Article

Who Are the "Dark" Politicians? Insights From Self-Reports of German State Parliament Candidates

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Abstract
A growing body of studies is focusing on politicians' personalities, as the personality of political elites has been shown to affect their behavior. Whereas most research uses the big five framework or HEXACO, only a few studies have been able to capture more "aversive," "dark"—yet non-pathological—personality traits of politicians. However, these studies refer to top politicians; information on the distribution and the correlates of dark personality traits in the broad mass of politicians is still lacking. Moreover, information on dark personality traits in politicians is usually based on expert ratings; data using self-placement is missing. Based on data from six surveys with candidates running for German state elections in 2021 and 2022 (N[pooled data set] = 1,632), we, to the best of our knowledge, offer, for the first time, insights into politicians' self-reported socially aversive personality traits. "Dark" personality traits are measured by the political elites aversive personality scale (PEAPS). Results show that German politicians exhibit moderate levels of aversive personality traits. In addition, the extent of candidates' dark personalities is strongly negatively correlated with honesty–humility, agreeableness vs. anger, and extraversion, while associations with other basic personality traits are much weaker or insignificant. We also find that younger, more right-leaning, and more ideologically extreme candidates report higher levels of aversive personality.

Issue
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1. Introduction

The media often depict top politicians based not only on their actions but also on their personalities. For example, the media attributed narcissism (among other traits) to former US President Donald Trump (Bannon, 2020), former German Chancellor Angela Merkel has been described as conscientious and patient (Bildt, 2018), and current Russian President Vladimir Putin has been seen—even before Russia's attack on Ukraine—as deceitful and aggressive ("Vladimir Putin: Russia's action man president," 2021). In addition, several scientific studies have analyzed the personality of (top) politicians (e.g., Nai, 2019a; Nai & Maier, 2018; Rice et al., 2021; Visser et al., 2017); their results show that voters not only have a choice between different policy programs when it comes to elections but also between different personalities of political leaders. Because personality has an impact on their performance (for instance, policy successes, relationships with the legislature, use of executive orders, and the likelihood of unethical behavior; see, e.g., Lilienfeld et al., 2012; Rubenzer & Faschingbauer,

2004; Rubenzer et al., 2000; Watts et al., 2013), analyzing the personality of political elites is not only of academic interest but also of practical relevance for better understanding the outcomes of political systems.

Despite all efforts to measure politicians' personalities, current research has some limitations. First, most studies focus on those already in office (e.g., members of parliament). Studies on candidates running for office are less common. However, candidate studies can be used to determine the pool of personnel from which voters can select their representatives. Only by comparing successful candidates (i.e., members of parliament) with unsuccessful candidates we gain insights into the factors that promote electoral success and the contribution of personality (see, e.g., Joly et al., 2019; Scott & Medeiros, 2020). Second, most research has focused on politicians' basic personality traits, usually measured via the big five framework (e.g., McCrae & John, 1992) and, to a lesser extent, the HEXACO model of personality (e.g., Ashton & Lee, 2007; Best, 2011; Hanania, 2017; Maier & Nai, 2021; Nai, 2019a; Ramey et al., 2019; Rice et al., 2021; Schumacher & Zettler, 2019; Visser et al., 2017). However, research suggests that individuals also differ in socially aversive—yet non-pathological—personality traits that are responsible for behavior violating generally accepted ethical, moral, and social norms. Therefore, analyzing the "dark" personality of politicians might help to better understand more recent developments in political communication and political behavior, which are often considered dysfunctional for the effectiveness of the political discourse and, more generally, a threat to the cohesion of society—e.g., negativity, incivility, populism, spreading of fake news, and involvement in scandals. However, the number of available studies on politicians' aversive personalities is still very limited (see Lilienfeld et al., 2012; Nai, 2019a, 2019b, 2022; Nai & Martínez i Coma, 2019; Nai et al., 2019; Nai & Toros, 2020; Simonton, 1988). Third, unlike the assessment of basic personality traits, where self-reports are not uncommon, the measurement of the "dark" personality of politicians is still limited to the assessments of experts (e.g., Lilienfeld et al., 2012; Nai, 2019a) and voters (Nai & Maier, 2021a). The reasons for this seem obvious: On the one hand, available inventories to measure aversive personality traits are often quite long; politicians are unlikely to spend much time (if any; this is especially true for top politicians who are unlikely to participate at all) in answering questions related to the "dark" sides of their personality. On the other hand, the available standard inventories of aversive personality often contain relatively difficult questions that are hard to present to a politician and thus pose a threat to the successful completion of the survey. Hence, to have any chance of collecting self-assessments of "dark" personality traits, we need a brief and inoffensive inventory. The current lack of such a self-assessment has important consequences for research. In fact, it limits our understanding to a few very prominent politicians of larger established parties.

