Moral Foundations and Heterogeneity in Ideological Preferences

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Scholars have documented numerous examples of how liberals and conservatives differ in considering public policy. Recent work in political psychology has sought to understand these differences by detailing the ways in which liberals and conservatives approach political and social issues. In their moral foundations theory, Haidt and Joseph contend the divisions between liberals and conservatives are rooted in different views of morality. They demonstrate that humans consistently rely on five moral foundations. Two of these foundations—harm and fairness—are often labeled the individualizing foundations, as they deal with the role of individuals within social groups; the remaining three foundations—authority, ingroup loyalty, and purity—are the binding foundations as they pertain to the formation and maintenance of group bonds. Graham, Haidt, and Nosek demonstrate that liberals tend to disproportionately value the individualizing foundations, whereas conservatives value all five foundations equally. We extend this line of inquiry by examining whether different types of liberals and conservatives value the moral foundations in varying degrees. Using survey data (n = 745), we rely on a mixed-mode latent class analysis and identify six ideological classes that favor unique social and fiscal policy positions. While most of the respondents belonging to these classes self-identify as conservative, they endorse the moral foundations in varying degrees. Since our findings demonstrate considerable heterogeneity with respect to ideology and moral preferences, we conclude by encouraging scholars to consider this heterogeneity in detailing the motivational and psychological foundations of ideological belief.

Introduction

It is well established that liberals and conservatives polarize on an array of issues, ranging from cultural matters to fiscal concerns. Moral considerations are the heart of much of this conflict, with many issues turning on fundamental disputes about family life, sexuality, social fairness, and so on (Lakoff, 2002, 2008). Although economic and security issues continue to resonate with voters, scholars and pundits alike have noted that cultural and moral concerns now play a more prominent role for many voters (Hunter, 1991) and help to explain polarization between liberals and conservatives on a host of issues (Hetherington & Weiler 2009; Hillygus & Shields, 2008). Moreover, an emerging body of work has demonstrated that the conflict between liberals and conservatives is rooted in different worldviews and motives (Graham, Haidt, & Nosek, 2009; Hunter, 1991; Jost, 2006; Lakoff, 2002; Skitka & Tetlock, 1993).

In this vein, there is a growing literature demonstrating fundamental differences between liberals and conservatives with respect to their views of morality (Graham et al., 2009; Haidt, 2007; Haidt,
Graham, & Joseph, 2009; Haidt & Graham, 2007; Lakoff, 2002). Indeed, Putnam and Campbell (2010) suggest that ideological considerations have proven a potent and divisive force in American religion, with liberals and conservatives sorting themselves into denominations that view religious doctrine in accordance with ideological worldviews. While several approaches have been developed to understand the moral differences between liberals and conservatives (Haidt & Joseph, 2004; Lakoff, 2002, 2008; McAdams et al., 2008), these approaches converge by emphasizing the centrality of morality to ideological belief and detailing the different moral intuitions relied upon by liberals and conservatives.

Our study advances this line of inquiry by examining whether different “types” of liberals and conservatives endorse varying constellations of moral intuition. Though it is common for scholars to view ideology as unidimensional, a corpus of research has demonstrated ideology is multifaceted.

We contend that within the liberal and conservative coalitions there should be variation in the moral considerations drawn upon while considering public policy. Specifically, we extend Feldman and Johnston’s (2009) work on subtypes of conservatives and liberals, looking at whether the subtypes vary in their tendency to endorse the five moral foundations, as defined by Haidt and Joseph (2004). While most of the classes in Feldman and Johnston’s study symbolically identify as “conservative” (Stimson, 2004), these groups present very different political, psychological, and demographic profiles (Feldman & Johnston, 2009). This study advances this line of inquiry by examining whether different “types” of liberals and conservatives endorse different moral considerations. Thus far, most studies of the relationship between ideology and moral foundations have operationalized ideology as a unidimensional construct. Nevertheless, considerable work demonstrates that ideology is multifaceted, consisting of two dimensions—a “fiscal” dimension and a “social” dimension (Bartels, 2006; Conover & Feldman, 1980, 1981; Duckitt, 2001; Feldman & Johnston, 2009; Lane, 1962; Weber & Federico, 2007). Even more importantly, emerging research suggests that the intersection between these multiple dimensions may help produce multiple kinds of liberals and conservatives—that is, there may be groups of individuals who place themselves in similar positions on the left-right spectrum, yet display distinct patterns of issue preferences across the aforementioned fiscal and social dimensions. For example, the Pew Research Center (2011) details various cleavages within the liberal and conservative traditions, finding that “staunch conservatives” and “solid liberals”—i.e., voters who consistently endorse conservative or liberal policy positions—are relatively rare, accounting for only roughly one-quarter of the U.S. public.

If there are in fact different kinds of liberals and conservatives that can be distinguished in terms of their preferences across the multiple dimensions of ideology, then existing work on the interface between ideology and moral orientations may present an incomplete picture of the moral differences between liberals and conservatives. In this article, we demonstrate that ideology is far more complex. After accounting for this complexity, we show that different “types” of liberals and conservatives emerge with very different types of moral profiles. In doing so, we focus in particular on one leading account of the intersection between morality and politics—namely, moral foundations theory (Haidt & Graham, 2007).

**Moral Foundations Theory**

In political science and psychology, moral considerations have proven to be a potent predictor of policy preferences and vote choice, as well as partisan and ideological identification (Graham

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1 Although many view ideology as a single dimension, with liberalism at one extreme and conservatism at the other, a growing body of work has demonstrated this is problematic. Lakoff (2008) thoroughly details the problems that ensue viewing ideology as unidimensional; among others, the single-dimension model assumes moderates are in the ideological center, when, in fact, they possess cross-cutting ideological beliefs (see, also, Treier & Hillygus, 2009).
et al., 2009; Lakoff, 2002, 2008), especially in light of the “culture wars” (Hunter, 1991; Layman, 2001). While research on morality has traditionally been positioned to understand perceptions of justice and when individuals care for others (e.g., Gilligan, 1982; Kohlberg, 1969), recent work suggests that morality also encompasses concerns about community, social order, stability, and the maintenance of group bonds (Haidt & Graham, 2009; Lakoff, 2002, 2008).

Several approaches have been central to understanding the richness of moral judgment. One of these approaches—and the one we focus on here—is moral foundations theory (MFT; Graham et al., 2009; Haidt & Joseph, 2004, 2007; Haidt, Graham, & Joseph, 2009). MFT was developed to account for the varying patterns of intuition underlying human morality. A sociocultural-evolutionary approach to morality, MFT contends that there are are five foundations of moral intuition that exist across cultures and emerged in human evolution to regulate group life. Two of these foundations have been labeled the *individualizing* foundations, harm/care and fairness/equality. The former refers to the protection of individuals, the latter to broader concerns about justice. They are referred to as the individualizing foundations because they support the rights of individuals and curb the consequences of self-interest (Haidt & Joseph, 2004). On the other hand, the three binding foundations—authority/respect, ingroup/loyalty, and purity/sanctity—facilitate group formation and help to maintain cohesive group bonds. Specifically, the authority/respect and ingroup/loyalty foundations produce group solidarity and respect for authority. Purity/sanctity reflects the evolved tendency to place controls on one’s desires and is often manifest in traditional religious values and an emphasis on spiritual piety (Haidt & Joseph, 2004, 2007).

