The dark side of the mood. Candidate evaluation, voter perceptions, and the driving role of (dark) personality traits

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ABSTRACT

Voter perceptions of leadership traits impact overall candidate evaluations. Less is however known about the impact of candidates' personality traits, and especially the "darker" ones (narcissism, Machiavellianism, psychopathy), above and beyond the structuring role of partisan attitudes. We present a multi-method approach combining an experimental design and a post-electoral survey on the 2020 US Presidential election. Survey data (study 1) shows that perceived personality affects candidate evaluation beyond partisanship. Experimental evidence (study 2) confirms a causal relationship between candidate personality and subsequent evaluation: exposure to a negatively (positively) framed candidate personality reduces (increases) candidate likeability. Moreover, exposure to candidates scoring higher on the dark traits is more impactful than exposure to candidates scoring lower on those same traits. Across both studies, the results highlight the relevance of dark triad personality traits for candidate favorability, and the existence of asymmetric effects for politicians scoring higher vs. lower on dark traits.

"There is no dark side in the moon, really. Matter of fact, it's all dark."

1. Introduction

Across the world, political figures with "dark" personality traits - antagonistic, callous, self-aggrandizing, cunning, and generally promoting an uncompromising approach to politics - seem to be having a moment, from Trump to Putin, Bolsonaro, Duterte, Erdoğan, and more. Yet, while research has investigated the personality profile of selected politicians (e.g., populists; Nai and Martinez i Coma, 2019), or the preferred personality of political figures from the voters' standpoint (Aichholzer and Willmann, 2020), a general account of the electoral dynamics of dark personality remains elusive. Beyond the electoral success (or lack thereof) of darker politicians (Nai, 2019), a blind spot in the literature concerns more specifically how such politicians are perceived and evaluated by the public at large. To what extent are dark politicians liked, or disliked, by the electorate?

Answering this question poses two important challenges. First, partisanship is a strong predictor of candidate evaluations, which makes it difficult to estimate any independent effect of a candidate's personality. Second, and related, personalities are complex and may be perceived differently across individual voters, which complicates measuring the 'real' effect of politicians' personalities. Our paper addresses these challenges by conducting two interrelated studies, which test the same theoretical assumptions concerning the linear relationship between dark personality and candidate evaluations alongside a potential negativity bias – that is, a stronger influence of negative over comparable positive information (e.g., Lau 1982; Soroka, 2014). In a nutshell, study 1 leverages observational evidence from the 2020 US Presidential election (N = 1,064) to investigate the relationship between voters' partisan attitudes, perceived (dark) personality of the two main candidates (Trump and Biden), and candidate evaluation. Building on results in study 1, study 2 discusses evidence from a survey conducted with American voters (N = 1,330), in which we experimentally

manipulated the personality traits of a fictive candidate, and, in absence of explicit partisan cues, assessed whether respondents liked the candidate.

Study 1 shows that partisanship does, unsurprisingly, condition how voters assess the personality of candidates, but that personality assessments drive candidate evaluations even when controlling for partisan attachments. In turn, study 2 confirms that the public at large generally dislikes dark personality traits, and that the (negative) effect of dark traits on candidate evaluation is comparatively stronger than the (positive) effect of more socially desirable personality profiles. Moreover, through assessing both a direct and an indirect effect (via perceptions) of candidate (dark) personality on candidate evaluations, we show that voter perceptions, such as used in study 1, are valid shortcuts for estimating personality effects on voter assessment.

This manuscript contributes to the literature in at least three important ways. First, it builds on research focusing on "undesirable" dark personality traits in politicians (narcissism, psychopathy and Machiavellianism). While the topic has received increased attention in recent years (e.g., Sendinc and Hatemi, 2023; Hart et al., 2018; Nai and Maier, 2024), it remains nonetheless an area that is largely unexplored in relative terms, compared to the wealth of knowledge we have about so-called desired leadership traits, such as competence, integrity, empathy and decisiveness (e.g., Aaldering and Vliegenthart, 2016; Bittner, 2011; Funk, 1999; Kinder et al., 1980). Second, it expands our knowledge on the negativity bias hypothesis, presenting novel evidence of its relevance for undesirable, negatively charged personality traits. Third, this study shows that a candidate's (perceived) personality affects voters above and beyond partisanship, which is strongly endogenous to candidate evaluations (e.g., Aaldering et al., 2018; Garzia, 2012; Page and Jones, 1979).[1]

2. Dark personality traits and candidate evaluation

A long line of research has shown that *candidate evaluations*, oftentimes effectuated through media coverage or campaigns (e.g., Aaldering, 2018; Aaldering et al., 2018; Bos et al., 2011; Gattermann and Marquart, 2020; Gattermann et al., 2017), impact voters' party preferences (Garzia et al., 2020; Kinder, 1986; Ferreira Da Silva and Costa, 2019). Perceptions of the characteristics of a politician are used as a heuristic for the overall perception of the politician (Greene, 2001; Ohr and Oscarsson, 2013). There is a lively scholarly debate about which traits (or better: trait dimensions) are important for candidate assessments. Voters can potentially rely on a vast array of aspects connected to the candidate's personality. However, existing evidence supports the idea that voters think about candidates "in terms of a limited number of broad categories rather than in terms of a multitude of discrete traits" (Miller et al., 1986: 528). According to Bittner (2011) voters' appraisal of candidates' personality is based on just two encompassing politically relevant traits: competence and character.[2]

As a common denominator, the existing literature on trait-typologies focuses on *desirable* characteristics of politicians that are related to how well they perform as a politician. The normative ideal-type of politicians suggest, for instance, that politicians ideally should be competent, empathic, decisive and honest. Thus, voters' positive perceptions of candidates on these traits have a positive effect on their candidate evaluation, while violations of such political prototypes tend to yield less favorable candidate evaluations (e.g., Aaldering et al., 2018; Bittner,

2011; Ferreira Da Silva and Costa, 2019).