This study helps to fill the identified research gaps to some extent. Based on six German candidate surveys, we provide insights into the distribution and predictors of candidates' self-reported levels of aversive ("dark") personality traits. To do so, we use a short scale designed to measure politicians' self-assessed aversive personalities. This allows us to make statements that go beyond a limited selection of top and prominent politicians and also include politicians from smaller parties. The results suggest that German candidates have moderate levels of aversive personality traits and that the extent of candidates' aversive personalities can be predicted by candidates' social and political characteristics. Selected characteristics (age, ideology, and extremism) remain significant predictors of aversive personality even after controlling for basic personality traits.

2. Dark Personality: Measurement and Correlates

2.1. Measurement

There is neither a universally accepted model of aversive personality nor agreement on how to measure it. The most prominent framework in this regard is the so-called dark triad of personality, consisting of three related yet (allegedly) distinctive personality traits: narcissism, psychopathy, and Machiavellianism (Paulhus & Williams, 2002). In a nutshell, psychopathy includes "impulsivity, reckless risk-taking, and very shallow empathy toward other people" (Lyons, 2019, p. 2). Narcissism is the belief that one has "superior abilities in comparison to other people" (Lyons, 2019, p. 3), coupled with seeking "attention and admiration" (agentic narcissism) "while devaluing others" (antagonistic narcissism; Rauthmann, 2012, p. 487). Machiavellianism is "the flexible, chameleon-like use of strategies from defection to cooperation to suit the demands of the situation, with the ultimate aim of gaining benefits for the self" (Lyons, 2019, p. 2). The dark triad has been successfully used to measure the aversive personality traits of political candidates based on expert ratings (e.g., Lilienfeld et al., 2012; Nai, 2019a) and voter ratings (Nai & Maier, 2021a).

The concept of the dark triad is not unchallenged. For example, some scientists claim that the dark triad should be expanded to include sadism, a trait that measures the reward "of inflicting unnecessary pain on others" (Lyons, 2019, p. 35). This four-domain concept is known as the dark tetrad (e.g., Chabrol et al., 2009). With respect to politicians, "everyday sadism" (Buckels et al., 2013), i.e., non-pathological "behaviors that [are] not too extreme or illegal" (Lyons, 2019, p. 36), could be relevant but have not yet been studied. Furthermore, other scholars claim that aversive personality traits, such as those measured by the dark triad, are manifestations of a common *"dark" core of personality* (e.g., Moshagen et al., 2018, 2020; Schreiber & Marcus, 2020; Vize et al., 2020). In particular, the idea of a "common core" of aversive personality is intriguing for the

study of self-reported "dark" personality in politicians because its measurement is not tied to a fixed set of items but is explicitly understood as a "fluid construct...that...appears in all combinations of a sufficient number of different indicators of dark traits in a form that mirrors our conceptualization" (Moshagen et al., 2018, p. 659). Consequently, the concept of there being a dark core of personality is not limited to the dimensions proposed by the dark triad (i.e., narcissism, psychopathy, and Machiavellianism) but is also open to other socially aversive personality traits (e.g., amoralism, egoism, moral disengagement, sadism, self-centeredness, and spitefulness; see Moshagen et al., 2020).

This allows the compilation of items suitable in number and content to be presented to politicians. Maier et al. (2022) recently proposed such an instrument, the political elites aversive personality scale (PEAPS), which we will use in our study.

The few available studies on the aversive personality of politicians show that, on average, political leaders exhibit high levels of narcissism and moderate levels of psychopathy and Machiavellianism (Nai, 2019a, 2019b, 2022; Nai & Martínez i Coma, 2019; Nai & Toros, 2020). Nai (2022) calculated the mean across the three domains of the dark triad to measure the dark core of personality. Using a sample of 49 top candidates from 22 countries, he reported a mean of 2.6 on a scale from 0 (*low level of dark personality*) to 4 (*high level of dark personality*).

2.2. Correlates

There is little research on which social and political characteristics correlate with politicians' "dark" personality traits. First, Nai and Martínez i Coma (2019) have shown that while female populist candidates exhibit lower levels of narcissism, there are no gender differences in psychopathy and Machiavellianism. Nai and Maier (2020) find no correlation between politicians' gender and the level of dark personality. However, psychological research provides strong evidence that females score lower on aversive personality traits than males (e.g., Muris et al., 2017; Schmitt et al., 2017). These differences are, on the one hand, explained by biological factors—e.g., genetic dispositions or prenatal experiences (Schmitt et al., 2017). On the other hand, social factors (e.g., differences in socialization, gender roles, gender stereotypes, or the balance of power between males and females in a society) account for gender differences in dark personality traits (Schmitt et al., 2017), as the rewards and punishments for exhibiting aversive behaviors are not the same for men and women, but typically favor the former and punish the latter (Landay et al., 2019). Therefore, we expect that males show higher levels of "dark" personality than females (H1).

