352)	-0.287 (0.348)	-0.451 (0.352)
Attitude*Education	-0.132 (0.100)	-0.112 (0.100)	-0.136 (0.099)	-0.118 (0.099)
Attitude*Knowledge	-0.112 (0.083)	-0.093 (0.083)	-0.012 (0.088)	-0.009 (0.087)
Attitude*Interest	0.531 (0.645)	0.491 (0.640)	0.362 (0.642)	0.364 (0.638)
Attitude*Conservatism	0.063 (0.440)	-0.086 (0.439)	-0.084 (0.438)	-0.204 (0.438)
Attitude*Republican	0.256 (0.508)	0.213 (0.504)	0.358 (0.503)	0.316 (0.501)
Attitude*Religiosity	1.174*** (0.452)	0.984** (0.454)	0.909** (0.457)	0.792* (0.459)
Attitude*Need for closure		0.086** (0.033)		0.072** (0.033)
Attitude*CRT intuitive			0.486*** (0.152)	0.427*** (0.153)
Constant	4.769*** (0.554)	5.545*** (0.692)	4.629*** (0.563)	5.327*** (0.695)
Observations	357	357	357	357

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## Gun-control arguments used in information-search tasks

### Pro-gun-control arguments:

1. *A study in a prominent medical journal found that you or a member of your family are 43 times more likely to be killed by your own gun than by an intruder's. Guns aren't the protection many people think they are. We need stricter gun control.*
2. *In one poll of imprisoned felons, only 27% report buying guns on the black market; the rest got their weapons through legal channels. Obviously, tougher gun controls are needed to keep these 'legal' guns out of criminal hands.*
3. *A study of 743 gunshot deaths reports that 398 occurred in a home where a gun was kept. Only 9 of the 743 were deemed to be justified by the police. It follows that gun owners are not as responsible as they claim to be.*
4. *A gun should be fired only if one's life is in danger and all other options have been exhausted. Most 'self-defense' shootings do not meet these criteria. Thus use of guns in self-defense only contributes to the crime rate.*
5. *Several recent school tragedies highlight the fact that guns have become a menace to our children. It's very simple: our schoolyards should not be battlefields. We need to reduce access to guns; we need stricter gun control.*
6. *Recent trials against gun manufacturers have consistently found them guilty, and have forced the gun industry to pay out huge sums of money. If the courts can find good reason to rein in the gun industry, then it is high time for Congress to follow suit.*
7. *Self-defense arguments for the need of guns are silly: guns only become necessary for self-defense because there are so many guns out there. Thus, guns should be outlawed outright – then we won't need to worry about self-defense.*
8. *The United States has the highest murder rate of all industrialized nations. It is also the only industrialized country that has lenient gun laws. We therefore say: bring down the number of guns, bring down the murder rate.*

### Anti-gun-control arguments:

1. *The Bill of Rights guarantees the right of all citizens to bear arms. Quite simply, gun control measures are unconstitutional infringements on a basic right of citizenship.*
2. *Most privately-owned guns in America are owned by sportsmen and are used for completely peaceful purposes. These guns pose no risk to society, but they are unfairly targeted by gun control legislation.*
3. *A national council reported in a recent year that handgun accidents killed less than 15 children under the age of 6. This number is minuscule when compared to the total number of accidental deaths of young children. It simply is not worth outlawing guns to save just a handful of lives.*

4. *Gun control legislation can only regulate guns sold through legal outlets. But these days, many criminals buy their guns illegally. Gun control legislation therefore cannot regulate the most dangerous guns in society.*
5. *The liberal media distort gun issues: they only talk about tragedies involving guns. Yet guns were used defensively 2.5 million times last year. The real tragedy would be to outlaw guns – crime would spiral out of control.*
6. *A main reason why our murder rate is so high is that most crime victims do not resist. These victims are twice as likely to be injured compared to those who defend themselves. Carrying a gun is thus one's ultimate protection against violent crime.*
7. *Stricter gun control laws have not passed Congress, reflecting serious misgivings the American people have about gun control. However, the courts have repeatedly ignored the will of the people, finding gun manufacturers in the wrong. We need to limit the power of the courts in gun control cases.*
8. *Laws that require guns to be locked up defeat the purpose of gun ownership: how can I protect my family if I must first retrieve my gun from its locker? We thus need to repeal laws regulating guns in private homes.*