However, by focusing on politically relevant leadership traits of politicians, the candidate evaluation literature largely overlooks the possible influence of psychological personality traits of politicians. Thus, little is known about the impact of a politician's perceived personality on voters' attitudes and behavior, although the former likely affects candidate evaluations, just as perceived character traits (Caprara and Vecchione, 2017; Roets et al., 2009). Not considering the personality of the politicians, thus, provides an incomplete picture of the way voters assess candidates.

Existing research that does explore (the impact of) politicians' personality almost exclusively focuses on the "socially desirable" traits within the Big Five inventory -extraversion, agreeableness, openness to experience, emotional stability, and conscientiousness. The focus on these traits stems from a long tradition of research in cognitive, social, and personality psychology about individual differences in the lay public (e.g., Gerber et al., 2011); applied to political figures, it broadly reflects two complementary ideas: (i) some traits are "preferred" by the public because they reflect traits that voters like to see in their elected leaders (for instance, someone who is "extremely competent, extremely high in character, quite composed and sociable, [and] slightly extroverted" (Heixweg 1979: 373), and (ii) some traits are associated with better job performance (e.g., extroversion; Judge et al., 1999), and should thus be particularly adaptive in politics.

While this literature includes results that indirectly suggest that the darker side of personality might play are role as well – for instance, evidence exists that politicians *low* on agreeableness reach more prestigious positions and are more effective in passing legislation (Joly et al., 2018; Ramey et al., 2017) – a specific and systematic focus on dark traits is mostly absent from the literature, but see, e.g., the work by Blais and Scott (2017) on nascent political ambition, or the work by Nai and Maier (2020) on dark candidates and the use of negative and uncivil campaigns. Yet, there are strong reasons to believe that *darker* aspects of a politician's personality are equally relevant - most notably, the three traits within the *Dark Triad* (Moshagen et al., 2018; Paulhus and Williams, 2002): *narcissism* (bombastic ego-reinforcing behaviors, self-promotion, tendency to seek prestige or higher status), *psychopathy* (callousness, lacking remorse, insensitivity, cynicism, and the tendency of not being concerned with the morality of one's own actions), and *Machiavellianism* (tendency to manipulate others and adopting cunning and strategic behaviors, calculating mindset, propensity for lies and deceit). Dark personality traits have been shown to influence the success (or lack thereof) of political leaders once in office. For instance, grandiose narcissism in US presidents is associated with greater public persuasiveness and a composite index of "presidential greatness", but also with a higher incidence of impeachment resolutions and unethical behaviors (e.g., Watts et al., 2013). There is consistent evidence that psychopathy can be an adaptive trait in business (Babiak and Hare, 2006), mostly because individuals high in psychopathy have the "capacity to remain calm and focused in situations involving pressure or threat" (Patrick et al., 2009, p. 926) and as such can be seen as intelligent and skilled (Furnham et al., 2009). At the same time, strong evidence also exists that a harsher persona is detrimental in political leaders, for instance in terms of more confrontational relationships with the legislative branch (e.g., Simonton, 1988). Narcissism is linked to overconfidence, deceit, and incapacity to learn from past mistakes (Campbell et al., 2004), which are unlikely to be particularly appreciated by voters. Indeed, some evidence exists that voters negatively evaluate candidates that display excessive levels of "overt positive self-description" (Schütz, 1998). Psychopathy is associated with a harsher approach to politics and more negative and uncivil campaigns (Nai and Maier, 2020), which tend to be disliked by the public at large as well (Fridkin and Kenney, 2011). And Machiavellianism is associated with low levels of integrity, trustworthiness and empathy (Silvester et al., 2014), which is unlikely to positively affect voters' perception of a candidate. Although there is research that shows the relevance of dark

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[1] OSF repository for replication materials : https://osf.io/tgzjx/.

[2] When it comes to the relationship between politically relevant traits and candidate feeling thermometers, existing research shows that the former contribute in a varying manner to overall evaluations on the thermometer scale. Depending on the context and the study, thermometer evaluations can be shaped more strongly by either competence (Funk, 1999) or character (Garzia, 2017).

personalities in politics, the *direct impact* of dark personality traits on overall candidate evaluations has not yet been tested. Contrasting to the typologies of desirable leadership traits, dark personality traits can be expected to be generally *undesirable*. Therefore, we expect that politicians (who are perceived to be) scoring high on these dark personality traits, thereby violating the social norms of political prototypes, are punished by voters in candidate evaluations (H1), while candidates that score low on these traits are rewarded with better evaluations (H2).

3. Positive-negative assymmetry in candidate evaluation

Psychological research has demonstrated the existence of a positive–negative asymmetry effect in general impression formation, according to which negative stimulus or information about an individual outweighs the impact of positive stimuli in impression formation (for an extensive review, see: Baumeister et al., 2001). According to information processing (Newell and Simon, 1981) and attribution theories (Kanouse and Hanson, 1972), as most information received on others is positive, rarer negative information "would have a greater value to a decision-maker than would positive information" (Gant and Davis, 1984: 275). Individuals tend to pay more attention to (Marshall and Kidd, 1981) and spend more time thinking about negative stimuli than positive stimuli (Abele, 1985; Fiske, 1980). This asymmetry transpires to individual memory as well, as subjects tend to more frequently remember negative than positive behaviors (Ybarra and Stephan, 1996), as well as traits (Pratto and John, 1991). Additionally, experimental evidence shows that subjects exposed to negative traits deviate farther from the mean than subjects exposed to equally strong positive, or mixed, stimulus (Anderson, 1965).

The implications of such positive-negative asymmetry for political behavior remained largely unexplored until the 1980s. The greater weight given to negative information compared to equally extreme and equally positive information in a variety of information-processing tasks has been described in Lau's studies (1982) as a "negativity effect" on voters' impression formation of presidential candidates, as well as on vote choice and turnout in American presidential elections. In line with this, scholars showed that the impact of negative leadership trait evaluations generally appears greater than positive leadership trait evaluations (e.g., Ohr and Oscarsson, 2013; Soroka, 2014). However, others showed an opposing trend: positive character trait evaluations affect voters more strongly in their candidate evaluation or voting behavior than negative ones (Aaldering et al., 2018; Aarts and Blais, 2013). So, although there are theoretically strong reasons to expect that *desirable* traits follow the logic of the negativity bias, the empirical evidence is mixed.

