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Personality Traits, Partisan Attitudes, and Voting Behavior. Evidence from Germany

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Political psychology has paid rather little attention to personality traits when explaining political attitudes and political behavior in mass publics. The present paper argues that personality traits contribute to our understanding of political attitude formation and decision making of ordinary citizens. Based on the Five Factor Model of Personality, we state hypotheses regarding the effects of personality traits on partisan attitudes and vote choice in Germany. We test the hypotheses using survey data obtained from a random sample of the Germans eligible to vote. The evidence confirms that personality traits indirectly affect partisan attitudes and voting behavior in Germany in predictable ways even after controlling for sociodemographic characteristics. More specifically, *Openness* makes citizens more inclined to support parties endorsing social liberalism whereas low scores on *Conscientiousness* increase the likelihood of liking and voting for parties subscribing to economic or social liberalism as do high levels on *Agreeableness*. High levels of *Neuroticism* appear to promote support for parties that offer shelter against material or cultural challenges.

Keywords: Big Five; five factor model of personality; personality traits; partisan attitudes; voting behavior; Germany

In political psychology, research on political elites differs remarkably from research on mass publics. As regards political elites, scholars often rely on personality traits to explain attitudes or behavior (e.g., Barber, 1972; George & George, 1998; Hermann, 1999; Rubenzer, Faschingbauer, & Ones, 2000; Walker, Schafer, & Young, 1998, 1999). For example, scientists and pundits alike may describe a politician as a strong leader to explain his success in an international crisis. Likewise, scholars interpret a politician's specific policy decisions, *inter alia*, as a result of his personality profile. In contrast, researchers have paid little attention to personality traits as factors shaping political attitudes or behavior in mass publics. To be sure, some analyses examine the effects of specific personality concepts on political reasoning but they are fairly selective. For instance, Sniderman (1975) examined self-esteem while Altemeyer (1981, 1988, 1996) and Oesterreich (1996, 2005) studied authoritarianism, but many other relevant personal characteristics have been widely ignored. At the same time, studies claiming that personality plays a role in influencing political attitudes (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950) were heavily criticized for methodological and theoretical shortcomings (e.g., Christie & Jahoda, 1954). In electoral research, some previous studies dealing with the effects of personality on political behavior in mass publics yielded null findings (Campbell, Converse, Miller, & Stokes, 1960, 506). As a consequence, traditional models of voting behavior do not include personality traits as determinants of vote choice.

In spite of the rather discouraging results of previous research, several arguments suggest that personality traits play a considerable role in shaping partisan attitudes and voting behavior in mass publics (see Schoen & Schumann, 2005; Schumann & Schoen, 2005). When assessing other persons in everyday life, human beings compare their own personality to the personality traits they ascribe to the others (Byrne, 1971, 1997). As voters are accustomed to utilize this strategy, they presumably employ it as well when they evaluate politicians. Moreover, political parties appear to "own" particular issues which they are perceived to be particularly skilled at dealing with (Petrocik, 1996). These programmatic reputations appear to affect voters' perceptions of candidates' personality attributes. In the United States, for example, Republican candidates for President on average are perceived to be better leaders and more moral than Democratic candidates, while the latter are perceived to be more compassionate (Hayes, 2005). These perceptions may serve as an additional base for evaluating politicians by utilizing the strategy with which they are accustomed. As the personality traits voters attribute to a party's politicians are fairly stable over time, party images in the voter's mind may also contain some personality attributes (see Schumann, 2001, 2002). Irrespective of the political objects voters evaluate, relying on personality traits is a strategy voters are well-accustomed with as they utilize it every day. Compared to gathering information about party platforms and policy proposals, it is thus a device to save information costs in political decision making (e.g., Downs, 1957; Popkin, 1993). Against this backdrop, it comes as no surprise that recent studies suggest that the voter's personality plays a role in shaping electoral choice. Caprara, Barbaranelli, and Zimbardo (1999) examined the effects of the so-called Big Five personality traits on vote choice between party coalitions in the 1994 Italian election by analysing recall data from a local convenience sample. They found *Openness* and *Extraversion* to be particularly influential in shaping voting behavior, with persons scoring high on *Openness* and low on *Extraversion* being disproportionately inclined to prefer the center-left coalition to the center-right coalition.

In this paper, we analyse effects of personality traits on attitudes towards political parties and on vote choice in Germany. We will start by discussing the Five Factor model of personality. After having established theoretical linkages between personality traits on the one hand, and partisan attitudes and vote choice on the other hand, we will state specific

hypotheses on the effects of the Big Five on partisan attitudes and vote choice, respectively. Subsequently, we will test the hypotheses drawing on data from a random sample of the Germans eligible to vote. The paper concludes by discussing the findings.

The Five Factor Model of Personality

Personality psychology analyses individual differences that make human beings into a person. Within this field, several approaches exist, including psychoanalysis, the information processing approach, and the trait-based paradigm (cf., e.g., Asendorpf, 1996; John & Srivatsava, 1999). Within these traditions, many concepts have been developed to describe personality. The information processing approach, for instance, focuses on individual differences in the way persons deal with information. To capture this characteristic, Festinger (1957) devised the concept “tolerance of ambiguity,” and Sternberg (1997) proposed several thinking styles. One of the most prominent concepts is “authoritarianism” which is rooted in psychoanalysis. After its introduction (Adorno et al., 1950), it provoked lively debates that led scholars to reconsider the concept (e.g., Altemeyer, 1981, 1988; Oesterreich, 1996, 2005) and to suggest new concepts to capture its main contents, with “dogmatism” (Rokeach, 1960) and “conservatism” (Wilson, 1973) being particularly influential proposals.

In personality psychology, the trait-based paradigm has become the leading approach since the 1990s (cf., e.g., Asendorpf, 2004). Relying on this approach, scholars devised several trait taxonomies. As this rendered cumulative research quite complicated, researchers aimed at identifying a consensual lexicon to describe personality. For this purpose two strategies have been devised. The lexical approach builds on the assumption that personality traits that are of particular importance in personal relationships should also be particularly and intensively represented linguistically. Consequently, a random selection of adjectives from a language that are applicable to personal description is given to a random sample of persons. Respondents are then asked to assess a particular person through application of these adjectives. Finally, their answers are factor analysed, and the most significant description dimensions are determined. In contrast, scholars in the tradition of the conceptual approach do not use natural language adjectives but rely on theory to develop personality questionnaires. Analyses in both traditions yielded five basic factors, the so-called Big Five, which were validated in several methodologically sophisticated studies in various cultures (cf., e.g., Goldberg, 1993; John, 1990; John, Angleitner, & Ostendorf, 1988; McCrae & Costa, 1997; Ostendorf & Angleitner, 1994; Saucier & Goldberg, 1996; but see also Cheung et al., 2001).

The five factors are *Agreeableness* (or *Friendliness*), *Conscientiousness*, *Extraversion* (or *Energy*), *Neuroticism* (or *Emotional Stability*), and *Openness*. To begin with, *Agreeableness* refers to trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. High scorers on this trait are thus characterized as being altruistic, trusting, generous, soft-hearted, and sympathetic, while low scorers are suspicious, hard-hearted, and demanding. *Conscientiousness* mainly refers to impulse control that is socially prescribed so that persons at the high end of this scale are thorough, organized, industrious, ambitious, resourceful, and enterprising, whereas their counterparts at the lower end are immature, impatient, lazy, careless, and moody. *Extraversion* comprises warmth, gregariousness, positive emotions, and assertiveness. Thus, extraverts are upbeat, energetic, active, friendly, talkative, and assertive, while introverts are reserved or even shy. *Neuroticism* chiefly refers to controlling negative emotions like anxiety, depression, anger, discontent, and irritation. Finally, *Openness* refers to tolerance of diversity, broadness of one’s own cultural interest, and exploration of novelty. As a result, persons who score high on this dimension are curious, imaginative, and original, while persons who exhibit low scores are mild, cautious, and conservative. (e.g., Borkenau and Ostendorf, 1993; Costa and McCrae, 1989, 1992).

