# THE PROBLEM OR THE PEOPLE: WHAT CONSERVATIVES AND LIBERALS WANT TO KNOW WHEN MAKING DECISIONS

by

#### MATTHEW ALEXANDER SANDERS

(Under the Direction of LEONARD L. MARTIN)

#### **ABSTRACT**

Conservatives and liberals may differ in how they construe decision making.

Conservatives tend to value consensus, whereas liberals tend to value novelty (Nathanson & Becker, 1981, Shook & Fazio, 2009). Decision making can be construed as intellective or judgmental (Laughlin, 1980). Intellective (i.e. accuracy-focused) decisions tend to be informed by objective sources of information, whereas judgmental (i.e. consensus-focused) decisions tend to be informed by normative sources of information (Kaplan & Miller, 1987). Two studies tested whether conservatives and liberals differed in their construal of decision making by assessing how they evaluated sources of information and used information in their judgments. In Experiment 1, participants were presented with a moral dilemma and were asked to rate objective and normative sources of information that could inform a decision in that dilemma. In Experiment 2, participants were presented with a decision making dilemma and were provided with objective or normative anchors for their judgments. Results showed that conservatives tended to positively evaluate and use normative sources of information, whereas liberals positively evaluated objective sources of information. The results suggest differences in how

decisions are construed across political orientation and suggest that further studies are needed to assess how information from different sources is used in judgments.

INDEX WORDS: political orientation, decision making, conformity, information search, intellective versus judgmental tasks

# THE PROBLEM OR THE PEOPLE: WHAT CONSERVATIVES AND LIBERALS WANT TO KNOW WHEN MAKING DECISIONS

by

MATTHEW ALEXANDER SANDERS

B.S., UNIVERSITY OF GEORGIA, 2007

B.A., UNIVERSITY OF GEORGIA, 2007

M.S., UNIVERSITY OF GEORGIA, 2010

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PSYCHOLOGY

ATHENS, GEORGIA

2013

### © 2013

## MATTHEW ALEXANDER SANDERS

All Rights Reserved

# THE PROBLEM OR THE PEOPLE: WHAT CONSERVATIVES AND LIBERALS WANT TO KNOW WHEN MAKING DECISIONS

by

#### MATTHEW ALEXANDER SANDERS

Major Professor: Leonard L. Martin

Committee: Michelle vanDellen

Adam Goodie

Electronic Version Approved:

Maureen Grasso Dean of the Graduate School The University of Georgia May 2013

#### **ACKNOWLEDGEMENTS**

I would like to thank my advisor, Dr. Leonard L. Martin, for supporting me in my career and helping me to develop as a person and as a thinker. I would also like to thank the members of my committee, Dr. Michelle vanDellen and Dr. Adam Goodie, for their invaluable help. Additionally, I would like to thank my wife, Sarah Wagner Sanders, for her support during my graduate career.

## TABLE OF CONTENTS

		Page
ACKNOV	VLEDGEMENTS	iv
LIST OF	TABLES	vi
LIST OF	FIGURES	vii
CHAPTE	R	
1	INTRODUCTION	1
2	EXPERIMENT 1: POLITICAL ORIENTATION AND EVALUATION OF	
	INFORMATION SOURCES	16
3	EXPERIMENT 2: POLITICAL ORIENTATION AND THE USE OF OBJECT	IVE
	VERSUS NORMATIVE INFORMATION	29
4	GENERAL DISCUSSION	36
REFERE	NCES	40
APPEND	ICES	
A	INDIVIDUAL DIFFERENCE MEASURES	45
В	TYPES OF INFORMATION FOR EXPERIMENT 1	68
C	PARTNER PROFILES FOR EXPERIMENT 1	70
D	ANCHORS FOR EXPERIMENT 2	71
F	CONSTRUAL MEASURE FOR EXPERIMENT 2	72

### LIST OF TABLES

	Page
Table 1: Epistemic differences between conservatives and liberals	73

### LIST OF FIGURES

Page
Figure 1: Outline of epistemic differences between conservatives and liberals75
Figure 2: Ratings of the evidential and normative sources of information predicted by political
orientation76
Figure 3: Semi-partial ratings of the evidential and normative sources of information predicted
by political orientation
Figure 4: Political orientation and hostile world perceptions interacting to predict evidential
information source ratings
Figure 5: Political orientation and knowledge certainty interaction predicting evidential
information source ratings79
Figure 6: Recommended percent success for Robert with a high social anchor predicted by
political orientation80
Figure 7: Recommended percent success for Robert with a high social anchor predicted by
political orientation and the belief that knowledge is certain81

#### CHAPTER 1

#### INTRODUCTION

How do people make decisions when they do not know what the answer is or when there no objective answer is readily available? Sometimes people search for and use objective facts to help them make their decisions (Sherif, 1935). Other times, they search for and use socially normative information in their decisions (Asch, 1956). Might the values people hold relate to their tendency to search for facts versus normative information? For instance, if people place a relatively strong value on family, social harmony, and security, might they be more likely to seek normative information from their valued groups (i.e., their preferences and approval)? If, on the other hand, people place a relatively strong value on novelty and autonomy, then might they be more likely to devalue the evaluations of others and seek objective, impersonal information in their decisions?

One dimension on which people have vastly different values is political orientation. In my dissertation, I examine whether people's political differences lead them to search for different types of information when making judgments. More precisely, I hypothesize that conservatives tend to have processing objectives that can be satisfied by gathering normative information, whereas liberals tend to have processing objectives that can be satisfied by gathering objective facts.

The search for normative versus objective information parallels the distinction between judgmental and intellective tasks (Kaplan & Wilke, 2001). So, I begin by discussing that distinction. In brief, judgmental tasks focus people on finding group consensus, whereas

intellective tasks focus people on finding an objective answer Then, I review evidence showing that conservatives value tradition and tend to conform to their social group, whereas liberals search for and use novel, factual information in their judgments. These differences suggest that processing objective differences may exist between the two groups. Finally, I describe two studies that tested how conservatives and liberals evaluate and use information that comes from evidential or normative sources.

Judgmental and Intellective Decision Strategies

Imagine a scenario in which a group of colleagues are considering where to eat lunch.

One member of the group suggests an appealing local restaurant. "Excellent," another member responds, "Where is the restaurant?" A third member is less convinced. She asks, "I don't know...is it really a good restaurant?"

Those two questions represent very different decision making processes. "Where is the restaurant?" is a question about an objective reality. There is an actual answer somewhere outside of the group. In order to figure out where the restaurant is, and how to get there, the group might look in a phone book, or search for driving directions on the internet. Whatever decision they make, the information that they use will be factual and their thought process will be focused on objectively understanding something out in the world.

"Is it really a good restaurant?" is a very different question. There is no objective answer to that question. Some of the members of the group may like the restaurant; some may not. Even if a large number of people do happen to like the restaurant, some individuals may not appreciate the menu, cooking style, or service. This evaluation is more subjective and has more to do with the preferences of the members of the group. To find the answer, the woman may be able to survey the opinions of the other group members to answer the question. Alternatively, she might

search for an opinion of a celebrity chef on the quality of the restaurant. Whatever direction she chooses to inform her decision, the information will come from people's subjective evaluations.

Laughlin (1980) proposed that people adopt processing objectives that fit with the types of decisions they are trying to make (for a review see Kaplan & Wilke, 2001). These objectives can be arranged along a continuum. At one end of the continuum are intellective tasks. These are decisions tasks with definite, objective answers as with math problems, anagram tasks, or analogies – or finding the location of a restaurant. According to Laughlin and Ellis (1986), a task must satisfy four conditions to be considered intellective: (1) there must be an existing group consensus on a system of rules for reaching an answer (e.g. mathematical order of operations or English grammar), (2) there must be sufficient information for a solution within the system (e.g. equations are identified or terms are defined), (3) people who have not yet made a definitive decision must be able to recognize what the correct solution is when it is demonstrated, and (4) people who can solve the problem must have the motivation and ability to demonstrate how to arrive at the answer to others. In other words, for an intellective task, there is an objective answer to the question and there must be consensus on the method to reach that answer. Answering, "Where is the restaurant?" is an intellective task.

At the other end of the continuum are judgmental tasks. These are tasks that have no objective answer or that fail to satisfy at least one of the four criteria for the task to be intellective. Tasks at the judgmental end of the continuum include moral, ethical, or behavioral decisions that can only be solved with group consensus, for example, "Which movie is most deserving of the picture of the year award?" (Zanorth & Sniezek, 1997). Because there is no single, objectively correct answer or no correct method to come to an objective answer, judgmental tasks are decided by a subjective consensus of the group or by the appeal to higher

social status individuals such as judges, managers, or other authorities (Kaplan & Martin, 1999, Kirchler & Davis, 1986). Answering, "Is it a good restaurant?" is a judgmental task.

The Intellective-Judgmental Dimension in Decision Making

The type of task one is working on can lead to intellective or judgmental processing objectives in judgment. For instance, Laughlin and Ellis (1986) used mathematical problems to operationalize intellective tasks. Mathematical problems have a clear set of rules (e.g. numerical system, order of operations) that can be used to solve for an objective answer. However, most social decisions people make tend to vary in how intellective or judgmental they are.

How a task can affect processing objectives is clear when considering a jury deciding on compensatory versus exemplary damages in a court case. Compensatory damages are relatively objective and are based on the facts of the case. For compensatory damages, juries are given the amount in medical bills the defendant would have to pay and are given clear instructions on how to deliberate to determine if the defendant would have to pay the bills. Exemplary damages are a relative judgment of how deviant an act is considered by the members of the jury, a task for which there is no objective standard or method of determination.

Kaplan and Miller (1987) adopted this task distinction in their decision making research. They assumed that compensatory damages were more likely to be an intellective (i.e. accuracy, fact-based) decision, whereas exemplary damages were more likely to be a judgmental (i.e. consensus, preference-based) decision. In their experiment, the researchers examined how these two tasks would affect the type of information group members used to influence each other. Kaplan and Miller thought that if participants believed they were working on a factual decision, they would be more likely to exchange objective information about the case. On the other hand, if participants believed they were working on a preference-based decision, they should place

more emphasis on values and seek to reach consensus as a group. The researchers thought that the type of social influence the participants used on each other would vary based on these hypotheses.

Deutsch and Gerard (1955) divided social influence into two categories: informational and normative. They defined informational influence as, "an influence to accept information obtained from another as evidence about a reality" (emphasis in original, p. 629). People turn to informational social influence when they want to make accurate judgments about reality. Normative influence, on the other hand, was defined as "an influence to conform with the positive expectations of another" (p. 629). People rely on normative influence when they want to conform to accepted standards of behavior and to generate group consensus. In the context of colleagues considering where to eat lunch, if one asks, "Where is the restaurant?" that is a factual question that could be answered by informational influence. One could socially influence others by providing information about what roads one would need to drive down to reach the restaurant. To answer a question like, "Is it a good restaurant?" requires a different answer. Normative influence would be best suited to responding to such a question. For example, a coworker might say that members of the department liked the restaurant in question when they went there last month. The questions themselves constrain what type of social influence is most relevant.

In their study, Kaplan and Miller predicted that participants working on the intellective task would be more likely to use informational social influence in their deliberation, whereas participants working on the judgmental task would be more likely to use normative influence.

The results supported their predictions. Participants working on the intellective task discussed more evidence of the case or inferences from testimony, whereas participants working on the

judgmental task discussed their preferred verdict and were more likely to pressure others to conform to that judgment. In other words, working on the intellective task focused on the facts of the case itself, whereas working on the judgmental task focused the participants on coming to agreement. The type of task changed the processing objective for participants, which in turn changed the information they found useful in their deliberation.

Can the way that a participant perceives a decision affect that participant's judgment?

Rugs and Kaplan (1993) answered this question by directly manipulating their participants'

processing objectives during an experiment (see also Postmes, Spears, & Cihangir, 2001, Stasser & Stewart, 1992). The participants were told that they would be working on a number of tasks, and that later in the experiment they would participate in a group discussion on a divisive issue.

