

## PSYCHOLOGICAL NEEDS AND VALUES UNDERLYING LEFT-RIGHT POLITICAL ORIENTATION: CROSS-NATIONAL EVIDENCE FROM EASTERN AND WESTERN EUROPE

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**Abstract** According to previous research conducted mainly in the United States, psychological needs pertaining to the management of uncertainty and threat predict right-wing conservatism, operationally defined in terms of resistance to change and acceptance of inequality. In this study, we analyze data from 19 countries included in the European Social Survey (ESS) to assess two sets of hypotheses: (1) that traditionalism (an aspect of resistance to change) and acceptance of inequality would be positively associated with right (versus left) orientation, and (2) that rule-following (an aspect of the need for order), high need for security, and low need for openness to experience would be associated with right (versus left) orientation, adjusting for quadratic effects associated with ideological extremity. In addition, we determine the extent to which the pattern of relations among needs, values, and political orientation was similar in Eastern and Western European contexts. Results from regression and structural equation models indicate that traditionalism and, to a lesser extent, rule-following predict right-wing conservatism in both regions, whereas acceptance of inequality predicts right-wing orientation in the West only. Although openness to experience was associated with preferences for greater

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equality in both regions, it was associated with left-wing orientation in Western Europe and right-wing orientation in Eastern Europe. Needs for security, conversely, were associated with right-wing orientation in Western Europe and left-wing orientation in Eastern Europe. Thus, we find evidence of both universal and context-specific effects in our analysis of the cognitive and motivational antecedents of left-right political orientation.

Social scientists generally consider the left-right distinction to be the most powerful and parsimonious way of classifying political attitudes (e.g., Feldman 2003; Fuchs and Klingemann 1990; Jost 2006; Knight 1999). In psychology, more than 50 years of research has focused on differences between adherents of left- versus right-wing ideology in terms of their goals, values, motives, and personalities (e.g., Adorno et al. 1950; Altemeyer 1996, 1998; Braithwaite 1998; Di Renzo 1974; McClosky 1958; Rokeach 1960, 1973; Sidanius 1985; Tetlock 1983; Tomkins 1963; Wilson 1973). The dimensions most often studied include needs for order, structure, closure, certainty, and discipline, all of which are assumed to be higher among proponents of right-wing than left-wing ideology. For example, Kruglanski and Webster's (1996) lay epistemic theory holds that people who score relatively high on the "need for cognitive closure" tend to "seize" and "freeze" on aspects of the status quo, thereby favoring structure and stability over openness and change (see also Tetlock 2000). Similarly, Higgins' (1998) regulatory focus theory suggests that people who are determined to prevent unfavorable outcomes will adopt a more conservative orientation than will people who are striving to promote favorable outcomes (see also Crowe and Higgins 1997). Finally, terror management theory demonstrates that people who are made to consider their own mortality typically defend the traditional worldview and tend to become more conservative (e.g., Arndt, Greenberg, and Cook 2002; Jost, Fitzsimons, and Kay 2004; Landau et al. 2004), although there is also some evidence that liberals may become more tolerant of people with different opinions following mortality salience (Greenberg et al. 1992). All of these perspectives suggest that there should be dispositional (as well as situational) predictors of political orientation, and these predictors include needs for order and structure, experiential openness, and sensitivity to threat.

In a quantitative review of evidence bearing on the hypothesis that these psychological motives underlie political orientation, Jost et al. (2003a) integrated the above perspectives and proposed a unifying motivated social cognition framework to explain differences in ideological attitudes. According to these authors, people embrace right-wing ideology in part because "it serves to reduce fear, anxiety, and uncertainty; to avoid change, disruption, and ambiguity; and to explain, order, and justify inequality among

groups and individuals” (p. 340). The evidence that Jost et al. (2003a, 2003b) brought to bear tended to support the notion that there is a “resonance” or “match” between strong motives to reduce ambiguity and anxiety and the core values of right-wing ideology, namely resistance to change (including traditionalism), and acceptance of inequality (or hierarchy). However, most of the studies on which these conclusions were based were conducted in the United States, which raises the question of whether these effects would hold in nations with different political histories and cultural traditions (Greenberg and Jonas 2003).

In this article, we build on and extend the theoretical framework introduced by Jost et al. (2003a) and analyze data from the European Social Survey (ESS) to investigate whether the hypothesis of ideological resonance is robust and generalizable across different national contexts. We analyze data from 19 different countries, nearly all from Europe—including four formerly communist countries in Eastern Europe. Our review of empirical studies of right-wing versus left-wing ideological orientation indicates that no systematic examinations of the key constructs have been conducted across such a wide range of national groups.

## Core Aspects of Right-Wing (versus Left-Wing) Ideology

In seeking to distill the core components of right-wing conservatism from conceptual analyses by Bobbio (1996), Huntington (1957), Kerlinger (1984), and Muller (2001), among others, Jost et al. (2003a, 2003b) identified two relatively stable dimensions: resistance to change and acceptance of inequality. In the same vein, we propose that these two features are at the heart of the distinction between left- and right-wing ideologies. However, to address objections that have been raised by Greenberg and Jonas (2003), we use data from the ESS to adopt an empirical rather than a purely conceptual approach to the issue. Thus, we hypothesize that right-wing (and conservative) ideologues would resist change and accept inequality, whereas left-wing (and liberal) ideologues would prefer change and reject inequality.

### RESISTANCE TO CHANGE/TRADITIONALISM

Social scientists have often stressed traditionalism and resistance to change as a central feature of right-wing conservatism (Erikson, Luttbeg, and Tedin 1988; McClosky and Zaller 1984; Muller 2001). Wilson (1973), for example, defined conservatism as “resistance to change and the tendency to prefer safe, traditional, and conventional forms of institutions and behavior” (p. 4). Research on values and voting preferences indicates that prioritizing resistance to change is associated with the tendency to vote for conservative and right-wing parties in Israel and Switzerland (Barnea and Schwartz 1998;

Devos, Spini, and Schwartz 2002). However, some researchers have objected to the idea that resistance to change is a stable, core feature of right-wing ideology. Greenberg and Jonas (2003), in commenting on Jost et al.'s (2003a) article, argued that conservatives in Europe and elsewhere call for political change whenever the dominant ideology is left-of-center. They further suggested that resistance to change should characterize extreme beliefs in general, whether the extremity is left-wing or right-wing in nature (see Shils 1954 and Eysenck 1999 for similar arguments). In reply, Jost et al. (2003b) noted that although some right-wing conservatives seem to favor change, most of their proposed changes are retrograde and involve a return to earlier cultural values, including religious traditions and historical divisions of labor within the family. Nevertheless, the best way to address this issue is by considering the widest possible range of political contexts, including respondent samples from nations with a history of socialist or communist rule. These nations provide the most likely forum for observing an association between traditionalism (an aspect of resistance to change) and left-wing political orientation (e.g., McFarland, Ageyev, and Djintcharadze 1996). Data from the ESS provide a unique opportunity to determine whether respondents in countries with a history of left-wing rule do indeed differ from other respondents in terms of traditionalism and other values and needs.