The Five Factor model provides a useful mapping of individual differences and a common framework for research in personality psychology and proved to be compatible with

various previously proposed trait psychology systems (cf., e.g., Bartussek, 1996, pp. 86–87). There is some controversy about the explanatory value of the model, however. In the course of this discussion, scholars showed that personality traits are not merely descriptive dimensions but have a biophysical basis and are thus capable of explaining attitudes and behavior (cf., e.g., McCrae & Costa, 1995, pp. 238, 248; Sader & Weber, 1996, p. 121). As a consequence, it is reasonable to conceive of the Big Five as factors shaping political attitude formation and decision making.

Linking Personality Traits to Partisan Attitudes and Voting Behavior

As the above description suggests, the five personality factors are not political in content. Thus it cannot be taken for granted that they affect attitudes toward political parties and electoral choice. In particular, it is very implausible that personality traits directly affect partisan attitudes and voting behavior. In contrast, personality attributes may exhibit indirect effects. We shall elaborate on these linkages, which have been tested elsewhere (see e.g., Schumann, 2001, 2002), in some detail.

We start by discussing effects of personality on partisan attitudes, thereby focusing on individual parties rather than dealing with a choice set voters face when deciding for which party to vote. Studying evaluation scores rather than a categorical choice variable is useful as it allows more precise analyses (e.g., Brody & Page, 1973). Moreover, attitudes toward political parties reveal voters' political preferences more adequately than vote choice. Evaluation scores allow analysts to study how strongly voters like or dislike every single party while vote choice only indicates a categorical choice of one party over all others. Obviously, this argument merits more attention in multiparty systems than in two-party systems. In Germany, a multiparty system exists, so that focusing on attitudes toward individual parties is warranted.

Personality traits affect attitudes toward political parties indirectly rather than directly. This proposition builds on the following argument: Parties endorse ideologies and values, propose policies, and are represented by politicians. Put in theoretical terms, values, ideologies, policies, and politicians are attributes of political parties. Prior research showed that attitudes toward an object are affected by opinions about its attributes (Fishbein, 1963, 1965). In particular, attitudes toward politicians, policies, ideologies, and values were shown to shape evaluations of political parties (e.g., Ajzen & Fishbein, 1980; Campbell et al., 1960; King, 2002; Miller & Shanks, 1996; Rattinger, 1994; Schumann & Schoen, 2003). These attitudes toward party attributes in turn are shaped by personality traits (e.g., Schumann, 2001, 2002).

We shall start our discussion by dealing with the role attitudes toward politicians play in linking personality traits to partisan attitudes. According to the “attraction paradigm,” which has been attested in numerous studies (Byrne, 1971, pp. 99, 309–311; 1997), a person will have a better opinion about a stranger if she perceives him to be similar to herself. Assessing a politician is a special case of evaluating other persons. Thus, personality traits may also serve as criteria when voters evaluate politicians. As politicians represent parties attitudes toward the latter are likely to be influenced by opinions about the former (e.g., King, 2002). Put in a nutshell, voters like parties that are represented by politicians who are similar to them in terms of personality traits as perceived by the voters.

Personality factors are influential in shaping a person's principal worldview (e.g., Costa & McCrae, 1988). These fundamental preferences may fit with values or policies a party endorses while they may be at odds with another party's ideology. As voters are likely to support parties whose policies and values they prefer to those of other parties these policy-related attitudes affect opinions about political parties. For example, citizens at the high end of *Conscientiousness* try to avoid uncertainty and like order so that they may support law and order policies and therefore like parties and politicians endorsing a tough stance on crime

while opposing elite actors whom they consider soft on crime (e.g., Jost, Glaser, Kruglanski, & Sulloway, 2003). To summarize, personality traits may exhibit indirect effects on attitudes toward political parties by shaping fundamental predispositions and policy preferences that in turn affect opinions about political parties.¹

Personality traits may also exhibit effects on vote choice. As attitudes toward political parties are strongly correlated with vote choice, at first glance, it may appear to be straightforward to expect personality traits to affect vote choice. However, liking a party is not identical with voting for it. As was argued above, voting for a party means to choose between competing parties, i.e., the voter has to make a trade-off (cf., e.g., Lau, 2003, pp. 39–40). For example, a voter may like a party but he will not vote for it if he likes another one even more. Furthermore, a citizen may rely on considerations other than feelings toward parties when deciding for which party to vote. Proving effects of personality traits on partisan attitudes thus does not necessarily imply showing that personality traits affect vote choice. As a consequence, it is warranted to analyse separately whether the voter's personality plays a role in influencing voting behavior.

Voters choose among parties that are represented by politicians and that pursue certain policies. Thus, the reasoning presented in the above sections also applies when linking personality traits to voting behavior. Accordingly, voters may vote for parties whose politicians they perceive to be similar in terms of personality traits, and they may vote for parties that pursue policies that fit with the voters' policy preferences shaped by their personality traits. Interestingly, fundamental policy predispositions, attitudes toward candidates and policies that this line of reasoning assumes to play a crucial role in mediating effects of personality attributes on vote choice, are identified by the famous Michigan model of voting behavior as important factors influencing voting behavior (Campbell, Gurin, & Miller, 1954; Campbell et al., 1960; Miller & Shanks, 1996). As a result, this model of voting behavior can be used to link a voter's personality to her vote choice in a theoretically consistent way (Schoen & Schumann, 2005): Personality may be conceived of as a factor in the stem of the funnel devised by the Michigan scholars influencing voting behavior indirectly by shaping political predispositions and attitudes toward political objects that in turn affect vote choice.

When casting a vote, citizens do not necessarily have only political preferences in mind but might also consider the viability of the parties or candidates from which they choose. Put differently, they might engage in strategic voting (e.g., Cox, 1997). As policy and candidate attitudes are assumed to mediate the effects of personality traits on partisan attitudes, strategic voting implies casting a vote for a party other than that which the voter prefers in terms of policies and candidates. As attitudes toward these objects are assumed to mediate the effects of personality on vote choice, strategic voting is likely to change the effect of personality traits on vote choice as compared to expressive voting, presumably diminishing it. Moreover, personality itself may be related to the inclination to cast votes strategically. For example, as *Conscientiousness* refers to the inclination to obey to social rules, it might be related to the responsiveness to incentives resulting from electoral rules. To summarize, regardless of the specific role of strategic voting, the effects personality traits exhibit on vote choice may differ from effects on partisan attitudes.

¹ Some voters appear to ascribe personality traits to political parties, so that the attraction paradigm may apply at this point, too, suggesting that citizens have a good opinion about parties they perceive to be similar to themselves in terms of personality traits (e.g., Schumann 2001, 2002). As it has not been tested yet whether these personality-related images exhibit effects independent of the policy-related attitudes discussed in the previous paragraph, we will not pursue this line of reasoning.