Half of the participants were told that they should be able to provide correct and concise arguments and that the group would need to be accurate - an intellective goal. The other half of the participants were told that they needed to maintain a cooperative attitude and come up with a solution everyone could agree on - a judgmental goal.

Participants were told that they would be discussing how ethical animal testing is by passing notes to other participants. In addition to processing objectives, the researchers manipulated the type of social influence the actual participant was exposed to. Half of the participants received informational arguments against animal testing such as one that argued few cures for diseases were found to offset the number of animals killed during testing - a fact-based argument. The other half of the participants received normative arguments against animal testing indicating ideas such as the assertion that "most people" found the practice cruel and would like to see it stopped - a values-based argument.

The dependent measure of the study was how persuaded participants were by the social influence to which they were exposed. The results showed that participants were most persuaded when their goals matched the type of social influence. In other words, people who were told to be concerned with accuracy were most convinced by fact-based arguments, whereas people told to be cooperative with the group were most convinced by values-based arguments.

Not only are people more convinced by arguments that fit with their processing objectives they also prefer discussing information that fits with their processing objectives.

Kaplan, Schaefer, and Zinkiewicz (1994) told participants that they would be discussing social issues such as the environment, immigration, and the right to die. Participants were again told that they would be working with others and that the group would need either to be accurate or to come to a consensus.

Following the goal manipulation, participants were asked to read through a list of potential discussion topics. The topics included factual information and public opinion information. For example, factual topics regarding the right to die included items such as "the number of people in coma-like conditions who are unable to communicate and for whom the prognosis is 'no recovery,'" whereas the opinion-based topics included items such as "opinion survey results regarding whether courts or medical bodies should be the ultimate parties to make 'right to die' decisions for individual cases." Participants were told that either four factual or four opinion-based topics had been selected for their group to discuss. The dependent measure was how satisfying participants thought it would be to talk about each topic. When participants thought they needed to be accurate, they were more satisfied with the fact-based discussion topics. When they thought they needed to reach group consensus, they were more satisfied with the opinion-based discussion topics.

In sum, it appears that the way in which people perceive their decision making goal affects their processing objectives. Under certain circumstances, a decision maker will be focused on the problem at hand and will believe that there is one answer they need to uncover. Under other circumstances, a decision maker will be focused on other people and will believe that they need to find harmony with others. Furthermore, people (1) communicate in a style that fits with their processing objectives, (2) are most convinced by information that fits with their processing objectives, and (3) are most satisfied when discussing information that meets their processing objectives.

The Role of Political Orientation in Decision Making

Previous research has considered the role of the type of task or the instructions participants are given in determining their processing objectives. One facet of psychology that has not been considered with respect to intellective or judgmental processing is the role of personality. Some personality constructs, for example need for cognition (Cacioppo & Petty, 1982), might cause certain individuals to think of their decisions in more intellective terms.

I propose that individual differences in political orientation may be related to differences in how decision making is construed. A number of research findings suggest that this difference exists. Haidt and colleagues (2001, Graham, Haidt, & Nosek, 2009) argue that conservatives are more likely than liberals to integrate the values and traditional sentiments of their cultural ingroup in their moral decisions. Janoff-Bulman and colleages (2009, Janoff-Bulman, Sheikh, & Baldacci, 2008) have found that conservatives are socially motivated to protect their in-group. In addition, conservatives report personally valuing tradition and conformity and having positive opinions of others that tend to try to fit in with others (Caprara, Schwartz, Capanna, Vecchione, & Barbaranelli, 2006, Cavazza & Mucchi-Faina, 2008, Thorisdottir, Jost, Liviatan, & Shrout,

2007). In short, research on morality and values raises the possibility that conservatives are more likely than liberals to consult the opinions of relevant others (e.g. social norms) when making decisions.

Research by Nathanson and Becker (1981) examined how social norms differentially affect conservatives and liberals. The study examined the behavior of obstetricians following the 1973 Supreme Court decision in Roe v. Wade, which legalized abortion in the United States. Following this decision, some hospitals supported abortion procedures and some did not, creating different normative environments. The research showed that conservatives were more sensitive to local social norms. In other words, if the hospitals at which they were employed supported abortion, the doctors performed abortions. If the hospitals did not support abortions, then the doctors did not perform abortions. The values of their social group were fundamentally important in the determination of the behavior of conservative obstetricians. Liberal obstetricians were focused on their personal values and conducted abortions regardless of the values of their social group. Thus, the normative environment was much less informative for liberal obstetricians in determining their behavior.

More generally, following social norms seems more important to politically conservative people. For instance, conservatives are less likely than liberals to commit criminal or deviant acts because of their relatively higher pressure to conform to norms (Tittle, Welch, & Grasmick, 2008). Gibbons and Wright (1983) showed that when conservatives were presented with information that their personal attitudes were discrepant from others, they were more likely than liberals to adjust their attitudes in the direction of the social norm. Furthermore, Margulies, Kessler, and Kandel (1977), in studying the onset of drinking behavior in high school students, found that drinking in freshman and sophomore students was correlated with political liberalism

and served as a non-conformist, rebellious behavior. By their junior and senior years, more conservative students started drinking as a way to conform to the drinking norms of their peers.

In addition, individuals high in right-wing authoritarianism, a strong predictor of conservative attitudes, value conformity, tradition, and the opinions of high-status individuals (Altemeyer, 1981, Duriez & Van Hiel, 2002, Jugert, Cohrs, & Duckitt, 2009, Vidulich & Kaiman, 1961). Feldman (2003) argued that in modern society people face conflicts between personal autonomy and social cohesion. Authoritarians respond to this conflict by strongly supporting social cohesion, which in-turn makes them more aware of threats to society. For example, individuals high in authoritarianism show strong preferences for in-groups over outgroups, in part because out-groups violate conformity to social norms (Thomsen, Green, & Sidanius, 2008). These results suggest a general pattern for conservatives to value normative information in their judgments.

Conversely, research consistently shows that liberals seem less likely or less willing to conform to the opinions of others. For instance, Sistrunk and Halcomb (1969) presented conservative and liberal participants with a number of either easy or difficult verbal analogies in testing books. The easy analogies could be solved by 90% of participants without help in a pretest, whereas the hard analogies could be completed without help by fewer than 25% of the pretest participants. Importantly, some of the analogies in the test booklets had answers already written in, ostensibly by previous participants in the study. For the easy analogies, conservatives conformed to the answers of previous participants at a relatively high rate compared to liberals and political moderates despite how easy the analogies were. When considering the difficult analogies, it would be reasonable for the participants to conform to previous answers due to how hard participants found them. Conservative and politically moderate participants did conform at

a high rate for the difficult analogies. Liberals, on the other hand, conformed relatively little, despite their difficulty. Even when it was reasonable to rely on the answers of other participants, liberal participants were less likely to use that information in their judgments. However, conservatives (and moderates) were more likely to embrace conformity.

If liberals do not use social-normative information in their decisions, what might they do? A number of research findings hint at an answer. Tetlock (1983, 1986) found that liberal, as opposed to conservative, politicians were more likely to consider multiple perspectives concurrently when making political evaluations. In addition, liberals seem relatively more accepting of ambiguity and uncertainty compared to conservatives suggesting that they may be more comfortable exploring environments and exposing themselves to new information (Sidanius, 1978, Wilson, Ausman, & Matthews, 1973). Fittingly, liberals also tend to show greater openness to experience, a personality dimension related to unconventionality, creativity, and searching for new perspectives (Caprara, Barbaranelli, & Zimbardo, 1999, Carney, Jost, Gosling, & Potter, 2008).

Based on these differences, Shook and Fazio (2009) directly tested conservative and liberal participants' propensity to seek out new, objective information about the environment. They did this by asking participants to play a game on the computer. The object of the game was to accrue points by clicking or not clicking on a series of beans. The beans differed in shape, size, and markings. Clicking on some of the beans provided points, whereas clicking on other subtracted points. To find out which beans provided points and which subtracted points, participants had to click on the beans. This was the only way for participants to find out which beans were good which were bad. Clicking on the beans was also the only way to win points and the only way to lose points.

Previous research had shown that conservatives display greater sensitivity to fear and threats than liberals and are more responsive to loss than to gain (Lavine, Burgess, Snyder, Transue, Sullivan, Haney, & Wagner, 1999). So, Shook and Fazio (2009) hypothesized conservatives would be less likely than liberals to search for information by examining beans.

The results supported their prediction. Conservatives were less likely to click on the beans even though doing so would have given them information and potentially given them points. They seemed to be more sensitive than liberals to the possibility that clicking on the beans could allow take points away from them. On the other hand, liberals approached more beans and were able to learn about more positive and negative bean values. In short, liberals sought out more evidential information from the environment than did conservatives.

In sum, research suggests that conservatives and liberals may differ in the type of information they use when making a decision. A list of the epistemic differences between conservatives and liberals is presented in Table 1. Liberals may be more likely to look for evidence that will help them come to a real answer about a problem in the real world, whereas conservatives may be more likely to look for information that allows them to arrive at group consensus and maintain harmony within their in-group. In other words, liberals are likely to consider decision making as intellective, whereas conservatives are likely to consider decision making as judgmental. A graphic of this hypothesis can be seen in Figure 1.

It is important to keep in mind that what I am discussing here is the type of information people actually use. This is not the same as their subjective experience of making a decision. Presumably, everyone feels they are making accurate judgments based on incontrovertible evidence and it is the other side that is biased and uninformed (Robinson, Keltner, Ward, & Ross, 1995). The problem, of course, is that people are generally not accurate at understanding

what affects their decision making (Nisbett & Wilson, 1977). What they think they are doing may not be exactly what they are doing.

#### System Justification Theory

According to system justification theory (Jost & Hunyady, 2002), people are motivated to see the prevailing social, economic, and political norms (i.e., the status quo) as good, legitimate, and desirable. This motivation grows out of three more basic needs: (a) a need for consistency, certainty, and meaning, (b) a need to manage threat and distress, and (c) a need to coordinate social relationships and achieve shared reality with others. Research on System Justification has focused primarily on people's motivation to maintain certain content in their beliefs.

For example, Napier and Jost (2008) used system justification theory to make a connection between two consistent findings: conservatives are generally happier than liberals and conservatives are generally more likely than liberals to support meritocracy. Napier and Jost (2008) began with the observation that the gap between the rich and the poor in the U.S. has increased dramatically since 1970. During this time, the life satisfaction of liberals has declined, whereas the life satisfaction of conservatives has not. Why are conservatives better able to cope with the growing inequality? Conservatives are more likely to see the inequality as justified because they view it as a sign that the system is working. The rich deserve their good outcomes; the poor deserve their bad outcomes. Liberals, on the other hand, interpret the inequality as a flaw in the system that they interpret as a lack of fairness. So, increasing inequality decreases the life satisfaction of liberals but not conservatives. Conservatives' justification of the status quo helps them stay happy.

Studies on system justification have frequently used dependent measures reflecting support for cultural stereotypes (Kay & Jost, 2003), sexism (Calogero & Jost, 2011), faith in the

government (Jost, Pelham, Sheldon, & Sullivan, 2003), or meritocracy (Ledgerwood, Mandisodza, Jost, & Pohl, 2011). These studies have shown that conservatives are more likely than liberals to support the cultural status quo. However, a few studies have looked at how System Justification tendencies can influence the search for and use of information. For example, Feygina, Jost, and Goldsmith (2010) showed that conservatives tend to reject evidence for global warming in part because they think it threatens the status quo (e.g., people have to reduce the amount they drive). They also showed that it was possible to change conservatives' acceptance of evidence by changing how the evidence was framed. Conservatives showed increased belief in the evidence supporting global warming when the belief was presented as patriotic and as system-sanctioned.

Shepherd and Kay (2012) showed that the tendency to support the status quo can be enhanced by feelings of helplessness and uncertainty. They presented participants with either simple or complex messages about the workings of the economy. Complex messages made participants feel ignorant and helplessness, which they attempted to allay by supporting the government status quo. Participants also tended to say that they would prefer to avoid information that could potentially undermine their belief in the ability of the government to control the economy. Shepherd and Kay concluded that feeling uncertain can motivate people to justify the status quo by avoiding information that could undermine that justification.

