

PERSONALITY AND IDEOLOGY AS DETERMINANTS OF CANDIDATE PREFERENCES AND “OBAMA CONVERSION” IN THE 2008 U.S. PRESIDENTIAL ELECTION

John T. Jost

Department of Psychology, New York University

Tessa V. West

Department of Psychology, New York University

Samuel D. Gosling

Department of Psychology, University of Texas at Austin

Abstract

We conducted a longitudinal study involving 734 college students over a three-month period that included the 2008 U.S. presidential election. The study investigated factors such as respondents' personality characteristics and ideological proclivities in predicting perceptions of the major candidates and both stability and change in voting preferences for Barack Obama and John McCain. Previous research on personality and political orientation suggests that Openness to New Experiences is positively associated with liberal political preferences, whereas Conscientiousness is positively associated with conservative preferences; we replicated these results in the context of the current study. Several ideological factors also predicted conversion to Obama's candidacy. These included respondents' degree of self-reported liberalism, perceptions of their parents as liberal (versus conservative), and lower scores on measures of authoritarianism and political system justification (i.e., support for the prevailing system of electoral politics and government). The effects of Openness and Conscientiousness on candidate preferences were statistically mediated by ideological variables, providing further evidence that general predispositions exist that link personality and political orientation, and these are likely to play a significant role in electoral politics. Implications for the integration of “top-down” (institutional) and “bottom-up” (psychological) approaches to the study of political behavior are discussed.

Keywords: Personality, Ideology, Authoritarianism, System Justification, Political Behavior

Du Bois Review, 6:1 (2009) 103–124.

© 2009 W. E. B. Du Bois Institute for African and African American Research 1742-058X/09 \$15.00
doi:10.1017/S1742058X09090109

Certainly the process of political evaluation is carried on by most citizens, and this process leads to more or less predictable organization of behavior. If ideology in a sophisticated sense is not widespread in the population, there must be surrogates for ideology that bring large aggregates to act as though propelled by ideological concerns.

—Angus Campbell, Philip E. Converse, Warren Miller, and Donald Stokes,
The American Voter ([1960] 1965, p. 125)

It remains commonplace, if not axiomatic in sociology, political science, and communications research, to assume that candidate preferences, issue positions, and voting behavior are determined in a largely “top-down” manner by party elites, political advertising, media coverage, and other institutional factors (e.g., Delli Carpini and Keeter, 1996; Fiorina et al., 2006; Graber 2004; Layman and Carsey, 2002; Poole and Rosenthal, 1997; Sniderman and Bullock, 2004; Stimson 2004; Zaller 1992). There can be little doubt that these factors are powerful determinants of electoral and other political outcomes. But there is good reason to think that the “institutional” story is by no means the whole story.

“BOTTOM-UP” PROCESSES AFFECTING POLITICAL OUTCOMES

As we will show in this article, there are also “bottom-up” social and psychological processes associated with personality, interpersonal relationships, and political orientation (or ideology), but these are often given short shrift in the voluminous literature on public opinion. For example, in an extremely influential monograph entitled *The Nature and Origins of Mass Opinion*, John Zaller (1992, p. 23) stated simply that “sources of variability in individuals’ political predispositions [were] beyond the scope of [his] book” and “the academic literature on personality and opinion is problematic.” Contemporary texts on public opinion and voting behavior are notably silent, if not openly wary, about psychological research on individual differences in personality, temperament, and ideological proclivities and their relations to preferences for specific candidates, parties, and policies. This state of affairs is unfortunate, given the plethora of recent research suggesting that “bottom-up” factors are indeed linked—sometimes quite strongly—to political preferences (see Jost et al., 2009, for a review).

THE “AUTHORITARIAN PERSONALITY” REVISITED

Part of the scholarly resistance to “bottom-up” factors is historical, insofar as the earliest psychological research on the connection between personality and political orientation began with the publication of *The Authoritarian Personality* by Theodor Adorno et al. (1950; see also Lane 1962; McClosky 1958; Tomkins 1963). Although work on the authoritarian personality represented a profound synthesis of sociological and psychological (especially psychodynamic) theory and research (e.g., see Allport 1954; Brown [1965] 2004), it was attacked relentlessly on largely ideological grounds, and its authors were accused (hyperbolically and therefore unjustly) of equating political conservatism with authoritarianism and, in so doing, “pathologizing” conservatism (e.g., Shils 1954; Martin 2001; see also Roiser and Willig, 2002).¹ For these reasons and others, as Alan Wolfe (2005) noted, by the 1960s, “*The Authoritarian Personality* was treated as a social-science version of the Edsel, a case study of how to do everything wrong.”

Personality, Ideology, and Ethnocentrism

The basic theoretical argument advanced by Adorno et al. (1950) is in fact more reasonable, more measured, and, as it turns out, more empirically sound than critics allow. The authors of *The Authoritarian Personality* proposed that *personality*, which they described as "essentially an organization of needs," is a "*determinant* of ideological preferences" (Adorno et al., 1950, p. 5). Because of certain socialization experiences and unresolved intrapsychic conflicts (e.g., with parental and other authority figures), some individuals develop an "ideological receptivity" toward belief systems that are authoritarian, pseudoconservative, rigid, hostile, and intolerant of others (Adorno et al., 1950, p. 9). Although the specific causes of authoritarian personality styles in childhood and beyond are still not well understood, subsequent research has backed up Adorno et al.'s (1950) claims that individual differences in authoritarian tendencies are measurable and observable and that they predict intolerant, ethnocentric social and political attitudes in general (e.g., Altemeyer 1996, 1998; Cunningham et al., 2004; Duckitt 2001; Feldman and Stenner, 1997; Napier and Jost, 2008; Rokeach 1960; Scheepers et al., 1990; Sidanius and Pratto, 1999; Stenner 2005). In other words, it is now a widely accepted fact of social science that, as Adorno et al. (1950) put it, "A man [or woman] who is hostile toward one minority group is very likely to be hostile against a wide variety of others" (p. 9). It is also the case that political conservatism is correlated with authoritarianism (e.g., Altemeyer 1996; Bonanno and Jost, 2006; Saucier 2000; Sidanius and Pratto, 1999) and with hostility and prejudice toward racial and ethnic minorities (e.g., Sears et al., 1997; Sidanius et al., 1996).

Parental Influences

Parents' influences on the social and political attitudes of their offspring are considerable (e.g., Altemeyer 1988; Davies 1965; Niemi and Jennings, 1991; Sears and Levy, 2003; Sidanius and Ekehammar, 1979). The role of harsh child-rearing practices, theorized by Adorno et al. (1950) to significantly affect the development of an authoritarian temperament, is somewhat more controversial, but even here there is some evidence that child-rearing goals and practices differ as a function of parents' political and religious belief systems (e.g., Boshier and Izard, 1972; Danso et al., 1997; Ellison et al., 1996; Eisenman and Sirgo, 1991; see also Wilcox 1998). In any case, the voluminous literature on political socialization (see Sears and Levy, 2003, for a review) casts at least some doubt on the assertion made by Judith Rich Harris (1999) and echoed by Steven Pinker (2003) that parental influences on the attitudes and behaviors of their children are a trifling matter. Not only are correlations between the social and political attitudes of parents and offspring positive and robust (e.g., Jennings and Niemi, 1981), experimental research demonstrates that simply priming thoughts of a conservative (or liberal) parent is enough to shift adult children's political attitudes in the direction of that parent's ideology (see Jost et al., 2008a).

Authoritarianism and Voting Preferences

Since at least the early 1960s, when the Democratic Party first took a strong leadership role on the issue of civil rights for African Americans (e.g., Carmines and Stimson, 1989; Frymer 1999; Petrocik 1989; Zaller 1992), participants who score relatively high on various dispositional measures of authoritarianism tend, on average, to favor conservative (and Republican) over liberal (and Democratic) candidates for president. That is, studies show that authoritarianism was positively correlated

with support for Barry Goldwater over Lyndon Johnson in 1964 (Higgins 1965), Richard Nixon over Robert Kennedy in 1968 (Byrne and Przybyla, 1980) and George McGovern in 1972 (Hanson and White, 1973), Ronald Reagan over Jimmy Carter in 1980 (Byrne and Przybyla, 1980) and Walter Mondale in 1984 (McCann and Stewin, 1986), as well as Robert Dole over Bill Clinton in 1996 and George W. Bush over Al Gore in 2000 (Kemmelmeier 2004). These studies and many others suggest that authoritarianism continues to play a significant role in the political life of the United States (see also Dean 2004, for a popular treatment).

