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INTUITIONS OR INFORMATIONAL ASSUMPTIONS? AN INVESTIGATION OF
THE PSYCHOLOGICAL FACTORS BEHIND MORAL JUDGMENTS

A Dissertation Presented

by

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of

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Abstract

There is an ongoing debate among psychologists regarding the psychological factors underlying moral judgments. Rationalists argue that informational assumptions (i.e. ideological beliefs about how the world works) play a causal role in shaping moral judgments whereas intuitionists argue that informational assumptions are post hoc justifications for judgments made automatically by innate intuitions. In order to compare these two perspectives, the author conducted two studies in which informational assumptions related to ingroups and outgroups varied across conditions. In Study 1, political conservatives and liberals completed the moral relevance questionnaire while imagining they were in the US, Iran, or no specific country. Keeping in line with the predictions of the intuitionist perspective, the results showed that the judgments of conservatives and liberals did not significantly differ across conditions. Study 2 used a more in depth manipulation in which participants read a vignette about a government (US, Iran, or the fictional country of Kasbara) violating the rights of a minority group. As in Study 1, the results support the intuitionist perspective—the judgments of conservatives and liberals did not significantly differ across conditions. These findings play a small part in clarifying the role of informational assumptions in moral judgments.

Table of Contents

Introduction.....	1
The Intuitionist Perspective	3
The Rationalist Perspective.....	9
Summary and Overview of Studies	13
Study 1	18
Method	19
Participants.....	19
Procedure	20
Materials	22
Results.....	25
Study 2	27
Method	28
Participants.....	28
Procedure	28
Materials	29
Results.....	31
General Discussion	32
References.....	37
Appendix A.....	41
Appendix B.....	43
Appendix C.....	45
Appendix D.....	46
Appendix E.....	47
Appendix F.....	50

INTUITIONS OR INFORMATIONAL ASSUMPTIONS? AN INVESTIGATION OF THE PSYCHOLOGICAL FACTORS BEHIND MORAL JUDGMENTS

People are capable of creating a broad range of moral systems. Same sex marriage, women's rights, and pacifism can be virtues or vices depending on one's moral code. How can we account for the diversity of moral systems in societies throughout history? Are morals simply social constructs that people internalize early in childhood or are people born with biological predispositions to moralize particular actions and relationships? Understanding how people develop their moral worldview and how they arrive at specific moral judgments has implications for how we resolve moral debates. Among researchers in moral psychology, however, there remains an ongoing disagreement regarding answers to these questions.

According to moral foundations theory (Haidt, 2001), humans have innate moral intuitions related to five domains: harm, fairness, loyalty, authority and purity. The domains of harm and fairness govern the welfare of individuals whereas the other three domains govern the welfare of the group as a whole. Innateness does not mean that morality is biologically determined. Rather, these intuitions create the boundary conditions for the types of morality that human societies can create (Haidt & Graham, 2008; Haidt & Joseph, 2004). Through the process of enculturation, people's intuitions are tuned to their culture's moral system. Specific patterns of behavior will automatically trigger a corresponding moral judgment, regardless of the situation or context (Graham, Haidt, & Nosek, 2009; Haidt, 2001). According to this perspective, moral reasoning based on beliefs, ideas, and values is a conscious, effortful cognitive process and therefore can play no role (except in rare cases) in the formation of moral judgments. As

a result, moral foundations theory argues that researchers exploring moral judgments can and should ignore people's consciously held beliefs about the world.

Although moral foundations theory has received a great deal of attention both within academic circles and popular media, it is not without its detractors (see, for example Pizarro & Bloom, 2003; Turiel, 2006; Prinz, 2008). The specific critiques of moral foundations theory are wide-ranging and come from a variety of disciplines including psychology, philosophy, and neuroscience (Pizarro & Bloom, 2003; Prinz, 2008; Suhler & Churchland, 2011; Turiel, 2006). For current purposes, I will refer to critics of moral foundations theory as proponents of the rationalist perspective. This perspective argues that informational assumptions—deeply held beliefs about how the world works—play a causal role in shaping automatic moral judgments (Nucci & Turiel, 1978; Turiel, 1998). Although they do not disagree with Haidt's (2001) assertion that moral judgments are often automatic, they argue that informational assumptions are an integral part of shaping these automatic processes (Pizarro & Bloom, 2003; Turiel, 2006). In other words, differences in moral judgments (e.g. differences with regard to whether abortion is morally wrong) may reflect differences in informational assumptions (e.g. life begins at conception) and not intuitions (Hatch, 1983).

In the current research, I compare the intuitionist perspective of moral foundations and the rationalist perspective by examining the moral judgments of conservatives and liberals. I conducted two experiments that examined participants' self-reported use of the five moral domains in ingroup versus outgroup social contexts. In so doing, I was able to assess whether the informational assumptions associated with ingroups and outgroups impact people's moral judgments. If they do, it will suggest that beliefs and values play a

causal role in shaping moral judgments. If they do not, it will suggest that intuitions may in fact be the driving force behind moral judgments. In the following sections, I (1) review the logic and empirical justifications for both the intuitionist and the rationalist perspectives; (2) discuss the theoretical differences and competing predictions of the two perspectives; and (3) conduct two studies that pit the two approaches against one another, with the goal of determining whether informational assumptions are relevant in shaping moral judgments.

THE INTUITIONIST PERSPECTIVE

Moral foundations theory argues that moral judgments are the product of moral intuitions: automatic and rapid cognitive processes that produce affective flashes indicating approval or disapproval (Graham et al., 2009; Greene & Haidt, 2002; Haidt, 2001; Haidt & Graham, 2007). Haidt and Joseph (2004) describe moral intuitions as “little bits of input-output programming” (p. 60) triggered by particular patterns of behavior in the environment (for discussion, see Pizarro & Bloom, 2003; Suhler & Churchland, 2011; Haidt & Joseph, 2011). According to this theory, reasoning is a post hoc process that functions simply to manipulate others into agreeing with one’s intuition (Haidt, 2001).

At the neurological level, Haidt’s intuitions are more appropriately called modules. Although there is no universally agreed upon definition of modularity, generally speaking, a particular mental process might be classified as modular if it occurs automatically and without input from other processes in the brain. The modular theory of the mind is itself a highly contested topic in neuroscience. This is in part because researchers lack the imaging technology to assess the existence of modules directly.

Although imaging studies can (and do) show higher levels of activation in localized areas of the brain when people make moral judgments (for a review, see Greene & Haidt, 2002), this is not sufficient evidence for intuitions, as other theories can easily account for localized activation (Suhler & Churchland, 2011). As a result, researchers can only offer indirect evidence that might suggest modularity.

Keeping with this line of thought, Haidt cites evidence from moral dumbfounding studies as evidence for the modularity of moral judgments (Haidt, Koller, & Dias, 1993). In these studies, participants are given a story in which people commit taboo acts that most people regard as immoral. Importantly, however, these stories are carefully constructed so that there is no violation of the harm and fairness domains. For example, in one story, a man wants to clean his house but he does not have any cleaning rags. He finds an American flag, cuts it up and uses the pieces as cleaning rags. In another story, a brother and sister decide to have sex with one another because they are curious about what the experience would be like. He uses a condom and she is on birth control, so there is no chance of pregnancy. They enjoy the experience, feel that it has brought them closer together, but they make the decision not to do it again. After hearing the stories, participants were asked whether or not the people in these scenarios acted immorally and then justify their answers.

