

A PROCESS MODEL OF EDUCATION'S MODERATING ROLE IN PARTISAN-  
BASED ATTITUDES TOWARD POLITICIZED ISSUES

by

Rebecca R. Donaway

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Thesis Committee:

Dr. Ken Blake, Chair

Dr. Jason Reineke

Dr. Bob Pondillo

I dedicate this research to my grandparents, Bill and Shirley Ussery. Thank you for being my biggest fans and teaching me to love learning. I love you both.

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## ABSTRACT

Recent research has renewed interest in the influence of education, political ideology and attention to media on “knowledge gaps” and “belief gaps” about politically charged issues (Tichenor, Donohue & Olien, 1970; Hindman, 2009, 2012; Meirick, 2012). Based on secondary analysis of Pew Center poll data, this study proposes and tests a process model (Hayes, 2013) depicting education’s role in predicting beliefs – some politicized and others not – about the level of threat posed to the United States by North Korea, Iran and China. The model treats beliefs about the threat posed to the U.S. by the nuclear programs of North Korea and Iran as politicized and finds that education and perceived credibility of Fox News significantly interact as predictors of those beliefs. However, it treats beliefs about the threat posed to the U.S. by China as not politicized and finds no such interaction between education and perceived credibility of Fox News.

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## CHAPTER ONE: INTRODUCTION

For many, the root of democratic power lies in an informed public's ability to use knowledge responsively and responsibly (Delli Carpini & Keeter, 1996). While this may be intuitive to democratic theory, defining, measuring, and assessing knowledge is more complex. The accumulation of knowledge alone is not responsible for the relative success or failure of a democracy. Rather, the motivation to seek knowledge, the accessibility of such knowledge, and the distribution of and application of that knowledge, much of which is politically contested, account for more of the public's understanding. Though these affect decision-making at the micro, or individual, level, the more interesting questions arise when one considers the macro level aspects of knowledge distribution as a form of democratic currency -- questions about who has the access, opportunity, interest, and ability to use this political knowledge as power.

For decades, scholars have been interested in measuring what Americans know about politics and current events. Naturally, understanding the ways in which Americans use and consume news are foremost to this conversation. Among researchers and industry professionals alike, the public's declining news consumption habits can be unsettling. The results from a Pew Center for the People and the Press study (2008) suggest that from the early 1990s to 2008, the proportion of Americans who said they read a newspaper yesterday fell from 58% to 34%. Additionally, the proportion of Americans who said they watched nightly network news fell from 60% to 29% (Pew Study, 2008). One conclusion could be that more Americans are turning to the Internet for news, but the same study suggests that only 37% of Americans polled were getting news online, and

another 19% were going “newsless” altogether, meaning they read no news yesterday (Pew Study, 2008). With these fluctuations in news consumption, the public’s issue knowledge changes as well. Overall, the public seems to be aware of national news stories but much less knowledgeable about Washington politics (Pew Research Center for the People and the Press, 2011). Recently, researchers found that more Americans could correctly identify Mark Zuckerberg as the founder of the social media site Facebook (55%) than could identify John Boehner as the Speaker of the House of Representatives (43%), (Pew Study, 2011). In the same study, 57% of Americans polled could correctly identify the unemployment rate, but only 38% knew that Republicans had a majority in the House (Pew Study, 2011). Citing an increase in entertainment content and a decrease in foreign affairs coverage, some researchers suggest that the responsibility to keep Americans informed belongs to the media (Patterson, 1993). Robert Putnam (2000) suggests that the television, by its very nature, increases the dependence on entertainment and a decrease in civic engagement and news consumption. On the other hand, though, some blame the public’s waning engagement (Converse, 1964; Zaller, 1992). What can be agreed upon, though, is that little has changed over time regarding what Americans do or do not know about politics (Delli Carpini & Keeter, 1996; Pew Study, 2007). Even in the face of concerns regarding the state of education, the decline of newspaper readership, and a declining commitment to civic engagement, research has found evidence that “citizens appear no less informed than they were half a century ago” (Delli Carpini and Keeter, 1996, p. 133). A decade later, in a Pew Center Study on Public Knowledge of Current Affairs (2007), respondents’ knowledge of their president and



major news events was, on average, nearly that of respondents 20 years before (Pew Research Center for the People and the Press, 2007).

Scholars are divided about the implications of these results. Some suggest that the public can use “shortcuts” or “cues,” usually political party affiliation, to make informed judgments, in which case an uninformed public is not problematic (Popkin, 1991). Others propose that these shortcuts are often incomplete and lead the public to misinformation (Althaus, 1998; Bartels, 1996). Regardless, partisan behavior is active, and partisan loyalties continue to have an impact on elections (Bartels, 2000).

## CHAPTER TWO: REVIEW OF LITERATURE

Traditional news media, which relied on appointment viewing and homogenized content, have seen the past few decades wreak havoc on their systems. The multitudes of news platforms offer the consumer a newfound independence when it comes to content, but also raises fears that individually tailored media use may be “fast displacing national comings-together, and pleasure seems to be pushing public affairs ever more out of sight” (Katz, 1996, p. 25). Now it seems that fragmentation is the norm, rather than the exception. William Powers (2005), writing for *The Atlantic* said,

... Thanks to the proliferation of new cable channels and the rise of digital and wireless technology, the disaggregation of the old mass audience has taken on a furious momentum. And the tribalization is not just about political ideology. In the post-mass-media era audiences are sorting themselves by ethnicity, language, religion, profession, socioeconomic status, sexual orientation, and numerous other factors.

Earlier media researchers have suggested that consumers, when selecting materials rely on a combination of their own interests and the news cues which are derived from the way news is packaged (Graber, 1988). Graber calls these packaging cues of news editors. Coupled with personal interest, they make up the two most important factors in news story selection (1988). Thus, in the absence of the front-page or above-the-fold cues, users have more freedom to pursue news based on their own interests. While an increase in options is not inherently bad, online news users generally consume fewer political, national, and international news stories (Tewksbury & Althaus, 2000; Tewksbury, 2003). Research finds that people will use different sites for information, so they will visit one

page for sports and another for stock updates (Tewksbury, 2005). During this process of acquiring interest-specific information, they are increasingly less likely to encounter across-the-board information (Tewksbury, 2005). These changes result in a fragmented news audience with the opportunity and ability to handpick the information they consume and the source from which it originates.

