


Compassionate Liberals and Polite Conservatives: Associations of Agreeableness With Political Ideology and Moral Values

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Abstract

Political conservatism has been characterized by resistance to change and acceptance of inequality, with liberalism characterized by the polar opposite of these values. Political attitudes are heritable and may be influenced by basic personality traits. In previous research, conservatism (vs. liberalism) has been associated positively with Conscientiousness and negatively with Openness-Intellect, consistent with the association of conservatism with resistance to change. Less clear, however, are the personality traits relating to egalitarianism. In two studies, using a personality model that divides each of the Big Five into two aspects, the present research found that one aspect of Agreeableness (Compassion) was associated with liberalism and egalitarianism, whereas the other (Politeness) was associated with conservatism and traditionalism. In addition, conservatism and moral traditionalism were positively associated with the Orderliness aspect of Conscientiousness and negatively with Openness-Intellect. These findings contribute to a more nuanced understanding of personality's relation to political attitudes and values.

Keywords

personality, politics, morality, conservatism, liberalism

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Although psychologists have long been interested in studying political attitudes and orientations (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Eysenck, 1954; Rokeach, 1973), there has recently been a renewed interest in studying political behavior from social-cognitive and motivational perspectives (Jost, 2006; Jost, Glaser, Kruglanski, & Sulloway, 2003; Jost, Nosek, & Gosling, 2008). These frameworks argue that the adoption of different political beliefs satisfies a variety of motivational needs. In particular, political conservatism is thought to be a belief system predicated on resistance to change and the acceptance of inequality, strategies that serve as defenses against the experience of threat and uncertainty (Jost et al., 2007). Support for this model has come from both correlational research, in which conservative beliefs are associated with measures of uncertainty avoidance and acceptance of inequality, and experimental manipulations, in which increasing the salience of a threat leads to greater support of conservative values (Jost, Fitzsimons, & Kay, 2004; Landau et al., 2004).

An important feature of these models is that political beliefs are derived from deeper psychological needs, which suggests

that individuals may be predisposed by their personalities to adopt particular ideological perspectives. Findings that political attitudes are heritable and thus genetically influenced (Bouchard et al., 2003; Koenig & Bouchard, 2006) highlight the possibility of a connection to basic traits. Consistent with this possibility, research has demonstrated that conservatives tend to be higher in trait Conscientiousness, whereas liberals are higher in trait Openness-Intellect (Carney, Jost, Gosling, & Potter, 2008; Goldberg & Rosolack, 1994; Jost, 2006). Although this combination of personality traits clearly relates to a preference for tradition, order, and stability (McCrae & Costa, 1997; Roberts, Chernyshenko, Stark, & Goldberg, 2005), it fails to explain the second core aspect of

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conservative ideology, namely, the acceptance of inequality. It has been argued that conservatives support inequality simply because it forms part of the status quo and any change would lead to instability. Although this is a plausible argument, research suggests that a preference for egalitarian outcomes might be a motivational system in its own right (Moskowitz, Gollwitzer, Wasel, & Schaal, 1999). In particular, individual differences in empathy, communal goals, and the acceptance of outgroups all appear related to the personality trait of Agreeableness (Ashton, Paunonen, Helmes, & Jackson, 1998; Graziano, Bruce, Sheese, & Tobin, 2007; Graziano, Habashi, Sheese, & Tobin, 2007; Graziano & Tobin, 2002; Nettle, 2007). Furthermore, social dominance orientation, which predicts a variety of antiegalitarian attitudes, has been related to a more disagreeable disposition (Lippa & Arad, 1999). It may thus seem a conspicuous absence that Agreeableness has not emerged as a significant predictor of political beliefs, despite the fact that attitudes toward equality are thought to be a core aspect of conservative versus liberal ideologies (Jost, 2006; Jost et al., 2003).

There are at least two potential explanations for the absence of Agreeableness in models of political belief, neither of which precludes the other. The first is that the personality trait of Agreeableness may contain elements that are differentially related to conservative and liberal worldviews. Specifically, Agreeableness appears to be divisible into subtraits of Compassion and Politeness (DeYoung, Quilty, & Peterson, 2007). Compassion appears to index the components of Agreeableness most closely linked to empathy and interpersonal concern. Politeness, by contrast, appears to reflect the components of Agreeableness that are more closely linked to norm compliance and traditionalism. It is thus possible that Compassion would relate to the liberal emphasis on fairness and equality, whereas Politeness would relate to the conservative emphasis on order and traditionalism.

A second potential explanation for the lack of reported correlation between Agreeableness and political beliefs is that it is a consequence of measuring liberalism and conservatism as opposite ends of a single psychological dimension. Although the unidimensional view is the most commonly employed, a number of researchers have argued that it does not accurately reflect the underlying structure of political psychology (Conover & Feldman, 1981). Alternative models propose that political values are better represented by two or more separate psychological dimensions, such as "radicalism" and "tender-mindedness" (Eysenck, 1954, 1975) or "freedom" and "equality" (Rokeach, 1973). Such models argue that global political beliefs emerge from the interaction of multiple motivational and dispositional systems. Interestingly, there appears to be a conceptual relation, on one hand, of radicalism and freedom with a reduced emphasis on order and tradition and, on the other, of tender-mindedness and equality with a preference for egalitarian values. It is also worth noting that similar two-factor models have been used to describe the

motivational bases of prejudiced social attitudes, as captured in the separate measures of Right Wing Authoritarianism and Social Dominance Orientation (Duckitt, Wagner, Du Plessis, & Birum, 2002).