If anyone tried to justify a judgment by appealing to violations of harm or fairness, the experimenters would correct them. For example, if a participant brought up the possibility of pregnancy from siblings' sexual encounter, the experimenter would remind them that the brother used a condom and the his sister was on birth control. Or, if participants suggested that sex could have hurt their relationships, the experimenter

would remind them that they both felt the experience brought them closer together. Haidt found that most people remained steadfast in their initial judgment despite the fact that they could not justify their position. After having all of their reasons refuted by the experimenter, people would often say something like, “I don’t why, but it’s just wrong.” For Haidt, this was evidence of the moral modules at work. According to this interpretation, the moral taboos in these stories activated people’s binding modules which in turn produced a judgment (i.e. an intuition) that the actions in the story were immoral. Once the automatic judgment had been made, people’s higher level reasoning abilities kicked in to justify the intuition. And even after their justifications proved to be erroneous, the intuition remained and they stuck by their initial judgment.

In this sense, rather than behaving like a scientist searching for the truth, reason is like a lawyer, marshaling evidence and interpreting it in whatever way makes the best case for the client (i.e. the intuitive judgment) (Haidt, 2001). Although Haidt (2001) acknowledges that worldviews are strongly correlated with moral judgments (Nucci & Turiel, 1978; Turiel & Wainryb, 1998), he warns against inferring causation from the correlation. For example, regarding the issue of abortion, Haidt (2001) argues:

The correlation...between the judgment [that abortion is wrong] and supporting belief does not necessarily mean that the belief caused the judgment. An intuitionist interpretation is just as plausible: The anti-abortion judgment (a gut feeling that abortion is bad) causes the belief that life begins at conception (an ex post facto rationalization of the gut feeling). (p.817)

Thus, because beliefs and reasons (i.e. informational assumptions) are brought to bear after the intuitive judgment, they cannot, by definition, play a causal role in

judgment formation. Accordingly, Haidt and colleagues (Haidt, Graham, & Joseph, 2009) posit that ideological beliefs and their justifications “might be epiphenomena that can safely be ignored in the study of moral and political behavior,” (p. 111).

According to the intuitionist, children come into the world with a biological preparedness to form moral intuitions in five domains: harm, fairness, loyalty, authority, and purity. Haidt refers to harm and fairness as *individualizing* domains in that they regulate interactions between individual group members (Graham & Haidt, 2011). The harm intuition evolved to recognize and respond to the pain and suffering of individuals, whereas the fairness intuition evolved to address issues of reciprocity and justice for individual group members. In contrast, loyalty, authority, and purity are *binding* domains because they address group-level concerns and help suppress selfish desires (Haidt & Graham, 2008). The loyalty intuition moralizes group-solidarity, patriotism, and self-sacrifice for the good of the group; the authority intuition moralizes behaviors such as obedience (for subordinates) and good leadership (for those in power); and the purity intuition moralizes the suppression of more “primal” urges such as lust and greed.

These innate capacities, however, are only propensities for moral development in these domains. Cultures can emphasize certain domains and deemphasize others, much in the same way that cultural cuisines can emphasize certain tastes and deemphasize others (Haidt et al., 2009). Haidt argues that, in the same way that all people have five taste receptors, all people have a universal set of moral intuitions; and just like cultural cuisines, “moral cuisines” can differ from culture to culture. Returning to the moral dumbfounding studies discussed above, Haidt found this pattern in every population he studied, except one. Liberal participants in the US tended to either not see the taboo acts

as immoral, or they would change their judgment after realizing that the principles of harm and fairness had not been violated. This led Haidt to hypothesize that left-wing ideology in the West, with its narrow focus on individual rights, was a unique historical phenomenon in which people only used two of the five moral domains. Using his initial findings in the moral dumbfounding studies, Haidt went on to further explore the differing moral matrices of liberals and conservatives in the US.

According to Haidt and Graham (2008), moral foundations theory explains the ongoing culture wars between conservatives and liberals in the United States. Moral foundations theory argues that conservatives and liberals often take different positions on moral issues because liberals have an individualistic morality based primarily on the domains of harm and fairness whereas conservatives have a group-level morality that uses all five domains equally (Graham et al., 2009; Haidt, 2001). Take, for example, a government infringing on the rights of marginalized groups in order to protect the status quo (Haidt & Graham, 2007). For liberals, the government's violation of individual freedom triggers their harm and fairness intuitions and they therefore condemn the government action. For conservatives, however, in addition to the governments' actions triggering harm and fairness intuitions, the marginalized groups' threat to the status quo triggers the binding intuitions of loyalty and authority. As a result, conservatives will generally show higher levels of support for the status quo, relative to liberals (Jost, Glaser, Kruglanski, & Sulloway, 2003).

In support of this approach, Graham and colleagues (Graham et al., 2009) conducted a series of four studies examining the patterns of moral judgments for conservatives and liberals in the United States. These researchers measured individuals'

self-reported use of the five moral foundations using a variety of different methods and measures including: rating the general relevance of the foundations in making moral judgments (Study 1); making judgments about various scenarios related to the violation of a specific intuition (Study 2); reactions to taboo-trade-offs (Study 3); and a textual analysis of sermons from the religious-left and –right looking for foundation-related words (Study 4). Across all four studies liberals relied primarily on the individualistic domains of harm and fairness whereas conservatives used all five domains equally. Graham et al. (2009) interpret the stable pattern of differences as evidence that context-specific informational assumptions do not significantly impact moral judgments.

Thus, conservatives' support for institutions, traditions, and hierarchies that perpetuate inequality and injustice simply "reflects a widespread human tendency to believe that the existing social order is morally good, regardless of how it treats us," (p. 395-396; Haidt & Graham, 2008). In short, the harm and fairness intuitions make-up almost the entirety of liberal morality; whereas, for conservatives, harm and fairness comprise less than half of their moral-matrix (Haidt & Graham, 2007).

To summarize, moral foundations theory posits that in order to meet the adaptive challenges of the evolutionary environment, humans evolved five moral intuitions: harm, fairness, loyalty, authority, and purity. Each of these intuitions has two components: (1) innate and automatic cognitive processes that trigger (2) the corresponding emotional response. From this perspective, moral judgments (good or bad) are the product of automatic processes, whereas moral justification (the reason why something is good or bad) are post hoc conscious processes that play almost no causal role in moral reasoning. From this perspective, conservatives' opposition to change and acceptance of inequality

are simply the natural expression of a five-foundation morality that regards the protection of the existing social order and institutions of power as moral issues distinct from harm and fairness (Graham & Haidt, 2011; Haidt & Graham, 2008). As a result, social patterns that trigger both individual and binding intuitions in conservatives may often lead to judgments that differ from the judgments of liberals.

THE RATIONALIST PERSPECTIVE

As mentioned above, the critiques of moral foundations theory are wide-ranging and come from a variety of disciplines in science and philosophy (Pizarro & Bloom, 2003; Prinz, 2008; Suhler & Churchland, 2011; Turiel, 2006). However, for current purposes, I will focus on two related critiques that challenge central claims of moral foundations theory: (1) that the automaticity of moral judgments implies the absence of reasoning; and (2) that worldviews have no causal impact on moral judgments.