Recently, MFT has been used to explain differences in outlook between liberals and conservatives in the United States. Graham and colleagues (2009) demonstrate that many of the differences between liberals and conservatives relate to the endorsement of different moral foundations (Haidt et al., 2009). Liberals tend to be primarily concerned with the two *individualizing* foundations—fairness/equality and harm/care—placing less emphasis on the *binding* foundations. Conservatives, on the other hand, place equal weight on all five moral foundations, simultaneously considering fairness/equality, harm/care, ingroup/loyalty, authority/respect, and purity/sanctity in their approach to morality (Graham et al., 2009; Haidt et al., 2009). Graham and colleagues thus argue that ideological differences in policy preferences reduce to varying endorsement of the moral foundations, shedding light on what some have called the “great divide” and others have referred to as the “culture wars” (Fiorina, Abrams, & Pope, 2005; Hunter, 1991; Layman, 2001; McCarty, Poole, & Rosenthal, 2006; Wuthnow, 1988). Thus, along these lines, we generally expect that self-identified conservatives will rely on a wider variety of moral intuitions than self-identified liberals.

### The Heterogeneity of Ideology

According to MFT, conservatives rely on a richer pool of moral considerations when considering social and political issues. Like many approaches to ideology, however, most MFT studies operationalize ideology as a unidimensional construct—arraying liberals and conservatives in single dimension with each ideological commitment being at opposing ends of the same scale (see also, Jost, Glaser, Kruglanski, & Sulloway, 2003). Recent work has challenged the unidimensional view (Conover & Feldman, 1981; Duckitt, 2001; McClosky & Zaller, 1984; Weber & Federico, 2007), arguing that at least two dimensions underlie policy considerations. One dimension—often conceptualized as an “economic” dimension—is rooted in concerns about hierarchy, inequality, and economic considerations more broadly; a second correlated “social” dimension is rooted in concerns over social order, stability, and the status quo (Duckitt, 2001; Stenner, 2005, 2009).

Importantly, this perspective not only suggests that ideology may consist of multiple dimensions, but it also implies that there may be multiple kinds of liberals and conservatives that nevertheless place themselves in fairly similar locations on the unidimensional left-right spectrum.
A brief look at the historical evolution of conservatism in the United States illustrates this dynamic. While conservatism in the first half of the twentieth century tended to focus on the size of government and was frequently associated with an isolationist foreign policy posturing, it was not until after the civil rights movement and the emergence of race as a salient political concern that liberals and conservatives began to consistently differ on domestic social policy (Carey, 1984; Carmines & Stimson 1991). In particular, the mobilization of the religious right in the 1970s and Ronald Reagan’s ability to appeal to both culturally conservative religious voters and fiscally conservative voters, led once-distinct “economic” and “social” camps to coalesce under the GOP (Dionne, 1991). For the last several decades, this ideological heterogeneity is one reason for tensions within the Republican Party, as many libertarians and social conservatives find themselves at opposite ends on an array of public policy. Although libertarians and social conservatives may both identify as “conservative,” their reasons for doing so may differ in many important ways (Haidt et al., 2009). Analyses informed by cognitive linguistics have similarly pointed out similar dynamics, suggesting that there are multiple varieties of liberals and conservatives that view the world through somewhat different thematic lenses (e.g., Lakoff, 2002, 2008).

In this vein, we argue that there is more to ideology than what is captured by conventional self-identification measures. It is because of this nuance that the patterns of moral intuition displayed by self-identified conservatives and liberals in previous studies may mask more fine-grained moral differences among individuals on each side of the general ideological divide (a point also made by linguistic analyses; see Lakoff, 2008; McAdams et al., 2008). Specifically, if ideology is multifaceted, then two people who locate themselves in relatively similar places on a standard unidimensional liberal-conservative scale may view the social world in very different moral terms. The number of apparently relevant moral foundations may be confounded with the presence of many different latent “types” of liberals and conservatives choosing similar points on a self-placement question. Thus, within the broader groups of individuals who identify as liberal or conservative on a standard self-placement item, we expect to find classes of individuals with different constellations of public policy preferences. Moreover, given these individuals are likely to be liberal or conservative for different reasons, we also expect these distinct clusters of self-identified liberals and conservatives to differ in the constellations of moral foundations they rely on.

Previous research has not thoroughly explored these possibilities, but it does suggest the existence of politically significant patterns of moral intuition beyond those associated with ideal-type liberals and conservatives. In one recent study, Haidt et al. (2009) examined patterns of moral intuition other than those displayed by conventional liberals and conservatives. Rather, focusing specifically on issue-based subgroups within each ideological label—as we do here—they performed a cluster analysis on participants’ responses to measures of the five moral foundations and found four basic patterns of moral-foundation endorsement. In turn, the subsets of participants that displayed each pattern showed different social and political beliefs. While two clusters corresponded to consistent liberals and consistent conservatives of the type examined in previous moral foundations research, the other two appeared to attract those with less clearcut beliefs. For example, one of the latter clusters showed lower scores on the individualizing foundations, like conservatives, and lower scores on the binding foundations as well, much like liberals. Importantly, this cluster also contained 60% of their sample’s self-identified libertarians. Unfortunately, this study does not address several of the key issues we outline above. Most importantly, it identified subsets of individuals on the basis of their moral concerns, whereas we are interested in identifying latent ideological clusters of individuals based on their attitudes across the economic and social issue domains; that is, our theoretical and empirical starting point is with structures of political belief as opposed to morality. Moreover, Haidt et al. (2009) do not directly address the question of whether there are distinct ideological classes—with unique patterns of moral intuition—that nevertheless place themselves in similar ways on the unidimensional left-right spectrum.
Turning to our own hypotheses, we offer some predictions about what exactly the distinct clusters of liberals and conservatives should look like in terms of their issue-attitude profiles—and more importantly, their moral profiles. With respect to the issue orientations of the clusters, we offer one general prediction: there should be a greater number of clusters among those who self-identify as conservative than those who self-identify as liberal. Several factors point in this direction. First, as noted above, the conservative coalition in the United States has long been split between libertarians with a primary interest in individual freedom and cultural conservatives with a stronger interest in social cohesion (Dionne, 1991). Second, there is heterogeneity in policy preferences within the broad group of individuals who label themselves as conservatives. Stimson (2004), for instance, finds a nontrivial number of self-identified conservatives who are “operational liberals”—i.e., individuals who adopt liberal policy positions while adopting the conservative label and identity at a “symbolic” level (Feldman & Johnston, 2009; Stimson, 2004). Together, these considerations suggest greater variance in issue orientations among those who self-identify as conservative.