Researchers interested in moral psychology have similarly argued for the existence of distinct motivational systems underlying different moral values and political affiliations, such that liberalism emerges out of psychological systems that are distinct from those that give rise to conservatism. According to moral foundations theory (Graham, Haidt, & Nosek, 2009; Haidt & Graham, 2007; Haidt & Joseph, 2007), human morality can be summarized by five major domains. Importantly, research using this model has demonstrated that the relative importance of these domains varies between liberals and conservatives. In particular, liberals tend to be more concerned about compassion and justice, whereas conservatives are more concerned about ingroup loyalty, respect for authority, and purity. Differences in the strength of these underlying motivational systems are thought to influence explicit political attitudes and ideologies.

Multidimensional models such as these imply that individuals can have dispositional leanings toward conservative and liberal moral values simultaneously, with political behavior emerging out of the relative strength of the two systems. Such models allow for the possibility that individuals with a strong preference for order are not necessarily antiegalitarian. Similarly, individuals who have a relative preference for novelty are not necessarily more inclined toward equality. Instead, attitudes toward equality and order may vary independently from one another, in accordance with the strength of their distinct underlying motivational systems. If this is true, then the use of a single dimension to assess political attitudes (conservatism vs. liberalism) might mask the association of Agreeableness with liberalism and its associated moral values.

The two studies described in the current article were designed to test the two possible reasons for the lack of previous findings of association of Agreeableness with political attitudes (a) by examining the two different aspects of Agreeableness, Compassion, and Politeness and (b) by utilizing a multidimensional measure of moral values. Study 1 employed a measure of the Big Five personality traits that distinguishes between the two empirically derived aspects of Agreeableness to determine whether differential associations with political values would be observed. Two measures of political values were employed to examine the robustness of the effect. It was hypothesized that the Compassion aspect of Agreeableness would be positively associated with liberalism, whereas the Politeness aspect would be negatively associated with liberalism. Study 2 employed the Moral Foundations Questionnaire (MFQ), an instrument designed to assess multiple distinct moral systems thought to influence outward political behavior (and supporting the notion that attitudes toward inequality and preferences for order can

vary independently). It was hypothesized that higher levels of Compassion would relate to moral systems associated with egalitarianism, whereas low Openness-Intellect and high Conscientiousness would relate to moral systems associated with order and traditionalism.

Study 1

Method

Participants and design. Participants included 481 members of the Eugene–Springfield Community Sample (ESCS; 200 male, 281 female), ranging in age from 20 to 85 years ($M = 52.5$, $SD = 12.6$). The ESCS is a longitudinal data collection project in which a number of questionnaires were completed by community members from Eugene and Springfield, Oregon (Goldberg, 2005). Participants were recruited by mail from lists of homeowners who agreed to complete questionnaires, delivered by mail, for pay, over a period of many years, beginning in 1994. The sample spanned all levels of educational attainment, with an average of 2 years of post-secondary schooling. Most participants identified themselves as White (97%). The remainder were Hispanic, Asian American, or Native American or did not report their ethnicity. Because the included measures were spread across a number of years, any results obtained should reflect the more stable trait aspects of the constructs under investigation.

Measures

Big Five Aspect Scales (BFAS). The BFAS (DeYoung et al., 2007) is an empirically derived instrument for measuring the broad Big Five dimensions of personality as well as the lower level aspects. Factor analyses of the facet scales from two personality questionnaires, the Revised NEO Personality Inventory (NEO PI-R; Costa & McCrae, 1992) and Abridged Big Five Circumplex (Hofstee, De Raad, & Goldberg, 1992), revealed two correlated but distinct factors for each of the Big Five domains (DeYoung et al., 2007). These factors correspond to factors found in a behavior-genetic study demonstrating that two distinct genetic factors underlie the shared variance of the six facet scales composing each of the Big Five domains in the NEO PI-R (Jang, Livesley, Angleitner, Riemann, & Vernon, 2002). Each Big Five trait domain thus appears divisible into two aspects, with distinct biological sources. The BFAS was designed to assess this midrange level of personality, between the broad domains and the narrow facets.

The BFAS features 100 descriptions with which respondents must rate their agreement on a 5-point Likert-type scale (e.g., “Sympathize with others’ feelings”; “Like to solve complex problems”). Items were selected from the International Personality Item Pool (IPIP; Goldberg et al., 2006) based on their correlations with the 10 aspect-level

factors derived by DeYoung et al. (2007). As a measure of the broad domains, the BFAS has been validated against standard Big Five instruments such as the Big Five Inventory (BFI) and the NEO PI-R, with an average uncorrected correlation of $r = .76$. The scale also demonstrates internal (mean $\alpha = .83$) and test–retest (mean $r = .81$) reliability. At the aspect level, the five domains are broken down into Assertiveness and Enthusiasm (Extraversion), Compassion and Politeness (Agreeableness), Industriousness and Orderliness (Conscientiousness), Volatility and Withdrawal (Neuroticism), and Openness and Intellect (Openness-Intellect). Although the aspects from each domain are correlated with each other, they are also characterized by reasonable and meaningful discriminant validity (DeYoung et al., 2007) and are not correlated so strongly (mean $r = .44$) as to present a problem of collinearity when using pairs of aspects as simultaneous predictors in multiple regression. The BFAS thus provides a good assessment of the broad Big Five domains and provides the additional advantage of assessing an empirically derived aspect level of personality. The IPIP items (including those that now constitute the BFAS) were administered to the ESCS between 1994 and 1996.