First, critics of moral foundations theory argue that the speed and affective-content of judgments does not mean that reasoning is uninvolved. Rather, it is evidence of a bi-directional relationship in which emotion informs the development and maintenance of beliefs and vice versa (Turiel, 1998). According to Pizarro and Bloom (2003), “Prior reasoning can determine the sorts of output” generated by what may appear to be “intuitive systems,” (p. 194). They use the example of a husband or wife finding a telephone number in their spouse’s pocket. This could arouse either jealousy or curiosity depending on the individual’s construal of the situation. Stated another way, informational assumptions about oneself (e.g. I am not worth staying with) and one’s partner (e.g. my partner is untrustworthy) shape an individual’s automatic appraisal of the event. In short, the automaticity of moral judgments, rather than being evidence for

biologically-prepared intuitions, may simply reflect deeply internalized patterns of reasoning and judgment (Turiel, 2006).

Consistent with this idea, an extensive and growing body of research indicates that culture-specific beliefs and values play an important role in shaping automatic thoughts and behaviors (for a review, see Bargh & Ferguson, 2000). In particular, Devine's (1989) famous series of studies on stereotyping provides strong evidence for the impact of implicit social knowledge on social judgments. Because of the culturally prevalent stereotype that black people are aggressive, Devine hypothesized that unconsciously priming words stereotypically associated with Blacks (e.g. welfare, jazz, lazy) would cause Whites to evaluate an ambiguously hostile action as significantly more hostile; importantly, none of the word-primers were associated with hostility.

To test this, Devine asked White participants to read a paragraph in which a man named Donald engaged in a number of ambiguously hostile behaviors such as refusing to pay rent until the landlord repaints his apartment and demanding a refund immediately after making a purchase. After reading the paragraph, participants judged Donald on a list of positive and negative traits (e.g. hostile, unfriendly, thoughtful, and kind). Devine found that, when primed with stereotypically black-traits, participants rated Donald more negatively, relative to participants in the control condition. This study demonstrates that implicit stereotypes (i.e. informational assumptions) about the aggressiveness of Blacks versus Whites impact social judgments such as inferring character traits and intentionality to social actors.

Although Devine was not explicitly assessing participants' moral judgments, somewhat surprisingly, Haidt (2001) uses Devine's studies as evidence for moral

foundations theory. Because “stereotypes often include negative morally evaluated traits,” (p.820; Haidt, 2001) Haidt takes the evidence for instantaneous and automatic stereotype activation as de facto evidence of moral intuitions. This interpretation is problematic for a couple of reasons. First, the fact that cognitive processes implicated in moral and non-moral social judgments (such as stereotype activation) are both carried out automatically is evidence against positing innate processes uniquely designed for *moral* judgments. Second, and more importantly, Haidt explicitly argues that the moral intuitions are triggered by *social patterns in the environment*. However, Devine held the social patterns constant in her studies—Donald behaved exactly the same way in each condition. Rather, it was Donald’s race that varied across conditions. This means that the differing judgments of Donald’s actions must have been a result of the differing informational assumptions associated with race (i.e. the stereotype of blacks as aggressive), not intuitions. Thus, contrary to Haidt and colleagues’ argument, participants’ assessment of Donald as significantly more hostile and aggressive in the Black-race (relative to White-race) condition is evidence of informational assumptions effecting moral judgments.

This line of reasoning relates to the second critique of moral foundations theory: the assumption that worldviews have no causal impact on moral judgments. Although they may disagree on issues modularity of moral domains, intuitionists and rationalists agree that the domains of harm and fairness are universal features of human society (Graham & Haidt, 2011; Haidt & Graham, 2008; Turiel, 1998; Turiel & Wainryb, 1998; Wainryb, 1991, 2006). Indeed, primate research suggests that other primates possess an understanding of fairness (Brosnan & de Waal, 2003; de Waal, 1996; Dugatkin, 1997).

Research by Brosnan and de Waal (2003), for example, found that capuchin monkeys will refuse to complete a task if they see another monkey get a more desirable reward for completing the same task. The fact that other primates respond negatively to unequal compensation suggests that a sense of fairness has deep roots in our evolutionary predated the development of culture. The central disagreement, at least regarding the appropriate taxonomy of morality, is about the existence of the binding domains. Rationalists argue that the influence of cultural ideology on the development and application of harm and fairness principles is capable of accounting for group-level moral concerns.

Critics argue that the classification of acts related to loyalty, authority, and purity as inherently moral “entails an overly literal interpretation of how to classify issues in domains (moral or otherwise) that fails to account for the intentions...the surrounding context of the actions, and informational assumptions,” (p. 497). Real world reasoning and judgment takes place against a background of beliefs and assumptions about the nature of reality. According to Wainryb (2006), “persons develop moral and other social concepts within their culture through participation in and *reflection on social interactions* of different kinds,” (p. 211; emphasis added). In other words, people’s ideological worldviews impact their interpretation, and therefore judgment, of events in the world (Duckitt, 2006; Duckitt & Sibley, 2007; Sibley & Duckitt, 2009; Stephan, Ybarra, & Morrison, 2009; Zarate, Garcia, Garza, & Hitlan, 2004). Thus, differing informational assumptions about the nature of reality may explain why people reasoning about the same event can draw different conclusions (Turiel, Hildebrandt, & Wainryb, 1991; Turiel & Wainryb, 1998).

Accordingly, empirical research reveals a strong correlation between beliefs and judgments (Chiu, Dweck, Tong, & Fu, 1997; Levy, Chiu, & Hong, 2006; Turiel et al., 1991; Turiel & Wainryb, 1998; Wainryb, 1991). For example, Wainryb (1991) found that people's beliefs about the effectiveness of corporal punishment correlates with their judgments regarding its use in disciplining children. In another study, Turiel, Hildebrandt, and Wainryb (1991) conducted a crosscultural analysis of the relationship between informational assumptions and judgments related to pornography, incest, and abortion. They found that individuals who held similar beliefs on these issues tended to make the same judgment. Regarding judgments on abortion, for instance, people who assumed life begins at conception tended to oppose abortion rights where as people who assumed life begins sometime later supported abortions rights. Informational assumptions, therefore, appear to function as the background (i.e. the context) within which judgments are made. According to Hatch (1983), "what appears to be a radical difference in values between societies may actually reflect different judgments of reality," (p. 67). Thus, in contrast to the moral foundations perspective, as informational assumptions change, so too should moral judgments.

SUMMARY AND OVERVIEW OF STUDIES

The intuitionist and the rationalist approaches have competing explanations of the moral-divide between conservatives and liberals. Importantly, the disagreement between these two perspectives is not about the automaticity of moral judgments—both perspectives agree that moral judgments are, or at least can be, automatic and unconscious (Haidt, 2001; Turiel, 2006). Rather, the crux of the disagreement regards whether informational assumptions play a causal role in shaping moral judgments.

The rationalist approach argues that conservatives and liberals have different judgments about morality because of differing informational assumptions about the world. Conservatives tend to endorse inequality and support the status quo because of informational assumptions that the existing social order is constantly in danger of collapsing due to challenges from dangerous and threatening outgroups (Duckitt, 2006; Jost et al., 2003). They protect their ingroup by more strictly enforcing group norms and values, even at the short-term expense of individuals' wellbeing. Liberals, on the other hand, tend to oppose inequality and challenge the status quo (to the extent that it is unjust) because of informational assumptions that, generally speaking, the world is a stable and safe place and people are good (Duckitt, 2006; Jost et al., 2003). As a result, liberals do not perceive outgroups as threatening and therefore tend to apply moral principles similarly between ingroups and outgroups. Thus, from the rationalist perspective, the differing informational assumptions of conservatives and liberals are the driving force behind their differing moral systems.