#### ACCEPTANCE OF INEQUALITY/HIERARCHY

The second core aspect of right-wing conservatism identified by Jost et al. (2003a) was acceptance of inequality. It captures the notion that the political left tends to yearn for equality while the right sees society as inevitably and often appropriately hierarchical. Many researchers in the social sciences in general and in psychology in particular share the idea that right-wing conservatives embrace social and economic inequality (e.g., Altemeyer 1996, 1998; Jost et al. 2003a, 2003b; Sidanius and Pratto 1999). Bobbio (1996) and Giddens (1998), both contemporary European political thinkers, have identified the acceptance of inequality as the essence of conservatism in its current form. Similarly, Muller (2001) focused on the legitimization of inequality and support for elites as two of the most recurrent themes in conservative philosophy. These observations are also consistent with empirical findings indicating that the endorsement of specific values concerning egalitarianism covaries with left-right political orientation (e.g., Barnea and Schwartz 1998; Braithwaite 1997; Cochrane, Billig, and Hogg 1979; Devos et al. 2002; Feather 1979; Feldman 2003; Rokeach 1973). We therefore expect that acceptance of inequality (like traditionalism) will be positively associated with right-wing (versus left-wing) political orientation in general.

## CULTURAL AND ECONOMIC CONSERVATISM

Several researchers have distinguished between cultural and economic forms of conservatism (e.g., Johnson and Tamney 2001; Lipset 1981; Van Hiel, Pandelaere, and Duriez 2004). This distinction corresponds roughly to the two core dimensions of conservatism we have identified, namely traditionalism and acceptance of inequality. Cultural conservatism reflects a general concern with maintaining social order and a rejection of qualitative social change as well as a belief in the importance of religion, traditional family arrangements, and conventional gender roles. Economic conservatism, by contrast, involves an ideological commitment to capitalism, private enterprise, and the value of competition among individuals and corporations in the context of a free market system. Because capitalist mechanisms magnify inequality, economic conservatism entails the acceptance and even justification of inequality.

There is some evidence suggesting that cultural conservatism (which is related to traditionalism) and economic conservatism (related to the acceptance of inequality) tend to be positively correlated in Western societies, but they are often negatively correlated in Eastern European countries (e.g., see Duriez, Van Hiel, and Kossowska 2005). This means that people who are especially motivated to preserve what is familiar and known in the West (especially in the U.S.) will be *both* culturally and economically conservative. In the East, however, the situation is more complex. Eastern Europeans who are strongly motivated to maintain what is familiar should be culturally conservative (traditional) but not necessarily economically conservative, because of the communist legacy that prevailed during the second half of the twentieth century. Consistent with these ideas, prior research suggests that whereas conventionalism, traditionalism, and closed-mindedness are consistently related to cultural conservatism across cultures, they are sometimes positively related, sometimes negatively related, and sometimes unrelated to economic conservatism in Eastern Europe (Duriez et al. 2005; Golec 2001; Kossowska and Van Hiel 2003). In the current study, therefore, we propose that psychological needs associated with the management of uncertainty and threat will be associated with traditionalism in general and—to a lesser degree, depending upon the economic context of the country—acceptance of inequality.

## Psychological Predictors of Left-Right Orientation

It has been suggested that right-wing conservatism is motivated in part by psychological needs to minimize uncertainty and threat (e.g., Wilson 1973). Jost et al. (2003a, 2003b) theorized that there is a special resonance or match between motives to reduce uncertainty and threat, and the two

core aspects of right-wing ideology, resistance to change and acceptance of inequality. For example, preserving traditions extinguishes fear of the unknown and allows one to stick with what is familiar and certain. Similarly, accepting and justifying existing forms of inequality contributes to a stable social order while suppressing challenges to hierarchical authority figures. We focused on three psychological predictors of traditionalism, acceptance of inequality, and left-right orientation: (1) needs for order (or rule-following), (2) needs for security, and (3) openness to new experiences.

#### NEEDS FOR ORDER AND RULE-FOLLOWING

The existing evidence suggests that a positive correlation exists between needs for order and structure and support for right-wing ideology, although this effect has been investigated in only a handful of countries to date. Altemeyer (1998), for example, found that the personal need for structure predicted right-wing authoritarianism in Canada. Scores on the need for cognitive closure scale (which includes preferences for both order and structure) have been shown to be positively associated with right-wing attitudes in Italy, Germany, Belgium, and the U.S. (Chirumbolo 2002; Jost, Kruglanski, and Simon 1999; Kimmelmeier 1997; Tetlock 2000; Van Hiel et al. 2004). In addition, American conservatives tend to score higher on self-report and behavioral measures of conscientiousness (including orderliness and rule-following) than do American liberals (Carney et al. 2006; Stenner 2005). Our goal was to systematically explore the effects of needs for order and rule-following on traditionalism, acceptance of inequality, and left-right orientation in a larger and more diverse sample of nations than has previously been attempted.

#### NEEDS FOR SECURITY

Prior research suggests that needs for safety and security should be related to preferences for right-wing attitudes. Studies of authoritarianism, for example, show that right-wing leaders are generally preferred to left-wing leaders during periods of crisis or threat (e.g., Doty, Peterson, and Winter 1991; McCann 1997; Sales 1973). Much less research has addressed individual differences in needs for security and their consequences for political affiliation, but there is some evidence from Australia and Switzerland that people who place a premium on security values (including national security and family security) are more likely to support right-wing political parties (Braithwaite 1997; Devos et al. 2002; Feather 1979). In addition, Duckitt (2001) found in samples from New Zealand and South Africa that perceptions of a dangerous world were positively correlated with right-wing attitudes. Previous studies are consistent with Jost et al.'s

(2003a) supposition that right-wing conservatism is especially appealing to people who are strongly motivated to reduce threat, but this hypothesis also requires cross-national replication before it can be accepted as a general statement of fact.

#### OPENNESS TO NEW EXPERIENCES

Several studies conducted in the U.S. and Western Europe suggest that liberals are more likely than conservatives to score high on measures of sensation-seeking and openness (e.g., Caprara, Barbaranelli, and Zimbardo 1999; Carney et al. 2006; Goldstein and Blackman 1978; Gosling, Rentfrow, and Swann 2003; Levin and Schalmó 1974; Riemann et al. 1993; Stenner 2005; Trapnell 1994). The consistency of the results reported in the research literature prompted McCrae (1996) to declare that “a case can be made for saying that *variations in experiential Openness are the major psychological determinant of political polarities*” (p. 325, emphasis in original). To our knowledge, the only previous study to investigate the relation between openness and political orientation in both Eastern and Western European countries was conducted by Van Hiel, Kossowska, and Mervielde (2000). They found that openness predicted left-wing orientation in both Belgium and Poland, but the correlation was stronger in the former than the latter country.

### Distinguishing Matching and Extremity Effects

In elaborating on the possibility raised by Wilson (1973), Sidanius (1985), and Jost et al. (2003a, 2003b), among others, that there is a “match” between the contents of right-wing attitudes and underlying psychological needs to manage uncertainty and threat, we have so far focused exclusively on linear associations among variables. Specifically, it has been suggested that needs for order/structure and security would be positively associated with right (versus left) orientation and that needs for openness to experience would be negatively associated with right (versus left) orientation. Although there is evidence supporting each of these linear predictions, skeptics have argued that left-wing ideologues should resemble right-wing ideologues, psychologically speaking (Eysenck 1999; Greenberg and Jonas 2003; Shils 1954).

An alternative to our linear matching hypothesis, therefore, is a quadratic extremity hypothesis, according to which people who are further away from the political center in *either* direction would be expected to possess stronger needs for order, structure, and security and weaker needs for openness to experience. Greenberg and Jonas (2003) suggested that such patterns would be especially likely in formerly communist countries. Although data were only available for a fairly narrow range of countries, Jost et al. (2003b) found



no evidence for extremity effects alone. Rather, linear trends consistently emerged, either exclusively or in addition to nonlinear extremity effects.