The Upshot

While it is true that much of the research evidence produced by Adorno et al. (1950) would fail to satisfy contemporary methodological standards, several of their basic theoretical claims have been substantiated by studies that do satisfy those standards (e.g., see Altemeyer 1996, 1998; Duckitt 2001; Feldman and Stenner, 1997; Napier and Jost, 2008; Scheepers et al., 1990; Stenner 2005). Unfortunately, however, the damage was done long ago, and several generations of social scientists have dismissed the notion that personality characteristics (including authoritarianism) reliably predict specific social and political attitudes. The intellectual backlash against *The Authoritarian Personality* led some commentators to go so far as to deny that individuals possess meaningful ideological proclivities at all. Edward Shils (1954), for example, was moved in his searing critique of the Adorno et al. (1950) work to declare that the left-right distinction itself was “rickety,” “spurious,” and “obsolete” (pp. 27–28).

THE “END OF IDEOLOGY” REVISITED

In the 1950s and 1960s, an influential band of sociologists and political scientists (e.g., Aron [1957] 1968; Bell 1960; Lipset 1960; Shils 1954) advanced the provocative claim that in the aftermath of the Second World War, Western society had witnessed the “end of ideology”—and that there were few if any important differences of substance or style that remained between leftists and rightists (see Jost 2006, for an extended discussion). This position gained steam following Philip Converse’s (1964) empirical study of public opinion, which suggested that most U.S. survey respondents in the 1950s showed little or no understanding of basic ideological concepts such as liberalism and conservatism. As recently as 2004, a cultural critic writing for the *New Yorker* noted:

Forty years later, Converse’s conclusions are still the bones at which the science of voting behavior picks.

Converse claimed that only around ten per cent of the public has what can be called, even generously, a political belief system. . . .

. . . [And] concluded that “very substantial portions of the public” hold opinions that are essentially meaningless—off-the-top-of-the-head responses to questions they have never thought about, derived from no underlying set of principles. These people might as well base their political choices on the weather. And, in fact, many of them do (Menand 2004, pp. 92–94).

Many prominent social scientists continue to argue that most U.S. citizens are largely “innocent” of ideology and that their political preferences are, as a rule,

fleeting and artificial (e.g., Fiorina et al., 2006). However, this skeptical position has increasingly come under attack, as evidence of bona fide ideological differences and political conflict has mounted in recent years (e.g., Abramowitz and Saunders, 2008; Barker and Tinnick, 2006; Erikson et al., 2002; Jost 2006; Rathbun 2007; Stimson 2004).

In contemporary U.S. society, most survey respondents—especially those who are college educated—can and do identify themselves as relatively liberal, moderate, or conservative. Contrary to the claims of the skeptics, these identifications do predict a large number of the individuals’ thoughts, feeling, and behaviors, including voting intentions (see Jost et al., 2009, for a review). The fact of the matter is that liberals vote overwhelmingly for Democratic presidential candidates and conservatives vote overwhelmingly for Republicans (e.g., Jost 2006; Stimson 2004). Furthermore—just as Adorno et al. (1950) proposed—ideological preferences are indeed grounded in the personality characteristics of individual citizens (e.g., see Block and Block, 2006; Carney et al., 2008; Gerber et al., 2008). One of the most important differences between liberals (or leftists) and conservatives (or rightists) concerns the extent to which people are open versus resistant to novelty and change and, relatedly, the extent to which they differ in “system justification motivation”—that is, whether they are motivated to challenge or support the societal status quo (see Jost et al., 2004; Jost et al., 2008b). These and other characteristics can be understood in terms of the most prominent taxonomy used by contemporary personality psychologists, namely the Five Factor Model (e.g., McCrae and Costa, 1999), discussed next.

THE FIVE FACTOR MODEL OF PERSONALITY AND ITS RELATION TO POLITICAL PREFERENCES

The Five Factor Model (FFM) of personality has emerged, after decades of conceptual analysis and factor analytic research, as the most widely used framework for classifying and measuring the major dimensions of personality in a wide range of languages and cultures (e.g., Goldberg 1992; John and Srivastava, 1999; McCrae and Costa, 1999; Wiggins 1996). The model suggests that there are five (largely non-overlapping) dimensions that people (more or less everywhere) use to distinguish their own personalities and the personalities of others, and that these dimensions are captured, however imperfectly, by the acronym OCEAN. Individuals who are high on Openness tend to be creative, imaginative, abstract, curious, deep thinkers, inventive, and appreciative of arts and aesthetic experiences compared with low scorers, who tend to be relatively conventional, concrete, traditional, and to favor the known over the unknown. Conscientious people are thorough, dependable, reliable, hard-working, task focused, efficient, and good planners, whereas people who are low on conscientiousness tend to be disorganized, careless, and impulsive. High scorers on Extraversion are generally talkative, energetic, enthusiastic, assertive, outgoing, and sociable, whereas low scorers (i.e., introverts) are characterized as being relatively reserved, quiet, and shy. People scoring high on Agreeableness tend to be helpful, selfless, sympathetic, kind, forgiving, trusting, considerate, and cooperative, in contrast to the people at the low end of the dimension who, at the extreme, are often described as quarrelsome, critical, harsh, aloof, and blunt. People who are high in Neuroticism tend to be anxious, worried, easily upset, and moody compared with low scorers, who are relatively calm, relaxed, emotionally stable, and able to handle stress well.

Although no studies (to our knowledge) have directly addressed the implications of the FFM for voting behavior in the United States (but see Rentfrow et al., 2009, for a psychological analysis of regional voting patterns), some studies have examined the extent to which these five dimensions are correlated with various measures of political orientation. The strongest and most consistently observed finding is that liberals generally score higher than do conservatives on various measures of Openness to New Experiences (e.g., Barnea and Schwartz, 1998; Carney et al., 2008; Ekehammar et al., 2004; Gosling et al., 2003; Jost et al., 2003, 2007; McCrae 1996; Riemann et al., 1993; Sidanius 1978; Stenner 2005; Trapnell 1994; Van Hiel and Mervielde, 2004). Such findings led Robert McCrae (1996) to conclude that “variations in experiential Openness are the major psychological determinant of political polarities” (p. 325). Furthermore, Gian Vittorio Caprara et al. (1999) found that center-left voters in Italy scored higher than center-right voters on Openness, and Peter J. Rentfrow et al. (2009) found that U.S. citizens living in Democratic-leaning states scored higher on Openness than did citizens living in Republican-leaning states.

The second most common finding is that conservatives score somewhat higher than do liberals on Conscientiousness (Caprara et al., 1999; Ekehammar et al., 2004; Gosling et al., 2003; Mehrabian 1996; Stenner 2005; Van Hiel et al., 2004)—especially when it comes to the “need for order” facet (Carney et al., 2008; Jost 2006). Consistent with this observation, Dana Carney et al. (2008) found that, compared with those of liberals, conservatives’ living spaces tended to be neater, cleaner, fresher, and to include more organizational items, such as calendars and postage stamps. Gian Vittorio Caprara et al. (1999) found that center-left voters in Italy scored higher than center-right voters on Agreeableness, whereas center-right voters scored higher than center-left voters on Energy (or Extraversion), but these patterns have not been replicated in the United States (e.g., see Carney et al., 2008; Jost 2006; Rentfrow et al., 2009; Stenner 2005). There is no evidence that political orientation is consistently related to Neuroticism (or Emotional Stability).

THE U.S. PRESIDENTIAL ELECTION OF 2008: OBAMA VERSUS MCCAIN

The election of 2008 provided an exceptionally interesting political context in which to examine personality and ideological determinants of candidate preferences for several reasons. First, although there was no incumbent running for president, in many ways the election was a referendum on the Bush presidency and conservative domination of the U.S. government for the better part of eight years. Thus, one would expect that ideological factors, including authoritarianism and system justification, would carry considerable weight (see also Abramowitz and Saunders, 2008; Jost 2006). The fact that the election also pitted a relatively young African American candidate, Barack Obama, who happened to be a liberal Democrat, against a much older, more conservative European American candidate, John McCain, meant that attitudes and stereotypes concerning race and age were likely to play a significant role. Such attitudes, we know from previous research, are correlated with ideological factors (including liberalism-conservatism, authoritarianism, and system justification) as well as personality characteristics such as Openness and Conscientiousness (e.g., Jost et al., 2003, 2004, 2009; McCrae 1996). In the present study, then, we sought to determine the characteristics of young American voters who were moved to vote for the nation’s first African American major-party candidate. Specifically, we

sought to identify the personality and ideological factors that predicted the likelihood of “Obama conversion,” and how these personality and ideological factors were related to one another.

