Values and Epistemic Motivation:
Testing Ideological Differences and Similarities in Need for Closure

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DISSERTATION

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This dissertation is dedicated to my wife, Lathie, my daughter, Naomi, and our families. Without their continual support and encouragement this dissertation would have never been accomplished.

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SUMMARY

One of the most frequently referenced explanations for ideological differences is that conservatives, compared to liberals, have a greater psychological need to possess knowledge that is certain, unchanging, and permanent (e.g., Jost, Glaser, Kruglanski, & Sulloway, 2003). More recent research finds that epistemic needs predict social conservatism only to a small extent, and sometimes actually predict economic liberalism instead (e.g., Malka, Soto, Inzlicht, & Lelkes, 2014). The proposed dissertation used a new framework for examining ideological differences in epistemic needs as a function of worldview defense (Values and Epistemic Motivation Model). Rather than viewing political preferences as satisfying psychological needs for knowledge and structure, I proposed that liberals and conservatives should be equally likely to seek closure on value-relevant beliefs. My dissertation tested how value relevance and consistency impacted processing of information related to potential political candidates.

Liberals and conservatives spent less time evaluating political candidate information when that information conflicted with their important values and beliefs, which was partly explained by negative affect felt toward the candidates with worldview-conflicting stances. Importantly, conservatives and liberals engaged in this motivated process to a similar extent. Therefore, previously accepted political differences might be more a function of value differences between liberals and conservatives rather than underlying differences in psychological needs or functioning.

1. INTRODUCTION

Political scientists and psychologists, especially in the United States, have been trying for decades to understand what makes liberals and conservatives tick (see Jost, Nosek, & Gosling, 2008 for a review). Theories founded on differences in conceptions of morality (e.g., Graham, Haidt, & Nosek, 2009; Janoff-Bulman & Carnes, 2013; Lakoff, 2010), personality (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Altemeyer, 1981), cognitive ability (e.g., Gruenfeld, 1995; Sidanius, 1985; Tetlock, 1983a), system justification motives (e.g., Jost, Banaji, & Nosek, 2004), and brain structures (e.g., Amodio, Jost, Master, & Yee, 2007) have been proposed as explanations for why and how political liberals and conservatives are different from one another. One of the most frequently referenced explanations for ideological differences, however, suggests that political conservatism is a form of motivated social cognition, or the idea that people adopt politically conservative beliefs to satisfy existential and, more importantly for the purposes of this project, epistemic needs (Jost, Glaser, Kruglanski, & Sulloway, 2003). Specifically, a motivated social cognition (MSC) approach to ideology argues that conservatives, more than liberals, have a greater psychological need to possess knowledge that is certain, unchanging, and permanent (e.g., Kruglanski, 1989).

Given the wide acceptance of the MSC theory, one might expect a surplus of evidence in favor of its explanation of ideological difference. The bulk of conclusions drawn about ideological differences in epistemic needs, however, stems from a single meta-analysis published in 2003, which showed moderately sized relationships between epistemic needs and political conservatism (Jost et al., 2003). More recent meta-analytic efforts find that epistemic needs predict social conservatism only to a small extent, and sometimes actually predict economic liberalism instead (Jost, 2017; Malka, Soto, Inzlicht, & Lelkes, 2014; Van Hiel, Onraet, & De

Pauw, 2010). Therefore, a more nuanced look at how and why epistemic needs relate to political ideology is needed.

The proposed dissertation research will use a new framework for examining ideological differences in epistemic needs as a function of worldview defense. Rather than viewing political preferences as satisfying psychological needs for knowledge and structure, I am proposing that liberals and conservatives are equally likely to seek closure on value-relevant beliefs. I will test whether liberals and conservatives differ in the beliefs and attitudes they want to defend rather than their motivations for closure. Before turning to the specifics of my proposed research, I present the values and epistemic motivation (VEM) model, which details how contextual variations in value salience predict differences and similarities between liberals and conservatives in epistemic motivation. I explicitly outline the theoretical rationale behind the VEM model and its predictions in contrast to the motivated social cognition (MSC) model of political differences in epistemic motivation (e.g., Jost et al., 2003). Finally, I outline a set of studies designed to test ideological differences in epistemic motivation as a function of differences in the content of people's values and beliefs. My new framework focuses on how liberals and conservatives are motivated to seek closure on different beliefs, which could explain previously identified aggregate level ideological differences in epistemic needs and situationally specific fluctuations in ideological differences in epistemic motivation. The proposed dissertation offers a more comprehensive theoretical framework for understanding when and why we might expect differences and similarities in epistemic needs and motivation across ideological lines, and tests the implications of this new theory.

1.1 Values and Epistemic Motivation Model

The theory of lay epistemics argues that people are constantly constructing new knowledge about their worlds, generating and testing hypotheses about how pieces of knowledge fit together, and making sense of all that information considering other sensory-perceptive information (Kruglanski, 1989). A key piece of the knowledge acquisition phenomenon is that people are not just haphazardly seeking out information, but instead are engaging in a motivated information search to regulate the cognitive demands of the information construction process. Therefore, a central argument of the theory of lay epistemics is that people are motivated to either obtain or avoid definitive information on any given topic. This core motivation is characterized as the need for cognitive closure, which ranges from the need to avoid closure on one end to the need to obtain closure on the other (Kruglanski, 1989; Kruglanski & Webster, 1996).

A values-based approach to epistemic motivation suggests that as people encounter new information, they interpret the information as being value-relevant or value-irrelevant (see Figure 1, right panel). Values are abstract principles that serve to guide the way we behave, the way we judge others' behavior, and assist us in explaining our choices, actions, beliefs, and intentions (Schwartz, 1996; Schwartz & Bilsky, 1987; Sverdlik, Roccas, & Sagiv, 2012). Although values are generally broad concepts (e.g., self-reliance, egalitarianism), they often guide beliefs and decisions about political and social topics and people often see values as relevant to political information (e.g., Feldman & Zaller, 1992; Tetlock, 1986). Values also tie together different political issue positions and belief stances through the top-down influence of political elites such that mere exposure to and investment in political elite discourse can bring about an alignment to and support for the ideas promoted within that discourse (Zaller, 1992). Therefore, assessing the value-relevance of new information can serve as a heuristic for determining whether or not the

new information is worth carefully processing without having to first decide one's level of agreement with or willingness to accept the new information.

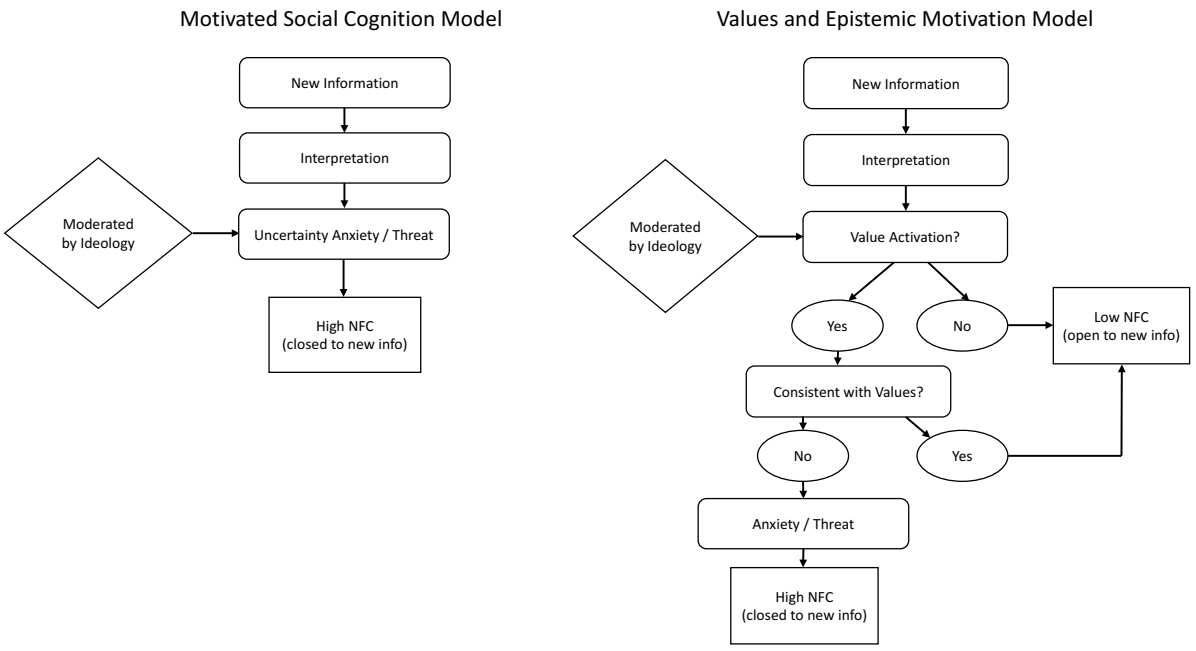

Figure 1. A conservativism as motivated social cognition approach to epistemic motivation on the left, and the values and epistemic motivation model on the right.

For new information that is value-irrelevant, people should be open to the new information (i.e., demonstrate low desire for closure) because the information is not potentially threatening to important values. If the new information is value relevant, people must then decide if the value-relevant information in consistent or inconsistent with their stances related to those values (e.g., Does this information threaten or confirm my views on abortion?). If the value-relevant information is consistent with one's value stances, then that person should also be open

to the new information because this information is value-affirming and supportive of the perceiver's worldview. If the new value-relevant information is inconsistent with the perceiver's stances, then that person should be motivated to be closed to further information processing because continued processing would be threatening to that perceiver's values.

1.2 Comparing and Contrasting the VEM and MSC Models

1.2.1 Direct versus Indirect Relationship between Political Orientation and Epistemic Motivation

The VEM model differs from the MSC model in a number of ways (see Figure 1). First, the MSC model posits a direct relationship between epistemic motivation and political orientation. Specifically, the MSC model suggests that conservatives more than liberals are likely to experience fear or threat in the face of uncertainty that new information provides (e.g., Wilson, 1973), and the desire to reduce this uncertainty is what motivates conservatives to exhibit cognitive closure (Jost et al., 2003). The link between need for closure and political orientation, however, is somewhat cyclical. Not only are conservatives said to be more threatened by uncertainty, which leads to greater need for closure, but those high in need for closure are also motivated to adopt a more conservative political belief system (Jost et al., 2003). Because those high in need for closure are motivated to have firm and concrete answers on a topic, some have argued that people high in need for cognitive closure (compared to low) are more likely to adopt ideologies or belief systems that promise stability and order as attributes of its beliefs rather than simply offering beliefs about something (e.g., Federico & Goren, 2009). Therefore, because conservatism is associated with traditionalism, resistance to social change, authoritarianism, and a whole host of rigid and structured attributes (see Jost et al., 2003 for a review), those high in need for cognitive closure might be more attracted to a conservative than a

liberal political ideology. The proclivity of those high in need for closure to gravitate toward adopting a conservative political orientation is the crux of the MSC model argument.

As evidence for this argument, need for cognitive closure is associated with other typically conservative attitudes and attributes. Among other things, high need for cognitive closure is positively associated with traditionalism (Webster & Kruglanski, 1994), authoritarianism (Webster & Kruglanski, 1994), religious conservatism (Golec, 2002), support for the death penalty (Jost, Kruglanski, & Simon, 1999), hawkish foreign policy attitudes (Federico, Golec, & Dial, 2005), and even simple left-right measures of political orientation (Jost et al., 1999). One could see how a person high in need for cognitive closure might also be supportive of a policy like the death penalty because it offers a final and unwavering punishment for a heinous crime (Jost et al., 1999). Additionally, if someone high in need for closure seeks out the company of others who also share his predilection for supporting capital punishment, then that person may find himself being influenced by the other policy stances that a pro-death penalty sympathizer might already possess. Therefore, one may end up adopting a belief system known as conservatism because of a sort of foot-in-the-door technique with regards to the now shared reality of other group members (e.g., Kruglanski et al., 2002). Thus, those high in need for closure may be attracted to political conservatism through indirect means of being motivated to have a more conservative stance on one salient issue (e.g., death penalty) and through the desire for group formation and maintenance (e.g., Kruglanski et al., 2006) come to share in the views of others who are deemed "worthy" group members capable of providing closure on other important issues. Regardless of the exact ontogeny of the epistemic motivation and political conservatism connection, the MSC model predicts that political conservatives, more than

liberals, should be motivated to exhibit high need for closure for any new information because the uncertainty of new information is perceived as threatening.

In contrast to the MSC model, the VEM model posits that any connection between political orientation and epistemic motivation is dependent on the context where the different value priorities of those on the left and right might be more or less salient. More critical analyses of the relationship between ideology and need for cognitive closure has revealed that epistemic motivation is not necessarily related to conservatism writ large (e.g., Van Hiel et al., 2010), but instead is more closely related to social or cultural conservatism (Malka et al., 2014). Social conservatism is said to be particularly satisfying for those high in need for closure because adhering to time-honored traditions regarding social roles and collective security (e.g., through conservative positions on issues like abortion, same-sex marriage, and immigration) provides a sense of finality and certainty that will not change or be challenged in the future (e.g., Duckitt, Wagner, du Plessis, & Birum, 2002). Indeed, many of the findings suggesting that high need for closure is associated with conservative policies are generally relegated to conservative social or cultural policies and not economic policies (e.g., Carney, Jost, Gosling, & Potter, 2008; Feldman & Johnston, 2014; Van Hiel & Mervielde, 2004). These recent findings support the contention by others suggesting that any determinants or consequences of ideology need to be examined within at least a two-dimensional space of both social and economic ideological concerns (Feldman & Johnston, 2014).

Indeed, need for cognitive closure is related to both social conservatism and economic liberalism (Malka et al., 2014), and some argue that need for closure should be related to economic liberalism because liberal economic policies (e.g., support for public welfare) often offer economic stability and security (Federico, Johnston, & Levine, 2014; Malka & Soto, 2015).

Research on need for closure predicting economic conservatism is decidedly mixed, where some have found that high need for closure (or high needs for certainty and security, Van Hiel et al., 2010) predicts both social and economic conservatism (e.g., Kossowska & Van Hiel, 2003) and others have found that high need for closure only predicts cultural conservatism (e.g., Chirumbolo, Areni, & Sensales, 2004).Therefore, correlational analyses examining relationships between need for cognitive closure and a multi-dimensional view of ideology at least partially suggest that both liberals and conservatives exhibit epistemic motivation depending on the context and the issue under question. Indeed, there is a growing scientific consensus that ideological differences originally thought to be a result of innate psychological differences might be explained by contextual factors instead.

1.2.2 The Stability versus Instability of Psychological Differences between the Left and Right

The VEM model also differs from the MSC model in the extent to which differences in epistemic motivation between liberals and conservatives are stable versus unstable. The MSC model suggests that conservatives exhibit higher need for closure than liberals because a conservative ideology is particularly epistemically satisfying (Jost et al., 2003) and those high in need for closure should be more likely to seek out a conservatively ideology to satisfy their closure needs. Therefore, according to the MSC model, the difference in epistemic motivation between liberals and conservatives is stable and enduring because conservatives are defined as people who are high in need for closure. Alternatively, the VEM model suggests that epistemic motivation for conservatives and liberals should rise and fall with the salience of their respective values. In other words, conservatives and liberals should primarily be motivated to exhibit high need for closure for information that implicates important values. The VEM prediction that

people's need for closure will be contextually variable and tied to is consistent with a growing body of research suggests that many previously accepted psychological differences between liberals and conservatives in areas such as attribution tendencies (e.g., Cozzarelli, Wilkinson, & Tagler, 2001), prejudice and intolerance (e.g., Duckitt & Sibley, 2010), and science denial (Feygina, Jost, & Goldsmith, 2010) are driven more by context and values than by innate psychological differences. Depending on context, liberals and conservatives can be equally likely to make situational or dispositional attributions for others' behavior (Morgan, Mullen, & Skitka, 2010), express intolerance and prejudice against others (Brandt, Reyna, Chambers, Crawford, & Wetherell, 2014), or deny or accept scientific information as a function of whether performing said behavior in a particular context fits with that person's values (e.g., Kahan, Peters, Dawson, & Slovic, 2013).

1.2.2.1 **Attribution Tendencies**

The ideo-attribution effect posits that conservatives prefer to make dispositional attributions and liberals prefer to make situational attributions for social problems, an effect replicated across a wide range of topics and issues (e.g., Arceneaux & Stein, 2006; Cozzarelli et al., 2001; Skitka & Tetlock, 1992; 1993). This seemingly stable pattern of ideological differences, however, has more recently been called into question. For example, conservatives can just as easily make situational attributions for behavior (like liberals) when doing so is value-consistent (e.g., defending security values, Morgan, Mullen, & Skitka, 2010). Most of the early work on attribution tendencies failed to look at situations where conservatives might have a desire to use the environment to explain someone else's behavior (e.g., Skitka & Washburn, 2016). Because attributions generally involve a two-step procedure where dispositional attributions are primary and situational attributions only occur when there is extra motivation to

do so (e.g., Gilbert, Pelham, & Krull, 1988), people theoretically should only engage in situational attributions when making a dispositional attribution is unpleasant or value-conflicting (Skitka, Mullen, Griffin, Hutchinson, & Chamberlain, 2002). In much of the previous work on attributions, conservatives tended to stick with their initial dispositional attributions because doing so did not conflict with their conservative values (e.g., self-reliance, Feather, 1984). Because liberals value social equality and fairness, they were motivated to correct an initial dispositional attribution and come up with a situational explanation for the same person's behavior. The exact opposite happened when conservatives were asked to attribute the behavior of U.S. Marines accused of war crimes in Iraq. Instead of sticking with their initial dispositional attributions, conservatives relied on the situational explanation of the "fog of war" and liberals were, instead, the ones who maintained their initial dispositional attribution of blaming the Marines for their behavior (Morgan et al., 2010). Therefore, both conservatives and liberals were motivated to engage in explanations for behavior that was more consistent with their values regardless of whether that meant making either situational or dispositional attributions. Therefore, the context in which people were making their judgments influenced the degree to which different important values were salient, which then determined the attributions most consistent with those values. More recently, evidence for value-driven political behavior has been demonstrated in the realm of intolerance and prejudice.

1.2.2.2 **Intolerance and Prejudice**

Following a similar mechanism as attribution tendencies, liberals are just as intolerant of groups they perceive as violating their values (e.g., Christian fundamentalists, anti-abortionists) as conservatives are intolerant of groups that violate their values (e.g., labor unions, environmentalists) (Brandt et al., 2014). One reason for the discrepancy in previous research on

ideological differences in these domains and more current research is the lack of representativeness of groups or contexts that allow for both sides of the spectrum to display the behavior in question. Much previous research on intolerance, for example, focused strictly on intolerance towards groups congenial to liberal values (e.g., African Americans) because liberals tend to be concerned about racial disparities (e.g., Sibley & Duckitt, 2008), and because most researchers who study intolerance are liberal (Duarte et al., 2015; Inbar & Lammers, 2012), many target groups to which people can show intolerance were overlooked, especially groups to which liberals might show intolerance (Mullen, Bauman, & Skitka, 2003). Recent research on ideological differences in willingness to discriminate and general disliking toward political outgroups has followed the same pattern where both liberals and conservatives are equally willing to discriminate and show disfavor toward groups they perceive as violating their values (Chambers, Schlenker, & Collisson, 2013; Wetherell, Brandt, & Reyna, 2013). The strength of values-based motivated reasoning also extends to areas where one's values might compete with objective scientific information.