Still another possibility is suggested by the work of Sidanius (1988). He proposed that the more sophisticated and secure an individual is, the more likely it is that he or she will hold deviant (i.e., extreme) political opinions. This theory would lead one to hypothesize quadratic effects, but they would be opposite in sign to the extremity effects hypothesized by Eysenck (1999), Greenberg and Jonas (2003), and Shils (1954). Thus, Sidanius' theory would lead one to expect negative quadratic effects for the relation between ideology and needs for order, structure, and security and a positive quadratic effect for the relation between ideology and openness to experience. The present study is unprecedented because it allows one to evaluate both linear and quadratic hypotheses derived from several different theories of ideological functioning in an unusually large and diverse sample of national contexts.

## Comparing Eastern and Western European Contexts

Most theorizing on the nature and psychological basis of political ideology comes from work carried out in Western, largely democratic, nation states. The extent to which such theories apply to other contexts—especially to formerly communist countries in Eastern Europe—is of paramount scientific interest. These countries, especially the four that were included in the ESS (Czech Republic, Hungary, Poland, and Slovenia), have undergone a rapid transition from communism to democratic forms of government and capitalist economic systems (see Tucker 2002; Whitefield 2002). It is conceivable that in the Eastern European context, then, traditionalism, rule-following, and needs for security would be more strongly associated with preferences for the old (left-wing) ways of doing things than with right-wing preferences. It is also possible that openness would be associated with a right-wing political orientation in Eastern Europe, rather than with a left-wing orientation, as in the West.

## Summary of Hypotheses

To recap, there are two sets of hypotheses under consideration. First, we predict that a positive relationship will emerge between right-wing political orientation and two key components: traditionalism (Hypothesis 1) and acceptance of inequality (Hypothesis 2). Second, we predict that right-wing orientation will be positively associated with needs for order/rule-following (Hypothesis 3) and security (Hypothesis 4) and negatively associated with openness (Hypothesis 5), even after adjusting for quadratic effects associated with ideological extremity and sophistication. Each of these



hypotheses will be investigated with data from 19 European countries, using multiple regression methods. A multivariate representation of the effects will also be examined using structural equation modeling. It was expected that the hypotheses would receive more consistent support in Western than in Eastern European countries, which are still in transition between “old” and “new” regimes.

## Analysis of Data from the European Social Survey

Data were obtained from the 2002 wave of the European Social Survey, a large survey initiative designed to monitor the attitudes of Europeans. The ESS is jointly funded by the European Commission’s 5th Framework Program, the European Science Foundation, and academic institutions in participating countries who also conduct the survey in each country. According to the survey’s technical report, “it is designed and carried out to exceptionally high standards. It involves strict random probability sampling, a minimum target response rate of 70% and rigorous translation protocols. The hour-long face-to-face interview includes (amongst others) questions on immigration, citizenship and socio-political issues” (Jowell and Central Coordinating Team 2003, p. 6). In the current study, we used data from the 14 Western European and 4 Eastern European countries listed in table 1 plus Israel, which was also included in the ESS.<sup>1</sup>

Samples from each country were drawn from all people aged 15 and over living in private households, regardless of their nationality, citizenship, language, or legal status within that country. The sample size within each country ranged from approximately 1,200 to 2,800. The total number of participants who completed the measures of interest was 36,385. Number of participants and response rate in each country are listed in table 1; the response rate varied considerably across countries. The data collection period lasted from September 2002 to Spring 2003 for most countries. A team of translators in each country followed the “TRAPD” procedure, which involved translation, review, adjudication, pre-testing, and documentation (Jowell and Central Coordinating Team 2003). Data quality was ensured through a variety of means, including requirement of random samples, rules for data collection institutions in each country, pilot studies in two countries, and extensive documentation of all aspects of the survey. Detailed information about all parts of the survey, including development, method, sampling, and quality control can be found on the survey’s website at <http://www.europeansocialsurvey.org>. The data are archived and distributed by the Norwegian Social Science Data Services (<http://www.nsd.uib.no>).

1. Two countries included in the ESS, Italy and Luxembourg, were excluded from our study because the questions of interest were not administered.

**Table 1.** Means (and Standard Deviations) for Political Orientation and Predictor Variables

Country	<i>N</i>	Response Rate	Left-right	Traditionalism	Inequality	Rule-Following	Security	Openness
Austria	2,255	60.4%	4.65 (1.85)	3.09 (1.36)	0.99 (1.04)	2.81 (1.16)	3.55 (1.07)	3.32 (1.13)
Belgium	1,869	59.2%	4.83 (2.04)	3.18 (1.31)	1.06 (0.92)	3.10 (1.06)	3.49 (1.01)	3.31 (1.05)
Czech Rep	1,229	43.3%	5.43 (2.39)	3.24 (1.37)	1.20 (1.04)	3.46 (0.97)	3.81 (0.95)	3.06 (1.07)
Denmark	1,478	67.6%	5.54 (1.99)	3.36 (1.40)	1.45 (1.28)	2.97 (1.18)	3.04 (1.16)	3.32 (1.10)
Finland	1,778	73.2%	5.63 (2.02)	2.98 (1.33)	1.03 (0.98)	3.19 (1.07)	3.63 (0.95)	3.26 (1.01)
Germany	2,831	55.7%	4.69 (1.84)	3.00 (1.39)	1.15 (1.08)	2.77 (1.19)	3.59 (1.02)	3.21 (1.04)
Greece	2,558	80.0%	5.69 (2.16)	4.25 (0.90)	0.81 (0.90)	3.67 (0.90)	4.27 (0.82)	3.49 (1.04)
Hungary	1,641	69.9%	4.94 (2.38)	3.39 (1.35)	1.21 (1.25)	3.09 (1.07)	4.10 (0.91)	3.37 (1.17)
Ireland	1,926	64.5%	5.38 (1.88)	3.52 (1.24)	0.98 (1.00)	3.16 (1.13)	3.83 (0.93)	3.28 (1.13)
Israel	2,294	71.0%	5.64 (2.93)	3.18 (1.57)	0.90 (1.01)	3.15 (1.18)	3.98 (0.95)	3.42 (1.11)
Netherlands	2,346	67.9%	5.32 (2.05)	3.18 (1.23)	1.16 (0.95)	3.14 (0.97)	3.35 (0.91)	3.27 (0.99)
Norway	1,817	65.0%	5.23 (1.98)	3.04 (1.34)	1.37 (1.08)	3.17 (1.06)	3.05 (1.04)	2.98 (1.04)
Poland	2,096	73.2%	5.11 (2.39)	3.87 (1.00)	0.90 (0.86)	3.67 (0.87)	4.01 (0.78)	3.10 (1.14)
Portugal	1,509	68.8%	5.08 (2.23)	3.33 (1.16)	1.14 (0.94)	2.87 (1.03)	3.67 (0.91)	3.05 (0.99)
Slovenia	1,490	70.5%	4.71 (2.17)	3.37 (1.23)	1.02 (0.97)	3.17 (1.07)	3.77 (0.89)	3.44 (0.99)
Spain	1,720	53.2%	4.41 (2.04)	3.36 (1.33)	0.82 (0.98)	3.32 (1.03)	3.94 (0.98)	3.29 (1.11)
Sweden	1,705	69.5%	4.94 (2.39)	2.88 (1.38)	1.13 (1.03)	2.66 (1.09)	2.94 (1.06)	3.00 (1.01)
Switzerland	2,036	33.5%	4.87 (1.87)	2.97 (1.39)	1.03 (1.00)	2.59 (1.13)	3.41 (1.05)	3.44 (0.99)
UK	1,807	55.5%	5.18 (1.75)	2.99 (1.49)	1.26 (1.13)	2.99 (1.16)	3.55 (1.03)	3.29 (1.04)
<i>All countries</i>	<i>36,385</i>	<i>63.6%</i>	<i>5.12 (2.17)</i>	<i>3.28 (1.36)</i>	<i>1.07 (1.04)</i>	<i>3.10 (1.12)</i>	<i>3.65 (1.03)</i>	<i>3.27 (1.07)</i>

NOTE.—Response rate is calculated according to The American Association for Public Opinion Research (AAPOR) response rate 1 (AAPOR 2006), with the exception that deceased and those who have moved abroad are not counted as nonrespondents. Left-right orientation is scored on an 11-point scale ranging from 0 (Left) to 10 (Right). The other variables range from 0–5.