Arguing that personality traits affect vote choice does not answer the more specific question which personality trait influences voting for a certain party in which way. As policy attitudes and candidate orientations are assumed to mediate the effects of personality attributes on vote choice, answering this question requires a closer look at the policies and politicians of the parties competing for votes. By and large, a voter whose personality fits nicely with a party's policy proposals and politicians in personality terms is likely to vote for it. However, whether she actually casts her vote for that party also depends on the policies and the politicians of the competing parties. For example, a person scoring high on *Conscientiousness* who takes up a law and order stance will cast her vote for party A that has a law and order image if it competes with a party that is soft on crime. However, she will have some difficulty in deciding whom to vote for if the competing party also has a law and order image. Put differently, in the first instance *Conscientiousness* exhibits a strong effect on vote while in the second one its effect is nonexistent. This argument also implies that in multiparty systems effects of personality factors differ from one choice set to another.

Hypotheses

Building on the discussion in the previous sections, we hypothesize that personality traits influence attitudes towards political parties and vote choice in Germany. To state more specific hypotheses, we now give an outline of the contemporary German parties.² The Christian Democrats (CDU/CSU) are a party of the moderate right resembling several European Christian Democratic parties. They are conservative on social issues like abortion and immigration, while they tend to favor the free market on economic issues. The FDP endorses liberalism on civil rights and a clear free-market position with the economic domain of primary importance. Like their counterparts in several European countries, the Greens prefer state intervention to laissez-faire in the economic domain. They pay much more attention to social issues, environmental protection, and peace issues, however, on which they are distinctly liberal. The Social Democratic Party (SPD) belongs to the traditional left, i.e., it is rather liberal on social issues and sceptical about the free market. The postcommunist PDS, the heir of the former GDR's state party, parallels the SPD in endorsing liberalism on social issues, but it is much more prone to state intervention on economic issues. Finally, there are several right-wing parties which propose state intervention in the market economy but are primarily concerned with immigration, civil rights, and other social issues on which they endorse very tough stances.

Based on this outline, we now state specific hypotheses regarding effects of personality traits on attitudes towards political parties. To begin with, high scores on *Openness* indicate tolerance of new ideas and change, so that *Openness* should increase the likelihood that a person likes parties taking liberal stances on social issues. Thus, we anticipate *Openness* to increase support for the Greens and, albeit less strongly, the SPD and the PDS. Following the same line of reasoning, *Openness* should make persons dislike the conservative CDU/CSU and the extreme right parties. As regards the FDP, we do not expect

² In this discussion, we do not explicitly deal with candidates and political leaders because including them would not change our predictions significantly. To begin with, Germans appear to perceive leading politicians to be similar to one another on many personality traits. As far as voters perceive differences between politicians in terms of personality, these differences are in line with policy differences between the respective parties; for instance, the leader of a party endorsing cultural diversity and new ideas is considered as distinctively open, so that including leading politicians would not change our hypotheses (see Kunz, 2005). The only exception is *Extraversion*. Concerning this trait, however, including attitudes toward politicians would result in additional ambiguous expectations.

any effect as this party does not emphasize social issues strongly.

High scorers on *Conscientiousness* are inclined to obey social rules calling for impulse control, so that they may endorse conservative stances on both economic and social issues. As a result, *Conscientiousness* should affect attitudes toward the Greens, the SPD, and the PDS negatively and opinions about CDU/CSU and right-wing parties positively. As the FDP endorses economic laissez-faire and social liberalism, our theory predicts *Conscientiousness* to exhibit opposing effects cancelling out each other so that no net effect should be observed; a small positive effect might result only if the voters recognize the FDP's emphasis on economic issues.

High scores on *Neuroticism* indicate the inability of controlling one's emotional reactions and the proneness to negative emotions like fear so that persons at the high end of this scale are more likely to feel challenged in material or cultural terms. Persons perceiving material threats may endorse the welfare state while citizens who feel challenged in cultural terms may oppose social liberalism. As a consequence, we anticipate high scorers on *Neuroticism* to be particularly inclined to like the SPD and the PDS, as these parties are liberal on both dimensions. High levels of *Neuroticism* also should be conducive to good opinions about right-wing parties which heavily emphasize opposition to social liberalism. By contrast, attitudes toward the FDP should be affected negatively by high scores on *Neuroticism* as it is liberal on social issues and conservative on economic issues. The CDU/CSU endorses moderate economic and social conservatism, so that we expect no effect of *Neuroticism* on opinions about this party. The Greens' program contains social and economic liberalism, with the former likely to appeal to low scorers on *Neuroticism* and the latter to high scorers. These opposing effects should result in a null net effect of *Neuroticism* on attitudes toward the Greens. If voters, however, perceive the Greens' emphasis on social issues, we might anticipate the negative effect to prevail.

Persons at the high end of *Agreeableness* are sympathetic and altruistic, so that they may be predisposed to endorse economic and social liberalism. We thus anticipate *Agreeableness* to be positively related with good opinions about parties which support the welfare state and reject law and order policies, i.e., the Greens, the SPD, and the PDS. Concerning the conservative parties and the extreme right, we anticipate a negative effect of *Agreeableness*. The expectations regarding the FDP are mixed since it is liberal on social issues and rather soft on crime on the one hand, and it proposes laissez-faire in the economic domain on the other hand; however, a weak negative effect may result because of the party's emphasis on economic issues.

Extraversion includes talkativeness, gregariousness, optimism, activity, assertiveness, and dominance. Compared to the four traits discussed in the previous paragraphs, it is not easy to state hypotheses on the effects of *Extraversion* on partisan attitudes as this trait does not obviously resemble policy stances. However, one may turn to single facets of this trait. Caprara et al. (1999) argued that optimism and activity fit well with economic laissez-faire. Accordingly, high scores on *Extraversion* should affect attitudes toward the FDP and CDU/CSU positively, while attitudes toward the SPD, the PDS, and, albeit not as strongly, the Greens and right-wing parties negatively. However, it may be objected that high scorers on this trait are socially dominant so that the attraction paradigm may predict them to be inclined to endorse strong political leadership and hierarchy. In this line of reasoning, high scores on *Extraversion* should be accompanied by a good opinion about right-wing parties emphasizing strong leadership and a bad opinion about the Greens proposing grassroots democracy while expectations concerning the remaining parties turn out to be more mixed. At the same time, high scorers on *Extraversion* are also talkative and gregarious so that they might endorse grassroots democracy and reject strong leadership. From these conflicting arguments, we conclude that it is reasonable to expect no effect of *Extraversion* on partisan

attitudes.

<<Table 1 about here>>

Building on these hypotheses (Table 1), we now state expectations concerning the effects of personality traits on vote choice. Traits that are not correlated with attitudes toward any party are not likely to exhibit any effect on the choice between parties. In contrast, traits that are correlated positively with attitudes towards one party while they are correlated negatively with good opinions about another party can be assumed to have strong effects on the choice between the respective parties. Consequently, we expect strong effects of *Openness* and *Conscientiousness* on the choice between SPD, Greens, and PDS on the one hand, and CDU/CSU and parties of the extreme right on the other hand. *Agreeableness* should affect the choice between SPD, Greens, and PDS on the one hand, and CDU/CSU, FDP, and the extreme right parties on the other hand. Concerning *Neuroticism*, we anticipate strong effects when voters choose between FDP on the one hand, and parties of the left and of the far-right on the other hand. Finally, as with attitudes toward political parties, we do not expect effects of *Extraversion* on vote choice.

Method and Measures

Our analyses are based on a survey of a representative sample from Germany's population aged 18 and over. From September 15 to October 10, 2003, respondents were randomly selected using sample points, random routes, and Kish selection grid and interviewed face-to-face. In sum, the survey comprised 2,508 respondents. Before reunification in 1990, 1,931 of them lived in West Germany, 544 in East Germany (the former GDR). The field work was done by Marplan, a survey company. The data are available from the Cologne "Zentralarchiv für Empirische Sozialforschung" (data set # 4052).