Little is known about the asymmetrical responses to information about candidates' *undesirable* traits. However, as the Dark Triad personality traits are inherently negatively charged, the negativity effect should be even more pronounced. After all, if psychological mechanisms affect humans more strongly when failing instead of succeeding on a characteristic we desire in a leader, this process is likely to be exacerbated for characteristics we do not desire in a leader. Thus, (perceived) high scores on dark personality traits should affect candidate evaluations more strongly than (perceived) low scores on the same traits (H3).

4. Partisanship and candidate evaluation

Traditional analyses of vote choice have customarily relied on the concept of party identification, which is conceived as "the individual's affective orientation to an important group object in his environment" (Campbell et al., 1960: p. 121). According to the normal vote model (Converse, 1966), such orientation is rooted in early socialization and based on primary group memberships. On these bases, party identification is supposed to because (but not consequence) of less stable attitudes and opinions about, e.g., candidates. However, more recent analyses have cast doubts on the supposed stability of party

identification, and showed that partisan ties are responsive to those short-term forces that they were thought to cause (e.g., Page and Jones, 1979). This is shown, most notably, by the evaluation of Trumps character: liberals and conservatives are strongly at odds about how they perceive the character and personality of their President (Fiala et al., 2020; Hyatt et al., 2018). Because partisanship also strongly drives candidate assessments, the overarching role of partisan identification muddles the investigation of the impact of candidate perceptions on voting behavior, although attempts have been made to disentangle these, for instance by taking an instrumental variable approach (Garzia, 2012) or by considering exogenous mediated leader effects (Aaldering, 2018; Aaldering et al., 2018; Gattermann et al., 2017). This study scrutinizes the extent to which (perceived) candidate dark personality traits affects candidate evaluations in conjunction to partisan considerations, by examining the interplay between partisanship, perceived evaluation of dark personality in candidates and overall candidate evaluations (study 1) and by testing the (indirect) effects of (perceived) dark personality characteristics on candidate evaluation for independent candidates (study 2).

5. Study 1

Study 1 seeks to gather initial evidence of the extent to which (perceived) candidate dark personality influences candidate evaluations through observational data. In line with our theoretical framework we describe the interconnection between partisanship and personality perceptions of the two presidential candidates running in the 2020 election and candidate evaluations; and the asymmetric effect of negativity (i.e., higher scores on dark triad traits) over positivity (i.e., lower scores on dark triad traits) on candidate likeability.

5.1. Data and measures

Study 1 relies on data from a post-electoral CAWI survey collected on a representative sample of the American voting population (age, gender, and macro-region of residence [East, Midwest, South, West] used as quota factors; N = 1,064) between 9 and November 29, 2020. Participants were drawn from traditional, actively managed, double-opt-in market research panels partnering with Qualtrics International Inc. Participants received an email invitation informing them about the research purpose and expected length (8–10 min).[3] No deception was involved. The resulting sample is well balanced in terms of gender (49.5% female) and partisan identification (23.2% strong Democrat, 20.9 strong Republican respondents); the average respondent is 46 years old, and rather interested in politics. Full sample composition is summarized in Table E1, Appendix E.

To measure partisan identification respondents were first asked whether they think of themselves as a Democrat, a Republican, and Independent, or if they have no preference. Those responding Democrat or Republican were then prompted to assess whether they would call themselves a strong or not a strong Democrat or Republican. Respondents who selected the other two options (independents or non-aligned) were instead asked to indicate if they feel closer to the Democrats, Republicans, or neither. The combination of these different questions yields a 7-point scale ranging from −3 (Strong Democrat) to 3 (Strong Republican).

The perceived personality of Trump and Biden was measured using the "Dirty Dozen" battery (Jonason and Webster, 2010). The battery was designed to map the dark personality traits of the public and has been used in recent studies to assess the dark personality traits of political elites (Nai and Martinez i Coma, 2019). Respondents were presented, for

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each candidate, with twelve statements that describe specific facets of the candidates' profile and asked whether they agree or disagree with such statements (e.g., "Tends to be callous or insensitive", "Tends to want others to pay attention to him", "Tends to manipulate others to get his way"), on a scale from 1 "Disagree strongly" to 5 "Agree strongly." The average scores on groups of four statements produce indexes for each of the three dark personality traits (narcissism, psychopathy, Machiavellianism). Trump scores much higher on all three dark triad traits than Biden ($M_{NarcissismTrump} = 3.99$; $M_{NarcissismBiden} = 3.26$; $M_{PsychopathyTrump} = 3.83$; $M_{PsychopathyBiden} = 2.81$; $M_{MachiavellianismTrump} = 3.7$; $M_{MachiavellianismBiden} = 2.96$). Mean-comparison tests confirm that all differences are statistically significant ($p < 0.001$).

Although in all six cases the reliability of the composite indexes is high,[4] for both candidates Principal Component Analyses (PCAs) on the twelve statements failed to extract three separate underlying traits - not unexpectedly, as "short" personality scales like the "Dirty Dozen" tend to privilege conceptual validity of the traits and cannot be expected to capture all trait nuances (Credé et al., 2012; Bakker and Lelkes, 2018). With this in mind, we have also computed a unified measure of "dark core" (e.g., Moshagen et al., 2018; Paulhus and Williams, 2002) that averages, for each candidate, their scores on the three dark traits, ranging from 1 to 5 ($M_{Trump} = 3.8$, $SD_{Trump} = 1.1$, $M_{Biden} = 3.0$, $SD_{Biden} = 1.2$). Fig. 1 illustrates, for both candidates, correlations between the three dark traits and a series of other perceived leader traits (e.g., the candidate is honest, speaks his mind, is knowledgeable; Kinder et al., 1980), and shows clearly the negative association between desirable perceived leader traits and dark personality perceptions.