In sum, system justification theory suggests that people prefer information that justifies the status quo over information that does not. People also tend to avoid information if it might threaten the status quo. The theory makes no prediction about people's preferences for evidential versus normative evidence. Either type of information could justify or threaten the status quo. There are two aspects of the theory, however, that might be relevant to the current research. The

theory suggests that people's preference for certain kinds of information is heightened by threat as well as by uncertainty. So, although system justification theory does not allow us to predict whether liberals are conservatives are more or less likely to seek out informational or normative evidence, it could suggest that whatever information-seeking tendencies people display may be stronger among people who see the world in threatening terms or who are high in need for certainty.

#### **CHAPTER 2**

## EXPERIMENT 1: POLITICAL ORIENTATION AND EVALUATION OF INFORMATION SOURCES

Previous research has raised the possibility that people's political orientation is related to the processing objectives people employ when making decisions. I conducted two experiments to test whether conservatives and liberals differ in their search for and use of evidential information versus normative information. In Experiment 1, I asked participants to rate the usefulness of a number of sources of information in the context of solving a moral dilemma. I expected that conservatives would be more likely than liberals to seek out information about other people's values and judgments, whereas liberals would be more likely than conservatives to ask for evidence related to the problem.

Experiment 1 conceptually replicated the methods of Kaplan, Schaefer, and Zinkiewicz (1994). I presented participants with a medical dilemma. Then, I asked them to rate a number of sources of information for how useful they would be in the participant's judgment. Some of the sources of information were evidential in nature (e.g. "Research reports from trusted journals on the effectiveness of the scan for the proposed brain scan medical procedure"). Other sources of information were normative in nature (e.g. "Opinions of the other relevant medical professionals on performing the brain scans on healthy people"). I hypothesized that conservatives perceive decision making to be a judgmental matter, so I predicted that they would evaluate the normative sources of information more positively than would liberals. I hypothesized that liberals would

perceive their decision making as an intellective matter, so I predicted that they would evaluate the evidential sources of information more positively than would conservatives.

#### **Participants**

100 undergraduates enrolled in introductory psychology courses completed the study for partial course credit.

#### Method

#### Measures

All of the individual difference scales are included in Appendix A.

Political Orientation Scale. This measure was designed to assess participants' attitudes toward a number of social issues (e.g. the death penalty, stem cell research) as well as their attitudes toward conservative and liberal politicians (e.g. George Bush, Barack Obama). Items were averaged to create a scale where the high end represented support for conservative politicians/policies and the low end represented support for liberal politicians/policies.

Parental Authority Questionnaire (Buri, 1991). Participants completed a version of this scale designed to assess their mother's level of parental authority. The scale contains three subscales: permissive, authoritative, and authoritarian. An example authoritarian item is, "Even if her children didn't agree with her, my mother felt that it was for our own good if we were forced to conform to what she thought was right." Participants rated the extent to which each item described their relationship with their mother on a 1 (strongly disagree) to 5 (strongly agree) Likert scale.

Parenting Style. Participants completed a version of this scale designed to assess both parents' style of treatment of the participant based on Baumrind's (1971) parenting styles. The scale contains three subscales: permissive, authoritative, and authoritarian. An example

authoritarian item is, "They were in charge and enforced the rules, no matter what." Participants rated the extent to which each item was true of their relationship with their parents on a 1 (not true) to 7 (true) Likert scale.

Schwartz Values Scale (Davidov, Schmidt, & Schwartz, 2008). This was an adapted 21item scale assessing the Schwartz values. A scale was administered for each gender.

Participants rated statements about other individuals such as, "It is important to him to be rich.

He wants to have a lot of money and expensive things." Participants indicated the extent that those statements resembled themselves on a 1 (not like me at all) to 6 (very much like me) Likert scale.

Belief that Knowledge is Certain (Schraw, Bendixen, & Dunkle, 2002). This measure was a variant of the original Epistemic Beliefs inventory and assesses the participant's belief that knowledge structures they have are unchanging and universal. An example item is, "What is true today will be true tomorrow." Participants either agreed or disagreed with each item as a binary decision.

Objectivism Scale (Leary, Shepperd, McNeil, Jenkins, & Barnes, 1986). This scale measures the participant's desire for empirical information and rational decision making. An example item is, "I see myself as a rational and objective person." Participants indicated how much each statement resembled them on a 1 (not at all characteristic of me) to 5 (extremely characteristic of me) Likert scale.

Belief in a Dangerous World Scale (Altemeyer, 1988). This measure asks participants to indicate how threatening they perceive the world to be. An example item is, "Any day now chaos and anarchy could erupt around us. All the signs are pointing to it." Participants indicated their agreement with items on a 1 (strongly disagree) to 7 (strongly agree) Likert scale.

Self Consciousness Scale Revised (Scheier & Carver, 1985). This scale assesses the extent to which the participant is aware of private or public self-consciousness as well as social anxiety. Participants read statements such as, "I'm always trying to figure myself out" and indicated how much each statement was like them on a 0 (not like me at all) to 3 (a lot like me) Likert scale.

Self Trust Scale. This scale was developed in order to assess how much a participant trusts his or her own judgment in a given situation. An example item is, "When I work on my own, I make the right decisions." Participants indicated their agreement with items on a 1 (not very true of me) to 7 (very true of me) Likert scale.

#### Procedure

Participants completed the study in groups of one to three. Each participant was seated individually at a computer station running Media Lab that was visually separated from other participants. The instructions on the computer informed participants that they would be making some decisions about a medical dilemma and would be having a discussion with another participant at the end of the study. Before the computer presented the dilemma, participants completed the individual difference measures presented in the measures section.

Next, the computer presented the medical dilemma. The text of the dilemma (adapted from Petrinovich & O'Neill, 1996) read:

Imagine that there is a new disease is afflicting many patients who could be helped if a new medical procedure is approved. The proposed new procedure would involve performing brain scans on currently healthy individuals for information that could save people afflicted with this new disease. Doctors believe that performing the brain scan on these healthy

people could save five patients who are dying of the new disease, but it would cost the life of the healthy person.

What information would you need in order to make a decision about supporting the medical procedure?

Participants were told that before the partner discussion, they would be presented with a number of different types of information that could be used to inform their decision about the morality of the new procedure. Participants rated 18 sources of information for how useful each would be. They did this on a 1 (not at all useful) to 7 (very useful) Likert scale. Nine of the sources were evidential in nature, whereas nine were normative in nature. The information sources are presented in Appendix B.

Finally, participants were told that they would be able to indicate which other participant they would like to work with in the upcoming discussion. One participant preferred evidential information; the other preferred normative information. Information about the participant selection is presented in Appendix C. Participants picked one of the other participants, then were thanked and debriefed.

#### Results

Correlations Among Individual Difference Variables and Dependent Measures

I first conducted correlation analyses of the individual difference variables with political orientation and the ratings of the evidential and normative sources of information. This was the first step of my analysis to check if the data replicated previous research and to check for the possibility of moderators. The results of these analyses can be found in Table 2. As can be seen, a number of the individual difference measures correlated significantly with political orientation, including the primary dependent measures: the ratings of the evidential sources of information

(r(98) = -.242, p < .05) and the ratings of the normative sources of information (r(98) = .185, p = .066). The ratings of these two sources of information were highly inter-correlated, r(98) = .415, p < .01. In addition, none of the other individual difference measures correlated with the information ratings, despite reflecting potentially related values (e.g. conformity, tradition, stimulation), normative parenting styles (e.g. authoritarian), and epistemic beliefs (e.g. knowledge certainty, objectivism). These results suggest that the differences in ratings of the sources of information are primarily due to individual differences in political orientation.

In terms of values, political orientation was significantly positively correlated with power (r(98) = .207, p < .05), conformity (r(98) = .261, p < .01), and tradition (r(98) = .296, p < .01), indicating that conservatives tended to hold these values to a greater extent than did liberals. Additionally, self-direction (r(98) = -.235, p < .05), universalism (r(98) = -.514, p < .001), and benevolence (r(98) = -.203, p < .05) were negatively correlated with political orientation, indicating that liberals tended to hold these values to a greater extent than did conservatives. These results replicate prior findings showing the relationship between values and political orientation (e.g. Caprara, et al., 2006). A priori, I believed that these values could be related to ratings of the sources of information, but they were uncorrelated.

Political orientation was also positively correlated with belief that the world was dangerous (r(98) = .332, p < .01) and the belief that knowledge was certain (r(98) = .307, p < .01). However, these variables were uncorrelated with the information source ratings. Political Orientation and Information Preferences

The first hypothesis of this study was that conservatives would value normative information (i.e. information from other people) relatively more than liberals. I would expect to find a positive b-value when the normative information source ratings are regressed on political

orientation. The second hypothesis was that liberals would value evidential information (i.e. objective information about the environment) relatively more than conservatives. I would expect to find a negative b-value when the evidential information source ratings are regressed on political orientation.

To test these hypotheses, I averaged the ratings of the normative sources of information  $(\alpha = .83)$  to create a composite score across participants. This score was regressed on political orientation. The regression model reached significance,  $R^2 = .034$ , F(1, 98) = 3.456, p = .066. Political orientation significantly predicted the ratings of the normative sources of information in the hypothesized direction (b = .212, SE = .114, t(98) = 1.859, p = .066). This relationship indicates that conservatives rated the normative sources of information as significantly more useful than liberals.

The ratings of the evidential sources of information ( $\alpha$  = .75) were also averaged together to create a composite score across participants. This score was also regressed on political orientation. The regression model was significant,  $R^2$  = .059, F(1, 98) = 6.095, p < .05. Political orientation emerged as a significant predictor of participants ratings of the evidential information sources in the hypothesized direction (b = -.201, SE = .081, t(98) = -2.469, p < .05). This relationship indicates that liberals rated the evidential sources of information as significantly more useful in their thinking than did conservatives.

Following standard practice, I graphed these relationships at  $\pm 2SD$  of political orientation. The results of these analyses are presented together in Figure 2. Follow Up Analysis

Because the evidential and normative information source ratings were highly correlated, r(98) = .415, p < .01, I conducted a follow up analysis to test effects of political orientation on

variance unique to the evidential and normative ratings. To do this, I regressed the evidential ratings on the normative ratings and saved the unstandardized residual values. These values represent variance uniquely attributable to the normative information sources that was unshared with the evidential sources. I followed the reverse procedure to save values representing variance uniquely attributable to the evidential information sources. These values essentially represent semi-partial correlations and were the dependent measure of the following analyses.

I regressed political orientation on the semi-partial normative source ratings. The regression model reached significance,  $R^2 = .098$ , F(1, 98) = 10.653, p < .01. Political orientation significantly predicted the semi-partial ratings of the normative sources of information (b = .328, SE = .1, t(98) = 3.264, p < .01). This analysis adds to the previous findings in that information uniquely attributed to the normative information sources can be predicted by political orientation in the hypothesized direction. This is a more powerful test of the hypothesis and the relationship between political orientation and the information ratings is stronger than in the previous analysis.

I followed the same analysis pattern for the evidential source ratings. I regressed political orientation on the semi-partial evidential source ratings. The regression model reached significance,  $R^2 = .123$ , F(1, 98) = 13.686, p < .001. Political orientation significantly predicted the semi-partial ratings of the evidential sources of information in the hypothesized direction (b = .265, SE = .072, t(98) = -3.699, p < .001).

Following standard practice, I graphed these relationships at  $\pm 2SD$  of political orientation. The results of these analyses are presented together in Figure 3. Testing for System Justification

According to system justification theory, people prefer information that justifies the status quo over information that does not. The theory suggests that whatever information-seeking tendencies people display may be stronger among people who see the world in threatening terms or who are high in need for certainty.

I first explored this possibility by assessing whether participants' views of the world as threatening influenced their preference for evidential information. I regressed political orientation, belief that the world is threatening, and their interaction on the evidential information sources. This model was significant,  $R^2 = .098$ , F(3, 96) = 3.47, p = .019. A main effect of political orientation reached significance, b = -.259, SE = .089, t(96) = -2.906, p < .01, as did the interaction between orientation and belief that the world is threatening, b = .179, SE = .088, t(96) = 2.033, p < .05.