Competition among these outlets, both traditional and new, has led to an increase in the dramatization of the news with conflict and confrontation at the forefront of delivery (Bennett, 2001). With a generally uninformed electorate and access to such a variety of differing opinions and talking points, political ideology can act as a connector to familiar ideas. Of all the various predispositions, political values seem to have the strongest and most pervasive effect on opinions (Zaller, 1992). So, to capture audience, partisan news outlets tailor news to highlight stories that are flattering to their own party affiliations as well as focus on stories that are negative to their rivals (Baum & Groeling, 2008). The measurement of factual knowledge is therefore much more complex when information becomes politically motivated and the interpretation of that information divides according to party affiliation (Gaines, Kuklinski, Quirk, Peyton, & Verkuilen 2007).

Much of the literature has examined public affairs knowledge in dichotomous terms of an informed or uninformed electorate; however, a third category, misinformed, should be considered as well (Kuklinski, Quirk, Jerit, Schwieder, and Rich, 2000). Kuklinski and his colleagues prefer this three-category distinction, positing, “It is one thing to not to know and be aware of one’s ignorance. It is quite another to be dead certain about factual beliefs that are far off the mark” (Kuklinski, et al., 2000, 809). They

suggest when examining a factual question from a survey (How many Supreme Court Justices are there?), giving the wrong answer and having no answer are probably not indicative of a larger, more “attitudinal difference” (2000, p. 810). However, when considering misperceptions in light of evaluating policy or voting behavior (Kuklinski et al., 2000), political heuristics become again relevant (Popkin, 1991), as do notions of political elites shaping discourse (Zaller, 1992). Thus, ideological selectivity in media consumption can account for some of the gaps in knowledge about public affairs. When issues become divided by party ideology, the editorial direction of news outlets can have a great effect on the public’s opinion of the issue. Iyengar and Hahn (2009) found evidence of this selectivity when research participants, especially those who were politically engaged, were more likely to select news, even soft news items, from sources reflective of their own political affinity. Conservatives and Republicans were more likely to attend to stories from Fox News and avoid stories from NPR and CNN, while the opposite applied to liberals and Democrats, who avoided exposure to Fox News and showed preferences for CNN or NPR. Partisans are often blind to the effects of their party’s ideological influence, but then insist that those on the opposite side of the ideological spectrum might be influenced by the majority’s opinion (Cohen, 2003). In several cases, attention to a news outlet can predict politically disputed beliefs (Lin, 2009) and political misperceptions (Johansen & Joslyn, 2008; Kull, Ramsey, & Lewis, 2003).

Political misinformation spreads in the same ways that factual information does, as a result of corporate interests, government officials, traditional media, and the Internet. Some information works its way into public discourse as urban legend or rumor. The

nature of breaking news means that often misinformation is distributed and accepted until new information arrives. Even when corrective information has been issued or distributed, misinformation persists. Anderson, Lepper, & Ross (1980) presented participants with opposing explanations of a causal relationship and then debriefed them, describing the information provided as incorrect. The results find that the participants were extremely resistant to changing or updating their beliefs even in the presence of a scientific explanation. Instead, clinging to their original beliefs, they rejected the changes even in the face of invalidated evidence. When offered a more realistic modification, in the form of a correction paragraph at the end of an article, response to the correction differs greatly depending on ideological preference and in some cases can serve to *strengthen* the misperception, a phenomenon the authors refers to a “the backfire effect” (Nyhan & Reifler, 2010). Especially if challenging information comes from an opposing partisan source, there is evidence for increased support for the original position (Morris, 2005). Meirick (2012) suggests that a combination of motivated reasoning -- that is, the tendency of partisans to seek congruent material and process it with overt bias -- and the current media landscape is responsible for citizen misperceptions. Recent research has examined public beliefs regarding many of the past decades’ most stubborn political mistruths: the belief that the United States military found weapons of mass destruction during its invasion of Iraq (Kull, Ramsey, & Lewis, 2003; Morris, 2005), the supposed “death panels” in President Obama’s health reform legislation (Meirick, 2012), allegations that President Obama lacked a valid claim to U.S. citizenship (Morales, 2011), and the denial of climate change science (Leiserowitz, Maibach, Roser-Renouf, Smith, & Dawson, 2012; Hindman, 2009). When considering the belief that weapons of

mass destruction were found in Iraq, the most powerful predictor of misperception was the intention to vote for George W. Bush. Compared to those who intended to vote for the Democratic nominee, Bush supporters were three times more likely to believe the misperception (Kull, et al., 2003). The next most powerful predictor was the respondent's primary news source. Fox News was the most consistent predictor of misperception, with viewers 1.6 times more likely than viewers whose primary news source was not Fox to believe the misperception (Kull, et al., 2003). Meirick (2012) obtained similar results when examining belief in "death panels" associated with the Affordable Care Act. In that analysis, party identification and regular viewing of Fox News were both significant predictors of belief in the misperception (Meirick, 2012).

### **Knowledge Gaps, Belief Gaps, and Motivated Misperception**

One way to explain the differences in political knowledge between segments of the population is the knowledge gap hypothesis (Tichenor, Donohue, & Olien, 1970). Originally conceptualized as a way to explain the acquisition of information throughout a social system regarding science and public affairs issues, knowledge gap functions, operationally, on two key premises: first, that over time, acquisition of a highly publicized topic will proceed at a faster rate for those that are more educated, and, secondly, at a given point in time, there will be a greater discrepancy in knowledge about highly publicized topics between those with education and those without than for topics that are less publicized (Tichenor, et. al, 1970). The researchers posit that the socioeconomic status indicator best equipped to predict knowledge is level of education.

Agreeing with Tichenor et al. (1970), that knowledge often equals power, and that all information comes with a relative amount of implied control, the belief gap hypothesis

(Hindman, 2009, 2012) reexamined the knowledge gap in a social environment where more of the public policy issues are subject to political dispute. Hindman's work sought to refine knowledge gap theory by offering several criticisms. First, his belief gap theory posits that privileged groups have the power to define and distinguish knowledge, and that knowledge is socially constructed rather than independent of the observer (2009). Most importantly, though, Hindman makes a distinction between factual information and information that, while based on evidence, is politically contested. According to Hindman, knowledge stems from systematic observation and logical analysis of evidence (2009). Belief, by contrast, emerges from "value systems, loyalties, reference groups, social institutions, elite opinions, and ideological predispositions." (Hindman, 2012, pp. 589-590). Furthermore, belief, Hindman says, has "a lower standard of merit than knowledge" (2009, p. 4), it must only be "accepted, whereas knowledge must be acceptable" (2009, p. 4). Hindman grants, "Statements of both beliefs and knowledge are intrinsically cognitive processes in that each involves an individual's claim regarding reality. In the case of beliefs, however, the statement is a subjective proposition about the attributes of some aspect of reality" (2012, p. 590). Thus, belief gap makes a distinction between knowledge and beliefs, stipulating that when scientific information about climate change or healthcare reform is subject to political dispute, political ideology is a better predictor of acceptance of belief than education.