Second, the relationship between (politicians') aversive personality and age lacks coherence. Nai and Martínez i Coma (2019) found that younger populist leaders score somewhat higher on narcissism than older can-

didates. In contrast, there was no relationship between psychopathy and Machiavellianism. However, from the perspective of personality development, we can expect that aversive personality traits should be negatively correlated with age since older individuals are better able to regulate their emotions (Carstensen et al., 2003) and therefore tend to be more agreeable (Chopik & Kitayama, 2018; Roberts et al., 2006). Consistent with this increase in "psychological maturity" (Roberts et al., 2006, p. 3; as well as because people adjust their life history strategy over the course of their lives in response to perceived changes in the degree of unpredictability of their environment [Hartung et al., 2022] and that prosocial behavior becomes more beneficial as people assume more "stable" social roles [Roberts & Wood, 2006]) socially aversive personality traits have been shown to decrease with age (Hartung et al., 2022; Klimstra et al., 2020). Therefore, we expect a negative relationship between "dark" personality and age (H2).

Third, Nai and Martínez i Coma (2019) report that incumbent populist candidates show higher levels of Machiavellianism, narcissism, and psychopathy than challengers. Furthermore, there is evidence that personality traits influence the decision to run for office (Scott & Medeiros, 2020) as well as electoral success (Joly et al., 2019; Scott & Medeiros, 2020). Among aversive personality traits, Machiavellianism and narcissism are positively related to political success (Blais & Pruysers, 2017). The findings from the political sphere are confirmed by studies from the business world, which show that psychopaths are more likely to hold leadership positions or be perceived as leaders (Landay et al., 2019). The correlation between aversive personality and political success could be due to two reasons: On the one hand, individuals with dark personality traits score high on social values that are relevant for obtaining leadership positions. In particular, dark personalities consider achievement (e.g., success, ambition) and power (e.g., authority, wealth) as important goals (Kajonius et al., 2015). On the other hand, individuals with higher levels of aversive personality exhibit certain skills that are useful for success. For instance, psychopaths are described as "calm and focused in situations involving pressure or threat" (Patrick et al., 2009, p. 926). Therefore, we expect that incumbents self-report a higher level of aversive personality than challengers (H3). Furthermore, we expect that candidates scoring high on aversive personality have a higher likelihood of being elected (H4).

Fourth, there is evidence that aversive personality is positively correlated with left-right ideological placement, i.e., more conservative politicians show higher levels of "dark" personality (Nai & Maier, 2020; Nai & Martínez i Coma, 2019). This finding matches the result that conservative politicians show lower levels of agreeableness than liberals (e.g., Caprara & Vecchione, 2017, p. 224; Dietrich et al., 2012; see also Schumacher & Zettler, 2019). One explanation for the finding that the left–right placement of politicians is positively correlated

with their level of dark personality is that conservative beliefs are linked to social dominance (e.g., Van Hiel & Mervielde, 2002). Social dominance, in turn, is positively associated with psychopathy, narcissism, and Machiavellianism (Jones, 2013). Subjects scoring high on social dominance tend to have a "'social Darwinist' view of the world," i.e., "a view of the world as a ruthlessly competitive jungle in which the strong win and the weak lose" (Duckitt, 2006, p. 685). Therefore, we expect that left-leaning (right-leaning) politicians self-report lower (higher) levels of aversive personality (H5).

Finally, several studies reported a link between aversive personality and extreme political attitudes, extreme (intended) political behavior, or preference for left- or right-wing political parties among citizens (for an overview, see Pavlović & Wertag, 2021). However, the reasons for this relationship are not clear yet. Different traits considered as "dark" might explain this link, for instance, "feelings of being treated unjustly, intolerance to frustration, hostile reactions to perceived provocation and discrimination, depreciation and dehumanization of the victims" (narcissism); "detachment from conventional morality and search for power, control, and authority" (Machiavellianism); "impulsivity, low empathy and callous disregard of others" (psychopathy); or "the feeling of pleasure derived from dominance and suffering of others" (sadism; Chabrol et al., 2020, p. 158). Although to the best of our knowledge, there is no empirical evidence on the relationship between political extremism and dark personality traits in politicians, we nevertheless assume the correlation to be similar to that of the general public. Therefore, we expect politicians who self-report an extreme ideological position to exhibit higher levels of aversive personality (H6).

3. Research Design

3.1. Data

Our analyses are based on post-election surveys of candidates running in six state elections in Germany in 2021 and 2022: Baden-Wuerttemberg, Berlin, Mecklenburg-Western Pomerania, Rhineland-Palatinate, Saxony-Anhalt (all 2021), and Saarland (2022). Data were collected using a mixed mode. Data collection began the day after election day and ended two months later. Approval of the Institutional Review Board (IRB) was obtained prior to data collection (the GESIS ethics committee approved the study on 27 November 2020, Reference No. 2020–6). All candidates (including candidates running for smaller parties in the 2021 elections) were invited to participate. Candidates that provided an email address in their professional contact details online were invited to participate via an online link to our survey (Baden-Wuerttemberg: 81.4%; Berlin: 56.6%; Mecklenburg-Western Pomerania: 65.0%; Rhineland-Palatinate: 66.8%; Saxony-Anhalt: 58.5%; Saarland: 52,1%). All candidates without a publicly