To illustrate the interaction, I graphed values at  $\pm 2\text{SD}$  political orientation and belief that the world is threatening. The interaction can be seen in Figure 4. To break down this interaction, I conducted a simple slope analysis. For participants who were high in the belief that the world was threatening, the simple slope was not significant, b = .059, t(96) = .336, p = .715. Conservatives and liberals who believed that the world was threatening valued the evidential sources of information equally. However, for participants who did *not* believe that the world was threatening, the simple slope was significant, b = -.577, t(96) = -2.872, p < .01. Conservatives and liberals who did not believe the world was threatening viewed the evidential sources of information differently. Conservatives generally rated the evidential sources of information as less useful in their judgments than did liberals. Thus, the differences between conservatives and liberals in evaluation of the evidential sources of information emerged only among participants who did not believe the world was threatening.

System justification theory might also suggest that participants would be more likely to avoid objective information if they personally believe that knowledge is certain (Shepherd & Kay, 2012). To assess this possibility, I regressed political orientation, knowledge certainty, and their interaction on the ratings of the evidential sources of information. This model significantly predicted the ratings,  $R^2 = .105$ , F(3, 96) = 3.737, p = .014, and yielded a main effect of political orientation, b = -.167, SE = .085, t(96) = -1.974, p = .05. There was also a significant interaction between political orientation and belief that knowledge is certain, b = -.11, SE = .054, t(96) = -2.032, p < .05.

To illustrate this interaction, I graphed values at  $\pm 2$ SD political orientation and knowledge certainty. The interaction can be seen in Figure 5. To break down this interaction, I conducted a simple slope analysis. For participants who did not believe that knowledge was certain, the simple slope was not significant, b = .148, t(96) = .798, p = .427. Conservatives and liberals evaluated the evidential sources of information relatively equally when they did not believe knowledge was certain. For participants who did believe that knowledge was certain, the simple slope was significant, b = .482, t(96) = -3.187, p < .01. Among participants who believed knowledge was certain, conservatives gave lower evaluations of the evidential sources of information than did liberals.

Parallel analyses exploring the effects of political orientation and the individual differences (believe in a threatening world and belief that knowledge is certain) on the search for normative information sources yielded no significant effects.

Partner Selection

The partner selection measure was analyzed using a binary logistic regression. Political orientation did not significantly predict partner selection (b = .061, SE = .197, Wald(1) = .097, p = .76, odds ratio = 1.063).

#### Discussion

The results of Experiment 1 show that there are significant differences in the way in which conservatives and liberals evaluate sources of information. Conservatives were relatively more likely to evaluate the normative sources of information positively compared to liberals. For the evidential sources of information, liberals were relatively more likely to give positive evaluations compared to conservatives. These findings replicate previous research showing that individuals perceiving their decision making as intellective or judgmental evaluate information more positively when it fits their processing objectives (Kaplan, Schaefer, & Zinkiewicz, 1994).

Together, these findings provide initial evidence for differences in processing objectives between conservatives and liberals. Conservatives rated normative sources as more useful and the evidential sources as less useful in their decision making compared to liberals. Liberals, on the other hand, rated evidential sources as more useful than the normative sources. This pattern supports my hypotheses and fits with previous research indicating that conservatives value social harmony and conformity more than liberals do, whereas liberals value autonomy and openness to information more.

To test for a system justification effect, I also examined the way in which the information search of conservatives and liberals was affected by their belief that the world is threatening and that knowledge is certain. Although neither belief influenced participants' ratings of the normative sources, but both influenced their ratings of the evidential sources. I found that conservatives gave lower evaluations of the objective evidence than did liberals but only among

participants who did not see the world in threatening terms. Among those who believed the world was threatening, conservatives and liberals evaluated the objective evidence the same. It is unclear how this pattern fits with system justification theory. According to the theory, conservatives would be more likely than liberals to seek out system justifying information, and this would be especially true when they felt threatened. In Experiment 1, however, the difference between conservatives and liberals was seen when participants did not feel threatened and when they evaluated information that had no direct implications for the status quo. There is no a priori reason from a System Justification perspective why this should be the case. Further research is needed to integrate system justification theory with the kind of information search addressed in this research.

The belief that knowledge is certain also interacted with political orientation in predicting how participants evaluated the objective evidence. Not believing that knowledge is certain led to the same evaluations for conservatives and liberals. However, among participants who did believe knowledge was certain, conservatives tended to evaluate the objective evidence as less useful than did liberal participants. This means that what they interpreted certain knowledge to be was different across ideology. Conservatives thought that certain knowledge did not mean facts and data (i.e. objective evidence), contrasting the liberal position.

From a System Justification perspective, perceiving the world in threatening terms might heighten the need to justify the system. It is not clear, though, why this would be related to evaluations of the usefulness of objective sources of information that do not relate to cultural systems. Objectives sources could just as easily support the status quo as undermine it.

Furthermore, the data from Experiment 1 show that participants who did *not* believe the world was threatening evaluated the objective information differently. The same can be said of

knowledge certainty. It is not clear why seeing knowledge as certain would make conservatives less likely to value objective sources of information when liberals show increased endorsement of the same information. If fact, conservatives should prefer certain knowledge if they believed it supported the status quo (i.e. the medical establishment).

Because Experiment 1 was not designed explicitly to test predictions of System

Justification Theory, the results do not speak clearly to that theory. The results showed that two
variables relevant to System Justification Theory (threat, certainty) moderated the results, but the
implications for that moderation for the theory are not clear. The theory is focused primarily on
people's interest in information that supports or undermines the status quo and either evidential
or normative sources of information could do that.

#### CHAPTER 3

# EXPERIMENT 2: POLITICAL ORIENTATION AND THE USE OF OBJECTIVE VERSUS NORMATIVE INFORMATION

Experiment 1 showed that conservatives and liberals have different information preferences when making an uncertain decision about a medical dilemma. In order to strengthen the argument for different processing objectives for conservatives and liberals, I designed Experiment 2 to examine how evidential or normative information would influence participants' judgments. Previous research shows that participants use information in their judgments that fits with their intellective or judgmental processing goals (Kaplan & Martin, 1999, Kaplan & Miller, 1987, Rugs & Kaplan, 1993, Zanorth & Sniezek, 1996). Experiment 1 provided initial evidence that conservatives and liberals conceive of decision making in different terms by examining how they evaluate information sources. Experiment 2 will extend this distinction by demonstrating that information sources affect conservative and liberal participants' judgments in different ways based on their processing objectives.

In order to test this hypothesis, I gave participants an anchor to use in their judgments that came from either an objective source or from a normative source. Specifically, participants were told to make a judgment about what percentage chance of success in journalism a particular student should accept before going into that major. Half of the participants were told that their anchor came from objective national survey data, whereas the other half were told that their anchor came from subjective judgments of other university students. If there are differences in how conservatives and liberal construe decision making, I would expect to see differences in

how the anchors are used in their judgments. Conservatives, whom I propose view decision making as judgmental, should be relatively more likely to anchor closer to the normative source of information (e.g. other students) than liberals. Liberals, whom I propose view decision making as intellective, should be relatively more likely to anchor closer to the evidential source of information (e.g. national survey data) than conservatives. If this pattern were obtained, it would extend and conceptually replicate Experiment 1.

#### Method

#### **Participants**

177 undergraduates enrolled in introductory psychology courses completed the study for partial course credit.

#### Measures

Participants completed all of the measures in Study 1 with the exception of the Self Consciousness Scale Revised.

#### Procedure

As in Experiment 1, participants came to the study in groups of one to three. They were seated individually at a computer running Media Lab that was visually separated from the other participants. Participants initially completed the individual difference measures.

Next, participants were presented with an adapted version of Robert's Dilemma from previous research (Griffin & Buehler, 1993). The text of the dilemma read:

Robert Wilkins, a high school senior, has always enjoyed writing since he was very young and has even had a few articles printed in a local paper, suggesting he has considerable writing talent. As high school graduation approaches, Robert has the choice of taking an engineering school scholarship, a profession which would

bring certain prestige and financial rewards, or entering a journalism school and work with well-known writers. Robert realizes that even upon completion of his journalism studies, which would take many years and a considerable amount of money, success as a news writer would not be assured.

What is the LOWEST probability of success as a news writer that would make it worthwhile for Robert to go to the journalism school (rather than the engineering school)?

Before giving their judgment of the lowest acceptable probability, participants were primed with one of four anchors. Two anchors came from a social source (e.g. other UGA students) and should fit more with consensus goals. The other two anchors came from an evidential source (e.g. independent study data) and should fit with accuracy goals. For each of these sets, one anchor was high (e.g. 80% chance of success) and one anchor was low (e.g. 20% chance of success). The anchors are provided in Appendix D. Participants then indicated the lowest probability of success Robert should accept before pursuing the major he really wants.

Participants then completed a measure of their construal of Robert's situation, also adapted from Griffin and Buehler (1993). The construal measure is included in Appendix E. Finally, participants were debriefed and dismissed from the study.

#### Results

Correlations Among Individual Difference Variables and Dependent Measure

As in Experiment 1, I first conducted correlation analyses of the individual difference variables with political orientation (higher numbers represent a more conservative orientation). Unlike Experiment 1, the Parental Authority Questionnaire Authoritarian (r(175) = .213, p < .01) and Flexible (r(175) = .148, p < .05) subscales reached significance when correlated with

political orientation, indicating that conservative participants thought their parents were relatively more authoritarian (i.e. normative in their parenting) and flexible (i.e. accommodating to their needs). In addition, the Permissive parenting subscale of the Parenting Style scale was significantly correlated with political orientation (r(175) = -.176, p < .05) indicating that liberals felt their parents were relatively more permissive than did conservative participants. The finding that conservatives reported more authoritarian finding replicates some previous research by Fraley and colleagues (2012). These values did not correlate or interact with the main dependent measure.

In terms of values, the data in Experiment 2 replicate some of the data from Experiment 1. Power (r(175) = .168, p < .05), conformity (r(175) = .324, p < .01), and tradition (r(175) = .247, p < .01) were all positively correlated with political orientation, indicating that conservatives valued these areas relatively more than liberals. Conversely, universalism (r(175) = .413, p < .01) was negatively correlated with political orientation, indicating that liberals valued the positions of others relatively more than conservatives. Experiment 2 failed to replicate significant correlations between political orientation and valuing self-direction and benevolence. These values did not correlate or interact with the main dependent measure.

Political orientation was also positively correlated with belief that the world was dangerous (r(175) = .228, p < .01) and the belief that knowledge was certain (r(175) = .366, p < .01).

#### Main Analysis

This study presented participants with one of four potential anchors for their judgments.

Two came from objective, factual sources (e.g. data reports). Two came from normative, social sources (e.g. other students' opinions). If liberals perceive their decision making as intellective,

they should be more likely to use information from an objective source and should anchor closer to it. On the other hand, if conservatives perceive their decision making as judgmental, they should be more likely to use information from a normative source and anchor closer to it.

Political Orientation and Use of Information

27 participants (17.9%) in the study had to be dropped for failing to follow directions. These participants answered the question of the lowest acceptable percentage of success for Robert with uninterpretable answers such as, "yes," "no," or "he should pick what he wants." Because no percentage would make sense for these answers, these participants were dropped from the main analysis. A  $\chi$ 2 test of independence across conditions was non-significant,  $\chi$ 2 (3, N = 27) = 1.89, p = .60, indicating that the participants were not missing at a significant rate differently by condition.

This left 149 participants across four conditions to analyze. Only the high normative anchor yielded significant results,  $R^2 = .155$ , F(1, 37) = 6.812, p = .01. Conservatives recommended significantly higher percentages than did liberals when primed with this anchor (b = 7.341, SE = 2.813, t(37) = 2.61, p = .01). The pattern of results, at  $\pm 2$ SD of political orientation can be seen in Figure 6. This result is consistent with predictions but the lack of significant differences in any of the other comparisons and the large number of participants who made mistakes answering the questions suggests that there were problems with the study.