1.2.2.3 **Science Denial**

Despite a longstanding claim that conservatives are more likely to deny science than liberals (e.g., Mooney, 2012), recent research has found that people on both the left and the right are motivated to evaluate the credibility of scientific evidence in ways that fit with their ideological preferences (Kahan et al., 2013; Kahan, Jenkins-Smith, & Braman, 2011; Peterson, Skov, Serritzlew, & Ramsoy, 2013). For example, people had negative reactions to value-conflicting science presented on a fake educational website designed to present scientific information to college students and adults on such issues as climate change, evolution, nuclear power, and hydraulic fracturing (Nisbet, Cooper, & Garrett, 2015). Participants were presented

with a version of the science that conflicted with either liberal values (e.g., that hydraulic fracturing is safe and not a threat to the environment), conservative values (e.g., that global warming is man-made and a threat to the environment), or was ideologically neutral (e.g., science regarding astronomy). Both liberals and conservatives indicated lower trust in science when presented with scientific information that conflicted with their ideological values compared to ideologically neutral information. Additionally, the motivated distrust of science effect was partially explained by greater negative affective reactions to the conflicting science, which then led to lower trust in the scientific community (Nisbet et al., 2015). These results add to the growing body of evidence suggesting that conservatives and liberals are equally motivated to deny or at least become less trustworthy of scientific claims that counter their ideological values (e.g., Washburn & Skitka, 2017). Partisans on both sides of the isle are willing to supplant accuracy goals in favor of ideologically value consistent goals.

Based on the mounting evidence suggesting that liberals and conservatives engage in similar psychological processes regarding ways of coping with political worldview conflict and threat, it may also be the case that conservatives and liberals are equally likely to display epistemic needs for information that is relevant to their specific political worldviews. Rather than look for an ideology with specific contents that are particularly epistemically satisfying, as suggested by the MSC model, people may exhibit a heightened need for closure for information relevant to important beliefs and values, as described by the VEM model.

1.3 Motivation for Cognitive Closure on Value-Relevant Information

Just like intolerance, prejudice, and discrimination, need for closure can and does change from context to context and person to person. A major impetus for the paradigm shift in thinking about ideological differences in intolerance was the realization that conservatives were

not intolerant of all groups all the time (e.g., Reyna, Henry, Korfmacher, & Tucker, 2006), and liberals were sometimes intolerant of other groups when conservatives were not (e.g., anti-abortionists, Wetherell et al., 2013). The question switched from "why are conservatives always intolerant" to "when are conservatives (and liberals) intolerant." Similarly, people are not always exhibiting a need for closure on all topics under question. Indeed, research on lay epistemics originally considered context specific fluctuations in need for closure to be the rule rather than the exception (e.g., Kruglanski, 1989; Kruglanski & Freund, 1983). Once need for closure became known as an individual difference variable, researchers stopped asking "when do people exhibit need for closure" and started asking "why do certain people (i.e., conservatives) exhibit need for closure" (e.g., Jost et al., 1999). The answer to the question of why conservatives have higher need for closure than liberals has relied on the premise that conservative political ideology is particularly epistemically satisfying (e.g., Jost et al., 2003). The idea that one political belief system should bring more closure than another has been convincingly challenged (e.g., Greenberg & Jonas, 2003). Therefore, the more important question to ask, just like researchers are asking in other domains of political psychology, is "when do conservatives and liberals exhibit need for closure"? I contend that both liberals and conservatives are likely to exhibit high need for closure on topics related to the values they care about and want to defend.

Intolerance, prejudice, and discrimination are useful worldview defense mechanisms because they offer a way for people to maintain a consistent political worldview without suffering the influence of others whose values are threatening to or do not fit with one's own values. For example, being intolerant of a political outgroup alleviates the need or even possibility of having a discussion regarding the veracity of one's own political worldview. Someone who agrees that a value violating group should not be allowed to make public

speeches, for example, is defending one's worldview by restricting the political impact of that group (e.g., Wetherell et al., 2013). Therefore, maintaining one's worldview is made easier by preemptively removing the social influence of a group that would disrupt that worldview. A similar process may occur for information that supports one's cherished political worldview.

Just as people can be motivated to limit the influence of others who violate their values, people may also be motivated to limit the influence of alternative information that might come into conflict with the existing knowledge one has on a topic that implicates a cherished value. One way to accomplish the task of limiting the influence of outside value conflicting information is to maintain cognitive closure on the information that already fits with one's values.

1.3.1 **Benefits of Closure for Belief Systems**

Maintaining high closure on a value relevant topic allows one the psychological freedom to discount or even ignore alternative information (e.g., engage in early cue utilization, Kruglanski & Freund, 1983). Similar to how different situational manipulations of need for closure can make relevant the potential costs or benefits of maintaining or avoiding closure (e.g., time pressure or fear of invalidity, Kruglanski, 1989, 2004), the values associated with a particular political issue can also make the costs or benefits of seeking closure more or less relevant depending on what values are at stake. If someone is deciding which stance to take on a certain political issue, and that person realizes that one stance or another will either fit or not fit with a cherished value, then that person will realize the potential cost of choosing the wrong stance (i.e., the stance that would conflict with a cherished value) and instead should be motivated to seek closure on that issue because the possibility of violating a cherished value is too great of a cost to risk further information processing. Thus, once people realize how specific issue stances line up with cherished values, they should become motivated to seek closure on

those issues in a way that fits with their values and then, by necessity, decreases the possibility of being deterred from that value congruent stance. In other words, we want to have stances that are consistent with our values and avoid any information that could lead us astray.

1.4 The Current Research

One area where examining ideological differences and similarities in need for cognitive closure is particularly relevant is in evaluation of political figures. Political polarization in the United States is on the rise (Kiley, 2017) and many political issues are discussed in terms of values, morals, and identities. Indeed, many voters select candidates and selectively expose themselves to information and media that confirms their cherished value and positions (e.g., Stroud, 2010). One potential explanation for this may be that people's desire or need for closure are determining the types of information to which people are willing to expose themselves. Therefore, the current set of studies tested how value relevance and consistency impacts processing of information related to potential political candidates. Importantly, the current set of studies directly compared the impact of manipulations of values-based need for closure rather than rely on measures of need for closure as an individual difference. Because the values and epistemic motivation model suggests that need for closure can and should vary from situation to situation, the current set of studies provides a much-needed test of the existing research on need for cognitive closure, especially as it pertains to ideological differences and similarities.[1]

[1] All study materials, data, and analysis scripts are available on the Open Science Framework (https://osf.io/qahr3/?view_only=c182b3a640874237b0d3e24c1cd76795).

2. PILOT STUDY

In Studies 1 and 2, participants will be evaluating candidates based on their political stances on several issues. A key part of my hypotheses is that value relevant inconsistent candidate stances should be particularly threatening to participants, which should motivate them to cease information processing (compared to consistent stances). In the context of political candidate evaluation, however, I also want to be sure that the information people are evaluating are consistent with positions that typical Democratic and Republican candidates would have. Therefore, I need to be sure that each candidate statement has an obvious political leaning (Democrat vs. Republican) and that each statement is relevant for both liberal and conservative worldviews. To make sure that the candidates have stances that are actually perceived to be Democratic and/or Republican and value relevant for both liberals and conservatives, I conducted a pilot study where participants evaluated several stances and rated them on how Democratic or Republican they were and how relevant they were for liberal or conservative values. I then used the statements that were obviously Democratic and Republican and value relevant as the candidate statements in Studies 1 and 2.

2.1 Method

2.1.1 Participants

One hundred thirteen participants were recruited from Mturk and compensated $0.75 for their participation. I will over recruited conservatives because Mturk tends to skew liberal (Berinsky, Huber, & Lenz, 2012). Specifically, I recruited participants through Mturk until I reached about fifty self-identified liberals. I then recruited conservatives from a known population of conservative Mturk workers (Skitka Lab Conservative Mturker List) where Mturk workers from this list were contacted via email to inform them that they were eligible to

participate in my study. Importantly, they did not know why they were eligible to participate, just that they qualified for a study on Mturk. I then recruited from this list until I reached an approximately equal number of liberals and conservatives in my sample. After removing participants who were politically moderate, I was left with a final sample of 101 participants (52 liberals and 49 conservatives; M_{age} = 35.36, SD_{age} = 11.28; 65% male, 34% female, 1% other; 78% White, 8% Asian, 7% Black, 3% Latino/a, 2% biracial, 2% Native American).

2.1.2 Procedure

Participants evaluated the likelihood that each of 60 candidate statements belonged to a Republican or Democrat and indicated how relevant each statement was to their political values. After they made these judgments, they completed some demographic information including political orientation and political party identification (see Appendix A for details).

2.1.3 Measures

2.1.3.1 Candidate Statement Evaluation

One item measured the perceived party identification of the statement owner (i.e., "Please indicate where you think a person with this stance falls in terms of their political party identification.") with response scales ranging from -3-*very much Democrat* to +3-*very much Republican*.

2.1.3.2 Candidate Statement Value Relevance

The value-relevance of the same candidate statements was assessed with one item (i.e., "How consistent or inconsistent is this position with your core values?"). Response options will range from -3-*completely inconsistent* to +3-*completely consistent*.

2.1.3.3 Political Orientation

General, social, and economic political orientation was assessed using two items each asking participants, “What is your political orientation [in general/when it comes to social issues/when it comes to economic issues]?” Participants responded by selecting whether they were conservative, liberal, or neither/uncertain. Participants who indicated that they were conservative or liberal branched to a question that assessed their degree of conservatism/liberalism by asking, “To what extent are you conservative [liberal]?” with response options ranging from 1-*slightly* to 3-*very*. Those who responded that they were neither/uncertain branched to an item that asked whether they leaned more toward conservative or liberal, or were still neutral/uncertain. Those who indicated leaning toward conservative or liberal were coded as 1 or -1, respectively, and those who again marked neither or uncertain were coded as 0. These items were combined to form a single liberal/conservative bipolar measure ranging from -3-*very liberal* to +3-*very conservative* for general, social, and economic political orientation.

2.1.3.4 **Political Party Identification**

Political party identification was assessed using two items asking participants, “What is your political party identification?” Participants responded by selecting whether they were Republican, Democrat, Independent, or neither/uncertain. Participants who indicated that they were Republican or Democrat branched to a question that assessed their degree of identification by asking, “To what extent are you Republican [Democrat]?” with response options ranging from 1-*slightly* to 3-*very*. Those who responded that they were neither/uncertain branched to an item that asked whether they leaned more toward Republican or Democrat, or were still neutral/uncertain. Those who indicated leaning toward Republican or Democrat were coded as 1 or -1, respectively, and those who again marked neither or uncertain were coded as 0.

These items were combined to form a single bipolar measure of party identification ranging from -3-*very much Democrat* to +3-*very much Republican*.

2.2 Results

Because the candidate statements need to be perceived as either Democratic or Republican and relevant to liberal and/or conservative values, I incorporated both ratings into my decision for which statements to keep for my main studies. As can be seen in Table 1, all of the intended Democratic statements were rated as such (i.e., all ratings below 4) and all of the intended Republican statements were also rated as such (i.e., all ratings above 4). To measure value relevance, I "folded over" the value consistency measure (i.e., subtracted the midpoint of the item from each value and retained the absolute value) such that the new relevance measure ranged from a score of 0-not value relevant (i.e., neither inconsistent nor consistent with one's values) to 3-completely value relevant (i.e., completely consistent/inconsistent with one's values).

I then conducted a mixed ANOVA with side (liberals rating Democratic statements vs. conservatives rating Republican statements) as my between-subjects factor and topic (each of the 30 different issue topics) as my within subjects factor predicting the value relevance of each candidate statement. In other words, I tested whether liberals and conservatives rated the value relevance of each Democratic and Republican statement, respectively, differently. As expected, there was a side by topic interaction, $F(29, 2871) = 4.24$, $p < .001$. For 15 of the issue topics, liberals and conservatives rated the value relevance of their same side statements differently. For the remaining 15 issue topics, there were no differences in value relevance ratings between liberals and conservatives. The 15 topics (immigration, citizenship, capital punishment, LGBT issues, military intervention, education, affirmative action, Afghanistan, unemployment, welfare,

Iran, teacher tenure, Syrian refugees, sanctuary cities, and felons voting) that were rated similarly in value relevance by liberals and conservatives were used in the main studies (bolded statements in Table I).

Table I
MEANS AND STANDARD DEVIATIONS OF PERCEIVED PARTY IDENTIFICATION AND VALUE RELEVANCE FOR EACH STATEMENT

Topic	Statement	Intended Party ID	Perceived Party ID		Value Relevance	
			M	*SD*	*M*	*SD*
Abortion	Favors a right-to-life constitutional amendment that would outlaw abortion at any time and for any reason	Republican	5.82	1.72	1.78	1.09
Abortion	Strongly and unequivocally supports Roe v. Wade and a woman's right to make decisions regarding her pregnancy, including a safe and legal abortion, regardless of ability to pay	Democratic	1.67	1.40	2.46	0.94
Affirmative action	**Agrees that racism is a major issue in society, but feels that affirmative action programs only inflame racial tensions by discriminating against non-minorities**	**Republican**	**4.96**	**1.63**	**1.88**	**0.95**
Affirmative action	**Believes that affirmative action programs are necessary for redressing a long national history of discrimination against minorities**	**Democratic**	**2.08**	**1.67**	**1.94**	**1.04**
Afghanistan	**Views Afghanistan as the center for the global war on terror and believes that victory there is essential for keeping America safe in the future**	**Republican**	**4.94**	**1.66**	**1.27**	**1.06**
Afghanistan	**Supports a slow reduction of forces that would allow the Afghans to build a legitimate government without Taliban influence and the withdrawing remaining U.S. troops as soon as possible**	**Democratic**	**3.12**	**1.46**	**1.33**	**1.06**

Table I (Continued)
MEANS AND STANDARD DEVIATIONS OF PERCEIVED PARTY IDENTIFICATION AND VALUE RELEVANCE FOR EACH STATEMENT

Topic	Statement	Intended Party ID	Perceived Party ID		Value Relevance	
			M	*SD*	*M*	*SD*
Capital punishment	**Supports the elimination of the appeals system that grants indefinite stays of execution for convicted offenders so that the death penalty will be a more effective deterrent to committing these crimes and to unclog the courts**	**Republican**	**5.18**	**1.50**	**1.51**	**0.98**
Capital punishment	**Opposes capital punishment on moral grounds and favors mandatory life sentences to punish those convicted of the most heinous crimes**	**Democratic**	**2.50**	**1.55**	**1.73**	**1.17**
Citizenship	**Supports changing U.S. Constitution so that children of illegal immigrants are not granted automatic citizenship**	**Republican**	**5.33**	**1.65**	**1.73**	**1.00**
Citizenship	**Supports birthright citizenship for children of illegal immigrants born in the U.S.**	**Democratic**	**2.02**	**1.49**	**1.94**	**1.11**
Climate change	Believes that global warming is not as serious a problem as the media and far-left organizations are portraying it	Republican	5.71	1.55	1.76	1.03
Climate change	Supports the Kyoto Protocol and other international treaties that would force all nations to limit pollution and further protect the environment	Democratic	1.77	1.26	2.29	0.91
Crime	Believes crime is a social problem that is caused by poverty and drug use, but still needs to be handled strongly	Republican	4.39	1.71	1.59	1.02
Crime	Believes crime is best prevented through proactive programs such as after-school programs for youth and job training for adults	Democratic	1.96	1.34	2.29	0.85

Table I (Continued)
MEANS AND STANDARD DEVIATIONS OF PERCEIVED PARTY IDENTIFICATION AND VALUE RELEVANCE FOR EACH STATEMENT

Topic	Statement	Intended Party ID	Perceived Party ID		Value Relevance	
			M	*SD*	*M*	*SD*
Defense spending	Believes we should have no limits on defense spending and spend whatever it costs to protect the nation	Republican	5.71	1.50	1.82	0.97
Defense spending	Supports diverting 5% of the military budget to fund domestic programs like education and improving the infrastructure	Democratic	1.98	1.38	2.29	0.91
Education	**Supports No Child Left Behind and strongly favors school vouchers because they provide more parental choice and provide competition that ultimately leads to an improvement in overall school quality**	**Republican**	**4.51**	**1.85**	**1.59**	**1.00**
Education	**Supports early childhood programs such as Head Start and opposes to school vouchers that take money away from public schools and lead to less accountability**	**Democratic**	**2.44**	**1.88**	**1.98**	**1.00**
Energy	Is a major proponent of expanding domestic oil production, especially in wilderness areas that hold great potential for development	Republican	5.71	1.49	1.49	1.12
Energy	Supports efforts that would encourage the use of alternative energy sources and reduce the nation's dependence on foreign oil supplies	Democratic	1.85	1.33	2.37	0.95
Environment	Is a strong proponent of alternate fuels and favors subsidies for ethanol but is opposed to the Kyoto Protocol or any other attempts to legislate an end to global warming	Republican	4.27	1.86	1.53	0.98

Table I (Continued)
MEANS AND STANDARD DEVIATIONS OF PERCEIVED PARTY IDENTIFICATION AND VALUE RELEVANCE FOR EACH STATEMENT

Topic	Statement	Intended Party ID	Perceived Party ID		Value Relevance	
			M	*SD*	*M*	*SD*
Environment	Supports environmental legislation and, believes that the Environmental Protection Agency should be strengthened and do more to enforce its regulations to minimize industrial pollution	Democratic	1.75	1.43	2.38	0.89
Felons voting	**Opposes any legislation allowing convicted felons to vote once release from prison**	**Republican**	**5.59**	**1.61**	**1.65**	**1.09**
Felons voting	**Supports legislation that would allow former convicted felons released from prison to vote in federal elections**	**Democratic**	**2.25**	**1.62**	**1.81**	**1.03**
Gun control	Opposes all restrictions on the constitutional right of citizens to bear arms, including any sort of federal licensure or universal background checks	Republican	5.33	1.92	1.63	1.18
Gun control	Supports banning the sale of any type of gun that is designed primarily to kill people, including handguns, machine guns, and all types of assault weapons	Democratic	1.90	1.60	2.27	0.84
Health care	Supports repealing the Affordable Care Act and replacing it with a system that uses tax credits and subsidies to very low-income people to help them buy policies from private insurance companies	Republican	5.53	1.73	1.86	0.91
Health care	Supports providing universal health insurance coverage via a single-payer national health care system	Democratic	1.65	1.34	2.33	0.98

Table I (Continued)
MEANS AND STANDARD DEVIATIONS OF PERCEIVED PARTY IDENTIFICATION AND VALUE RELEVANCE FOR EACH STATEMENT

Topic	Statement	Intended Party ID	Perceived Party ID		Value Relevance	
			M	*SD*	*M*	*SD*
Immigration	**Supports establishing strict quotas limiting immigration to fewer than 100,000 people per year who would have to have immediate family in the U.S. and who would not be eligible for welfare benefits**	**Republican**	**5.73**	**1.55**	**1.69**	**1.06**
Immigration	**Supports expanding legal immigration to about 1.2 million people per year, and would eliminate quotas that limit which part of the world immigrants can come from**	**Democratic**	**2.08**	**1.51**	**1.77**	**1.10**
Iran	**Opposes the Iran nuclear deal because it dangerously enables a longtime adversary and vows to retain all options in dealing with Iran**	**Republican**	**5.43**	**1.59**	**1.57**	**1.04**
Iran	**Supports the Iran nuclear deal which aims to curtail Iran's nuclear capability in exchange for lifting debilitating economic sanctions**	**Democratic**	**3.19**	**1.99**	**1.40**	**1.19**
Labor	Supports right-to-work laws which give workers the option to stop supporting unions while still enjoying the benefits of representation	Republican	4.69	2.00	1.37	1.01
Labor	Supports raising the federal minimum wage to $15/hour to give the underemployed a fighting chance to achieve economic success	Democratic	1.63	1.30	2.33	0.90
LGBT issues	**Believes the government should be in the business of promoting family values and that marriage should be defined strictly as the union of a man and a woman**	**Republican**	**5.86**	**1.53**	**1.86**	**1.08**

Table I (Continued)
MEANS AND STANDARD DEVIATIONS OF PERCEIVED PARTY IDENTIFICATION AND VALUE RELEVANCE FOR EACH STATEMENT