Respondents were asked questions on political issues of the day, politicians, political parties, and voting behavior. Additionally, they were administered the Five Factor personality inventory. The German translation by Borkenau and Ostendorf (1993) of the NEO-Five-Factor Inventory (NEO-FFI) was used.³ The NEO-FFI represents a short version of the classical instrument, the so called NEO-PI-R (Costa & McRae, 1989). It contains 12 items for each of the five factors. As can be seen from Cronbach's alpha coefficients in Table 2, the five scales are quite reliable instruments. Additionally, Table 2 reveals the distribution of the Big Five factors in Germany in 2003. The intercorrelations among the five factors range from 0.10 to 0.46 (not reported in tables).

<<Table 2 about here>>

Attitudes toward political parties were measured by asking respondents to evaluate each party on an 11-point feeling thermometer scale.⁴ Additionally, participants in the interview were asked whom they would vote for if a general election were held on the next Sunday. To be sure, this is a hypothetical question that may yield results that are not completely valid. However, we are not primarily interested in the vote shares of single parties; rather, we address the relationships between personality traits and vote choice. As correlations between variables whose marginal distributions vary are rather stable over time and the same holds for both personality traits and relevant attributes of political parties, however, empirical relationships between personality traits and vote choice are arguably rather stable over time. As a result, the findings of our analysis are presumably valid.

We analysed the effects of personality factors on evaluations of political parties and on

³ NEO is the designation for the three scales *Neuroticism*, *Extroversion*, and *Openness* to experience, upon which an earlier form of the test was based.

⁴ CDU and CSU are treated as one party; as a consequence, we averaged the sympathy scores of both parties. Likewise, we averaged the sympathy scores of three right-wing parties (NPD, DVU, REP) for which separate analyses yielded very similar results.

intended vote choice. We used linear regression to examine the effects of the Big Five factors on party feeling scores while we adopted multinomial logistic regression to study the effects of personality traits on vote choice. In both analyses, we first examined the effects of personality traits while controlling for age, gender, region, education, social class, and religion (see appendix for details). These variables were shown by previous research to affect vote choice in Germany (e.g., Falter & Schoen, 2005) and are likely to be exogenous to personality traits, so that controlling for them is necessary to give an unbiased estimate of the total effect of personality.⁵ We then added political ideology, value orientations, party identification, policy preferences, and attitudes toward candidates (see appendix for details). These variables may serve as factors mediating effects of personality on attitudes toward political parties and on vote choice. As we hypothesized effects of personality to be not direct but indirect, the Big Five factors should not exhibit any effect after including these variables.⁶

Results

The results of the OLS-regressions of attitudes toward German parties on sociodemographic variables and personality traits are reported in the left-hand section of Table 3. To begin with, *Openness* is quite strongly related to attitudes towards leftist parties. The more open to experience a person is the more inclined she is to like PDS, SPD, and the Greens and to dislike, albeit less strongly, CDU/CSU and FDP. These results are in line with our hypotheses. In contrast, the finding on attitudes toward right-wing parties does not meet our expectations as the coefficient has the expected sign but is not statistically significant.

The empirical findings concerning the effects of *Conscientiousness* look somewhat like a mirror image of the results just discussed. High scores on *Conscientiousness* contribute to negative evaluations of leftist parties. By contrast, attitudes toward the conservative CDU/CSU are getting much more positive when one moves from the low to the high end of the *Conscientiousness* scale. Attitudes toward FDP and right-wing parties are not correlated significantly to this personality trait. Except the latter results, the evidence thus backs our hypotheses.

As anticipated, *Agreeableness* renders individuals more inclined to hold favorable opinions about the Greens and the SPD. However, evaluations of the leftist party which most strongly endorses the welfare state, the PDS, are not affected by *Agreeableness*. In line with our expectations, *Agreeableness* plays a role in influencing attitudes toward the CDU/CSU, the FDP, and right-wing parties: The more agreeable a person is the less favorable her statements about the CDU/CSU, the FDP, and right-wing parties. The finding on attitudes toward the FDP is remarkable as we argued that *Agreeableness* should exhibit a negative effect on the opinion about this party if voters perceive the FDP to be primarily concerned with economic issues. Thus, we might speculate that high scores on *Agreeableness* direct a person's attention to particular policy domains.

⁵ As some of these variables—particularly education—may not be entirely exogenous to personality but might be affected by it, including these control variables results in a fairly conservative estimate of the total effect of personality on attitudes toward political parties and on vote choice.

⁶ We excluded respondents even from the analyses of total effects if they had missing values on any of the mediating variables. This procedure makes it easier to compare results but inevitably reduces the number of cases considerably. Respondents who were excluded have somewhat worse opinions about political parties and somewhat lower social status than the respondents who were included, but they do not differ substantively in terms of personality traits. Most importantly, additional analyses revealed that excluding respondents did not alter substantive results on the effects of personality traits on attitudes toward political parties and on vote choice. Thus, our results are not biased.

Neuroticism clearly affects attitudes toward political parties. High scores on *Neuroticism*, i.e., emotional instability and negative emotions, render a person more inclined to support the SPD, the PDS, and right-wing parties than are parties of both the far left and the far right. Though seemingly paradoxical this finding comes as no surprise but is in line with our expectations. Moreover, we do not find any effect of *Neuroticism* on attitudes toward the CDU/CSU and the FDP. Opinions about the Green Party are positively affected by *Neuroticism* though we expected a negative, if any, effect. This finding suggests that the policy-based reasoning that was presented above does not suffice to explain the effects of neuroticism on attitudes toward political parties.⁷ Thus the findings on *Neuroticism* parallel the results concerning the traits discussed above in that they partially meet our expectations.

Among the Big Five, *Extraversion* is the personality trait that does not exhibit any effect on attitudes toward political parties. Thus, the evidence supports our expectations.

To sum up, the analysis of personality effects on partisan attitudes exhibits considerable support for the notion that the Big Five personality factors shape feelings toward political parties. Moreover, in many cases our specific hypotheses are borne out by the evidence. At the same time, the results indicate that the effects of personality traits on partisan attitudes are limited. However, personality traits contribute to explaining partisan attitudes to an extent that cannot be ignored. This is the more remarkable as the five factors are rather apolitical in content.

The right-hand section of Table 3 shows the results of OLS regressions of attitudes toward political parties on personality traits while controlling for sociodemographic factors and policy predispositions, party identification, and opinions about candidates. As the increase in adjusted R² suggests, the additional control variables exhibit strong effects on attitudes toward political parties. At the same time, most effects of personality traits diminish to insignificance, though there are a few exceptions. For one thing, the coefficients for *Neuroticism* decrease only slightly. For another thing, though the effects of *Agreeableness* on attitudes toward the SPD, the CDU/CSU, the FDP, and the Greens vanish, this trait still exhibits considerable effects on opinions about the postcommunist PDS and the right-wing parties. By and large, however, the results support the notion of personality traits exhibiting indirect effects on opinions about political parties by shaping political predispositions and attitudes toward issues and politicians that in turn affect opinions about political parties.