As recommended by the authors of the ESS, a design weight was applied in estimating regression (but not structural equation) models. The weight corrects for slight differences in probabilities of participant selection from certain types of households.

#### MEASUREMENT OF POLITICAL ORIENTATION

All participants were asked to place themselves on a single left-right continuum, from 0 (extreme left) to 10 (extreme right), with 5 (centrist) as the midpoint. Ingelhart and Klingemann (1976) have shown that this is a valid and reliable measure of left-right identification (see also Jost 2006; Knight 1999). The mean scores on political orientation for each of the 19 countries are listed in table 1, along with their standard deviations.

#### CORE ASPECTS OF RIGHT-WING IDEOLOGY

We hypothesized that traditionalism (Hypothesis 1) and acceptance of inequality (Hypothesis 2) would be positively associated with right-wing orientation across countries. Although the ESS did not include direct measures of the two core aspects of right-wing ideology, items from the Portrait Values Questionnaire (PVQ) were included in the survey (Schwarz et al. 2001), and two of these items were judged to be suitable as measures of the core components. The items were in the form of a description of a hypothetical person and respondents were asked to indicate on a six-point scale whether that hypothetical person was “not like me at all” (coded as 0), “not like me” (1), “a little like me” (2), “somewhat like me” (3), “like me” (4), or “very much like me” (5).

*Hypothesis 1: Traditionalism* was measured with a single item: “Tradition is important to him. He tries to follow the customs handed down by his religion or his family.”<sup>2</sup> To assess the hypothesis that traditionalism would be positively associated with right-wing conservatism, we analyzed an ordinary least squares (OLS) regression model with respondent nested within country, and country nested within region. Each country was effects coded, and region was effects coded so that Eastern Europe = +1 and Western Europe = -1. In this and subsequent models, traditionalism was treated as the outcome variable (not centered) and left-right orientation as the explanatory variable (centered at the scale midpoint).<sup>3</sup> We included

2. For female respondents, the item contained feminine pronouns.

3. Although our theory implies that left-right orientation is itself affected by psychological variables, the regression analyses were designed to accommodate potential nonlinear (i.e., quadratic) associations between political orientation and other variables. For computational purposes this necessitated reversing the independent and dependent variables in the multiple regression analyses (but not in the structural equation models). Because the data are cross-sectional, all of the models provide valid estimates of the multivariate effects as hypothesized.

interaction terms for both the region and country level variables to determine whether the relationship between traditionalism and left-right orientation varied between regions and countries. We also adjusted for demographic variables of age, years of education, household income (all mean-centered), and gender. A hierarchical model included the following steps: (1) demographic variables, (2) region, (3) country (within region), (4) left-right political orientation, (5) the region  $\times$  political orientation interaction term, (6) the country  $\times$  political orientation interaction term, (7) ideological extremity (political orientation squared), (8) the region  $\times$  ideological extremity interaction term, and (9) the country  $\times$  ideological extremity interaction term.

As can be seen in table 2, results indicated that each step (except for Step 8) significantly improved the fit of the model. In table 3, we list the effect sizes for the variables of theoretical interest. Region, political orientation, and their interaction were significantly associated with traditionalism. Overall, respondents from Eastern Europe tended to value traditionalism more highly than respondents from Western Europe ( $b = .152$ ,  $p < .001$ ). As hypothesized, there was an overall tendency for traditionalism to be associated with right-wing (versus left-wing) orientation ( $b = .063$ ,  $p < .001$ ), but no tendency for it to be associated with ideological extremity (see table 3). The analysis also yielded a significant interaction between region and political orientation ( $b = -.018$ ,  $p < .001$ ). To interpret the interaction, we conducted separate regression analyses for each region, adjusting for the other variables included in the omnibus model. Results revealed that the relationship between traditionalism and right-wing orientation was stronger for respondents in Western Europe ( $b = .082$ ,  $p < .001$ ) than in Eastern Europe ( $b = .047$ ,  $p < .001$ ). Results for individual countries showed that in all but one (the Czech Republic) a significant positive relationship held between traditionalism and right-wing political orientation, although the magnitude of the relationship was typically small (see online Appendix I).

*Hypothesis 2: Acceptance of inequality* was measured with a single item: "He thinks it is important that every person in the world should be treated equally. He believes everyone should have equal opportunities in life" (reverse-coded). We conducted the same nine-step OLS hierarchical regression as described above. The analysis yielded a main effect of political orientation and an interaction between region and political orientation. As can be seen in table 3, acceptance of inequality was positively related to right-wing conservatism overall ( $b = .037$ ,  $p < .001$ ), but not to ideological extremity. The interaction between region and political orientation ( $b = -.032$ ,  $p < .001$ ) indicated that the relationship between acceptance of inequality and right-wing orientation was stronger in Western Europe ( $b = .069$ ,  $p < .001$ ) than in Eastern Europe ( $b = .005$ , ns). Results for individual countries revealed that a significant positive relationship between

**Table 2.** *F*-change Values and Their Significance for Each Step of the Hierarchical Regressions

	df	<i>F</i> -change				
		Traditionalism	Acceptance of Inequality	Rule Following	Need for Security	Openness to Experience
Step 1: Demographics <sup>a</sup>	4	394.92***	52.01***	476.47***	273.56***	382.88***
Step 2: Region	1	257.21***	6.31*	357.91***	636.68***	.02 ns
Step 3: Countries	17	96.02***	43.96***	106.34***	198.74***	30.58***
Step 4: Left-right	1	415.60***	327.22***	163.41***	100.265***	.38 ns
Step 5: Region $\times$ left-right	1	13.93***	73.85***	36.92***	52.91***	19.49***
Step 6: Countries $\times$ left-right	17	4.10***	6.13***	3.591***	8.73***	1.52 ns
Step 7: Left-right <sup>2</sup>	1	6.53*	14.82***	3.27 ns	6.86**	38.90***
Step 8: Left-right <sup>2</sup> $\times$ Region	1	1.20 ns	1.54 ns	.15 ns	1.02 ns	5.70*
Step 9: Left-right <sup>2</sup> $\times$ Countries	16	4.41***	.74 ns	1.93*	1.37 ns	2.44***

NOTE.—Political orientation is scored so that higher numbers indicate right-wing orientation. All predictor variables are centered. Pairwise deletion is employed.

\* $p < .05$ .

\*\* $p < .01$ .

\*\*\* $p < .001$  (two-tailed).

<sup>a</sup>Gender, age, household income and years of education.