OVERVIEW OF RESEARCH

In the epigraph to this article, from *The American Voter*, Angus Campbell et al. ([1960] 1965) suggest that “there must be surrogates for ideology” that lead citizens to act “*as though* propelled by ideological concerns.” This view suggests that voters are not genuinely ideological, despite the fact that their behavior makes it seem as if they are. In this article and elsewhere (e.g., Carney et al., 2008; Jost 2006; Rentfrow et al., 2009), we propose another view that may not be wildly discrepant from that of Campbell et al. ([1960] 1965), but that is different enough to merit discussion. We assume, as did Adorno et al. (1950), that a relatively close connection exists between the individual’s personality characteristics, on one hand, and his or her political ideology, party affiliation, and candidate preferences, on the other (see also Jost et al., 2003). One might even refer to these connections as “elective affinities” to emphasize the ways in which individuals “choose” ideologies, parties, and candidates and, conversely, the ways in which ideologies, parties, and candidates “choose” individual supporters (see also Jost et al., 2009).

Thus, from one perspective, personality may operate as a kind of “surrogate” for ideology, insofar as potential voters may possess political preferences that they do not (for whatever reason) associate with explicit ideological goals. These preferences may even appear to be somewhat idiosyncratic and attached to the individuals’ general or diffuse personality characteristics rather than to their beliefs and opinions. Nevertheless, as Campbell et al. ([1960] 1965) suggest, “This process leads to more or less predictable organization of behavior,” and it may end up looking quite a bit like ideological (voting) behavior. But to the extent that certain personality characteristics may lead one to gravitate toward one ideological pole rather than to the other, one might just as easily suggest that ideology is a “surrogate” for personality, and that ideology is the “glue” that (over time) binds certain would-be voters to specific parties, policies, and candidates.

With all of this as conceptual and theoretical background in place, we are now in a position to advance several more specific hypotheses. First, we predicted that certain personality characteristics of potential voters, namely Openness and Conscientiousness, would be associated with support for Obama and McCain, respectively (see also Caprara et al., 1999; Carney et al., 2008; Jost 2006; Rentfrow et al., 2009). Second, we predicted that ideological factors, including liberalism-conservatism and authoritarianism, would also be associated with voting intentions and candidate preferences in the 2008 election (see also Byrne and Przybyla, 1980; Jost 2006; McCann and Stewin, 1986; Kimmelmeier 2004; Stimson 2004). Specifically, we expected that liberalism would be positively correlated with support for Obama, whereas conservatism and authoritarianism would be negatively correlated with support for Obama (or positively correlated with support for McCain). Evidence in support of this prediction would be a surprise only to those intellectual descendants of the “end-of-ideology” tradition who remain suspicious of the notion that meaningful differences (including differences in authoritarianism) exist between political voters (and/or candidates) of the left and right or—if those differences do exist—that the average voter is able to detect them and map them onto specific candidates accurately (see also Jost 2006; Jost et al., 2009).

Third, in light of work addressing political socialization and relational motives underlying ideological commitments, we also hypothesized that students whose parents were relatively liberal would be more inclined to support Obama, in comparison with students whose parents were relatively conservative, even after adjusting for these students' own political orientations (cf. Altemeyer 1988; Jost et al., 2008a; Sears and Levy, 2003). Fourth and finally, we predicted that the effects of Openness and Conscientiousness on voting preferences would be mediated (or statistically explained) by differences in liberalism-conservatism, insofar as ideology is the "glue" that binds personality to political behavior (see also Adorno et al., 1950; Carney et al., 2008; Gerber et al., 2008; Jost et al., 2003, 2007, 2009; Lane 1962; Tomkins 1963). These hypotheses were assessed using linear growth curve modeling in the context of a longitudinal study involving several hundred U.S. college students before, during, and after the 2008 presidential contest between Barack Obama and John McCain.

METHOD

Participants

Data were collected in the context of an introductory psychology class taught at a large public university in the southwestern United States (in a predominantly Republican state) during the fall 2008 semester (a period that included the 2008 presidential election). Data were collected as part of an ongoing series of online and in-class exercises and demonstrations. The students were provided with regular individual and group-level feedback based on their responses. The students were not required to participate in the exercises, but most of them chose to do so. The number of students completing the study materials varied somewhat from week to week. The final sample analyzed here consisted of 734 undergraduate students (40% men, 60% women); 15.6% were Asian or Asian American, 51.7% were Caucasian, 22.5% were Hispanic, 5.6% were African American, and 4.5% identified as Other (i.e., Pacific Islander, Native American, or "Other").

Measures

Candidate preferences

Participants indicated their candidate preferences (*Who do you plan to vote for?*) on a 5-point scale (*definitely Obama, probably Obama, not sure/neither, probably McCain, definitely McCain*) at six different time periods during the semester (August 28, 2008; September 9, 2008; September 25, 2008; October 9, 2008; October 23, 2008; October 30, 2008). On November 25, 2008, participants also indicated whether they had voted in the election on November 4 and, if so, whom they had voted for. Thus, candidate preferences were assessed at seven different time points spanning approximately three months.

Political party affiliation

Party affiliation was assessed once on the basis of responses to the open-ended item, *Which political party do you affiliate with?* Responses were coded as Republican, Democrat, or Other (i.e., Green, Libertarian, Independent, Other). Of those who chose

to respond to this item ($n = 535$), 33.8%, 42.4%, and 23.7% indicated their affiliation as Republican, Democratic, and Other, respectively.

Political orientation

Past research shows that single-item measures of political orientation (ranging from left/liberal to right/conservative) are remarkably effective at predicting other thoughts, feelings, and behaviors (e.g., Jost 2006). Therefore, participants located themselves on a 5-point scale of political orientation ranging from 1 (*very liberal*) to 5 (*very conservative*). The mean political orientation score was 2.80 ($SD = 1.02$), very close to the scale midpoint.

Social versus economic liberalism-conservatism

To gauge social and economic forms of liberalism-conservatism, participants also located themselves on 5-point scales ranging from 1 (*very liberal*) to 5 (*very conservative*) in response to the following two questions: *In terms of social and cultural issues, where would you place yourself on the scale?* (social liberalism-conservatism) and *In terms of economic issues, where would you place yourself?* (economic liberalism-conservatism). The mean scores were 2.54 ($SD = 1.09$) and 3.12 ($SD = 1.04$), respectively, and the two items were positively correlated at 0.38, $p < 0.001$.

Parental political orientation

Parental political views were assessed by asking participants, *Overall, where would you place your parents' political views?* Participants located their parents' political orientation on a 5-point scale ranging from 1 (*very liberal*) to 5 (*very conservative*). The mean score for the sample was right of center: 3.46 ($SD = 1.17$).

Political system justification

Participants indicated their degree of ideological support for the political system by indicating (on a 5-point scale) their agreement or disagreement with each of seven items taken from a longer scale administered by John T. Jost and colleagues (in press) to measure system justification in the political sphere. The items were: *The American political system is the best system there is*; *the system of checks and balances insures that no one branch of government can ever pursue unreasonable or illegal activities*; *radical changes should be made in order to have a truly democratic political system in our country* (reverse scored); *in general, the American political system operates as it should*; *the political system lacks legitimacy because of the power of special interests* (reverse scored); *the two-party electoral system is democracy at its best*; and *the political system is unfair and cannot be trusted* (reverse scored). An overall index was calculated by taking the mean of responses to all seven items following recoding ($\alpha = 0.72$).