<<Table 3 about here>>

Having shown that personality traits shape attitudes toward political parties, we now turn to the effects of personality traits on vote choice. To explore these effects we ran multinomial logistic regressions of vote choice on the Big Five while controlling for sociodemographic background and, in a second analysis, policy preferences and attitudes toward candidates. The reference category is the SPD vote so that the coefficients that are reported in Table 4 refer to the choice between the party in the respective column and the SPD. Coefficients for other choices can be calculated by subtracting the coefficients in the column of the respective parties. For example, the effect of *Openness* on the choice between CDU/CSU and FDP is calculated as follows: $-1.98 - (-2.18) = 0.20$. As otherwise the presentation of results would be too complex, we report in Table 6 the direction of statistically significant coefficients for specific choices. From the model reported in the left-hand section of Table 4, we also calculated predicted probabilities of voting for a particular party depending on personality traits while holding all other variables in the model at their mean,

⁷ Previous studies have shown that a considerable section of the German public ascribes “emotionalism” to the Greens (see Schumann 2001, 2002). As high scorers on *Neuroticism* are not able to control emotional reactions, they may consider a party appealing whose image contains “emotionalism.”

median, and mode, respectively; more specifically, we compare those persons at the high end and the low end (mean plus/minus two standard deviations) of the five personality scales. These probabilities are reported in Table 5. In the right-hand section of Table 4, we report the results of the analysis with the additional control variables. This evidence indicates that including these controls diminishes the effects of personality traits on vote choice, thereby supporting the notion that personality traits exhibit indirect rather than direct effects. The few effects that are still significant suggest that we have not included all relevant intervening variables.

The evidence in the left-hand section of Table 4 clearly supports the notion that *Openness* affects vote choice (Wald-test: $\chi^2 = 32.12$; $p = 0.0000$). The effect of *Openness* varies across parties considerably, however. The choice between the Greens and one of the remaining parties is affected by *Openness* in each case, except the choice between the Greens and the PDS. Even when voters are asked to choose between the Greens and the SPD, *Openness* increases the likelihood of a vote for the Greens. Thus, it comes as no surprise that while voters who score low on this trait are very unlikely to cast a vote for the Greens, more than one-third of the voters who are extremely open cast a vote for them. This trait also affects the vote for the SPD positively, though this effect is less consistent and weaker. As the results in Table 5 indicate, high levels on this dimension increase the likelihood to cast a vote for the SPD from about 25% to roughly 40%. In contrast, *Openness* exhibits negative effects on voting for right-wing parties and for CDU/CSU. The effect of *Openness* on the latter is remarkably strong as the CDU/CSU vote share decreases from more than 68% to about 41% when moving from the low to the high end of this trait. Finally, the vote for the FDP and the PDS is affected by *Openness* only when it comes to the decision whether to vote for them or the Greens and a right-wing party respectively. In summary, the findings suggest that *Openness* mainly affects the choice between parties that are distinctively conservative or liberal on social issues. Thus, by and large, the evidence supports our hypotheses.

<<Insert tables 4, 5 and 6 about here>>

Conscientiousness clearly exhibits effects on vote choice ($\chi^2 = 24.94$; $p = 0.0001$). However, its effects are somewhat smaller in magnitude and resemble something of a mirror image of the findings on *Openness* as regards the direction of effects. *Conscientiousness* is a strong predictor of casting a vote for CDU/CSU. Persons scoring low on this trait cast a CDU/CSU vote in two of five cases. In contrast, highly conscientious persons choose to vote for CDU/CSU in almost two of three cases. As the findings in Table 4 show, this effect mainly results from the effect of *Conscientiousness* on the choice between CDU/CSU and SPD and the Greens, respectively. As with *Openness*, *Conscientiousness* affects the choice between the latter two parties with the Greens being more appealing to individuals scoring low on this trait. *Conscientiousness* also exhibits an effect on the choice between the Greens and the FDP and right-wing parties, respectively, so that it is no surprise to find that the likelihood to vote for the Greens is considerably conditioned by *Conscientiousness*: At the high end of *Conscientiousness*, not more than about 4% of the voters cast a vote for the Greens while among persons at minimal levels of *Conscientiousness* about 19% decide to vote for the Greens. Electoral support for the remaining parties is not linked to *Conscientiousness* as strongly and consistently as that for the CDU/CSU and the Greens though high scores on this dimension tend to increase the likelihood to vote for the FDP and right-wing parties while decreasing the likelihood to cast a vote for the SPD and the PDS. In summary, the findings are in line with the general hypothesis that parties which endorse conservatism on economic and social issues are likely to benefit from high scores on *Conscientiousness* at the polls, though our expectations are not completely borne out by the evidence.

The evidence concerning effects of *Agreeableness* on vote choice clearly confirms our

expectation that this personality trait plays a role in influencing vote choice ($\chi^2 = 22.52$; $p = 0.0004$). *Agreeableness* does not affect the choice between parties of the left, while exhibiting considerable effects on the choice between them and FDP, CDU/CSU, and right-wing parties. While in the case of the PDS we find only a weak tendency, the effects for the Greens and the SPD are consistent and sizable. As the results in Table 5 indicate, the electoral benefits from high levels of *Agreeableness* are more evenly divided than those from *Openness* and *Conscientiousness*. Regarding the Greens, the increase is from roughly 6% to 13%. Likewise, among persons who score very low on *Agreeableness* the Social Democrats receive roughly 25% of the vote while they garner about 37% among highly agreeable voters. These findings are mirrored by the evidence on the remaining parties as voting for CDU/CSU, FDP, and right-wing parties tends to become less probable the more agreeable a person gets. However, *Agreeableness* also affects the choice between CDU/CSU and the right-wing parties, so that it appears that there is something peculiar to the latter that makes them distinctively appealing to voters scoring low on *Agreeableness*. By and large, the evidence supports our hypotheses concerning the role of *Agreeableness* in influencing vote choice.

Neuroticism exhibits an effect on voting behavior which is considerably smaller than that found for the three traits discussed in the above paragraphs ($\chi^2 = 12.59$; $p = 0.0276$). The results suggest that it is the FDP and right-wing parties whose electoral support is most strongly affected by the level of *Neuroticism*. Persons scoring high on this dimension are less likely to cast a vote for the FDP when asked to choose between it and another single party, with the Greens being the only exception. As the results in Table 5 show, all other included variables held constant at their mean, median, and mode respectively, at the low end of *Neuroticism*, about 13% vote for the liberal FDP, while at the scale's high end, the FDP's vote share is just 2%. At the same time, citizens at the high end of this trait prefer right-wing parties over SPD, CDU/CSU, FDP, and the Greens. When neither the FDP nor right-wing parties are involved, however, *Neuroticism* does not play a role in influencing vote choice.

By and large, these findings support our hypotheses. However, the fit is far from perfect. For instance, one might have expected also the choice between the CDU/CSU and the SPD and the PDS, respectively, to be affected by *Neuroticism*, as in Table 3 the coefficients capturing the effect of *Neuroticism* on attitudes toward the CDU/CSU and the FDP, respectively, are indistinguishable. Thus, the evidence underscores the argument that voting for parties is different from liking parties, so that it is warranted to examine the effects of personality on attitudes toward political parties and on voting behavior separately. This conclusion is particularly backed by the outstanding role *Neuroticism* plays in influencing the FDP vote, though we found attitudes toward this party not affected by this trait (see Table 3). We might speculate that it makes a difference to voters whether they evaluate a single party or they choose between two parties, as by comparing parties, they might more easily recognize the peculiarities of the parties from which they have to choose.

Turning to *Extraversion*, the evidence shows that this trait is irrelevant for vote choice since in Table 4, none of 15 coefficients is statistically significant at conventional levels ($\chi^2 = 2.93$; $p = 0.7111$). This finding is in line with the findings concerning the noneffects of *Extraversion* on attitudes toward political parties. Moreover, the evidence backs our expectations as we concluded from competing hypotheses that it is not clear which, if any, effect to expect.