BFI. The BFI (John & Srivastava, 1999) is a short, reliable measure of the Big Five featuring 44 Likert-type scale items ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The BFI was employed as an additional measure of the Big Five because multiple peer ratings using this instrument were available for a subset of the sample ($n = 293$; 176 female, 117 male). Peer ratings contribute incremental validity over self-ratings while minimizing the chance that obtained results are because of rater bias (Fiedler, Oltmanns, & Turkheimer, 2004; Mount, Barrick, & Strauss, 1994). Results using scores for self- and peer ratings on the BFI were therefore compared to the BFAS results. During the summer of 1998, the BFI was administered to the ESCS participants and to three peers who knew the participants well and were asked to rate them. The peer-rated personality scores were averaged together to generate composite ratings for each Big Five dimension.

Political party preference. In 2001, 431 members of the sample completed two 5-point Likert-type scale items regarding their political orientation: “Politically, I favor the Democratic Party” and “Politically, I favor the Republican Party.” These two items were strongly negatively correlated ($r = -.87$) and were therefore combined to form a single Republican versus Democrat variable by subtracting scores on the latter from scores on the former. Higher scores on the combined variable indicate greater support for the Republican Party. The sample demonstrated a range of political preferences, with a slight overall tilt toward preference for the Democratic Party ($M = -0.69$, $SD = 2.8$).

Liberalism. Liberalism was assessed using the IPIP Liberalism scale, which is a 10-item scale for assessing liberal versus conservative values (Goldberg, 1999). Participants use a 5-point Likert-type scale to rate the extent to which

they agree with a variety of political and moral statements (e.g., "Tend to vote for liberal political candidates," "Believe that there is no absolute right or wrong," "Believe laws should be strictly enforced" (reversed), "Tend to vote for conservative political candidates" (reversed)). The scale demonstrates good internal reliability (Cronbach's $\alpha = .86$). Liberalism and political party preference were strongly correlated ($r = -.63, p < .01$). The IPIP items were administered to the ESCS between 1994 and 1996.

Results

A regression analysis was first conducted using each of the broad Big Five domains to predict political party preference. The overall model significantly predicted party preference, $R^2 = .11, F(5, 425) = 10.11, p < .01$. As expected, significant effects were observed for Conscientiousness ($\beta = .23, t(425) = 4.71, p < .01$); Openness-Intellect ($\beta = -.16, t(425) = -3.28, p < .01$); and Agreeableness ($\beta = -.17, t(425) = -3.53, p < .01$). Republican supporters thus appear to be higher in Conscientiousness, but lower in Openness-Intellect and Agreeableness.

A secondary series of regression analyses predicting political party preference was conducted, with each regression containing the two aspects of the significant domain-level predictors. These analyses revealed that the domain-level effects of Conscientiousness and Openness-Intellect were driven by Orderliness ($\beta = .26, t(428) = 3.94, p < .01$, but not Industriousness ($\beta = -.03, t(428) = -0.50, p = .62$, and by Openness ($\beta = -.37, t(428) = -6.81, p < .01$, but not Intellect ($\beta = .09, t(428) = 1.67, p = .10$). For the aspects of Agreeableness, as hypothesized, preference for the Republican Party was predicted negatively by Compassion ($\beta = -.32, t(428) = -5.35, p < .01$, and positively by Politeness ($\beta = .18, t(428) = 3.00, p < .05$).

Additional regression analyses were conducted to examine the personality correlates of the IPIP Liberalism scale. When all Big Five domains were simultaneously entered into the regression, the model predicted a significant amount of the overall variance, $R^2 = .53, F(5, 475) = 36.35, p < .01$. Significant effects were again observed for Conscientiousness ($\beta = -.36, t(475) = -8.57, p < .01$, and Openness-Intellect ($\beta = .38, t(475) = 9.07, p < .01$, but not for Agreeableness ($\beta = .00, t(478) = 0.04, p = .97$).

The aspect level of personality was then examined in the same manner as for political party preference. Significant effects were observed for Orderliness ($\beta = -.48, t(478) = -8.05, p < .01$, but not Industriousness ($\beta = .10, t(478) = 1.7, p = .09$, and Openness ($\beta = .44, t(478) = 9.12, p < .01$, but not Intellect ($\beta = .07, t(478) = 1.38, p = .17$). Although the broad domain of Agreeableness was not a significant predictor, an analysis of its aspect-level components again revealed the hypothesized pattern of dissociation. Specifically, Compassion was positively associated with Liberalism ($\beta = .27, t(478) = 4.92, p < .01$, whereas Politeness was negatively

associated with Liberalism ($\beta = -.30, t(478) = -5.41, p < .01$). The failure of Agreeableness to significantly predict Liberalism thus appears to be because of this divergence in the political manifestations of its lower order aspects.

Peer-rated personality and political orientation. A limitation of the above analysis is that it relies on self-report personality assessments. The regressions of political party preference and Liberalism on the Big Five were thus duplicated, using peer rating scores from the BFI. For political party preference, significant effects were once again observed for Conscientiousness ($\beta = .24, t(287) = 3.87, p < .01$); Openness-Intellect ($\beta = -.28, t(287) = -4.75, p < .01$); and Agreeableness ($\beta = -.21, t(287) = -3.07, p < .01$). Very similar findings emerged when these traits were entered into a regression predicting Liberalism, with significant effects being found for Conscientiousness ($\beta = -.30, t(287) = -5.34, p < .01$, and Openness-Intellect ($\beta = .44, t(287) = 8.30, p < .01$, whereas a near-significant effect emerged for Agreeableness ($\beta = .12, t(287) = 1.91, p = .06$). The observed associations between the Big Five and political orientation thus remain reasonably stable across alternative measures and both self and multi-informant ratings. Controlling for demographic variables (age, gender, education, and ethnicity) did not influence the observed pattern of results. Because the BFI does not differentiate the aspects of the Big Five, the multirater data could not be used to examine the more specific aspect levels of personality.¹