### **Scrambled sentences used in faith-priming task**

Faith-prime condition:

1. *appreciated presence was see her*
2. *felt she eradicate spirit the*
3. *more paper it once do*
4. *dessert divine was fork the*
5. *send I over it mailed*
6. *evil faith have God in*
7. *yesterday it finished track he*
8. *sacred is book refer the*
9. *prepared somewhat I was retired*
10. *sermons believed the simple she*

Neutral condition:

1. *appreciated presence was see her*
2. *fall was worried she always*

3. *more paper it once do*
4. *shoes give replace old the*
5. *send I over it mailed*
6. *saw hammer he the train*
7. *yesterday it finished track he*
8. *sky the seamless blue is*
9. *prepared somewhat I was retired*
10. *predictable he shoes his tied*

## **Need for cognitive closure**

Six items taken from the Need For Closure Scale:

1. *When I am confronted with a problem, I'm dying to reach a solution very quickly.*
2. *I enjoy having a clear and structured mode of life.*
3. *I feel irritated when one person disagrees with what everyone else in a group believes.*
4. *When I have made a decision, I feel relieved.*
5. *I don't like situations that are uncertain.*
6. *I do not usually consult many different opinions before forming my own view.*

Participants report their level of agreement with each statement on a 7-point scale ranging from "Strongly disagree" to "Strongly agree" (coded to range from 0 to 6). The sum of the six items forms a need-for-closure score for each participant with a possible range from 0 to 36 and an observed range from 6 to 35.

## **Modified Cognitive Reflection Test (CRT)**

1. *A concert ticket and the transportation to get to the concert cost \$110 in total. The ticket costs \$100 more than the transportation. How much does the transportation cost? (Intuitive response: \$10. Correct response: \$5.)*
2. *A large crowd of people are gradually arriving for a big event. Some people arrive early and camp out to reserve the best spots, while others arrive later. Each hour the crowd doubles in size. If it takes 18 hours for the crowd to cover the entire event area, how many hours does it take for the crowd to cover half of the event area? (Intuitive response: 9 hours. Correct response: 17 hours.)*

3. *If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets?* (Intuitive response: 100 minutes. Correct response: 5 minutes.)

Each question is displayed on a separate page to prevent participants from going back to change their answers on previous questions. The number of items on which the participant gives the intuitive but incorrect answer forms the CRT-intuitive score for each participant.

## **Partisan leaning**

*Do you think of yourself as closer to the Republican party or closer to the Democratic party?*

- Forced dichotomous choice (coded as 0 for *Democratic* or 1 for *Republican*)

## **Self-assessed conservatism**

*Are your political views liberal or conservative...*

1. *on economic issues?*
2. *on social issues?*
3. *in general?*

Each of the three items is a continuous slider ranging from "*Extremely liberal*" to "*Extremely conservative*" (coded to range from -1 to +1). However, the models presented in this paper include only the "*in general*" item.

## **Political knowledge test**

*We are also interested in seeing how much information about U.S. politics gets out to the public. Please answer the following questions without searching for the answers and without asking anyone for assistance. Most people don't know the answers to these questions. If you don't know the answer, you should guess.*

- *Which job or political office is currently held by each of the following individuals?*
  1. *John Roberts*
  2. *Mitch McConnell*
  3. *Jeff Sessions*
  4. *Rex Tillerson*
  5. *Betsy DeVos*
- *How long is a single term for each of the following elected offices?*
  1. *President*
  2. *Senators*
  3. *House of Representatives*

Each question is a multiple-choice item with forced response. The number of questions answered correctly forms the political-knowledge score, ranging from 0 to 8.

## **Political interest**

- *How interested are you in information about current events in government or politics?*
  - Continuous slider from "Not at all interested" to "Extremely interested" (coded to range from 0 to 1)

## **Education**

*What level of education have you completed?*

1. *Less than high school*
2. *High school graduate or equivalent*
3. *Some college*
4. *Trade school or community college degree (or more than two years at university)*
5. *Bachelor degree*
6. *Some graduate studies*
7. *Master degree*
8. *Professional degree*
9. *Doctoral degree*

In the data analysis presented in this paper, this is treated as an interval variable ranging from 0 to 8. However, using a set of 8 dummy variables in place of the single education-level variable does not reduce the estimated interactive effect between pre-task gun-control attitude and CRT intuitive score.