**Table 3.** Regression Coefficients from the Final Step of Hierarchical Regressions for Traditionalism and Acceptance of Inequality

	Traditionalism		Acceptance of Inequality	
	<i>b</i>	SE	<i>b</i>	SE
Region	.152***	.013	.007 ns	.010
Left-right (LR) political orientation	.063***	.005	.037***	.004
Region × LR	−.018***	.005	−.032***	.004
LR <sup>2</sup> (ideological extremity)	.001 ns	.001	−.005 ns	.001
Region × LR <sup>2</sup>	−.001 ns	.001	−.001 ns	.001

NOTE.—The results are from the last step of a hierarchical regression that includes: (1) Demographics (age, years of education, gender, and household income), (2) Region (Eastern versus Western Europe), (3) Countries (nested within Region), (4) Left-Right political orientation, (5) Region × Left-Right orientation, (6) Countries × Left-Right orientation, (7) Squared Left-Right orientation (ideological extremity), (8) Region × Squared Left-Right orientation, and (9) Countries × Squared Left-Right orientation. Pairwise deletion is employed.

\**p* < .05.

\*\**p* < .01.

\*\*\**p* < .001 (two-tailed).

acceptance of inequality and right-wing orientation was obtained in 14 of the 19 countries (see online Appendix II). It is noteworthy that four of the five countries that yielded no significant association between these two variables were Eastern bloc Communist countries (Hungary, Poland, Slovenia, and the Czech Republic).

PSYCHOLOGICAL PREDICTORS OF IDEOLOGY

Our next set of hypotheses was that needs for order/rule-following (Hypothesis 3) and security (Hypothesis 4) would be positively associated with right-wing orientation, and openness to new experiences (Hypothesis 5) would be negatively associated with right-wing orientation, especially in Western Europe. By considering quadratic as well as linear effects we were able to distinguish among matching, extremity, and sophistication hypotheses. As before, we conducted OLS regression models with respondent nested within country and country nested within region. In order to test for quadratic effects, the hierarchical regressions included the following nine steps: (1) demographic variables, (2) region, (3) country within region, (4) left-right political orientation, (5) the region × political orientation interaction term, (6) the country × political orientation interaction term, (7) ideological extremity (political orientation squared), (8) the region × ideological extremity interaction term, and (9) the country × ideological extremity interaction term.

**Table 4.** Regression Coefficients from the Final Step of Hierarchical Regressions for Rule-Following, Need for Security, and Openness to New Experiences

	Rule-Following		Need for Security		Openness to Experience	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
Region	.155***	.011	.193***	.010	.003 ns	.011
Left-right (LR) political orientation	.030***	.004	.014***	.004	.005 ns	.004
Region × LR	−.026***	.004	−.029***	.004	.015***	.004
LR <sup>2</sup>	.002 ns	.001	.002 ns	.001	.005***	.001
(ideological extremity)						
Region × LR <sup>2</sup>	.001 ns	.001	−.001 ns	.001	−.003**	.001

NOTE.—The results are from the last step of a hierarchical regression that includes: (1) Demographics (age, years of education, gender, and household income), (2) Region (Eastern versus Western Europe), (3) Countries (nested within Region), (4) Left-Right political orientation, (5) Region × Left-Right orientation, (6) Countries × Left-Right orientation, (7) Squared Left-Right orientation (ideological extremity), (8) Region × Squared Left-Right orientation, and (9) Countries × Squared Left-Right orientation. Pairwise deletion is employed.  
\**p* < .05.  
\*\**p* < .01.  
\*\*\**p* < .001 (two-tailed).

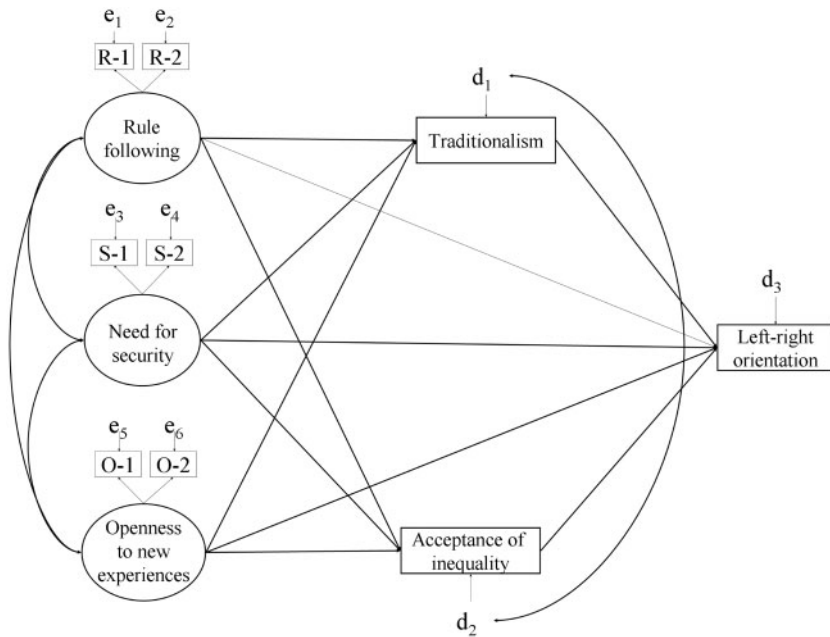
*Hypothesis 3: Need for order/rule-following* was measured by taking the mean of responses to two ESS items from the PVQ: (1) “It is important to him to behave properly. He wants to avoid doing anything people would say is wrong”; and (2) “He believes that people should do what they’re told. He thinks people should follow rules at all times, even when no one is watching” ( $\alpha = .58$ ). The analysis yielded significant main effects for region and political orientation as well as their interaction (see table 4). Overall, Eastern Europeans scored higher on rule-following than did Western Europeans ( $b = .155, p < .001$ ). As hypothesized, there was a general tendency for rule-following to be associated with right-wing (versus left-wing) orientation ( $b = .030, p < .001$ ). The analysis also yielded a significant interaction between region and political orientation ( $b = -.026, p < .001$ ), which indicated that the relationship between rule-following and right-wing orientation was stronger in Western Europe ( $b = .056, p < .001$ ) than in Eastern Europe ( $b = .004, ns$ ). As can be seen in table 4, ideological extremity (the quadratic term) was not significantly related to rule-following either as a main effect or in interaction with region. In all of the Western European countries (but not in the Eastern European countries), there was a significant linear relationship between rule-following and right-wing orientation (see online Appendix III).



*Hypothesis 4: Need for security* was also measured with two items: (1) “It is important to him to live in secure surroundings. He avoids anything that might endanger his safety”; and (2) “It is important to him that the government ensures safety against all threats. He wants the state to be strong so it can defend its citizens” ( $\alpha = .62$ ). The analysis again yielded significant main effects for region and political orientation as well as their interaction (see table 4). Eastern Europeans scored higher on the need for security than did Western Europeans ( $b = .193, p < .001$ ). There was a general tendency for the need for security to be associated with right-wing (versus left-wing) orientation ( $b = .014, p < .001$ ). The analysis also yielded a significant interaction between region and political orientation ( $b = -.029, p < .001$ ), indicating that the relationship between the need for security and right-wing orientation was positive in Western Europe ( $b = .043, p < .001$ ) but negative in Eastern Europe ( $b = -.014, p < .05$ ). Ideological extremity (the quadratic term) was not significantly related to need for security either as a main effect or in interaction with region (see table 4). Ten countries, all in Western Europe, showed a significant positive linear association between need for security and right-wing orientation. In only one country, the Czech Republic, did the negative linear relationship attain significance, indicating higher need for security among leftists than among rightists (see online Appendix IV).