The findings on the effects of personality traits on vote choice suggest that voters of different parties differ in personality. If one were asked to give the outstanding characteristics of the voters of the Greens in terms of personality traits, one would point to low levels of *Conscientiousness* and high levels of *Openness*. Concerning the CDU/CSU voters, one finds a mirror image of the Greens. High levels of *Agreeableness* and *Openness* strongly contribute to the SPD vote. *Neuroticism* and *Agreeableness* play a considerable role in influencing the

right-wing vote while casting a FDP vote becomes considerably more probable as *Neuroticism* decreases. Finally, compared to the other parties, the PDS vote is only mildly affected by personality traits. This finding is the more remarkable as opinions about the postcommunist party are considerably affected by a voter's personality (see Table 3).

Conclusion

Political psychology deems personality traits an important factor in explaining elite behavior. In contrast, in analyses of mass beliefs and mass behavior personality has not yet played a major role. The present paper argues that it is worthwhile to study effects of personality traits on partisan attitudes and voting behavior. It shows how deep-seated personality traits can be linked to partisan feelings and vote choice in theoretically consistent ways: They influence predispositions and attitudes that in turn affect opinions about political parties and vote choice. Put somewhat differently, we propose personality to influence political attitudes and political behavior indirectly rather than directly. Following this line of reasoning, the paper examines the effects of the Big Five personality traits on partisan attitudes and voting behavior in Germany. The results support our hypothesis that personality traits have an impact on partisan attitudes and vote choice that is mediated by political predispositions and attitudes toward issues and politicians. More specifically, *Openness* makes citizens more inclined to support parties endorsing social liberalism whereas low scores on *Conscientiousness* increase the likelihood of liking and voting for parties subscribing to economic or social liberalism as do high levels on *Agreeableness*. Finally, high levels of *Neuroticism* appear to render individuals more inclined to support parties that offer shelter against material or cultural challenges. Thus, this analysis adds to the scholarly knowledge by revealing that personality traits affect partisan attitudes and by showing that personality plays a role in influencing vote choice in Germany, thereby paralleling evidence from Italy (Caprara et al., 1999). As a consequence, it is reasonable to consider personality traits as factors that shape partisan attitudes and voting behavior though their effects are not overwhelmingly strong.

Our analysis also has shown that the effects of personality traits on vote choice differ from the effects personality exhibits on partisan attitudes. This finding suggests that it is warranted to study the effects of personality traits on evaluations of political parties and on voting behavior separately. Moreover, we might conclude that the trade-off voters have to make when asked to choose between competing parties makes a difference when it comes to the effects of personality, though we could not study the underlying mechanisms in this paper in more detail.

Unlike previous research on the role personality plays in shaping political opinions and behavior, we have studied attitudes toward and choosing between single parties rather than coalitions of parties. We find the effects of personality traits on partisan attitudes and on vote choice to differ considerably across political parties. In some instances, the effects of personality characteristics differ in strength or direction even between parties forming a governing coalition. To illustrate the point, the effect of *Openness* on voting for the Greens, which formed a governing coalition with the SPD at that time, is clearly stronger than for the SPD. Likewise, the effect of *Conscientiousness* on the likelihood of voting for SPD differed significantly from its effect on the Green vote with the SPD vote benefiting from high scores on this scale while the Green vote suffering from them. These results suggest that the difference in the effects of personality reflects policy differences between the SPD and the Greens with the former being a traditional left party and the latter a party of the new left focusing primarily on social issues. Thus, in general, our analysis lends support to the conclusion that it is more appropriate to study single parties rather than coalitions of parties when examining the effects of personality traits on partisan attitudes and on voting behavior. Moreover, the evidence suggests that in some instances personality traits are of particular

importance for attitudes toward and voting for small parties.

The effects of personality traits on partisan attitudes and vote choice also differ considerably across the Big Five. In this respect, by and large, our findings parallel those of Caprara et al. (1999) on Italy in showing that high scores on *Openness* and *Agreeableness* and low scores on *Conscientiousness* render voters more inclined to vote for parties of the left. However, our findings also differ remarkably from previous evidence. Whereas *Neuroticism* exhibits considerable effects on partisan attitudes and vote choice in Germany, Caprara et al. (1999) found this trait not to be influential in shaping vote choice between center-left and center-right parties in Italy, which may result from their binary coding of voting behavior. As regards *Extraversion*, in our analysis it does not exhibit any effect on partisan attitudes and on vote choice while in Italy high scores on this trait turned out to render voters considerably more inclined to vote for center-right parties.⁸

According to our theory, these differences in the effects of personality traits on partisan attitudes and vote choice may stem from differences in fundamental policy cleavages or in short-term factors, e.g., a specific policy issues or political leaders particularly appealing to highly extraverted voters. Moreover, the number of parties may play a role in conditioning the effects of personality as small parties like the Greens mainly deal with social issues that appear to be of particular importance when it comes to link some personality traits to partisan attitudes and vote choice. Finally, the electoral system arguably conditions the effects of personality on vote choice as higher electoral thresholds imply stronger incentives for strategic voting that may change, and presumably diminish, the effects of personality. In summary, the discussion suggests that the findings from Germany do not necessarily apply to other countries. Accordingly, the effects of personality traits on partisan attitudes and vote choice may differ considerably between Western European countries though it is tempting to conclude from similarities in cleavage structures and party systems identical effects in these political systems. Likewise, we might speculate that the effects of personality traits in the United States with two major parties and a first-past-the-post electoral system are likely to differ from those effects in a multiparty system under proportional representation. Though plausible, these are only speculations. To study the effects of potentially conditioning factors comparative analyses of personality traits on political attitudes and voting behavior are warranted.

In theorizing on the effects of personality traits on partisan attitudes and vote choice, we build on the notion that personality traits shape political predispositions and attitudes toward political leaders and issues that in turn affect attitudes toward parties and voting behavior. Though our analysis supports many hypotheses derived from this model, it has not examined the mechanisms outlined above, so that it is rather suggestive than conclusive in this point. Future research may thus study more thoroughly the mechanisms which engender personality effects on political attitudes and behavior.

Appendix

Question Wording and Variable Coding

Gender: 0 = male, 1 = female

Age: in years

Region: 0 = West Germany, 1 = East Germany.

No/primary education: 1 = no/primary education, 0: otherwise.

Mid school: 1 = secondary school, 0: otherwise.

Worker: 1 = worker, 0 = otherwise.

Christian: 1 = Christian, 0 = otherwise.

⁸ Additional analyses showed that this difference does not result from differences in the coding of the dependent variable, i.e., coalitions of parties versus single parties.

Ideology: “People often use the terms ‘left’ and ‘right’ in politics. Using this scale from 1 to 11, where would you place yourself, if 1 stands for left and 11 stands for right?” Range rescaled to 0 – 1.

Postmaterialism and materialism: “There is a lot of talk these days about what the aims of this country should be. On this card are listed are some of the goals which different people would give top priority. Would you please say which of these you, yourself, consider the most important? And which would be the next most important?” A: Maintaining order in the nation. B: Giving the people more say in important government decisions. C: Fighting rising prices. D: Protecting freedom of speech.

Postmaterialism: 1: respondents say that B and D are the two most important aims; 0: otherwise.

Materialism: 1: respondents say that A and C are the two most important aims; 0: otherwise.

Party identification: “In the Federal Republic, many people lean towards a political party for an extended period of time although they vote for a different party now and then. Do you—generally speaking—lean towards a political party? And if so: Which party?” Dummy variables were created for identification with SPD, CDU/CSU.