Topic	Statement	Intended Party ID	Perceived Party ID		Value Relevance	
			M	*SD*	*M*	*SD*
LGBT issues	**Supports a federal non-discrimination policy for LGBT community and making it illegal for businesses to discriminate against anyone because of their sexual orientation or gender identity**	**Democratic**	**1.71**	**1.39**	**2.25**	**1.05**
Military intervention	**Believes that the U.S. has become the chief protector of freedom and peace throughout the world, and that this is best accomplished by making sure that those who would use violence to further their aims are aware of its consequences**	**Republican**	**5.49**	**1.50**	**1.63**	**1.01**
Military intervention	**Views the U.S. role in the world as the chief negotiator and feels that the U.S. is most effective if it negotiates with its enemies and avoids military conflict at all cost**	**Democratic**	**2.73**	**1.82**	**1.85**	**0.98**
Net neutrality	Supports overturning net neutrality rules because net neutrality created burdensome and over-reaching regulations to govern the internet which ultimate cost consumers more	Republican	5.14	1.55	1.41	1.12
Net neutrality	Opposes overturning net neutrality rules and thinks that net neutrality protects consumers by keeping internet providers from charging higher fees for specific online content	Democratic	1.96	1.56	2.50	0.92
Police body cameras	Believes that police body cameras invade the privacy of citizens, expose victims and witness of crimes, and damage public-police relationships	Republican	4.22	1.84	1.55	1.02

Table I (Continued)
MEANS AND STANDARD DEVIATIONS OF PERCEIVED PARTY IDENTIFICATION AND VALUE RELEVANCE FOR EACH STATEMENT

Topic	Statement	Intended Party ID	Perceived Party ID		Value Relevance	
			M	*SD*	*M*	*SD*
Police body cameras	Believes that all police should wear body cameras to increase public safety and provide accountability for police officers	Democratic	2.35	1.34	2.19	0.97
Prison system	Supports private prisons and believes they can be operated at much lower costs and would ultimately save the taxpayers a lot of money.	Republican	5.08	1.80	1.41	0.98
Prison system	Opposes prison privatization and believes we should move away from contracting out this core responsibility of the federal government because it contributes to over-incarceration	Democratic	2.27	1.74	2.10	1.11
Recreational marijuana	Thinks the marijuana should only be used for medical purposes because of the potentially harmful effects on teens who are at risk for increased use when marijuana is legalized	Republican	5.10	1.52	1.94	0.99
Recreational marijuana	Thinks that recreational marijuana use should be legal because it can help to boost the economy and reduce the racial disparity of marijuana related arrests in the black community	Democratic	1.79	1.27	2.46	0.78
Sanctuary cities	**Believes sanctuary cities harbor criminals and create dangerous environments for U.S. citizens and prevent local, state, and federal authorities from doing their jobs**	**Republican**	**5.86**	**1.62**	**2.08**	**1.02**

Table I (Continued)
MEANS AND STANDARD DEVIATIONS OF PERCEIVED PARTY IDENTIFICATION AND VALUE RELEVANCE FOR EACH STATEMENT

Topic	Statement	Intended Party ID	Perceived Party ID		Value Relevance	
			M	*SD*	*M*	*SD*
Sanctuary cities	**Believes sanctuary cities are needed to protect undocumented immigrants, especially those brought to the U.S. as children, from over-reaching and unjust federal immigration laws**	**Democratic**	**1.65**	**1.17**	**2.00**	**0.97**
Social security	Supports privatization of social security because retirees will see higher returns on their investment and privatization will give individuals control over their retirement decisions	Republican	4.98	1.63	1.37	0.99
Social security	Opposes privatization of social security because it would undermine guaranteed retirement income by putting peoples' retirement money at the whim of the stock market	Democratic	2.29	1.64	1.83	1.12
Syrian refugees	**Opposes letting any and all Syrian refugees into the country and supports proposal to block federal funding for resettling Syrian refugees until terrorist risk can be assessed**	**Republican**	**5.96**	**1.55**	**1.84**	**1.21**
Syrian refugees	**Supports allowing Syrian refugees into the country and thinks that the U.S. should resettle a minimum of 200,000 refugees by the end of 2016, including 100,000 Syrian refugees**	**Democratic**	**1.83**	**1.34**	**1.92**	**1.10**
Taxes	Wants to make the Bush-era tax cuts permanent and calls for the estate tax, capital gains tax, and other taxes on the wealthy to be eliminated	Republican	5.35	1.88	1.43	1.06

Table I (Continued)
MEANS AND STANDARD DEVIATIONS OF PERCEIVED PARTY IDENTIFICATION AND VALUE RELEVANCE FOR EACH STATEMENT

Topic	Statement	Intended Party ID	Perceived Party ID		Value Relevance	
			M	*SD*	*M*	*SD*
Taxes	Supports repealing the Bush-era tax cuts taxing the wealthiest Americans at higher rates	Democratic	3.42	2.58	2.25	0.97
Teacher tenure	**Thinks that teacher tenure creates complacency and makes it difficult to remove under-performing teachers because of legal red tape**	**Republican**	**5.20**	**1.65**	**1.69**	**1.02**
Teacher tenure	**Thinks teachers should be given the opportunity for tenure to protect them from being fired for personal, political, or other non-work related reasons**	**Democratic**	**3.29**	**1.67**	**1.37**	**1.10**
Unemployment	**Believes that the government should provide a safe environment in which businesses can succeed and flourish but does not believe that it is the federal government's responsibility to provide jobs for everyone in the country**	**Republican**	**5.65**	**1.63**	**1.94**	**1.11**
Unemployment	**Supports increasing job training programs and expanded educational opportunities for unemployed workers and would extend unemployment benefits indefinitely until the economy recovers more fully**	**Democratic**	**1.87**	**1.28**	**2.13**	**0.79**
Welfare	**Urges moving welfare services to private control paid for by tax-deductible contributions**	**Republican**	**5.24**	**1.57**	**1.49**	**0.98**

Table I (Continued)
MEANS AND STANDARD DEVIATIONS OF PERCEIVED PARTY IDENTIFICATION AND VALUE RELEVANCE FOR EACH STATEMENT

Topic	Statement	Intended Party ID	Perceived Party ID		Value Relevance	
			M	*SD*	*M*	*SD*
Welfare	**Supports increasing welfare benefit payments and re-establishing strong federal oversight of welfare to ensure that state cuts are not too deep**	**Democratic**	**2.15**	**1.68**	**1.85**	**1.00**

Note. Scores greater than 4 on perceived party identification indicate a Republican rating and scores less than 4 indicate a Democratic rating. Higher scores on value relevance indicate greater value relevance for liberals rating Democratic statements and conservatives rating Republican statements. For the bolded topics, there were no significant differences in value relevance ratings between the Republican and Democratic statements (*p*s > .05). The bolded topics were used in Studies 1 and 2.

2.3 Discussion

The pilot study allowed me to identify several political topics that were similarly value-relevant for conservatives and liberals. By only retaining the issues where there were no differences in value relevance ratings across the political spectrum, I was able to keep a more simplified methodology in Studies 1 and 2 and be more confident that any differences in information processing for liberals and conservatives in my main studies would not be due to differences in how relevant each issue was to liberal or conservative values. Again, only the 15 topics where there were no differences in value-relevance were used for Studies 1 and 2.

3. STUDY 1

Study 1 tested the value consistency component of the VEM using a mouse-tracking information processing paradigm. Participants were asked to consider two political candidates' issue platforms who were running for congressional seats in the 2020 election and the main dependent variables of interest were the overall time spent on the information for each candidate, the overall number informational boxes uncovered for each candidate, and the overall number of topics for which they requested more information for each candidate. The platforms consisted of issues stances that were either mostly consistent with a typical Democratic candidate or mostly consistent with a typical Republican candidate. Based on the MSC model, *the conservative advantage hypothesis* suggests that conservatives should have a greater need to exhibit closure than liberals and should, therefore, process less candidate information overall compared to liberals. Alternatively, based on the VEM model, *the equal opportunity hypothesis* suggests that reading about a candidate with stances that are value-inconsistent should be threatening, and people should be motivated to display closure and cease information processing under certain conditions. Specifically, liberals should consume more information about the candidate with mostly liberal stances versus the candidate with mostly conservative stances before making their evaluations. Also, conservatives should consume more information about the candidate with mostly conservative stances versus the candidate with mostly liberal stances before making their evaluations. Finally, *the threat hypothesis* suggests that negative emotion (e.g., threat and/or anxiety) should mediate the relationship between the interaction of political orientation and candidate party platform on information processing such that conservatives and liberals will experience more threat from a candidate with mostly inconsistent stances, and therefore, process less information compared to a candidate with mostly consistent stances.

3.1 Method

3.1.1 Participants

Based on my experimental design and using GPower software, I calculated that I would need approximately 400 participants to achieve 80% power to detect an effect that explains at least 2% of the variance in candidate information processing. Four hundred nine participants were recruited from Mturk and compensated $1.25 for their participation. I again over recruited conservatives because Mturk tends to skew liberal (Berinsky, Huber, & Lenz, 2012). Specifically, I recruited participants through Mturk until the desired number of liberal-leaning participants was achieved (i.e., approximately 200). Then I recruited conservatives from a known population of conservative Mturk workers (Skitka Lab Conservative Mturker List) where Mturk workers from this list were contacted via email to inform them that they were eligible to participate in my study. Importantly, they did not know why they were eligible to participant, just that they qualified for a study on Mturk. I then recruited from this list until I reached an approximately equal number of liberals and conservatives in my sample. I removed 31 participants for not having complete data on my variables of interest (i.e., did not have mouse tracking responses, candidate evaluation responses, or political orientation). Seven participants were removed for spending less than 200 ms, total, on information about both candidates, and 13 participants were removed for spending too much time on the candidate information (i.e., greater than three standard deviations above the mean).[2] I was left with a final sample of 358 participants (171 liberals, 32 moderates, and 155 conservatives; M_{age} = 36.21, SD_{age} = 11.26;

[2] These cutoffs are common for reaction time data. However, if I changed the threshold to 4 *SD*s above the mean, the pattern of results stays the same.

55% male, 45% female; 80% White, 8% Black, 4% Asian, 4% Latino/a, 2% biracial, 1% Native American, 1% other).

3.1.2 Procedure

Participants were informed that they were taking part in a study designed to assess likely support for potential candidates in an upcoming primary election. Participants were presented with an informational grid for two candidates, presented one at a time. The candidates were labeled as "Candidate A" and "Candidate B" (without political affiliations) at the top of the page and several political issue topic boxes were listed below the candidate's label. Participants were told that they could click on any of the boxes to learn the candidate's stance on the issue and that they could click on as many boxes as they would like as often as they would like before making their evaluations. One of the candidates had mostly Democratic stances (Democratic stances on 11 issues, Republican stances on 4 issues) on 15 issues (e.g., federal health insurance for all citizens) and the other candidate had mostly Republican stances (Republican stances on 11 issues, Democratic stances on 4 issues) on the 15 issues (e.g., less government regulation of business). Finally, participants were asked to indicate their emotional reactions to the candidates, their level of warmth or coldness toward the candidates, how much they supported the candidates, and their likelihood of voting for the candidates. Participants then answered several demographic questions (See Appendix B for details).

3.1.3 Candidate Platform Manipulation

The candidate platform manipulation was a 2 level within-subjects manipulation of the stances of two political candidates (Mostly Democrat vs. Mostly Republican). Specifically, participants had the opportunity to read the policy platforms of two candidates, one with mostly Democratic policy stances (11 Democratic, 4 Republican) and one with mostly

Republican policy stances (11 Republican, 4 Democratic). The platform of each candidate was presented one at a time on its own screen in random order. The issues were also presented in a random assortment for each candidate platform. Importantly, only the generic labels of the candidates were used as identifiers; they were not labeled as Democrat or Republican.

3.1.4 Measures

3.1.4.1 Political Orientation

General, social, and economic political orientation was assessed using two items each asking participants, "What is your political orientation [in general/when it comes to social issues/when it comes to economic issues]?" Participants responded by selecting whether they were conservative, liberal, or neither/uncertain. Participants who indicated that they were conservative or liberal branched to a question that assessed their degree of conservatism/liberalism by asking, "To what extent are you conservative [liberal]?" with response options ranging from 1-*slightly* to 3-*very*. Those who responded that they were neither/uncertain branched to an item that asked whether they leaned more toward conservative or liberal, or were still neutral/uncertain. Those who indicated leaning toward conservative or liberal were coded as 1 or -1, respectively, and those who again marked neither or uncertain were coded as 0. These items were combined to form a single liberal/conservative bipolar measure ranging from -3-*very liberal* to +3-*very conservative* for general, social, and economic political orientation.

3.1.4.2 Political Party Identification

Political party identification was assessed using two items asking participants, "What is your political party identification?" Participants responded by selecting whether they were Republican, Democrat, Independent, or neither/uncertain. Participants who indicated that

they were Republican or Democrat branched to a question that assessed their degree of identification by asking, “To what extent are you Republican [Democrat]?” with response options ranging from 1-*slightly* to 3-*very*. Those who responded that they were neither/uncertain branched to an item that asks whether they leaned more toward Republican or Democrat, or were still neutral/uncertain. Those who indicated leaning toward Republican or Democrat were coded as 1 or -1, respectively, and those who again marked neither or uncertain were coded as 0. These items were combined to form a single bipolar measure of party identification ranging from -3-*very much Democrat* to +3-*very much Republican*.

3.1.4.3 **Situational Need for Cognitive Closure**

The main dependent variable of interest was processing of candidate information, operationalized as overall time spent on the information for each candidate, the overall number informational boxes uncovered for each candidate, and the overall number of topics for which they requested more information for each candidate.

3.1.4.3.1 **Time Spent on Information**

Using the MouseLabWeb software (Willemsen & Johnson, 2011), I tracked how much time each participant spent on the information for each candidate by keeping track of where the mouse pointer was at all times when participants were evaluating the information. Specifically, I aggregated the time spent on the boxes of information for the mostly Republican candidate (i.e., time spent reading the information after clicking on any of the boxes) and time spent on the boxes of information for the mostly Democratic candidate. I only analyzed time spent on the information after any issue box was clicked (i.e., opened), including boxes that were clicked multiple times.

3.1.4.3.2 **Number of Unique Boxes Uncovered**

I also kept a count of how many unique topic boxes participants clicked on for each candidate. This measure gives a sense of how much different information people considered for each candidate.

3.1.4.3.3 Number of Times Requested Additional Information

For each issue topic box, I provided a checkbox for participants to click on if they wanted to receive more information about the candidate's stance and thoughts on the issue. Participants were told that they would receive this additional information at the end of the survey, but, in reality, did not receive any extra information. This measures the extent to which people were acutely engaged in processing the information presented in each box.

Taken together, these information processing measures approximated situational need for closure because people motivated to achieve closure regarding one of the candidates should have been less willing to look at new information.

3.1.4.4 Trait Need for Cognitive Closure

Individual differences in need for cognitive closure were measured with the 15-item version of the Need for Closure Scale (Roets & Van Hiel, 2011). For example, "I don't like situations that are uncertain" was measured on a scale ranging from 1-*strongly disagree* to 6-*strongly agree* ($\alpha = .93$). Although the need for cognitive closure scale has been used to measure trait need for closure, I included it here to be able to compare scores on this measure to scores on my behavioral measure of need for closure (i.e., information processing).

3.1.4.5 Emotions Associated with the Candidate

Emotions experienced when thinking about the candidates were assessed using the brief version of the Positive and Negative Affect Schedule (PANAS, Watson, Clark, & Tellegen, 1988). The brief version of the PANAS asked participants to indicate "to what extent

do you feel the following emotional reactions right now, that is, at the present moment, when thinking about [candidate]" for several different emotions (e.g., interest, distress, fear, nervousness, anger, hostility, contempt) on a scale ranging from 1-*very slightly or not at all* to 5-*extremely*. The brief version of the PANAS factored into two factors: positive affect (e.g., happy, enthusiastic; $\alpha = .97$) and negative affect (e.g., afraid, hostile; $\alpha = .96$).

3.1.4.6 **Candidate Support**

Support for each candidate was assessed with three items: explicit support for the candidate, feeling thermometer ratings, and reported likelihood of voting for each candidate.

3.1.4.6.1 **Support for Candidate**

Support for the candidate was measured with one item asking participants, "How much do you support or oppose [candidate] as a future U.S. legislator representing your district or state in the House of Representatives or Senate?" with response options ranging from -3-*extremely oppose* to 3-*extremely support*.

3.1.4.6.2 **Feeling Thermometer**

Participants also rated the candidate using a feeling thermometer where they rated how warm or cold they felt toward the candidate on a scale from 0-*coldest* to 100-*warmest*.

3.1.4.6.3 **Likelihood of Voting for Candidate**

Willingness to vote for each candidate was measured with one item asking participants, "What is the likelihood that you would vote for [candidate]?" with response options ranging from -3-*extremely unlikely* to +3-*extremely likely*.

The three support variables reliably measured candidate support ($\alpha = .95$). I therefore standardized each support rating and averaged the three scores together to get a composite measure of candidate support.

3.2 Results

Means, standard deviations, and zero-order correlations between all dependent variables are presented in Table II.

Table II

MEANS, STANDARD DEVIATIONS, AND CORRELATIONS FOR ALL RELEVANT STUDY 1 MEASURES

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Political Orientation	-0.12	2.10									
2. Need for Closure	3.96	1.04	.17**								
3. Time Spent on Info (s)	33.73	27.60	-.15**	-.04							
4. Unique Boxes Opened (#)	7.98	4.33	-.17**	-.06	.58**						
5. Information Requests (#)	1.11	1.85	.12**	.02	-.10**	.01					
6. Candidate Support	4.00	1.99	.14**	.12**	-.08*	-.03	.19**				
7. Candidate Warmness	6.00	2.96	.13**	.10**	-.08*	-.05	.21**	.93**			
8. Voting Likelihood	3.88	2.09	.15**	.11**	-.11**	-.05	.19**	.94**	.90**		
9. Negative Affect	1.82	0.99	.09*	.17**	-.33**	-.28**	.24**	-.14**	-.13**	-.10**	
10. Positive Affect	2.22	1.16	.22**	.10**	-.25**	-.21**	.30**	.68**	.69**	.69**	.22**

Note. * $p < .05$. ** $p < .01$.

3.2.1 Conservative Advantage and Equal Opportunity Hypotheses

As a reminder, the *conservative advantage hypothesis* suggests that conservatives, more than liberals, should process less candidate information overall because they have a higher need for cognitive closure. The *equal opportunity hypothesis* suggests that liberals should process more information about the candidate with mostly Democratic stances versus the candidate with mostly Republican stances before making their evaluations, and conservatives should process more information about the candidate with mostly Republican stances compared to the candidate with mostly Democratic stances. If the *conservative advantage hypothesis* is true, I would expect a main effect of political orientation on information processing of the candidates. Specifically, conservatives should process less information compared to liberals. If the *equal opportunity hypothesis* is true, I would expect a two-way interaction between candidate and participant political orientation on information processing regarding the hypothetical candidates. Liberals (1 *SD* below the midpoint) should process more information about the Democratic candidate compared to the Republican candidate. Alternatively, conservatives (1 *SD* above the midpoint) should process more information about the Republican candidate compared to the Democratic candidate. The results of Study 1 mostly supported the *equal opportunity hypothesis* and partially supported the *conservative advantage hypothesis*.

More specifically, I conducted a mixed-effects linear regression predicting situational need for closure (i.e., time spent on candidate information, number of unique boxes uncovered, and number of requests for further information, separately) from participant political orientation, candidate political orientation (effect coded, -0.5 = mostly Democratic candidate, 0.5 = mostly Republican candidate), and their interaction with a random intercept for each participant. Analyzing the data with a mixed model is essentially the same as conducting a mixed ANCOVA

but the mixed model approach offers more flexibility for adding complexity to the model and conducting follow-up tests.

3.2.1.1 Time Spent on Information

There was no effect of candidate political orientation, $B = 1.04$, $SE = 1.16$, $p = .37$, $R^2 = .002$, meaning participants spent equal amounts of time on the Republican and Democratic candidate, overall. There was an effect of participant political orientation on time spent on candidate information, $B = -2.00$, $SE = .63$, $p = .002$, $R^2 = .02$, such that the more conservative the participant was the less time they spent on candidate information, overall. The effect of participant political orientation was qualified, however, by an interaction with candidate political orientation, $B = 2.30$, $SE = .55$, $p < .001$, $R^2 = .04$. Specifically, liberals (1 *SD* below the midpoint of political orientation) spent more time on the mostly Democratic compared to the mostly Republican candidate, $B = -3.79$, $SE = 1.60$, $p = .018$. Conservatives (1 *SD* above the midpoint of political orientation), however, spent more time on the mostly Republican compared to the mostly Democratic candidate, $B = 5.87$, $SE = 1.69$, $p = .001$ (see Figure 2). This pattern of results provides some support for the *conservative advantage hypothesis* because conservatives spent less time than liberals on the candidates, but mostly supports the *equal opportunity hypothesis* because both liberals and conservatives spent more time on the candidate with stances that fit with their ideological worldviews than the candidate with stances that conflicted with their worldviews.[3]

[3] Controlling for education in any of the analyses for any dependent variable does not change any patterns of results or levels of statistical significance.