According to the intuitionist approach, by contrast, it is the differential use of moral intuitions that produce the different judgments of conservatives and liberals. Liberals use only two intuitions—harm and fairness—and thus only social patterns related to individual-level concerns trigger automatic moral judgments. Conversely, conservatives use all five intuitions and therefore social patterns related to both individual- and group-level concerns trigger moral judgment. According to this perspective, conservatives tend to endorse inequality and support the status quo, not because they are fearful or defensive, but because they have more fully developed group-level moral intuitions, relative to liberals. From this perspective, longstanding traditions

and existing institutions of authority have inherent value and should not be tampered with lightly. Rather, situations in which individuals or groups challenge institutionalized authority or violate purity norms automatically trigger the corresponding intuition. For intuitionists, this is the perfectly natural response of an individual with a fully developed moral matrix.

There are two problems with the current literature that make empirical comparisons of the two models difficult. First, because of the correlational nature of many of these studies, proponents of both models can look at the same research and interpret the findings to support their perspective. Take, for example, the research on judgments about abortion, discussed above. Intuitionists and rationalists agree that beliefs and judgments are correlated; however, they disagree about the causal relationship between beliefs and judgments. Rationalists argue that informational assumptions caused the judgment whereas intuitionists argue that the judgment caused the beliefs.

Second, despite changing scenarios, studies of moral foundations theory always keep the participant firmly embedded within the perspective of their ingroup. Even when people are asked to evaluate the actions or worldviews of outgroup members, they are still doing so, whether implicitly or explicitly, in relationship to the impact of such actions and beliefs on their ingroup's symbolic or material status. For example, when conservatives condemn the behaviors of homosexuals, they are doing so at least in part because of the threat it represents to the values of their ingroup. In short, the judgments are being made about how the actions of an outgroup impacts one's ingroup or they are judgments about an ingroup member's violation of ingroup norms.

Thus, one way to tease apart these two perspectives would be to hold the moral actions constant across conditions while varying whether the ingroup or a threatening outgroup performed the action. In doing so, researchers would be able to empirically assess whether participants were drawing upon informational assumptions about the ingroup versus outgroup in their moral judgments. If the informational assumptions associated with threatening outgroups are driving conservatives' opposition to them (as the rationalist model would predict) then binding domains should only apply to the ingroup. However, if it is intuitions that are driving the judgments of conservatives, then these intuitions should be triggered regardless of the group-context in which the violation occurs.

Keeping with his line of thought, I conducted two studies examining conservatives' and liberals' use of the five moral domains in an ingroup versus outgroup context. In Study 1, participants completed the moral relevance questionnaire—used by Graham and colleagues (Graham et al., 2009)—while imagining they were observing actions in the US (ingroup), Iran (outgroup) or a control condition in which no group-context was specified. In Study 2, participants read a vignette in which a government violated the rights of minority group members in name of protecting the status quo. The government in question was either the US (ingroup), Iran (outgroup) or the fictional country of Kasbara (control).

Note that by holding the social patterns constant in both studies, but varying the group condition, I was able to examine the impact of informational assumptions (e.g. beliefs and values associated with group identity) on moral judgments. If informational assumptions contribute to shaping moral judgments, then the judgments of conservative

participants should vary across conditions. If, however, intuitions determine moral judgments, then the judgments of all participants should remain constant across conditions. Stated another way, systematic differences in judgments across conditions will indicate the relevance of informational assumptions in judgment formation whereas consistency across conditions will point towards the primacy of intuitions.

Before moving on, it is important to briefly discuss other measure included in the studies. First, I included the Rosenberg self-esteem scale in both studies (Rosenberg, 1965). Jost and colleagues' (Jost et al., 2003) meta-analysis of self-esteem and political conservatism indicated a significant (although relatively weak) negative correlation. In addition, research demonstrates that individuals with low self-esteem are more likely to perceive outgroups as threatening and tend to become more defensive in response to outgroups threats (for a review, see Aberson, Healy, & Romero, 2000; Jost et al. 2003). Given the significant impact of threat perception on judgments of ingroups and outgroups, I included self-esteem as a potential moderating variable.

Second, I also included several different measures of political ideology. Moral foundations theory primarily relies on a single-item question to assess political ideology. Although research has shown that this is a reasonably good method for predicting attitudes and beliefs, there is increasing evidence that political orientation is multi-faceted and therefore a single liberal-conservative dimension glosses over the different sociopolitical worldviews that exist within this dichotomy (for a review, see Jost et al., 2003). Research by Duckitt and colleagues (2006) demonstrate that these features are captured nicely by the constructs of right wing authoritarianism and social dominance orientation. It is important to note that these two constructs are orthogonal dimensions of

political ideology that generate unique predictions regarding attitudes towards, and perceived threat from, various outgroups—individuals high in right wing authoritarianism, but not those high in social dominance orientation, are threatened by deviant outgroups that undermine social stability, whereas high social dominance orientation individuals, but not individuals high in right wing authoritarianism, are threatened by groups that challenge the dominance and superiority of the ingroup (Duckitt, 2006). Because the current studies involve a potentially threatening outgroup (Iran), I included right wing authoritarianism (Altemeyer, 1981) and social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994) as alternative measures of political ideology.

STUDY 1

In Study 1, participants with varying political ideologies were assigned to one of three conditions: ingroup, outgroup, control. Similar to the methodology used by Haidt and colleagues (Haidt & Graham, 2007), I asked participants to rate how relevant concerns related to the five domains are when making moral judgments. However, I added an additional layer by asking participants to imagine they are making judgments about behaviors/events in the US (ingroup condition) or behaviors/events in Iran (outgroup condition). By varying the group-context in which participants rate moral relevance items, I was able to examine whether higher-order informational assumptions associated with group-context significantly impact the relevance of the five moral domains.

In order to replicate Graham and Haidt's (2009) first study and create a baseline for the current study, I added a control condition in which there was no ingroup or

outgroup context manipulation—participants read the same instructions from Graham and Haidt’s original study. However, I suspect that when contemplating abstract moral questions, people will, by default, make these considerations relative to their ingroup. Thus, I do not predict significant differences between the ingroup and control conditions.

Regarding the ratings of liberals, the predictions of the intuitionist and rationalist perspectives do not differ from one another—liberals will report harm and fairness as significantly more relevant to their moral judgments across all three conditions.

However, the two perspectives make divergent predictions regarding conservatives. If, as the intuitionists assert, particular social patterns trigger an intuition and corresponding judgment, then conservatives and liberals should show stable (although different) patterns in their self-reports of moral relevance across conditions—conservatives will report all five domains equally relevant whereas liberals will rely primarily on harm and fairness domains. In contrast, if, as the rationalists argue, the binding domains apply only to ingroup members, then conservatives should rate the binding domains as significantly more relevant in the ingroup and control conditions, relative to the outgroup condition.

METHOD

Participants

In order to qualify, participants had to be US citizens of at least 18 years of age. Participants were recruited through Amazon’s online data collection system, Mechanical Turk, and received 50 cents in exchange for participating in the study. According to previous findings, stable patterns of differences between conservatives and liberals only emerge at the far ends of the scale. Thus, a single-item question assessing political orientation (1 = *strongly conservative*, 5 = *moderate*, 9 = *strongly liberal*) was used as a

screening question. Only participants who self-report as highly-conservative (rating of 1 or 2) or highly-liberal (rating of 8 or 9) were able to participate in the study. A total of 285 participants (53% male, 47% female) provided complete data for the study. Participants ranged in age from 18 to 73 (mean age 37). Overall, 145 participants self-identified as conservative and 140 self-identified as liberal.