Recent work also offers a few more specific clues about what the various types of liberals and conservatives might look like. In an effort to explore intra-ideological differences, Feldman and Johnston (2009) employed factor mixture modeling to isolate groups of respondents who rooted their self-placements on a standard liberal-conservative scale in different clusters of issue preferences. While one group of respondents relied on both economic and social issue preferences in anchoring their overall ideological position, two other groups of respondents focused respectively on either economic or social issues alone. More importantly, Feldman and Johnston also used latent class analysis to identify six groups of respondents with unique patterns of attitudes across the economic and social issue domains. Consistent with our own expectations, most of these classes—four out of six—self-identified as conservative. Two of these were relatively familiar: one class that took conservative positions on both economic and social issues (i.e., consistent conservatives) and a second class that paired conservative positions on economic issues with liberal positions on social issues (i.e., libertarians). Nonetheless, libertarians were less religious and less authoritarian than consistent conservatives (Feldman & Johnston, 2009). The third largely self-identified conservative class took moderate positions on economic issues, but held extremely conservative preferences on social issues, such as abortion. This class was the most authoritarian, religious, and the least educated and sophisticated of the six classes. Finally, a fourth class that tended to self-identify as conservative held relatively liberal preferences on economic policy, but conservative preferences for social policy. This class is more egalitarian but also more religious and authoritarian than the libertarian or consistent-conservative classes. In contrast, Feldman and Johnston (2009) only found two classes that self-identified as liberal. One class—comprised of consistent liberals—took liberal positions on both economic and social issues; they were less religious, more egalitarian, and less authoritarian. The second class held relatively moderate economic preferences, but extremely liberal social preferences; they were less religious and authoritarian than the consistent-liberal class. In our own analyses—which also rely on latent class analysis—we expect to find a roughly similar set of ideological groups.

More importantly, with respect to moral intuition, we expect the latent ideological classes we uncover to differ in systematic ways as well. In particular, we expect to find important differences among the various conservative classes, consistent with the expectation that there will be more ideological variance among self-identified conservatives. First, among the classes that self-identify as conservative, we expect the classes that place a strong emphasis on socially conservative issue positions to show higher scores on the binding foundations compared to both self-identified conservative classes that do not emphasize social conservatism and self-identified liberal classes. Conversely, we expect self-identified conservative classes that do not place an emphasis on social conservatism to be more like liberals in their level of support for the binding foundations. These predictions follow from the strong link between moral traditionalism and the binding foundations suggested by earlier research (e.g., Haidt et al., 2009). Second, we expect that latent classes that
largely self-identify as conservative but take liberal positions in some domains will be higher than other self-identified conservatives in their support for the individualizing foundations. These groups may include not only libertarians—who think of themselves as conservative but reject social conservatism—but also “conflicted conservatives” who adopt the conservative label while taking liberal positions on economic matters (Stimson, 2004). In this case, we believe that greater support for the individualizing foundations will be driven by strong concerns for individual liberty or well-being in particular policy domains.

To explore these hypotheses, we rely on results from a survey administered to a large sample of participants at Louisiana State University. To review, our three general hypotheses are:

**H1:** Self-identified conservatives should rely on a richer set of moral considerations than liberals, valuing the three binding foundations as well as the two individualizing foundations. Liberals, on the other hand, should mainly endorse the two individualizing foundations, placing much less emphasis on the binding foundations.

**H2:** There should be unique clusters of individuals—with unique patterns of issue preferences—among those who broadly identify as liberal or conservative on a standard unidimensional self-placement item. In this regard, we expect to find roughly the same ideological subtypes uncovered by Feldman and Johnston (2009).

**H3:** Different types of self-identified liberals and conservatives—with unique patterns of issue preferences—should differ in the constellations of moral foundations they rely on, depending their relative emphasis on social conservatism and the broader consistency between their adopted ideological label and their issue positions.

**Methods**

Seven-hundred-and-forty-five undergraduate students enrolled in mass communication and political science courses at a large southern university completed an opinion survey on the “Foundations of Political Beliefs.” Participants were drawn from a subject pool and received extra credit for their participation. All participants completed the survey online and were required to provide informed consent before completing the survey. Sixty-two percent of the sample was female; 38% were male. Eighty percent of the sample was white; 11% identified as African American, 3% as Latino, 4% as Asian; and the remainder chose the “other” category. While the sample was disproportionately Republican (55%), there were a fair number of Democrats (24%), with the remaining participants identifying themselves as Independent or third party (21%). Finally, 26% identified themselves as liberal; 18% were moderate; and 56% were conservative.

**Measures**

*Moral Foundations Questionnaire.* Respondents completed a 15-item version of the Moral Foundations Questionnaire (MFQ; Graham et al., 2011). The MFQ measures the five moral foundations identified by Haidt and Joseph (2007): harm/care, fairness/reciprocity, ingroup/loyalty, authority/respect, and purity/sanctity. Each foundation was measured using three “moral relevance” items, introduced with the stem “We would like to know to what extent the following considerations are relevant to your thinking when you decide whether something is right or wrong.” All items were answered on a 6-point scale ranging from 1 (not at all relevant) to 6 (extremely relevant). The full text of the 15 MFQ items can be found in the appendix. The three MFQ items corresponding to each
constuct were used as indicators of fairness/reciprocity ($\alpha = .74$, $M = 4.48$, $SD = .84$), harm/care ($\alpha = .70$, $M = 4.30$, $SD = .87$), ingroup/loyalty ($\alpha = .66$, $M = 3.98$, $SD = .90$), authority/respect ($\alpha = .57$, $M = 3.99$, $SD = .81$), and purity/sanctity ($\alpha = .62$, $M = 3.90$, $SD = .97$).

Policy Preferences. Following the moral foundations questions, participants indicated their preferences on a host of public policy issues. We administered 19 items about a range of policies from both the “economic” and “social policy” domains (Conover & Feldman, 1981; Feldman & Johnston, 2009; Hunter, 1991; Layman, 2001). For instance, in the economic domain, we asked questions about poverty (e.g., “Some people believe that private charities are enough to help the poor, others think that government should set up programs to help the poor. How about you?”); attitudes towards general government spending (e.g., “Do you think the government should provide fewer services in such areas as health and education, or should the government provide more services?”); health insurance (e.g., “Do you favor the option of having a government insurance plan, or do you prefer keeping insurance private?”); and social welfare spending (e.g., “Some people feel that the government in Washington should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on their own. How about you?”). We also asked about a variety of attitudes in the social domain, such as abortion (e.g., “Do you feel that government should not restrict abortion rights, or that abortion should never be allowed? Or, do you attitudes fall somewhere in between?”); guns and gun control (e.g., “Do you think the federal government should make it easier or more difficult to buy a gun?”); and attitudes towards gay marriage and adoption (e.g., “Do you think gay and lesbian couples should be legally permitted to adopt children?”). Given the diversity of these issues—i.e., some focus on spending, others more general assessments of public policy—these questions were asked using different response formats. Detailed information on these items can be found in the online appendix. Each item was answered on a 7-point Likert scale; however, prior to the analyses, scores on the items were recoded to run from 0 to 1, with higher scores denoting more conservative attitudes.