#### Moderation of the Effect

Belief in a threatening world did not interact with political orientation to predict the percentage chances of success participants indicated for Robert. The belief that knowledge is certain, did however,  $R^2 = .27$ , F(3, 35) = 4.318, p = .01. A main effect for political orientation emerged, b = 8.001, SE = 2.979, t(35) = 2.686, p = .01. This main effect was qualified by a

significant interaction between the belief that knowledge is certain and political orientation, b = -4.472, SE = 1.908, t(35) = -2.344, p < .05. The pattern of results, at  $\pm 2$ SD of political orientation and belief that knowledge is certain can be seen in Figure 7. To break down this interaction, I conducted a simple slope analysis. For participants who were high in the belief that knowledge is certain, there was no significant difference between conservatives and liberals in the percentage chances of success they indicated for Robert, b = -4.262, t(35) = -.8, p = .429. However, for participants who were low in the belief that knowledge is certain, conservatives tended to give higher percentage chances of success for Robert than did liberals, b = 20.264, t(35) = 3.47, p < .01. Conservative participants who were low in the belief that knowledge is certain were most influenced by the anchor they were provided.

#### Discussion

Overall, Experiment 2 was only partially successful. Although there was a difference between conservatives and liberals the normative-high anchor condition and many of the correlations among the values replicated earlier work, most of the results were not significant. Conservatives who were low in the belief that knowledge is certain anchored their judgments very closely to the provided social information. Liberals who were low in the belief that knowledge is certain gave very distant judgments about Robert's chances of success. Because this was not replicated across conditions, I am hesitant to speculate about what this may mean. In addition, a large number of participants had to be dropped from the study.

The most likely explanation for the failure is the lack of understanding on the part of the participants. Although the instructions and procedure for the anchoring task had been used successfully in previous research (Griffin & Buehler, 1993), our participants seemed to have

trouble understanding what to do. 17.9% of our participants responded in an inappropriate, nonsensical way.

#### **CHAPTER 4**

#### **GENERAL DISCUSSION**

The findings of my dissertation provide some evidence that conservatives and liberals differ in how they construe decision making. The results of Experiment 1 suggest that conservatives are more likely to view decision making as a judgmental matter, whereas liberals are more likely to view decision making as an intellective matter. As such, conservatives are likely to view decision making as a function of values and preferences and perceive that information as relatively more useful than do liberals. Liberals, on the other hand, tend to find objective, factual sources of information useful in their decision making.

That these differences in values exist is not surprising given previous research and in observing political discourse. Liberals and conservatives rarely view political decisions in a similar way. Take, for instance, the issue of support (or lack thereof) for teaching the theory of evolution in schools. For conservatives, this is an affront to religious values and beliefs.

Conservatives tend to emphasize that evolution is, "Just a theory," and that creationist views of world creation should be taught alongside evolution in schools. If a person were viewing this decision as a judgmental matter, this reasoning makes perfect sense. Recall that people use normative influence in order to express personal values and to produce group consensus. That seems to be what conservatives are doing on the issue of teaching evolution. Conservatives view evolution as one perspective about how humanity came into existence that they disagree with, and so use normative influence to express their own views and suppress others. On the other hand, for liberals the issue seems clear: science unequivocally supports the theory of

evolution. Liberals do not see the issue as a matter of comparing views; rather, it is a matter of what objective evidence supports. Thus, for liberals, there is no conflict on the issue and they tend to view the conservative viewpoint as one that "denies reality."

In short, when making decisions in life, conservatives are likely to be people-focused, whereas liberals are likely to be problem-focused. For conservatives, the people that they turn to – their in-group – are likely to have useful perspective on a valued, group-centered judgment. For liberals, the problem can be roughly considered "out there in reality," rather than socially determined.

Moreover, the results of my dissertation indicate that information does not have one value. Information has value in the context of a goal. Re-consider the issue of the colleagues deciding on where to eat lunch. If they are construing the decision as about an objective reality, then they need evidence about that reality to make a decision. If they are construing the decision as about the preferences of the group, then they need to assess everyone's judgments and come to consensus. My data suggest a case for this difference in interpretation of decisions for liberals and conservatives at a broader level than just political decision making. So, if the person making the decision is conservative or liberal, it is likely that she may be more likely to make her decision based on one set of information versus the other.

#### Limitations and Future Directions

Not all of the data were successful, however. The data from Experiment 2 largely did not fit with my predictions. The correlations between political orientation and values were somewhat similar to Experiment 1, but did not replicate the correlations between self-direction and benevolence. Furthermore, the answers many participants gave for their responses to

Robert's Dilemma were uninterpretable or the remaining results were mostly non-significant when regressed on political orientation.

Therefore, at least one follow up study would be meaningful to extend the work of Experiment 1. The study I propose would be roughly a replication of Rugs and Kaplan (1993). Recall that Rugs and Kaplan showed that people who viewed their decision making in an intellective way were most persuaded by fact-based arguments, whereas people who viewed their decision making in a judgmental way were most persuaded by values-based arguments. I would replicate this study using political orientation as my exogenous variable in place of an experimental manipulation. Participants would be told that they would be evaluating arguments to be presented to the Board of Regents on whether it would be a good idea to increase parking fees on campus. They would read through a series of five arguments that came from either objective sources (e.g. research reports) or from social sources (e.g. faculty opinions). The dependent measure of this study would be how convinced liberals and conservatives would be by these two types of arguments.

The results addressing system justification theory were also somewhat uninformative, at least with regard to the theory. I found that conservatives preferred evidential sources of information less than liberals, but this pattern was significant only amount participants who did not believe the world was threatening and who believed knowledge was certain. System justification does not provide an obvious explanation for this pattern. Evidential sources of information could support or threaten the status quo. The problem facing participants in Experiment 1 was a moral dilemma for which no previously learned cultural knowledge should apply. Therefore, it is unclear why any of the information sources would have an impact on

support for social systems, as they specifically pertained to the hypothetical dilemma and the hypothetical people involved.

From a system justification perspective, it is not clear why conservatives would show a uniform dislike for such information and it is not clear why their dislike would be stronger if they did not believe the world was hostile or that knowledge was certain. More broadly, the results are consistent with previous research demonstrating that conservatives value social harmony, whereas liberals value openness in searching for information. Future studies could test implications of system justification Theory more directly, perhaps by manipulating the extent to which the sources of information support or threaten the status quo.

#### Conclusions

In conclusion, my dissertation provides the first suggestive evidence of differences in processing objectives for liberals and conservatives. Conservatives tend to focus on information about how people (e.g. their in-group) evaluate a decision and give what they think is the "right" answer; liberals tend to be focused on information about the objective problem itself. This has implications for political orientation literature in that very little has looked at basic differences in how liberals and conservatives construe decision making contexts.

#### REFERENCES

- Altemeyer, B. (1981). *Right-wing authoritarianism*. Winnipeg, Canada: University of Manitoba Press.
- Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco, CA, US: Jossey-Bass.
- Asch, S. E. (1956). Studies of independence and conformity: I. A minority of one against a unanimous majority. *Psychological Monographs: General and Applied*, 70, 1-70.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph*, 4, 1-103.
- Buri, J. R. (1991). Parental authority questionnaire. *Journal of Personality Assessment*, 57, 110-119.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology*, 42, 116-131.
- Calogero, R. M., & Jost, J. T. (2011). Self-subjugation among women: Exposure to sexist ideology, self-objectification, and the protective function of the need to avoid closure. *Journal of Personality and Social Psychology*, 100, 211-228.
- Caprara, G. V., Barbaranelli, C., & Zimbardo, P. G. (1999). Personality profiles and political parties. *Political Psychology*, *20*, 175-197.
- Caprara, G. V., Schwartz, S., Capanna, C., Vecchione, M., & Barbaranelli, C. (2006).

  Personality and politics: values, traits, and political choice. *Political Psychology*, 27, 1-28.
- Carney, D. R., Jost, J. T., Gosling, S. D., & Potter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology*, *29*, 807-840.
- Cavazza, N., & Mucchi-Faina, A. (2008). Me, us, or them: who is more conformist? Perception of conformity and political orientation. *The Journal of Social Psychology*, *148*, 335-345.
- Davidov, E., Schmidt, P., & Schwartz, S. H. (2008). Bringing values back in: The adequacy of the European social survey to measure values in 20 countries. Public Opinion Quarterly, 72, 420-445.
- Deutsch, M. & Gerard, H. B. (1955). A study of normative and informational social influences on individual judgment, *The Journal of Abnormal and Social Psychology*, *59*, 629-636.

- Duriez, B., & van Hiel, A. (2002). The march of modern fascism: A comparison of social dominance orientation and authoritarianism. *Personality and Individual Differences*, 32, 1199-1213.
- Feldman, S. (2003). Enforcing social conformity: A theory of authoritarianism. *Political Psychology*, 24, 41-74.
- Feygina, I., Jost, J. T., & Goldsmith, R. E. (2009). System justification, the denial of global warming, and the possibility of "system sanctioned change." *Personality and Social Psychology Bulletin*, *36*, 326-338.
- Fraley, R. C., Griffin, B. N., Belsky, J., & Roisman, G. I. (2012). Developmental antecedents of political ideology: A longitudinal investigation from birth to age 18 years. *Psychological Science*, 23, 1425-1431.
- Gibbons, F. X., & Wright, R. A. (1983). Self-focused attention and reactions to conflicting standards. *Journal of Research in Personality*, 17, 263-273.
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, *96*, 1029-1046.
- Griffin, D. & Buehler, R. (1993). Role of construal processes in conformity and dissent. *Journal of Personality and Social Psychology*, 65, 657-669.
- Haidt, J. (2001). The emotional dog and its rational tail: a social intuitionist approach to moral judgment. *Psychological Review*, 108, 814-834.
- Janoff-Bulman, R. (2009). To provide or protect: motivational bases of political liberalism and conservatism. *Psychological Inquiry*, 20, 120-128.
- Janoff-Bulman, R., Sheikh, S., & Baldacci, K. G. (2008). Mapping moral motives: approach, avoidance, and political orientation. *Journal of Experimental Social Psychology*, 44, 1091-1099.
- Jost, J. T., & Hunyady, O. (2002). The psychology of system justification and the palliative function of ideology. *European Review of Social Psychology*, 13, 111–153.
- Jost, J. T., Pelham, B. W., Sheldon, O., & Sullivan, B. N. (2003). Social inequality and the reduction of dissonance on behalf of the system: Evidence of enhanced system justification among the disadvantaged. *European Journal of Social Psychology*, 33, 13-36.
- Jugert, P., Cohrs, J. C., Duckitt, J. (2009). Inter- and intrapersonal processes underlying authoritarianism: The role of social conformity and personal need for structure. *European Journal of Personality*, 23, 607-621.