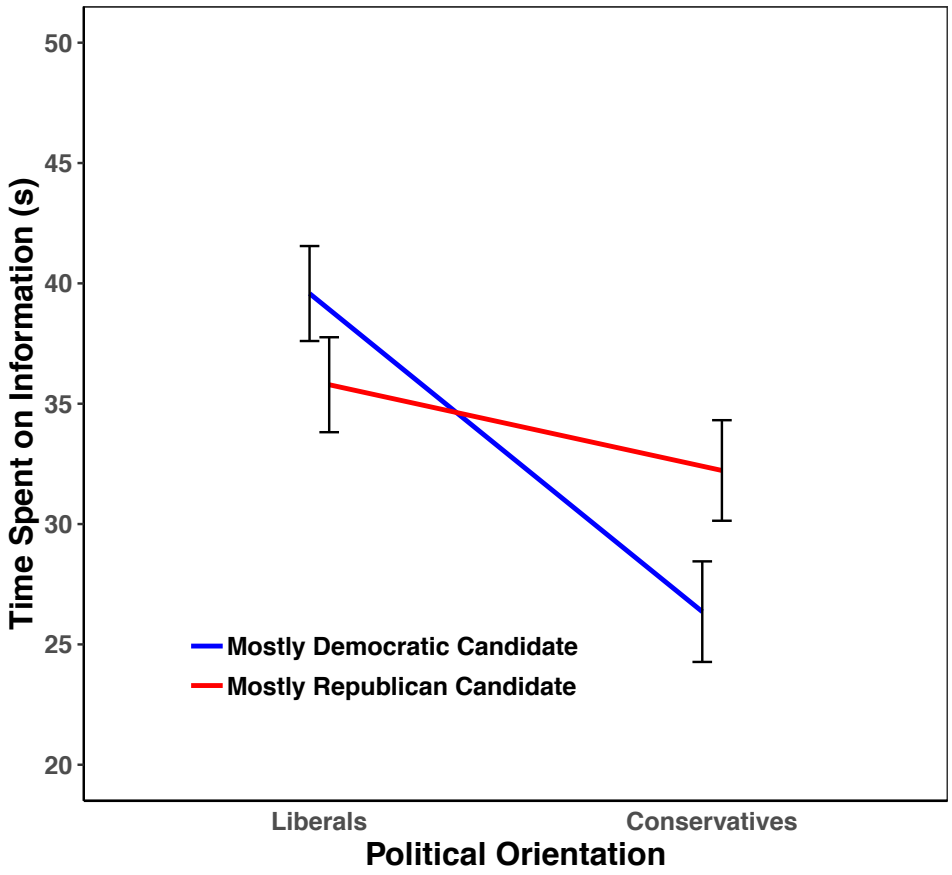

Figure 2. Time spent on information (in seconds) as a function of candidate political orientation and participant political orientation. Liberals = 1 *SD* below the midpoint of the scale and conservatives = 1 *SD* above the midpoint of the scale. Error bars represent standard error of the mean.

3.2.1.2 **Number of Unique Information Boxes Uncovered**

There was no effect of candidate political orientation, B = -.25, SE = .15, p = .086, R^2 = .01, meaning participants clicked on an equal number of unique boxes for each candidate, overall. There was an effect of participant political orientation on number of unique boxes uncovered, B = -.35, SE = .10, p = .001, R^2 = .03, such that the more conservative someone was, the fewer unique boxes they uncovered, overall. The effect of participant political orientation

was qualified, however, by an interaction with candidate political orientation, $B = .31$, $SE = .07$, $p < .001$, $R^2 = .05$. Specifically, liberals uncovered more unique boxes of information for the mostly Democratic compared to the mostly Republican candidate, $B = -.91$, $SE = .20$, $p < .001$. Conservatives, however, uncovered more unique boxes of information for the mostly Republican compared to the mostly Democratic candidate, $B = .41$, $SE = .21$, $p = .058$ (see Figure 3). This pattern of results again provides some support for the *conservative advantage hypothesis* because conservative participants looked at fewer unique boxes of information than did liberal participants, but mostly supports the *equal opportunity hypothesis* because liberal and conservative participants looked at wider range of information on the candidate with stances that fit with their ideological worldviews than the candidate with stances that conflicted with their worldviews.

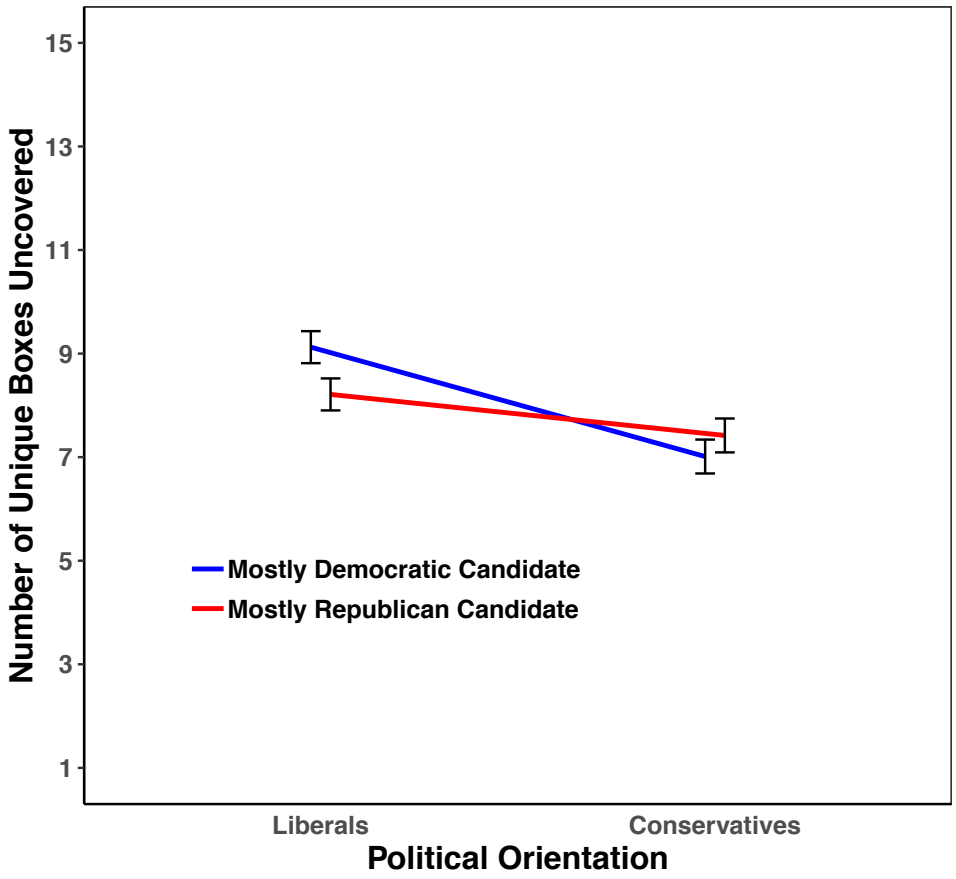

Figure 3. Number of unique boxes uncovered as a function of candidate political orientation and participant political orientation. Liberals = 1 *SD* below the midpoint of the scale and conservatives = 1 *SD* above the midpoint of the scale. Error bars represent standard error of the mean.

3.2.1.3 **Number of Requests for Further Information**

There was no effect of candidate political orientation, $B = .04$, $SE = .05$, $p = .51$, $R^2 = .001$, meaning participants requested an equal amount of further information for each candidate, overall. There was an effect of participant political orientation on further information requests, $B = .11$, $SE = .04$, $p = .014$, $R^2 = .02$, such that the more conservative someone was, the greater number of requests for more information, overall. The effect of participant political

orientation was qualified, however, by an interaction with candidate political orientation, B = .06, SE = .03, p = .014, R^2 = .02. Specifically, liberals requested a similar amount of additional information for the mostly Democratic and mostly Republican candidates, B = -.10, SE = .07, p = .19. Conservatives, however, requested more additional information for the mostly Republican compared to the mostly Democratic candidate, B = .17, SE = .08, p = .032. (see Figure 4). This pattern of results provides no support for the *conservative advantage hypothesis* because conservatives actually requested more information than did liberals and some support for the *equal opportunity hypothesis* because conservatives requested more information about the candidate with worldview-consistent stances than the candidate with worldview-consistent stances.

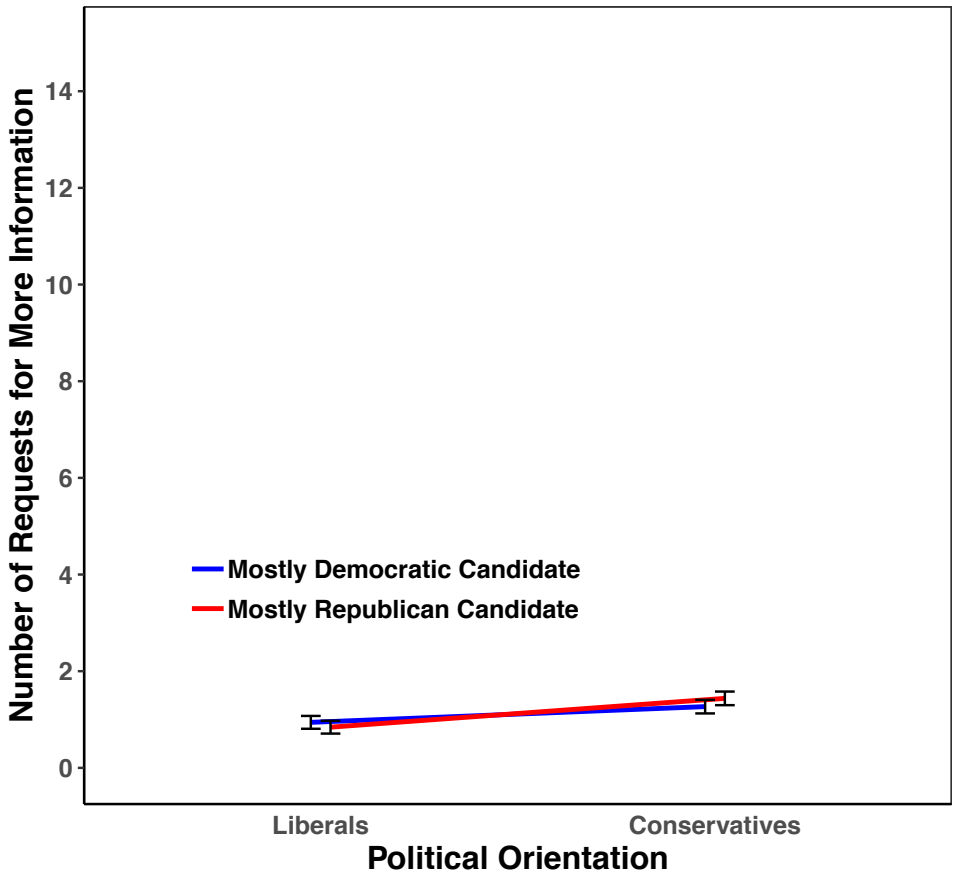

Figure 4. Number of requests for additional information as a function of candidate political orientation and participant political orientation. Liberals = 1 *SD* below the midpoint of the scale and conservatives = 1 *SD* above the midpoint of the scale. Error bars represent standard error of the mean.

3.2.2 **Threat Hypothesis**

If the *threat hypothesis* is true, the interactive effect of candidate and participant political orientation on candidate information processing should be mediated by negative affect toward the candidates. Specifically, candidate political orientation and participant political orientation should interact when predicting negative affect such that liberals should experience more negative affect toward the mostly Republican candidate and conservatives should

experience more negative affect toward the mostly Democratic candidate. The negative affect experienced by liberals reading about the Republican candidate and conservatives reading about the Democratic candidate should then negatively predict information processing such that the more negative affect liberals and conservatives experience, the less time they spend on that candidate's information.

Although the *threat hypothesis* focuses on the mediating role of negative emotion, it is possible that positive affect towards the candidates could also impact information processing. Specifically, participants who experience positive affect toward a candidate might spend more (or less) time on that candidate's information because they are attracted to that candidate. Because I measured both positive and negative affect for each candidate, I included positive affect as a parallel mediator with negative affect. By including both negative and positive affect in the moderated mediation model I was able to test the relative explanatory power of negative versus positive affect in explaining candidate information processing.

I used the lavaan package (Rosseel, 2012) in R to estimate a moderated mediation model where the effect of candidate political orientation on time spent on information through negative affect and positive affect, separately, was moderated by participant political orientation. Both negative and positive affect mediated the interactive effect of candidate political orientation and participant political orientation on time spent on candidate information. Specifically, liberals experienced more negative affect toward the mostly Republican candidate compared to the mostly Democratic candidate, which in turn predicted less time spent on that candidate's information (indirect effect: B = -3.45, SE = .53, $p < .001$). Conservatives, however, experienced less negative affect toward the mostly Republican compared to mostly Democratic candidate, which in turn, predicted more time spent on that candidate's information (indirect effect: B =

2.80, *SE* = .53, $p < .001$). The opposite pattern of results was observed for the mediating role of positive affect (albeit weaker than the results observed with negative affect). Specifically, liberals experienced less positive affect toward the mostly Republican candidate compared to the mostly Democratic candidate, that in turn predicted more time spent on that candidate's information (indirect effect: *B* = 2.12, *SE* = .55, $p < .001$). Conservatives experienced more positive affect toward the mostly Republican compared to mostly Democratic candidate that in turn predicted less time spent on that candidate's information (indirect effect: *B* = -3.23, *SE* = .73, $p < .001$) (see Figure 5 for moderated mediation model). Therefore, both negative and positive affect mediated the interactive effect of candidate and participant political orientation on information processing, but the pattern of results associated with negative affect supported the *threat hypothesis*. The more negative affect experienced toward the candidate, the less information participants processed about that candidate. Interestingly, positive affect towards a candidate also negatively predicted information processing suggesting that people may be less likely to process information about political candidates when their affective experience is heightened, regardless of valence.

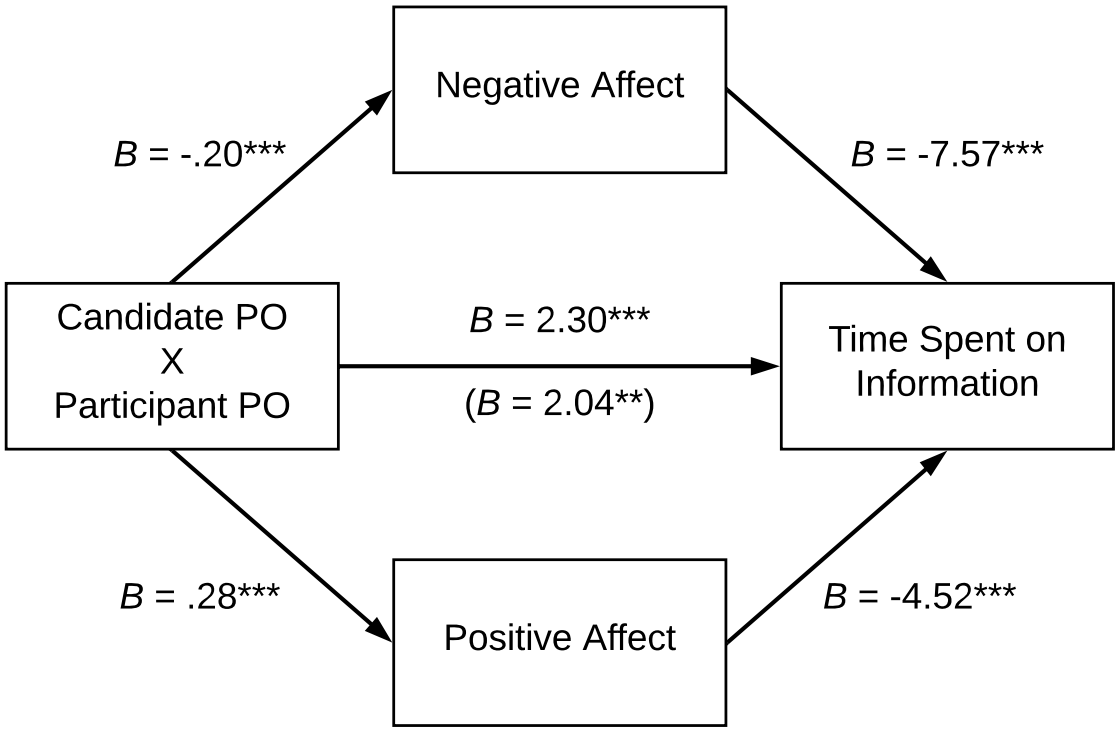

Figure 5. Moderated mediation model showing the interactive effect of candidate political orientation and participant political orientation on time spent on information through negative and positive affect. The total effect of the interaction on time spent on information is above the path; the direct effect of the interaction on time spent on information is below the path in parentheses. * $p < .05$. ** $p < .01$. *** $p < .001$.

3.2.3 **Support**

I also conducted a mixed-effects linear regression predicting the composite candidate support variable from participant political orientation, candidate political orientation (effect coded, -0.5 = mostly Democratic candidate, 0.5 = mostly Republican candidate), and their interaction with a random intercept for each participant. There was no effect of candidate political orientation, $B = .06$, $SE = .06$, $p = .36$, $R^2 = .001$, meaning participants, overall, did not

differ in their support for the mostly Democratic and mostly Republican candidates. There was an effect of participant political orientation on candidate support, $B = .06$, $SE = .02$, $p < .001$, $R^2 = .02$, such that the more conservative the participant was, the more they supported the candidates, overall. The effect of participant political orientation was qualified, however, by an interaction with candidate political orientation, $B = .46$, $SE = .03$, $p < .001$, $R^2 = .24$. Specifically, liberals (1 *SD* below the midpoint of political orientation) indicated greater support for the mostly Democratic compared to the mostly Republican candidate, $B = -.91$, $SE = .09$, $p < .001$. Conservatives (1 *SD* above the midpoint of political orientation), however, indicated greater support for the mostly Republican compared to the mostly Democratic candidate, $B = 1.02$, $SE = .09$, $p < .001$ (see Figure 6).

