

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

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## Abstract

When seeking political information, people are motivated to selectively seek information that is congruent with their prior attitudes. However, some individuals may do so more than others, and not much is known about what factors affect such individual differences. Rigid religious faith is one variable that may promote selective exposure. Messages of the importance of rigid faith – the idea that religious beliefs must be held firmly and not doubted – could encourage a habit of selective exposure to information that supports existing religious beliefs. As a side effect, this habit of selective exposure might be applied outside the context of religion. In this study, an information-search task on a non-religious political issue is used to demonstrate that subjects prefer to read a greater number of arguments that are congruent with their prior attitudes on the issue, and this effect of prior attitudes on information-search behavior is found to be stronger among individuals who have rigid religious convictions. A scrambled-sentence task is used to prime half the subjects with religious concepts prior to completing the information-search task. This experiment demonstrates that increased salience of religious faith causes an increase in selective exposure to attitude-congruent political information.

**Keywords:** Motivated reasoning, selective exposure, confirmation bias, individual differences, religion, faith, beliefs, attitudes, information seeking

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## **Introduction and overview**

When seeking information on political topics, people are motivated to selectively expose themselves to information that will support their prior beliefs or attitudes and avoid information that might challenge them (Taber & Lodge 2006; Garrett 2009; Knobloch-Westerwick & Meng 2009; Westerwick et al. 2013; Iyengar & Hahn 2009; Johnson et al. 2009). However, some individuals may do so more than others (Kruglanski et al. 1993; Chen et al. 2014). Individual differences in the tendency to engage in selective exposure to attitude-congruent information could be affected by many different variables, but one such variable may be religious faith. Some religions teach that maintaining one's beliefs is valuable and even virtuous. This could encourage religious believers to develop habits of selectively seeking, or selectively attending to, information that will strengthen their existing religious beliefs. Messages that encourage selective exposure to information congruent with one's religious beliefs could unintentionally produce habits of selective exposure outside the context of religion as well. People who are exposed to messages of rigid religious faith might thus be more likely to seek information that supports their political beliefs and opinions.

In this paper, I start by introducing the concept of selective exposure to attitude-congruent information, a well-established phenomenon. I then present my own novel theory about how messages of religious faith promote selective exposure. I discuss potential challenges for causal inference, including the possibility of confounding variables such as a need for cognitive closure or a preference for intuition over reflection. I then describe an empirical study that uses an information-search task on a controversial political issue to measure selective exposure. Behavior in this task is found to be correlated with an observational measure of rigid religious conviction and is directly affected by an experimental treatment in which participants are primed to think of concepts of religious faith. Finally, I discuss possible interpretations of the results and important limitations of the study.

## **Selective Exposure to Attitude-Congruent Information**

The phenomenon of selective exposure to attitude-congruent information is well documented in past research. For example, people who have pro-gun-control opinions usually choose to read arguments from political organizations known to be supporters of gun-control policies, while anti-gun-control individuals more often read arguments from anti-gun-control organizations (Taber & Lodge 2006). People with strong attitudes are also more likely to view an article if the headline indicates that the information contained in the article is congruent with their prior attitudes (Garrett 2009; Knobloch-Westerwick & Meng 2009; Westerwick et al. 2013). In the United States, 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 & Hahn 2009). In a survey of people who read political blogs, most respondents report that they often visit blogs that provide information with which they agree, while fewer than a quarter of respondents say they read blogs with which they disagree (Johnson et al. 2009). Selective exposure is an important research topic especially in the current day as the rise of cable television and the Internet has made it easier for individuals to expose themselves selectively to information that is congruent with their opinions and beliefs (Stroud 2008; Prior 2013). This increased selective exposure may be a cause of increased polarization of public opinion in 21st Century politics (Prior 2013; Lelkes et al. 2017).

Although selective exposure seems to be common, there may be differences in the degree to which individuals engage in selective exposure (Kruglanski et al. 1993; Chen et al. 2014). Between 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. There may be many variables that affect this behavior. This paper investigates just one possible factor: religious faith.

## **Rigid Religious Faith and Selective Exposure**

Religious philosopher William James professed the propriety of a "will to believe" (James 1896). Many religious teachings are more insistent than that in their promotion of the importance of faith, or an effort to maintain a strong belief in the essential doctrines of the religion. Scriptural texts often proclaim that maintaining one's beliefs is not only virtuous but is essential for gaining eternal 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 reasons 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 damnation, believers should feel especially motivated to maintain their beliefs. The stakes are high.

Because maintenance of religious beliefs is so important in many religious traditions, 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, 2016). Selective exposure is one type of behavior that could be effective in maintaining faith. If religious believers are frequently exposed to messages of the importance of maintaining faith, this could motivate them to

spend time with other believers who will strengthen their belief and to shun non-believers who might challenge their faith (Hardin 1997). It might also lead more generally to habits of selectively exposing themselves to information that supports the doctrines of the religion in which they believe and avoiding information that might challenge their beliefs (Hart et al. 2009).

Selective exposure to information congruent with one's religious beliefs has been observed in past research. McFarland & Warren Jr (1992) find that biblical literalists, especially those who score low on the Quest Scale (a self-report measure of open-mindedness about one's religious beliefs), prefer to read articles that support fundamentalist Christian beliefs and avoid articles that challenge their beliefs. Jang (2014) finds that when choosing articles to read on the topics of biological evolution or stem-cell research, religious individuals read fewer belief-incongruent articles than less religious individuals do. An example of explicit endorsement of selective exposure to belief-congruent information can be seen in an advice forum in a Latter-Day-Saint (LDS) magazine. When questions about the propriety of reading anti-LDS literature are submitted to the magazine, most readers' responses recommend that such literature should not be read (New Era 1973, 2007).

However, such explicit messages endorsing selective exposure may not even be necessary for habits of selective exposure to develop. Messages that endorse faith-promoting behavior generally could be sufficient to produce selective exposure more specifically. Because followers of rigid-faith religions have been taught that strengthening their beliefs is virtuous, when they engage in selective exposure and feel their beliefs being strengthened as a result of that behavior, this should make them feel good about what they are doing. This positive feedback should thus encourage habits of selective exposure.

A habit of selective exposure developed in the context of religious beliefs may not be forever confined to the context of religion. Behaviors learned in one area of life can often be applied in other areas of life. For example, Brady et al. (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. Even if this is not an issue on which this person's opinions have been dictated by religion, the habits developed in learning to protect religious beliefs are now instinctively applied to protecting other beliefs and attitudes outside the context of religion, perhaps without any conscious awareness that this is happening. In the context of religion, the person learned that having beliefs reinforced is desirable and thus 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. This is not to say that all religious people will avoid attitude-incongruent political information. Some religious individuals may reject the importance of rigid faith and may be more open to future changes in their religious beliefs (Batson & Raynor-Prince 1983). Such individuals should not be particularly susceptible to the preference for seeking attitude-congruent information. Rather, we should expect to find that patterns of selective exposure are strongest among individuals who believe in the importance of rigid faith and who hold religious beliefs with rigid conviction.