available email address were invited by regular mail, including a paper-and-pencil questionnaire and a return envelope. They were also provided with a personalized link in case they preferred to answer the survey online. Since many candidates in state elections can rely on campaign or office staff if they are already members of parliament, we explicitly asked candidates in the invitation letter to complete the questionnaire themselves. From the initial 3,842 candidates contacted (Baden-Wuerttemberg: 824; Berlin: 1,116; Mecklenburg-Western Pomerania: 434; Rhineland-Palatinate: 788; Saxony-Anhalt: 423; Saarland: 257), 43.5% participated in the study (minimum 35.0%, maximum 59.5%). Note that there are no significant differences in social and political profile between participants and non-participants except for incumbency (i.e., incumbents participated significantly less often in the survey; see Table C1 of Appendix C in the Supplementary File). For our analyses, we excluded 41 candidates who rushed through the (online) survey by employing the procedure to filter out speeders described by Leiner (2019). This resulted in N = 1,632 valid cases (Baden-Wuerttemberg: 473; Berlin: 382; Mecklenburg-Western Pomerania: 158; Rhineland-Palatinate: 354; Saxony-Anhalt: 151; Saarland: 114).

One-third (33.3%) of the participants were female. The average age was 45.3 years (SD = 13.7 years). Data for gender and age is based on the information of the state returning officer (*Landeswahlleiter*). The IRB approval covers linking candidates' survey responses with external sources; these linking possibilities were explicitly mentioned to the candidates in the informed consent. The ideology of the sample was slightly skewed to the left (M: 4.72/1–11, SD: 2.18); 12.3% of the candidates who participated in our surveys ran for the Christian Democrats (CDU), 12.2% for the Social Democrats (SPD), 12.1% for the Green Party (Bündnis 90/Die Grünen), 8.6% for the Left Party (Die Linke), 11.5% for the Liberal Party (FDP), 5.2% for the Alternative for Germany (AfD), and 38.1% for smaller parties not (yet) represented in the parliament. On average, participants took 17 minutes and 45 seconds (SD = 325 s) to complete the questionnaire (information only available for the online questionnaires).

3.2. Measures

3.2.1. Dependent Variable

Aversive ("dark") personality was measured by the PEAPS (Maier et al., 2022; for more information on the development of psychometric characteristics, see Appendix A in the Supplementary File). The scale is a six-item short scale developed specifically to measure the self-reported aversive personality of politicians and aims to reflect the "dark factor of personality" suggested by Moshagen et al. (2018). We have described the development and psychometric characteristics of the scale in

detail elsewhere (Maier et al., 2022). The scale includes the following items (in parentheses: represented facets of aversive personality): "There have been times when I was willing to suffer some small harm so that I could punish someone else who deserved it" (spitefulness); "It's wise to keep track of information that you can use against people later" (Machiavellianism); "There are things you should hide from other people to preserve your reputation" (Machiavellianism); "I insist on getting the respect I deserve" (narcissism); "I want my rivals to fail" (narcissism); "People who mess with me always regret it" (psychopathy). Consistent with the concept of the dark core of personality (Moshagen et al., 2018, 2020), the number of traits represented by PEAPS goes beyond the dimensions proposed by the dark triad (i.e., narcissism, psychopathy, and Machiavellianism; see Jones & Paulhus, 2014). All items were measured on a five-point Likert scale from 1 (*do not agree at all*) to 5 (*fully agree*), with only the endpoints of the scale verbalized. Reliability of the scale is Cronbach's $\alpha = 0.67$.

Obviously, asking politicians about their (aversive) personality traits is not without challenges. First, social desirability might cause candidates scoring high on dark personality traits to not participate in our survey or not reveal their "true" personality. Although candidate studies that have surveyed basic personality traits using the five-factor/big five framework or the HEXACO inventory suggest that politicians attribute more socially desirable characteristics to themselves, the observed bias does not appear to be excessively strong, at least not stronger than in citizen samples (Schumacher & Zettler, 2019). Indeed, it is unclear what qualities the politicians themselves consider desirable; they may consider high self-esteem, tactical skill, and a certain ruthlessness to be prerequisites for real success in the political arena (Schumacher & Zettler, 2019). In line with this consideration, some studies report that politicians score lower than ordinary citizens on some personality traits intuitively rated as socially desirable (e.g., Best, 2011). Second, it is difficult to motivate politicians to answer questions about socially less tolerated characteristics; the risk that they will stop answering the questionnaire is high, particularly if the number of questions is very high (as this is often the case for personality measures). However, by using the presented short scale, we try to minimize these problems.