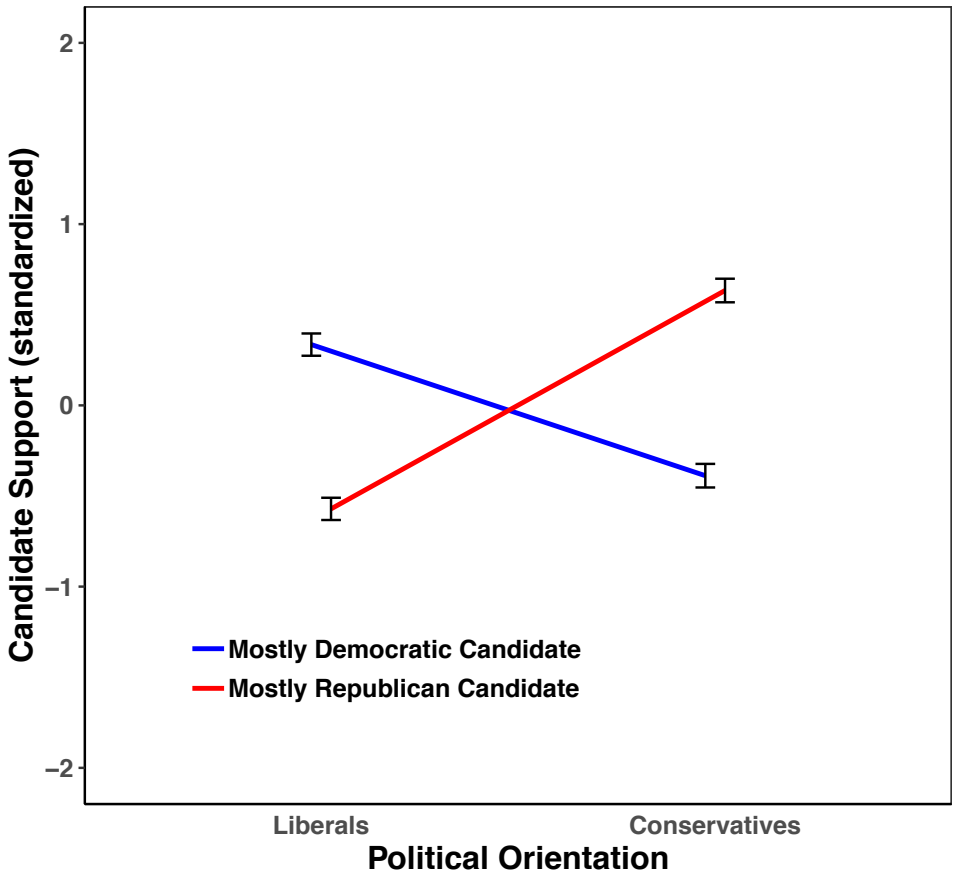

Figure 6. Support as a function of candidate political orientation and participant political orientation. Liberals = 1 *SD* below the midpoint of the scale and conservatives = 1 *SD* above the midpoint of the scale. Error bars represent standard error of the mean.

3.2.4 **Information Processing and Support**

Although my hypotheses were concerned with information processing as the primary dependent variable, I also tested whether the extent of information processing alos predicted support for the two candidates. I independently tested whether each measure of information processing predicted candidate support using a mixed-effects linear regression with a random intercept for each subject. Information processing was not a reliable predictor of candidate support. Specifically, the more time one spent on candidate information, the *less* they

supported the candidate, overall, B = -.003, SE = .001, p = .012, R^2 = .01. The number of unique boxes uncovered did *not* predict candidate support at all, B = -.01, SE = .01, p = .22, R^2 = .002. Finally, the more requests for further information one made, the *more* they supported the candidate, overall, B = .11, SE = .02, $p < .001$, R^2 = .04. Therefore, people were motivated to process information in a way that fit with their political worldviews, but extent of information processing did not translate into explicit support for the candidate.

3.3 Discussion

The patterns of results of Study 1 provided the most support for the *equal opportunity* and *threat hypotheses* and some support for the *conservative advantage hypothesis*. Liberals processed and responded to information about political candidates more than conservatives, a result somewhat consistent with the conservatism as motivated social cognition perspective (e.g., Jost et al., 2003). The main effect for conservatism was not consistent across all three information processing variables, however. Importantly, conservatives were actually *more* likely than liberals to request further information about the candidates, a result inconsistent with the idea that conservatives have a higher dispositional need for closure than liberals. As predicted by the *equal opportunity hypothesis*, however, liberals and conservatives processed more information (i.e., spent more time on and looked at more unique information) about the political candidate that had issue stances that were consistent, rather than inconsistent, with their worldviews. This motivated information processing effect was partly explained by the fact that both liberals and conservatives experienced greater negative emotion in response to political candidates with party inconsistent versus consistent candidate positions, and this negative emotion predicted decreased information processing. Therefore, being exposed to information about a candidate with stances that are dissimilar to our own increases negative emotional

experiences related to that candidate, which motivates us to spend less time on that negative emotion-inducing information. This pattern of results fits with the VEM model of information processing, whereby people are motivated to seek closure (i.e., cease information processing) for information that is threatening to their important values and beliefs.

Interestingly, the motivated information processing strategy people used did not necessarily impact whether they eventually choose to support a specific candidate. As seen in Figure 6, the pattern of results for candidate support are what one might expect given the motivated information processing strategies employed by liberals and conservatives. Specifically, the fact that liberals supported the mostly Democratic candidate over the mostly Republican candidate and vice versa for conservatives could be due to the demonstrated discrepancy in information processing related to the two candidates. Information processing, however, was not a reliable predictor of candidate support. Therefore, it could be the case that people are motivated to avoid information that conflicts with their cherished beliefs but are still motivated to support political candidates via other concerns like group-based political identity. Study 2 was designed to further tease apart the influence of values-based motivated reasoning from identity-based motivated reasoning.

4. STUDY 2

One alternative explanation for the results of Study 1 is that people are motivated to engage in information processing only to the extent that they can determine whether a certain candidate is a political ingroup or outgroup member. In other words, people may simply be looking for information about the candidates that signal they are a Republican or Democrat and make their evaluation once they have some evidence of their political identity. Political partisans often determine their support or opposition to a candidate based on whether the candidate shares the same party affiliation as them even when the candidate holds ideologically conflicting stances (e.g., Cohen, 2003; Skitka & Robideau, 1997). Therefore, instead of being motivated to cease information processing in response to worldview threat, people might be motivated to seek out identity confirming information.

If people are motivated to seek out identity relevant information, then they might display one of two potential information processing strategies. An undifferentiated approach to political identity information processing would suggest that people should expel equal amounts of information processing energy to confirm the identity of both ingroup and outgroup political candidates. In other words, people should look for information to confirm that a Republican is indeed Republican in their issue positions and that a Democrat is indeed Democratic in their positions. From this perspective, information processing for both ingroup and outgroup candidates should be similar. Alternatively, a differentiated approach to political identity information processing would suggest that people only care about confirming the identity of political ingroup members and care less about the actual positions of political outgroup members. If this is true, then people should expend information processing effort to find at least some evidence of political identity consistency for ingroup members and simply rely on the party label

for outgroup members and process less information about those candidates. Study 2 was designed to test these competing theoretical perspectives.

Study 2 was similar to Study 1 in that participants evaluated potential political candidates using the exact same information and policy stances as the candidates in Study 1. In Study 2, however, the candidates were labeled as being either a "Democrat" or "Republican" in a way that was mostly inconsistent with their actual policy stances. If the *worldview threat hypothesis* is true, liberals should process more information about the candidate with mostly Democratic stances (the "Republican") versus the candidate with mostly Republican stances (the "Democrat") before making their evaluations. Also, conservatives should process more information about the "Democrat" versus the "Republican" before making their evaluations. If the *undifferentiated group identity hypothesis* is true, liberals should process information about both candidates equally and conservatives should also process information about both candidates equally. If the *differentiated group identity hypothesis* is true, liberals should process more information about the candidate with mostly Republican stances (the "Democrat") versus the candidate with mostly Democratic stances (the "Republican") before making their evaluations. Also, conservatives should process more information about the "Republican" versus the "Democrat" before making their evaluations.

4.1 Method

4.1.1 Participants

Based on my experimental design and using GPower software, I calculated that I would need approximately 400 participants to achieve 80% power to detect an effect that explains at least 2% of the variance in time spent on candidate information. Six hundred sixty participants were recruited from Mturk and compensated $1.25 for their participation. I

attempted to recruit an equal number of liberals and conservatives using the same method described in Study 1. I removed 93 participants for not having complete data on my variables of interest (i.e., did not have mouse tracking responses, candidate evaluation responses, or political orientation). Eighty-two participants were removed for failing the manipulation check (i.e., incorrectly identifying the party label of the candidate). Six participants were removed for spending less than 200 ms, total, on information about both candidates, and 11 participants were removed for spending too much time on the candidate information (i.e., greater than three standard deviations above the mean).[4] I was left with a final sample of 468 participants (232 liberals, 45 moderates, and 191 conservatives; M_{age} = 38.37, SD_{age} = 12.91; 52% male, 47% female, 1% other; 78% White, 9% Black, 5% Latino/a, 4% Asian, 3% biracial, 1% Native American, <1% other).

4.1.2 Procedure

The procedure was the same as Study 1 except that the candidate with mostly Democratic stances was labeled as a "Republican" and the candidate with mostly Republican stances was labeled as a "Democrat" (see Appendix C for details).

4.1.3 Candidate Platform Manipulation

The candidate platform manipulation was the same as Study 1 except that the mostly Republican candidate was labeled as "Democrat" and the mostly Democratic candidate was labeled as "Republican."

4.1.4 Measures

4.1.4.1 Manipulation Check

[4] The patterns of results do not change if I keep those who failed the manipulation check in the sample. Similarly, adjusting the thresholds for exclusion for time spent on information does not significantly influence the patterns of results.

Participants were asked to identify the party label of each candidate with one item (i.e., "Candidate A is running for congress as a Republican, Democrat, or Independent?") with response options of 1-Republican, 2-Democrat, and 3-Independent.

4.1.4.2 Political Party Identification

Political party identification was assessed the same as in Study 1.

4.1.4.3 Political Orientation

General, social, and economic political orientation was assessed the same as in Study 1.

4.1.4.4 Situational Need for Cognitive Closure

Candidate information processing was assessed the same as in Study 1.

4.1.4.5 Trait Need for Cognitive Closure

Individual differences in need for cognitive closure was measured the same as in Study 1 ($\alpha = .91$).

4.1.4.6 Emotions Associated with the Candidate

Emotions experienced in response to the candidate was assessed the same as in Study 1 (positive emotions: $\alpha = .97$, negative emotions: $\alpha = .96$).

4.1.4.7 Candidate Support

Candidate support was assessed the same as in Study 1 ($\alpha = .96$).

4.2 Results

Means, standard deviations, and zero-order correlations between all dependent variables are presented in Table III.

Table III

MEANS, STANDARD DEVIATIONS, AND CORRELATIONS FOR ALL RELEVANT STUDY 2 MEASURES

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Political Orientation	-0.22	2.09									
2. Need for Closure	4.03	0.93	.17**								
3. Time Spent on Info (s)	42.22	33.09	.04	.04							
4. Unique Boxes Opened (#)	8.80	4.32	-.10**	-.06	.56**						
5. Information Requests (#)	1.22	1.98	.01	-.04	-.08*	-.01					
6. Candidate Support	3.81	1.87	.09**	.05	-.02	-.02	.13**				
7. Candidate Warmness	5.78	2.73	.11**	.06	-.02	-.03	.13**	.92**			
8. Voting Likelihood	3.64	1.94	.11**	.04	-.06	-.05	.15**	.93**	.92**		
9. Negative Affect	1.73	0.90	.04	.11**	-.27**	-.20**	.12**	-.29**	-.28**	-.25**	
10. Positive Affect	2.07	1.07	.12**	.05	-.13**	-.16**	.19**	.68**	.69**	.69**	.04

Note. * $p < .05$. ** $p < .01$.

4.2.1 **Worldview Threat and Group Identity Hypotheses**

As a reminder, the *worldview threat hypothesis* suggests that liberals should process more information about the candidate with mostly Democratic stances (the "Republican") versus the candidate with mostly Republican stances (the "Democrat") before making their evaluations, and conservatives should process more information about the "Democrat" compared to the "Republican." The *undifferentiated group identity hypothesis* suggests that liberals should process information about both candidates equally and conservatives should also process information about both candidates equally. The *differentiated group identity hypothesis* suggests that liberals should process more information about the "Democrat" versus the "Republican" before making their evaluations. Also, conservatives should process more information about the "Republican" versus the "Democrat" before making their evaluations.

If the *worldview threat hypothesis* is true, I would expect a two-way interaction between candidate and political orientation on information processing regarding the hypothetical candidates. Liberals should process more information about the "Republican" candidate compared to the "Democratic" candidate. Alternatively, conservatives should process more information about the "Democratic" candidate compared to the "Republican" candidate. If the *undifferentiated group identity hypothesis* is true, I would expect there to be no interaction between candidate and political orientation on information processing. Specifically, liberals should process information to a similar extent for both the "Democratic" and "Republican" candidates. Also, conservatives should process information to a similar extent for both the "Democratic" and "Republican" candidates. If the *differentiated group identity hypothesis* is true, however, I would still expect a two-way interaction between candidate and political

orientation on information processing. Specifically, liberals should process more information about the "Democratic" candidate compared to the "Republican" candidate, and conservatives should process more information about the "Republican" candidate compared to the "Democratic" candidate. The results of Study 2 were most consistent with the *undifferentiated group identity hypothesis* and partially consistent with the *worldview threat hypothesis*.

To test these hypotheses, I conducted a mixed-effects linear regression predicting situational need for closure (i.e., time spent on candidate information, number of unique boxes uncovered, and number of requests for further information, separately) from participant political orientation[5], candidate political orientation (effect coded, -0.5 = mostly Democratic candidate "Republican", 0.5 = mostly Republican candidate "Democrat"), and their interaction with a random intercept for each participant.

4.2.1.1 **Time Spent on Information**

There was an effect of candidate political orientation, $B = 2.78$, $SE = 1.30$, $p = .033$, $R^2 = .01$, meaning participants, overall, spent more time on the "Democratic" candidate than the "Republican" candidate. There was no effect of participant political orientation on time spent on candidate information, $B = .57$, $SE = .66$, $p = .39$, $R^2 = .001$, meaning that liberals and conservatives spent equal amounts of time on the candidate information, overall. The effect of candidate political orientation was qualified, however, by an interaction with participant political orientation, $B = 1.53$, $SE = .62$, $p = .014$, $R^2 = .01$. Specifically, liberals (1 *SD* below the midpoint of political orientation) spent an equal amount of time on the "Democratic" compared

[5] I decided to keep political orientation in as the ideological measure rather than party identification to keep the comparisons with Study 1 as straightforward as possible. The effects are statistically the same if I used party identification, though some of the patterns look a little different to the naked eye. Political orientation and party identification were significantly correlated, $r = .71$, $p < .001$.

to the “Republican” candidate, B = -.41, SE = 1.73, p = .81. Conservatives (1 SD above the midpoint of political orientation), however, spent more time on the “Democratic” candidate compared to the “Republican” candidate, B = 5.97, SE = 1.93, p = .002 (see Figure 7). This pattern of results provides some support for the *worldview threat hypothesis* (only conservatives spent more time on the “Democratic” candidate than “Republican” candidate) and some support for the *undifferentiated group identity hypothesis* (only liberals spent equal amounts of time on both candidates) but no support for the *differentiated group identity hypothesis*.

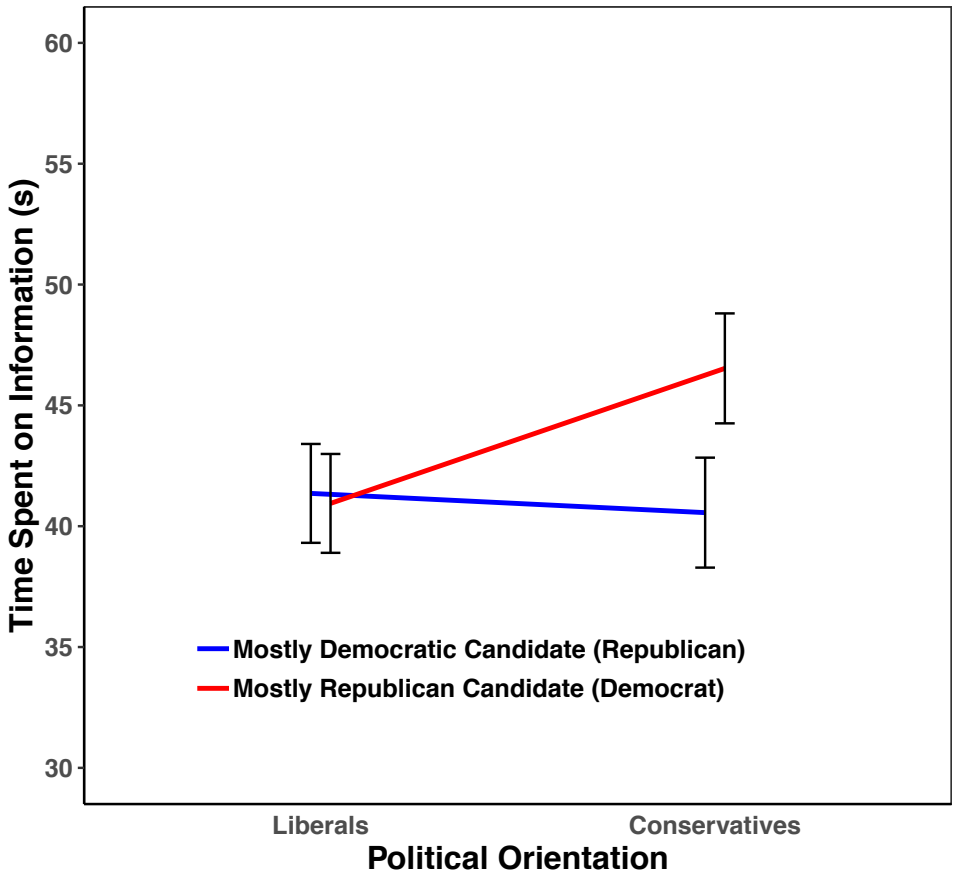

Figure 7. Time spent on information (in seconds) as a function of candidate political orientation and participant political orientation. Liberals = 1 *SD* below the midpoint of the scale and conservatives = 1 *SD* above the midpoint of the scale. Error bars represent standard error of the mean.

4.2.1.2 **Number of Unique Information Boxes Uncovered**

There was an effect of candidate political orientation, B = -.31, SE = .15, p = .037, R^2 = .01, meaning participants, overall, clicked on more unique boxes for the "Republican" candidate than the "Democratic" candidate. There was also an effect of participant political orientation on number of unique boxes uncovered, B = -.21, SE = .09, p = .021, R^2 = .01, such that the more conservative someone was, the fewer unique boxes they uncovered, overall. There

was no interaction effect between participant political orientation and candidate political orientation on number of unique boxes uncovered, $B = .11$, $SE = .07$, $p = .107$, $R^2 = .01$ (see Figure 8). This pattern of results again provides some support for the *undifferentiated group identity hypothesis* (liberals and conservatives did not differ in the relative time spent on the "Republican" versus "Democratic" candidates) but no support for the *differentiated group identity hypothesis* or *worldview threat hypothesis*.

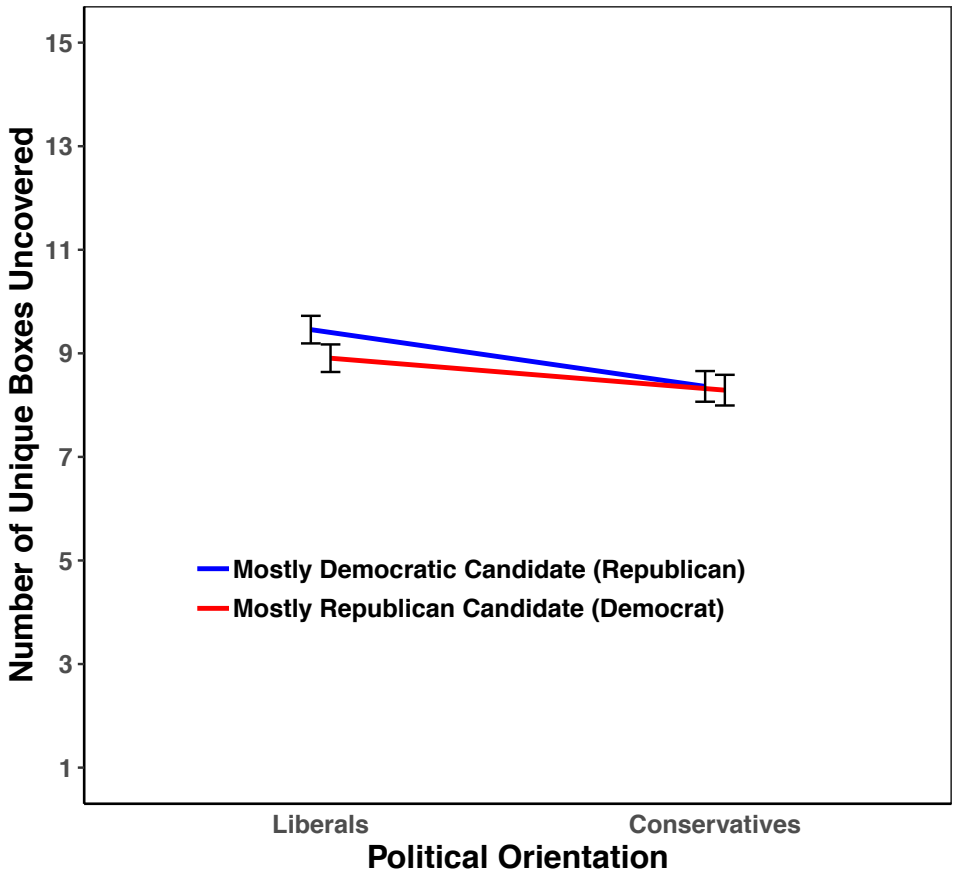

Figure 8. Number of unique boxes uncovered as a function of candidate political orientation and participant political orientation. Liberals = 1 *SD* below the midpoint of the scale and conservatives = 1 *SD* above the midpoint of the scale. Error bars represent standard error of the mean.