Importance of measurement instrument and analytic technique. It is worth noting that the failure of previous studies to detect significant effects for Agreeableness appears to be in part related to the instrument and analysis employed. Because the ESCS has data from multiple Big Five instruments, it was possible to compare their ability to predict political outcomes in a set of post hoc analyses. When using the Liberalism scale as a measure of political ideology, no significant zero-order correlations were observed for any of the Agreeableness measures (including the BFAS, NEO PI-R, and self- and peer-rated BFI). When using political party preference to assess political affiliation, significant effects were observed only for BFAS ($r = -.14, p < .01$) and peer-rated BFI Agreeableness ($r = -.14, p < .05$); no zero-order effects were observed for the self-rated BFI ($r = -.09, p > .05$) or NEO PI-R ($r = -.08, p > .05$). When entered into simultaneous regressions with the other Big Five factors, however, both NEO PI-R and self-rated BFI Agreeableness significantly predicted party affiliation. The relatively small effects of domain-level Agreeableness may have been suppressed at the zero-order level of analysis in previous research, only to emerge when the variance associated with the other traits is controlled. In addition, the current analysis of the BFAS suggests that differentiation between Compassion and Politeness is important for predicting political outcomes; instruments that do not differentiate the two aspects of Agreeableness should be less able to reveal the importance of Agreeableness.

Indeed, even though NEO PI-R Agreeableness had no relation to political orientation, the NEO facet Tender-Mindedness (which reflects having sympathy for others) demonstrated a positive correlation with Liberalism ($r = .19, p < .01$) and reduced preference for the Republican Party ($r = -.29, p < .01$). By contrast, the NEO facet Modesty (a tendency to demonstrate polite humility) demonstrated a correlation with Liberalism in the opposite direction ($r = -.13, p < .01$). These results are in keeping with the finding that Compassion and Politeness predict political orientation in opposite directions. It is worth noting at this point that although there is no definitive list of facets in the Big Five framework, the aspects measured by the BFAS reflect an empirically derived taxonomy of lower order personality traits (DeYoung et al., 2007). We thus prefer the aspect-level analysis to the facet-level analysis and believe it provides a clearer indication of underlying personality processes.

Study 2

Method

Participants. Participants included 146 members of the University of Toronto community (47 male, 99 female), ranging in age from 18 to 63 years ($M = 26.14, SD = 9.14$). They were recruited by flyers posted around campus and messages on electronic bulletin boards advertising the study. The sample included a variety of ethnic backgrounds, mostly consisting of Caucasian (61.0%), East Asian (14.0%), and South Asian (7.5%) participants. The remainder identified themselves as Hispanic, African, or Native American or did not report their ethnicity. Inclusion criteria required that each participant had voted in at least one government election (city or municipal, state or provincial, or federal).

Measures

MFQ. The MFQ (Graham, Nosek, et al., 2009) is a 30-item self-report questionnaire designed to assess the five domains of morality proposed by moral foundations theory (Graham, Haidt, et al., 2009; Haidt & Joseph, 2007). The five moral dimensions assessed by the questionnaire are Harm-Care, Fairness-Reciprocity, Ingroup-Loyalty, Authority-Respect, and Purity-Sanctity. These variables tend to cluster into two broad factors with reasonable discriminant validity, with Harm and Fairness being closely associated with self-reported liberalism, and Ingroup, Loyalty, and Purity being more associated with self-reported conservatism (Graham, Haidt, et al., 2008).

Political orientation. The same liberalism and political party preference measures were employed in Study 2 as in Study 1. However, because Study 2 involved a Canadian population, additional party preference items were included, assessing participants' attitudes toward the major Canadian political

Table 1. Factor Loadings of Moral Foundations

	Egalitarianism	Order-traditionalism
Harm	.775	.045
Fairness	.751	-.037
Ingroup	.005	.744
Authority	-.081	.799
Purity	.092	.807

parties with a national presence (Conservative Party, Liberal Party, New Democratic Party, and Green Party). In addition, we included a single item measure of self-rated political orientation ranging from 1 (*very conservative*) to 5 (*very liberal*). Participants again displayed a range of political orientations, with a slight tilt toward the liberal end of the scale ($M = 3.54, SD = 0.95$).

Personality was assessed using the BFAS, as in Study 1.

Procedure

Participants who expressed interest in the study were e-mailed instructions for accessing the study materials online. After completing an informed consent form, participants completed online versions of a demographics questionnaire, the MFQ, and the BFAS. Previous research suggests that online questionnaire-based assessment produces results similar to in-lab assessments (Chuah, Drasgow, & Roberts, 2006). At the end of the study, participants received an electronic debriefing form and were reimbursed for their time with access to a detailed report on their personality profile.

Results

Alpha reliabilities for each of the MFQ domains were as follows: Harm-Care = .61, Fairness-Reciprocity = .70, Ingroup-Loyalty = .70, Authority-Respect = .63, Purity-Sanctity = .77. A factor analysis using maximum likelihood estimation and direct oblimin rotation ($\Delta = 0$) was conducted on the five moral foundation scores. Factor loadings are presented in Table 1. Consistent with previous research, the MFQ domains clustered into two broad dimensions, which can be described as the moral values related to order-traditionalism (authority, purity, and ingroup) and egalitarianism (fairness and harm-care). These two factors were correlated with each other at $r = .16$. The eigenvalues of these first two factors were 2.32 and 1.51 (accounting for 76.48% of the total variance), followed by smaller factors with eigenvalues of 0.43, 0.40, and 0.34. Factor score estimates (based on the regression method) were used in regressions to examine the personality predictors of each cluster of moral domains.