An alternate way to explain these gaps draws from the literature on cognitive dissonance theory (Festinger, 1957), which states, "being psychologically uncomfortable will motivate the person to reduce dissonance and achieve consonance" and "in addition to trying to reduce it the person will actively avoid situations and information which

would likely increase the dissonance” (p.3). Dissonance theory is important to communication studies in the areas of information seeking (selective exposure) and avoidance (selective attention) because it suggests that individuals will avoid information which is inconsistent with their beliefs. In her work on motivated reasoning, Kunda (1990) suggests that “people rely on cognitive processes and representation to arrive at their desired conclusion, but motivation plays a role in determining which of these will be used on a given occasion” (p. 480). Motivated reasoning falls into two main categories: those where the outcome is to arrive at an accurate conclusion, called accuracy goals, and those in which the end goal is to arrive at a specific, directional conclusion, or direction goals. Kunda doesn’t suggest that people are inactive in this process or aim to be biased; rather, they “attempt to be rational and construct a justification of their desired conclusion” (p. 482). Meirick (2012) also sought to explain disparities in what people know, or believe they know, about politically contested public affairs by drawing from motivated reasoning literature. Rather than viewing ideology and education as rival explanations for information gaps as Hindman (2009, 2012) does, Meirick (2012) considers them as interacting explanations. Meirick used multiple regression techniques to model variation in beliefs about a politically contested issue – specifically, belief that the Affordable Care Act healthcare reform legislation included language creating so-called “death panels” empowered to deny care to individuals deemed too old or too sick to be cured. Using many of the same variables as Hindman, Meirick examines knowledge of a politically contested issue (“death panels”), as predicted by ideology, but also includes education and attention to partisan media as variables. He also checked for interactions between education and attention to politically partisan media – specifically,



viewing Fox News. Neither interaction appeared significant. Intriguingly, though, Meirick found that education and attention to Fox News interacted to significantly boost belief that the law included death panels. He also found that the interaction achieved significance only among self-described Republicans, a pattern suggestive of a three-way interaction among ideology, education and attention to partisan news media. Discussing the interaction, Meirick speculated that well educated individuals who chose to engage with Fox News were more likely to absorb and retain the information Fox News presented regarding the death panel claim, especially if they possessed Republican loyalties that motivated them to accept the information uncritically.

In summary, the work of Tichenor, et.al, established education as a key predictor of knowledge about an issue. Distinguishing between belief and knowledge, Hindman, offers ideology as the better predictor of beliefs, especially in a politically partisan environment. Meirick combines these two variables, education and ideology, to consider a politically contested issue, but introduces a new variable, attention to partisan media. While Meirick's work does find some interaction between all of these variables, the nature of the analysis, basic multiple regression, does not allow for the detection of a more complex relationship.

### **Focus and Context of the Current Studies**

The current study uses process modeling (Hayes, 2013) to probe the structure of a three-way interaction similar to the one that emerged in Meirick's (2012) investigation. The study does so by examining data from a May 2008 Pew Center poll asking a national sample of U.S. adults three questions, two of which were highly politicized--whether they considered North Korea's or Iran's nuclear program a major threat to the United States—

and one which was not—whether they considered China’s emergence as a global economic power to be a threat to the United States. To briefly describe the poll’s context: During a 2007 televised CNN debate in Charleston, S.C., among eight contenders for the Democratic presidential nomination, host Anderson Cooper asked the candidates whether they were willing to meet, without preconditions, with the leaders of Iran, Syria, Venezuela, Cuba and North Korea to “bridge the gap that divides our countries.” Barack Obama, then a senator from Illinois, replied first, saying he would do so and characterizing as disgraceful the lack of diplomatic contact between the United States and those countries (Presidential Candidates Debates, 2007).

Obama’s remarks started a politicized, and well publicized, dispute between Obama and Republican presidential frontrunner Sen. John McCain that lasted into the general election, with McCain calling Obama’s willingness to talk with rogue states naïve and dangerous, and Obama charging that McCain’s support for isolating such states would merely accelerate their efforts to acquire nuclear weapons (The New York Times, 2008). The severity of the threats was a subjective question, yet Republican and Democratic presidential candidates were sending opposing, well publicized signals regarding what the true threat levels were and how the U.S. should respond. Overall, the situation was ripe for producing individual political beliefs that were based partly on objective information and partly on other factors, including individuals’ political loyalties and news media preferences.

### **Hypotheses**

Given the above discussion, this three-part study proposes and tests a conditional process model in which an individual’s beliefs about a given political issue depend at

least partly on both the nature of the issue and interactions among the individual's political conservatism, education level, and degree of belief in Fox News. Figure 1 depicts a mathematical view of the model. Two paths in the model are of particular interest. The first is the education-influenced path leading from conservative ideology to belief in Fox News (a3) and then on to belief in "a major threat" (b1). The second path of interest is the education-influenced path leading directly from conservative ideology to belief a "major threat" (c3).

The study hypothesizes that (H1) in the case of the two politically contested beliefs – those about the threat posed by North Korea and Iran – political conservatism correlates indirectly and positively with belief via a process mediated by higher belief in Fox News and moderated by higher levels of education. At the same time, (H2) political conservatism correlates directly and positively with belief in threats from North Korea and Iran via a process that is also moderated by higher education levels. Finally, the study hypothesizes that (H3) the mediating role of belief in Fox News and the moderating roles of education as described in the first two hypotheses will be more evident when the outcome variable represents politically contested beliefs, such as in those regarding threats from North Korea and Iran, than when the outcome variable represents less politically contested beliefs, such as those regarding a threat from China.