Candidate evaluations: “Generally speaking, what is your opinion about the candidates? Please use this scale from –5 to +5. –5 means that you have a very poor opinion about a party, +5 means that you have a very good opinion about a party.” Range rescaled to 0 – 1.

Welfare state: 7-point scale with 0 indicating a preference for support for enterprises and 1 indicating a preference for redistribution of income to the unemployed.

Immigration: 7-point scale with 0 indicating a preference for reducing immigration and 1 indicating a preference for increasing immigration.

Same-sex marriage: 7-point scale with 0 indicating opposition to and 1 indicating support of same-sex marriage.

Iraq war: 7-point scale with 0 indicating opposition to and 1 indicating support for the Iraq war.

Nuclear power: 7-point scale with 0 indicating opposition to and 1 indicating support for the use of nuclear power.

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Table 1. Hypotheses concerning the effects of the Big Five on partisan attitudes

	SPD	CDU/CSU	FDP	Greens	PDS	Right-wing parties
Openness	+	-	o	+	+	-
Conscientiousness	-	+	(+)	-	-	+
Agreeableness	+	-	(-)	+	+	-
Extraversion	o	o	o	o	o	o
Neuroticism	+	o	-	(-)	+	+

Legend: +: positive effect; -: negative effect; O: no effect; brackets indicate that the policy a party most strongly emphasizes suggests a particular effect but there are competing hypotheses.

Table 2. Mean, standard deviation, and reliability coefficients of the Big Five Personality traits

	Mean	Standard deviation	Cronbach's α	N
Openness	.513	.125	.66	2498
Conscientiousness	.706	.146	.84	2499
Agreeableness	.658	.124	.73	2498
Extraversion	.569	.129	.76	2498
Neuroticism	.346	.152	.82	2499

Range of all variables: 0 – 1.

Table 3. Effect of personality traits on attitudes towards political parties in Germany 2003 (OLS-Regression)

	Mediating variables not included						Mediating variables included					
	SPD	CDU/CSU	FDP	Greens	PDS	Right-wing parties	SPD	CDU/CSU	FDP	Greens	PDS	Right-wing parties
Openness	.38*** (.07)	-.19* (.07)	-.12* (.06)	.37*** (.07)	.24*** (.06)	-.07 (.04)	.06 (.04)	.06 (.04)	-.02 (.06)	.11* (.06)	.10 (.06)	-.03 (.04)
Conscientiousness	-.13* (.06)	.25*** (.06)	.04 (.05)	-.20** (.06)	-.20*** (.05)	.03 (.04)	-.00 (.04)	.02 (.03)	-.07 (.05)	.01 (.05)	-.07 (.05)	.01 (.04)
Agreeableness	.22** (.07)	-.20** (.06)	-.12* (.06)	.27*** (.06)	-.02 (.05)	-.26*** (.05)	.00 (.04)	.01 (.04)	-.02 (.05)	.06 (.05)	-.12* (.05)	-.22*** (.05)
Extraversion	-.05 (.07)	.09 (.07)	.09 (.06)	.05 (.07)	-.06 (.05)	-.02 (.04)	.00 (.04)	.06 (.04)	.07 (.05)	.07 (.06)	-.06 (.05)	-.00 (.04)
Neuroticism	.17** (.06)	.04 (.07)	-.01 (.06)	.14* (.06)	.18*** (.05)	.11* (.04)	.08* (.04)	.05 (.03)	-.02 (.05)	.10* (.05)	.15** (.05)	.10* (.04)
Left-right ideology							-.12*** (.03)	.08** (.03)	.07 (.04)	-.12** (.04)	-.14** (.04)	.04 (.03)
Materialism							-.01 (.01)	-.00 (.01)	.02 (.01)	.00 (.01)	-.01 (.02)	-.00 (.01)
Postmaterialism							.01 (.01)	.01 (.01)	-.01 (.01)	.01 (.02)	.03 (.02)	.01 (.01)
SPD Identification							.10*** (.01)	-.03** (.01)	-.04** (.01)	-.01 (.02)	-.07*** (.02)	-.01 (.01)
CDU/CSU identification							-.07*** (.01)	.11*** (.01)	.01 (.02)	-.05** (.02)	-.05** (.02)	-.03* (.02)
SPD-candidate							.57*** (.02)	-.01 (.02)	.08** (.03)	.31*** (.03)	.10*** (.03)	.02 (.02)
CDU/CSU-candidate							-.07*** (.02)	.53*** (.02)	.27*** (.03)	-.05 (.03)	-.03 (.03)	.09*** (.02)
Welfare state							-.00 (.02)	.01 (.02)	.02 (.02)	-.05* (.02)	-.07** (.02)	-.02 (.02)
Immigration							.06** (.02)	-.03 (.02)	-.02 (.02)	.10*** (.02)	.06* (.03)	.00 (.02)
Same-sex marriage							-.02 (.01)	-.03* (.01)	.03 (.02)	.05* (.02)	.04 (.02)	-.01 (.02)
Iraq							-.02 (.02)	.02 (.01)	.03 (.02)	-.04* (.02)	.01 (.02)	.06** (.02)

Nuclear power							.01	.04*	.04	-.14***	-.02	.01
							(.02)	(.02)	(.02)	(.03)	(.03)	(.02)
Worker	-.02	-.06**	-.07**	-.03	-.01	.00	-.02	-.03**	-.04**	-.03*	-.02	-.01
	(.02)	(.02)	(.02)	(.02)	(.02)	(.01)	(.01)	(.01)	(.01)	(.02)	(.02)	(.02)
Christian	-.01	.09***	.04*	-.03	-.05*	.02	.02	.01	-.00	-.00	-.02	.01
	(.02)	(.02)	(.02)	(.02)	(.02)	(.01)	(.01)	(.01)	(.02)	(.02)	(.02)	(.01)
No education/ primary education	.00	.03	-.02	-.04	-.02	.04**	-.00	.02	-.03	-.05*	-.01	.04**
	(.02)	(.02)	(.02)	(.02)	(.02)	(.01)	(.01)	(.01)	(.02)	(.02)	(.02)	(.01)
Mid-school	-.02	.04*	.01	-.04	-.01	.02	-.00	.02	-.01	-.02	-.00	.02
	(.02)	(.02)	(.02)	(.02)	(.02)	(.01)	(.01)	(.01)	(.02)	(.02)	(.02)	(.01)
Region	.01	-.03	-.03	.00	.26***	.04*	-.00	-.01	-.03	-.02	.24***	.04*
	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.01)	(.01)	(.02)	(.02)	(.02)	(.02)
Gender	.01	.04*	.02	-.02	-.00	.01	.01	.01	.01	-.01	.00	-.00
	(.02)	(.02)	(.01)	(.02)	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)
Age	-.0001	.002**	.0002	-.001**	-.0006	-.0009**	.0004	.0001	-.0002	-.0003	.0002	-.001*
	(.0005)	(.0005)	(.0004)	(.0005)	(.0004)	(.0003)	(.0003)	(.0003)	(.0004)	(.0004)	(.0004)	(.0003)
Constant	.23*	.33***	.50***	.27**	.27***	.23**	.19**	.06	.28**	.32***		
	(.10)	(.09)	(.08)	(.09)	(.08)	(.07)	(.06)	(.05)	(.08)	(.08)		
Adjusted R ²	.04	.08	.03	.11	.25	.08	.70	.70	.22	.39	.33	.12
N	1840	1838	1837	1840	1822	1674	1840	1838	1837	1840	1822	1674

Entries are unstandardized OLS-coefficients; robust standard errors in parentheses. As statistical tests confirmed there were no serious collinearity problems in the analyses. Significant at *: $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$.