Candidate evaluation for both Trump and Biden was measured using the ANES "feeling thermometer." Low scores on the 0–100 scale signal "cold" feelings and high scores "warm" ones ($M_{Trump} = 39.5$, $SD_{Trump} = 38.7$, $M_{Biden} = 49.3$, $SD_{Biden} = 35.9$). Evaluations of the two candidates are significantly and negatively correlated, $r(1062) = -0.54$, $p < 0.001$.

5.2. Results

5.2.1. Partisanship and perceptions of candidate personality

Fig. 2 plots the average score of Trump (black bars) and Biden (light grey bars) on the "dark core" (average of their perceived narcissism, psychopathy, and Machiavellianism) for respondents in the sample, grouped by party identification (7-point scale). It shows that respondents identifying as a Democrat tend to have a very critical image of Trump - that is, they score him high on the dark personality traits - but have a much more nuanced perception of Biden. The independents and Republicans, on the other hand, show a somewhat different picture: they perceive both Trump and Biden to score high on dark personality traits. The linear effect of partisanship on perceptions of Trump and Biden is statistically significant (Table A1; Appendix A).

5.2.2. Perceived personality and candidate evaluation

Table 1 regresses the score of the two candidates on the feeling thermometer (0–100) on the perceived candidate dark personality traits (unified dark core). The first two models are for Trump, the last two for Biden. In both cases the first model (respectively, M1 and M3) includes only the direct effect of perceived dark personality, whereas the second model (M2 and M4) includes the following controls: party identification, age, gender, education, region of residence, retrospective sociotropic economic assessment, interest in politics, and self-assessed Big Five personality traits (this latter using the TIPI inventory developed by Gosling et al., 2003); see Table A2, Appendix A for the operationalization of the control variables.

The table shows that perceiving the candidate as higher on the dark

personality traits is associated with a harsher overall evaluation in terms of feeling thermometer. The effect holds even after controlling for all covariates, including the all-important party identification – although it is stronger for Trump. M2 shows that for each additional value on the dark core index the thermometer score lowers by about 12 points out of 100, while the decrease for Biden is of about 9.5 points (M4).

Robustness checks show, first, that similar trends exist when estimating vote choice (binary variable opposing a declared vote for Biden to a declared vote for Trump) instead of the feeling thermometer (Table A3; Appendix A). Second, the results are also similar when running the models for each of the three dark traits separately (Tables A4 and A5; Appendix A).

5.2.3. Negativity bias

To test the asymmetric effect of negative and positive candidate perceptions, we adapt the empirical strategy employed by previous studies (Aarts and Blais, 2013; Garzia and Ferreira da Silva, 2021; Lau, 1982; Soroka, 2014), computing two separate dummy variables for each candidate tapping whether they are perceived by respondents as either scoring high or low on the core dark trait index. Accordingly, *High Dark Core* is coded 1 for all respondents reporting values in the 66–100th percentiles of the original dark core variable (dark core scores for Trump above 4.66, and for Biden above 3.49), and 0 for all other respondents. *Low Dark Core* is coded 1 for all respondents reporting values in the 0–33rd percentiles of the original dark core variable (dark core scores for Trump below 3.33, and for Biden below 2.42), and 0 for all others. Thus, individuals in the 34–65th percentile are coded 0 on both *High Dark Core* and *Low Dark Core* variables. Unlike previous studies, we chose a cut-off point criterion based on the distribution rather than on values of the answer scale (i.e., the mid-point) due to the stark differences between candidate scores on the dark triad core and to the highly skewed nature of the distribution of observations, particularly among partisans (Fig. 1).

Using the same model specification as the direct effects test above (Table 1), we replace the dark core trait variable in each candidate model with the *High Dark Core* and *Low Dark Core* variables for each candidate, respectively. In line with H1 and H2 and the previous results (Table 2), *High Dark Core* scores leads to a statistically significant decrease in the candidate feeling thermometer, whereas *Low Dark Core* scores have a positive and significant correlation with an increase in the candidate feeling thermometer, for both candidates.

For both candidates, tests for nonlinear combinations of estimators run on the models with full controls show that the difference in (absolute) magnitude between the two effects is statistically significant; $b = 19.86$, $z(930) = 5.32$, $p < 0.001$ (for Trump); $b = -13.02$, $z(921) = -3.51$, $p < 0.001$ (for Biden). Yet, asymmetric effects, that is, stronger coefficients for *High Dark Core* than for *Low Dark Core*, are only found for Donald Trump. We thus only find partial support for H3. All relationships are robust to controlling for partisanship and other relevant factors, and no issue with Variance Inflation Factors (VIF) is to be signaled in these models.

Robustness checks that estimate vote choice instead of the feeling thermometer (Table A6; Appendix A) and test for the direct effects of the three separate traits (Tables A7 and A8; Appendix A) show consistent results.

5.3. Summary

Results in Study 1 suggest that – like character-related leadership traits – assessments of Dark Triad traits are an important component of overall candidate likeability. While partisanship conditions voters' personality assessment, personality perceptions drive candidate assessments even when controlling for partisan attachments. The larger impact of negative compared to positive personality assessments appears to be dependent on the individual candidate. However, due to the observational nature of data, the causality supporting these mechanisms