## CHAPTER THREE: METHOD

### Data

The study drew data from a May 21-25, 2008 Pew Research Center for the People & the Press telephone poll of 1,505 people sampled by list-assisted random digit dialing from the adult population of the continental United States. Statistical results were weighted to correct known demographic discrepancies. The poll's cooperation rate computed to 29% using American Association for Public Opinion Research (AAPOR) disposition codes and reporting guidelines. (May 2008 Political Survey, Methodology). There were 1,505 participants in the survey. In terms of sex, of those who responded, 54% were female, and 46 % were male. Their mean age was 54.31 years ( $SD = 18.521$ ). In terms of race, 81.9% identified as white, 9.5 % identified as black or African American, 1.7 % identified as Asian, and 4.9 % identified as some other race.

### Dependent/Outcome Variable

**Belief in a perceived threat.** The study examined three dependent variables, one for each part of the study. The first dependent variable indicated whether respondents considered North Korea's nuclear program a "major threat" to the United States. The second dependent variable assessed whether respondents considered Iran's nuclear program a "major threat" to the United States, and finally, the third study measured whether respondents considered China's emergence as a global economic power a "major threat" to the United States. Specifically, the poll asked respondents, "I'd like your opinion about some possible international concerns for the U.S. Do you think that (North Korea's nuclear program, Iran's nuclear program, or China's emergence as a global economic power) is a major threat, a minor threat or not a threat to the well-being of the

United States?” (Pew Study, 2008). The survey asked similar questions about growing authoritarianism in Russia, political instability in Pakistan, and Islamic extremist groups like al Qaeda, although these variables were not considered in the current study.

The analysis dichotomized respondents into those who considered each condition a “major threat” and those who gave any other answer, including those who said they “did not know” or refused to answer. The dichotomous recoding assigned a 1 to respondents who had chosen the “major threat” option and a zero to all others. Thus, in the modeling that follows, positive coefficients for paths leading to the dependent variable indicate positive relationships with perceiving a threat. In keeping with process modeling terminology, this paper occasionally refers to the dependent variable as the “outcome variable,” meaning the variable modeled as chronologically last in the process’s chain of variables.

### **Independent Variables**

Each part of the study examined relationships between its dependent variable and the same set of three independent variables: conservative ideology, belief in Fox News, and education level.

**Conservative ideology.** The poll asked respondents to describe their political views as generally “very conservative, conservative, moderate, liberal, or very liberal.” Respondents also could reply that they did not know, or they could decline to answer. The analysis recoded these responses into a 0-4 scale, with zero indicating those who had answered “very liberal” and 4 indicating those who had answered “very conservative.” Of those who responded, 5.7% answered “very liberal”, 14.2% “liberal”, 34.4% “moderate”, 36.7% conservative, and 9.0% “very conservative.” The mean was 2.2908

( $SD = 1.0057$ ). The recoding omitted respondents who had said they didn't know or who had declined to answer ( $n = 78$ , or 5.2% of all respondents). In keeping with process modeling terminology, "independent variable" means the variable considered to be chronologically first in the modeled process's chain of variables.

### **Mediators and Moderators**

**Belief in Fox News.** Positioned as a mediator of conservative ideology's relationship with belief in a perceived threat, this variable measured how much respondents thought they could "believe" the Fox News Cable Channel on a four-point scale ranging from a low indicating that the respondent believed "almost nothing" of what the organization says to a high indicating that the respondent believed "all or most" of what the organization says. Believing Fox News is not, of course, the same thing as watching Fox News. However, measures of watching Fox News were unavailable in the dataset. Thus, there was no alternative to assuming that belief in Fox News would have correlated positively with Fox News viewing had such viewing been measured.

In terms of the responses, 15.9% gave Fox News a believability rating of 1; 20.7% gave a rating of 2; 31.0% gave a rating of 3; 20% gave a rating of 4; and 1.5% and 10.9% said they'd never heard of Fox News or couldn't rate it, respectively. The mean was 3.406 ( $SD = 2.278$ ).

In all, the poll asked the question about each of 22 different news organizations including all three broadcast networks, other cable networks besides Fox, nationally circulated newspapers ranging from the *New York Times* to *The National Enquirer*, weekly news magazines, The Associated Press, National Public Radio, the British Broadcasting Corporation, and the respondent's local newspaper and television news

outlets. The poll did not ask all 1,505 respondents about the level of belief they attributed to Fox News; rather the poll asked each participant about eight media outlets randomly selected from the overall list. Thus, only 889 participants were asked about Fox News. Fox News was singled out after preliminary analysis showed that, of all of the news outlets examined, only Fox News' believability rating registered a correlation with conservative ideology that was both positive and significant, ( $r = .153, p < .001$ ). Political conservatives tended to give high believability ratings to *The Wall Street Journal*, an outlet newly acquired at the time by Rupert Murdoch's News Corp., but so did political liberals, resulting in a nonsignificant correlation. Correlations between conservative ideology and believability ratings for all other media outlets mentioned in the poll were either nonsignificant or significantly negative.

**Education.** The poll measured last year of school completed in seven levels ranging from "none or grades 1-8" through "Post-graduate training or professional schooling after college." The mean was 4.68 ( $SD = 1.635$ ). The analysis used this variable directly, after recoding "Don't knows" and refusals as missing values.

### **Procedures**

The analysis employed the PROCESS macro for SPSS (Hayes, 2012) to test the paths of interest in the model described.<sup>1</sup> In particular, the analysis specified Model 8, with belief of a perceived threat placed as the outcome variable (Y), conservative ideology as the independent variable (X), belief in Fox News as a mediator (M), and education as a moderator (W). The number of bootstrapping iterations was set at 5,000. Plotting techniques depicted the significant moderations and mediations found.

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<sup>1</sup> For more on the use of PROCESS rather than SEM, see Hayes (2013, p.161).

## CHAPTER FOUR: RESULTS

Figure 2 depicts the process model and the coefficients produced by an analysis with perceived threat from North Korea as the outcome variable. To begin with, the analysis found that the interaction between ideology and education significantly predicted belief in Fox News ( $a_3 = .1479, p < .001$ ). Note that the models for perceived threat from Iran and China produced identical results for this path, because the path did not directly include the outcome variable. Meanwhile, belief in Fox News significantly, and positively, predicted belief in a threat ( $b_1 = .0453, p < .01$ ).