Procedure

Participants completed the study online using Mechanical Turk (Buhrmester, Kwang, & Gosling, 2011; Callison-Burch, 2009). Research demonstrates that, relative to traditional methods of data collection using college undergraduates, data obtained using Mechanical Turk has similar levels of reliability while offering a more diverse sample population (Buhrmester et al., 2011).

The study design consisted of randomly assigning participants to either an ingroup, outgroup, or control condition and measuring their responses to the moral relevance questionnaire. Initially, participants read the following introductory paragraph, and then clicked a button indicating that they wished to participate in the study:

The current study, being conducted by Nolan Rampy, M.A. at the University of Vermont, aims to explore the relationship between morality and political views. You will be asked to read a brief paragraph describing the social and political culture of Iranian [or US] society and then complete a 16-item questionnaire about how you would make moral judgments while living within Iranian [or US] society. After completing the moral judgments questionnaire, you will be asked to complete several more questionnaires regarding your personality traits and attitudes on various topics. Your participation is completely voluntary, and your

responses will be anonymous. We are interested in your honest opinions, so there are no right or wrong answers to these questions. You will receive 50 cents to compensate you for your time. It should take about 20 minutes to complete this task. If you agree to participate, please click <continue>.

After reading the introduction and agreeing to take part in the study, participants were asked to report demographic information, including their political affiliation. Participants were divided into two groups based on their response to the question regarding political orientation. Participants who responded with a 1 or 2 were placed in the conservative group (n = 145) and participants who responded with an 8 or 9 were placed in the liberal group (n = 140). Participants in the experimental conditions then read a description of either US or Iranian society and filled out the moral relevance questionnaire while imagining that they were in that society. Participants in the control condition were simply asked to complete the questionnaire without any specification of group-context. I used composite scores on the moral relevance questionnaire sub-scales to form the dependent variable. More specifically, participants' ratings of the harm and fairness domains were combined to form an individualistic morality composite score and ratings of the loyalty, authority, and purity domains were combined to form a group-level morality composite score. After completing the moral relevance questionnaire, participants were given several questionnaires including self-esteem (Rosenberg, 1965); social dominance orientation (Pratto et al., 1994); and right wing authoritarianism (Altemeyer, 1981). As discussed above, because self-esteem can be a relevant factor in ingroup bias, I used the self-esteem scale as a potential moderating variable (Aberson,

Healy, & Romero, 2000). In addition, right wing authoritarianism and social dominance orientation were used as alternative methods for operationalizing political ideology.

Materials

Demographics. During the registration process, participants answered questions regarding their gender, age, and education-level.

Description of US society. The description of US society was intended to convey that the US is a model of Western democratic societies seen around the world.

Participants in the ingroup condition read, “The US is a typical western state...Many aspects of the society bear a striking resemblance to other western societies...They have a democratically elected government, a judicial branch, and a state-run police force to maintain order and protect the status quo.”

Description of Iranian society. In contrast to the description of US society, the description of Iranian society is intended to convey that, although the values of Iranian society significantly differ from those of the West, the social and political institutions in Iranian society are remarkably similar to Western countries. For example, participants in outgroup condition read, “Iran identifies as an Islamic state...However, despite the religious nature of Iranian ideology, many aspects of the society bear a striking resemblance to secular western societies...They have a democratically elected government, a judicial branch, and a state-run police force to maintain order and protect the status quo,” (see Appendix A for the complete version of instructions for each condition).

Moral Relevance Questionnaire. I assessed the relevance of the five moral domains using the Moral Relevance Questionnaire developed by Graham and colleagues

(2009) (see Appendix A). In the control condition, I used the instructions from Graham et al. (2009): “When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?” However, I made a slight change in the instructions for the ingroup and outgroup conditions. In the current study, participants read, “Imagine that you are observing a variety of behaviors and events taking place in Iran (versus the US). When deciding whether these things are right or wrong, to what extent would the following considerations be relevant to your thinking?”

Participants then rated the moral relevance of 15 items on a 6-point scale (1 = never relevant, 7 = always relevant), with 3 items for each moral domain (e.g. Harm: “Whether or not someone used violence”; Fairness: “Whether or not some people were treated differently than others”; Loyalty: “Whether or not someone did something to betray his or her group”; Authority: “Whether or not someone showed a lack of respect to legitimate authority”; and Purity: “Whether or not someone violated standards of purity and decency”). As in Graham and colleagues’ (2009) study, I inserted a 16th item stating “Whether or not someone believed in astrology,” as a check of whether participants are paying attention and accurately understanding the scale-response format. Anyone using the upper half of the scale was not used in data analysis. Only one participant was dropped for using the upper half of the scale.

For the analysis, I combined ratings of the harm and fairness domains to create a composite score of individualistic morality. Cronbach’s alphas showed strong reliability for the composite score across all three conditions (US, .84; Iran, .90; control, .81). Similarly, combined ratings of the loyalty, authority, and purity domains to create a

composite score of binding morality showed comparably high levels of reliability (US, .93; Iran, .90; control, .93).

Right Wing Authoritarianism. The right-wing authoritarianism scale (Altemeyer, 1981) is a 12-item measure assessing authoritarian attitudes (see Appendix B).

Authoritarianism is associated with social conservatism and traditionalism (high-authoritarianism) on one end of the spectrum versus openness and individual freedoms (low-authoritarianism) on the other (Duckitt, 2006). Typically, individuals high in authoritarianism view the stability of the social order as perpetually unstable and therefore constantly in danger of collapse and a descent into a competitive jungle. They view the world as “a dangerous and threatening place in which, deviant people’s values and way of life are threatened by bad people,” (p. 78; Duckitt et al., 2002). In contrast, low-authoritarians (e.g. liberals) believe that people are basically good and the world is generally a safe and stable place. Participants used a 5-point Likert scale (1 = certainly disagree; 5 = certainly agree). The scale contains items such as “Obedience and respect for authority are the most important virtues children should learn.”

Social Dominance Orientation. The social dominance orientation scale (Pratto et al. 1994) is a 16-item measure assessing individuals’ endorsement of inequality and power distance (see Appendix C). Individuals high in social dominance *already* view the world as a competitive jungle in which groups are in a perpetual zero-sum competition over access and control of resources. At one end of the social dominance spectrum is a “might is right,” winner-take-all outlook and, at the other end “a view of the world as one of cooperative harmony in which people care for, help, and share with each other” (p. 78; Duckitt et al., 2002). Participants used a 9-point Likert scale (1 = strongly disagree, 5 =

neither agree nor disagree, 9 = strongly agree) to respond to scale-items [e.g. “Inferior groups should stay in their place”; “In getting what your group wants, it is sometimes necessary to use force against other groups”; “No one group should dominate society” (reverse scored)].

Self-Esteem. The Rosenberg self-esteem scale (Rosenberg, 1965) was used to measure individual differences in self-esteem (see Appendix D). This is a 10-item self-report measure in which individuals respond to items such as “I feel I am a person of worth, at least on an equal basis with others,” and “I wish I could have more respect for myself” (reverse scored). Participants responded on Likert scale ranging from 1 = strongly disagree to 4 = strongly agree.

RESULTS

Because the intuitionist perspective would essentially predict null findings, I will focus on the predictions of the rationalist perspective. There are three predictions for Study 1. First, the rationalist perspective predicts a significant interaction between political ideology and condition. If the findings confirm the predicted interaction, there are two follow-up predictions regarding the pattern of these differences: (1) conservative participants in the ingroup condition will use the binding foundations significantly more than conservatives in the outgroup condition; and (2) conservatives in the ingroup condition will use the individualistic foundations significantly less than conservatives in the outgroup condition.