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[4] Cronbach's alphas for Trump: $\alpha_{Narcissism} = 0.92$, $\alpha_{Psychopathy} = 0.94$, $\alpha_{Machiavellianism} = 0.95$; for Biden: $\alpha_{Narcissism} = 0.91$, $\alpha_{Psychopathy} = 0.95$, $\alpha_{Machiavellianism} = 0.96$.
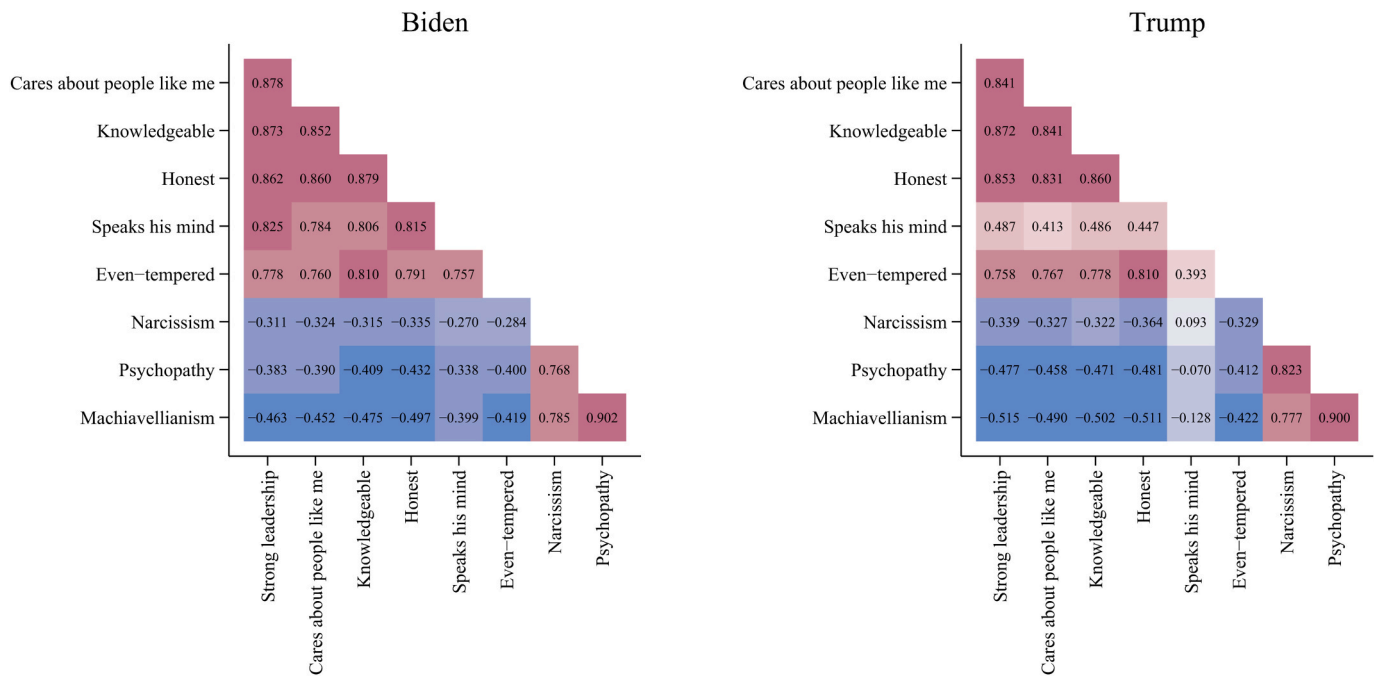
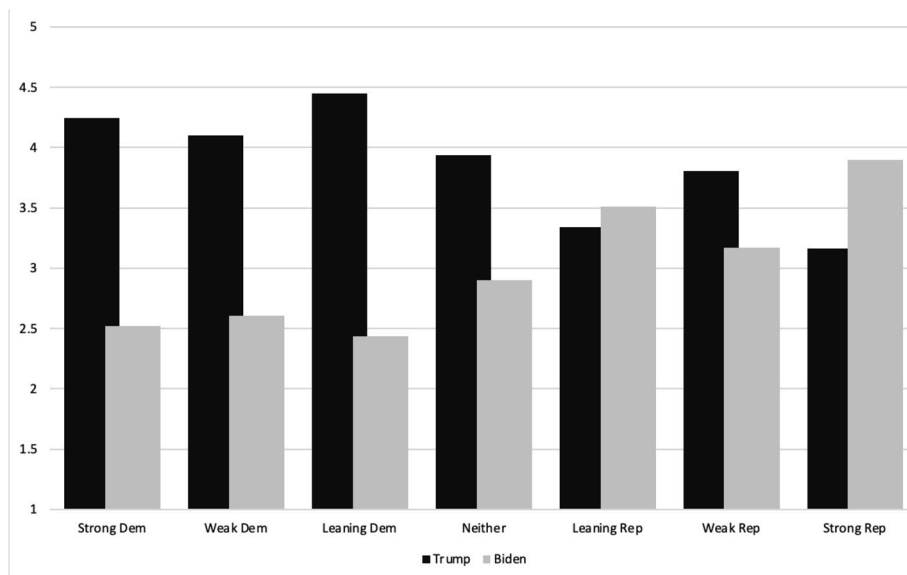**Fig. 1.** Perceived personality traits of Trump and Biden

Fig. 2. Perceived dark personality of Trump and Biden by party identification.

can only be assumed. More specifically, these findings cannot tell us whether perceived presence of dark triad personality traits affects candidate evaluation or whether prior images of Trump and Biden influence the perceived presence of dark traits. Thermometer evaluations and impressions of personality traits of candidates are closely related, correlational, and potentially reciprocal. In a comparative analysis of Italy and the US; Garzia (2017) shows that "half of the variance in thermometer scores is not explained by trait assessments. Yet […] the inclusion of partisanship/ideology in the model bears a strong effect on traits' parameter estimates without adding much to the overall explained variance, thus highlighting a strong pattern of covariance between trait perceptions and pre-existing ideological predispositions." In other terms, while study 1 shows that candidate evaluations are associated with perceived (dark) traits, the causality between the two

assessments remains an open question. This is where study 2 intervenes.