3.2.2. Independent Variables

To assess the social profile of candidates, we use gender (0 = male, 1 = female) and age, both stemming from data of the state returning officer. Political profile is measured first by whether a candidate was an incumbent, i.e., whether a candidate was a member of parliament before the election (0 = no, 1 = yes), and second by electoral success. This information was also taken from the state returning officer. Furthermore, ideology is measured by the candidates' self-reported left–right posi-

tion (11-point scale from 1 *left* to 11 *right*). Ideological extremism is measured on a six-point scale from 0 *moderate* to 5 *extreme*, obtained by folding the left–right variable on itself.

3.2.3. Controls

Several meta-studies have investigated the correlations between basic personality traits, measured via the big five framework or the HEXACO inventory, and aversive personality traits, both at the citizen level (e.g., Moshagen et al., 2018; Muris et al., 2017; O'Boyle et al., 2015; Schreiber & Marcus, 2020) but also among politicians (Nai, 2019a, 2019b, 2022; Nai & Martínez i Coma, 2019; Nai et al., 2019; Nai & Toros, 2020; Simonton, 1988). The most consistent patterns exist for agreeableness and, to a somewhat lesser degree, conscientiousness (for both negative correlations with dark personality). We use the 24-item brief HEXACO inventory (De Vries, 2013; Schumacher & Zettler, 2019) to assess basic personality traits. Please note that two items to measure the honesty-humility trait were slightly modified to reduce the risk that politicians stop answering the questionnaire (see Table B1 of Appendix B in the Supplementary File). Furthermore, we have omitted the item "*Ich bin selten aufgeregt*" ("I am seldom cheerful") from the index for extraversion because, contrary to expectations, it correlated negatively with the scale. The reliability values for the HEXACO traits are quite low (e.g., Bakker & Lelkes, 2018; honesty–humility: $\alpha = 0.40$; emotionality: $\alpha = 0.40$; extraversion: $\alpha = 0.61$; agreeableness vs. anger: $\alpha = 0.41$; conscientiousness: $\alpha = 0.50$; openness for experience: $\alpha = 0.46$). One factor that might explain this is that short scales use only a few items for each trait, which in turn measure only a small subset of the characteristics of their subdimensions.

Furthermore, we control for the mode of participation (online vs. paper-and-pencil) and the different elections.

4. Results

Figure 1 shows the distribution of the candidates' self-reported aversive personalities. The distribution almost follows a normal distribution; however, the distribution is slightly skewed to the left, indicating that the average candidate scores somewhat below the mean of the scale. In fact, the mean is $M = 2.50$ ($SD = 0.70$), reflecting a moderate level of "dark" personality among politicians. Compared to the study by Nai (2022), who reported a mean score for top politicians worldwide, we find somewhat lower levels of aversive personality. However, it is unlikely that general social desirability is at play here. Compared to the findings of Bader et al. (2021), who analyzed a German student sample using the D-16, the D-35, and the D-70 scales representing the dark core of personality, the average level of aversive personality reported by politicians is about 0.5–0.7 scale points *higher*.
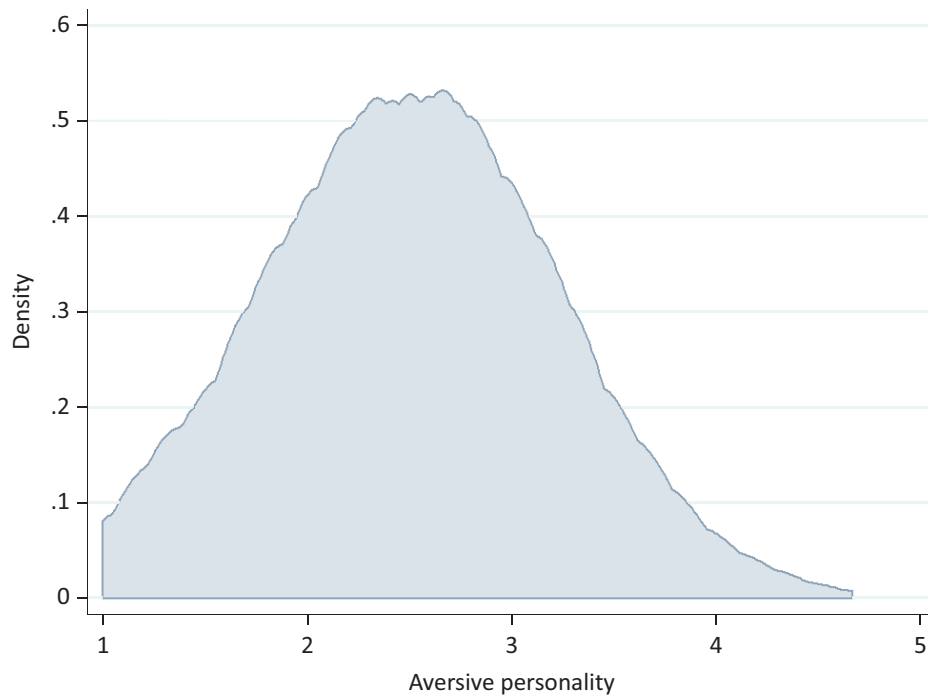
Figure 1. Kernel density plot of self-reported aversive personality traits. Notes: N = 1,441 candidates; Kernel Epanechnikov bandwidth = 0.20.