Testing H1 required assessing whether the indirect effect of the conservative ideology and education interaction on perceived threat from North Korea and Iran via belief in Fox News was significant. For the North Korea measure, the product of the  $a_3$  and  $b_1$  coefficients was .0283, and the 95% bootstrap confidence interval ranged from .0116 to .0515. For the Iran measure, the product of the  $a_3$  and  $b_1$  coefficients was .0338, and the 95% bootstrap confidence interval ranged from .0157 to .0586. Figure 3 depicts these results. The findings support H1's assertion that conservative ideology's education-moderated link to belief that North Korea or Iran posed a threat was mediated by degrees of belief in Fox News. An examination of this conditional indirect effect at five levels of education, the 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup> and 90<sup>th</sup> percentiles, found the effect rising in a positive direction from .0212 through to .1565 for belief in a threat from Iran. For belief in a threat from North Korea, the analysis found the effect rising in a positive direction from .0177 to .1309. The results were significant for the 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentile groups.



This suggests that conservatives who believed Fox News tended to perceive a greater threat from North Korea or Iran, especially those conservatives who were well educated.

Meanwhile, the direct links between the ideology and education interaction and belief that Iran posed a threat ( $c_4 = .1183, p < .05$ ) and belief that North Korea posed a threat ( $c_4 = .0961, p < .05$ ) were also significant, suggesting that conservative ideology's link to belief that North Korea or Iran posed a threat depended significantly on education level, even after accounting for the influence of belief in conservative media. An examination of this conditional direct effect at five levels of education, the 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup> and 90<sup>th</sup> percentiles, found the effect rising in a positive direction from .0998 through .4841 for belief in a threat from North Korea. For belief in a threat from Iran, the analysis found the effect rising in a positive direction from .1931 to .6663. The results were significant for the 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentile groups. H2 was supported.

Notably, the direct link between education and belief that Iran posed a threat ( $c_2 = -.3048, p < .05$ ) and belief that North Korea posed a threat ( $c_2 = -.3344, p < .01$ ) remained significantly negative in both models, indicating that, independently of its moderating influences on belief in Fox News and the conservatism/perceived threat link, education tended to diminish belief that North Korea or Iran posed threats to the U.S. In other words, although conservatives perceived more of a threat than liberals did, especially conservatives who considered Fox News credible, higher levels of education still tended to reduce the level of threat perceived.

For the less politicized issue, the belief in a threat from China as a global economic power, none of the paths leading to the outcome variable were significant. Figure 4 depicts the model. Despite the lack of significance, it may be worth noting that

the coefficient signs tended to match the signs in the models involving perceived threat from North Korea and Iran. H3 was supported.

## CHAPTER FIVE: DISCUSSION

The results reveal a complex relationship between ideology, education and belief in Fox News as factors in the public's judgments about a politically contested matter like the threat level posed by North Korea and Iran's nuclear programs. Overall, a higher education level tended to decrease the perceived threat level, while rising conservatism tended to raise it. Adding the measure of belief in Fox News to the picture introduces additional complexities, partly because the positive link between conservatism and belief in Fox News is more intense among better-educated individuals than among lesser-educated individuals. The patterns that emerge when all three factors are considered simultaneously suggest that the greatest likelihood of perceiving a threat from North Korea and Iran's nuclear program appeared among well educated conservatives with high levels of belief in the truthfulness of Fox News, while the smallest likelihood of perceiving a threat from North Korea and Iran's nuclear program appeared among well-educated liberals with low levels of belief in the truthfulness of Fox News. Figures 5 and 6 illustrate the patterns by showing mean probabilities of threat belief at different levels of conservatism and education. The mean probabilities were obtained via logistic regression models predicting threat belief from conservatism, education, Fox belief, and a conservatism/education interaction term.

These results support the model Meirick's (2012) data on belief in "death panels" suggested but was unable to support, due to the use of OLS regression. The two-way interactions between ideology and education measures and between ideology and conservative media measures failed to produce significant coefficients in Meirick's study but did yield significant coefficients in this study. Similarly, the data in this study provide

evidence for a three-way moderated mediation in which ideology's link with politically contested beliefs is mediated by belief in partisan media and moderated by education and also directly moderated by education, links that Meirick's discussion suggested may be possible.

In another way, the findings pose an empirical challenge to Hindman's (2009, 2012) preference for belief gap modeling that does not consider the interaction of education and ideology as predictors of politically contested knowledge and belief, but rather suggests that education and ideology are rival predictors of belief. One way to move forward would be to check for mediation and moderation over time or to see whether the degree of politicization affects the result. Additionally, it would be interesting to examine the model using data about issues promoted by liberals and check for interaction with liberal media outlets.

The implication that education does not increase open-mindedness, and in fact may create an even narrower worldview isn't new to this study. Lodge and Taber (2000) found a significant sophistication effect where those who are politically knowledgeable are more susceptible to motivated biases than are unsophisticates. They conclude that this may be partly due to the possession of "political ammunition with which to argue incongruent facts, figures, and arguments" (p. 757). In another case, high levels of education did not reduce the chance of worldview-based rejection of information when conflicting information was presented (Lewandowsky, Ecker, Seifert, Schwartz, & Cook, 2012).

It is also possible that issue specialization is at work in the analysis. That is, because national security is fundamental to conservative ideology, this issue is interesting

to conservatives and thus receives more attention among them. According to a 2014 Pew Center survey on policy priorities, 81% of Republicans named “terrorism” as the top policy priority, and 75% named “economy” as the third priority. Among Democrats, by contrast, 85% said “economy” was the top priority, and 70% named “terrorism” as the fourth most important priority (Pew Center for the People and the Press, 2014). So, it is possible that conservatives actively seek information about national security, which could in turn increase their belief in a threat. A search of the News Coverage Index indicated that China was discussed more in 2008 than either North Korea or Iran, yet the effect for the two possible national security threats pervades. Researchers have found that people develop knowledge about highly specific topics (Converse, 1964) and that documenting these patterns of knowledge is relatively easy (Delli Carpini & Keeter, 1996). Slater (2007) describes a spiral of selectivity where news consumers seek issue specific information, find that information, feel affirmed, and continue to consume more of the same. Strong news consumers also spend more time with attitude-consistent information (Knobloch-Westerwick & Meng, 2009 & 2011). Also exploring these spirals, Stroud (2011) investigated the causal direction of the relationship between partisan selective exposure and increased polarization and found evidence that suggests polarization leads to agreeable media exposure. Lewandowsky, et.al (2012) calls this “belief polarization,” suggesting that new information serves to drive each partisan group farther into its own corner. Finally, more engaged conservative readers were more likely to select stories labeled FOX and specifically avoid those labeled NPR or CNN, especially when the topic was politically controversial (Iyengar & Hahn, 2009).