- Kaplan, M. F., & Martin, A. M. (1999). Effects of differential status of group members on process and outcome of deliberation. *Group Processes & Intergroup Relations*, 2, 347-364.
- Kaplan, M. F., & Miller, C. E. (1987). Group decision making and normative versus informational influence: Effects of type of issue and assigned decision rule. *Journal of Personality and Social Psychology*, *53*, 306-313.
- Kaplan, M. F., Schaefer, E. G., & Zinkiewicz, L. (1994). Member preferences for discussion content in anticipated group decisions: Effects of type of issue and group interactive goal. *Basic and Applied Social Psychology*, *15*, 489-508.
- Kaplan, M. F., & Wilke, H. (2001). Cognitive and social motivation in group decision making. In: J. P. Forgas, K. D. Williams, & L. Wheeler (Eds.); *The social mind: Cognitive and motivational aspects of interpersonal behavior* (pp. 406-428). New York, NY, US: Cambridge University Press.
- Kay, A. C., & Jost, J. T. (2003). Complementary justice: Effects of "poor but happy" and "poor but honest" stereotype exemplars on system justification and implicit activation of the justice motive. *Journal of Personality and Social Psychology*, 85, 823-837.
- Kirchler, E., & Davis, J. H. (1986). The influence of member status differences and task type on group consensus and member position change. *Journal of Personality and Social Psychology*, *51*, 83-91.
- Kruglanski, A. W. & Mayseless, O. (1987). Motivational effects in the social comparison of opinions. *Journal of Personality and Social Psychology*, *53*, 834-842.
- Laughlin, P. R. (1980). Social combination processes of cooperative problem-solving groups on verbal intellective tasks. In M. Fishbein (Ed.), *Progress in social psychology*, (Vol. 1, pp. 127-155). Hillsdale, NJ: Erlbaum.
- Laughlin, P. R., & Ellis, A. L. (1986). Demonstrability and social combination processes on mathematical intellective tasks. *Journal of Experimental Social Psychology*, 22, 177-189.
- Lavine, H., Burgess, D., Snyder, M., Transue, J., Sullivan, J. L., Haney, B., & Wagner, S. H. (1999). Threat, authoritarianism, and voting: An investigation of personality and persuasion. *Personality and Social Psychology Bulletin*, 25, 337-347.
- Leary, M. R., Shepperd, J. A., McNeil, M. S., Jenkins, T. B., & Barnes, B. D. (1986). Objectivism in information utilization: Theory and measurement. *Journal of Personality Assessment*, 50, 32-43.
- Ledgerwood, A., Mandisodza, A. N., Jost, J. T., & Pohl, M. J. (2011). Working for the system: motivated defense of meritocratic beliefs. *Social Cognition*, 29, 322-340.

- Margulies, R. Z., Kessler, R. C., & Kandel, D. B. (1977). A longitudinal study of onset of drinking among high-school students. *Journal of Studies on Alcohol*, *38*, 897-912.
- Napier, J. L., Jost J. T. (2008). Why are conservatives happier than liberals? *Psychological Science*, 19, 565–72.
- Nathanson, C. A., & Becker, M. H. (1981). Professional norms, personal attitudes, and medical practice: The case of abortion. *The Journal of Health and Social Behavior*, 22, 198-211.
- Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports of mental processes. *Psychological Review*, *84*, 231-259.
- Petrinovich, L. & O'Neill, P. (1996). Influence of wording and framing effects on moral intuitions. *Ethology and Sociobiology*, 17, 145-171.
- Piurko, Y., Schwartz, S. H., & Davidov, E. (2011). Basic personal values and the meaning of left-right political orientations in 20 countries. *Political Psychology*, *32*, 537-561.
- Postmes, T., Spears, R., & Cihangir, S. (2001). Quality of decision making and group norms. *Journal of Personality and Social Psychology*, 80, 918-930.
- Robinson, R. J., Keltner, D., Ward, A., & Ross, L. (1995). Actual versus assumed differences in construal: 'Naive realism' in intergroup perception and conflict. *Journal of Personality and Social Psychology*, 68, 404-417.
- Rugs, D., & Kaplan, M. F. (1993). Effectiveness of informational and normative influences in group decision making depends on the group interactive goal. *British Journal of Social Psychology*, 32, 147-158.
- Scheier, M. F., & Carver, C. S. (1985). The self-consciousness scale: A revised version for use with general populations. *Journal of Applied Social Psychology*, 15, 687-699.
- Schraw, G., Bendixen, L. D., & Dunkle, M. E. (2002). Development and validation of the epistemic beliefs inventory (EBI). In Hofer, B. K., & Pintrich, P. R. (Eds.), *Personal epistemology: The psychology of beliefs about knowledge and knowing.* (pp. 261-275). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Shepherd, S. & Kay, A. C. (2012). On the perpetuation of ignorance: System dependence, system justification, and the motivated avoidance of sociopolitical information. *Journal of Personality and Social Psychology*, 102, 264-280.
- Sherif, M. (1935). A study of some social factors in perception. *Archives of Psychology* (*Columbia University*), 187, 60.
- Shook, N. J., & Fazio, R. H. (2009). Political ideology, exploration of novel stimuli, and attitude formation. *Journal of Experimental Social Psychology*, 45, 995-998.

- Sidanius, J. (1978). Intolerance of ambiguity and socio-political ideology: a multi-dimensional analysis. *European Journal of Social Psychology*, 8, 215-235.
- Sistrunk, F., & Halcomb, C. G. (1969). Liberals, conservatives, and conformity. *Psychonomic Science*, 17, 349-350.
- Stasser, G., & Stewart, D. (1992). Discovery of hidden profiles by decision making groups: solving a problem versus making a judgment. *Journal of Personality and Social Psychology*, 63, 426-434.
- Tetlock, P. E. (1983). Cognitive style and political belief systems in the British House of Commons. *Journal of Personality and Social Psychology*, 46, 365-375.
- Tetlock, P. E. (1986). A value pluralism model of ideological reasoning. *Journal of Personality and Social Psychology*, *50*, 819-827.
- Thomsen, L., Green, E. G. T., & Sidanius, J. (2008). We will hunt them down: How social dominance orientation and right-wing authoritarianism fuel ethnic persecution of immigrants in fundamentally different ways. *Journal of Experimental Social Psychology*, 44, 1455-1464.
- Thorisdottir, H., Jost, J. T., Liviatan, I., & Shrout, P. E. (2007). Psychological needs and values underlying left-right political orientation: cross-national evidence from eastern and western Europe. *Public Opinion Quarterly*, *71*, 175-203.
- Tittle, C. R., Welch, M. R., & Grasmick, H. G. (2008). Self-control, political ideology, and misbehavior: Unpacking the effects of conservative identity. *Sociological Spectrum*, 28, 4-35.
- Vidulich, R. N., & Kaiman, I. P. (1961). The effects of information source status and dogmatism upon conformity behavior. *The Journal of Abnormal and Social Psychology*, *63*, 639-642.
- Wilson, G. D., Ausman, J. M., & Matthews, T. R. (1973). Conservatism and art preferences. *Journal of Personality and Social Psychology*, 25, 286-288.
- Zanorth, P., & Sniezek, J. A. (1997). The social influence of confidence in group decision making. *Journal of Experimental Social Psychology*, *33*, 345-366.

# APPENDIX A – INDIVIDUAL DIFFERENCE MEASURES

## Political Orientation Scale

Indicate your attitude toward each of the following issues:

	Overa	ıll, I wo	uld co	nsider r	nyself		
1	2	3	4	5	6	7	
Very		M	Ioderat	te		Very	
Libera	ıl			(	Conser	vative	
		Dea	th Pen	alty			
1	2	3	4	5	6	7	
Negati	ve				P	ositive	
		Internet	t porno	graphy	,		
1	2	3	4	5	6	7	
Negati	ve				P	ositive	
		Bannii	ng Han	dguns			
1	2	3	4	5	6	7	
Negati	ve				P	ositive	
		Ab	stract A	Art			
1	2	3	4	5	6	7	
Negati	ve				P	ositive	
		Fe	eminis	m			
1	2	3	4	5	6	7	
Negati	ve				P	ositive	
		Affirm	native A	Action			
1	2	3	4	5	6	7	
Negati	ve				P	ositive	
		De	emocra	ıts			
1	2	3	4	5	6	7	
Negati	ve					ositive	
1	2		publica 4		(	7	
1 Nagati	2	3	4	5	6 D	7	
Negati	ve				Р	ositive	

**Banning Abortion** 

Property Tax  1 2 3 4 5 6 7  Negative Positive									
1 2 3 4 5 6 7									
Negative Positive									
	e								
Same Sex Marriage									
1 2 3 4 5 6 7									
Negative Positive	e								
Liberals 1 2 3 4 5 6 7									
Negative Positive	e								
-	-								
Conservatives									
1 2 3 4 5 6 7 Negative Positive	_								
Negative Positive	e								
<b>Tougher Immigration Laws</b>									
1 2 3 4 5 6 7									
Negative Positive	e								
Capitalism									
1 2 3 4 5 6 7									
Negative Positive	e								
School Prayer									
1 2 3 4 5 6 7									
Negative Positive	e								
Cogialism									
Socialism 1 2 3 4 5 6 7									
Negative Positive	e								
	Toshive								
Stem Cell Research									
1 2 3 4 5 6 7 Negative Positive	^								
negative 1 ostitvi	C								
Universal Health Care									
1 2 3 4 5 6 7									
Negative Positive									
Barack Obama									
1 2 3 4 5 6 7									

Negative Positive

George Bush

1 2 3 4 5 6 7 Negative Positive

### Parental Authority Questionnaire

*Instructions:* For each of the following statements, circle the number of the 5-point scale (1 = strongly disagree, 5 = strongly agree) that best describes how that statement applies to you and your mother. Try to read and think about each statement as it applies to you and your mother during your years of growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Neither agree nor disagree
- 4 = Agree
- 5 = Strongly Agree

1.	While I was growing up my mother felt that in a well-run home		2	3 4	5
	the children should have their way in the family as often as the				
	parents do.				
2.	Even if her children didn't agree with her, my mother felt that it		2	3 4	5
	was for our own good if we were forced to conform to what she				
	thought was right.				
3.	Whenever my mother told me to do something as I was growing		2	3 4	5
	up, she expected me to do it immediately without asking any				
	questions.				
4.	As I was growing up, once family policy had been established,		2	3 4	5
	my mother discussed the reasoning behind the policy with the				
	children in the family.				
5.	My mother has always encouraged verbal give-and-take	1	2	3 4	5
	whenever I have felt that family rules and restrictions were				
	unreasonable.				
6.	My mother has always felt that what her children need is to be	1	2	3 4	5
	free to make up their own minds and to do what they want to do,				
	even if this does not agree with what their parents might want.				
7.	As I was growing up my mother did not allow me to question any	1	2	3 4	- 5
	decision she had made.				
8.	As I was growing up my mother directed the activities and	1	2	3 4	- 5
	decisions of the children in the family through reasoning and				
	discipline.				
9.	My mother has always felt that more force should be used by	1	2	3 4	. 5
	parents in order to get their children to behave the way they are				
	supposed to.				
10.	As I was growing up my mother did not feel that I needed to		2	3 4	5
	obey rules and regulations of behavior simply because someone				
	in authority had established them.				
11.	As I was growing up I knew what my mother expected of me in	1	2	3 4	5

	my family, but I also felt free to discuss those expectations with my mother when I felt that they were unreasonable.	
12.	My mother felt that wise parents should teach their children early just who is boss in the family.	1 2 3 4 5
13.	As I was growing up, my mother seldom gave me expectations and guidelines for my behavior.	1 2 3 4 5
14.	Most of the time as I was growing up my mother did what the children in the family wanted when making family decisions.	1 2 3 4 5
15.	As the children in my family were growing up, my mother consistently gave us direction and guidance in rational and objective ways.	
16.	As I was growing up my mother would get very upset if I tried to disagree with her.	1 2 3 4 5
17.	My mother feels that most problems in society would be solved if parents would <i>not</i> restrict their children's activities, decisions, and desires as they are growing up.	1 2 3 4 5
18.	As I was growing up my mother let me know what behavior she expected of me, and if I didn't meet those expectations, she punished me.	1 2 3 4 5
19.	As I was growing up my mother allowed me to decide most things for myself without a lot of direction from her.	1 2 3 4 5
20.	As I was growing up my mother took the children's opinions into consideration when making family decisions, but she would not decide for something simply because the children wanted it.	1 2 3 4 5
21.	My mother did not view herself as responsible for directing and guiding my behavior as I was growing up.	1 2 3 4 5
22.	My mother had clear standards of behavior for the children in our home as I was growing up, but she was willing to adjust those standards to the needs of each of the individual children in the family.	1 2 3 4 5
23.	My mother gave me direction for my behavior and activities as I was growing up and she expected me to follow her direction, but she was always willing to listen to my concerns and to discuss that direction with me.	
24.	As I was growing up my mother allowed me to form my own point of view on family matters and she generally allowed me to decide for myself what I was going to do.	1 2 3 4 5
25.	My mother has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up.	1 2 3 4 5
26.	As I was growing up my mother often told me exactly what she wanted me to do and how she expected me to do it.	1 2 3 4 5
27.	As I was growing up my mother gave me clear direction for my behaviors and activities, but she was also understanding when I disagreed with her.	1 2 3 4 5

28.	As I was growing up my mother did not direct the behaviors,	1 2 3 4 5
	activities, and desires of the children in the family.	
29.	As I was growing up I knew what my mother expected of me in	1 2 3 4 5
	the family and she insisted that I conform to those expectations	
	simply out of respect for her authority.	
30.	As I was growing up, if my mother made a decision in the family	1 2 3 4 5
	that hurt me, she was willing to discuss that decision with me and	
	to admit it if she had made a mistake.	