4.2.1.3 **Number of Requests for Further Information**

There was no effect of candidate political orientation, B = -.09, SE = .05, p = .079, R^2 = .01; participant political orientation, B = .01, SE = .04, p = .748, R^2 < .001; nor an interaction between candidate political orientation and participant political orientation, B = .01, SE = .03, p = .643, R^2 < .001, on number of requests for further information. These results suggest that all participants requested an equal amount of further information regardless of political leaning or candidate condition (see Figure 9). This pattern of results provides some support for the *undifferentiated group identity hypothesis* (liberals and conservatives did not differ in time spent on the "Republican" versus "Democratic" candidates) but no support for the *differentiated group identity hypothesis* or *worldview threat hypothesis*.

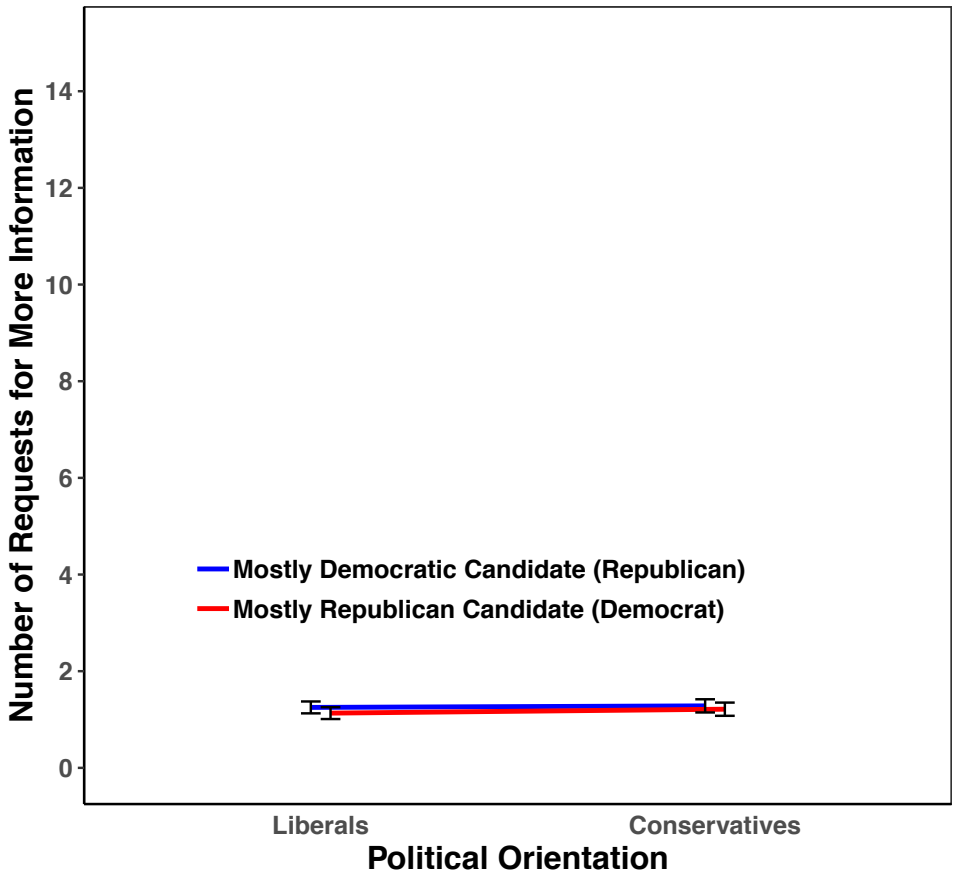

Figure 9. Number of requests for additional information as a function of candidate political orientation and participant political orientation. Liberals = 1 *SD* below the midpoint of the scale and conservatives = 1 *SD* above the midpoint of the scale. Error bars represent standard error of the mean.

4.2.2 Negative and Positive Affect as Mediators

I again used the lavaan package (Rosseel, 2012) in R to estimate a moderated mediation model where the effect of candidate political orientation on time spent on information through negative affect and positive affect, separately, was moderated by participant political orientation. Both negative and positive affect mediated the interactive effect of candidate political orientation and participant political orientation on time spent on candidate information.

Specifically, liberals experienced more negative affect toward the "Democratic" candidate compared to the "Republican" candidate, which, in turn, predicted less time spent on that candidate's information (indirect effect: B = -5.22, SE = .77, p < .001). Conservatives, however, experienced less negative affect toward the "Democratic" compared to "Republican" candidate, that in turn predicted more time spent on that candidate's information (indirect effect: B = 2.78, SE = .67, p < .001) (see Figure 10 for moderated mediation model). The opposite pattern of results was true for the mediating role of positive affect. Specifically, liberals experienced less positive affect toward the "Democratic" candidate compared to the "Republican" candidate, which, in turn, predicted more time spent on that candidate's information (indirect effect: B = 1.74, SE = .54, p = .001). Conservatives, however, experienced more positive affect toward the "Democratic" compared to "Republican" candidate, that in turn predicted less time spent on that candidate's information (indirect effect: B = -1.01, SE = .41, p = .014). Similar to Study 1, both negative and positive affect mediated the interactive effect of candidate and participant political orientation on information processing, but only the pattern of results associated with negative affect supported the *threat hypothesis* outline in Study 1. The more negative affect experienced toward the candidate, the less information participants processed about that candidate. Also similar to Study 1, positive affect towards a candidate also negatively predicted information processing lending further credence to the idea that people may be less likely to process information, overall, when affective experience is heightened.

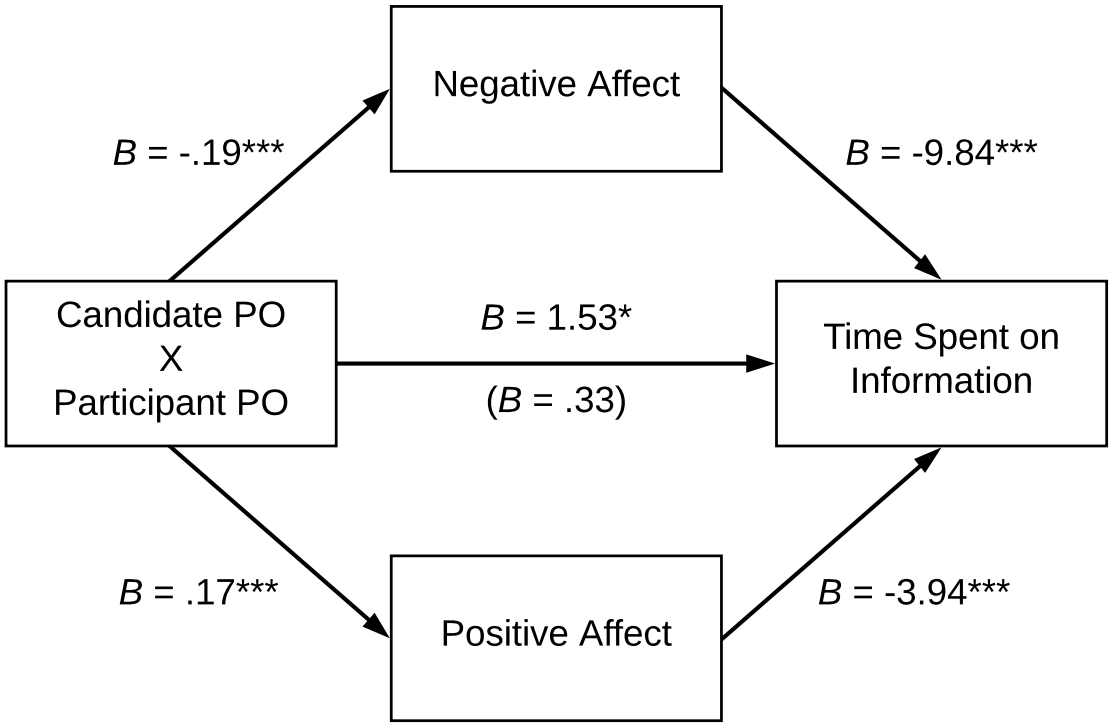

Figure 10. Moderated mediation model showing the interactive effect of candidate political orientation and participant political orientation on time spent on information through negative and positive affect. The total effect of the interaction on time spent on information is above the path; the direct effect of the interaction on time spent on information is below the path in parentheses. * $p < .05$. ** $p < .01$. *** $p < .001$.

4.2.3 **Support**

I also conducted a mixed-effects linear regression predicting the composite candidate support variable from participant political orientation, candidate political orientation (effect coded, -0.5 = “Republican”, 0.5 = “Democratic”), and their interaction with a random intercept for each participant. There was no effect of candidate political orientation, $B = .07$, $SE = .06$, $p = .25$, $R^2 = .001$, meaning participants, overall, did not differ in their support for the

"Republican" and "Democratic" candidates. There was an effect of participant political orientation on candidate support, $B = .05$, $SE = .01$, $p = .001$, $R^2 = .01$, such that the more conservative someone was, the more they supported the candidates, overall. These main effects were qualified, however, by an interaction between candidate political orientation and participant political orientation, $B = .29$, $SE = .03$, $p < .001$, $R^2 = .10$. Specifically, liberals (1 *SD* below the midpoint of political orientation) supported the "Republican" candidate more than the "Democratic" candidate, $B = -.54$, $SE = .08$, $p < .001$. Conservatives (1 *SD* above the midpoint of political orientation), however, supported the "Democratic" more than the "Republican" candidate, $B = .67$, $SE = .09$, $p < .001$ (see Figure 11).

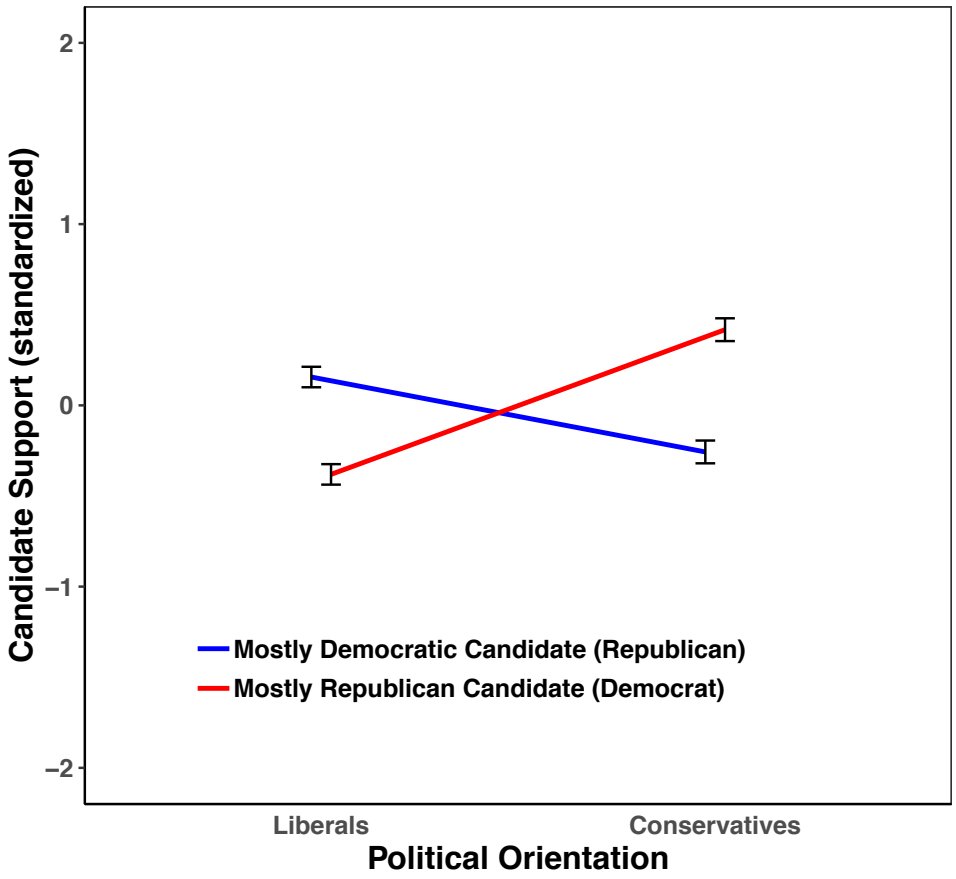

Figure 11. Support as a function of candidate and political orientation. Liberals = 1 *SD* below the midpoint of the scale and conservatives = 1 *SD* above the midpoint of the scale. Error bars represent standard error of the mean.

4.2.4 **Information Processing and Support**

Similar to Study 1, I independently tested whether each measure of information processing predicted candidate support using a mixed- effects linear regression with a random intercept for each subject. Information processing was not a reliable predictor of candidate support. Specifically, time spent on candidate information was not related to candidate support, B = -.001, SE = .001, p = .35, R^2 = .001. The number of unique boxes uncovered did not predict candidate support either, B = -.01, SE = .01, p = .26, R^2 = .001. Finally, the more requests for

further information one made, the more they supported the candidate, overall, $B = .07$, $SE = .02$, $p < .001$, $R^2 = .02$. Therefore, people were motivated to process information in a way that fit with their political worldviews, but extent of information processing did not translate into explicit support for the candidate.

4.3 Directly Comparing Studies 1 and 2

Studies 1 and 2 came to slightly different conclusions about how liberals and conservatives use information when evaluating political candidates. In Study 1, without party labels for the candidates, liberals and conservatives processed more candidate information when the information was consistent versus inconsistent with their worldviews. In Study 2, when party labels were given, liberals seemed to adjust their information processing strategy such that they processed more worldview-inconsistent information when the candidate had a congruent party label (compared to the pattern of results for liberals in Study 1). To make this explicit comparison, however, would require directly testing the experimental conditions of Study 1 and Study 2 in one analysis. Therefore, I decided to combine the data from the two studies and rerun some of the information processing analyses explicitly comparing the patterns of results from each study.

Specifically, I conducted a mixed-effects linear regression predicting situational need for closure (i.e., time spent on candidate information and number of unique boxes uncovered, separately)[6] from participant political orientation, candidate political orientation (effect coded, -0.5 = mostly Democratic candidate, 0.5 = mostly Republican candidate), study [effect coded, -0.5 = Study 1 (no party label), 0.5 = Study 2 (inconsistent party label)], all two-way interactions,

[6] Because the number of requests for further information variable was basically at floor in both studies, I excluded that variable from these analyses.

and the three-way interaction with a random intercept for each participant. If the *undifferentiated group identity hypothesis* is true, I would expect a three-way interaction between participant political orientation, candidate political orientation, and study. If the group identity derived from the party label in Study 2 is motivating information processing, then we should an increase in processing when the group identity cue is present versus when it is not present. Specifically, liberals should process information about the mostly Democratic candidate without a party label (i.e., Study 1) to a similar extent as the mostly Democratic candidate with an inconsistent party label (i.e., Study 2). Liberals, however, should process information about the mostly Republican candidate with an inconsistent party label (i.e., Study 2) to a greater extent than the mostly Republican candidate without a party label (i.e., Study 1). The reverse pattern should be observed for conservatives. The results of the combined analyses provided some support for the *undifferentiated group identity hypothesis* (for liberals but not conservatives) and no support for the *differentiated group identity hypothesis*.

4.3.1 Time Spent on Information

There was no three-way interaction between participant political orientation, candidate political orientation, and study on the time participants spent on information, B = -.78, SE = .86, p = .37, R^2 = .001, meaning the patterns of results did not significantly differ between Study 1 and Study 2 (see Figure 12). Although liberals did seem to spend more time on the mostly Republican candidate with a Democratic party label compared to a mostly Republican candidate with no party label, this difference is difficult to trust given the lack of a significant three-way interaction. Conservatives did not show any evidence in support of the *undifferentiated group identity hypothesis* because they spent more time on the candidates with party labels compared to candidates without party labels.

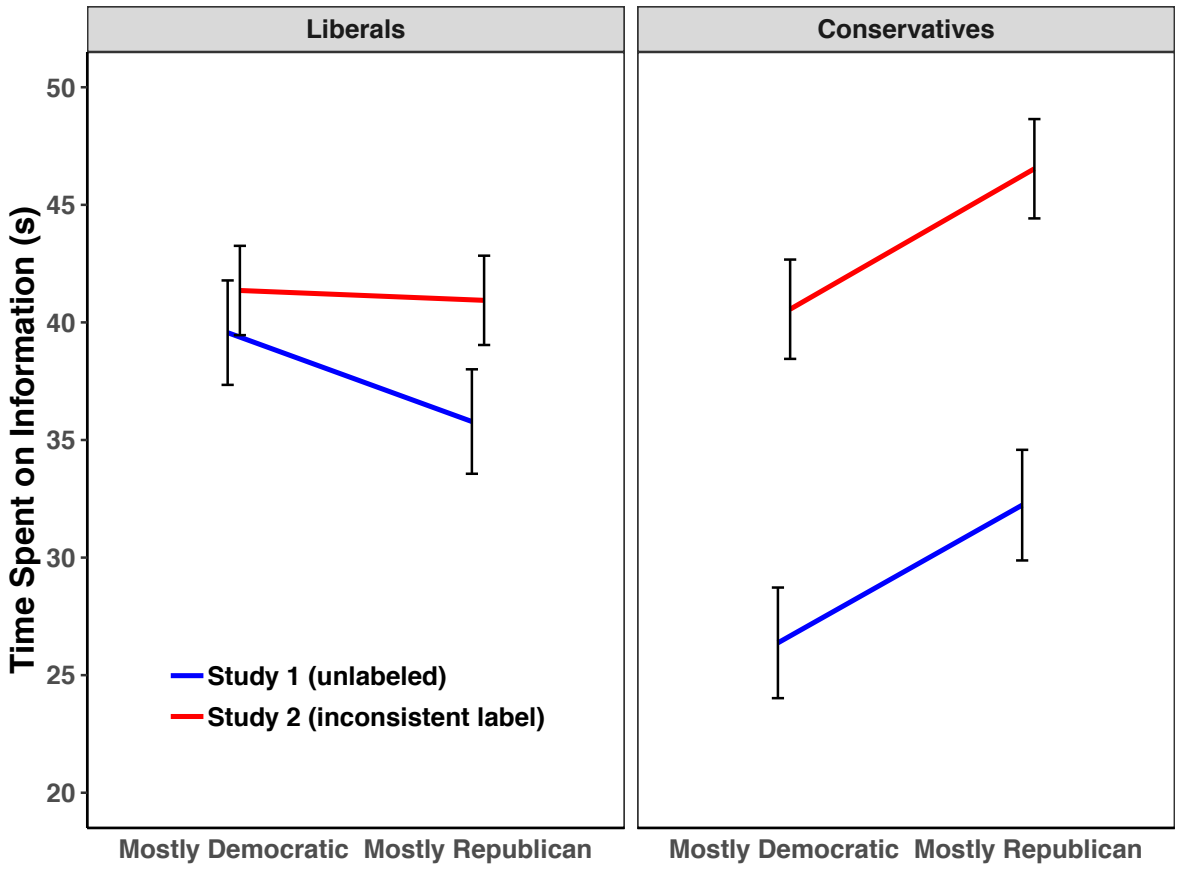

Figure 12. Time spent on information (in seconds) as a function of candidate political orientation, participant political orientation, and study. Liberals = 1 *SD* below the midpoint of the scale and conservatives = 1 *SD* above the midpoint of the scale. Error bars represent standard error of the mean.