Finally, we assessed general ideological self-placement using a single question, “How would you describe your political preferences?” where responses varied from 1 (strongly liberal) to 7 (strongly conservative).

Results

Based on previous research, our first hypothesis is that self-identified conservatives should rely on a wider range of moral considerations when considering public policy (Graham et al., 2009). While liberals will mainly consider harm/care and fairness/reciprocity, conservatives should be more likely to consider all five: harm/care, fairness/reciprocity, ingroup/loyalty, authority/respect, and purity/sanctity. Consistent with the pattern of results in this literature, Figure 1 shows that ideological groups do not significantly differ with respect to the individualizing foundations. The pairwise correlations between ideological self placement and the moral foundations demonstrated a nonsignificant relationship for the individualizing foundations (harm/care: $r_{polyserial} = 0.01$, ns; fairness/reciprocity: $r_{polyserial} = -0.00$, ns). For the binding foundations—authority/respect, ingroup/loyalty, and purity/sanctity—we find for a stronger relationship between ideology and morality, with conservatives being more likely to endorse authority/respect $r_{polyserial} = .27$, $p < .01$), ingroup/loyalty $r_{polyserial} = .29$, $p < .01$), and purity/sanctity $r_{polyserial} = .35$, $p < .01$).

Ideological Heterogeneity

However, the pattern of results in Figure 1 may mask other important differences between liberals and conservatives. In line with our second and third hypotheses, concluding that self-
identified liberals and conservatives rely on different constellations of moral foundations may be problematic if significant heterogeneity exists within these ideological groups. That is, if ideology is more nuanced than is captured by a single left-right continuum, then standard indicators of left-right self-placement may mask important variation in political beliefs. To explore this possibility, we conduct a “mixed mode latent class analysis” (Vermunt & Magidson, 2002), and we treat ideology as a latent construct, with issue preferences serving as manifest indicators of an individual’s ideological commitments. Instead of relying on a single self-placement item to measure one’s ideological leanings, we follow the approach of others (e.g., Conover & Feldman, 1981; Feldman & Johnston, 2009), examining if issue preferences systematically covary in meaningful ways. That is, we examine whether it is possible to identify different patterns of ideological preference based on patterns of covariation between policy attitudes. This affords us the ability to examine if those who identify as liberal or conservative are as unified in their policy positions as is frequently assumed.

The majority of empirical research detailing the multifaceted nature of ideology has used factor analysis or similar data-reduction techniques, which allows one to ascertain whether attitudes toward particular issues hang together in empirically consistent ways. Factor analysis, however, is less appropriate to classify individuals (Lubke & Neale, 2006, 2008). Since our primary focus is heterogeneity among liberals and conservatives with respect to policy preferences, an alternative and more appropriate method of examining variation among subtypes of liberals and conservatives is mixed-mode latent class analysis (hereafter, LCA). LCA allows us to examine whether “classes” or subgroups of individuals hold similar preferences (Lubke & Neale, 2006, 2008).

LCA allows us to group respondents according to similar patterns of issue preferences. The model is used to test whether the relationship between any set of $k$ variables is a function of $j$ latent classes (Hagenaars & McCutcheon 2002; Muthén, 2008). In other words, the model categorizes individuals into a latent class based on a particular pattern of responses to a set of items. Specifically, Vermunt and Magidson (2002, p. 94) define the LCA as:

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2 Standard LCA estimates a set of latent classes from the cross-classified responses of categorical variables. Mixed-model LCA allows for both continuous and categorical responses, though the logic is the same: One derives $k$ latent classes from a set of observed variables.

3 An analogue to mixed-model LCA is cluster analysis. Yet, unlike cluster analysis, mixture modeling assumes that classes are latent, meaning membership in a given class is based on probability.
where the observed data, \( y \), is a function of \( \theta \), the estimated parameters in the model—namely, the probability of belonging to latent class \( k \) based on the distribution of \( J \) items (Vermunt & Magidson, 2002, p. 94).\(^4\)

We begin by specifying the LCA model in *Mplus* version 6.11 (Muthén & Muthén, 1998–2010). Based on responses to the aforementioned 19 policy items, we specified a series of mixture models to ascertain how many “classes” provide the best fit-to-data. The first step in this analysis requires specifying, a priori, the number of latent classes underlying the actual data. Following Muthén (2002), we use an iterative process by specifying a \( k \)-class model and comparing that to a model where \( k - 1 \) classes are estimated. If the \( k \)-class model is a drastic improvement in fit to a \( k - 1 \)-class model, we then compare the \( k \)-class model to a \( k + 1 \)-class model. The process terminates when adding extra classes does not improve the model fit. We explore the changes in model fit using the Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), and sample-size-adjusted Bayesian Information Criterion (aBIC), all of which provide a statistical punishment for adding uninformative classes.

We first compare a two-class model to a one-class model. The two-class model provides a marked improvement in model fit, which is evident by comparing the AIC, BIC, and aBIC values in Table 1. Values closer to zero indicate a better model fit. The two-class model provides a better fit relative to a single-class model—the naive model where there are no classes. The two-class model has an acceptable entropy level (0.79), and the change in AIC, BIC, and sample adjusted BIC values are substantial (\( \Delta \text{AIC} = 1309.51; \Delta \text{BIC} = 1194.51; \Delta \text{aBIC} = 1273.90 \)). However, examining the rows in Table 1, we find that the best-fitting model is a six-class model, as indicated by an improved AIC and aBIC fit than a five-class model. A bootstrapped likelihood ratio test comparing a five- to six-group model also indicated a significantly better fit for the latter (\( \chi^2[24] = 154.51, p < .01 \)). Thus, as expected, we find a latent structure similar to that uncovered by Feldman and Johnston (2009).\(^5\)

From this model, we then present the means of 16 of the 19 items in Figure 2. Three of the items were treated as categorical, not continuous, which is why we do not present them in the figure. The predicted probabilities of being in the most conservative category across each class are listed in the appendix.\(^6\) These results shed light on the policy bases of the various latent classes. Four of the classes are identical to those identified by Feldman and Johnston (2009). The first group is defined by individuals taking a liberal position on all of the items (21% of the sample), while the second group is defined by a conservative position on all items (9%). A third group, denoted by the dotted

\[^4\] The only difference between this model with all continuous items, the latent profile analysis (LPA), and a latent class analysis with only categorical variables, is that instead of using a multivariate distribution, it is necessary to define the univariate distribution function for all variables.

\[^5\] We were unable to estimate a higher class model due to model nonconvergence.

\[^6\] The predicted probabilities for choosing categories in the three remaining questions support the general pattern in this figure; they are excluded so as to not confuse mean responses with predicted probabilities.
lines connecting the crown symbols, holds relatively conservative positions on many of the fiscal items (e.g., domestic spending) while holding relatively liberal positions on social policy (e.g., gay marriage). These individuals, which account for 15% of the sample, hold positions consistent with libertarianism, favoring a conservative, limited-government position on fiscal issues while endorsing relatively liberal positions on social and cultural issues. Finally, the fourth class holds relatively moderate positions on fiscal issues, but very conservative positions on social issues (14% of the sample). We call this class “social conservatives” in Figure 2, and it is represented by the dotted line connecting the diamonds.