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

A direct effect of rigid religious faith 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 motivated reasoning and selective exposure could cause individuals to be more likely to select into religious belief. The possibility of reverse causality is thus a major concern when attempting to identify the effect of rigid religious faith on selective exposure. It is also possible that some other predispositional variable could affect both religious belief and selective exposure. 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 measures individual differences in desire for predictability, preference for order and structure, discomfort with ambiguity, closed-mindedness, and decisiveness (Webster & 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 & Boyatzi 2012). This theory is supported by 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. Having a greater need for cognitive closure could also cause a person to be more drawn to religious belief, especially to fundamentalist religions, because the doctrines of such faiths may provide certainty of belief and rigid structure through strict behavioral requirements. Saroglou (2002) finds that the Need for Closure Scale is indeed associated with measures of religiosity, both with the Religious Fundamentalism scale of Altemeyer & Hunsberger (1992) and with a more general measure of religiosity. Duriez et al. (2000) find 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. If a need for cognitive closure increases one's affinity for religious belief and a 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.

Another potential confounding variable could be the tendency to engage in a more intuitive, rather than reflective, cognitive style. When making judgments, some individuals are more likely to go with the first thing that intuitively jumps to their mind, while others are more likely to reflect on those intuitions effortfully and override them when it is appropriate to do so (Frederick 2005; Toplak et al. 2011). The Cognitive Reflection Test (Frederick 2005) is a set of three simple math questions, each of which is 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 found 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 et al. 2012; Gervais & Norenzayan 2012). A preference for intuition rather than reflection also predicts susceptibility to various types of partisan motivated reasoning (Arceneaux & Vander Wielen 2017). Because selective exposure is believed to be closely related to motivated reasoning (Taber & Lodge 2006), it is 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 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.

Identifying a direct effect of religious belief on political information-seeking behavior can thus be challenging. An experimental manipulation that increases the salience of religious faith can help overcome these challenges. Individuals, especially those who have regularly been exposed to faith messages, may possess a close cognitive association between concepts of religion and any behaviors that are learned through religious faith. When the salience of religious faith is increased, any behaviors that are cognitively associated with religious faith 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 when feeling more faithful. If religious individuals, as a result of exposure to faith messages, have learned to have greater faith in their political beliefs (rather than just 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 momentarily increase faith in their political beliefs and increase the tendency to engage in selective exposure to information congruent with those political beliefs.

We should thus expect that experimentally priming people to think of religious concepts would increase their tendency to seek attitude-congruent information, even when seeking information in the context of non-religious political topics.

## **Overview of Current Study**

Here I describe 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. In this study, subjects participate in an information-search task on a non-religious political issue: gun policy. In the United States, the country in which this study is conducted, this topic is a major controversial political issue, with many people holding strong opinions either favoring or opposing strict firearms legislation (Parker et al. 2017). After reporting their own attitudes toward gun control, my research participants are given access to a set of pro-gun-control and anti-gun-control arguments, and I observe which arguments they choose to read. The prediction is that those with stronger pro-gun-control attitudes should choose to read more pro-gun-control items, and those with stronger anti-gun-control attitudes should read more anti-gun-control items. I measure rigid religious conviction using a six-item scale to determine whether the correlation between pre-task attitudes and information-search behavior is stronger among those with rigid religious convictions. Several other variables are 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 direct causal effects of salience of religious faith, I use a scrambled-sentence task prior to the gun-control information-search task as an experimental manipulation to prime half of the subjects with religious concepts.

### **Predictions:**

1. **Selective exposure:** When seeking information on the topic of gun control, subjects with higher pre-task levels of support for gun control should choose to read a greater quantity of pro-gun-control arguments rather than anti-gun-control arguments and those with greater levels of opposition to gun control should choose to read a greater proportion of anti-gun-control arguments.
2. **Correlation between rigid religious conviction and selective exposure:** The tendency of pro-gun-control subjects to read more pro-gun-control items (and anti-gun-control subjects to read more anti-gun-control items) should be stronger among individuals with rigid religious convictions.

3. **Effect of experimental prime on selective exposure:** Experimentally increasing the salience of religious faith by means of conceptual priming should increase the tendency to read attitude-congruent gun-control arguments.

## Methods

### Measurement of Religiosity and Sampling Method

The study was conducted using a sample of United States residents recruited through the Amazon Mechanical Turk (MTurk) online labor market. Although MTurk workers are not a representative sample of this country's population, MTurk samples have been found to replicate the results of many important political psychology experiments that had previously been conducted on more representative samples (Mullinix et al. 2015; Berinsky et al. 2012). One important difference from the general U.S. population is that MTurk users tend to be less religious than most people (Clifford et al. 2015; Lewis et al. 2015). To test whether religious individuals engage in more selective exposure than do the less rigidly convicted, we do not require a sample whose average level of religiosity is identical to that of the population of any particular country. However, a lack of variation in religiosity would be problematic for a test of this research question. To acquire a sample with a sufficient quantity of religious individuals, while remaining within the limits of a tight research budget, I used a two-stage sampling procedure. Rigid religious conviction was measured for a large sample in a short, low-cost, first-wave survey. From that first sample, a second sample with a wide range of rigid conviction was selected to participate in the full study for a larger payment. To avoid biasing responses to the rigid-religious-conviction questionnaire, I did not tell participants in the first wave that their responses would affect their probability of being invited for a second survey.

In late 2017, 1490 participants were recruited to answer the following six items measuring rigid religious conviction:

1. God has given humanity a complete, unyielding 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 & Hunsberger 2004), while the two remaining items are adapted from the Quest Scale (Batson 1976; Altemeyer & Hunsberger 1992). These six items are not intended simply to measure the level of religious belief. It is possible to be religious without scoring high on this scale. This scale specifically measures the tendency to hold religious beliefs rigidly and an unwillingness to consider the possibility that one's religious beliefs could be imperfect.

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 being reverse scored to ensure that higher scores always represent higher levels of rigid religious conviction. 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.

To select a sample of participants with a wide range of religiosity to participate in the second wave of the study, 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. 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, these 723 selected individuals were sent an email inviting them 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 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 to the task Taber & Lodge (2006) used to detect selective exposure to attitude-congruent information. In this task, participants are given