The analysis consisted of a 3 (condition: US, Iran, control) X 2 (political orientation: conservative, liberal) MANOVA, with composite scores on the individualistic domains and on the group-level domains from the moral relevance

questionnaire as the two dependent measures. This showed a main effect for political orientation for both the individualistic domain $F(1, 203) = 20.32, p < .001$ and the binding domain $F(1, 203) = 13.10, p < .001$. However, the predicted interaction effect between political orientation and condition was not significant for the individualistic domain ($p = .58$) or the binding domain ($p = .74$).

The results indicated that, regardless of condition, liberals reported relying more heavily on the individualistic domain ($M = 4.83, SE = .09$) relative to conservatives ($M = 4.23, SE = .10$), $p < .001$. In contrast, conservatives relied more heavily on the binding domain ($M = 4.03, SE = .11$) relative to liberals ($M = 3.51, SE = .10$), regardless of condition, $p < .001$. The data indicate that group condition did not significantly impact participants' ratings on the moral foundations questionnaire.

Post-hoc analyses using race¹, gender, and self-esteem as potential moderating variables did not yield significant results. Similarly, using right wing authoritarianism or social dominance orientation as operationalizations of political ideology did not significantly affect the results.

In summary, conservatives, relative to liberals, reported using the binding domains significantly more than liberals whereas liberals reported using the individualistic domains significantly more than conservatives. Both the intuitionist and rationalist perspectives predicted this pattern of findings for the US and the control conditions. Importantly, however, these differences remained consistent across the three conditions. The absence of a significant interaction between political ideology and

¹ An additional analysis in which non-white participants were dropped from the data set did not alter the findings.

condition seems to support moral foundation's perspective that informational assumptions associated with group-context are not relevant in moral judgments.

One reason for the null findings across group context, however, could be the relatively abstract nature group-context manipulation. It could be that the change in context across conditions was not particularly salient for participants. Similarly, participants were rating the relevance of the moral domains without any reference to a specific situation or scenario. Thus, the salience of the manipulation and the abstract nature of the moral relevance questionnaire may account for the null findings. In order to explore these possibilities, in Study 2 I used a more in depth group-context manipulation and asked participants to make judgments about a specific situation related to a government violating the rights of minority groups.

STUDY 2

In Study 2, I examined participants' moral judgments regarding violations of harm and fairness in one of three conditions: ingroup (US), outgroup (Iran), or control (a fictitious country named Kasbara). More specifically, participants read one of three vignettes in which violations of harm and fairness are justified in the interest of protecting the status quo. I designed the vignettes to highlight the ideological differences between the countries while keeping constant the social patterns—e.g. a nation's government violating the rights of marginalized groups in order to protect the status quo—that would trigger intuitions. Again, I predict no difference between the ingroup and control conditions.

As in Study 1, the two perspectives make similar predictions regarding liberals—they will judge the violations of harm and fairness as significantly more immoral (relative

to conservatives) across all three conditions. Regarding conservatives, however, the intuitionist perspective argues that relevant social patterns trigger intuitional judgments, irrelevant of other contextual factors. Therefore, because the actions of the government are held constant, intuitionists should predict that conservatives' moral judgments will remain stable across conditions. In contrast, if, as the rationalists argue, the binding domains are ingroup-specific, then conservatives should judge violations of harm and fairness as moral in the ingroup and control conditions and immoral in the outgroup condition.

METHOD

Participants

As in Study 1, participants were recruited through Mechanical Turk and participated in exchange for 50 cents. A total of 262 participants (54% men and 46% women) provided complete data for this study. Participants ranged in age from 18 to 75 (mean age 38).

Political orientation was again used as a prescreening question. Participants were divided into two groups based on their response to the question regarding political orientation. Participants who responded with a 1 or 2 were placed in the conservative group ($n = 130$) and participants who responded with an 8 or 9 were placed in the liberal group ($n = 132$).

Procedure

Participants completed the study online using Mechanical Turk. The study design consisted of randomly assigning participants to one of three conditions—ingroup, outgroup, or control—and measuring their moral judgment regarding actions performed

by the US government (ingroup condition), Iranian government (outgroup condition) or the fictitious government of Kasbara (control condition). One hundred sixteen participants were in the US condition, 71 were in the Iran condition, and 75 were in the Kasbara condition. Initially, participants read an introductory paragraph describing the study as an examination of the relationship between attitudes and political views. After reading the introduction and agreeing to take part in the study, participants were asked to report demographic information. Participants then read a brief vignette in which the government (US vs Iran vs Kasbara) justified violating the rights of marginalized groups (i.e. violating principles of harm and fairness) by claiming that they are protecting the status quo. After reading the vignette, participants completed a measure assessing their moral judgments regarding the actions of the government. Upon completing the measure, participants were given several personality questionnaires—self-esteem (Rosenberg, 1965); social dominance orientation (Pratto et al., 1994); and right wing authoritarianism (Altemeyer, 1981)—that I used as potential moderating variables.

Materials

Demographics. During the registration process, participants answered questions regarding their gender, age, and education-level.

Moral Violations Vignette. Participants in each condition read a brief vignette (set 10 years in the future) about a period of economic, social, and political instability in which a government violates the rights of minority groups in order to protect the status quo. For example, participants in the US condition read, "...in one particularly large protest in the nation's capital, police killed roughly one hundred peaceful protestors and injured several thousand more. In an effort to justify these actions, government officials

claim that the protests of Blacks and Latinos are threatening the security and stability of American society and that a firm and unequivocal response to the protestors is absolutely necessary in order to preserve the status quo.”

In contrast, participants in Iran condition read “in one particularly large protest in the nation’s capital, police killed roughly one hundred peaceful protestors and injured several thousand more. In an effort to justify these actions, the Iranian government officials claim that the protests of Kurds and Turks are threatening the security and stability of Iranian society and that a firm and unequivocal response to the protestors is absolutely necessary in order to preserve the status quo.”

Finally, participants in the Kasbara condition read, “...in one particularly large protest in the nation’s capital, police killed roughly one hundred peaceful protestors and injured several thousand more. In an effort to justify these actions, the Kasbara government officials claim that the protests of the Basanda and Kush are threatening the security and stability of society and that a firm and unequivocal response to the protestors is absolutely necessary in order to preserve the status quo.” (See Appendix E for the full-length version of all three vignettes.)

Vignette Evaluation. The vignette questionnaire is a 9-item measure developed for this study assessing the degree to which participants agreed or disagreed with the actions taken by the government versus the actions taken by the minority groups (see Appendix F). For example, participants in the US condition used a 7-point Likert scale (1 = completely disagree; 7 = completely agree) to rate statements such as, “The stability of US society is more important than meeting the demands of Black and Latino minority groups,” and “Blacks and Latinos are morally justified in demanding their individual

rights, even if it threatened the stability of American society.” With the exception of the name of the government and minority groups, the 9-items were identical across all three conditions (e.g. Iran condition: “The stability of Iranian society is more important than meeting the demands of Kurds and Turks.”). Cronbach’s alphas in all three conditions showed strong reliability (US, .95; Iran, .90; Kasbara, .89).

As in Study 1, self-esteem (Rosenberg, 1965), social dominance (Pratto et al., 1994), and right wing authoritarianism (Altemeyer, 1981) were used in Study 2, with the same order and procedure.

RESULTS

As in Study 1, the intuitionist perspective would predict null findings across conditions. In contrast, according to the rationalist perspective, conservatives should judge the government’s violations of harm and fairness significantly more favorably in the US condition, relative to the Iran condition.