Our LCA also identified two other classes that differed slightly from Feldman and Johnston’s (2009) remaining groups. First, a fifth class was comprised of consistent moderates who respond near the midpoint for all the items (28%). Second, a sixth class consisted of individuals who are slightly left of center on fiscal issues, but who endorse very liberal positions on all social issues except for immigration and abortion (14% of the sample). Individuals in this class, who we refer to as “inconsistent liberals” (for lack of a better term) are somewhat similar to one of the remaining classes identified by Feldman and Johnston (2009), which consisted of individuals with moderate economic views and largely liberal social views. What the analysis summarized in this figure indicates is that there is considerable individual-level heterogeneity in the ways that issue preferences are assembled and that this heterogeneity takes on a pattern largely similar to that identified by earlier work (as expected; see Feldman & Johnston 2009).

According to our second hypothesis, members of many of these distinct latent classes should nevertheless place themselves in similar regions of the left-right spectrum. In order to address this question, we looked at each group’s ideological self-description in two ways: (1) in terms of its average score on the 7-point ideological self-placement item and (2) in terms of how its members classified themselves into the general categories of liberal, conservative, and moderate. For the latter purpose, we recoded the 7-point ideology variable into three broad categories indicating whether the respondent identified himself or herself as liberal, conservative, or moderate.

Table 2 presents the contingency table for three-category ideological self-placement crossed with class membership, along with each class group’s average self-placement on the original 7-point measure. Three-category ideological self-placement and class membership are highly related ($\chi^2[10] = 249.46, p < 0.01$, $LR\chi^2[10] = 255.20, p < 0.01$). Among individuals in the liberal class,
65.8% are self-identified liberals, followed by self-identified moderates (24.5%) and conservatives (9.7%). Yet, for all the remaining classes, at least a plurality of 40%—and in two cases, a majority—of respondents self-identify as conservatives. For instance, among libertarians, 17.4% identify as liberal, whereas 44% are conservative. The two most conservative classes are the socially conservative class (77.1% conservative) and the conservative class (92.2% conservative).

The column percentages similarly demonstrate that, among self-identified liberals, the most common class is the liberal class (52.8%), for moderates it is the moderate class (33.5%), and for conservatives it is also the moderate class (27.9%). An important characteristic of this table is that among self-identified conservatives, the probability of being in any one class is more uniform, as indicated by the similar column percentages. Moreover, if we look at the class groups’ average self-placements on the original 7-point ideology scale, we see that five of the six classes place themselves to the right of the ideological midpoint of 4, despite broad differences in their actual patterns of belief across issue domains. What this suggests is that there is a great deal more heterogeneity in class membership among self-identified conservatives than among self-identified liberals, as expected.

To further illustrate how ideology systematically relates to class membership, we conducted a multinomial logistic regression, allowing ideological self-placement to predict the probability of being in each of six classes. For the purposes of this analysis, we used the original 7-point coding of the ideological self-placement variable. Since class membership is derived from the probabilities of being in each of the six classes, we also weighted our data to reflect uncertainty in class membership. Specifically, the data were weighted based on the the respondent’s highest class probability. As such, those individuals who were very likely to be in one class over another were weighted more heavily than those where class membership was less certain. From this model, we generated predicted probabilities of belonging to the $k$th class across the seven values of the ideological self-placement scale. These probabilities are plotted in Figure 3.

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<th>Class</th>
<th>Liberal</th>
<th>Moderate</th>
<th>Conservative</th>
<th>7-Point Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistent Liberal</td>
<td>102</td>
<td>38</td>
<td>15</td>
<td>2.97</td>
</tr>
<tr>
<td>(65.8) (52.9)</td>
<td>(24.5) (18.5)</td>
<td>(9.7) (4.5)</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Libertarian</td>
<td>19</td>
<td>42</td>
<td>48</td>
<td>4.49</td>
</tr>
<tr>
<td>(17.4) (9.8)</td>
<td>(38.5) (20.4)</td>
<td>(44.0) (14.4)</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Social Conservative</td>
<td>7</td>
<td>15</td>
<td>74</td>
<td>5.39</td>
</tr>
<tr>
<td>(7.3) (3.6)</td>
<td>(15.6) (7.2)</td>
<td>(77.1) (22.2)</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>47</td>
<td>69</td>
<td>93</td>
<td>4.39</td>
</tr>
<tr>
<td>(22.5) (24.4)</td>
<td>(33.0) (33.5)</td>
<td>(44.5) (27.9)</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Consistent Conservative</td>
<td>1</td>
<td>4</td>
<td>59</td>
<td>5.99</td>
</tr>
<tr>
<td>(1.6) (0.5)</td>
<td>(6.3) (1.9)</td>
<td>(92.2) (17.7)</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Inconsistent Liberal</td>
<td>17</td>
<td>38</td>
<td>44</td>
<td>4.45</td>
</tr>
<tr>
<td>(17.2) (8.8)</td>
<td>(38.4) (18.5)</td>
<td>(44.4) (13.2)</td>
<td>–</td>
<td></td>
</tr>
</tbody>
</table>

Note: Frequencies, below which are unweighted row percentages in parentheses, followed by unweighted column parentheses in parentheses. The last column is mean ideology score from the 7-point self-placement item, weighted by the probability of class membership.

Table 2.

**Moral Foundations and Heterogeneity in Ideological Preferences**

7 We weighted the 7-point scores based on the probability of class membership. The weights were calculated based on the estimated probability of being in each class, $p_k$. We then use the class with the highest probability as weights to account for uncertainty in class identification. The weighted and unweighted means are negligible, but we opted to present the weighted means to better account for uncertainty in class membership.
At any given value on the x-axis in Figure 3, the predicted probabilities will sum to unity. At the liberal end of the spectrum, the likelihood of belonging to the liberal class is much larger than belonging to any other class. For instance, among strong liberals, the odds of belonging to the consistent liberal class is approximately 2.45 to 1 (i.e., .71/.29). However, among strong conservatives, the odds of belonging to any one class over the others is much less, as indicated by how close each of the predicted probabilities are to one another. While the probability of belonging to the consistently conservative class is the highest (.32), the probability of belonging to the social conservative class is .22, for the moderate class it is .23, for the libertarian class it is .10, and for the consistently liberal and inconsistently liberal classes it is .02 and .10, respectively. Again, this suggests that there is much more individual-level heterogeneity in issue-preference profiles among conservative identifiers than among liberal identifiers, as predicted. Together, Table 2 and Figure 3 illustrate that there is important heterogeneity within ideological labels.