Right-wing authoritarianism

We assessed participants' Right-Wing Authoritarianism (RWA) based on their responses to six items originally taken from Robert Altemeyer's (1996) RWA scale and administered by George A. Bonanno and John T. Jost (2006). Participants indicated their agreement with each item on a 5-point scale (1 = *disagree strongly*; 5 = *agree strongly*). The items were: *What our country really needs, instead of more "civil rights" is a good dose of law and order*; *some of the worst people in our country nowadays are*

those who do not respect our flag, our leaders, and the normal way things are supposed to be done; we should treat protestors and radicals with open arms and open minds, since new ideas are the lifeblood of progressive change (reverse scored); *people should pay less attention to the Bible and the other old traditional forms of religious guidance, and instead develop their own personal standards of what is moral and immoral* (reverse scored); *the situation in our country is getting so serious, the strongest methods would be justified if they eliminated the troublemakers and got us back on our true path; it is wonderful that young people can protest anything they don't like, and act however they wish nowadays* (reverse scored). An overall index was calculated by taking the mean of responses to all six items following rescoring ($\alpha = 0.65$).

Big Five personality dimensions

We assessed the Big Five personality dimensions using the Ten Item Personality Inventory (TIPI; Gosling et al., 2003). The TIPI includes two items, one positively worded and the other negatively worded, for each Big Five dimension. Participants rated the extent to which each item (e.g., dependable, self-disciplined) applied to them on a 5-point scale (1 = *disagree strongly*, 5 = *agree strongly*). Scores on the TIPI are highly correlated with scores on longer Big Five measures. The TIPI shows strong test-retest reliability as well as convergent and discriminant validity (Gosling et al., 2003). Correlations among major study variables (including personality dimensions, ideological factors, and final candidate preferences) are listed in Table 1.

RESULTS

Data Analytic Strategy

Given that voting intentions (i.e., candidate preferences) were measured at multiple time points, we conducted a series of linear growth curve analyses to examine the extent to which linear changes in voting intentions were moderated by personality and ideological factors. To adjust for the nonindependence of time points nested within individuals, data were analyzed using the MIXED procedure in SPSS. In each model, variances in the intercepts, slopes, and intercept covariance were included as random effects (the covariance type was unstructured). Time was centered at the chronological midpoint of the study. (Note that this analytic strategy can yield fractional degrees of freedom.)

We first examined the overall trajectory of voting intentions using a model in which only *time* was treated as a predictor at the level of the fixed effects (i.e., an unconditional growth model). Results from this analysis reveal a significant linear change such that respondents became more favorable toward Obama (and less favorable toward McCain) over time, $t(620.74) = -4.26, p < 0.001$. In addition, significant variance in the intercepts (Wald $Z = 17.29, p < 0.001$), the slopes (Wald $Z = 12.38, p < 0.0001$), and the slope-intercept covariance (Wald $Z = 9.32, p < 0.001$) was observed, indicating that sufficient variance exists to investigate moderators of candidate preferences (or voting intentions) as well as changes over time.

The remaining results are summarized in relation to three sets of models. The first set of models examines Big Five personality dimensions as predictors of overall and linear changes in voting preferences. The second set of models examines ideological predictors of overall and linear changes in voting preferences. Finally, in the third set of models, we include both personality and ideological factors and consider

Table 1. Correlations between Major Study Variables

	C	E	A	N	RWA ^a	Political Orientation	SC	EC	Political SJ	Parent's Political Views	Final Candidate Preference
Openness (O)	-.038	.349***	.078*	-.146***	-.229***	-.205***	-.196***	-.099*	-.151***	-.092*	-.208***
Conscientiousness (C)		.040	.125***	-.182***	.201***	.182***	.139***	.125**	.122*	.087*	.133**
Extraversion (E)			.086*	-.138***	-.004	-.019	-.029	.054	.028	-.032	.096 [†]
Agreeableness (A)				-.241***	.022	.021	.030	.012	.092*	.023	.116*
Neuroticism (N)					-.034	.086*	-.074	-.043	-.086*	-.006	-.057
RWA ^a						.547***	.534**	.308**	.398***	.270**	.508***
Political Orientation							.635***	.581***	.344***	.447***	.635***
Social Conservatism (SC)								.378***	.272***	.363***	.461***
Economic Conservatism (EC)									.282***	.361***	.463***
Political System Justification (SJ)										.154***	.306***
Parents' Political Views											.468***

Note: For political orientation and parents' political views, higher values indicate greater conservatism. For candidate preferences, higher values indicate stronger support for McCain (or weaker support for Obama).

^aRWA = Right-wing authoritarianism

[†] $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

the possibility that the effects of some (but not all) personality dimensions on candidate preferences are mediated by ideological factors.

Personality Determinants of Candidate Preferences

In Model 1, we estimated the main effects of the Big Five factors of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism and their interactions with time as predictors of candidate preferences. As can be seen in the left column of Table 2, Agreeableness and Neuroticism failed to predict overall voting preferences or changes in preference over time, and so we analyzed a second model (Model 2) in which these effects are trimmed. In both models, we adjusted for gender and ethnicity. The results for Model 2 are presented in the right column in Table 2. Overall effects were observed for Openness, Conscientiousness, and Extraversion on candidate preferences, indicating that the more conscientious and extraverted participants saw themselves as, the more they intended to vote for McCain; whereas the more open they saw themselves as, the more they intended to vote for Obama (throughout the entire time period). In addition, Openness and Extraversion both interacted with time to predict linear changes in candidate preferences.

Figure 1 displays the results for individuals who are high (1 *SD* above the mean) and low (1 *SD* below the mean) on Openness. Respondents who were high on Openness (i.e., 1 *SD* above the mean) increasingly gravitated toward Obama, $t(618.44) = -3.76$, $p < 0.001$, whereas those low on Openness demonstrated no change over time, $t(604.86) = 0.002$, $p = 0.99$. That is, the latter group simply stuck with McCain throughout the campaign season. As illustrated in Figure 2, respondents who were high on Extraversion did not change throughout the study, $t(604.62) = 0.09$, $p = 0.96$ —they consistently showed a stronger preference for McCain. How-

Table 2. Personality Variables as Predictors of Candidate Preferences

	Model 1	Model 2
<i>Intercept</i>	3.14	3.11
<i>Main Effect of Time</i>	-.014 (.013)	-.015 (.013)
<i>Openness</i>		
Overall	-.327 (.071)***	-.315 (.071)***
Interaction with Time	-.021 (.010)*	-.019 (.010)†
<i>Conscientiousness</i>		
Overall	.162 (.064)*	.181 (.063)**
Interaction with Time	.011 (.009)	.013 (.009)
<i>Extraversion</i>		
Overall	.148 (.057)**	.158 (.057)**
Interaction with Time	.015 (.008)†	.016 (.008)*
<i>Agreeableness</i>		
Overall	-.006 (.072)	—
Interaction with Time	.002 (.010)	—
<i>Neuroticism</i>		
Overall	-.091 (.060)	—
Interaction with Time	-.009 (.009)	—

Note: Coefficients are unstandardized (with standard errors in parentheses).
 † $p < 0.07$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

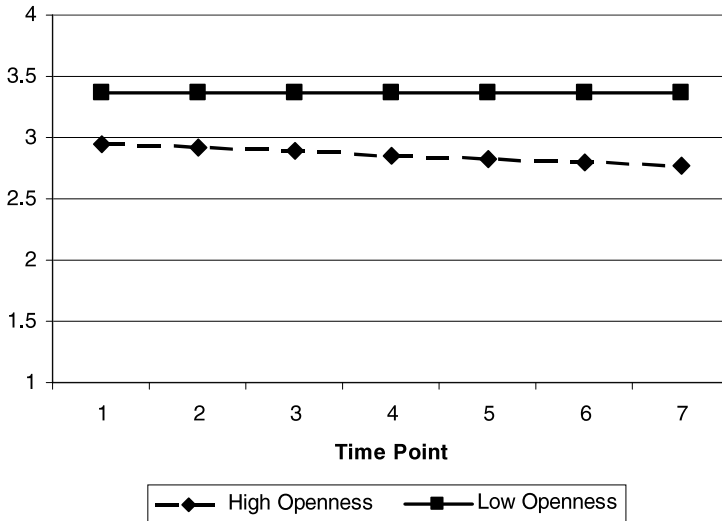


Fig. 1. Openness as a Predictor of Candidate Preferences

ever, respondents who were relatively low on Extraversion became more favorable toward Obama over time, $t(614.63) = -2.43, p = 0.016$.