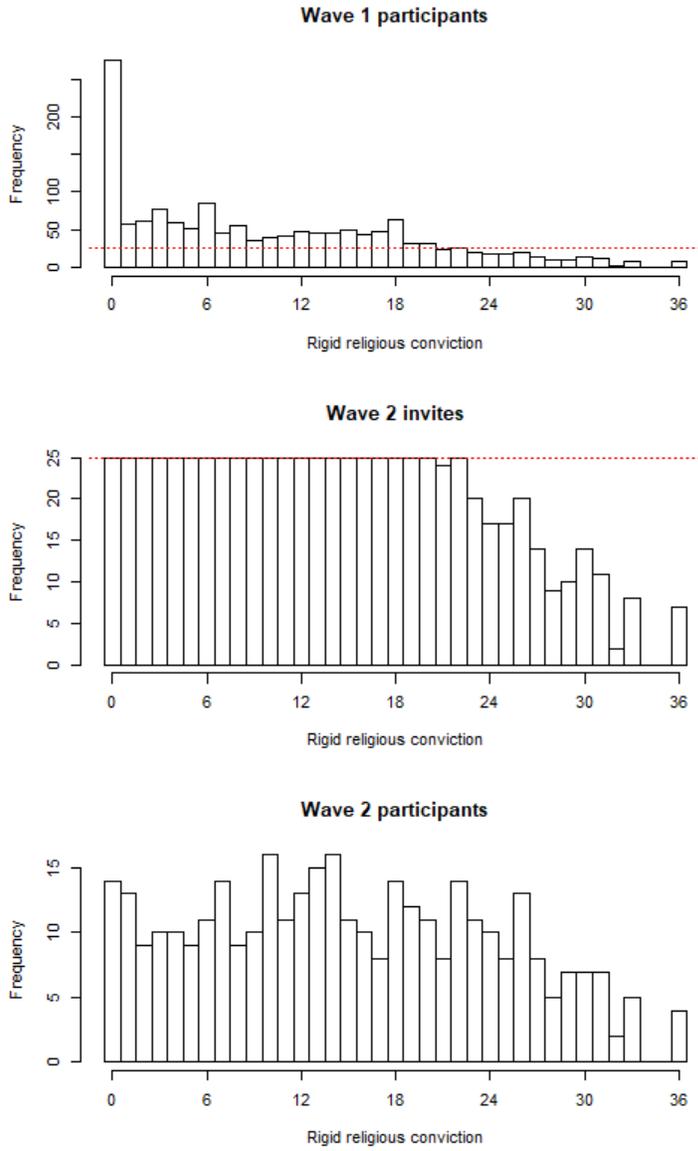


Figure 1: Distribution of Rigid Religious Conviction

access to a set of 8 pro-gun-control arguments and 8 anti-gun-control arguments, ranging in length from 28 to 86 words each. The full text of the arguments (Taber & Lodge 2006) can be found in my online appendix.

Before starting the information-search task, participants are asked to report their attitudes toward gun control using a continuous slider ranging from "strongly oppose" to "strongly support". A second item asks them to report the extent to which they prefer an increase or decrease in gun-control legislation, using a continuous slider ranging from "large decrease" to "large increase." Responses on each of these items are coded to range from -1 to 1. These two items are strongly correlated ( $r=0.79$ ). For each participant, I use the mean of these two items as the participant's pre-task gun-control attitude score ( $M=0.19$ ,  $SD=0.57$ ).

Participants are then told that they will have an opportunity to learn more about the issue by reading arguments on both sides and that after doing so they will be asked to choose which side they support. During the information-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. To counterbalance any effects of item location on the screen, half the participants see the list of pro items on the left side and the anti items on the right, while this orientation is reversed for the other half of participants. Participants are told they will be able to read 8 of the 16 items. When the subject selects 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 again (see Figure 2). This process continues until 8 items have been selected and read. The software records which items have been viewed, and I calculate how many of the viewed items are pro-gun-control items, with a possible range from 0 to 8 ( $M=3.99$ ,  $SD=1.72$ ). The midpoint of 4 would indicate that the participant viewed an equal quantity of pro-gun-control and anti-gun-control items.

The total number of items viewed by each participant is fixed at 8 because this is the procedure that was previously used by Taber & Lodge (2006) to demonstrate the existence of selective exposure. Controlling the total number of items selected simplifies the data analysis by ensuring that the analysis can focus on just one outcome variable: what proportion of the selected items are pro rather than anti items. Allowing participants to choose how many items to view (in addition to choosing which items they prefer over others) would introduce extra variation in the data that could make comparisons between subjects more difficult. It could also result in many participants choosing to read nothing and thus providing little useful data for the present research question. However, this feature of the study design does have some potential limitations, which I discuss later.

I predicted that participants with more pro-gun-control attitudes would choose to view a

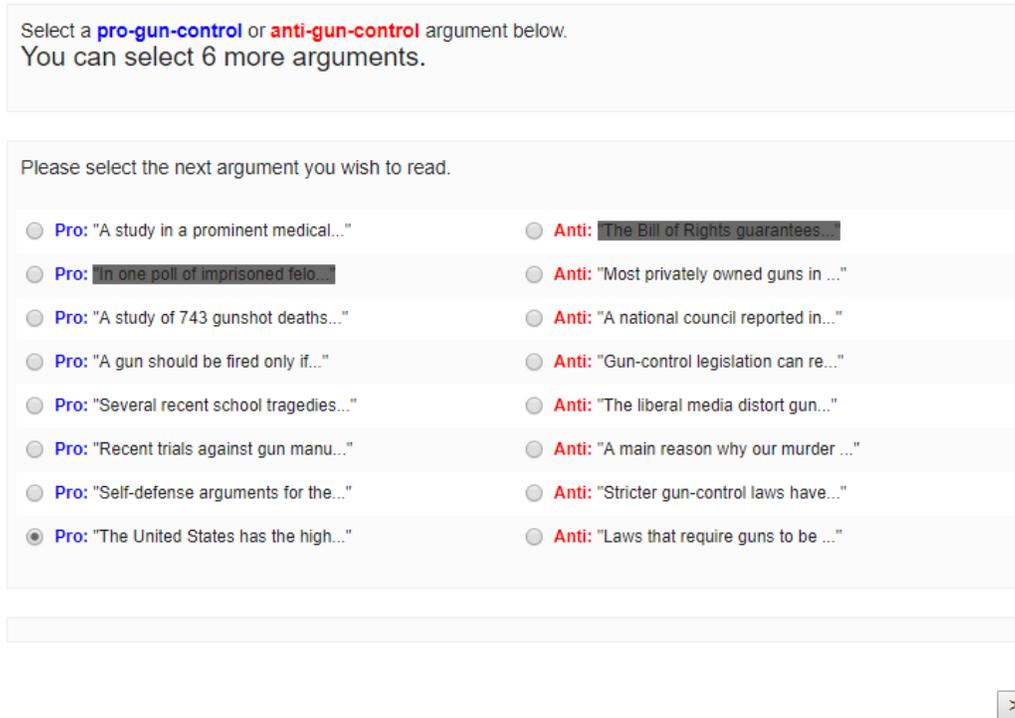


Figure 2: Screen capture of subject interface for gun-control information-search task after two items have been viewed.

greater proportion of pro-gun-control items and participants with more anti-gun-control attitudes would choose to view a lower proportion of pro-gun-control items. The outcome of interest is the strength of the correlation between respondents' pre-task level of support for gun control and the quantity of pro-gun-control items they choose to view. This correlation 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.

To test how the effect of pre-task gun-control attitude varies with rigid religious conviction, it is important to have common support: there must be sufficient variation in gun-control attitudes among those with low levels of religious conviction, and there must be variation across the same range of gun-control attitudes among those with high levels of religious conviction. As can be seen in the scatterplot in Figure 3, gun-control attitude and rigid religious conviction are only weakly correlated ( $r = -0.14$ ). Opposition to gun-control 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

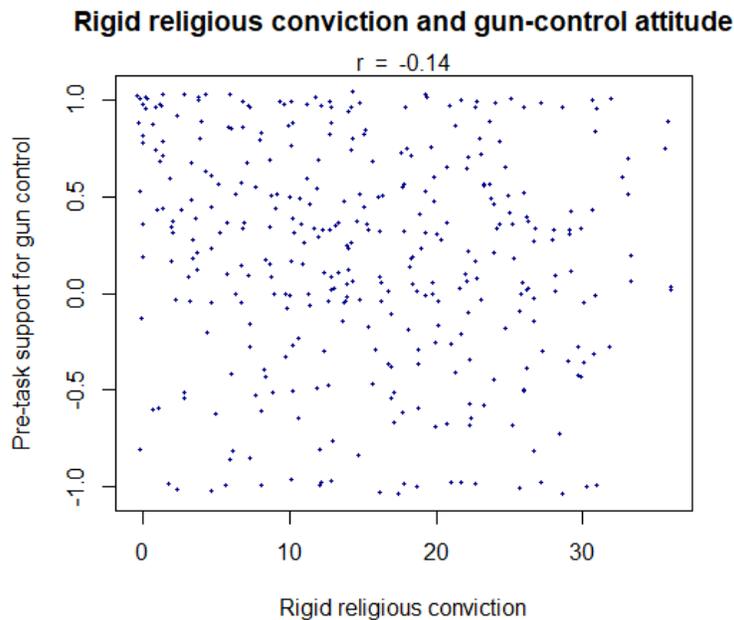


Figure 3: Scatterplot of rigid religious conviction and pre-task support for gun control. Positive values represent gun-control supporters, while negative values represent gun-control opponents. The values of each variable have been jittered slightly to enhance readability.