Phillip Converse (1964) said, “Belief systems have never surrendered easily to empirical study or quantification.” (p.206). Indeed, the data from this survey raise just as many questions as they answer. First, the data are from a few poll questions and were not given to all participants. Additionally, two versions of the “Belief in Fox News” questions were administered; this research chose a variable, which combined the results as no discernable difference was detected. Another area of concern, not limited to this research, but ongoing in the literature is the distinction between knowledge and belief. Tichenor, et al. (1970) and Hindman (2009, 2012) both offer definitions of each, but especially as information becomes politically contested defining what is empirical or not, becomes nebulous. Eveland and Cooper (2013) suggest that differentiating between the two is not always necessary. They hypothesize the process of acquiring beliefs and information are essentially accomplished by the same method: a person brings prior attitudes to new information, uses a variety of cognitive processes to assess the material, and then finally emerges with beliefs or information. Furthermore, with an issue like the threat of North Korea, Iran, or China, the answer “major threat” can only become incorrect if in fact one of them attacks the United States. So, it is possible that at the moment of writing, “not a threat” would be considered correct, but in a year “major threat” could be correct. The measure of “threat of nuclear program” also seems more subjective than previous research, which has explored belief in “death panels” (Meirick, 2012) or belief in Barack Obama’s citizenship (Morales, 2011). Finally, a measure of belief in Fox News does not necessary imply any attention to the media outlet, rather it may be that people believe Fox News based on reputation alone. The operationalization of a media use variable has been debated extensively within the literature. The

traditionally employed measure is one of exposure to news media, which seems straightforward. However, simple exposure to media does not explain who “gets the news” with regards to receiving the message (Price & Zaller, 1993, p.134). Other researchers have positioned attention to news media (Chaffee & Schleuder, 1986) as a better measure, suggesting attention “accounts for variation in learning beyond the effects of exposure” (p.103). Disagreeing, Slater (2004) points out that attention to media is influenced by prior knowledge, interpretation, and attitudes. Additionally, measuring this variable through self-reporting is also problematic, because often media consumers overestimate the amount of news they consume, for a variety of different reasons (Tewksbury, 2003). Despite these limitations, though, the study suggests a potentially rich area of research into the factors that affect levels of knowledge and belief regarding politically contested public affairs.

## CHAPTER SIX: CONCLUSION

The findings of this study raise important theoretical questions about the linkage between education, use of partisan media, and belief formation. It could be that education is as likely to interfere with as encourage accurate perceptions of information related to politically contested public affairs. The same high levels of education that, consistent with knowledge gap theory, enhance one's ability to absorb accurate information from reliable media sources may enhance one's ability to absorb inaccurate information from unreliable media sources. Education also may increase one's ability to argue against good information that challenges one's understanding of an issue. The availability of trustworthy information sources, and the ability to discern them from less trustworthy ones, matters, too.

As research continues to probe the area of public opinion knowledge and perceptual gaps, it will be increasingly important to consider the factors that lead to belief formation, especially in this partisan environment.



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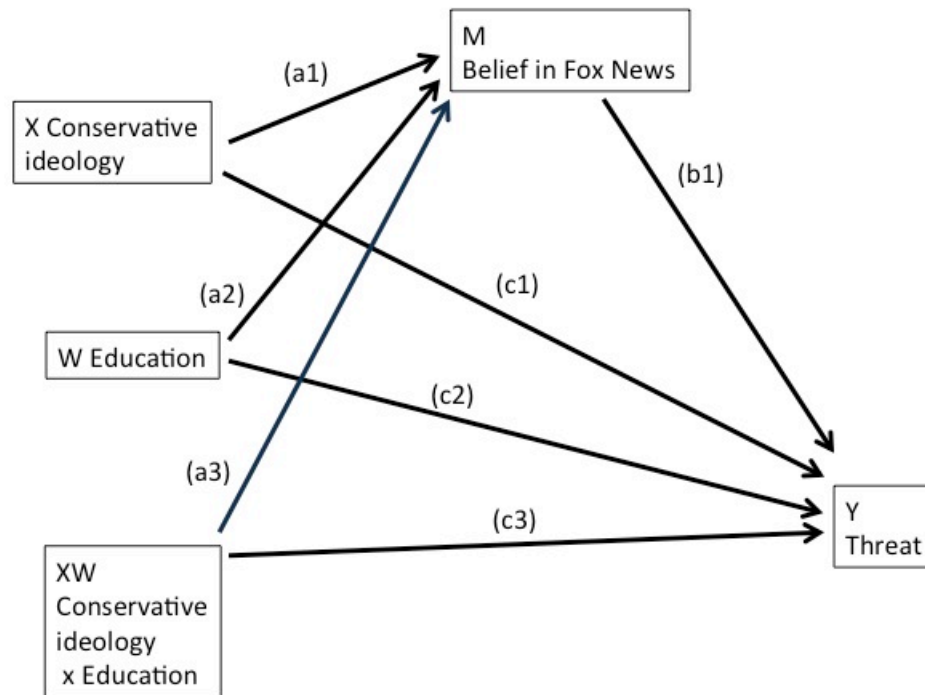