*Hypothesis 5: Openness to new experiences* was measured by combining responses to two items: (1) “Thinking up new ideas and being creative is important to him. He likes to do things in his own original way”; and (2) “He likes surprises and is always looking for new things to do. He thinks it is important to do lots of different things in life” ( $\alpha = .56$ ). The analysis yielded a significant main effect of ideological extremity and two-way interactions involving region and each of the two ideological variables (see table 4); this was a different pattern of results than for the other variables. An interaction between region and political orientation ( $b = .015, p < .001$ ) indicated that openness was associated with left-wing orientation in Western Europe ( $b = -.010, p < .01$ ), as has been shown in previous research, but it was associated with right-wing orientation in the Eastern European context ( $b = .018, p < .01$ ).<sup>4</sup> There was also a significant positive quadratic effect of political orientation on openness to experience ( $b = .005, p < .001$ ), indicating that ideological extremity (in either direction) was associated with greater openness overall. Finally, an interaction effect involving region and ideological extremity ( $b = -.003, p < .01$ ) revealed that ideological extremity was significantly associated with openness in Western Europe ( $b = .008$ ,

4. Because there was evidence of a quadratic effect, this comparison is of slopes at the neutral point.

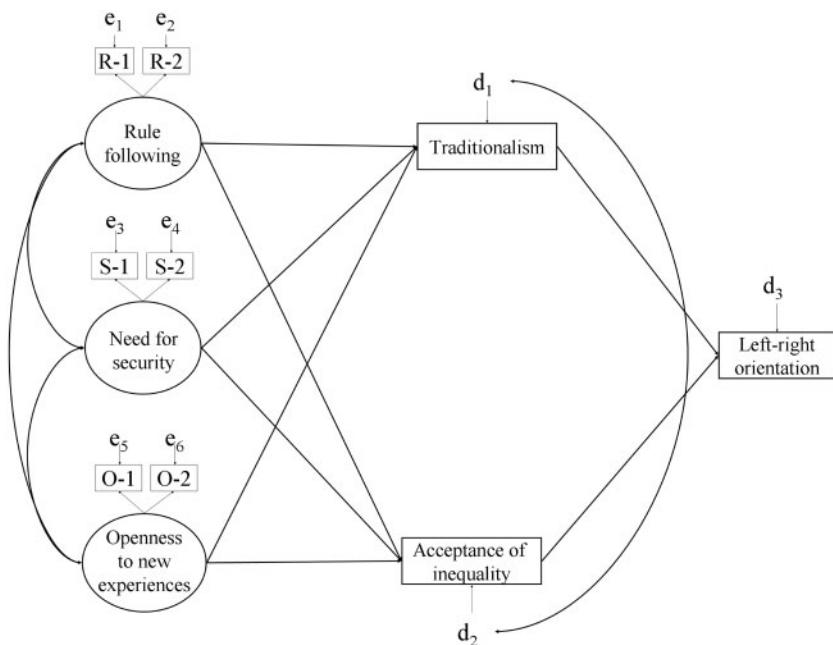


**Figure 1.** Partially mediated structural equation model.

$p < .001$ ) but not in Eastern Europe ( $b = .002$ , ns). Results for individual countries varied considerably (see online Appendix V).

#### STRUCTURAL EQUATION MODELING

We conducted path analyses to assess the fit of a model implying directionality in the pattern of relations among variables of interest and also to determine whether the same structural model could be used to describe the relations among variables in Eastern and Western Europe. In accordance with the theory proposed by Jost et al. (2003a, 2003b), we specified a model in which political orientation was predicted by the two sets of variables discussed earlier. The first set includes the two core aspects of right-wing conservatism: traditionalism (Hypothesis 1) and acceptance of inequality (Hypothesis 2). The second set includes the three psychological predictors: rule-following (Hypothesis 3), need for security (Hypothesis 4), and openness (Hypothesis 5). We assessed several models in addition to the measurement model. We focused on that portion of the association between left-right orientation and the other variables that was represented by direct (linear) relationships.



**Figure 2.** Fully mediated structural equation model.

The first path model, illustrated in figure 1, was a partially mediated model in which political orientation was predicted directly by traditionalism and acceptance of inequality as well as the three psychological variables, with the psychological variables *also* predicting political orientation indirectly through the two aspects of conservatism. This model was re-run for each of the 19 countries separately. Next we compared the partially mediated model to a fully mediated model, illustrated in figure 2, in which the three psychological variables were *not assumed* to predict political orientation directly, but only through a mediated relationship with resistance to change and acceptance of inequality.<sup>5</sup> We then conducted separate path models for Eastern and Western European countries to determine whether the same model provided an adequate fit in both regional contexts. Finally, we conducted a multiple group analysis and then compared the directions

5. The Mardia's coefficient for the dataset was 18.73, indicating that the data was not multivariate normal (a value lower than 1.96 indicates multivariate normality). This was unsurprising given the extreme skewness of some of the variable scores, as previously mentioned. A violation of the assumption of multivariate normality has been found not to dramatically affect the regression weights, but it will inflate standard errors. Because this is a very large sample, the standard error is small and thus not detrimentally affected by the lack of multivariate normality.

and relative strengths of individual structural paths in the Eastern and Western European data sets.

A matrix of intercorrelations among variables (including individual survey items) used in the model is provided in table 5. As expected, right-wing orientation was positively correlated with: acceptance of inequality; traditionalism; both items measuring rule-following; and both items measuring need for security. The correlations between political orientation and the items measuring openness to experience were in the expected (negative) direction, but they were very small, consistent with what we found in the regression analysis. Zero-order correlations between acceptance of inequality and traditionalism, rule-following, and needs for security were negative rather than positive, indicating that the more people accepted inequality overall the less traditional they were and the less they valued rule-following and security. To the extent that traditionalism relates to cultural conservatism and acceptance of inequality to economic conservatism, these findings add to the growing sense that cultural and economic conservatism may be different in terms of psychological antecedents, especially in certain European contexts in which there are established traditions of socialist governments seeking to provide security and order for citizens under an egalitarian banner.

Analyses were conducted using AMOS and EQS software. We followed Hu and Bentler's (1999) recommendations in estimating the fit of the model. They suggest that a good fit can be claimed for a model if the root-mean-square error of approximation (RMSEA) is close to or below .05, and the comparative fit index (CFI) is .95 or higher. According to all of these criteria, the fit of the measurement model was very good. The model had a  $\chi^2$  of 244.2 with 15 degrees of freedom, RMSEA was .020 [90% confidence limits (CL) .018, .022], CFI = .995, and TLI (NNFI) = .985. As the partially mediated model contains the same variables as the measurement model, it produced identical fit indices to the measurement model. We also ran the partially mediated model for each of the 19 countries separately. Model fit varied slightly across countries, but in every case indices suggested that the model fit very well, with RMSEA < .055 in every country (see results in online Appendix VI).

The second model we assessed was the fully mediated model illustrated in figure 2 in which the effects of the three psychological variables on political orientation were hypothesized to be completely mediated by acceptance of inequality and traditionalism. This model had a  $\chi^2$  of 385.2 with  $df = 18$ . Fit indices suggested a slightly poorer fit in comparison with the previous model: RMSEA = .023 (90% CL .021, .025), CFI = .992, and TLI = .979. A  $\chi^2$  difference test comparing the two models indicated that the partially mediated model illustrated in figure 1 provided a significantly better fit ( $\Delta\chi^2 = 385.2 - 244.2 = 141$ ,  $df = 18 - 15 = 3$ ,  $p < .01$ ), so this is the model we retained.