## Parenting Style

Rate the extent to which each of the following statements describes the way your parents (or primary caretakers) treated you as you were growing up.

1. They set few rules and expectations for me.

1 2 3 4 5 6 7 Not True

2. They were in charge and enforced the rules, no matter what.

1 2 3 4 5 6 7 Not True

3. They were inconsistent in disciplining me.

4. They considered my wishes and opinions along with theirs when making decisions.

5. For them, discipline usually meant punishment.

1 2 3 4 5 6 7 Not True

6. They dealt with misbehavior directly but not harshly.

1 2 3 4 5 6 7 Not True

7. They rewarded me f	for acting a	approp	riately	<b>'.</b>			
	1 Not True	2	3	4	5	6	7 True
8. They ignored most of	of my inap	propri	ate bel	havior	as nor	mal.	
	1 Not True	2	3	4	5	6	7 True
9. They seemed to kee	p their ann	oyanc	e and	anger	about	my be	ehavior to themselves.
	1 Not True	2	3	4	5	6	7 True
10. They valued my so	chool achie	vemei	nt and	suppo	rted m	y effo	orts.
	1 Not True	2	3	4	5	6	7 True
11. I think they were o	ccasionall	y over	whelm	ned an	d almo	st rea	dy to give up on me.
	1 Not True	2	3	4	5	6	7 True
12. They often gave in to my arguing, whining and other demands.							
	1 Not True	2	3	4	5	6	7 True
13. They made most of my decisions for me, even those that would have been developmentally appropriate for me to make.							

	Tru	Not e		3	4	5	6	7 True
14.	They often expressed a	nger to	oward 1	ne.				
	Tru	Not	2	3	4	5	6	7 True
15.	They expected me to ac	ct inde	pender	ıtly, at	an age	e-appro	opriat	e level.
	Tru	Not	2	3	4	5	6	7 True
16.	They strongly valued n	ny free	expres	ssion o	f wish	es and	impı	ılses.
	Tru	Not	2	3	4	5	6	7 True
17.	They used strong and f	requen	t physi	cal pu	nishm	ent.		
	Tru	Not	2					7 True
18.	They supported my con	nstructi	ve, res	ponsib	ole beh	avior.		
	Tru	1 Not e	2	3	4	5	6	7 True
19.	They communicated ru	ules cle	early aı	nd dire	ctly.			

	1	2	3	4	5	6	/
	Not						True
T	rue						

20. Many of their rules were general rather than specific. I rarely knew what they really meant.

21. They spent little time with me.

#### Schwartz Values Scale

Here we briefly describe some people. Please read each description and think about how much each person is or is not like you. Indicate the number that matches how much the person in the description is like you.

#### HOW MUCH LIKE YOU IS THIS PERSON?

Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
1	2	3	4	5	6

- 1. Thinking up new ideas and being creative is important to her. She likes to do things in her own original way.
- 2. It is important to her to be rich. She wants to have a lot of money and expensive things.
- 3. She thinks it is important that every person in the world be treated equally. She believes everyone should have equal opportunities in life.
- 4. It's important to her to show her abilities. She wants people to admire what she does.
- 5. It is important to her to live in secure surroundings. She avoids anything that might endanger her safety.
- 6. She likes surprises and is always looking for new things to do. She thinks it is important to do lots of different things in life.
- 7. She believes that people should do what they're told. She thinks people should follow rules at all times, even when no-one is watching.
- 8. It is important to her to listen to people who are different from her. Even when she disagrees with them, she still wants to understand them.
- 9. It is important to her to be humble and modest. She tries not to draw attention to herself.
- 10. Having a good time is important to her. She likes to "spoil" herself.
- 11. It is important to her to make her own decisions about what she does. She likes to be free to plan and not depend on others.
- 12. It's very important to her to help the people around her. She wants to care for their well-being.
- 13. Being very successful is important to her. She hopes people will recognize her achievements.
- 14. It is important to her to be rich. She wants to have a lot of money and expensive things.
- 15. She looks for adventures and like to take risks. She wants to have an exciting life.

- 16. It is important to her always to behave properly. She wants to avoid doing anything people would say is wrong.
- 17. It is important to her to get respect from others. She wants people to do what she says.
- 18. It is important to her to be loyal to her friends. She wants to devote herself to people close to her.
- 19. She strongly believes that people should care for nature. Looking after the environment is important to her.
- 20. Tradition is important to her. She tries to follow the customs handed down by her religion or her family.
- 21. She seeks every chance she can to have fun. It is important to her to do things that give her pleasure.

# Belief That Knowledge is Certain

1. What is true today will be true tomorrow.

2. False

1. True

1. True

2. False

2.	The moral rules I	live by apply to everyone.
	1. True	2.71
3.	If two people are a	arguing about something, then one of them must be wrong.
	1. True	2. False
4.	Working on a prol	blem with no quick solution is a waste of time.
	1. True	2. False
5.	If you don't under	stand something the first time going back over it won't help.
	1. True	2. False
6.	Instructors should	focus on facts rather than theories.
	1. True	2. False
7.	Too many theories	s just complicate things.
	1. True	2. False
8.	Things are simple	r than most professors would have you believe.
	1. True	2. False
9.	When someone in	authority tells me what to do, I usually do it.

# Objectivism Scale

I seek as much information as possible before making decisions.

1	2	3	4	5				
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extermely characteristic of me				
I think the answers to most questions in life can be found through careful, objective analysis of the situation.								
1	2	3	4	5				
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extermely characteristic of me				
I de	o not like to be to	o objective in the	way I look at thin	igs.				
1	2	3	4	5				
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extermely characteristic of me				
Trying to be hig	hly objective and	rational does not decisions.	improve my abili	ty to make good				
1	2	3	4	5				
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extermely characteristic of me				
I see myself as a rational and objective person.								
1	2	3	4	5				
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extermely characteristic of me				

After I make a decision, it is often difficult for me to give logical reasons for it.									
1	2	3	4	5					
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extermely characteristic of me					
I gather as much information as possible before making decisions.									
1	2	3	4	5					
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extermely characteristic of me					
The solution to man	ny problems in life	e can <i>not</i> be found of the facts.	through an intel	lectual examination					
1	2	3	4	5					
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extermely characteristic of me					
I try to employ a c	ool-headed, object	ctive approach wh	en making decisi	ons about my life.					
1	2	3	4	5					
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extermely characteristic of me					
I am only confident of decisions that are made after careful analysis of all available information.									
1	2	3	4	5					
Not at all characteristic of me	Slightly characteristic of me	Moderately characteristic of me	Very characteristic of me	Extermely characteristic of me					
I tend not	to be particularly	objective or logi	cal in my approac	ch to life.					
1	2	3	4	5					

Not at all Slightly Moderately Very Extermely characteristic of me of me of me of me

# Belief that the World is Threatening

Rate the extent to which you goree or disagree with each of the following statements

1. Although it may really isn't so. Ever		_			_		-	
life are better today	than ever befor				_	_	_	
	1	2	3	4	5	6	7	
	Disagree					A	gree	
	Strongly						Strongly	
2. Any day now cha	os and anarchy	z coule	d erunt	around	us. All	I the sig	ns are poi	nting to it.
_,,,,,,,,,,	1	2	3	4	5	6	7	
	Disagree					$\mathbf{A}_{i}$	gree	
	Strongly						Strongly	
3. There are many d		le in c	our soc	iety wh	o will at	ttack sc	omeone out	of pure
meanness, for no rea		2	2	4	_		7	
	1	2	3	4	5	6	7	
	Disagree					Α	gree	
	Strongly						Strongly	
4. Despite what one there ever has been.	hears about "c	erime i	in the s	treet" tl	nere pro	bably i	sn't any m	ore now than
	1	2	3	4	5	6	7	
	Disagree					Ag	gree	
	Strongly						Strongly	
5. If a person takes We do not live in a c		-	itions,	nothing	bad is	likely t	o happen to	him or her.
,, o do not nyo m w	1	2	3	4	5	6	7	
	Disagree					$\mathbf{A}_{i}$	gree	
	Strongly					,	Strongly	
6. Every day as sociassaulted, and even	-						chances of	f being robbed
	1	2	3	4	5	6	7	
	Disagree					Α	gree	
	Strongly	7					Strongly	
7. My knowledge an and secure place in v							e in is basic	cally a safe stal
	4	_	_		_	_	_	

1	2	3	4	5	6	7	
Disagree					A	gree	
Strongly	,					Strongly	Į

7

Strongly

Agree

6

9. The "end" is not near. People v	who th	nink tha	t earthq	uakes, v	vars, ar	ıd famine	s means	God	
might be about to destroy the worl	d are	being fo	olish.						
1	2	3	4	5	6	7			
Disagree		Agree							
Strongl		Strongly							
10. My knowledge and experience tell me that the social world we live in is basically a dangerous and unpredictable place, in which good, decent, and moral people's values and way of									
life are threatened and disrupted by	y bad	people.							
1	2	3	4	5	6	7			
Disagree				Agree					
Strongly				Strongly					

8. It seems that every year there are fewer and fewer truly respectable people, and more and

3

more person with no morals at all who threaten everyone else.

Strongly

2

1

Disagree

#### Self Consciousness Scale Revised

Please answer the following questions about yourself by selecting one of the numbers available. For each of the statements, indicate how much each statement is like you by using the following scale:

- 3 = a lot like me
- 2 =somewhat like me
- 1 = a little like me
- 0 = not like me at all

Please be as honest as you can throughout, and try not to let your responses to one question influence your response to other questions. There are no right or wrong answers.

- 1. I'm always trying to figure myself out.
- 2. I'm concerned about my style of doing things
- 3. It takes me time to get over my shyness in new situations.
- 4. I think about myself a lot.
- 5. I care a lot about how I present myself to others.
- 6. I often daydream about myself.
- 7. It's hard for me to work when someone is watching me.
- 8. I never take a hard look at myself.
- 9. I get embarrassed very easily.
- 10. I'm self-conscious about the way I look.
- 11. It's easy for me to talk to strangers.
- 12. I generally pay attention to my inner feelings.
- 13. I usually worry about making a good impression.
- 14. I'm constantly thinking about my reasons for doing things.
- 15. I feel nervous when I speak in front of a group.
- 16. Before I leave my house, I check how I look.
- 17. I sometimes step back (in my mind) in order to examine myself from a distance.
- 18. I'm concerned about what other people think of me.
- 19. I'm quick to notice changes in my mood.
- 20. I'm usually aware of my appearance.
- 21. I know the way my mind works when I work through a problem.
- 22. Large groups make me nervous.