Figure 1. Mathematical Model

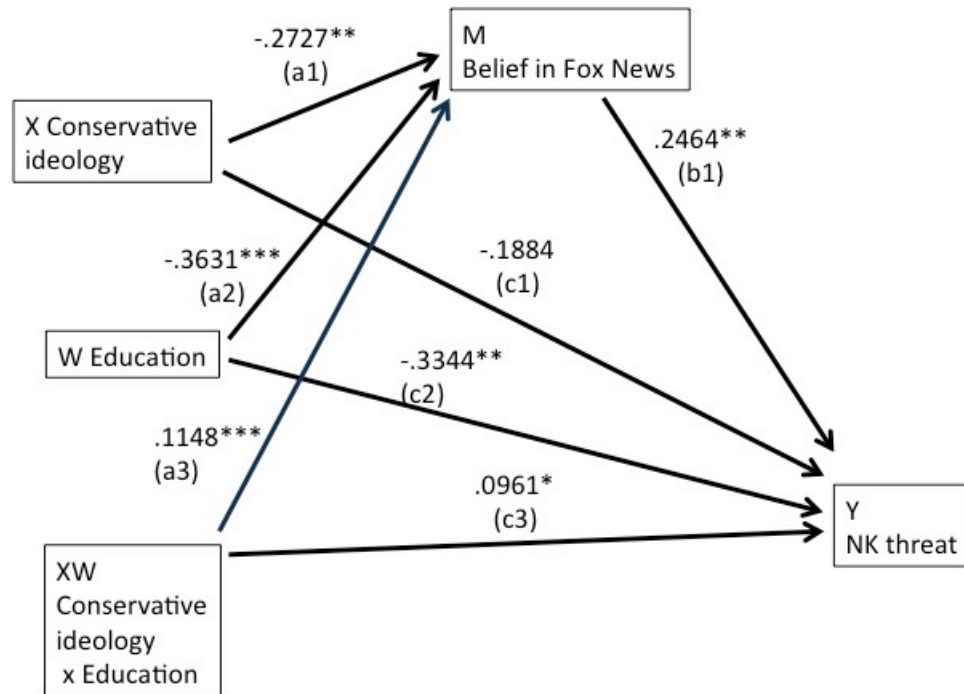


Figure 2. North Korea Results



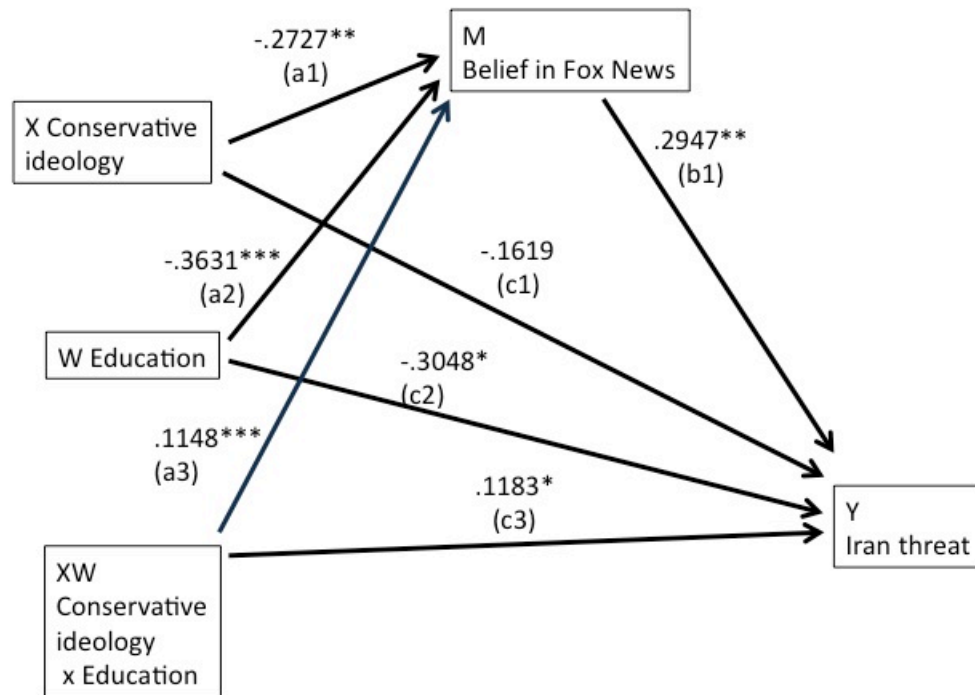


Figure 3. Iran Results

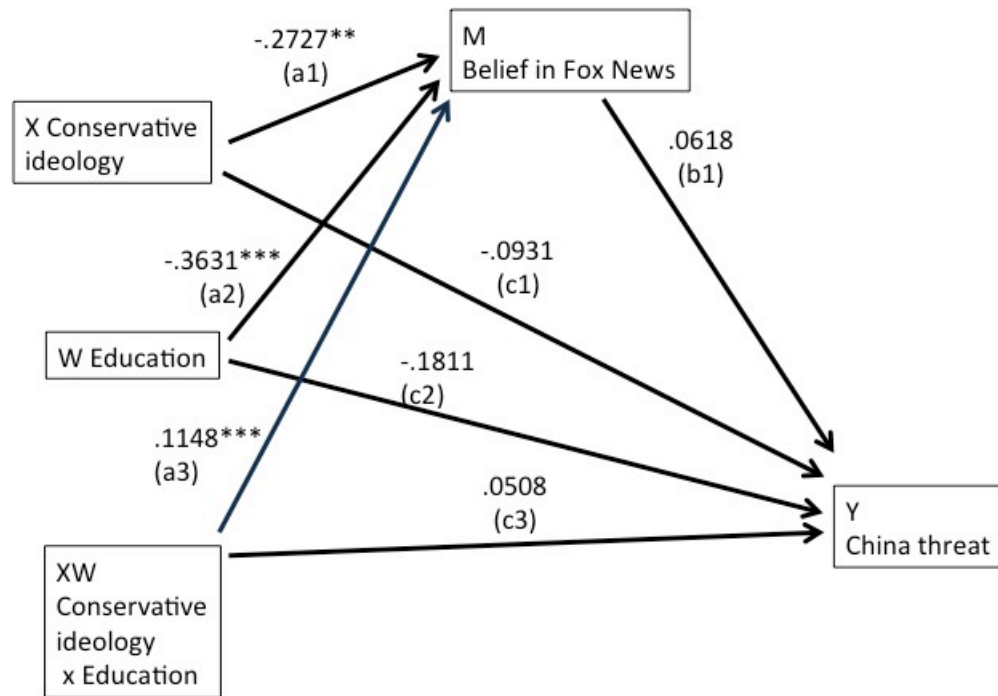


Figure 4. China Results