Personality and moral values. In the first regression analysis, each of the Big Five personality traits was used to predict the

Table 2. Associations Between Personality and the Moral Foundations Questionnaire

	Harm-Care	Fairness-Reciprocity	Ingroup-Loyalty	Authority-Respect	Purity-Sanctity
Neuroticism	.03	.13	.02	.00	-.02
Volatility	.01	.04	.00	.10	-.07
Withdrawal	.03	.12	.02	-.11	.08
Extraversion	.10	.10	-.06	.03	.04
Assertiveness	-.04	.00	-.09	-.01	-.07
Enthusiasm	.15	.11	.00	.04	.10
Openness-Intellect	.13	.14	-.12	-.25*	-.20*
Intellect	.03	-.04	-.14	-.26*	-.25*
Openness	.12	.17	-.02	-.06	-.01
Agreeableness	.38*	.21*	-.02	.06	.08
Compassion	.32*	.20*	-.10	-.13	-.06
Politeness	.16	.06	.07	.19*	.15
Conscientiousness	-.03	-.02	.25*	.29*	.27*
Industriousness	-.03	-.05	.06	.10	.11
Orderliness	.00	.09	.22*	.24*	.21*

* $p < .05$.

order-traditionalism factor. The overall model predicted a significant amount of variance, $R^2 = .13$, $F(5, 140) = 4.27$, $p < .01$. Specific personality effects were observed for Conscientiousness ($\beta = .31$), $t(140) = 3.78$, $p < .01$, and Openness-Intellect ($\beta = -.23$), $t(140) = -2.48$, $p < .01$. Moral values related to order-traditionalism were thus associated with higher levels of trait Conscientiousness but lower levels of Openness-Intellect. To examine the lower level traits associated with these values, the analytic procedure of Study 1 was repeated, using regressions containing the two aspects from each of these traits. These regressions demonstrated, once again, that the personality predictors of these values were specific to the Orderliness aspect of Conscientiousness ($\beta = .27$), $t(140) = 3.23$, $p < .01$, but not Industriousness ($\beta = .08$), $t(140) = 0.96$, $p = .34$. For Openness-Intellect, the predictive variance appears to have been split between Openness ($\beta = -.11$), $t(140) = -1.28$, $p = .20$, and Intellect ($\beta = -.09$), $t(140) = -1.01$, $p = .31$. Both of these aspects displayed similar relationships with order-traditionalism when analyzed using zero-order correlations ($r = -.15$ for Openness, $r = -.13$ for Intellect), suggesting that neither aspect was a stronger predictor. When looking at the role of the Agreeableness aspects, a significant effect was observed for Politeness ($\beta = .18$), $t(140) = 1.98$, $p < .05$, but not Compassion ($\beta = -.11$), $t(140) = -1.20$, $p = .23$.

This procedure was repeated to examine the personality predictors of egalitarian values. Again, the overall model predicted a significant amount of the variance in this cluster of moral domains, $R^2 = .17$, $F(5, 140) = 5.58$, $p < .01$. Of the broad personality domains, Agreeableness was the only significant predictor ($\beta = .33$), $t(140) = 4.20$, $p < .01$, with more agreeable individuals reporting a greater endorsement of egalitarian values. When looking at the lower order aspect level,

this effect appeared to be driven primarily by the Compassion aspect of Agreeableness ($\beta = .29$), $t(140) = 3.45$, $p < .01$, with less influence of Politeness ($\beta = .13$), $t(140) = 1.58$, $p = .12$.

In addition to the two broad factors extracted above, which have previously been related to political ideology, the relationship between the more differentiated moral foundation scales and each of the BFAS dimensions was examined while controlling for the other personality traits. Results of these analyses are reported in Table 2. As can be seen, the relationship between personality and moral values was largely preserved at the level of specific moral foundations. Of particular note is the fact that Compassion was most strongly associated with the Harm-Care and Fairness-Reciprocity scales. Politeness, in contrast, was more strongly associated with Authority-Respect, but not with Fairness-Reciprocity. Both of these findings are in keeping with the notion that Compassion more closely reflects egalitarianism, whereas Politeness is more closely related to order-traditionalism.

Moral values and political orientation. The next analyses examined whether the moral foundations described above contributed uniquely to political orientation. Indeed, according to previous research, attitudes toward equality and support for order-traditionalism should reflect two distinct motivational factors that contribute to outward political behavior (Jost, 2006; Jost et al., 2003). To examine this question, a composite index of political orientation was derived by conducting a factor analysis with maximum likelihood estimation on the available measures of political behavior described previously (Liberalism scale, support for American and Canadian political parties, and self-rated political orientation). The scree plot suggested that the first factor was an appropriate cutoff point, accounting for considerably more shared variance than the other factors. The eigenvalue of the first factor

was 3.15 (39.4% of the total variance), followed by smaller factors with eigenvalues of 1.21, 0.96, 0.77, 0.75, 0.50, 0.40, and 0.27.