Although there are some differences in average ideological self-placement for these classes, note that the logic of the second hypothesis is that if different classes choose similar points on the ideology scale, this could pose problems for conclusions about the relationship between ideology and the moral foundations. For instance, if libertarians identify themselves on the same side of the unidimensional left-right spectrum as those who hold both conservative fiscal and social preferences, this could lead to erroneous conclusions about liberal versus conservative differences. In Table 2, the only majority (or even plurality) liberal class is the class that holds liberal preferences for both social and fiscal issues—the “liberal” class from Figure 2. Every remaining group identifies at the midpoint of the scale or at the conservative end, suggesting that there is more heterogeneity in policy preferences among relatively conservative self-identifications. Indeed, the most conservative group

![Figure 3. Ideology and class membership. High scores denote conservatism. Predicted probabilities from a multinomial logit. Data are weighted by the probability of class membership.](image-url)
are those who hold conservative preferences for both fiscal and social policy, followed by those who are more moderate in their fiscal policy preferences but more conservative on social policy.

From our perspective, this variation may be important with regard to the five moral foundations. Is it the case that all classes of self-identified conservatives value all five moral foundations, or do different classes of conservatives rely on different constellations of moral considerations? To explore this possibility, a multilevel model was estimated where endorsement of each moral-foundation scale was nested within individual respondents. This model was estimated, as opposed to a single-level model, to control for individual-level variation in endorsing the moral foundations. In this model, we crossed the indicator for each moral foundation with the respondent’s most likely class in order to obtain a mean estimate and standard error for each moral foundation within each class. This also allows us to test mean differences across classes; we can place constraints on the parameters to examine whether overall model fit changes. We also control for several demographics, including the sex of the respondent (1 = female, 0 = male), the respondent’s race (1 = nonwhite, 0 = white), and his/her income (in $10,000 units). In order to account for the possibility that respondents might be using party cues (rather than ideological orientations) to make judgments about morality, we also controlled for party identification; this was measured on a 7-point scale (ranging from 1 = Strong Democrat to 7 = Strong Republican). We then estimated the weighted mean average endorsement for each item, with 95% confidence intervals surrounding the estimate. These estimates are plotted in Figure 4.

Figure 4. Moral relevance and class membership. High scores denote more relevance. Data are weighted by the probability of class membership.
Congruent with our third hypothesis, there is substantial variation in endorsement of the foundations across classes, even among classes with relatively similar self-placements on the unidimensional ideology scale. Recall that the “moral relevance” scales vary from 1 to 6, implying that a value of 4 or greater indicates a relevant foundation. Congruent with Graham et al. (2009), “consistent liberals” clearly emphasize the individualizing foundations. However, two of the classes that largely self-identified as conservative—libertarians, followed by inconsistent liberals—more closely resembled liberals in their endorsement of the individualizing foundations (although inconsistent liberals are much closer to the midpoint than libertarians or liberals). Moreover, we find that it is social conservatism which is most aligned with the conclusions Graham et al. (2009) reach about conservatives in general: only social conservatives place relatively equal weight on all five foundations, whereas consistent conservatives place most weight on fairness/reciprocity and ingroup/loyalty. For the latter class, the 95% confidence bar does not cross the midpoint for harm/care, authority/respect, or purity/sanctity.

In addition to comparing class means to the midpoint, we also contrast the classes. Echoing Graham et al. (2009), the consistently liberal class places relatively more value on the individualizing foundations; they place less emphasis on the binding foundations. Compared to those in the consistent conservative class, liberals place more emphasis on fairness/reciprocity and harm/care; jointly constraining the parameters to equality between consistent liberals and conservatives reduces the model fit ($\chi^2(1) = 27.98, p < .01$). In fact, the consistent liberal class places more emphasis on these foundations than four of the other classes (libertarians: $\chi^2(1) = 18.25, p < .01$; social conservatives: $\chi^2(1) = 21.38, p < .01$; moderates: $\chi^2(1) = 86.25, p < .01$; consistent conservatives: $\chi^2(2) = 34.01, p < .01$). However, there is only a marginally significant difference between consistent liberals and inconsistent liberals in terms of endorsing the individualizing foundations ($\chi^2(2) = 5.22, p < .10$), making them relatively similar in this regard.

Importantly, however, we do not find differences that are as striking between the consistent liberal class and the other classes with respect to the binding foundations. In particular, consistent liberals and libertarians do not differ on the binding foundations ($\chi^2(3) = 1.13, ns$), as we expected from both groups’ low emphasis in conservatism in the social-issue domain. However, there are differences between between liberals and social conservatives ($\chi^2(3) = 22.51, p < .01$), moderates ($\chi^2(3) = 7.35, p < .10$), consistent conservatives ($\chi^2(3) = 7.83, p < .05$), and inconsistent liberals ($\chi^2(3) = 14.62, p < .01$). However, decomposing this effect further, we find that the differences between inconsistent liberals and consistent liberals are driven completely by the purity/sanctity foundation ($\chi^2(3) = 11.85, p < .01$), as there are nonsignificant differences between liberals and inconsistent liberals on ingroup/loyalty ($\chi^2(1) = 0.81, ns$) and authority ($\chi^2(1) = 1.20, ns$). Inconsistent liberals, like consistent liberals, place substantial weight on the individualizing foundations, but place more weight on purity/sanctity than consistent liberals.

In short, there are important nuances that emerge comparing consistently liberal individuals to those who identify at the conservative end of the ideological spectrum. Liberals are quite similar in their moral profile relative to inconsistent liberals and libertarians, while they differ substantially from moderates, social conservatives, and to a lesser extent, consistent conservatives.

**Conservative Heterogeneity**

In addition to the important contrasts between consistently liberal participants and various conservatives, there are other noteworthy patterns in this figure. As predicted, there is considerable heterogeneity in the moral profiles of the five right-leaning classes. Recall that all classes other than “consistent liberals” fall to the right of the midpoint of the ideological self-placement scale. We predicted that groups who self-identify as conservative but take liberal positions in some domains would be higher than other self-identified conservatives in their support for the individualizing
foundations. Consistent with this expectation, libertarians are slightly more likely to endorse the individualizing foundations relative to other self-identified conservative groups, especially consistent conservatives ($\chi^2(2) = 5.12, p < .10$) and consistent moderates ($\chi^2(2) = 18.01, p < .01$); however, they did not differ from social conservatives ($\chi^2(2) = 1.27, ns$). Similarly, inconsistent liberals also differed significantly from both consistent conservatives ($\chi^2(2) = 18.15, p < .01$) and social conservatives ($\chi^2(2) = 9.91, p < .01$) on the individualizing foundations.