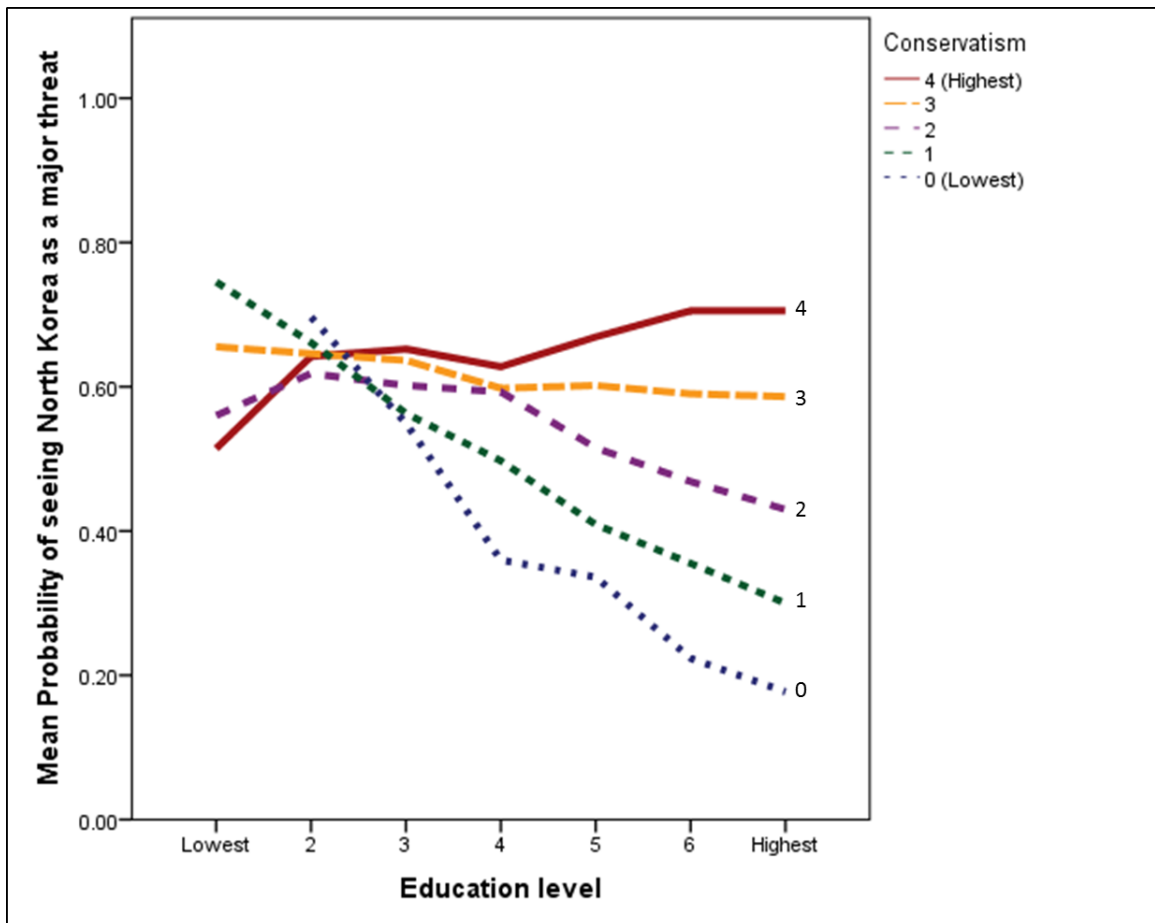


Figure 5. Belief in North Korea threat, by education and conservatism

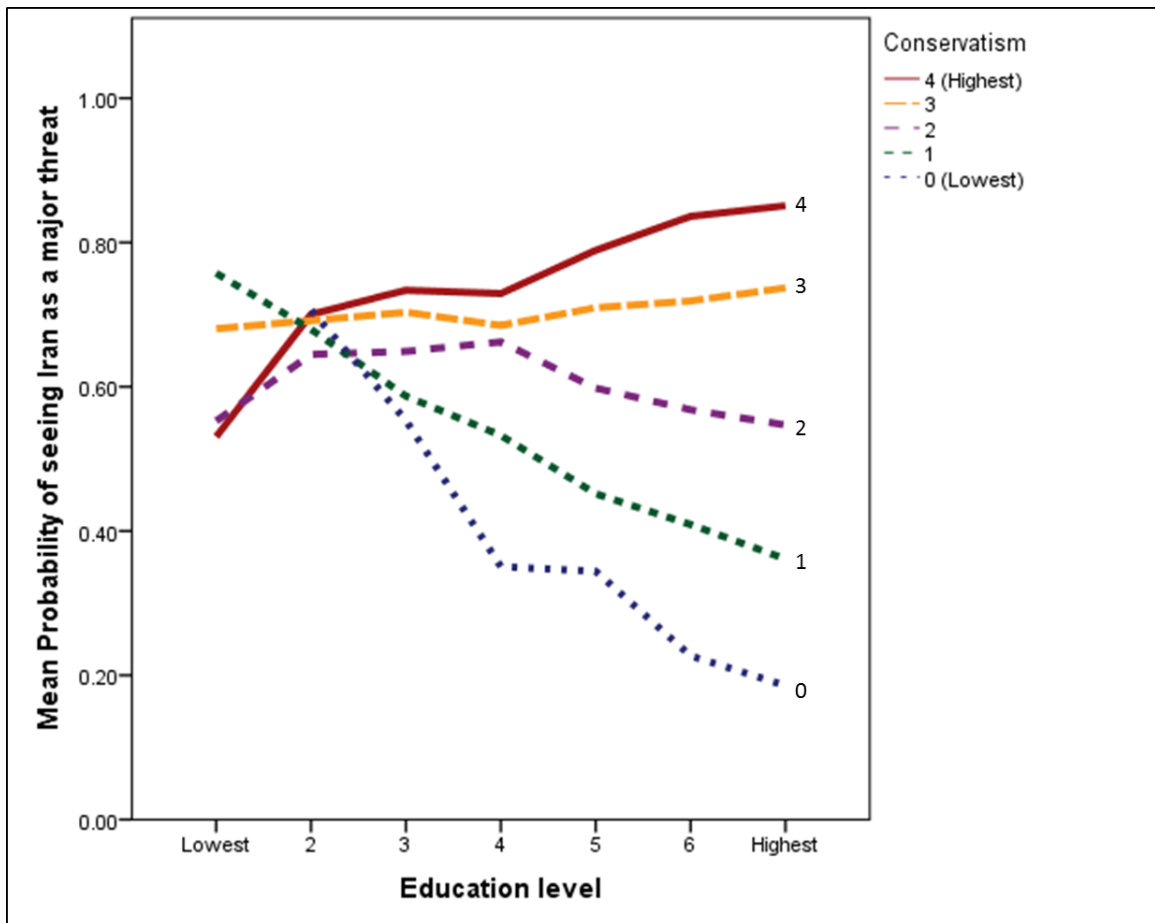


Figure 6. Belief in Iran threat, by education and conservatism