The broad moral foundation factors of egalitarianism and order-traditionalism were simultaneously entered into a regression predicting this political outcome measure. The overall model predicted a significant amount of the variance in political orientation, $R^2 = .18$, $F(2, 143) = 16.13$, $p < .01$. Furthermore, political preferences were predicted independently by the egalitarianism factor ($\beta = .27$), $t(143) = 3.44$, $p < .01$, and the order-traditionalism factor ($\beta = -.40$), $t(143) = -5.12$, $p < .01$. In a secondary analysis, the five moral foundation scales were entered simultaneously into a regression predicting political orientation. Significant effects were observed for Fairness-Reciprocity ($\beta = .29$), $t(140) = 3.09$, $p < .01$, as well as a near-significant trend for Authority-Respect ($\beta = -.20$), $t(140) = -1.93$, $p = .06$. By contrast, no independent effects were observed for Harm-Care ($\beta = -.01$), $t(140) = -0.09$, $p = .93$; Ingroup-Loyalty ($\beta = -.14$), $t(140) = -1.34$, $p = .18$; or Purity-Sanctity ($\beta = -.09$), $t(140) = -0.87$, $p = .39$. Note, however, that all MFQ domains except Harm-Care significantly predicted political orientation when employing zero-order correlations (Harm-Care = .10, Fairness-Reciprocity = .26, Ingroup-Loyalty = -.29, Authority-Respect = -.34, Purity-Sanctity = -.27), suggesting that much of the predictive variance is shared amongst the specific scales.

Personality and political orientation. Repeating the regression analyses from Study 1 also confirmed that the same personality traits were able to predict political behavior. In particular, liberal political attitudes were again associated with the broad traits of Conscientiousness ($\beta = -.15$), $t(140) = -1.72$, $p < .05$, and Openness-Intellect ($\beta = .24$), $t(140) = 2.56$, $p < .05$. At the aspect level, political attitudes were associated with Orderliness ($\beta = -.16$), $t(143) = -1.86$, $p < .05$, but not Industriousness ($\beta = .02$), $t(143) = 0.20$, $p = .84$, as well as Openness ($\beta = .18$), $t(143) = 1.97$, $p < .05$, but not Intellect ($\beta = .08$), $t(143) = 0.85$, $p = .40$. For the aspects of Agreeableness, the expected dissociation was again observed, with Compassion being associated with liberal political attitudes ($\beta = .23$), $t(143) = 2.57$, $p < .05$, and Politeness being associated with conservative political attitudes ($\beta = -.20$), $t(143) = -2.26$, $p < .05$.

To directly test the possibility that these personality traits influence political attitudes through their association with traditionalism and egalitarian values, mediation analyses among the BFAS, the MFQ, and the political outcome measures were conducted. The product of coefficients method recommended by MacKinnon, Lockwood, Hoffman, West, and Sheets (2002) was employed to determine whether or not significant mediation effects were observed. As expected, egalitarian values (but not traditionalist values) significantly mediated the relationship between Compassion and liberal political attitudes ($z' = 1.81$, $p < .01$). Similarly, traditionalist values (but not egalitarian values) mediated the relationships between

Politeness ($z' = -1.82$, $p < .01$), Orderliness ($z' = -3.00$, $p < .01$), and Openness-Intellect ($z' = 1.69$, $p < .01$) and political conservatism.

General Discussion

A growing awareness has developed in recent years of the psychological factors underlying political behavior and affiliation (Jost et al., 2008). In particular, the adoption of different political practices and beliefs are thought to reflect an individual's psychological needs (Jost, 2006; Jost et al., 2003). The current findings extend this idea by demonstrating specific personality traits associated with liberal and conservative ideologies. In previous research, resistance to change and the acceptance of inequality were identified as the two main components of conservative values (Jost et al., 2007). What the current findings suggest is that these two motives are indeed relevant to political orientation and that they reflect the functioning of distinct personality systems. Specifically, resistance to change appears to stem from high levels of Orderliness and Politeness and a low level of Openness-Intellect, whereas acceptance of inequality stems from a low level of Compassion. Importantly, although previous studies have identified Conscientiousness and Openness-Intellect as personality predictors of political beliefs (Carney et al., 2008; Goldberg & Rosolack, 1994; Jost, 2006), this is the first set of studies to identify the role of Agreeableness in political ideology. Past failure to identify the importance of Agreeableness appears primarily due to the fact that the two aspects of Agreeableness diverge in their associations with political ideology. Although the Compassion aspect of Agreeableness was associated with greater concern for egalitarianism (associated with liberal political attitudes), the Politeness aspect of Agreeableness was associated with greater concern for order-traditionalism (associated with conservative political attitudes).

Importantly, it has been previously suggested that attitudes toward inequality may derive from attitudes toward the status quo (cf. Jost et al., 2003). That is, if an individual supports the status quo in a nonegalitarian society, any movement toward greater equality is evaluated negatively because it is inherently disruptive of the current order and tradition. There are two lines of evidence in the current studies that suggest that these two ideological dimensions are in fact separable from one another. First, as in previous research looking at political values (Eysenck, 1954, 1975; Rokeach, 1973), the value domains of egalitarianism and order-traditionalism were empirically distinct from one another, suggesting that they can vary independently within any given individual. In addition, these two value domains were found to significantly predict different aspects of the overall variance in political orientation rather than being statistically redundant (as would be predicted by the theory that one domain is derived from the other). Second, the differential association of these value

domains with the Big Five personality traits further supports the two-factor model of political ideology. In particular, Openness-Intellect, Orderliness, and Politeness are all conceptually and empirically related to the value domain of order-traditionalism. Compassion, meanwhile, is empirically and conceptually related to the value domain of egalitarianism. The Big Five is a well-validated taxonomy of dispositional variables, and the differential associations with egalitarianism and order-traditionalism support the discriminant validity of these dimensions.