We also expected conservative-leaning groups that placed a greater emphasis on social conservatism to show more support for the binding foundations. In line with this expectation, both social conservatives ($\chi^2(3) = 29.63, p < .01$) and consistent conservatives ($\chi^2(3) = 13.29, p < .01$) were more likely to endorse the binding foundations relative to libertarians. Similarly, social conservatives ($\chi^2(3) = 14.10, p < .01$) and consistent conservatives ($\chi^2(3) = 12.67, p < .01$) were also more likely to endorse the binding foundations relative to another group that generally avoids socially conservative positions, i.e., moderates. Interestingly, to round the picture out, libertarians even showed less support for the binding foundations than two other self-identified conservative classes that—while not overly conservative on social issues—do place less of an emphasis on individual liberty, i.e., inconsistent liberals ($\chi^2(3) = 18.19, p < .01$) and moderates ($\chi^2(3) = 10.90, p < .01$).

Though libertarians do not resemble the other conservative categories with respect to the moral foundations, to what extent do the other conservative categories differ, given the aforementioned heterogeneity in conservatism (Stimson, 2004)? Contrasting the “consistent conservative” class to the social-conservative class, there are nonsignificant differences between the groups with respect to the individualizing foundations ($\chi^2(2) = 1.81, ns$), but significant differences with respect to the binding foundations ($\chi^2(3) = 8.42, p < .05$). Much of this difference is driven by the fact that social conservatives place substantially more weight on purity/sanctity than do consistent conservatives ($\chi^2(1) = 3.44, p < .06$). Thus, even among two classes that are similar in their level of conservatism on social issues, the class that was defined more exclusively by strong positions on social issues—social conservatives—endorsed the binding foundations to a greater extent, confirming our hypothesis about the special link between social conservatism and the binding foundations.

We take these results to suggest that there is important heterogeneity, especially at the right end of the political spectrum, that partially accounts for the finding that conservatives rely on a richer set of moral foundations than liberals. Our findings suggest that only some conservatives rely on a richer store of moral foundations. While a majority of our respondents identified as “conservative,” they endorsed quite different sets of moral considerations. Individuals who took a more “libertarian” stance on policy issues tended to more closely resemble the issue positions of liberals as opposed to those who took conservative positions on all policy items. Likewise, those that endorsed a more moderate position on fiscal policy (relative to libertarians), yet endorse a liberal stance on social policy, also had a moral profile more similar to liberals than conservatives. Our findings suggest that the only ideological classes to favor all considerations in equal proportions are those who consistently endorse conservative positions and fiscal moderates who endorse social conservatism.

Discussion

In recent years, both academics and political commentators have drawn attention to how liberals and conservatives may differ in their understandings of morality. Several approaches have been advanced to understand the moral gap between ideologues of different stripes (Haidt & Kesebir, 2010; Lakoff, 2002, 2008). As noted earlier, one of the most influential perspectives on this topic has been provided by moral foundations theory, which suggests that liberals and conservatives differ in the relative emphasis they place on moral principles that protect individuals versus those that protect social order (Graham et al., 2009; Haidt & Joseph, 2004; Rossiter, 1955). While self-identified liberals place a greater emphasis on individualizing moral foundations that emphasize fairness and
the avoidance of harm than on binding moral foundations that encourage ingroup loyalty, respect for authority, and purity, self-identified conservatives tend to emphasize the individualizing and binding foundations equally.

While both moral foundations theory and other contemporary approaches have shed important light on the different moral orientations of liberals and conservatives, we believe that existing studies have ignored potentially important variation among different types of liberals and conservatives. We argue that groups of individuals who place themselves at relatively similar points on a simple, unidimensional left-right scale may actually display distinct patterns of attitudes about social and economic issues—and more importantly, different patterns of support for individualizing and binding moral foundations. In the study reported here, we explore this possibility using data from a large survey of college students. We replicate the finding that self-identified conservatives emphasize all five foundations, while liberals primarily emphasize the individualizing foundations. However, a mixed-mode latent class analysis also suggested the presence of six different latent classes of respondents with distinct issue-attitude profiles. Importantly, we found that five of these groups were more likely to self-identify as conservatives than anything else, despite major differences in basic social attitudes.

Consistent with our general expectations, an examination of the six groups’ support for the various moral foundations indicated significant variation. First, individuals in the “liberal” class—who largely self-identified as liberal—did not differ from several of the classes that self-identified on average as “conservative” in their level of support for the binding moral foundations of ingroup loyalty, respect for authority, and purity. Moreover, at least one of the latent classes that self-identified as conservative—e.g., the “libertarian” class—was also notably less supportive of the binding foundations relative to two of the other classes that self-identified as conservatives. Second, among the five latent classes that broadly self-identified as conservative, there were notable differences in support for the individualizing foundations, with some classes strongly supporting fairness and harm avoidance (e.g., libertarians and “inconsistent liberals”) and other classes tending to shy away from the same foundations (e.g., “consistent conservatives” and “social conservatives”).

Thus, a key implication of our findings is that analyses of the relationship between ideology and morality that relies exclusively on unidimensional indices of ideological self-placement may be misleading. In particular, they may obscure important differences in moral intuition among subgroups of self-described liberals and conservatives with distinct patterns of social and economic attitudes. While work in this area has provided clear evidence for the existence of moral differences between various ideological factions, much of it has focused strictly on differences between “ideal-type” liberals and conservatives. Less attention has been devoted to the moral outlook of individuals with cross-cutting ideological beliefs. This is problematic, as both survey research (e.g., Treier & Hillygus, 2009) and work in cognitive science (e.g., Lakoff, 2002, 2004, 2008) suggests that many voters rely on principles from a variety of ideological backgrounds when considering political issues.

By identifying groups of individuals with cross-cutting belief systems and examining their patterns of support for individualizing and binding moral concerns, our study helps fill this gap. For example, our findings shed additional light on the pattern of moral intuition behind contemporary libertarianism—a belief system that has received less attention from political psychologists than either conventional liberalism and conservatism, despite its increasing influence on contemporary discourse (Iyer, Koleva, Graham, Ditto, & Haidt, 2010). Like other researchers who have examined libertarians, we find that they display a distinct pattern of moral dispositions. While libertarians fall between conventional liberals and conservatives in their level of support for the individualizing foundations (especially fairness), they are notably less supportive of the binding foundations compared to other groups that self-identify as conservatives (see also Haidt et al., 2009).