6. Study 2

Study 2 has an experimental setup in which the dark triad personality traits of fictitious candidates are manipulated to which respondents are subsequently exposed. The main goal is to establish causality and to provide a more stringent test of H3 (stronger negative than positive effects) while holding partisanship constant and eliminating pre-existing candidate impressions. Moreover, study 2 allows examining whether the impact of *exposure* to dark personality traits on candidate evaluation is mediated through *perceptions* of candidate personality to further validate the results of study 1. To what extent are the effects described in H1, H2 and H3 mediated by how respondents perceive the personality

Table 1
Feeling thermometer by perceived candidate dark core.

| | Trump | | | | | | Biden | | | | | |
| | M1 | | | M2 | | | M3 | | | M4 | | |
	Coef.	Se	sig	Coef.	Se	sig	Coef.	Se	sig	Coef.	Se	sig
Candidate Dark Core	−17.36	(0.92)	***	−12.05	(0.87)	***	−13.89	(0.83)	***	−9.48	(0.77)	***
Republican				8.79	(0.43)	***				−8.24	(0.41)	***
Age				−0.09	(0.06)					−0.04	(0.05)	
Female				0.17	(1.86)					−2.28	(1.72)	
Education				−0.50	(0.38)					0.75	(0.35)	*
Midwest				−11.85	(2.57)	***				−5.53	(2.39)	*
South				−5.82	(2.54)	*				−3.28	(2.35)	
West				−9.27	(2.55)	***				−4.88	(2.35)	*
Economic situation				−3.74	(0.85)	***				−2.27	(0.80)	**
Interest in politics				−3.00	(0.81)	***				−4.95	(0.75)	***
Extraversion				0.86	(0.98)					2.63	(0.90)	**
Agreeableness				−1.09	(1.31)					1.15	(1.21)	
Conscientiousness				−1.52	(1.21)					−5.77	(1.12)	***
Emotional stability				−0.23	(1.16)					−0.05	(1.08)	
Openness				1.03	(1.18)					−2.65	(1.09)	*
Constant	106.28	(3.67)	***	127.30	(8.69)	***	91.76	(2.69)	***	116.49	(8.48)	***
Observations	1,031			947			1,021			938		
R-squared	0.26			0.54			0.22			0.55		

In all models the dependent variable is the feeling thermometer for the candidate, and ranges between 0 "very cold" and 100 "very warm" feelings towards him.
***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1.

Table 2
Feeling thermometer by perceived candidates high/low dark core.

| | Trump | | | | | | Biden | | | | | |
| | M1 | | | M2 | | | M3 | | | M4 | | |
	Coef.	Se	sig	Coef.	Se	sig	Coef.	Se	sig	Coef.	Se	sig
High Dark Core	−38.36	(2.41)	***	−29.05	(2.25)	***	−11.48	(2.46)	***	−6.86	(2.10)	**
Low Dark Core	14.08	(2.49)	***	9.18	(2.15)	***	28.91	(2.48)	***	19.88	(2.22)	***
Republican				7.99	(0.42)	***				−8.14	(0.41)	***
Age				−0.03	(0.06)					−0.06	(0.05)	
Female				2.27	(1.79)					−2.36	(1.72)	
Education				−0.32	(0.36)					0.70	(0.35)	*
Midwest				−11.73	(2.47)	***				−5.10	(2.38)	*
South				−7.07	(2.44)	**				−3.17	(2.35)	
West				−9.32	(2.44)	***				−4.57	(2.35)	†
Economic situation				−3.14	(0.82)	***				−1.92	(0.80)	*
Interest in politics				−4.15	(0.78)	***				−4.44	(0.75)	***
Extraversion				0.76	(0.94)					2.97	(0.90)	**
Agreeableness				−0.16	(1.26)					1.12	(1.22)	
Conscientiousness				−1.03	(1.16)					−5.98	(1.12)	***
Emotional stability				−0.02	(1.11)					−0.18	(1.08)	
Openness				0.52	(1.13)					−2.95	(1.09)	**
Constant	49.51	(1.81)	***	77.79	(7.85)	***	44.21	(1.81)	***	84.12	(7.72)	***
Observations	1,031			947			1,021			938		
R-squared	0.35			0.58			0.23			0.55		

In all models the dependent variable is the feeling thermometer for the candidate, and ranges between 0 "very cold" and 100 "very warm" feelings towards him.
***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1.

traits of the candidates? Expectations and protocols for study 2 were pre-registered.[5]

6.1. Data and measures

6.1.1. Sample and sampling

On November 15, 2020, in the aftermath of the US presidential election, we fielded a survey experiment among a convenience sample of 1,408 US respondents via Amazon's Mechanical Turk crowd-sourced online data platform (MTurk).[6] The samples generated via MTurk are not representative of the US population, as the platform utilizes an opt-in protocol where participants are invited to complete small tasks against a remuneration. MTurk samples nonetheless perform reasonably well when compared to other convenience samples (Berinsky et al., 2012), and tend to mirror the psychological divisions of liberals and conservatives in the general US population (Clifford et al., 2015). In this sense MTurk samples represent an affordable yet reliable approach for survey data gathering (Hauser and Schwarz, 2016). Furthermore, because we are interested in group comparisons after exposure to experimental stimuli (and not generate trends to be reflected on a larger population), the convenience nature of the MTurk samples is even less problematic.[7] Participants were invited to fill in a short online survey

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[5] https://aspredicted.org/blind.php?x=xu7d84.

[6] The project received full ERB approval from the University of Amsterdam on 30 October 2020 (ref: 2020-PCJ-12714).

[7] See nonetheless Ford (2017) for a more critical take on MTurk.

against a small monetary compensation. Out of the 1,408 participants who completed the survey we excluded 65 respondents that failed an "attention check" (Berinsky et al., 2014). A further 13 respondents were excluded because they declared not being American citizens, thus leaving a final sample of 1,330 respondents.