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 & Wyer 1979; Bargh et al. 1996) is a method of conceptual priming that has previously been used to modify behavior by priming subjects with religious concepts (Shariff & Norenzayan 2007) (Randolph-Seng & Nielsen 2007) (Ahmed & Salas 2011). In this task, the subject is given ten sets of five words. Using each set of words, the task is to drop one of the five words and reorder the remaining four words to write a four-word sentence. For example, "dessert divine was fork the" becomes "the dessert was divine." In the current study's version of the task, subjects are randomly assigned either to a faith-prime condition or a neutral condition. In the faith-prime condition, five of the ten sentences include words relating to religion (spirit, divine, faith, god, sacred, sermons), while the other five sets of words are identical across treatment conditions. The full list of words can be found in the online 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**

Data from several other measures were collected to be used as control variables. Measurement methods and descriptive statistics for these variables can be found in the online appendix. The control variables include age, gender, level of education completed, performance on a political knowledge test, self-assessed level of interest in politics, party preference (Democrat or Republican), and self-placement on a liberal-to-conservative continuum.

Of special interest among the control variables 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 the participant's NFC score, which has a possible range from 0 to 36 but an observed range from 6 to 35. The text of the six items can be found in the online appendix. For the Cognitive Reflection Test, a modified version of the test was used because some MTurk users may be regular participants in behavioral research and may have had previous experience with the questions in the Cognitive Reflection Test. For the modified version, the context of some of the questions was changed to make the questions seem less familiar while maintaining the underlying logic of each question. For each participant, the CRT score is the quantity of questions on which the participant gave the correct, rather than the intuitive, response.

### **Observational Results: Rigid Religious Conviction Correlation**

From the list of eight pro-gun-control and eight anti-gun-control arguments, each participant was required to select a total of eight items to read. For the sample as a whole, the quantity of pro-gun-control items a participant chose to read is positively correlated with pre-task support for gun-control ( $r=.24$ ,  $p<.001$ ). I estimate a bivariate linear regression model<sup>1</sup> predicting the count of pro-gun-control items viewed as a function of pre-task gun-control attitude (Model 1 in Table 1). The estimated constant of 3.85 (95% confidence interval from 3.67 to 4.04) indicates that individuals with a neutral attitude toward gun control are predicted to read an average of 3.85 pro-gun-control items, which is equivalent to an average of 4.15 anti-gun-control items. The estimated coefficient

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<sup>1</sup>Examination of scatterplots (which can be found in the online appendix) does not suggest any strong non-linear trends in the data, so the analyses in this paper are conducted using linear models.

on gun-control attitude is 0.71 (95% confidence interval from 0.41 to 1.01). This indicates 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 an increase of 0.71 pro-gun-control items viewed, which is equivalent to a decrease of 0.71 anti-gun-control items viewed. This is also equivalent to saying that greater pre-task opposition to gun control predicts a decrease in the count of pro-gun-control items viewed and an increase in the count of anti-gun-control items viewed. The positive estimated effect of pre-task support for gun-control on the count of pro-gun-control items viewed can thus be interpreted as evidence of selective-exposure to attitude-congruent information. If the estimated effect were greater, it would indicate a stronger preference for reading attitude-congruent information. If it were lower, it would represent a weaker preference for congruent information. If it were negative, it would represent a preference for incongruent information.

Table 1: OLS estimates for linear regression models. The dependent variable is the quantity of pro-gun-control items viewed (which is always equal to 8 minus the quantity of anti-gun-control items viewed). Pre-task gun-control attitude is a continuous measure ranging from -1 (strongly oppose) to +1 (strongly support). Rigid religious conviction ranges for 0 to 36.

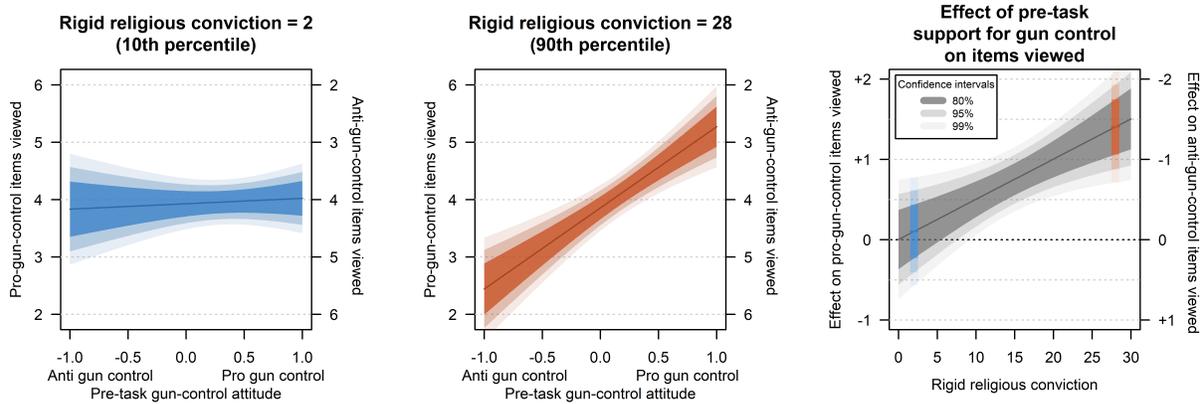
	(1)	(2)
Constant	3.853*** (0.094)	3.933*** (0.191)
GC attitude (support for gun control)	0.709*** (0.155)	0.003 (0.288)
Rigid religious conviction		-0.003 (0.010)
GC attitude * Rigid religious conviction		0.050*** (0.017)
Observations	358	355
R <sup>2</sup>	0.056	0.084
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01 Standard errors in parentheses.	