From a somewhat different angle, our study also adds to a growing body of work examining the broader heterogeneity of ideology. In this vein, analyses of ideology have long drawn on latent factor models to explore potential heterogeneity in the form of multiple underlying dimensions of ideology
(Feldman, 2003; Feldman & Johnston 2009; see also Duckitt, 2001; Schwartz, 1992). However, researchers have only recently begun to empirically explore potential heterogeneity in the form of latent classes of individuals with distinct combinations of issue preferences. Recent work taking this approach has shown that simple differences in self-placement on the unidimensional left-right spectrum mask the existence of distinct classes of individuals with varying levels of liberalism and conservatism in their preferences regarding social and economic issues. While some of these classes showed traditional patterns of consistent liberal or conservative issue evaluation, others show less consistent patterns. The results we report here extend this line of analysis in important ways. Like Feldman and Johnston (2009), we find similar latent classes of individuals with distinct patterns of issue preferences—reinforcing the claim that ideology is more complex than the notion of a single left-right spectrum might suggest. However, we go one step further by demonstrating that these groups of individuals also have distinct underlying moral profiles, despite sometimes placing themselves in similar positions on the standard left-right spectrum. Thus, the latent heterogeneity of ideology revealed by recent studies extends not just to issue judgment, but also to the potentially deeper level of moral intuition. Of course, in emphasizing the complexity of ideology, we do not wish to completely dismiss the utility of the unidimensional left-right spectrum. While the simple liberal-conservative dimension may not fully capture the complexity of citizens’ ideological attitude structures, it does have a great deal of predictive power and discursive relevance—especially among political elites and well-informed members of the mass public (Jost, 2006). As such, our goal is less to displace consideration of the left-right dimension than to illustrate some of the complexities behind it.

On a different note, our results also have parallels with conclusions reached by other perspectives on the intersection between morality and politics. One such perspective is provided by Lakoff’s (2002, 2008) work on the conceptual bases of liberal and conservative politics, which has its roots in cognitive linguistics and neuroscience. Lakoff’s approach contends that differences between liberal and conservative ideology boil down to the moral frames accompanying two important family metaphors: the strict father and nurturing parent metaphors (Lakoff, 2002, 2008; McAdams et al., 2008). At the heart of conservatism is the strict father metaphor; the belief that the father is a moral leader who is tasked with protecting the family from a competitive and dangerous world. Effective leaders should develop clear rules to ensure law and order and advance personal restraint, order, and suppression of impulses (Lakoff, 2002, 2008). Liberals, on the other hand, rely on the nurturing parent metaphor, defined by a family structure where the father and mother share equal roles. A parent’s primary job is to nurture, cultivating development with empathy and compassion, rather than harsh discipline. Extended to society, effective leaders are tasked with advancing the well-being of all members of society through principles of empathy, care, and respect (Lakoff, 2008; McAdams et al., 2008).

Importantly, Lakoff’s (2002) model speaks to many of the same phenomena we seek to address using MFT and bidimensional models of ideology. For example, the moral concerns embodied in Lakoff’s strict-father metaphor dovetail closely with the three binding foundations examined by MFT, which receive greater emphasis among conservatives than liberals; both are concerned with self-discipline, obedience, and loyalty. Conversely, the moral concerns at the heart of the nurturant-parent metaphor map onto those associated with the individualizing foundations emphasized above all by liberals; both deal with respect for others and control of selfishness. Moreover, like our approach, Lakoff’s model notes that the ideal-type “liberal” and “conservative” labels may mask the existence of distinct types of liberals and conservatives who vary along multiple attitudinal dimensions (Lakoff, 2008). Of course, the two approaches are rooted in very different methodologies, despite these similarities. While our analysis focuses on the statistical analysis of survey responses, Lakoff’s work derives from an analysis of language and the embodied conceptual structures implicit in political discourse. In this respect, we believe that our approach has the advantage of going beyond...
the formal analysis of language to provide clear statistical evidence of latent attitude structures using data collected from a large number of individuals. However, we also acknowledge the limits of this approach compared to the cognitive methods used by Lakoff and other methods developed in cognitive and brain science. For example, while our statistical analyses are well-suited to identifying preference patterns characteristic of different forms of moral intuition, they cannot identify the processes of moral inference behind these patterns. Moreover, by providing respondents with a fixed set of issues to offer judgments about, we limited the issue context in which different patterns of moral intuition could be expressed.

While we believe that these results make a critical contribution to literature on morality and the motivational foundations of ideology, we would like to conclude by mentioning a few other issues that call for further investigation. First, we rely entirely on student data from a single region of the United States in our analyses, raising potential issues of generalizability. For example, the fact that our analyses produced more conservative than liberal classes, with greater heterogeneity among the conservative classes, may have been a function of sampling from a relatively conservative population in the southern United States. Although it is important that our findings be replicated in other more representative data sets, it is worth noting that studies of the broader American population also suggest a greater number of self-identified conservatives than liberals and greater heterogeneity in patterns of issue attitudes among conservatives (Stimson, 2004). Moreover, Feldman and Johnston (2009) uncover a similar set of ideological clusters using a nationally representative data set, and our analyses of the moral differences between self-identified liberals and conservatives produced results similar to those found by Graham et al. (2009) using larger, nonstudent samples.

Generalizability issues also arise with respect to how our results might speak to the existence of latent ideological subtypes with distinct patterns of moral intuition in political contexts outside the United States. On one hand, as in the United States, we would expect to find multiple subgroups of ideologues lurking beneath the general left-right dimension, with multiple clusters sometimes placing themselves at relatively similar positions on this dimension. Moreover, we would also expect latent ideological classes with a strong emphasis on social conservatism to more strongly endorse the binding foundations and those with a stronger emphasis on individual liberty, justice, or well-being to endorse the individualizing foundations more strongly. On the other hand, different political cultures may produce ideological subtypes notably different from those in the United States. For example, given certain unique characteristics of American political culture—in particular, the extent to which it has been disproportionately influenced by classical liberalism and individualistic strains of Protestantism and the absence of a significant socialist political tradition (McClosky & Zaller, 1984)—we may find different left-wing and right-wing subtypes with somewhat different patterns of moral intuition in other contexts than we uncover here. Similarly, while we find a disproportionately large number of conservative-identifying classes in our data, the level of heterogeneity on each side of the left-right divide may vary depending on the number of competing interests that make up the coalitions of the left and right in a particular context. In this regard, we might expect the more fractious side of the ideological divide in a given political culture to produce more ideological subtypes with a greater diversity of moral concerns.

Second, our analyses do not examine whether the content of the five moral foundations may have different and contested meanings to those with different political beliefs (Lakoff, 2006a, 2006b, 2008). In this vein, future work may also wish to examine the measurement equivalence of constructs like fairness and harm avoidance across ideological categories of the sort we extract here. That is, do concepts such as fairness actually connote different things for liberals and conservatives (Lakoff, 2006a)? Future studies that rely on alternative techniques from the cognitive and brain sciences may provide us with insights about moral intuition that are not easily obtained using standard survey methods, affording us additional leverage in understanding the fundamental differences between liberals and conservatives.
Finally, our correlational analyses sidestep important questions about the direction of the causal relationship between moral intuition and ideology. While this question about the causal link between ideology and moral foundations is not unique to our work (e.g., Graham et al., 2009; Haidt et al., 2009), it remains an important one. Future studies—using either longitudinal or experimental data—will need to address this issue more carefully.

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REFERENCES