With regard to the aspects of Openness-Intellect, Study 1 found that Openness was a stronger predictor of political behavior than was Intellect. These findings were partially supported in Study 2, although the broad Openness-Intellect domain appeared to be the better predictor of political outcomes in this sample. It is possible that the relative strength of association between each of the two aspects and political behavior varies in different populations, with a somewhat stronger role for Openness. Based on the current findings, however, the most parsimonious explanation is that the entire domain of Openness-Intellect is negatively associated with order-traditionalism and political conservatism.

According to the current results, an individual's overall political orientation is likely to result from the relative balance of motivational needs for order and traditionalism on one hand (as reflected by Openness-Intellect, the Orderliness aspect of Conscientiousness, and the Politeness aspect of Agreeableness) and for equality and fairness on the other (as reflected by the Compassion aspect of Agreeableness). Indeed, Study 2 found that the relationship between personality and political orientation was mediated by the subjective importance of these moral values. Personality traits thus appear to influence political behavior by influencing the strength of these two underlying motivational systems. Individuals who have high needs for order but low needs for equality are likely to score at the high ends of conservative ideology. Conversely, individuals with low needs for order but high needs for equality are likely to score at the high ends of liberal ideology. If, by contrast, both of these needs are relatively balanced, a more moderate political outlook is likely to be observed. Although the term *bleeding-heart liberal* is often used pejoratively, the current findings suggest that liberals do indeed tend to have higher levels of compassion. These higher levels of compassion likely contribute to the liberal's preference for fairness and equality. In contrast, the term *compassionate conservative* may be something of an oxymoron. It is true that individuals with a more balanced personality profile may endorse both conservative and liberal values, but conservatism as a political orientation appears to be negatively associated with compassion. This does not mean there are no compassionate conservatives, but it suggests that the extent to which conservatives are compassionate may reflect the extent to which they possess the underlying motivation driving the liberal value of egalitarianism.

Although certain personality characteristics are often valued over others, the results of these two studies do not indicate the moral superiority of either the liberal or the conservative personality profile. Instead, the analyses support the notion that liberals and conservatives are motivated by distinct domains of morality (Graham, Haidt, et al., 2009; Haidt & Graham, 2007). The fact that a range of personality profiles has evolved suggests that no single profile is optimal across all contexts (Nettle, 2006). Each personality profile involves a distinct mixture of motivations and cognitive tendencies, so various costs and benefits will be associated with any particular combination of traits. The conservative profile described above may, for instance, encourage greater personal responsibility, self-discipline, and social stability, whereas the liberal profile may encourage greater innovation and social inclusiveness.

Understanding political behavior in terms of underlying psychological systems has been a long-standing research goal (Adorno et al., 1950; Eysenck, 1954; Rokeach, 1973). Applying contemporary models from social and personality psychology appears to provide a valuable extension of this classic work. Importantly, an individual's political orientation appears to be reflected not only in a distinct pattern of psychological motives (Jost et al., 2003) but also in a distinct personality profile. Given the increasing polarization of the political sphere, this topic remains a vital and timely point of inquiry.

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Note

1. Soto and John (2009) developed a method for scoring two facets within each of the Big Five scales in the Big Five Inventory (BFI). However, these two facets do not in every case map on cleanly to the aspect-level traits. For example, one of the BFI Agreeableness facets is Altruism, which is associated equally with Compassion and Politeness (DeYoung, Quilty, & Peterson, 2007).

References

- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York, NY: Harper & Row.
- Ashton, M., Paunonen, S., Helmes, E., & Jackson, D. (1998). Kin altruism, reciprocal altruism, and the Big Five personality factors. *Evolution and Human Behavior, 19*(4), 243-255.