4.3.2 Number of Unique Information Boxes Uncovered

There was a three-way interaction between participant political orientation, candidate political orientation, and study on the number of unique boxes uncovered, B = -.20, SE = .10, p = .049, R^2 = .004, suggesting that the patterns of results with respect to the number of unique boxes opened differed between Study 1 and Study 2 (see Figure 13). Specifically, liberals opened marginally more unique boxes for the mostly Republican candidate with a Democratic

party label compared to a mostly Republican candidate with no party label, $B = .70$, $SE = .41$, $p = .089$. Liberals, however, opened a similar number of unique boxes for the mostly Democratic candidate, regardless of party label, $B = .34$, $SE = .41$, $p = .41$. Conservatives opened more unique boxes for candidates with party labels than those without party labels, regardless of whether their stances were mostly Democratic, $B = 1.35$, $SE = .44$, $p = .002$, or mostly Republican, $B = .87$, $SE = .44$, $p = .049$. Therefore, these results provide some evidence for the *undifferentiated group identity hypothesis* for liberals, but not for conservatives. Again, there was no evidence in support of the *differentiated group identity hypothesis*.

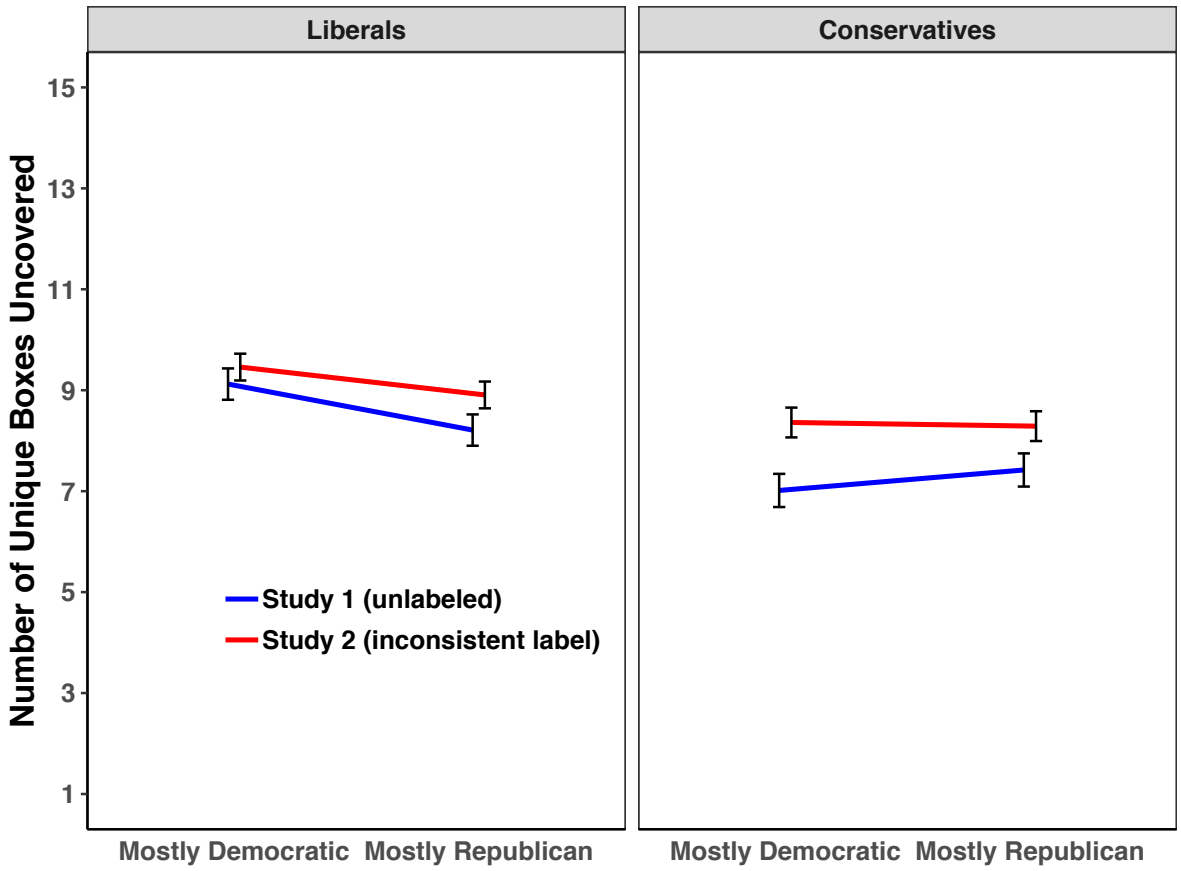

Figure 13. Number of unique boxes uncovered as a function of candidate political orientation, participant political orientation, and study. Liberals = 1 *SD* below the midpoint of the scale and conservatives = 1 *SD* above the midpoint of the scale. Error bars represent standard error of the mean.

4.4 Discussion

The results of Study 2 are more mixed than the results of Study 1. Overall, the patterns of results seem to provide the most support for the *undifferentiated group identity hypothesis* and some partial support for the *worldview threat hypothesis* with absolutely no support for the *differentiated group identity hypothesis*. Liberals did not show a preference in amount of information processing for either candidate. Conservatives, however, spent more time

on the “Democratic” candidate than the “Republican” candidate, which is a pattern consistent with how conservatives behaved in Study 1 (for the time spent on information variable). For the rest of the information processing variables, however, conservatives did not show an information processing advantage for either candidate. Also similar to Study 1, negative affect mediated the relationship between the interaction of candidate and participant political orientation and time spent on information. This overall pattern of results suggests that liberals and conservatives (some of the time) were motivated to process information about candidates with explicit party labels to a similar extent. Therefore, the group identity label of each candidate provided extra motivation for information processing beyond the threat of learning about a candidate with inconsistent stances.

Also similar to Study 1, the pattern of information processing did not reliably predict overall support for either candidate. Liberals still supported the candidate with mostly Democratic stances even though they were labeled as a “Republican,” and conservatives still supported the candidate with mostly Republican stances despite being labeled a “Democrat.” Therefore, seeing the party label of the candidates did seem to change the information processing strategy compared to Study 1 but did not change levels of support for either candidate. Specifically, liberals and, to a slightly lesser extent, conservatives were more likely to process worldview-conflicting information when there was potential for that candidate to be a sympathetic choice (i.e., for liberals when the candidate was labeled “Democrat” and for conservatives when the candidate was labeled “Republican”).

In summary, people seem to take into consideration both the consistency of candidate stance information with one’s own beliefs and group identity when processing information about potential political candidates. People (at least liberals) are just as willing to consider information

that does not fit with their ideological beliefs as they are willing to consider belief-consistent information when the inconsistent information is coming from a political ingroup member. Importantly, these results show that information processing for both liberals and conservatives can fluctuate from situation to situation and neither side of the aisle has an asymmetrical and stable need for cognitive closure, at least when it comes to processing political candidate information.

5. GENERAL DISCUSSION

The goal of the current research, broadly, was to examine differences and similarities in epistemic motivation between those on the political left and right. Prior research has suggested that conservatives have a higher need for closure than liberals (e.g., Jost et al., 2003). More recent research, however, suggests that the relationship between political orientation and need for cognitive closure is may be more contextually variable than previously thought (e.g., Malka et al., 2014). The values and epistemic motivation model predicts that contextual variations in value salience predict differences and similarities between liberals and conservatives in epistemic motivation. Specifically, both liberals and conservatives should be equally willing to consider new value-relevant information that is consistent with their worldviews. They should also be equally willing to avoid new value-relevant information that is inconsistent with their worldviews.

Study 1 tested these competing hypotheses in the context of evaluating information about potential political candidates. The *conservative advantage hypothesis* predicted that conservatives should process less information about political candidates compared to liberals, overall. The *equal opportunity hypothesis* predicted that liberals and conservatives should process information about candidates with worldview-consistent issue stances more so than candidates with worldview-inconsistent issues stances specifically because candidates with worldview-inconsistent stances are perceived as more threatening than candidates with consistent stances (*threat hypothesis*). The results of Study 1 mostly supported the *equal opportunity* and *threat hypothesis*. Liberals and conservatives were similarly motivated to process information selectively based on whether the information fit with their worldview. These results offer strong support for the values and epistemic motivation model because the actual information processing

behavior of people on both sides of the aisle fluctuated based on the type of information to which they were exposed. Although conservatives were less likely than liberals to engage in certain forms of information processing (e.g., time spent on information) in Study 1, this pattern was not replicated in Study 2. Instead, a more consistent theme across the different measures of information processing across the two studies was that conservatives and liberals fluctuated in their information processing strategies, a pattern of results inconsistent with the idea that conservative and liberal information processing strategies reflect a stable individual difference. Instead, differences between liberals and conservatives in information processing strategies appears to be at least somewhat situationally activated and determined.

Study 2 tested whether information processing regarding potential political candidates would change when exposed to relevant group identity information along with worldview-threatening information. Specifically, Study 2 tested the *worldview threat hypothesis*, which predicted that, similar to Study 1, liberals and conservatives should process information about candidates with worldview-consistent issue stances more so than candidates with worldview-inconsistent issues stances. The *undifferentiated group identity hypothesis* predicted that when given information about political group identity, liberals and conservatives should devote equal processing energy for political ingroup and outgroup members to gather enough information to either confirm or deny the stances implied by the explicit party label. The *differentiated group identity hypothesis* suggests that liberals and conservatives should process more information about ingroup labeled political candidates compared to outgroup labeled political candidates.

Results from Study 2 provided the most support for the *undifferentiated group identity hypothesis*. Liberals and conservatives (sometimes) processed information about ingroup and outgroup political candidates similarly even when faced with worldview-threatening information.

Therefore, these results provide a caveat for the values and epistemic motivation model. Although people are motivated via worldview defense to avoid information that conflicts with cherished beliefs, people are also motivated to give ingroup members the benefit of the doubt, so to speak, and process information for political ingroup members in an effort to make a judgment call about whether the ingroup member is a "good" or "bad" ingroup member. Interestingly, the pattern of results for candidate support in Study 2 conflicted with typical accounts of the "party over policy" phenomenon whereby partisans are more likely to base their decisions about candidate support on the party identification of the candidate rather than their explicit issue stances (e.g., Cohen, 2003; Skitka & Robideau, 1997). Participants in my sample seemed to base their candidate support judgments on the actual positions of the candidates rather than their party label, a pattern that suggests that people might put in more cognitive effort when evaluating candidates from opposing political parties than previously thought.

5.1 Theoretical Contributions

One theoretical implication of the current research is that it counters the commonly held narrative that political conservatism is driven by high need for closure (e.g., Jost et al., 2003). Current accounts of the relationship between need for cognitive closure and political ideology suggest that people choose to adhere to liberal or conservative ideologies because they are or are not particularly epistemically satisfying. However, the current research suggests that need for closure does not drive people to adopt particular ideologies, but instead that people's need for closure manifests as a way of defending one's political worldview. The current model relies on an already sound explanation of political differences (i.e., differences in value endorsement, Graham et al., 2009; Henry & Reyna, 2007) and uses that as the foundation to explain when we should expect to see liberals or conservatives to be more likely to have a

high need for cognitive closure. The differences observed in the current studies between conservatives and liberals were not necessarily psychological in nature (e.g., dispositional need for cognitive closure) but are better explained by value priority differences instead (e.g., Brandt et al., 2014; Morgan et al., 2010).

Importantly, this conceptualization of need for cognitive closure as worldview defense can explain contextual and dispositional differences in need for cognitive closure as a function of political ideology. For example, need for closure is sometimes associated with political conservatism (Jost et al., 2003) and sometimes associated with political liberalism (Malka et al., 2014). The prevailing notion that need for closure leads to conservatism cannot account for these disparate findings. However, the current research does allow for different associations between need for closure and political ideology. For example, the relationship between social conservatism and need for closure makes sense because conservatives often care more about specific social issues than liberals (e.g., maintaining traditional notions of marriage and family, Skitka, Morgan, & Wisneski, 2015). However, the positive association between need for closure and economic liberalism also makes sense because liberals often care about specific economic issues more than conservatives (e.g., redistribution of wealth and economic justice, Skitka et al., 2015).

5.2 Practical Implications

The current research has important implications for how people in the real-world talk about politics. It is obvious to anyone who reads or watches the news that liberals and conservatives in America have a difficult time not only getting along, but simply having a conversation with one another without wanting to scream and fight (e.g., Motyl, 2016). The

current research, I believe, offers at least two routes for thinking about how to promote more civil discourse between those on the left and the right.

One route for increasing fruitful discussion with political opponents would be to counter worldview defense motivated closure with other contextual motivations to avoid closure. There are many ways to increase motivation to avoid closure including instilling a fear of invalidity and increasing social accountability (e.g., Freund, Kruglanski, & Shpitzajzen, 1985). For example, making the negative social consequences of the policies that one supports more salient could make people think more openly about that topic, particularly if it negatively impacts loved ones or friends. In fact, there is evidence that people are more likely to think outside of their political comfort zones about issues when personal ties are at stake (e.g., opinions on same-sex marriage changing when one realizes a family member is gay, e.g., Herek & Glunt, 1993). Additionally, making people explicitly justify and explain their positions might also reduce one's need for cognitive closure. People who are asked to provide detailed information regarding their political stances are likely to reduce the extremity of their stances once they realize that they do not actually know all the inner-workings of a policy position (e.g., Fernbach, Rogers, Fox, & Sloman, 2013). Once people realize that current working knowledge of a policy does not in fact provide closure, they may be more open to taking in alternative points of view to reach a satisfying decision. Finally, social accountability could also play a role in reducing people's need for closure (Webster et al., 1996). For example, people engage in preemptive self-criticism, that is, when they are motivated to anticipate the counterarguments of potential critics, such as when told that they would be held accountable for a position they were going to take to either an unknown or ideologically opposed audience (e.g., Tetlock, Skitka, & Boettger, 1989). People are also willing to consider more information about a target person before making a judgment when

they expect to have to justify their choice to a third party (Tetlock, 1983b). Taken together, this evidence suggests that there are potentially fruitful avenues for decreasing worldview-defense motivated closure that pit a competing motivation—social accountability—against the driving motivation of worldview defense that was the focus of the current studies.

A second, although arguably more difficult, route to reducing political intransigence based on the current research would be to reduce the value violating attribute of alternative information. Because people are doubling down on information that supports their worldview and view conflicting information as threatening, the possibility of considering that conflicting information is quite low. However, if one could present a political point of view that does not come off as value threatening, the chance of increased civil engagement would likely increase. One could reframe an alternative position not in light of conflicting values but in light of the same value just addressed from a different point view. For example, one could reframe one's position on abortion not as an issue of valuing human life but valuing individual liberty. Reframing pro-environmental information in terms of moral values related to purity (a value more strongly endorsed by conservatives compared to liberals) rather than care or harm (a value more strongly endorsed by liberals) for the environment eliminated the gap between liberal and conservative attitudes toward the environment (Feinberg & Willer, 2013). In other words, when conservatives could get behind the message of caring for the environment as a way of adhering to a purity value, they were just as pro-environmental in their attitudes as liberals. Undoubtedly, this route would require a lot of effort and patience, but it could ultimately prove to be beneficial for overcoming many different types of political conflict.

5.3 Possible Limitations

Although the current research provides some compelling evidence in favor of the values and epistemic motivation model explanation of epistemic motivation of those on the political left and right, there are some possible limitations of these studies. One could argue that the measures of information processing used in these studies do not approximate need for cognitive closure or epistemic motivation. For example, information processing may only be one aspect of epistemic motivation and there are other, perhaps more important, components of epistemic motivation that I missed by not using other measures of information processing. The choice of measures as a limitation may be partly true, but the way that epistemic motivation has almost exclusively been measured and discussed as it relates to political differences has focused on the speed at which each side comes to a decision about something (e.g., Jost et al., 2003). From this perspective, measuring the time spent on information before making a decision should be the most precise way to get an estimate of the processing speed difference between liberals and conservatives, which I accomplished in the current research by using a behavioral timing measure. Additionally, behavioral measures of need for closure, like the information processing measures used in the current studies, are likely a more accurate reflection of reality than self-reporting how quickly someone usually comes to a decision.

5.4 Future Directions

The methodological design of the current research does not allow for one to directly compare information processing strategies for candidates with value-relevant versus value-irrelevant political stances. In other words, there is no true control condition for information processing to which to compare the strategies employed by participants in my sample. One could argue that the observed patterns of results are not motivated by value-relevance per se but are instead driven simply by attitude consistency and we might observe

similar patterns of information processing for any type of information. Adding a value-neutral control condition where participants evaluate a political candidate with stances on issues that are not relevant to liberal or conservative values would allow one to test how the value relevance piece contributes to the observed pattern of information processing. I expect that people would be more willing to consider information from about political candidates on issues that are value-irrelevant compared to issues that are value-relevant. In other words, I would not predict an interaction between participant and candidate political orientation on information processing for value-irrelevant issues.

Another area ripe for future research is examining the specific information processing strategies for participants based on what type of information they first uncover. In the current research, topics were randomly ordered for each candidate. One could imagine, however, that conservatives and liberals might differ in their information processing strategies depending on whether they first uncover worldview-consistent versus worldview-inconsistent information first. For example, if conservatives do have a higher need for cognitive closure than liberals, then uncovering worldview-inconsistent information first might motivate them to cease further information processing—a pattern of results predicted by the *conservative advantage hypothesis*. If, however, conservatives uncover a worldview-consistent piece of information first, then they might be more willing to look at other information about the candidate, even for candidates with mostly inconsistent stances. Similarly, does it take similar amounts of exposure to worldview-consistent and worldview-inconsistent information to make a decision to support or oppose a specific candidate? In other words, do people similarly weight negative and positive information when they are reading about candidates? For example, the candidate with mostly Democratic

stances still had a few Republican stances. Were these inconsistent stances for liberals perceived to be as impact in the decision-making process as were the consistent stances?

Another interesting finding from the current research was that conservatives appeared to be more interested about ideological coherence within parties than did liberals. The results of the combined Study 1 and Study 2 analyses suggested that conservatives processed candidate information more than liberals when party labels were given (compared to when they were not given). If the *conservative advantage hypothesis* is correct, then conservatives should not be any more willing to process information for worldview-threatening candidates just because they were given a party label identifier. In other words, conservatives seemed to care about whether a candidate's stances were consistent or inconsistent with their party identity (on both sides of the political aisle), something that would conflict with motivated social cognition approach (Jost et al., 2003). Future research could explore contexts in which conservatives versus liberals might be more or less attuned to ideological consistency when processing candidate or general political information. Although detailed analyses like these are beyond the aims of the current research, these are nonetheless potentially fruitful avenues for future researchers to consider.

5.5 Conclusion

For decades, researchers in political and social psychology have been studying what makes someone choose a conservative or liberal political ideology. One ideological difference that has almost been taken for granted for approximately the last 20 years is the idea that people become conservative rather than liberal because they have a need to obtain stable and ordered knowledge about the world (Jost et al., 2003). However, for myriad reasons, this difference in epistemic motivation requires further scrutiny. The current research provides a new framework for understanding when and why political conservatives and liberals might be

motivated to seize and freeze on information. I provided a framework that tested whether previously accepted political differences are more a function of value differences between liberals and conservatives rather than psychological differences, suggesting that we are all probably more alike than we are different (see Skitka & Washburn, 2016). Additionally, the current research offers a framework for researchers to critically examine other proposed psychological differences between liberals and conservatives that could potentially be explained through the lens of worldview defense. In sum, epistemic motivation is not a particularly conservative or liberal need, but instead it is a general human need to protect our cherished values and beliefs.

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APPENDICES

APPENDIX A

Pilot Study Materials

Instructions: For each statement please indicate where you think a person with this stance falls in terms of their political party identification. Next, please indicate how relevant each statement is to your core values.

Example statement (participants will evaluate approximately 60 statements):
Supports expanding legal immigration to about 1.2 million people per year, and would eliminate quotas that limit which part of the world immigrants can come from.

Please indicate where you think a person with this stance falls in terms of their political party identification.