**Table 5.** Intercorrelations Among Variables (Items) Included in SEM Analysis

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Left-Right orientation	—	.11**	.15**	.08**	.10**	.06**	.07**	-.01**	-.01
(2) Traditionalism		—	-.10**	-.35**	.30**	.29**	.31**	.00	.02**
(3) Acceptance of inequality			—	-.15**	-.09**	-.19**	-.21**	-.19**	-.16**
(4) Rule-following 1				—	.42**	.39**	.38**	.00	.01**
(5) Rule-following 2					—	.29**	.30**	-.03**	-.01**
(6) Need for security 1						—	.46**	.04**	.06**
(7) Need for security 2							—	.07**	.10**
(8) Openness 1								—	.39**
(9) Openness 2									—

NOTE.—*Description of variables:* (1) Left-right: Self placement on a continuum, with higher scores indicating right-wing political orientation; (2) Traditionalism: “Tradition is important to him. He tries to follow the customs handed down by his religion or his family”; (3) Acceptance of inequality: “He thinks it is important that every person in the world should be treated equally. He believes everyone should have equal opportunities in life” (reverse coded); (4) Rule-following 1: “It is important to him to behave properly. He wants to avoid doing anything people would say is wrong”; (5) Rule-following 2: “He believes that people should do what they’re told. He thinks people should follow rules at all times, even when no-one is watching”; (6) Security 1: “It is important to him to live in secure surroundings. He avoids anything that might endanger his safety”; (7) Security 2: “It is important to him that the government ensures safety against all threats. He wants the state to be strong so it can defend its citizens”; (8) Open 1: “Thinking up new ideas and being creative is important to him. He likes to do things in his own original way”; (9) Open 2: “He likes surprises and is always looking for new things to do. He thinks it is important to do lots of different things in life”.

\* $p < .05$ .

\*\* $p < .01$  (two-tailed).

**Table 6.** Comparison of Path Coefficients in Western and Eastern European Models

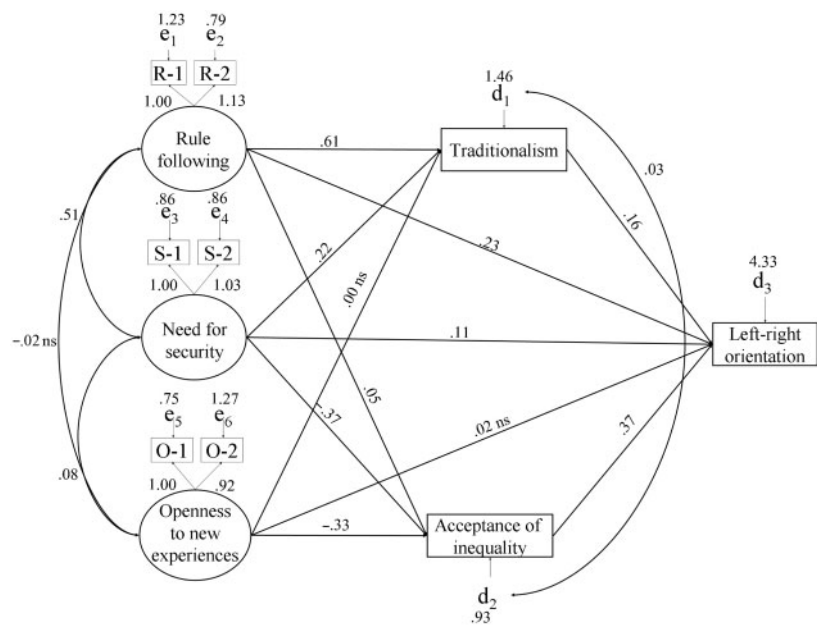
Path from:	Path to:	Western Europe		Eastern Europe		z-test
		<i>b</i>	(SE)	<i>b</i>	(SE)	
Traditionalism	Left-right	.158**	(.012)	.206**	(.035)	-1.30
Inequality	Left-right	.369**	(.015)	.026	(.037)	8.59**
Rule-following	Left-right	.229**	(.047)	.351	(.228)	-.52
Rule-following	Inequality	.052*	(.022)	-.055	(.083)	1.25
Rule-following	Traditionalism	.609**	(.028)	1.065**	(.131)	-3.40**
Need for security	Left-right	.107*	(.048)	-.685**	(.223)	3.47**
Need for security	Inequality	-.365**	(.023)	-.582**	(.087)	2.41*
Need for security	Traditionalism	.223**	(.029)	-.129	(.128)	2.68**
Openness	Left-right	.021	(.023)	.271**	(.063)	-3.73**
Openness	Inequality	-.326**	(.013)	-.181**	(.026)	-4.99**
Openness	Traditionalism	-.009	(.013)	.002	(.032)	-.32

\* $p < .05$ .\*\* $p < .01$  (two-tailed).

We then carried out separate path models for Eastern and Western Europe and found that the partially mediated model provided an excellent fit to the data in both contexts. In Eastern Europe: RMSEA = .027 (90% CL .022, .023), CFI = .988, and TLI = .965. In Western Europe: RMSEA = .021 (90% CL .018, .024), CFI = .994, and TLI = .982. These results confirm that the same structural model can be meaningfully applied to both regions.

We also conducted a multiple group analysis to test for the equivalency of the path coefficients. We first constrained all structural paths to be equal in the two regions by instructing the program to calculate the coefficients as if there were no differences between East and West. This model was compared to a fully relaxed model in which the coefficients for each of the two regions were calculated independently of the other. A chi-square difference test revealed that the relaxed model provided a superior fit to the constrained model ( $\Delta\chi^2 = 311.1$ ,  $df = 11$ ,  $p < .05$ ). A series of *z*-tests comparing individual path coefficients indicated that 7 of the 11 coefficients were statistically different in the two regions; in two cases the paths were opposite in sign (see table 6). Because of differences between the two models, we illustrate them separately in figures 3 and 4.

An examination of path coefficients from these models indicates that traditionalism is a positive predictor of right-wing orientation in both Western and Eastern Europe. Acceptance of inequality, however, is a significant



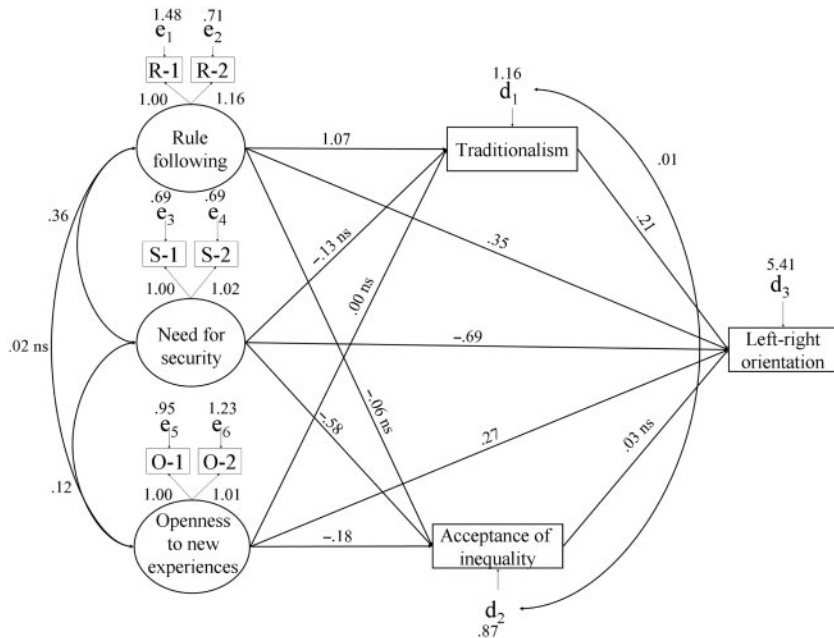
**Figure 3.** Results for partially mediated structural equation model in Western Europe.

predictor of right-wing orientation only in Western Europe. Rule-following exerted both direct and indirect effects on political orientation in both contexts. The indirect effect was much larger through traditionalism than through acceptance of inequality in both the West (.61 versus .05) and the East (1.07 versus  $-.06$ ); the direct effect of rule-following on left-right orientation was also positive and significant in both contexts.