- Bouchard, T., Segal, N., Tellegen, A., McGue, M., Keyes, M., & Krueger, R. (2003). Evidence for the construct validity and heritability of the Wilson–Patterson Conservatism Scale: A reared-apart twins study of social attitudes. *Personality and Individual Differences, 34*(6), 959-969.
- Carney, D., Jost, J., Gosling, S., & Potter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology, 29*(6), 807-840.
- Chuah, S. C., Drasgow, F., & Roberts, B. W. (2006). Personality assessment: Does the medium matter? No. *Journal of Research in Personality, 40*, 359-376.
- Conover, P., & Feldman, S. (1981). The origins and meaning of liberal/conservative self-identifications. *American Journal of Political Science, 25*(4), 617-645.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory and NEO Five-Factor Inventory professional manual*. Odessa, FL: Psychological Assessment Resources.
- DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: Ten aspects of the Big Five. *Journal of Personality and Social Psychology, 93*(5), 880-896.
- Duckitt, J., Wagner, C., Du Plessis, I., & Birum, I. (2002). The psychological bases of ideology and prejudice: Testing a dual process model. *Journal of Personality and Social Psychology, 83*(1), 75-93.
- Eysenck, H. J. (1954). *The psychology of politics*. London, UK: Routledge.
- Eysenck, H. J. (1975). The structure of social attitudes. *British Journal of Social and Clinical Psychology, 14*, 323-331.
- Fiedler, E. R., Oltmanns, T. F., & Turkheimer, E. (2004). Traits associated with personality disorders and adjustment to military life: Predictive validity of self and peer reports. *Military Medicine, 169*(3), 207-211.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. J. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe* (Vol. 7, pp. 7-28). Tilburg, Netherlands: Tilburg University Press.
- Goldberg, L. R. (2005). *The Eugene–Springfield Community Sample: Information available from the research participants* (Report No. 45). Eugene: Oregon Research Institute.
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality, 40*, 84-96.
- Goldberg, L. R., & Rosolack, T. K. (1994). The Big Five factor structure as an integrative framework: An empirical comparison with Eysenck's PEN model. In C. F. Halverston, Jr., G. A. Kohnstamm, & R. P. Martin (Eds.), *The developing structure of temperament and personality from infancy to adulthood* (pp. 7-35). Mahwah, NJ: Lawrence Erlbaum.
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology, 96*(5), 1029-1046.
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2009). *Broadening and mapping the moral domain: The development and validation of the Moral Foundations Questionnaire*. Manuscript submitted for publication.
- Graziano, W., Bruce, J., Sheese, B., & Tobin, R. (2007). Attraction, personality, and prejudice: Liking none of the people most of the time. *Journal of Personality and Social Psychology, 93*(4), 565-582.
- Graziano, W., Habashi, M., Sheese, B., & Tobin, R. (2007). Agreeableness, empathy, and helping: A person X situation perspective. *Journal of Personality and Social Psychology, 93*(4), 583-599.
- Graziano, W., & Tobin, R. (2002). Agreeableness: Dimension of personality or social desirability artifact? *Journal of Personality, 70*(5), 695-728.
- Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research, 20*(1), 98-116.
- Haidt, J., & Joseph, C. (2007). The moral mind: How 5 sets of innate intuitions guide the development of many culture-specific virtues, and perhaps even modules. In P. Carruthers, S. Laurence, & S. Stich (Eds.), *The innate mind: Foundations and the future* (Vol. 3, pp. 367-391). New York, NY: Oxford University Press.
- Hofstee, W. K. B., De Raad, B., & Goldberg, L. R. (1992). Integration of the big five and circumplex approaches to trait structure. *Journal of Personality and Social Psychology, 63*(1), 146-163.
- Jang, K. L., Livesley, W. J., Angleitner, A., Riemann, R., & Vernon, P. A. (2002). Genetic and environmental influences on the covariance of facets defining the domains of the five-factor model of personality. *Personality and Individual Differences, 33*(1), 83-101.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 102-138). New York, NY: Guilford.
- Jost, J. T. (2006). The end of the end of ideology. *American Psychologist, 61*(7), 651-670.
- Jost, J. T., Fitzsimons, G., & Kay, A. C. (2004). The ideological animal: A system justification view. In J. Greenberg, S. L. Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp. 263-283). New York, NY: Guilford.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin, 129*(3), 339-375.
- Jost, J. T., Napier, J. L., Thorisdottir, H., Gosling, S. D., Palfai, T. P., & Ostafin, B. (2007). Are needs to manage uncertainty and threat associated with political conservatism or ideological extremity? *Personality and Social Psychology Bulletin, 33*(7), 989-1007.
- Jost, J. T., Nosek, B. A., & Gosling, S. D. (2008). Ideology: Its resurgence in social, personality, and political psychology. *Perspectives on Psychological Science, 3*(2), 126-136.
- Koenig, L. B., & Bouchard, T. J., Jr. (2006). Genetic and environmental influences on the traditional moral values triad—Authoritarianism, conservatism and religiousness—as assessed by quantitative behavior genetic methods. In P. McNamara (Ed.),

- Where God and science meet: How brain and evolutionary studies alter our understanding of religion* (Vol. 1, pp. 31-60). Westport, CT: Praeger.
- Landau, M., Solomon, S., Greenberg, J., Cohen, F., Pyszczynski, T., Arndt, J., . . . Cook, A. (2004). Deliver us from evil: The effects of mortality salience and reminders of 9/11 on support for President George W. Bush. *Personality and Social Psychology Bulletin*, 30(9), 1136-1150.
- Lippa, R., & Arad, S. (1999). Gender, personality, and prejudice: The display of authoritarianism and social dominance in interviews with college men and women. *Journal of Research in Personality*, 33, 463-493.
- MacKinnon, D., Lockwood, C., Hoffman, J., West, S., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83-104.
- McCrae, R. R., & Costa, P. T. (1997). Conceptions and correlates of openness to experience. In R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.), *Handbook of personality psychology* (pp. 825-847). San Diego, CA: Academic Press.
- Moskowitz, G. B., Gollwitzer, P. M., Wasel, W., & Schaal, B. (1999). Preconscious control of stereotype activation through chronic egalitarian goals. *Journal of Personality and Social Psychology*, 77(1), 167-184.
- Mount, M. K., Barrick, M. R., & Strauss, J. P. (1994). Validity of observer ratings of the Big Five personality factors. *Journal of Applied Psychology*, 79(2), 272-280.
- Nettle, D. (2006). The evolution of personality variation in humans and other animals. *American Psychologist*, 61(6), 622-631.
- Nettle, D. (2007). Empathizing and systemizing: What are they, and what do they contribute to our understanding of psychological sex differences? *British Journal of Psychology*, 98(2), 237-256.
- Roberts, B. W., Chernyshenko, O. S., Stark, S., & Goldberg, L. R. (2005). The structure of conscientiousness: An empirical investigation based on seven major personality questionnaires. *Personnel Psychology*, 58(1), 103-140.
- Rokeach, M. (1973). *The nature of human values*. New York, NY: Free Press.
- Soto, C. J., & John, O. P. (2009). Ten facet scales for the Big Five Inventory: Convergence with NEO PI-R facets, self-peer agreement, and discriminant validity. *Journal of Research in Personality*, 43, 84-90.