The analysis consisted of a 3 (condition: US, Iran, Kasbara) X 2 (political ideology: conservative, liberal) two-way ANOVA, using the vignette evaluation as the dependent measure. This analysis revealed a main effect for political ideology $F(1, 256) = 65.39, p = .01$. The results indicated that, regardless of condition, conservatives were more supportive of the government’s actions ($M = 3.66, SE = .13$) relative to liberals ($M = 2.27, SE = .13, p < .001$). The interaction effect between political ideology and condition, however, was not significant ($p = .67$) indicating that changes in group context did not significantly impact the results directly nor through an interaction with political ideology.

Post-hoc analyses examining potential moderating variables did not produce a significant interaction effect². In addition, using right wing authoritarianism or social dominance orientation as operationalizations of political ideology did not significantly affect the results. In short, as the intuitionist perspective would predict, the judgments of conservatives and liberals did not significantly differ across conditions.

GENERAL DISCUSSION

The current studies were undertaken to examine whether informational assumptions impact the moral judgments of conservatives and liberals. Moral foundations theory posits that moral judgments are the product of innate moral modules that operate independently of higher cognitive faculties capable of taking informational assumptions into account. In contrast, critics of moral foundations theory argue that informational assumptions are inextricably linked with moral decision-making. If the intuitionist perspective of moral foundations theory is correct, then conservatives and liberals should show different but consistent patterns of moral judgments regardless of the context in which those judgments took place. However, if the rationalist view is correct then conservatives should arrive at different moral judgments depending on the group-condition whereas liberals should remain consistent regardless of the group-condition. Thus, the competing predictions of these two perspectives center on the judgments of conservatives.

In Study 1, across all three conditions conservatives relied more heavily on the binding domains of authority, loyalty, and purity whereas liberals relied on the

² As in Study 1, an analysis in which non-white participants were dropped from the data set did not alter the findings.

individualistic domains of harm and fairness. Similarly, in Study 2, liberals and conservatives remained consistent in their judgments across all three conditions. In both studies, this pattern of findings remained consistent across conditions regardless of whether political ideology was assessed using the single-item question, right wing authoritarianism, or social dominance orientation.

The findings in both studies offer support for the intuitionist perspective in two ways. First, the responses of both conservatives and liberals fit nicely with the existing body of literature. As has been shown in numerous other studies, liberals tend to rely primarily on the domains of harm and fairness whereas conservatives tend to rely on all five domains equally. Study 1 replicated this pattern of findings. Similarly, in Study 2, which focused specifically on the application of harm and fairness domains, conservatives tended to endorse violations of harm and fairness in order to protect the status quo whereas liberals tended to oppose such violations. The results of Study 2 in particular are significant because the methodology is significantly different than what is used in most moral foundations research. The replication of past findings using unique methodology offers additional evidence for the validity of the five-domain taxonomy of morality.

Second, and more importantly, the current findings offer support for the intuitionist argument that informational assumptions do not shape moral judgments. In both studies, differing pattern of responses for conservatives and liberals remained constant across conditions. This indicates that shifting informational assumptions associated with ingroup versus outgroup contexts did not play a causal role in shaping participants' responses.

These findings are particularly significant because, although the argument that informational assumptions are irrelevant is probably one of the most contested aspects of the intuitionist perspective, there have been surprisingly few attempts to demonstrate this empirically. In fact, other than the moral dumbfounding experiments discussed in the literature review, I was unable to find any research by proponents of the intuitionist perspective addressing this issue. Instead, proponents of the intuitionist perspective have primarily focused on demonstrating the reliability of the five foundations as a moral taxonomy and expanding it to other political groups such as libertarians and the religious left (e.g. Haidt, Graham, & Joseph, 2009). Focusing on taxonomy, however, side-steps examination of the more contentious aspects of the theory. Indeed, it should not be surprising that distinct political groups show consistent different but stable patterns in their use of the moral domains. If an individual believes it is morally just to violate the rights of harm and fairness in order to protect the status quo, one would expect consistent judgments across different scenarios relevant to that belief. In and of itself, this is not evidence for moral intuitions. Indeed, the fact that people make moral judgments consistent with their worldview is certainly not a novel prediction among theories in moral psychology. Thus, the current studies are an important contribution to the existing literature because they address a key aspect of the intuitionist perspective that thus far has received little attention.

However, there are several alternative explanations for the current findings. One potential reason for not detecting significant effects is that the studies lacked sufficient power. Power analysis using G-Power, however, showed that the sample size was sufficient for detecting effects of medium effect size magnitude. The studies did lack

adequate power to detect small effects but this fact is inconsequential as a small effect would likely not be meaningful, even if statistically significant.

Second, the findings could be the result of weaknesses in the group-context manipulations. In Study 1, the manipulation was relatively abstract. Participants read a brief and rather vague description of the US or Iran and then imagined that they were evaluating actions in one of these countries. Without asking participants to respond to a specific scenario, the contextual factors may not have been particularly salient in the minds of participants, meaning that they were still thinking about the moral domains in highly abstract terms. Study 2 attempted to use a more in depth context manipulation. The essays used in Study 2 highlighted the differing ideologies of each country. In addition, the essay provided participants with a specific scenario in which potentially immoral actions were taken to protect the society. Despite these efforts, the manipulation in Study 2 may have still lacked sufficient salience to activate the alternative informational assumptions that could have impacted judgments. Unfortunately, this possibility cannot be assessed directly using the current data, as manipulation checks were not used in the studies.

A third possibility is that the dependent variables, particularly for Study 1, may have been ill suited for the research questions. Study 1 used the moral foundations questionnaire to assess the effects of the group context manipulation. This measure is designed to gauge the general importance of each moral domain (i.e. the amount of weight a person gives to each domain when making any moral judgment). Although it is certainly possible that a different manipulation might produce changes in ratings on this questionnaire, it is also possible that such shifts only come about when making actual

judgments of specific actions and situations. Given that Study 2 attempted to address this issue by assessing participants' judgments of specific actions taken by a government and minority groups in a period of social instability the weakness of the manipulation (discussed above) is the more likely alternative explanation for the results of Study 2.

The results of the current studies certainly do not present insurmountable obstacles to the rationalist perspective; however, the findings should be encouraging to proponents of moral foundations theory. I hope that this research encourages others to explore the important but largely ignored issue of informational assumptions. If moral foundations theory is to establish itself as the dominant perspective in moral psychology, researchers will need to move beyond abstract assessments of the moral domains. Instead, future research should move toward assessing moral judgments in more concrete ways. Although the five moral domains are a useful taxonomy for categorizing morality, their existence as innate modules, capable of automatically producing moral judgments independent of informational assumptions associated with context, remains an open question.

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Whether or not someone put the interests of the group above his/her own

Authority:

Whether or not someone fulfills the duties of his or her role

Whether or not someone showed a lack of respect for decisions made by the group

Whether or not someone respected the traditions of the group

Whether or not leaders adhere to the values of the group

Purity:

Whether or not someone violated the standards of decency of the group

Whether or not a group member did something disgusting

Whether or not a group member did something unnatural or degrading

Whether or not someone negatively impacts the values and beliefs of the group

APPENDIX B: Right Wing Authoritarianism

This survey is part of an investigation of general public opinion concerning a variety of social issues. You will probably find that you agree with some of the statements, and disagree with others, to varying extents. Please indicate your reaction to each statement on the line to the left of each item according to the following scale:

Write down a -4 if you very strongly disagree with the statement.

Write down a -3 if you strongly disagree with the statement.