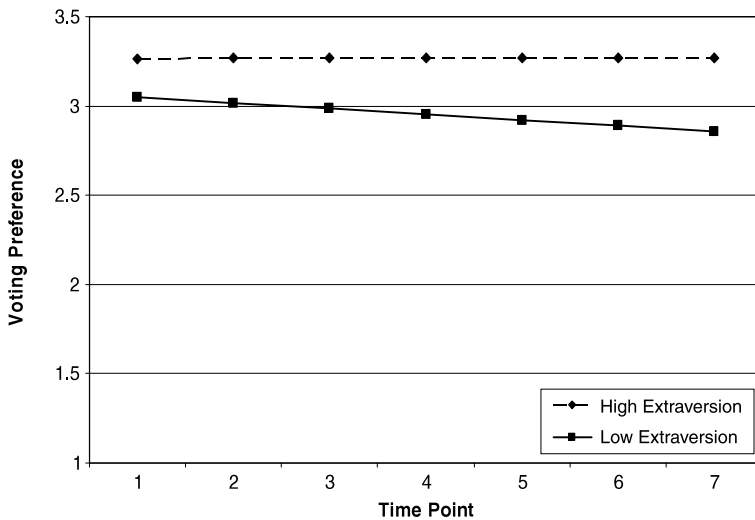


Fig. 2. Extraversion as a Predictor of Candidate Preferences

Ideological Determinants of Candidate Preferences

In a second set of models, we examined the degree to which respondents’ overall political orientation, social and economic liberalism-conservatism, right-wing authoritarianism (RWA), political system justification, and their parents’ political views

predicted overall candidate preferences and changes in preference over time. We adjusted for gender, ethnicity, and political party affiliation in these models. In Model 3, we included the main effects of these measures and their interactions with time.

As can be seen in Table 3, main effects were observed for RWA, political orientation, economic liberalism-conservatism, and political system justification, but no effect was observed for social liberalism-conservatism. The analysis yielded a marginal interaction with time for parents' political views. However, no other variables interacted with time to predict candidate preferences. Therefore, consistent with the strategy followed for the personality models, we estimated an additional model in which we trimmed all effects of social conservatism, and all interactions with time for the other measures, with the exception of parents' political beliefs. The results of Model 4, which are consistent with those for Model 3, are summarized in the right-most column in Table 3.

Respondents who scored higher on RWA and political system justification and who identified themselves as more conservative, both generally and on economic issues, demonstrated a stronger preference for McCain over Obama throughout the course of the study. Respondents who indicated that their parents were more conservative also preferred McCain in general, but this variable also marginally interacted with time ($p = 0.057$). As illustrated in Figure 3, participants who believed that their parents were high on conservatism (1 *SD* above the mean) consistently preferred McCain over Obama, and this effect did not change throughout the course of the study, $t(371.80) = 0.482, p = 0.63$. However, for participants who saw

Table 3. Ideological Variables as Predictors of Candidate Preferences

	Model 3	Model 4
<i>Intercept</i>	2.69	2.67
<i>Main Effect of Time</i>	-.027 (.010)**	-.028 (.010)**
<i>RWA</i>		
Overall	.271 (.080)**	.256 (.071)***
Interaction with Time	-.000 (.020)	—
<i>Political Orientation</i>		
Overall	.391 (.066)***	.352 (.058)***
Interaction with Time	.017 (.010)	—
<i>Social Conservatism</i>		
Overall	-.027 (.052)	—
Interaction with Time	.006 (.013)	—
<i>Economic Conservatism</i>		
Overall	.120 (.052)*	—
Interaction with Time	.012 (.013)	—
<i>Political System Justification</i>		
Overall	.130 (.067)†	.132 (.062)*
Interaction with Time	-.002 (.017)	—
<i>Parents' Political Views</i>		
Overall	.063 (.041)	.077 (.040)†
Interaction with Time	.017 (.010)†	.030 (.009)***

Note: Coefficients are unstandardized (with standard errors in parentheses). † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

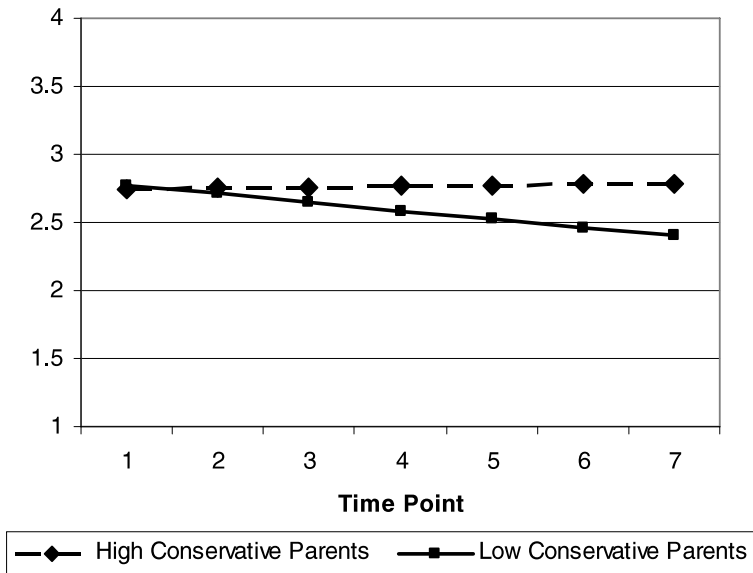


Fig. 3. Parents’ Political Views as a Predictor of Candidate Preferences

their parents as low on conservatism (1 SD below the mean), there was a significant change over time such that the strength of their preference for Obama increased, $t(371.69) = -4.19, p < 0.001$. Interestingly, at the beginning of the study there were no apparent differences in voting intentions as a function of parental political orientation. Rather, the significance of this variable came into play later, as respondents who perceived their parents as relatively liberal were more likely to exhibit “Obama conversion.”

Do Ideological Factors Account for the Effects of Personality on Candidate Preferences?

In a third set of analyses, we examined the extent to which the effects of personality dimensions of Openness, Conscientiousness, and Extraversion on candidate preferences (see Table 2) could be statistically explained by the relationship between personality and ideological factors, such as political orientation, right-wing authoritarianism, and system justification tendencies (see Carney et al., 2008; Jost 2006; Jost et al., 2008b). To investigate this possibility, we conducted a mediational analysis in which the three personality variables were treated as predictor variables, the three ideological variables were treated as mediators, and candidate preference was treated as the outcome variable. We followed the four steps outlined by Reuben Baron and David Kenny (1986; see Table 4). Because the three ideological factors did not interact with time to predict candidate preference, we only examined the degree to which they mediated the overall personality effects (i.e., across the trajectory).

We know from Table 2 that Openness, Conscientiousness, and Extraversion all predicted candidate preferences, adjusting for other factors. Thus, the total effects of the three personality variables are statistically significant (i.e., Step 1 is satisfied). In Step 2, the three personality variables were treated as predictors of political orientation, RWA, and system justification. As can be seen in Table 4, Openness was significantly and positively associated with political liberalism and negatively associ-

Table 4. The Effects of Openness and Conscientiousness on Candidate Preferences are Mediated by Political Orientation, Right-Wing Authoritarianism, and Political System Justification

Predictor	Candidate Preferences	Political Orientation	RWA	System Justification
<i>Step 1</i>				
Openness	-.315 (.071)**	—	—	—
Conscientiousness	.181 (.063)**	—	—	—
Extraversion	.158 (.057)**	—	—	—
<i>Step 2</i>				
Openness	—	-.266 (.048)**	-.208 (.034)***	-.145 (.034)***
Conscientiousness	—	.193 (.041)***	.148 (.031)***	.090 (.030)**
Extraversion	—	.047 (.038)	.048 (.028)	.052 (.027)†
<i>Step 3</i>				
Political Orientation	.401 (.059)***	—	—	—
RWA	.283 (.077)**	—	—	—
System Justification	.141 (.064)*	—	—	—
<i>Step 4</i>				
Openness	-.024 (.051)	—	—	—
Conscientiousness	-.108 (.049)*	—	—	—
Extraversion	.046 (.041)	—	—	—

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

ated with RWA and system justification; these findings are consistent with the results of prior research (e.g., Carney et al., 2008; Duckitt and Sibley, 2009; Jost 2006; Jost et al., 2008b). Conscientiousness was significantly and positively associated with political conservatism, RWA, and system justification. Extraversion was positively associated with political system justification, but it was not associated with RWA or liberalism-conservatism.