Minimal sample size was determined via a-priori power analyses effectuated with G*Power, based on the number of experimental conditions and proportion of respondents in these conditions. The baseline test compares respondents in the control group to respondents that are exposed to one of three vignettes cueing high (or low) Dark Triad. In this sense, the test is run on unbalanced experimental groups, where one of the groups is three times as big as the other one. For a one-tailed independent samples t-test with 5% Type I error, 80% power, and a 1–3 distribution of observations in the experimental groups, a minimum sample size of $N = 133$ (control group) and $N = 397$ (treatment group) is required to detect a small-to-medium effect size ($d = 0.25$). Assuming a random and even distribution of respondents across seven experimental conditions (one control, three "high Dark Triad" groups, three "low Dark Triad groups", see below), our final sample size of $N = 1,330$ is sufficient. As for study 1, the sample is rather balanced in terms of gender (51.3% female), but leans somewhat towards the left (28.6% strong Democrats vs. 16% strong republicans), which is rather usual for this type of samples. The average respondent is 43 years old, and rather interested in politics. Full sample composition is summarized in Table E1, Appendix E.

6.1.2. Stimuli and design

The questionnaire included an experimental component in which we simulated exposure to a fictive candidate with manipulated (dark) personality traits. We created seven mock newspaper interviews with a fictive candidate - independent Paul A. Bauer, running for a seat in the US House of Representatives for Minnesota's 9th Congressional district.[8] Respondents were randomly exposed to one of these seven interviews (henceforth, "vignettes"); only the beginning of the interview was shown (see Appendix C). All vignettes were set up as a short introduction about Bauer by the journalist, followed by a Q&A. Six vignettes contain "active" components, intended to cue respondents exposed to them about the personality profile of the fictive candidate. Three vignettes cued respondents that the candidate scores high on one of the three Dark Triad traits (narcissism, psychopathy, Machiavellianism; "negative personality cues"), whereas three vignettes cued respondents that the candidate scores low on those traits ("positive personality cues"). Such personality cues were in the form of short descriptive statements from the journalist; they were balanced in terms of positive and negative descriptors, to avoid a normative judgment by the journalist. For instance, the vignette for high psychopathy describes the candidate as "*being cold-hearted, but audacious*" whereas the vignette for low psychopathy describes him as "*compassionate, but tame.*" Furthermore, as a second personality cue, the candidate was asked to describe which "fictional character" he would like to be "for just a single day". The idea of this second cue is that respondents would recognize the personality of the candidate by association with the personality of known fictional characters. The use of fictional character to illustrate personality traits is not uncommon (e.g., Jonason et al., 2012; Schumacher and Zettler, 2019) and has some major advantages over using real candidates: the latter provide higher external validity, but the former increases internal (causal) validity (Brooks and Deborah, 2013), because it isolates the manipulated differences and excludes the impact of existing predispositions. The seventh vignette (control) did not include any personality descriptors (nor the "fictional character for a day" question), but instead comprised a neutral paragraph in which the candidate introduces himself. The personality cues used are summarized in Table 3; Appendix C presents the full text of all vignettes.

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[8] Minnesota only has 8 districts.

Table 3
Personality cues in the experiment.

Trait	Adjectives	Fictional character
Narcissism (presence)	vain, but self-assured	I always admired James Bond. He has spectacular watches, impeccably tailored suits, and perfect hair. And, of course, I envy his Aston Martin. He might have a grandiose and overinflated sense of himself, but he is just at the top of his game and he knows it.
Narcissism (absence)	humble, but insecure	I always admired Hugh Grant's character in Notting Hill. He's unassuming and unpretentious, and can't believe his good luck in meeting the woman of his dreams. His self-doubt and modesty are quite refreshing.
Psychopathy (presence)	cold-hearted, but audacious	I always appreciated anti-heroes like Hannibal Lecter from "the Silence of the Lambs." He is for sure a controversial figure that operates outside of moral standards, but he is suave and intelligent in a very unconventional way. And he gets the job done, which is the only thing that really matters.
Psychopathy (absence)	compassionate, but tame	I always appreciated C–3PO, the easily scared and unadventurous android from the Star Wars saga. He might be a robot, but he has a heart of gold and always looks out for his friends.
Machiavellianism (presence)	manipulative, but astute	I always admired Frank Underwood, the shrewd protagonist of "House of Cards" - he sometimes has the tendency to lie and cheat, but is really smart, has a great strategic mind, and is ultimately successful in reaching his objectives.
Machiavellianism (absence)	genuine, but naïve	I always liked Forrest Gump - he might not be the smartest guy, but I really admire his selfless and uncorrupted approach to life in general. He is a true kind spirit, and I find his ingenuousness quite touching.

Due to the lack of detailed personality self-descriptors for the dark traits we could rely upon directly, the language employed in the vignette to cue personality traits – e.g., the adjectives used to portray the candidates – comes from our understanding of how these traits are usually described in the literature, and related associations, e.g., between high narcissism and vanity (Egan and McCorkindale, 2007), low psychopathy and compassion (Lee and Gibbons, 2017), or high Machiavellianism and astuteness (Uppal, 2021).

It also has to be noted that the absence of dark traits (e.g., low psychopathy) was mostly cued in terms of the presence of its opposite (related to compassion, empathy) as cueing the absence of traits via self-descriptors likely includes unintended cues for the presence of such traits – when Nixon says that he is "not a crook", our mind necessarily frames the issue in terms of him being a crook or not, and not of him being honest or not. The fact that not being a crook reflects being honest (conceptual equivalence) does not take away from the fact that the former is framed negatively, whether the second one is framed positively. Given our desire to investigate dynamics of negativity bias by comparing exposure to negative and positive frames, this is an issue we wanted to avoid as much as possible.

Manipulations were mostly successful. Respondents exposed to one of the "active" vignettes were significantly more likely than respondents in the control group to agree that the article "clearly described the personality of the candidate" (7-point scale), $t(1328) = -6.61$, $p <$

0.001, and that it was "useful for you to form an idea about the personality of the candidate" (7-point scale), $t(1328) = -4.91$, $p < 0.001$. When compared to the neutral condition, respondents exposed to a *high Dark Triad* vignette agreed more strongly with both of these statements than respondents exposed to a *low Dark Triad* vignette[9] - which could be expected given the negativity bias at play. Importantly, respondents exposed to a *high Dark Triad* vignette were significantly more likely to agree that the candidate "was portrayed negatively in the article" compared to the control group (7-point scale), $t(751) = -17.04$, $p < 0.001$. However, respondents exposed to a *low Dark Triad* vignette were *less* likely to agree that the candidate "was portrayed positively in the article" compared to those in the control (7-point scale), $t(760) = 3.58$, $p < 0.001$. All "active" vignettes included both positive and negative descriptors while evaluations were absent in the control group, which suggests that respondents paid less attention to the positive component of a *low Dark Triad* profile (e.g., humility) and focused on the negative side (e.g., insecure). If this provides indirectly a confirmation that negative personality cues are more easily picked up, it potentially muddles the results for the direct effects of exposure to *low Dark Triad* cues.