Write down a -2 if you moderately disagree with the statement.

Write down a -1 if you slightly disagree with the statement.

Write down a 0 if you feel neutral about the statement

Write down a +1 if you slightly agree with the statement.

Write down a +2 if you moderately agree with the statement.

Write down a +3 if you strongly agree with the statement.

Write down a +4 if you very strongly agree with the statement.

1. The established authorities generally turn out to be right about things, while the radicals and protestors are usually just “loud mouths” showing off their ignorance.
2. Women should have to promise to obey their husbands when they get married.
3. Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.
4. Gays and lesbians are just as healthy and moral as anybody else.
5. It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people’s minds
6. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.
7. The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.
8. There is absolutely nothing wrong with nudist camps.

9. Our country needs free thinkers who have the courage to defy traditional ways, even if this upsets many people.
10. Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.
11. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.
12. The “old-fashioned ways” and the “old-fashioned values” still show the best way to live.
13. You have to admire those who challenged the law and the majority’s view by protesting for women’s abortion rights, for animal rights, or to abolish school prayer.
14. What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path.
15. Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the “normal way things are supposed to be done.”
16. God’s laws about abortion, pornography and marriage must be strictly followed before it is too late, and those who break them must be strongly punished.
17. There are many radical, immoral people in our country today, who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.
18. A “woman’s place” should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly in the past.
19. Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the “rotten apples” who are ruining everything.
20. There is no “ONE right way” to live life; everybody has to create their own way.
21. Homosexuals and feminists should be praised for being brave enough to defy “traditional family values.
22. This country would work a lot better if certain groups of troublemakers would just shut up and accept their group’s traditional place in society.

APPENDIX C: Social Dominance Orientation

1	2	3	4	5	6	7
completely disagree			neither agree nor disagree			completely agree

- 1) Some groups of people are simply inferior to other groups.
- 2) In getting what you want, it is sometimes necessary to use force against other groups.
- 3) It's OK if some groups have more of a chance in life than others.
- 4) To get ahead in life, it is sometimes necessary to step on other groups.
- 5) If certain groups stayed in their place, we would have fewer problems.
- 6) It's probably a good thing that certain groups are at the top and other groups are at the bottom.
- 7) Inferior groups should stay in their place.
- 8) Sometimes other groups must be kept in their place.
- 9) It would be good if groups could be equal.
- 10) Group equality should be our ideal.
- 11) All groups should be given an equal chance in life.
- 12) We should do what we can to equalize conditions for different groups.
- 13) Increased social equality is beneficial to society.
- 14) We would have fewer problems if we treated people more equally.
- 15) We should strive to make incomes as equal as possible.
- 16) No group should dominate in society.

APPENDIX D: Rosenberg Self-Esteem Scale

Indicate how much you agree or disagree with the following statements:

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

- _____ 1. On the whole, I am satisfied with myself.
- _____ 2. At times, I think I am no good at all.
- _____ 3. I feel that I have a number of good qualities.
- _____ 4. I am able to do things as well as most other people.
- _____ 5. I feel I do not have much to be proud of.
- _____ 6. I certainly feel useless at times.
- _____ 7. I feel that I'm a person of worth, at least on equal plane with others.
- _____ 8. I wish I could have more respect for myself.
- _____ 9. All in all, I am inclined to feel that I am a failure.
- _____ 10. I take a positive attitude toward myself.

APPENDIX E: Vignettes

US VIGNETTE

Imagine that it is 10 years in the future of the United States. The past several years have been bad economically and socially for the US. There has been a steady increase in unemployment over the past 5 years, which has now reached levels well over 25%. Black and Latino minority groups have been hit particularly hard by the crisis. Unemployment, homelessness, and poverty among these groups and is roughly double that of the general population. Politicians are quick to blame these groups for the economic and social ills plaguing society, frequently referring to them as greedy and lazy.

In response to what they perceive as attacks on their basic rights, Blacks and Latinos have begun going on strike and holding large scale demonstrations that have temporarily shut down businesses and governmental facilities throughout the US. Despite the fact that these acts of protest have been peaceful and modest in their demands, they have been met with increasingly violent repression from the state. For example, in one particularly large protest in the nation's capital, police killed roughly one hundred peaceful protestors and injured several thousand more. In an effort to justify these actions, government officials claim that these protests are threatening the security and stability of American society and that a firm and unequivocal response to the protestors is absolutely necessary in order to maintain order and preserve the status quo.

IRAN VIGNETTE

Imagine that it is 10 years in the future of Iran. The past several years have been bad economically and socially in Iran. There has been a steady increase in unemployment over the past 10 years, which has now reached levels well over 25%. Turkish and Kurdish minorities have been hit particularly hard by the crisis. Unemployment, homelessness, and poverty among these groups is roughly double that of the general population. Iranian politicians are quick to blame these groups for the economic and social ills plaguing society, frequently referring to them as greedy and lazy.

In response to what they perceive as attacks on their basic rights, the Turks and Kurds have begun going on strike and holding large scale demonstrations that have temporarily shut down businesses and governmental facilities throughout Iran. Despite the fact that these acts of protest have been peaceful and modest in their demands, they have been met with increasingly violent repression from the state. For example, in one particularly large protest in the nation's capital, police killed roughly one hundred peaceful protestors and injured several thousand more. In an effort to justify these actions, the Iranian government officials claim that these protests are threatening the security and stability of Iranian society and that a firm and unequivocal response to the protestors is absolutely necessary in order to maintain order and preserve the status quo.

CONTROL VIGNETTE

Imagine that it is 10 years in the future of a *fictional* country named Kasbara. The past several years have been bad economically and socially in Kasbara. There has been a steady increase in unemployment over the past 10 years, which has now reached levels well over 25%. Basanda and Kush minorities have been hit particularly hard by the crisis. Unemployment, homelessness, and poverty among these groups is roughly double that of the general population. Kasbara politicians are quick to blame these groups for the economic and social ills plaguing society, frequently referring to them as greedy and lazy.

In response to what they perceive as attacks on their basic rights, Basanda and Kush groups have begun going on strike and holding large scale demonstrations that have temporarily shut down businesses and governmental facilities throughout Kasbara. Despite the fact that these acts of protest have been peaceful and modest in their demands, they have been met with increasingly violent repression from the state. For example, in one particularly large protest in the nation's capital, police killed roughly one hundred peaceful protestors and injured several thousand more. In an effort to justify these actions, the Kasbara government officials claim that these protests are threatening the security and stability of society and that a firm and unequivocal response to the protestors is absolutely necessary in order to maintain order and preserve the status quo.

APPENDIX F: Vignette Evaluation

INSTRUCTIONS: In the next section you will read a brief paragraph about a hypothetical situation in the U.S. Please read the paragraph carefully and answer the questions that follow.

1	2	3	4	5	6	7
completely disagree			neither agree nor disagree			completely agree

- 1) The stability of US society is more important than meeting the demands of Black and Latino minority groups.
- 2) Blacks and Latino's should not have put their individual interests ahead of the collective interests of the US.
- 3) Ensuring the fair treatment and well-being of Blacks and Latinos is more important than protecting the status quo in the US.
- 4) Overall, I agree with and support the actions of the US government.
- 5) Overall, I agree with and support the actions of the Black and Latino minority groups.
- 6) The US government was morally justified in prioritizing the stability of American society.
- 7) Blacks and Latinos are morally justified in demanding their individual rights, even if it threatened the stability of American society.
- 8) Overall, I think the actions of the US government were immoral.
- 9) Overall, I think that the actions of the Black and Latino groups were immoral.