In Steps 3 and 4 (which are estimated simultaneously), we treated the personality variables and the three ideological variables as simultaneous predictors of preferences for Obama versus McCain (adjusting for sex, ethnicity, and party affiliation). Consistent with prior research (e.g., Jost 2006), political orientation significantly predicted voting preferences, $t(335.50) = 6.80$, $p < 0.001$, as did RWA, $t(335.58) = 3.70$, $p < 0.001$, and political system justification, $t(335.85) = 2.19$, $p = 0.029$ (see Table 4). Thus, people who were more conservative, more authoritarian, and more likely to justify the political system preferred McCain over Obama.

With political orientation, RWA, and political system justification in the model, the effect of Conscientiousness on candidate preferences remained significant, $t(335.63) = -2.19$, $p = 0.03$, but the effect of Openness did not, $t(335.74) = -0.48$, $p = 0.63$. Results of Sobel tests for each of the indirect effects involving Openness and Conscientiousness are summarized in Table 5. All of the indirect effects were significant, with the exception of the indirect effect from Conscientiousness to system justification, which was marginal. In sum, then, the results reveal that all three of the ideological variables independently mediated the effect of Openness on candidate preferences and voting intentions and two of them (political orientation and RWA) mediated the effect of Conscientiousness. None of the ideological variables significantly mediated the effect of Extraversion on candidate preferences.

Table 5. Sobel Tests for the Effects of Personality Variables on Candidate Preferences Mediated by Ideological Variables

Indirect Effect	Sobel Z (<i>p</i>)
Openness—Political Orientation	4.29 (<.001)
Openness—RWA	-2.80 (.005)
Openness—System Justification	-1.95 (.050)
Conscientiousness—Political Orientation	-1.99 (.046)
Conscientiousness—RWA	-2.00 (.045)
Conscientiousness—System Justification	-1.77 (.076)

GENERAL DISCUSSION

For several decades, social scientists and laypersons alike have exuded skepticism concerning the notion that citizens’ personality characteristics and ideological commitments play a significant role in political behavior. It is frequently assumed that elections are won and lost largely on the basis of campaign fundraising, message discipline, political advertising, mass media coverage, and other institutional or “top-down” processes. These factors are obviously important, but it would be foolhardy to assume that increased candidate exposure will have the same (presumably beneficial) effects on citizens who differ greatly from one another in terms of personality and ideology. Our research demonstrates that there are general predispositions that link political and nonpolitical predilections, and these do indeed predict candidate preferences over time, especially as citizens’ familiarity with the major candidates grows as the election approaches.

What are the distinctive characteristics (or predispositions) of those college students in our study who were drawn to Barack Obama? In terms of general personality traits, they were relatively high in Openness, low in Conscientiousness, and (perhaps surprisingly, given Obama’s apparent gregariousness) low in Extraversion. The effects of Openness and Conscientiousness (but not Extraversion) increased in strength with the election’s proximity, suggesting a possible interaction between “top-down” processes of mass communication and “bottom-up” processes associated with citizens’ personality characteristics. The finding that high Extraversion was associated with support for McCain was somewhat anomalous, given the research literature as a whole (see Carney et al., 2008). Possibly it reflects a “context effect,” given that the study was conducted in a strong Republican state. One might expect that in a strong Democratic state, high Extraversion would be associated with support for the more liberal candidate.

In terms of ideological factors, Obama supporters tended to be liberal and to score relatively low on measures of authoritarianism and system justification. Based on the current study, it is difficult to determine the extent to which Obama’s racial background played a major role in attracting or repelling students based on their ideological characteristics, but the fact that authoritarianism (even after adjusting for political conservatism and other ideological variables) was associated with decreased support for his candidacy is suggestive of the possibility that intolerance may have played some role. Interestingly, students who saw their parents as relatively liberal increasingly gravitated toward Obama over time, whereas students whose parents were described as conservative were relatively constant in their support for McCain. It is important to point out that this effect of parental ideology was independent of students’ own self-reported liberalism-conservatism, despite the fact that self- and parent ratings of political orientation were significantly correlated ($r = 0.44$).

Previous research has shown that Openness and Conscientiousness predict both political orientation in general (e.g., Carney et al., 2008) and voting behavior in particular (Caprara et al., 1999), but no extant study has (to our knowledge) demonstrated, as we have, that *the effects of personality on voting preferences are statistically mediated by individual differences in political ideology*. The results of this study, therefore, add substantially to the growing evidence that left-right bipolar conceptions of ideology are indeed useful for understanding political behavior and that ideological differences appear to be grounded in basic psychological processes (see also Jost 2006). The fact that political orientation, right-wing authoritarianism, and political system justification each contributed independently and significantly to candidate preferences and that they also mediated the effects of personality on candidate preferences suggests that, at least to some extent, they are tapping into distinctive (but correlated) ideological constructs.

Of course, there are limitations to what can be concluded on the basis of this study alone. For one thing, although the study sample was quite large, it was not a nationally representative sample, but rather a sample of students attending a large public university in a Republican-leaning Western state. Furthermore, although the longitudinal design of the study allowed us to investigate changes in individuals' candidate preferences over time (i.e., Obama conversion), we do not know what specific exogenous factors (in terms of campaign strategy, media coverage, and so on) interacted with the students' predispositions to bring about change in candidate evaluations over time. For instance, it is conceivable that the individual's degree of Openness affected his or her susceptibility to certain kinds of persuasive messages that Obama successfully communicated. It remains a task for further research, in other words, to discover more precisely how "top-down" and "bottom-up" processes "meet in the middle" (see also Jost et al., 2009).

In *The American Voter*, Campbell et al. ([1960] 1965) distinguished between "*personal forces*, which move individuals selectively without reference to the larger social categories to which they belong, [and] *social forces*, which move large sections of the population more or less simultaneously" (p. 88). Although it would be unwise to extrapolate on the basis of our study to the voting population of the United States as a whole, the results presented here suggest that, at least for the young people who participated in our study, Barack Obama succeeded not in winning over huge sections of the population as a whole but rather those individuals who—on the basis of their personal and ideological characteristics—were potential "converts." In our sample at least, he appeared to do this more effectively than did his opponent, John McCain. The research reported here also suggests that some "personal forces" are by no means idiosyncratic, unpredictable, or randomly determined. On the contrary, they may well reflect unifying cognitive and motivational structures within the individual that are not merely "surrogates" for ideology but may in fact constitute the underlying causes of ideological predispositions. Campaign advisors and researchers of political behavior, it seems to us, embrace considerable risk and uncertainty when they continue to ignore forces such as these.

Corresponding author: Professor John T. Jost, Department of Psychology, New York University, 6 Washington Place, 5th Floor, New York, NY 10003. E-mail: john.jost@nyu.edu

NOTE

1. In actuality, Adorno et al. (1950) denied that authoritarian individuals were genuinely in favor of conservative ideals such as individualism, equality of opportunity, meritocracy,

capitalist competition, patriotism, and so on. Rather, authoritarians were characterized as “reactionary” or “pseudo-conservative,” insofar as they hypocritically “emphasize competitiveness as a value, yet they support the concentration of economic power in big business” and “emphasize economic mobility and the ‘Horatio Alger’ myth, yet they support numerous forms of discrimination that put severe limitations on the mobility of large sections of the population” (p. 182). In the introduction to their book, Adorno et al. (1950) also made clear that nothing was to be gained by “pathologizing” certain personality styles (or ideologies), noting:

Personality patterns that have been dismissed as “pathological” because they were not in keeping with the most common manifest trends or the most dominant ideals within a society, have on closer investigation turned out to be but exaggerations of what was almost universal below the surface in that society (p. 7).