To test whether this effect of pre-task attitude on information-search behavior varies with the level of rigid religious conviction, I estimate an interactive model (Model 2 in Table 1) using the same dependent variable: count of pro-gun-control items viewed. This second model includes the following variables: pre-task gun-control attitude, rigid religious conviction, and a multiplicative interaction between the two. In this model, the coefficient on gun-control attitude does not show any significant effect (95% confidence interval from -0.56 to 0.57). It is important to understand that this does not indicate a lack of evidence for selective exposure among the sample as a whole. Rather, this represents a lack of evidence for selective exposure among individuals who have a rigid-religious-conviction score of zero (on the zero to 36 scale). If low-rigid-religious-

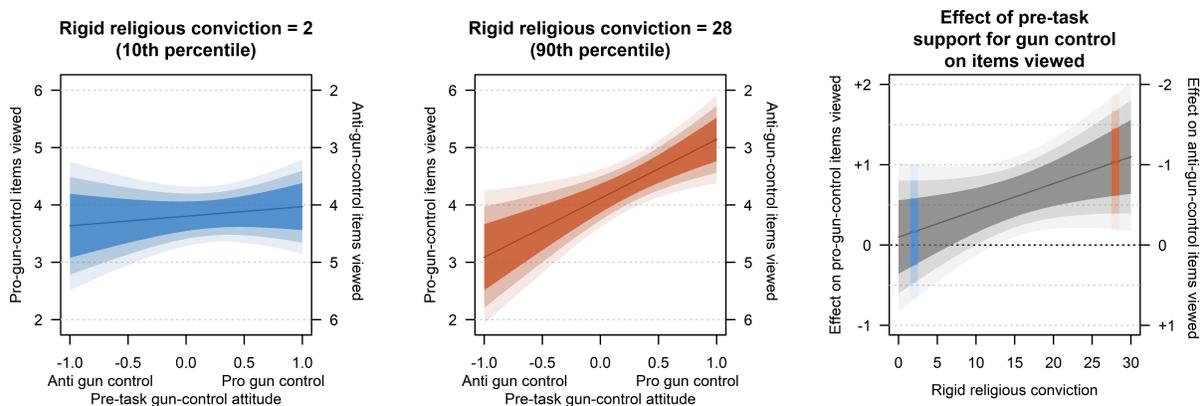
conviction individuals do have a preference for reading attitude-congruent arguments, it is likely a weak effect. The interaction coefficient is the parameter of greatest interest in this model. The positive interaction coefficient ( $p=.003$ ) indicates that the effect of prior gun-control attitudes on information-search behavior increases 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 that 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 this gun-control information-search task.

Predicted values of the outcome variable based on this model are plotted in the first two panels of Figure 4a. In these first two plots, 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 that individuals who are more anti-gun-control view more anti-gun-control items rather than pro-gun-control items. In other words, a positive slope would indicate selective exposure to attitude-congruent information. Among individuals at the 90th percentile of rigid religious conviction, there is a clear positive slope, suggesting that the things they choose to read depend heavily on their prior attitudes toward the issue. At this level of rigid religious conviction, a one-unit increase in support for gun control predicts an increase of 1.41 pro-gun-control items viewed (95% confidence interval from 0.878 to 1.932). In contrast, among individuals with a low level of rigid religious conviction (10th percentile), the slope is near zero (95% confidence interval from -0.408 to 0.615), suggesting that information-search behavior does not appear to be driven much by prior attitudes. The third panel of Figure 4a shows estimated marginal effects of pre-task support for gun-control on the count of pro-gun-control items viewed. In this plot, positive values on the vertical axis represent selective exposure to attitude-congruent information, while negative values would represent a preference for reading incongruent information. These marginal effects are plotted across most of the range of values of rigid religious conviction. The plot shows that the effect of increased support for gun-control on the count of pro-gun-control items viewed clearly increases as rigid religious conviction increases ( $p=.003$ ), suggesting that the preference for attitude-congruent information increases as rigid religious conviction increases.

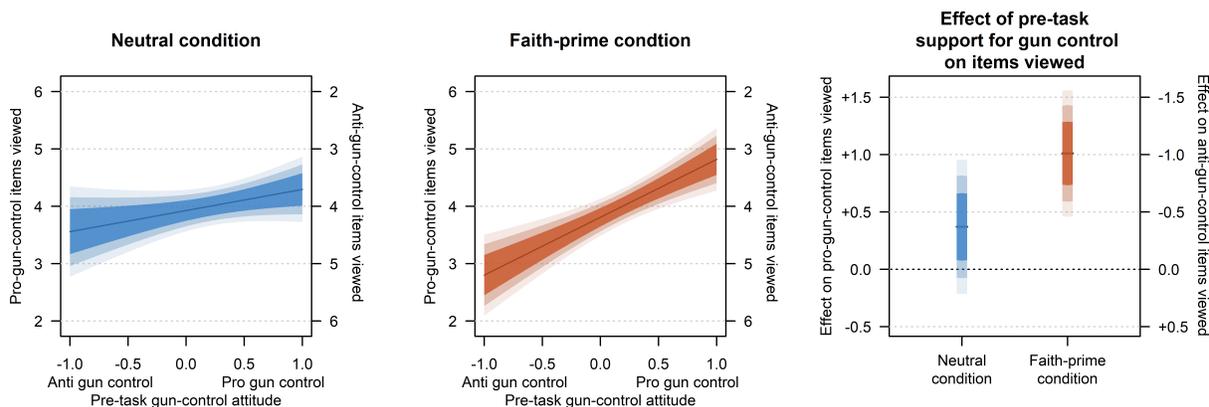
To test the robustness of the association between rigid religious conviction and selective exposure, I estimate another model, seen in column 1 of Table 2, which includes the following control variables: age, gender, level of education, performance on a test of political knowledge, self-assessed level of interest in politics, partisan leaning (forced dichotomous choice, Democrat or Republican), and self-assessed position on a liberal-conservative continuum. The model also includes a multiplicative interaction between pre-task gun-control attitude and each of these control variables. Even when controlling for all of these extra variables, the positive interactive effect



(a) Model 2 of Table 1 (with no control variables)



(b) Model 4 of Table 2 (with all control variables)



(c) Model 1 of Table 3 (experimental data)

Figure 4: For each model, the first two plots show predicted values of the outcome variable. The third plot shows estimated marginal effects. Because the total of all items viewed is constrained to 8, the count of anti-gun-control items viewed is always equal to 8 minus the count of pro-gun-control items viewed. Thus the vertical axis can be used simultaneously to represent both the count of pro-gun-control items viewed and the count of anti-gun-control items viewed if the axis is reversed. The secondary vertical axis on the right side of each plot does not represent a completely separate variable but rather a simple reversal of the left-side vertical axis.

Table 2: OLS estimates for linear regression models. The dependent variable is the quantity of pro-gun-control items viewed (which is always equal to 8 minus the quantity of anti-gun-control items viewed). Gun-control attitude is a continuous measure ranging from -1 (strongly oppose) to +1 (strongly support). Rigid religious conviction ranges from 0 to 36.