-3-very much Democrat -2-moderately Democrat -1-somewhat Democrat 0-neither Republican nor Democrat 1-somewhat Republican 2-moderately Republican 3-very much Republican

How consistent or inconsistent is this position with your core values?

-3-completely inconsistent -2-moderately inconsistent -1-somewhat inconsistent 0-neither consistent nor inconsistent 1-somewhat consistent 2-moderately consistent 3-completely consistent

Demographics

What is your age?_____

With what gender do you most closely identify?

1-Male 2-Female 3-Other/rather not say

With what ethnicity do you most closely identify?

1-White 2-Black or African American 3-Native American or Alaska Native 4-Latino/a 5-Asian/Asian American 6-Pacific Islander 7-Biracial/Multiracial 8-Other_____

What is the highest level of education you have achieved?

1-less than high school 2-high school/GED 3-some college, no degree 4-associate's degree 5-bachelor's degree 6-master's degree 7-professional degree 8-doctoral degree

Are you a U.S. citizen?

1-yes 2-no

In which state do you currently reside?_____

What is your political party identification?

1-Democrat 2-Republican 3-Independent 4-neutral/uncertain

To what extent are you Democrat [Republican]?
1-slightly 2-moderately 3-very

(If neutral/uncertain) Do you lean towards Democrat or Republican?
1-lean towards Democrat 2-neutral/uncertain 3-lean towards Republican

What is your political orientation in general [when it comes to social issues / when it comes to economic issues]?
1-liberal 2-conservative 3-neutral/uncertain

To what extent are you liberal [conservative]?
1-slightly 2-moderately 3-very

(If neutral) Do you lean towards liberal or conservative?
1-lean towards liberal 2-neutral/uncertain 3-lean towards conservative

APPENDIX B

Study 1 Materials

CANDIDATE PLATFORM MANIPULATION

Instructions: With the 2020 elections just around the corner, Republican and Democratic pollsters have been poring over public opinion data regarding attitudes toward potential congressional candidates. Each party has compiled a short list of lesser known candidates that they believe could have a decent shot at being a viable candidate for the U.S. House of Representatives or Senate. We are interested in your opinion of these candidates. Specifically, we are interested in how people make up their minds about new candidates and choose to support them (or not). For this reason, we are providing you with information about two political candidates that you can explore until you feel that you know enough to make up your mind about whether you would be likely to support them.

You will be presented with an informational grid for several candidates. An identifier (e.g., "Candidate A") for each candidate will be listed at the top of the page and several issue topic boxes will be listed below the candidate's label. You can click on any of the boxes to learn the candidate's stance on that particular issue. Feel free to click on as many or few boxes as often as you would like before making your evaluations. If you would like to know more about a candidate's stance on a particular issue you can check the "Request Additional Information" box next to that issue. You do not have to look at all of the information: As soon as you feel you have enough information about the candidate, feel free to move on to the next page.

Candidate A (Democratic Candidate) supports: see list of issues in Pilot Study results

Candidate B (Republican Candidate) supports: see list of issues in Pilot Study results

MEASURES

Emotions associated with candidate (adapted from the PANAS, Watson, Clark, & Tellegen, 1988)

To what extent do you feel the following emotional reactions right now, that is, at the present moment, when thinking about Candidate A [Candidate B]?

1-very slightly or not at all 2-a little 3-moderately 4-quite a bit 5-extremely

Negative Emotions	Positive Emotions
afraid	happy
scared	joyful
frightened	delighted
nervous	cheerful
jittery	excited
shaky	enthusiastic
angry	lively

hostile	energetic
irritable	proud
scornful	strong
disgusted	confident
loathing	bold

Candidate support

How much do you support or oppose Candidate A [Candidate B] as a future U.S. legislator representing your district or state in the house or senate?

-3-extremely oppose -2-moderately oppose -1-somewhat oppose 0-neither support nor oppose 1-somewhat support 2-moderately support 3-extremely support

Please rate each candidate on the provided feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the candidate. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the candidate. You would rate the person at the 50 degree mark if you don't feel particularly warm or cold toward the candidate.

How would you rate Candidate A [Candidate B]?

0-very cold/unfavorable feeling 50-no feeling at all 100-very warm/favorable feeling

What is the likelihood that you would vote for Candidate A [Candidate B]?

-3-extremely unlikely -2-moderately unlikely -1-somewhat unlikely 0-neither likely nor unlikely 1-somewhat likely 2-moderately likely 3-extremely likely

Trait need for cognitive closure (adapted from Roets & Van Hiel, 2011)

Please read each of the following statements and decide how much you agree with each according to your beliefs and experiences. Please respond according to the following scale:

1-strongly disagree 2-moderately disagree 3-slightly disagree 4-slightly agree 5-moderately agree 6-strongly agree

I don't like situations that are uncertain.
I dislike questions which could be answered in many different ways.
I find that a well ordered life with regular hours suits my temperament.
I feel uncomfortable when I don't understand the reason why an event occurred in my life.
I feel irritated when one person disagrees with what everyone else in a group believes.
I don’t like to go into a situation without knowing what I can expect from it.
When I have made a decision, I feel relieved.
When I am confronted with a problem, I’m dying to reach a solution very quickly.
I would quickly become impatient and irritated if I would not find a solution to a problem immediately.
I don’t like to be with people who are capable of unexpected actions.
I dislike it when a person’s statement could mean many different things.
I find that establishing a consistent routine enables me to enjoy life more.
I enjoy having a clear and structured mode of life.
I do not usually consult many different opinions before forming my own view.
I dislike unpredictable situations.

Demographics

What is your age?_____

With what gender do you most closely identify?
1-Male 2-Female 3-Other/rather not say

With what ethnicity do you most closely identify?
1-White 2-Black or African American 3-Native American or Alaska Native 4-Latino/a 5-Asian/Asian American 6-Pacific Islander 7-Biracial/Multiracial 8-Other_____

What is the highest level of education you have achieved?
1-less than high school 2-high school/GED 3-some college, no degree 4-associate's degree 5-bachelor's degree 6-master's degree 7-professional degree 8-doctoral degree

Are you a U.S. citizen?
1-yes 2-no

In which state do you currently reside?_____

What is your political party identification?
1-Democrat 2-Republican 3-Independent 4-neutral/uncertain

To what extent are you Democrat [Republican]?
1-slightly 2-moderately 3-very

(If neutral/uncertain) Do you lean towards Democrat or Republican?
1-lean towards Democrat 2-neutral/uncertain 3-lean towards Republican

What is your political orientation in general [when it comes to social issues / when it comes to economic issues]?
1-liberal 2-conservative 3-neutral/uncertain

To what extent are you liberal [conservative]?
1-slightly 2-moderately 3-very

(If neutral) Do you lean towards liberal or conservative?
1-lean towards liberal 2-neutral/uncertain 3-lean towards conservative

APPENDIX C

Study 2 Materials

The materials and procedure for Study 2 are the same as Study 1 except that the candidate with mostly Democratic stances will be labeled as a "Republican," and the candidate with mostly Republican stances will be labeled as a "Democrat." The following manipulation checks will also be added for Study 2.

Manipulation checks

Candidate A is running for congress as a Republican, Democrat, or Independent?

1-Republican 2-Democrat 3-Independent

Candidate B is running for congress as a Republican, Democrat, or Independent?

1-Republican 2-Democrat 3-Independent

VITA

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Curriculum Vitae

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ACADEMIC APPOINTMENTS

2018 – present DePaul University, Chicago, IL
Professional Lecturer, Department of Psychology

EDUCATION

2013 – 2018 University of Illinois at Chicago, Chicago, IL
Ph.D. Social Psychology
Minor: Statistics, Methods, and Measurement

2013 – 2015 University of Illinois at Chicago, Chicago, IL
M.A. Social Psychology

2011 – 2013 DePaul University, Chicago, IL
M.S. Psychology, *with distinction*

2004 – 2008 Greenville College, Greenville, IL
B.A. Psychology/Religion, *magna cum laude*
Minor: Business

GRANTS/AWARDS/SCHOLARSHIPS

2016 SPSP Graduate Student Travel Award, Society for Personality and Social Psychology

2014 – 2015 Chancellor's Graduate Research Fellowship ($8,000 over two summers), Graduate College, University of Illinois at Chicago

2015 – 2018 Travel Award, Graduate Student Council, University of Illinois at Chicago

2015 – 2018 Student Presenter Award, Graduate College, University of Illinois at Chicago

2014 – 2015 Ph.D. Student Travel Award, College of Liberal Arts and Sciences, University of Illinois at Chicago

2014 – 2018 Travel Grant, Department of Psychology, University of Illinois at Chicago

2014	M.A. Research Grant, Department of Psychology, University of Illinois at Chicago
2013	Graduate Research Funding Grant, College of Science and Health, DePaul University
2012	Avery-Barat Scholarship, Department of Psychology, DePaul University
2004 – 2008	Presidential Honors Scholarship ($20,000 over four years), Greenville College

RESEARCH INTERESTS

The influence of ideologically motivated reasoning on judgment and decision-making. Context-dependent and independent explanations for ideological differences and similarities in psychological functioning. The causes and consequences of holding attitudes with moral conviction.

JOURNAL ARTICLES

Skitka, L. J., Hanson, B. E., **Washburn, A. N.**, & Mueller, A. B. (2018). Moral and religious convictions: Are they the same or different things? *PLoS ONE, 13*(6), e0199311.

Washburn, A. N., Hanson, B. E., Motyl, M., Skitka, L. J., Yantis, C., Wong, K. M., Sun, J., Prims, J. P., Mueller, A. B., Melton, Z. J., & Carsel, T. S. (2018). Why do some psychology researchers resist using proposed reforms to research practices? A description of researchers' rationales. *Advances in Methods and Practices in Psychological Science, 1*(2), 166-173.

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Tierney, W., Schweinsberg, M., Jordan, J., Kennedy, D. M., Qureshi, I., Sommer, S. A., … **Washburn, A. N.**, … Uhlmann, E. L. (2016). Data from a pre-publication independent replication initiative examining ten moral judgment effects. *Scientific Data, 3*, 160082.

Schweinsberg, M., Madan, N., Vianello, M., Sommer, S. A., Jordan, J., Tierney, W., … **Washburn, A. N.**, … Uhlmann, E. L. (2016). The pipeline project: Pre-publication independent replications of a single laboratory's research pipeline. *Journal of Experimental Social Psychology, 66*, 55-67.

Skitka, L. J., **Washburn, A. N.**, & Carsel, T. S. (2015). The psychological foundations and consequences of moral conviction. *Current Opinion in Psychology, 6*, 41-44.

Washburn, A. N., & Skitka, L. J. (2015). Motivated and displaced revenge: Remembering 9/11 suppresses opposition to military intervention in Syria (for some). *Analyses of Social Issues and Public Policy, 15*, 89-104.

BOOK CHAPTERS AND COMMENTARY

Washburn, A. N., & Skitka, L. J. (in press). Strategies for promoting strong inferences in political psychology research. In B. T. Rutjens & M. J. Brandt (Eds.), *Belief systems and the perception of reality*.

Skitka, L. J., & **Washburn, A. N.** (2016). Are conservatives from Mars and liberals from Venus? Maybe not so much. In P. Valdesolo & J. Graham (Eds.), *Social psychology of political polarization* (pp. 78-101). New York: Routledge.

Washburn, A. N., Morgan, G. S., & Skitka, L. J. (2015). A checklist to facilitate objective hypothesis testing in social psychology research. *Behavioral and Brain Sciences, 38*, e161.

MANUSCRIPTS UNDER REVIEW AND IN PREPARATION

Washburn, A. N., & Mallett, R. K. (under revision). How the left and right respond to imagined and actual ideological insults.

Washburn, A. N., & Motyl, M. (under review). How political segregation demobilizes voters in the political minority and mobilizes voters in the political majority.

Mallett, R. K., **Washburn, A. N.**, & Skitka, L. J. (in preparation). Preferred responses to ideologically-motivated insults.

Mallett, R. K., & **Washburn, A. N.** (in preparation). Whiner or warrior? Social penalties for confrontation depend on whether it defends the ingroup or an outgroup.

Giner-Sorolla, R., Hilton, D., Erb, H., Durante, F., Flabbeck, C., Fulop, E., … **Washburn, A. N.**, & Zadora, A. (in preparation). Moral roles of the Second World War in Europe: National similarities, differences, and implications for group-level moral psychology.

Stahl, T. K., **Washburn, A. N.**, Zaal, M., & Skitka, L. J. (in preparation). Moralized rationality and motivated reasoning.

Peter-Hagene, L., & **Washburn, A. N.** (in preparation). Political orientation and attitude toward the police influence moral judgments and verdicts in police shooting cases.

INVITED ORAL PRESENTATIONS

Loyola University Chicago, Department of Psychology, Social Area Research Series, November 2017

CHAIRED SYMPOSIA

Washburn, A. N., & Mueller, A. B. (2018, April). *A deeper look at the status of our science*. Symposium conducted at the annual meeting of the Midwestern Psychological Association, Chicago, IL.

SYMPOSIA PRESENTATIONS

Washburn, A. N., Hanson, B. E., Motyl, M., Skitka, L. J., Yantis, C., Wong, K. M., Sun, J., Prims, J. P., Mueller, A. B., Melton, Z. J., & Carsel, T. S. (2018, April). A description of researchers' rationales for resisting proposed reforms to research practices. In A. N. Washburn (co-Chair) & A. B. Mueller (co-Chair), *A deeper look at the status of our science*. Symposium conducted at the annual meeting of the Midwestern Psychological Association, Chicago, IL.

Peter-Hagene, L., & **Washburn, A. N.** (2018, March). Moral outrage reactions to defendants and to the law mediate the effect of pre-trial attitudes toward euthanasia and policing on jurors' verdicts. In *Morality and law*. Symposium conducted at the annual meeting of the American Psychology-Law Society, Memphis, TN.

Washburn, A. N., & Skitka, L. J. (2015, July). Science denial across the political divide. In L. J. Skitka (Chair), *Motivated denial: How group identities motivate rejection of science*. Symposium conducted at the annual meeting of the International Society of Political Psychology, San Diego, CA.

POSTER AND PAPER PRESENTATIONS

Washburn, A. N., & Mallett, R. K. (2018, October). *How the left and right respond to imagined and actual ideological insults*. Informal paper presented at the annual meeting of the Society for Experimental Social Psychology, Seattle, WA.

Washburn, A. N., & Motyl, M. (2018, March). *Political segregation mobilizes voters in political majority, demobilizes voters in political minority*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Atlanta, GA.

Washburn, A. N., Skitka, L. J., & Mallett, R. K. (2017, January). *Victimhood or honor? How the political right and left respond to microaggression*. Poster presented at the Justice and Morality Preconference at the annual meeting of the Society for Personality and Social Psychology, San Antonio, TX.

Washburn, A. N., & Skitka, L. J. (2016, January). *Ideological symmetry in motivated cognition and science denial*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, San Diego, CA.

Washburn, A. N., & Skitka, L. J. (2015, May). *Science denial across the political divide*. Poster presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.

Washburn, A. N., & Skitka, L. J. (2015, February). *Motivated and displaced revenge: Remembering 9/11 influences support for military intervention in Syria*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Long Beach, CA.

Washburn, A. N., & Skitka, L. J. (2014, May). *Displaced international punishment and support for military intervention in Syria*. Poster presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.

Steiger, R. L., Benson, O., Omair, A., Van Damme, C., **Washburn, A. N.**, Wetherell, G. A., & Reyna, C. (2014, May). *Intent as a necessary and sufficient precursor to moral judgment*. Poster presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.

Washburn, A. N., Reyna, C., Steiger, R., Wetherell, G. A., Benson, O., & Omair, A. (2014, February). *Sex, pranks, and videotapes: What are the precursors of moral judgment?* Poster presented at the annual meeting of the Society for Personality and Social Psychology, Austin, TX.

Washburn, A. N., Wetherell G. A., Yantis, C., & Reyna, C. (2013, May). *Moral conviction and value violation in response to situational constraint*. Poster presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.

Washburn, A. N., Wetherell G. A., Yantis, C., & Reyna, C. (2013, January). *Forcing the issue: Moral conviction and perceptions of value violation in response to situational constraint*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, New Orleans, LA.

Washburn, A. N., Wetherell G. A., Yantis, C., & Reyna, C. (2012, May). *Effects of social distance and situational constraint on attitudes and moral conviction*. Poster presented at the annual meeting of the Association for Psychological Science, Chicago, IL.

Washburn, A. N., Wetherell G. A., Yantis, C., & Reyna, C. (2012, April). *Moral conviction, social distance, and situational constraint*. Paper presented at the 2nd meeting of Chicagoland Morality Researchers (C-MORE), Chicago, IL.

TEACHING EXPERIENCE

Instructor (Undergraduate Level)
Introductory Psychology II (DePaul University, Autumn 2018)
Statistics I (DePaul University, Autumn 2018)
Statistical Methods in Behavioral Science (University of Illinois at Chicago, Spring 2018)

Teaching Associate (Graduate Level)
Multivariate Analysis (University of Illinois at Chicago, Spring 2017)
Research Design and Analysis (University of Illinois at Chicago, Fall 2016)
Introduction to Computing in Psychology (University of Illinois at Chicago, Fall 2016)

Teaching Associate (Undergraduate Level)
Statistical Methods in Behavioral Science (University of Illinois at Chicago, Fall 2017)

Advanced Statistical Methods in Behavioral Science (University of Illinois at Chicago, Spring 2016)
Social Psychology (University of Illinois at Chicago, Spring 2016)
Writing in Psychology (University of Illinois at Chicago, Fall 2015)
Laboratory in Social Psychology (University of Illinois at Chicago, Fall 2012, Spring 2013, Fall 2013, Spring 2014, Fall 2014, Spring 2015)
Research Methods II (DePaul University, Winter 2013, Spring 2013)

Guest Lecturer

Statistical Methods in Behavioral Science
Independent Means T-Tests (University of Illinois at Chicago, Fall 2017)
Multivariate Analysis
Conditional Process Modeling (University of Illinois at Chicago, Spring 2017)
Research Design and Analysis
Analysis of Covariance (University of Illinois at Chicago, Fall 2016)
Laboratory in Social Psychology
Measurement Construction, Reliability, and Validity (University of Illinois at Chicago, Spring 2015)
Using Qualtrics for Psychological Research (University of Illinois at Chicago, Spring 2013, Fall 2013, Spring 2014, Fall 2014, Spring 2015)

Undergraduate Advising

Honors College Capstone Project Graduate Student Advisor (University of Illinois at Chicago, Fall 2016 – Spring 2017)

Professional Development

Practicum in Instruction in Psychology (University of Illinois at Chicago, Fall 2017 – Spring 2018)
Preparing Future Faculty (DePaul University, Fall 2012 – Spring 2013)

Teaching Interests

Basic and Advanced Statistics
Research Methods
Social Psychology
Political Psychology
Moral Psychology
Introduction to Psychology
Judgment and Decision-Making
Psychology and Justice
History and Systems

UNIVERSITY AND DEPARTMENTAL SERVICE

Social and Personality Program Brown Bag Graduate Student Coordinator (University of Illinois at Chicago, Fall 2015, Spring 2017)
Social and Personality Program Prospective Student Visiting Day Graduate Student Coordinator (University of Illinois at Chicago, Spring 2017)

PROFESSIONAL SERVICE

Ad Hoc Reviewer

Journal of Personality and Social Psychology
Journal of Experimental Social Psychology
Current Directions in Psychological Science
Personality and Social Psychology Bulletin
Social Justice Research
Analyses of Social Issues and Public Policy
The Journal of Social Psychology
Translational Issues in Psychological Science
PLoS ONE

Professional Memberships

Midwestern Psychological Association (MPA)
Society for Personality and Social Psychology (SPSP)
International Society of Political Psychology (ISPP)
Society for the Psychological Study of Social Issues (SPSSI)
Chicagoland Morality Researchers (C-MORE)

PROFESSIONAL EXPERIENCE

Research Consultant

Ministry Leadership Center, funded by the Hilton Foundation
Observed and identified themes from five meetings about the formation process for leaders in Catholic institutions, such as Catholic health care systems and Catholic higher education