REFERENCES

- Abramowitz, Alan I., and Kyle L. Saunders (2008). Is Polarization Really a Myth? *Journal of Politics*, 70(2), 542–555.
- Adorno, Theodor W., Else Frenkel-Brunswik, Daniel J. Levinson, R. Nevitt Sanford (1950). *The Authoritarian Personality*. Oxford, UK: Harpers.
- Allport, Gordon W. (1954). *The Nature of Prejudice*. Cambridge, MA: Addison-Wesley.
- Altemeyer, Robert A. (1988). *Enemies of Freedom: Understanding Right-Wing Authoritarianism*. San Francisco, CA: Jossey-Bass.
- Altemeyer, Robert A. (1996). *The Authoritarian Specter*. Cambridge, MA: Harvard University Press.
- Altemeyer, Robert A. (1998). The Other “Authoritarian Personality.” In Mark P. Zanna (Ed.), Vol. 30 of *Advances in Experimental Social Psychology*, pp. 47–92. New York: Academic.
- Aron, Raymond ([1957] 1968). The End of the Ideological Age? In Chaim Isaac Waxman (Ed.), *The End of Ideology Debate*, pp. 27–48. New York: Simon and Schuster.
- Barker, David C., and James D. Tinnick III (2006). Competing Visions of Parental Roles and Ideological Constraint. *American Political Science Review*, 100(2): 249–263.
- Barnea, Marina F., and Shalom H. Schwartz (1998). Values and Voting. *Political Psychology*, 19(1): 17–40.
- Baron, Reuben M., and David A. Kenny (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6): 1173–1182.
- Bell, Daniel (1960). *The End of Ideology: On the Exhaustion of Political Ideas in the Fifties*. Glencoe, IL: Free Press.
- Block, Jack, and Jeanne H. Block (2006). Nursery School Personality and Political Orientation Two Decades Later. *Journal of Research in Personality*, 40(5): 734–749.
- Bonanno, George A., and John T. Jost (2006). Conservative Shift among High-Exposure Survivors of the September 11th Terrorist Attacks. *Basic and Applied Social Psychology*, 28(4): 311–323.
- Boshier, Roger, and Alison Izard (1972). Do Conservative Parents Use Harsh Child-Rearing Practices? *Psychological Reports*, 31(3): 734.
- Brown, Roger ([1965] 2004). The Authoritarian Personality and the Organization of Attitudes. In John T. Jost and Jim Sidanius (Eds.), *Political Psychology: Key Readings*, pp. 39–68. New York: Psychology Press.
- Byrne, Donn, and D. P. J. Przybyla (1980). Authoritarianism and Political Preferences in 1980. *Bulletin of Psychonomic Society*, 16: 471–472.
- Campbell, Angus, Philip E. Converse, Warren Miller, and Donald Stokes ([1960] 1965). *The American Voter*. Oxford, UK: Wiley.
- Caprara, Gian Vittorio, Claudio Barbaranelli, and Philip G. Zimbardo (1999). Personality Profiles and Political Parties. *Political Psychology*, 20(1): 175–197.
- Carmines, Edward G. and James A. Stimson (1989). *Issue Evolution: Race and the Transformation of American Politics*. Princeton, NJ: Princeton University Press.
- Carney, Dana R., John T. Jost, Samuel D. Gosling, and Jeff Potter (2008). The Secret Lives of Liberals and Conservatives: Personality Profiles, Interaction Styles, and the Things They Leave Behind. *Political Psychology*, 29(6): 807–840.
- Converse, Philip E. (1964). The Nature of Belief Systems in Mass Publics. In David E. Apter (Ed.), *Ideology and Discontent*, pp. 206–261. New York: Free Press.

- Cunningham, William A., John B. Nezlek, and Mahzarin R. Banaji (2004). Implicit and Explicit Ethnocentrism: Revisiting the Ideologies of Prejudice. *Personality and Social Psychology Bulletin*, 30(10): 1332–1346.
- Danso, Henry, Bruce Hunsberger, and Michael Pratt (1997). The Role of Parental Religious Fundamentalism and Right-Wing Authoritarianism in Child-Rearing Goals and Practices. *Journal for the Scientific Study of Religion*, 36(44): 496–511.
- Davies, James C. (1965). The Family's Role in Political Socialization. *Annals of the American Academy of Political and Social Science*, 361(2): 10–19.
- Dean, John W. (2004). *Conservatives without Conscience*. New York: Viking.
- Delli Carpini, Michael X., and Scott Keeter (1996). *What Americans Know about Politics and Why It Matters*. New Haven, CT: Yale University Press.
- Duckitt, John (2001). A Dual-Process Cognitive-Motivational Theory of Ideology and Prejudice. Vol. 33 of *Advances in Experimental Social Psychology*, pp. 41–113. New York: Academic.
- Duckitt, John, and Chris G. Sibley (2009). A Dual Process Motivational Model of Ideological Attitudes and System Justification. In John T. Jost, Aaron C. Kay, and Hulda Thorisdottir (Eds.), *Social and Psychological Bases of Ideology and System Justification*, pp. 292–313. New York: Oxford University Press.
- Eisenman, Russel, and Henry B. Sirgo (1991). Liberals versus Conservatives: Personality, Child-Rearing Attitudes, and Birth Order/Sex Differences. *Bulletin of Psychonomic Society*, 29: 240–242.
- Ekehammar, Bo, Nazar Akrami, Magnus Gylje, and Ingrid Zakrisson (2004). What Matters Most to Prejudice: Big Five Personality, Social Dominance Orientation, or Right-Wing Authoritarianism? *European Journal of Personality*, 18(6): 463–482.
- Ellison, Christopher G., John P. Bartkowski, and Michelle L. Segal (1996). Do Conservative Protestant Parents Spank More Often? Further Evidence from the National Survey of Families and Households. *Social Science Quarterly*, 77: 663–673.
- Erikson, Robert S., Michael B. MacKuen, and James A. Stimson (2002). *The Macro Polity*. New York: Cambridge University Press.
- Feldman, Stanley, and Karen Stenner (1997). Perceived Threat and Authoritarianism. *Political Psychology*, 18(4): 741–770.
- Fiorina, Morris P., Samuel J. Abrams, and Jeremy C. Pope (2006). *Culture War? The Myth of a Polarized America*, 2nd ed. New York: Longman.
- Frymer, Paul (1999). *Uneasy Alliances: Race and Party Competition in America*. Princeton, NJ: Princeton University Press.
- Gerber, Alan, Gregory A. Huber, Connor Raso, and Shang Ha (2008). Personality and Political Behavior. Unpublished manuscript, Department of Political Science, Yale University, New Haven, CT.
- Goldberg, Lewis R. (1992). The Development of Markers for the Big-Five Factor Structure. *Psychological Assessment*, 4(1): 26–42.
- Gosling, Samuel D., Peter J. Rentfrow, and William B. Swann, Jr. (2003). A Very Brief Measure of the Big Five Personality Domains. *Journal of Research in Personality*, 37: 504–528.
- Graber, Doris A. (2004). Mediated Politics and Citizenship in the Twenty-First Century. *Annual Review of Psychology*, 55: 545–571.
- Hanson, David J., and Bruce J. White (1973). Authoritarianism and Candidate Preference in the 1972 Presidential Election. *Psychological Reports*, 32(3): 1158.
- Harris, Judith Rich (1999). *The Nurture Assumption: Why Children Turn Out the Way They Do*. New York: Simon and Schuster.
- Higgins, Jerry (1965). Authoritarianism and Candidate Preference. *Psychological Reports*, 16: 603–604.
- Jennings, M. Kent, and Richard G. Niemi (1981). *Generations and Politics: A Panel Study of Young Adults and Their Parents*. Princeton, NJ: Princeton University Press.
- John, Oliver P., and Sanjay Srivastava (1999). The Big Five Trait Taxonomy: History, Measurement, and Theoretical Perspectives. In Lawrence A. Pervin and Oliver P. John (Eds.), *Handbook of Personality: Theory and Research*, 2nd ed., pp. 102–138. New York: Guilford.
- Jost, John T. (2006). The End of the End of Ideology. *American Psychologist*, 61(7): 651–670.
- Jost, John T., Mahzarin R. Banaji, and Brian A. Nosek (2004). A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo. *Political Psychology*, 25(6): 881–919.
- Jost, John T., Christopher M. Federico, and Jaime L. Napier (2009). Political Ideology: Its Structure, Functions, and Elective Affinities. *Annual Review of Psychology*, 60: 307–337.