	(1)	(2)	(3)	(4)
Constant	4.729*** (0.480)	5.565*** (0.645)	4.568*** (0.485)	5.382*** (0.661)
GC attitude (support for gun control)	-0.447 (0.820)	-2.100** (1.027)	0.036 (0.827)	-1.346 (1.067)
Age	-0.016** (0.008)	-0.015* (0.008)	-0.018** (0.008)	-0.017** (0.008)
Woman	-0.057 (0.218)	0.094 (0.222)	0.014 (0.219)	0.122 (0.222)
Education	0.083 (0.060)	0.075 (0.059)	0.088 (0.059)	0.081 (0.059)
Political knowledge	-0.001 (0.049)	-0.003 (0.048)	-0.007 (0.051)	-0.005 (0.050)
Political interest	-0.595 (0.389)	-0.590 (0.385)	-0.511 (0.385)	-0.518 (0.383)
Conservatism self-assess	-0.258 (0.290)	-0.180 (0.290)	-0.208 (0.288)	-0.149 (0.289)
Lean Republican	-0.216 (0.275)	-0.193 (0.273)	-0.237 (0.274)	-0.208 (0.272)
Need for closure (NFC)		-0.046** (0.021)		-0.041* (0.021)
Cognitive Reflection Test (CRT)			0.067 (0.092)	0.034 (0.092)
Rigid religious conviction	0.005 (0.012)	0.009 (0.012)	0.010 (0.012)	0.012 (0.012)
GC attitude * Age	0.014 (0.012)	0.009 (0.012)	0.013 (0.012)	0.010 (0.012)
GC attitude * Woman	-0.077 (0.349)	-0.335 (0.356)	-0.300 (0.353)	-0.472 (0.358)
GC attitude * Education	-0.123 (0.100)	-0.109 (0.099)	-0.132 (0.098)	-0.118 (0.098)
GC attitude * Knowledge	-0.086 (0.084)	-0.071 (0.083)	0.012 (0.088)	0.007 (0.088)
GC attitude * Interest	0.630 (0.647)	0.544 (0.642)	0.596 (0.640)	0.548 (0.638)
GC attitude * Conservatism	-0.185 (0.473)	-0.293 (0.469)	-0.373 (0.471)	-0.432 (0.469)
GC attitude * Republican	0.518 (0.521)	0.415 (0.517)	0.694 (0.518)	0.578 (0.517)
GC attitude * NFC		0.092*** (0.033)		0.073** (0.034)
GC attitude * CRT			-0.479*** (0.152)	-0.399** (0.155)
GC attitude * Religious conviction	0.054*** (0.020)	0.045** (0.020)	0.037* (0.020)	0.033* (0.020)
Observations	354	354	354	354
R <sup>2</sup>	0.136	0.159	0.161	0.176

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01  
Standard errors in parentheses.

of rigid religious conviction and pre-task gun-control attitude is still present ( $p=.006$ ).

However, because rigid religious conviction is correlated with need for closure ( $r=0.21, p<.001$ ) and with Cognitive Reflection Test score ( $r=-0.34, p<.001$ ), it is possible that the effects of these variables could account for some of the estimated effects of rigid religious conviction. Adding NFC and CRT scores to the model (column 4 of Table 2) decreases the estimated interactive effect of rigid religious conviction by about 40%, from 0.054 to 0.033, but some of the effect still remains ( $p=.098$ ). Predicted values of the dependent variable based on this model can be seen in Figure 4b along with estimated marginal effects. Even when including all of these control variables, selective exposure to attitude-congruent information still appears to be greater among those with rigid religious convictions.

The coefficient for the interaction between NFC and gun-control attitude is also positive ( $p=.031$ ), suggesting that a greater need for closure is associated with a stronger preference for reading attitude-congruent information. The interaction coefficient for CRT score is negative ( $p=.01$ ), suggesting that a greater tendency for reflection is associated with a weaker preference for attitude-congruent information. The raw coefficients in the table do not facilitate meaningful comparisons of the effect sizes of these variables. However, multiplying each raw coefficient by the standard deviation of the respective variable to generate standardized coefficients (not shown in the table) indicates that the interactive effect of a one-standard-deviation increase in NFC is 15% greater than that of a one-standard-deviation increase in rigid religious conviction, and the effect of a one-standard-deviation increase in CRT score is 56% stronger than that of a one-standard-deviation increase in rigid religious conviction. Other than these three variables, none of the other variables in the model exhibit a significant interaction with gun-control attitude.

## **Experimental Results: Effect of Faith-Prime Manipulation**

The experimental priming manipulation makes it possible to test whether increased salience of religious faith has a direct effect on information-search behavior. To test the effects of the manipulation, I estimate another model of the quantity of pro-gun-control items viewed, this time using the following variables: treatment condition, pre-task gun-control attitude, and a multiplicative interaction between the two. The estimated coefficients for this model can be seen in column 1 of Table 3. The parameter of greatest interest for testing the effects of the priming manipulation is the coefficient for the interaction between pre-task gun-control attitude and treatment assignment. The estimated interaction coefficient is positive ( $p=.039$ ), indicating that the effect of pre-task gun-control attitudes on the quantity of pro-gun-control items viewed is stronger among those who were primed with religious words. Priming people with religious words increases se-

lective exposure to attitude-congruent information in the gun-control information-search task.<sup>2</sup>

Table 3: OLS estimates for linear regression models. The dependent variable is the quantity of pro-gun-control items viewed (which is equal to 8 minus the quantity of anti-gun-control items viewed). Gun-control attitude is a continuous measure ranging from -1 (strongly oppose) to +1 (strongly support). Rigid religious conviction ranges from 0 to 36.

	(1)	(2)
Constant	3.925*** (0.142)	4.173*** (0.294)
GC attitude (support for gun control)	0.371 (0.226)	-0.220 (0.415)
Faith-prime manipulation	-0.113 (0.189)	-0.451 (0.386)
Rigid religious conviction		-0.015 (0.016)
GC Attitude * Faith prime	0.640** (0.310)	0.392 (0.579)
GC Attitude * Rigid religious conviction		0.042* (0.025)
Prime * Rigid religious conviction		0.025 (0.021)
GC Attitude * Prime * Religious conviction		0.018 (0.033)
Observations	358	355
R <sup>2</sup>	0.067	0.101
Note:	*p<0.1; **p<0.05; ***p<0.01 Standard errors in parentheses.	

Predicted values of the outcome variable based on this model are plotted in the first two panels of Figure 4c. In these two plots, a positive slope represents selective exposure to attitude-congruent information, and a steeper slope indicates greater levels of selective exposure. The slope for the faith-prime condition is 1.01 (95% confidence interval from 0.594 to 1.427), meaning that a one-unit increase in gun-control support (e.g. an increase from neutral to strongly support or an increase from strongly oppose to neutral) predicts an increase of 1.01 pro-gun-control items viewed. In contrast, the slope for the neutral treatment condition is only 0.371 (95% confidence interval from -0.072 to 0.813). The marginal effects plot (in the far-right panel of Figure 4c) makes it easier to compare the two. In this plot, higher values on the vertical axis can be interpreted as a

<sup>2</sup>Estimating this same model while excluding participants who have very low scores for rigid religious conviction (such as those who have a score of zero or those who have a score lower than some other arbitrary low threshold) produces similar results and only makes the effects appear slightly stronger than those reported here.

greater preference for attitude-congruent information. The plot shows that 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. Priming participants with religious words makes pro-gun-control participants more likely to read pro-gun-control arguments and makes anti-gun-control participants more likely to read anti-gun-control arguments.

## **Interaction of Experimental Treatment & Rigid Religious Conviction**

It is reasonable to imagine that the priming manipulation might be effective primarily among religious individuals. Reminding subjects of their religious faith might have less effect among those do not have much religious faith. A test of whether the effect of the prime is stronger among subjects who have stronger pre-existing religious convictions was not planned for this study. Such a test involves a three-way interaction, and the sample size of this study unfortunately does not offer much statistical power for such a test. However, the three-way interactive model was estimated for exploratory purposes. The estimated parameters for this model can be seen in column 2 of Table 3.