Can we explain the variation in aversive personality between candidates with their social and political profiles? Model 1 in Table 1 shows that the variables included in our regression model explain only 4.9% of the variation in "dark" personality. Age (b = −0.007, $p < 0.001$), ideology (b = 0.070, $p < 0.001$), and extremism (b = 0.056, $p < 0.001$) are the most powerful predictors of aversive personality traits. Female (b = −0.087, $p < 0.05$)

Table 1. Prediction of self-reported dark personality traits of politicians.

	Model 1		Model 2	
	b	SE	b	SE
Adjusted R^2	0.049		0.270	
Gender	−0.087*	(0.040)	−0.041	(0.038)
Age	−0.007***	(0.001)	−0.005***	(0.001)
Incumbent	0.057	(0.085)	−0.011	(0.076)
Electoral success	−0.127*	(0.060)	−0.025	(0.054)
Ideology	0.070***	(0.012)	0.047***	(0.010)
Extremism	0.056***	(0.016)	0.034*	(0.014)
Honesty–humility			−0.388***	(0.030)
Emotionality			−0.010	(0.025)
Extraversion			−0.049	(0.026)
Agreeableness vs. anger			−0.314***	(0.028)
Conscientiousness			0.023	(0.026)
Openness to experience			0.035	(0.027)
Participation: Paper and pencil			−0.062	(0.042)
Rhineland-Palatinate			0.043	(0.046)
Saxony-Anhalt			0.004	(0.061)
Berlin			0.046	(0.047)
Mecklenburg-Western Pomerania			0.082	(0.069)
Saarland			0.043	(0.070)
Constant	2.549***	(0.115)	5.200***	(0.232)
N	1,321		1,320	

Notes: Displayed are unstandardized coefficients of an OLS regression; SE stands for standard error; significance levels: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

and successful (i.e., elected) candidates (b = −0.127, p = 0.05) exhibit significantly lower levels of aversive personality traits. Finally, incumbency (no support for H3) is not significantly correlated with aversive personality.

Not surprisingly, the adjusted R^2 increases sharply when basic personality traits are added, suggesting that aversive personality traits are strongly related to more general personality traits measured via the HEXACO inventory (M2 in Table 1). Bivariate analyses show that the self-reported aversive personality traits are meaningfully correlated with some traits of the HEXACO inventory. We find significant negative correlations with honesty–humility ($r(1,440)$ = −0.42, $p < 0.001$), agreeableness vs. anger ($r(1,441)$ = −0.38; $p < 0.001$), extraversion ($r(1,441)$ = −0.12, $p < 0.001$), and conscientiousness ($r(1,440)$ = −0.10, $p < 0.001$). In contrast, the PEAPS scale is uncorrelated with emotionality ($r(1,440)$ = 0.04, $p > 0.05$) and openness for experience ($r(1,441)$ = −0.04, $p > 0.05$).

More relevant for our research question, however, age (supporting H2), ideology (supporting H5), and extremism (supporting H6) still significantly predict aversive personality after controlling for basic personality traits, the mode of participation, and the different elections (see Model 2 in Table 1). The likelihood of reporting an aversive personality significantly decreases with age. The predicted difference between a candidate aged 20 and 80 is about 0.30 scale points (Figure 2). In addition, the likelihood of aversive personality traits significantly increases the more candidates describe themselves as ideologically right-leaning. The predicted difference between a candidate from the far-left and the far-right is about half a scale point (Figure 3). Furthermore, the likelihood of an aversive personality increases with an extreme ideological position. The predicted difference

between a moderate and an extreme candidate is somewhat lower than one-fifth of a scale point (Figure 4). There is no interaction between ideology and extremism, suggesting that it is not right-wing extremism that specifically correlates with dark personality (see Table D2 of Appendix D in the Supplementary File). However, gender (no support for H1) and electoral success (no support for H4) become insignificant after controlling for the HEXACO traits. Our model does not suffer from multicollinearity (see Table D1 of Appendix D in the Supplementary File).

5. Summary and Conclusion

An increasing number of studies examine politicians' personalities based on the assumption that personality, among other factors, can make an important contribution to understanding the behavior of politicians. Socially aversive—but not pathological—personality traits are held responsible for behavior that violates generally accepted ethical, moral, and social norms and thus can threaten democracy. We contribute to this emerging line of research by analyzing *self-reported* aversive (or "dark") personality traits of candidates running for German state parliaments.