Table 4. Effect of personality traits on the vote choice in Germany (multinomial logistic regression) (reference category: vote for SPD)

	Mediating variables not included					Mediating variables included				
	CDU/CSU	FDP	Greens	PDS	Right-wing parties	CDU/CSU	FDP	Greens	PDS	Right-wing parties
Openness	-1.98** (.63)	-2.18 (1.32)	2.78** (.96)	-.02 (1.43)	-6.01** (2.31)	.25 (1.16)	.15 (1.67)	1.72 (1.21)	1.22 (1.89)	-3.22 (2.19)
Conscientiousness	1.39** (.53)	1.32 (1.33)	-2.23** (.77)	-.72 (1.44)	1.82 (1.67)	1.48 (1.14)	1.91 (1.64)	.59 (1.03)	1.08 (1.62)	-2.26 (2.47)
Agreeableness	-1.20* (.57)	-3.08* (1.32)	.92 (.87)	.36 (1.39)	-7.41*** (2.07)	.80 (1.26)	-1.78 (1.85)	-.74 (1.30)	.86 (1.78)	-3.58 (2.77)
Extraversion	.70 (.58)	.61 (1.27)	-.09 (1.06)	.51 (1.32)	2.26 (1.79)	1.48 (1.23)	.38 (1.69)	-.51 (1.44)	-.82 (1.78)	5.60* (2.19)
Neuroticism	-.05 (.52)	-3.43* (1.53)	-.49 (.82)	1.03 (1.21)	3.71* (1.62)	1.59 (1.09)	-2.53 (1.66)	.29 (1.20)	2.03 (1.37)	4.05 (2.07)
Left-right ideology						3.06** (.93)	1.21 (1.35)	-1.04 (1.06)	-2.69 (1.55)	10.55*** (1.66)
Materialism						.37 (.34)	-.21 (.47)	.33 (.36)	-.03 (.47)	.26 (.86)
Postmaterialism						.36 (.31)	-.05 (.40)	.44 (.30)	.81 (.52)	.41 (1.05)
SPD Identification						-2.37*** (.32)	-6.06*** (1.07)	-3.58*** (.33)	-5.48*** (1.14)	-2.47* (1.15)
CDU/CSU identification						4.02*** (.75)	1.32 (.86)	.46 (.87)	.97 (1.10)	1.13 (1.47)
SPD-candidate						-5.53*** (.65)	-5.60*** (.83)	-2.52*** (.66)	-7.52*** (1.11)	-5.80*** (1.43)
CDU/CSU-candidate						4.37*** (.58)	2.53** (.77)	-.15 (.60)	-1.29 (1.15)	3.19* (1.25)
Welfare state						.65 (.47)	1.65* (.68)	.53 (.48)	-.75 (.62)	.38 (1.09)
Immigration						-.84 (.53)	-.59 (.77)	1.24* (.54)	.68 (.74)	-5.28*** (1.33)
Same-sex marriage						-.42 (.42)	.38 (.60)	.46 (.44)	.15 (.58)	.13 (1.08)
Iraq						-.12 (.45)	-.17 (.59)	-.95 (.68)	-.87 (.74)	-1.52* (.74)
Nuclear power						-.33 (.51)	-.45 (.72)	2.39** (.71)	.10 (.67)	-1.47 (1.68)

Worker	-.46**	-.79	-.32	.57	.70	-.70*	-.90	-.43	.44	.40
	(.17)	(.41)	(.30)	(.37)	(.86)	(.34)	(.48)	(.38)	(.50)	(1.20)
Christian	.55**	-.17	-.35	-1.26**	-.25	-.02	-.47	-.52	-1.40**	-.84
	(.18)	(.33)	(.24)	(.43)	(.51)	(.33)	(.44)	(.33)	(.50)	(.62)
No education/ primary education	-.02	-.74*	-.76*	-.44	1.99	.12	-.62	-.56	-.19	2.90
Mid-school	.03	-.00	-.37	-.74	1.52	-.16	-.05	-.31	-1.01	1.95
	(.19)	(.32)	(.25)	(.46)	(.99)	(.34)	(.43)	(.34)	(.56)	(1.49)
Region	.02	-.71	-.58	2.32***	.58	-.18	-1.32*	-1.04**	2.15***	.17
	(.20)	(.47)	(.34)	(.42)	(.57)	(.35)	(.56)	(.38)	(.61)	(.73)
Gender	.11	.31	-.40	.37	.34	.18	.42	-.02	.81	.67
	(.14)	(.28)	(.22)	(.36)	(.78)	(.29)	(.38)	(.30)	(.44)	(1.12)
Age	.007	-.008	-.04***	.01	-.06**	.001	.006	-.03*	.02	-.07**
	(.004)	(.008)	(.008)	(.01)	(.02)	(.01)	(.01)	(.01)	(.01)	(.03)
Constant	.08	1.87	1.00	-3.34	.23	-2.77	1.10	1.02	1.04	-3.91
	(.78)	(2.12)	(1.18)	(1.76)	(2.06)	(1.80)	(2.66)	(1.98)	(2.22)	(3.10)
-2 LL	2390.0					2390.0				
Adjusted McFadden's pseudo-R ²	.10					.57				
N	1843					1843				

Dependent variable: vote choice (0 = CDU/CSU)

Entries are coefficients from a multinomial logistic regression model; standard errors in parentheses. As statistical tests confirmed there were no serious collinearity problems in the analyses.

Significant at *: $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$.

Table 5. Probability of voting for SPD, CDU/CSU, FDP, Greens, PDS, and right-wing parties, given two levels of personality traits

		SPD	CDU/CSU	FDP	Greens	PDS	Right-wing parties
Openness	low	25.1	68.2	3.4	2.4	0.4	0.6
	high	40.8	41.2*	1.9	15.4*	0.7	0.0
Conscientiousness	low	35.4	41.5	4.0	18.6	0.5	0.1
	high	25.1	64.8*	6.0	3.7*	0.2	0.1
Agreeableness	low	25.4	59.1	9.0	5.7	0.3	0.5
	high	36.7	47.0	2.8	13.0	0.5	0.0
Extraversion	low	34.7	50.0	4.8	10.0	0.3	0.1
	high	28.1	58.2	5.4	7.8	0.4	0.2
Neuroticism	low	28.0	49.2	13.3	9.2	0.2	0.0
	high	33.0	56.1	2.0	8.1	0.5	0.3

Predicted probabilities were calculated from the model reported in the left-hand section of table 4 while holding all other variables in the model at their sample mean, median and modal values respectively. Asterisks indicate differences that are significant at $p < 0.05$. "Low" and "high" are defined as the mean minus/plus two standard deviations.

Table 6. Effects of the Big Five on the choices between pairs of parties

	SPD- CDU	SPD- FDP	SPD- Greens	SPD- PDS	SPD- right wing parties	CDU/CSU- FDP	CDU/ CSU- Greens	CDU/ CSU- PDS	CDU/ CSU- right- wing parties	FDP- Greens	FDP- PDS	FDP- right wing parties	Greens- PDS	Greens- right wing parties	PDS- right wing parties
Openness	-	o	+	o	-	o	-	o	o	-	o	o	o	+	+
Conscientiousness	+	o	-	o	o	o	+	o	o	+	o	o	o	-	o
Agreeableness	-	-	o	o	-	o	-	o	+	-	o	o	o	+	+
Extraversion	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Neuroticism	o	-	o	o	+	+	o	o	-	o	-	-	o	-	o

Legend: +: positive effect; -: negative effect; o: effect not significant at the 0.05-level.