The relationship between need for security and acceptance of inequality was, as in the zero-order case, contrary to expectations, insofar as the need for security was negatively associated with the acceptance of inequality. Presumably, this is due to the fact that socialist governments in Europe have traditionally provided social and economic security by pursuing egalitarian policies, especially in Eastern European “security societies” (Flanagan et al. 2003). Against this backdrop, which appears to be quite different from the American context, a preference for inequality seems motivated more by acceptance of risk than by needs for security. Consistent with this general interpretation, we find that although the direct path from need for security to right-wing orientation is significant and positive in Western Europe as originally predicted, this path is robustly negative in Eastern Europe, where the socialist/communist legacy is especially strong.

With regard to openness, a relatively complicated picture again emerged. Its indirect path via acceptance of inequality was negative and significant in





**Figure 4.** Results for partially mediated structural equation model in Eastern Europe.

both Eastern ( $b = -.18$ ) and Western ( $b = -.33$ ) contexts, but its direct effect on right-wing orientation was positive in Eastern Europe ( $b = .27$ ) and non-significant in Western Europe (its path leading to traditionalism was not significant in either case). Thus, there was some evidence that openness to experience led people to prefer egalitarianism, and this factor led them away from right-wing conservatism. At the same time, however, openness appears to have led people to be attracted to other aspects of conservatism—including perhaps the risks associated with entrepreneurial capitalism—and to turn away from the socialist tradition in Eastern Europe.

## Conclusions

We have sought to advance understanding of the psychological basis of ideology by assessing an integrated model of the needs and values underlying right-wing versus left-wing orientation. In addition, we have considered a much broader range of national contexts than has been previously attempted, focusing especially on similarities and differences between Eastern and Western European countries. The cross-national evidence generally replicates previous work using data from a larger set of countries

in Western Europe. The results for Eastern Europe depart from conclusions based on prior research, and these departures provide valuable insight into potential extensions of the theory.

There was strong support for the hypothesis that traditionalism would be positively associated with right-wing conservatism across different national contexts. This prediction was supported in 18 out of 19 countries. The other core component of conservatism, acceptance of inequality, was strongly related to right-wing orientation in Western Europe (14 out of 15 countries) but not in any of the four Eastern European countries. Results from structural equation models demonstrated that attitudes about inequality are stronger predictors of political orientation than are attitudes about traditionalism—as suggested by Bobbio (1996) and Giddens (1998)—but only in Western Europe. The fact that traditionalism and acceptance of inequality were uncorrelated in the path model and negatively rather than positively associated with one another in terms of zero-order correlations demonstrates that the European context, with its stronger history of socialist traditions, differs considerably from the American context in which the status quo has been relatively inegalitarian.

Our hypothesis that rule-following would be linearly and positively associated with right-wing ideology was supported in Western European countries but not in the former Eastern bloc countries included in our regression analyses. In the structural equation model, rule-following was consistently associated with right-wing orientation in both Eastern and Western Europe, adjusting for other direct and indirect effects. Strong support was also obtained for the hypothesis that needs for security would be positively associated with right-wing orientation, but only in Western Europe. The structural equation model for Eastern Europe indicated that needs for security were predictive of a left-wing rather than right-wing orientation after adjusting for other variables in the model. This suggests that people in Eastern Europe continue to depend upon socialist forms of government to satisfy their needs for safety and security, more than a decade after the collapse of communism. In many of these countries, the transition to capitalism has led to economic insecurity, fear, and resentment (Flanagan et al. 2003; Weiss 2003).

Probably the biggest surprise of the study concerns the variable of openness to new experiences. In Western Europe, openness was associated with preferences for greater equality, and egalitarianism was associated with left-wing orientation, but there was no direct effect of openness on political orientation. The regression analyses also suggested that in Western Europe higher levels of openness were related to ideological extremity (relative to the political center) rather than with left-wing orientation exclusively. In Eastern Europe, openness tended to be associated with right-wing orientation (despite also being associated with egalitarianism). Thus, the cross-national evidence forces some rethinking of McCrae's (1996) assessment that

experiential openness is the most fundamental psychological predictor of liberalism in general. Overall, the pattern that emerged most consistently in our analyses (but especially in Western Europe) was that of a positive quadratic trend, which indicated that openness was associated with ideological extremity in *either* direction. This finding may be consistent with Sidanius' (1988) suggestion that to deviate from the political mainstream one must possess a high degree of intellectual sophistication, and—in light of the present findings—perhaps even creativity.

Virtually no evidence was obtained for the commonly held hypothesis that an authoritarian personality style characterizes left-wing extremists just as well as right-wing extremists (e.g. Eysenck 1999; Greenberg and Jonas 2003; Shils 1954; see also Jost 2006). With regard to traditionalism and rule-following, we found that a linear pattern characterizes most nations, indicating that these needs are consistently stronger among right-wing than left-wing adherents, even in formerly communist countries. Evidence for the ideological extremity hypothesis was scant in general. There was, however, some evidence that in Eastern Europe needs for security were associated with left-wing orientation and openness to new experiences was associated with right-wing orientation.

The fact that the data from the ESS (especially the data from Western Europe) generally support the psychological model of political orientation presented by Jost et al. (2003a, 2003b) is important, because these data, which are of exceptionally high quality, are based on larger, more representative, and more diverse samples than the studies included in their meta-analysis. Nevertheless, there are clearly some limitations of the present study. The most significant methodological weakness concerns the fact that we had to rely on items already included in the ESS. As a result, our theoretical constructs were sometimes measured with a single item. The seriousness of this limitation should be mitigated somewhat by the fact that with regard to needs for orderliness and security, comparable results have been obtained in previous (but smaller-scale) studies that employed more comprehensive instruments for measuring these psychological constructs (see Jost et al. 2003a). It would be especially constructive to attempt a cross-national investigation of the psychological predictors of political orientation with the use of a multidimensional measure of left-right orientation that distinguishes more explicitly, for example, between cultural and economic forms of conservatism (e.g., Lipset 1981). Finally, it is probably less than ideal that only four Eastern European countries were included in the ES and that those countries may have experienced faster economic and democratic development than other former communist countries, but it is also true that the results were relatively clear and consistent across these four countries, suggesting a reasonable degree of generalizability.

Ideology was pronounced dead more than a generation ago (Bell 1960; Rejai 1971; Waxman 1968), and since then sociologists and political scientists have largely neglected the topic. Although it may be true that—as Converse (1964) famously argued—the political beliefs and opinions of ordinary citizens are relatively unconstrained by pressures for consistency and reason, this does not mean that they are unconstrained by other psychological forces (see also Jost 2006). A growing body of evidence, including the research reported here, requires us to take seriously the notion that there are general cognitive-motivational differences pertaining to the management of uncertainty and threat and that these underlie differences in ideological orientation. We have found that some of these effects are relatively general and replicate across very different social and political contexts, while others are more tied to local and historical features of the national setting. More specifically, placing a high value on tradition and rule-following is almost universally associated with adherence to right-wing ideology, whereas possessing a high need for security and low openness to new experiences are associated with the right-wing in Western Europe but with the left-wing in Eastern Europe. Although more research is obviously needed, it may well turn out that the left-right distinction gains as much or more coherence and structure from social and psychological regularities as from logical or philosophical constraints.

## Supplementary Data

Supplementary data are available online at <http://pubopq.oxfordjournals.org/>.

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