Our results suggest that candidates, on average, have moderate levels of aversive personality traits. The level found in our data is somewhat lower than that reported for top politicians (Nai, 2022) but clearly higher than for citizen samples. This suggests that social desirability is not a severe problem in our case, which is consistent with other research measuring self-reported personality traits in politicians (Best, 2011; Schumacher & Zettler, 2019). This makes sense intuitively as it is unclear what qualities politicians themselves consider desirable; they
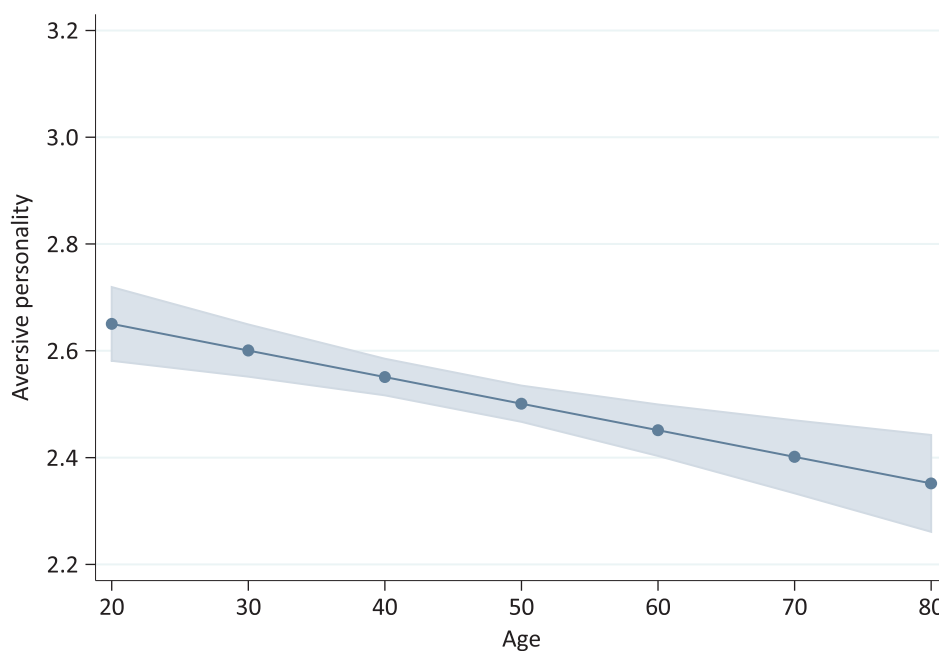

Figure 2. Predicted margins of age on aversive personality with 95% confidence intervals based on M2.
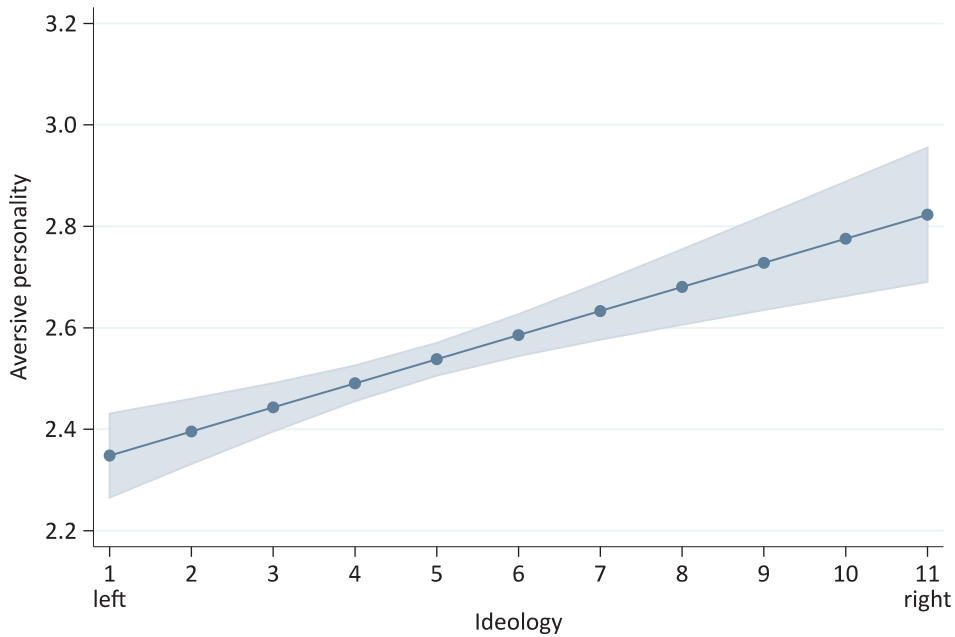
Figure 3. Predicted margins of ideology on aversive personality with 95% confidence intervals based on M2.
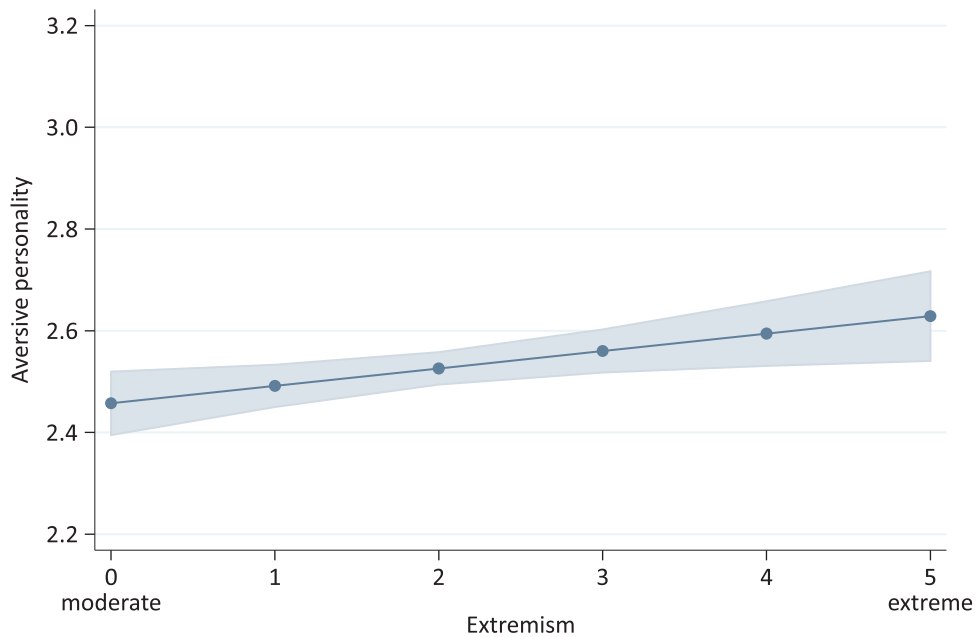