# Self Trust Scale

I frequently feel like I intuitively know how to respond to things that come up in life.							
	1 Not Very True of Me	2	3	4	5	6 Tru	7 Very e of Me
	When I work on my own, I make the right decisions.						
	1 Not Very True of Me	2	3	4	5	6 Tru	7 Very e of Me
	I like to experiment with new ideas I have.						
	1 Not Very True of Me	2	3	4	5	6 Tru	7 Very e of Me
	When I think about decisions, my assessment is usually correct.						
	1 Not Very True of Me	2	3	4	5	6 Tru	7 Very e of Me
Sometimes when I was growing up, my friends would make me do things I did not want to do.							
	1 Not Very True of Me	2	3	4	5	6 Tru	7 Very e of Me
If I were deciding to move for a job, I would be sure to consult my personal values in the decision.							
	1 Not Very True of Me	2	3	4	5	6 Tru	7 Very e of Me
	I find it difficult to choose the classes I need to take for my major.						
	1 Not Very True of Me	2	3	4	5	6 Tru	7 Very e of Me

When studying for class, I often wonder how other students remember the material.							
1 Not Very True of Me	2	3	4	5	6 True	7 Very e of Me	
If I have a class proje	ect, I am ab	le to mal	ke a mean	ingful de	cision o	n what to study.	
1 Not Very True of Me	2	3	4	5	6 True	7 Very e of Me	
In g	In group discussions, I consider myself a leader.						
1 Not Very True of Me	2	3	4	5	6 True	7 Very e of Me	
Sometimes I hav	e to think a	bout the	decisions	I have n	nade mu	ltiple times.	
1 Not Very True of Me	2	3	4	5	6 True	7 Very e of Me	
When I think about terrible news, such as events surrounding Hurricane Isaac, I know I would make the right decision in that situation.							
1 Not Very True of Me	2	3	4	5	6 True	7 Very e of Me	
When I get into my career, I think that I would be a good company decision maker.							
1 Not Very True of Me	2	3	4	5	6 True	7 Very e of Me	
I indentify with inventors, composers, and philosophers who pioneer new ideas.							
1 Not Very True of Me	2	3	4	5	6 True	7 Very e of Me	
If I were put in charge of a work group or class, I am not sure what I would do.							
1	2	3	4	5	6	7	

Not Very True of Me					Т	Very True of Me
My unique id	eas motiva	te my wil	llingness	to learn i	n my	major area.
1 Not Very True of Me	2	3	4	5	6 T	7 Very rue of Me
Other people v	would say I	know w	hat to do	in an em	ergen	cy situation.
1 Not Very True of Me	2	3	4	5	6 T	7 Very rue of Me
When my values are i	n conflict v	with some	eone else'	s, I usual	lly let	them get their way.
1 Not Very True of Me	2	3	4	5	6 T	7 Very rue of Me
Sometimes the stres	s of my life	e can ove	rwhelm n	ny ability	to re	spond effectively.
1 Not Very True of Me	2	3	4	5	6 T	7 Very rue of Me
Even if no one sup	ported me,	, I would	move to	another c	countr	ry for my career.
1 Not Very True of Me	2	3	4	5	6 T	7 Very True of Me
I take on m	ore respons	sibility in	life beca	use I bel	ieve i	n myself.
1 Not Very True of Me	2	3	4	5	6 T	7 Very rue of Me
If I had the opportunity to	o volunteer	-	others, I to	hink it w	ould t	be a great way to apply
1 Not Very True of Me	2	3	4	5	6 T	7 Very rue of Me

It is likely that the hard work I do now will open up great opportunities for me later.

#### APPENDIX B – TYPES OF INFORMATION FOR EXPERIMENT 1

### **Evidential Information Sources**

- Research reports from trusted journals on the effectiveness of the scan for the proposed brain scan medical procedure.
- Medical records indicating the likelihood of survival of the patients afflicted with the new disease without the brain scan procedure.
- Extensive review of medical literature to look for possible alternative procedures for the affected patients.
- Medical data for any one healthy patient's overall health and potential life span for comparison before a scan.
- The daily cost for taking care of patients dying from the new disease in medical offices around the country.
- Pharmacological information about the effectiveness of current medications to treat the symptoms and prevent the spread of the disease.
- Biological research reports on the potential for the disease to spread to new populations within the next 10 years.
- Economic data on the potential costs of implementing the new brain scan procedure in medical offices and how this would be offset by insurance.
- Projections of the number of patients that would need to be scanned in order to reduce the instances of the new disease.

#### Normative Information Sources

Opinions of the other relevant medical professionals on performing the brain scans on healthy people.

Asking patients dying from the new disease and their families whether they favor or disfavor the medical procedure.

National survey information about how most people generally feel about conducting the brain scans.

Survey results on how average American households generally feel about invasive medical procedures.

Opinion polls from average Americans on how willing they would be to help others in need.

A report on what people in comparable countries think about the new brain scan procedure.

Polls indicating whether or not medical offices or legal courts should decide if doctors should perform the brain scans.

Positions from religious denominations that have taken a stand on the ethics of the brain scan procedure.

Public opinion surveys examining if middle-aged persons have become more likely to donate their bodies to science over the last 50 years.

## APPENDIX C – PARTNER PROFILES FOR EXPERIMENT 1

## Partner A:

Research reports from trusted journals on the effectiveness of the scan for the proposed brain scan medical procedure.

Survey results on how average American households generally feel about invasive medical procedures.

Economic data on the potential costs of implementing the new brain scan procedure in medical offices and how this would be offset by insurance.

The daily cost for taking care of patients dying from the new disease in medical offices around the country.

## Partner B:

Opinions of the other relevant medical professionals on performing the brain scans on healthy people.

Polls indicating whether or not medical offices or legal courts should decide if doctors should perform the brain scans.

Asking patients dying from the new disease and their families whether they favor or disfavor the medical procedure.

Projections of the number of patients that would need to be scanned in order to reduce the instances of the new disease.

#### APPENDIX D – ANCHORS FOR EXPERIMENT 2

# **Evidential Anchors:**

A national, independent study of journalism students over the last 10 years found that they had a 20% chance of ending up with a successful career.

A national, independent study of journalism students over the last 10 years found that they had an 80% chance of ending up with a successful career.

# **Normative Anchors:**

Most UGA students believe that Robert should study journalism even if he has an 20% chance of success.

Most UGA students believe that Robert should study journalism even if he has an 80% chance of success.

#### APPENDIX E – CONTRUAL MEASURE FOR EXPERIMENT 2

#### Construal Items:

- 1) What does a successful news writing career mean? (local paper versus international news desk manager)
- 2) What are the chances that Robert will be a successful news writer? (poor versus good)
- 3) How high a value does Robert put on money? (high versus low)
- 4) How high a value does Robert put on self-fulfillment? (low versus high)
- 5) How ambitious is Robert about his news writing career? (unambitious versus ambitious)
- 6) How happy would Robert be in an engineering career? (happy versus unhappy)
- 7) How interesting does Robert find mathematics and science? (exciting versus boring)
- 8) How high a value does Robert place on security? (high versus low)
- 9) What does it mean to say that Robert has "enjoyed writing" since he was very young? (minor hobby versus extreme obsession)
- 10) What does it mean to say that Robert has "considerable writing talent?" (best in high school versus potential international fame)

Table 1

Epistemic differences between conservatives and liberals

1 00					
	<u>Conservatives</u>	<u>Liberals</u>			
Values	Value tradition, conformity	Reject conformity			
Personality	Dislike uncertainty	Open to new experiences, comfortab			
		with ambiguity			
Information Processing	Behave according to local	Look for new objective information			
	social norms				
Perception of Decision	Judgmental	Intellective			
Making					

# Figure Captions

- Figure 1. Outline of epistemic differences between conservatives and liberals.
- Figure 2. Ratings of the evidential and normative sources of information predicted by political orientation.
- Figure 3. Semi-partial ratings of the evidential and normative sources of information predicted by political orientation.
- *Figure 4*. Political orientation and hostile world perceptions interacting to predict evidential information source ratings.
- *Figure 5*. Political orientation and knowledge certainty interaction predicting evidential information source ratings.
- Figure 6. Recommended percent success for Robert with a high social anchor predicted by political orientation.
- Figure 7. Recommended percent success for Robert with a high social anchor predicted by political orientation and the belief that knowledge is certain.

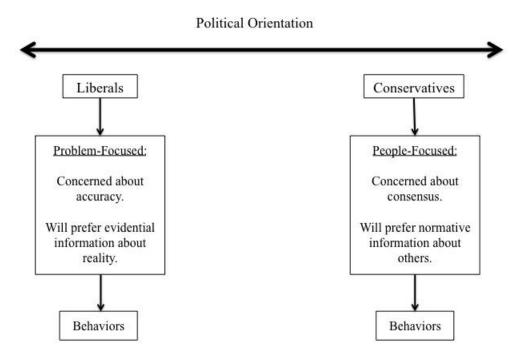


Figure 1. Outline of epistemic differences between conservatives and liberals.

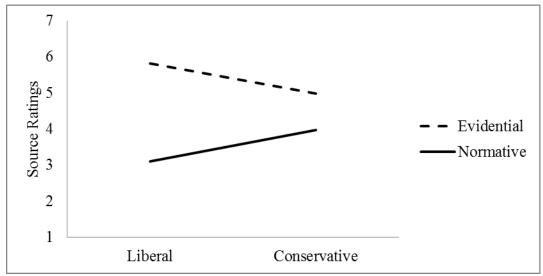


Figure 2. Ratings of the evidential and normative sources of information predicted by political orientation.

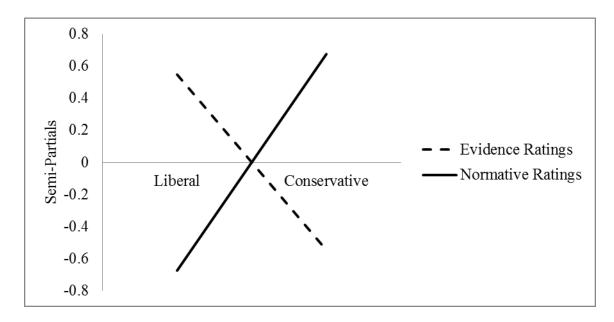


Figure 3. Semi-partial ratings of the evidential and normative sources of information predicted by political orientation.

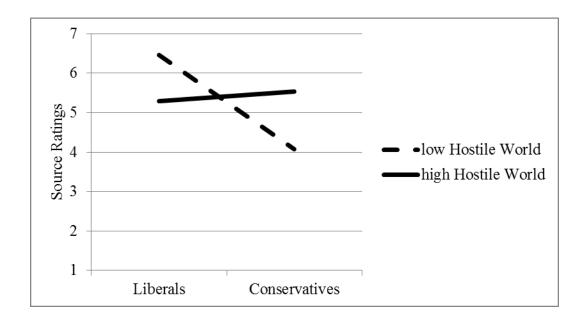
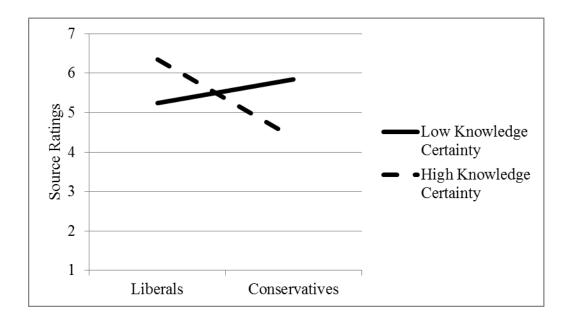


Figure 4. Political orientation and hostile world perceptions interacting to predict evidential information source ratings.



*Figure 5.* Political orientation and knowledge certainty interaction predicting evidential information source ratings.

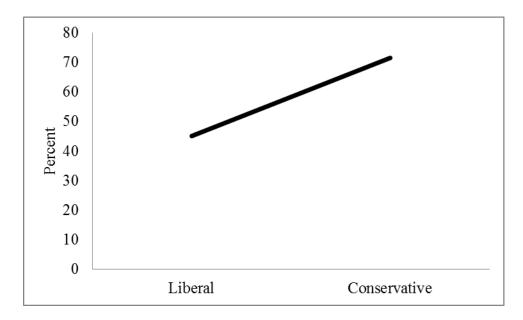


Figure 6. Recommended percent success for Robert with a high social anchor predicted by political orientation.

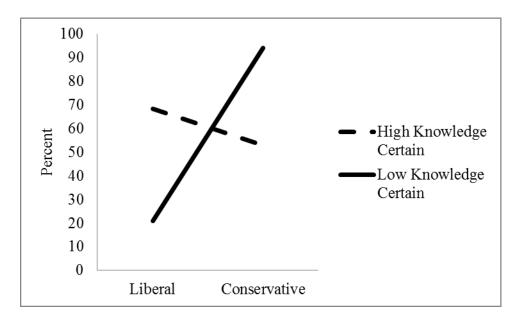


Figure 7. Recommended percent success for Robert with a high social anchor predicted by political orientation and the belief that knowledge is certain.