The estimated coefficient for the three-way interaction between pre-task gun-control attitude, rigid religious conviction, and faith-prime treatment is positive, as expected, but the standard error is quite large so the coefficient estimate is not statistically distinguishable from zero ( $p=.582$ ). The reader should thus not be confident about how the effect of the prime varies with levels of rigid religious conviction. Unlike in Model 1 of the same table, the coefficient for the two-way interaction between gun-control attitude and faith-prime treatment is not significant ( $p=.498$ ), but this should not be interpreted to mean that the prime has no effect on the correlation between pre-task attitude and information-search behavior. It is important to remember that when a three-way interaction is added to the model, the two-way interactive term takes on a different meaning. This coefficient represents the effect of the priming treatment when rigid religious conviction is zero.

Estimated marginal effects of pre-task gun-control attitude based on this three-way interactive model can be seen in the first panel of Figure 5. These marginal effects are shown separately for the faith-prime treatment condition and the neutral condition and are also separated by level of rigid religious conviction. The vertical axis in this plot can be interpreted as the strength of preference for reading attitude-congruent arguments. Negative values would represent a preference for incongruent arguments. When rigid religious conviction is zero, no significant effect of the faith-prime treatment on selective exposure can be inferred ( $p=.498$ ). However, when rigid religious conviction is at a relatively high level of 20, the preference for attitude-congruent information is greater in the faith-prime treatment condition than in the neutral condition ( $p=.034$ ).

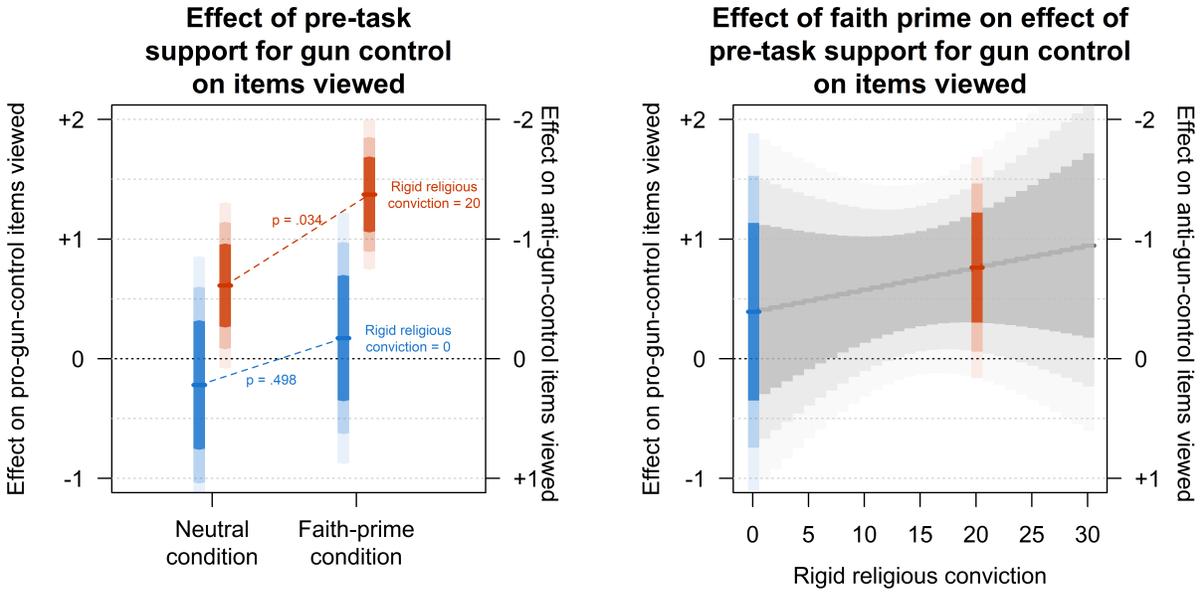


Figure 5: Three-way interactive model (Model 2 in Table 3). Shading represents 80%, 95%, and 99% confidence intervals. The first plot shows the marginal effects of pre-task gun-control attitude on the quantity of pro-gun-control (and anti-gun-control) items viewed. This vertical axis can be interpreted as the strength of preference for reading attitude-congruent items. The second plot shows the effect of the faith-prime treatment on the marginal effect of pre-task gun-control attitude on the quantity of pro-gun-control (and anti-gun-control) items viewed. This vertical axis can be interpreted as the effect of the prime on selective exposure to attitude-congruent information. Because the total of all items viewed is constrained to 8, the count of anti-gun-control items viewed is always equal to 8 minus the count of pro-gun-control items viewed. The secondary vertical axis on the right side of each plot thus does not represent a separate variable but rather a simple reversal of the left-side vertical axis.

The second panel shows the estimated effect of the faith-prime treatment at different levels of rigid religious conviction. In this plot, positive values on the vertical axis indicate that the faith-prime treatment increases the preference for reading attitude-congruent arguments, and negative values would indicate that the faith prime decreases the preference for attitude-congruent arguments. The plot shows that at high levels of rigid religious conviction the faith prime has a significant effect on selective exposure, though the large error bars leave much uncertainty about how strong the effect is. At low levels of rigid religious conviction, the faith-prime treatment may or may not have an effect.

Again, though, it is important to stress that this study was not designed to test whether the strength of the faith-prime treatment varies with the level of rigid religious conviction and cannot provide strong evidence on that question. However, the results do provide evidence that the prime has a significant average treatment effect among the full sample, as shown by model 1 in Table 3 and by Figure 4c, and evidence that the prime has a significant treatment effect among individuals who have high levels of rigid religious conviction, as shown by Figure 5.

## Discussion

In this paper I argue that rigid religious faith promotes selective exposure to attitude-congruent political information. Messages of rigid faith lead people to believe that maintaining their beliefs is desirable and such messages could thus encourage people to engage in motivated reasoning and selective exposure to increase the likelihood of maintaining their religious beliefs. This could lead to the development of a habit of selective exposure, which might then be applied more broadly to other non-religious contexts such as the context of political information seeking. The study reported here provides correlational and experimental evidence that is consistent with this theory.

First, I find a correlation between rigid religious faith and selective exposure to attitude-congruent political 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, 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 than those without such rigid religious convictions to choose to read pro-gun-control arguments over anti-gun-control arguments. Among anti-gun-control individuals, those with rigid religious convictions are more likely than those without such convictions to choose anti-gun-control arguments over pro-gun-control arguments. 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. This finding cannot be explained by measured

differences in age, gender, education level, political knowledge, political interest, self-labeled ideology, or party preference.

The argument of this paper is that rigid religious faith promotes selective exposure to attitude-congruent political information, but there are possible alternative explanations for an observed correlation between rigid religious conviction and selective exposure. There could be a confounding variable. Some predispositional variable, such as a need for cognitive closure or a preference for intuition over reflection, could cause individuals to be more religious and could have a separate effect on habits of selective exposure in political information seeking. To address this concern, I have my participants complete a modified version of the Cognitive Reflection Test and answer a subset of items from the Need for Closure Scale. I find that conditioning on these two variables reduces, but does not but does not completely eliminate, the estimated association between selective exposure to attitude-congruent political information and rigid religious conviction. This could mean some of the initially observed correlation between rigid religious conviction and selective exposure is generated by something other than an actual effect of religious faith on selective exposure, or it could just mean that a need for closure or a preference for intuition partially mediate the effect of rigid religious faith on selective exposure, at least among some people. However, whichever of these is the correct explanation for the reduction in the estimated effect of rigid religious conviction on selective exposure, some of the estimated effect still remains even after conditioning on need for closure and on Cognitive Reflection Test scores. This suggests that a need for closure and a preference for intuition are not the only mechanisms driving the correlation between rigid religious conviction and selective exposure.