Figure 4. Predicted margins of ideological extremism on aversive personality with 95% confidence intervals based on M2.

may consider high self-esteem, tactical skill, and a certain ruthlessness to be prerequisites for real success in the political arena (Schumacher & Zettler, 2019). Although we have no direct empirical evidence that our data suffer from social desirability, the extent of dark personality among politicians that we report could nevertheless be a conservative estimate. This is supported on the one hand by the fact that aversive personality is associated with extreme ideology and—even more strongly—with self-positioning as ideologically right, and on the other hand by the fact that candidates from CDU and AfD, i.e.,

parties ideologically on the right (Dippel & Burger, 2022), participate less frequently in our surveys (see Table C1 of Appendix C in the Supplementary File).

In addition, we find that the candidates' social and political profiles predict their self-reported level of "dark" personality. Aversive personality traits are significantly more likely for younger candidates, those who classify themselves as conservative, and the ideologically extreme. In contrast, we do not find differences between male and female candidates, incumbents and challengers, and those who have won a seat in the

parliament and those who have not. The results suggest that candidates with a high level of aversive personality are not more successful per se than less "dark" politicians. Our results further indicate that candidates with certain ideological positions (i.e., right-wing candidates, politically extreme candidates) are more likely to show aversive personality traits. At a time when polarization (i.e., the strengthening of the political fringes) is advancing, it is increasingly likely that "dark" candidates will enter the political arena. They might not be successful on election day, but they can, of course, harm the political process if their communication which is more likely to be negative, uncivil, populist, or based on fake information, attracts the media (e.g., Maier & Nai, 2020; Maurer et al., 2022), and a particular segment of voters (Nai & Maier, 2021b). Moreover, our results suggest that age predicts aversive personality traits. The average age in the federal parliament has decreased in the current legislative term (Feldkamp, 2022; information for state parliaments is unfortunately unavailable); hence, it is expected that the proportion of "dark" politicians has thus increased. Finally, our results show that aversive personality traits are meaningfully correlated with basic personality traits. Higher levels of "dark" personality go hand in hand with low agreeableness (vs. anger), low honesty-humility, and low extraversion.

Our approach comes with some limitations that open potential for future studies. First, our study focuses on German politicians. Comparative research is warranted to see whether there are differences concerning the distribution and the correlates of aversive personality traits in other countries. Second, our study is based on candidates running for German state parliaments. It would be interesting to compare our results with members of the national parliament. Third, our data only provide information on a limited number of candidate characteristics. Hence, future studies should include more variables to get a better picture of what predicts the level of aversive personality traits among political elites. Fourth, although we asked politicians to complete the questionnaire themselves, we have no way of verifying whether they did so. It could be that, in some cases, the survey was conducted by their staff. Fifth, the reliability of the scales we use is not particularly high. This is less true for PEAPS, which has sufficient reliability, than the HEXACO traits. One factor that might explain this is that short scales use only a few items for each trait, which in turn measure only a small subset of the characteristics of their subdimensions. Sixth, the focus of our study was limited to the distribution and the correlates of aversive personality traits. It would be very interesting to analyze the consequences of a "dark" personality, for instance, regarding candidates' campaign communication or, once in office, their policy accomplishments. Finally, we can only make very few comparisons between political elites and the population. However, with regard to questions of descriptive representation, representative surveys on the distribution and determinants of "dark" personality in the electorate would be very important. Our article and the short scale used to measure the core of aversive personality traits set the stage for such research.

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Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the authors (unedited).

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