- Jost, John T., Jack Glaser, Arie W. Kruglanski, Frank J. Sulloway (2003). Political Conservatism as Motivated Social Cognition. *Psychological Bulletin*, 129(3): 339–375.
- Jost, John T., Alison Ledgerwood, and Curtis D. Hardin (2008a). Shared Reality, System Justification, and the Relational Basis of Ideological Beliefs. *Social and Personality Psychology Compass*, 2(1): 171–186.
- Jost, John T., Ido Liviatan, Jojanneke van der Toorn, Alison Ledgerwood, Anesu Mandisodza, and Brian A. Nosek (in press). System Justification: How Do We Know It's Motivated? In Aaron C. Kay, D. Ramona Bobocel, Mark P. Zanna, and James M. Olson (Eds.), Vol. 11 of *The Psychology of Justice and Legitimacy: The Ontario Symposium*. Hillsdale, NJ: Erlbaum.
- Jost, John T., Jamie L. Napier, Hulda Thorisdottir, Samuel D. Gosling, Tibor P. Palfai, and Brian Ostafin (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, John T., Brian A. Nosek, and Samuel D. Gosling (2008b). Ideology: Its Resurgence in Social, Personality, and Political Psychology. *Perspectives on Psychological Science*, 3(2): 126–136.
- Kimmelmeier, Markus (2004). Authoritarianism and Candidate Support in the U.S. Presidential Elections of 1996 and 2000. *Journal of Social Psychology*, 144(2): 218–221.
- Lane, Robert E. (1962). *Political Ideology*. Oxford, UK: Free Press of Glencoe.
- Layman, Geoffrey C., and Thomas M. Carsey (2002). Party Polarization and “Conflict Extension” in the American Electorate. *American Journal of Political Science*, 46: 786–802.
- Lipset, Seymour M. (1960). *Political Man: The Social Bases of Politics*. Garden City, NY: Doubleday.
- Martin, John L. (2001). The Authoritarian Personality, 50 Years Later: What Lessons Are There for Political Psychology? *Political Psychology*, 22(1): 1–26.
- McCann, Stewart J. H., and Leonard L. Stewin (1986). Authoritarianism and Canadian Voting Preferences for Political Party, Prime Minister, and President. *Psychological Reports*, 59(3): 1268–1270.
- McClosky, Herbert (1958). Conservatism and Personality. *American Political Science Review*, 52(1): 27–45.
- McCrae, Robert R. (1996). Social Consequences of Experiential Openness. *Psychological Bulletin*, 120(3): 323–337.
- McCrae, Robert R., and Paul T. Costa, Jr. (1999). A Five-Factor Theory of Personality. In Lawrence A. Pervin and Oliver P. John (Eds.), *Handbook of Personality: Theory and Research*, 2nd ed., pp. 139–153. New York: Guilford.
- Mehrabian, Albert (1996). Relations among Political Attitudes, Personality, and Psychopathology Assessed with New Measures of Libertarianism and Conservatism. *Basic and Applied Social Psychology*, 18: 469–491.
- Menand, Louis (2004). The Unpolitical Animal: How Political Science Understands Voters. *New Yorker*, August 30, pp. 92–96.
- Napier, Jamie L., and John T. Jost (2008). The “Antidemocratic Personality” Revisited: A Cross-National Investigation of Working-Class Authoritarianism. *Journal of Social Issues*, 64(3): 595–617.
- Niemi, Richard G., and M. Kent Jennings (1991). Issues and Inheritance in the Formation of Party Identification. *American Journal of Political Science*, 35: 970–988.
- Petrocik, John Richard (1989). An Expected Party Vote: New Data for an Old Concept. *American Journal of Political Science*, 33: 44–66.
- Pinker, Steven (2003). *The Blank Slate: The Modern Denial of Human Nature*. New York: Penguin.
- Poole, Keith T., and Howard Rosenthal (1997). *Congress: A Political-Economic History of Roll Call Voting*. New York: Oxford University Press.
- Rathbun, Brian C. (2007). Hierarchy and Community at Home and Abroad: Evidence of a Common Structure of Domestic and Foreign Policy Beliefs in American Elites. *Journal of Conflict Resolution*, 51(3): 379–407.
- Rentfrow, Peter J., John T. Jost, Samuel D. Gosling, and Jeffrey Potter (2009). Statewide Differences in Personality Predict Voting Patterns in U.S. Presidential Elections, 1996–2004. In John T. Jost, Aaron C. Kay, and Hulda Thorisdottir (Eds.), *Social and Psychological Bases of Ideology and System Justification*, pp. 314–347. New York: Oxford University Press.
- Riemann, Rainer, Claudia Grubich, Susanne Hempel, Susanne Mergl, and Manfred Richter (1993). Personality and Attitudes towards Current Political Topics. *Personality and Individual Differences*, 15(3): 313–321.
- Roiser, Martin, and Carla Willig (2002). The Strange Death of the Authoritarian Personality: 50 Years of Psychological and Political Debate. *History of the Human Sciences*, 15(4): 71–96.

- Rokeach, Milton (1960). *The Open and Closed Mind: Investigations into the Nature of Belief Systems and Personality Systems*. Oxford, UK: Basic Books.
- Saucier, Gerard (2000). Isms and the Structure of Social Attitudes. *Journal of Personality and Social Psychology*, 78(2): 366–385.
- Scheepers, Peer, Albert Felling, and Jan Peters (1990). Social Conditions, Authoritarianism and Ethnocentrism: A Theoretical Model of the Early Frankfurt School Updated and Tested. *European Sociological Review*, 6(1): 39–54.
- Sears, David O., and Sheri Levy (2003). Childhood and Adult Political Development. In David O. Sears, Leonie Huddy, and Robert Jervis (Eds.), *Oxford Handbook of Political Psychology*, pp. 60–109. New York: Oxford University Press.
- Sears, David O., Colette van Laar, Mary Carrillo, and Rick Kosterman (1997). Is It Really Racism? The Origins of White Americans' Opposition to Race-Targeted Policies. *Public Opinion Quarterly*, 61: 16–53.
- Shils, Edward A. (1954). Authoritarianism: "Right" and "Left." In Richard Christie and Marie Jahoda (Eds.), *Studies in the Scope and Method of "The Authoritarian Personality"*, pp. 24–49. Glencoe, IL: Free Press.
- Sidanius, Jim (1978). Intolerance of Ambiguity and Socio-Political Ideology: A Multidimensional Analysis. *European Journal of Social Psychology*, 8(2): 215–235.
- Sidanius, Jim, and Bo Ekehammar (1979). Political Socialization: A Multivariate Analysis of Swedish Political Attitude and Preference Data. *European Journal of Social Psychology*, 9(3): 265–279.
- Sidanius, Jim, and Felicia Pratto (1999). *Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression*. New York: Cambridge University Press.
- Sidanius, Jim, Felicia Pratto, and Lawrence D. Bobo (1996). Racism, Conservatism, Affirmative Action, and Intellectual Sophistication: A Matter of Principled Conservatism or Group Dominance? *Journal of Personality and Social Psychology*, 70(3): 476–490.
- Sniderman, Paul M., and John Bullock (2004). A Consistency Theory of Public Opinion and Political Choice: The Hypothesis of Menu Dependence. In William E. Saris and Paul M. Sniderman (Eds.), *Studies in Public Opinion: Attitudes, Nonattitudes, Measurement Error, and Change*, pp. 337–357. Princeton, NJ: Princeton University Press.
- Stenner, Karen (2005). *The Authoritarian Dynamic*. New York: Cambridge University Press.
- Stimson, James A. (2004). *Tides of Consent: How Public Opinion Shapes American Politics*. New York: Cambridge University Press.
- Tomkins, Silvan (1963). Left and Right: A Basic Dimension of Ideology and Personality. In Robert W. White (Ed.), *The Study of Lives*, pp. 388–411. Chicago, IL: Atherton.
- Trapnell, Paul D. (1994). Openness versus Intellect: A Lexical Left Turn. *European Journal of Personality*, 8(4): 273–290.
- Van Hiel, Alain, and Ivan Mervielde (2004). Openness to Experience and Boundaries in the Mind: Relationships with Cultural and Economic Conservatism. *Journal of Personality*, 72(4): 659–686.
- Van Hiel, Alain, Ivan Mervielde, and Filip De Fruyt (2004). The Relationship between Maladaptive Personality and Right Wing Ideology. *Personality and Individual Differences*, 36(2): 405–417.
- Wiggins, Jerry S. (1996). *The Five-Factor Model of Personality: Theoretical Perspectives*. New York: Guilford.
- Wilcox, W. Bradford (1998). Conservative Protestant Childrearing: Authoritarian or Authoritative? *American Sociological Review*, 63: 796–809.
- Wolfe, Alan (2005). *The Authoritarian Personality Revisited*. *Chronicle of Higher Education*, October 7. (http://www.bc.edu/schools/cas/meta-elements/html/wolfe_revisited.htm) (accessed April 1, 2009).
- Zaller, John R. (1992). *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.