Of course, it is still possible that there is some other unmeasured variable that affects both rigid religious faith and selective exposure and is thus responsible for the observed covariation between them. For example, some people could have a stronger predispositional motivation to maintain their social identities. This could lead some people to be more motivated to maintain the beliefs that bind them to their social identities, and this motivation could manifest as more rigid religious convictions and as selective exposure to attitude-congruent political information. Unfortunately, this study does not, and cannot, measure every possible confounding variable. Even if it could, reverse causality is also a potential concern, as having a greater predisposition to seek attitude-congruent information might make people more likely to hold rigid religious convictions. The results of the observational part of this study should be interpreted only as evidence of correlation between rigid religious conviction and selective exposure — not as perfect evidence of a direct causal relationship.

These potential concerns regarding causal inference are alleviated somewhat by the experimental part of this study. Just prior to the gun-control information-search task, a scrambled-sentence task is used to prime half the participants with words related to religious belief. 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. The prime causes pro-gun-control participants to read more pro-gun-control arguments and it causes anti-gun-control participants to read more anti-gun-control arguments. This demonstrates that increased salience of religious-faith concepts causes an increase in selective exposure when seeking information on a non-religious political issue.

This experimental treatment effect could occur by two mechanisms. First, individuals who have habitually been exposed to messages of religious faith may have developed habits of selective exposure as a result of such regular exposure, and those habits may then be activated when the salience of their religious faith is activated. Second, a person may believe, either consciously or unconsciously, that selective exposure is a behavior associated with religious faith, regardless of whether that person has habitually been exposed to faith messages and regardless of whether that person has developed long-term habits of selective exposure. If this second mechanism is correct, then activating concepts of religious faith in a person's mind might unconsciously trigger selective-exposure behaviors even among some non-religious individuals. The current study cannot differentiate between these two mechanisms because this study lacks sufficient statistical power to show that the experimental prime does or does not affect non-religious individuals. However, both of these mechanisms imply that exposure to faith messages increases selective exposure.

This study found two variables other than religious faith that predict individual differences in selective exposure: a need for cognitive closure and a preference for relying on intuition rather than effortful reflection. These two findings are consistent with prior research which found that people high in need for closure are more likely to choose to read information from sources that will support their prior attitudes (Chen et al. 2014) and that people who rely more on intuition rather than reflection are more susceptible to partisan bias Arceneaux & Vander Wielen (2017). In the current study, these two variables are even better predictors of selective exposure than rigid religious conviction is.

### **Limitations and future work**

This study has several limitations. First, this study measures selective exposure in relation to only one political topic. The topic of gun policy was chosen for this study because it is a highly controversial topic in American politics on which many people hold strong opinions (Parker et al. 2017) and because this topic has been used in previous research demonstrating the phenomenon of selective exposure to attitude-congruent information (Taber & Lodge 2006). It is also important that there are many people with rigid religious convictions on both sides of the gun-control issue and many people without rigid religious convictions on both sides of the issue. However, the use

of only this one topic could be a weakness of this study. While this topic does not seem to be a religious issue explicitly, it could be possible that some people get their gun-policy opinions from their religion. If some people have religious beliefs that dictate pro-gun-control attitudes and others have religious beliefs that dictate anti-gun-control attitudes, then the topic of gun control would not be a non-religious issue and the results observed in this study would not necessarily demonstrate that rigid religious conviction is associated with selective exposure in the context of non-religious political issues. However, it would be difficult to think of other political topics that would not be similarly subject to this concern, so the topic of gun policy seems as appropriate a topic for this study as any other topic would be. There is also little reason to suspect that the topic of gun policy would be unique in terms of the degree to which religious faith affects the tendency to seek attitude-congruent information on the issue. However, future studies should test the theory using multiple political topics.

Second, this study uses only one type of measure of selective exposure, and the information-search task used here may not be representative of the environments in which people typically make their information-seeking decisions. In this study, participants see a clear list of available arguments all at the same time with obvious labels indicating which side of the debate each item supports. In normal life, the available information is rarely presented so neatly. The task used in this study also requires all participants to read the same total quantity of items. In normal life, people are free to choose not only which things they prefer to read but also how much they want to read. The current study cannot capture differences in the tendency to seek information – only differences in the tendency to favor one type of information over the other. If, hypothetically, the tendency to favor attitude-congruent information over incongruent information is stronger (or weaker) when people are required to choose something to read than when they are free to read as much or as little as they like, then this task might not provide an accurate measurement of the tendency to favor congruent information.

The task used in this study also makes it easy for participants to see whether their own information-search behavior is biased toward one side or the other. This could cause some participants to try to be more balanced in their information-search behavior than they typically would be. Almost half of the participants chose to read exactly equal quantities of pro and anti items. This study should thus not be taken to provide an estimate of the average amount of selective exposure that occurs in real-world information seeking. However, under the assumption that the use of this information-search task reduces selective exposure (in comparison to real-world behavior) just as much among people with rigid religious convictions as it does among people without such convictions, this study can still provide a valid test of whether rigid religious conviction increases selective exposure.

Another potential concern about the task used in this study is the first few words that are

visible to participants before they make their choices. If the few visible words reveal something about the nature of the argument other than the pro or anti direction of the argument, and if the argument type is correlated with the pro or anti direction of the arguments, then any observed effects could be driven by participants' preferences for reading certain types of arguments rather than preferences for reading pro or anti arguments. To improve on the current study, future research should test the theory using other types of measures of selective exposure that can better simulate real-world information-seeking environments and measures that can better distinguish between competing explanations.

Third, the MTurk sample used in this study may not be representative of the general population. MTurk users may be especially compliant and may try to do what they think the researchers would prefer. MTurk users may thus be more motivated than other samples to read a balanced set of pro and anti items. The amount of selective exposure to attitude-congruent information in the general population could thus be underestimated in this sample. It is also reasonable to suppose that the average level of religious conviction may be different in this sample than in the U.S. population. Fortunately though, this study is not primarily interested in estimating the average level of selective exposure or the average level of rigid religious conviction in the population of any particular country. Rather, this study is interested only in the covariation between these two variables. There is no obvious reason to suspect that an effect of rigid religious conviction on selective exposure would exist only among MTurk workers, but it is always possible. Future studies should test whether the observed effects are stronger or weaker in other samples.

Fourth, this study makes no differentiation between different types of religiosity. It could be that some types of religious messages, such as messages of rigid faith, promote selective exposure while other types of religious messages do not. The appendix includes additional models that were estimated using a more general measure of religiosity: self-placement on a continuous slider ranging from "not at all religious" to "extremely religious." The results using this alternative measure of religiosity are similar to the results using the scale of rigid religious conviction. However, this could simply be because self-identified religiosity is strongly correlated with rigid religious conviction. It does not necessarily imply a direct relationship between religiosity and selective exposure that is independent of rigid conviction. The sample size of the current study does not make it easy to separate these effects. Future research on this topic should explore the nature of religious faith more precisely to identify exactly what aspects of religion are responsible for increased selective exposure or 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 may not be the most important factor. The topic of individual differences in selective exposure is a young research topic, and there is still much that is not well known. 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. The phenomena of motivated reasoning and selective exposure are highly consequential in political discourse and public opinion, and any variables that can be identified as factors in these behaviors are thus valuable topics for future research.

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