More notably, exposure to the personality vignettes shaped respondents' perceptions of the candidate personality in a consistent way. After exposure to the vignette respondents were asked to assess the personality traits of the candidate using the "Dirty Dozen" battery described in Study 1 (Jonason and Webster, 2010). Respondents exposed to the "high narcissism" vignette were more likely to rate the fictive candidate as high in narcissism than respondents exposed to the control vignette, $t(370) = -13.37$, $p < 0.001$, whereas respondents exposed to the "low narcissism" vignette were *less* likely, $t(370) = 4.78$, $p < 0.001$. Respondents exposed to the "high Machiavellianism" vignette were more likely to rate the fictive candidate as high in Machiavellianism than respondents exposed to the control vignette, $t(363) = -18.85$, $p < 0.001$, whereas respondents exposed to the "low Machiavellianism" vignette were *less* likely, $t(369) = 4.65$, $p < 0.001$. Respondents exposed to the "high psychopathy" vignette were more likely to rate the fictive candidate as high in psychopathy than respondents exposed to the control vignette, $t(366) = -19.26$, $p < 0.001$. There was no difference between the "low psychopathy" vignette and the control in terms of perceived psychopathy, $t(375) = 1.52$, p = 0.129. The effect is however in the right direction, and the absence of significant differences could be simply due to sample size. Respondents exposed to a high Dark Triad vignette were more likely to score the candidate high on the dark core, $t(749) = -19.29$, p < 0.001, whereas respondents exposed to a low Dark Triad vignette were less likely to score the candidate high on the dark core, $t(757) = 4.37$, p < 0.001, compared to the control.

Interestingly, age did play a role in determining respondents' perceptions of candidate personality traits, likely due to the usage of "pop" references in the vignettes (whose resonance likely depends on age and cohort). For instance, older respondents were less likely to see Bauer as high in Machiavellianism when exposed to the vignette cueing the absence of this trait, $b = -0.2$, $t(187) = -2.55$, $p = 0.012$ (see materials in OSF repository). Also with this in mind, we present below models that control of major covariates, including age.

Randomization checks indicate a successful indiscriminate distribution of respondents over the seven vignettes according to their gender, age, education, interest in politics, party identification, and respondent personality traits (Big Five and Dark Triad) - except, but very marginally so, for respondent's psychopathy, $\chi 2(144, N = 1330) = 169.98$, $p = 0.069$. A subsequent *t*-test shows however that there is no significant

difference in respondents' self-rated psychopathy between vignettes with a negative and a positive personality cue, $t(572) = 0.19$, $p = 0.850$. Nonetheless, to err on the side of caution, we replicated all models by controlling for a series of covariates to reflect individual differences among respondents (Appendix B).

Models estimate respondents' evaluation of the fictive candidate, using the same measure as in Study 1, the ANES "feeling thermometer" (0–100). Exposure to one of the seven vignettes is the main predictor, and the candidate perceived personality - used above for manipulation checks, all traits ranging between 1 "very low" and 7 "very high" - is used for mediation analyses. For the operationalization of the control variables, see Table B1, Appendix B.

6.2. Results

6.2.1. Candidate personality and evaluation

T-tests indicate that respondents exposed to a *high Dark Triad* vignette rate the fictive candidate significantly lower on the feeling thermometer (0–100 scale), $t(751) = 13.96$, $p < 0.001$, compared to the control. Inversely, respondents exposed to a *low Dark Triad* vignette rate the fictive candidate significantly higher, $t(760) = -2.60$, $p = 0.009$, than those in the control. This provides preliminary support to H1 and H2.

Table 4 reports regressions of respondents' evaluation of the fictive candidate on their exposure to different personality vignettes. Models M1 and M2 test the effect of exposure to vignettes where high levels of the dark traits (narcissism, psychopathy, Machiavellianism) are cued, whereas models M3 and M4 test the effect of exposure to vignettes where low levels of these traits are cued. As above, M1 and M3 only include the direct effect of the treatment, while M2 and M4 additionally include important covariates. In all cases the effects of the experimental conditions are compared to the "neutral" vignette that did not include any personality cue (control group).

M1 and M2 provide full support to H1: exposure to a candidate framed as having a high score on a dark personality significantly and substantially reduces positive evaluations for the candidate. The strong effect holds when controlling for important covariates, such as the respondent partisan identification, gender, and self-assessed personality traits (M2). Our results provide however a much weaker evidence for H2: exposure to a candidate framed as scoring low on the Dark Triad only marginally increases positive evaluations for the candidate. The effect is not significant anymore when controlled by the profile of respondents, leading us to conservatively reject H2.

These results are replicated in models with different specifications. Robustness checks testing for the separate effect of each of the specific traits (high or low scores for narcissism, psychopathy, Machiavellianism: Table B2, Appendix B) and on propensity to vote as a dependent variable instead of candidate evaluation (Table B3, Appendix B) show consistent results.

6.2.2. Negativity bias

In order to test for the saliency of the "negativity bias" hypothesis (H3) within the setting under investigation, Table 5 replicates the previous models but includes both experimental conditions in the same models (that is, high and low Dark Triad), whose effects are compared to the control group (M1 and M2). Results of the two models confirm trends discussed above: exposure to a candidate framed with a negative personality (*high Dark Triad*) reduces positive candidate evaluations, whereas exposure to a candidate with a positive personality (*low Dark Triad*) has an (unstable) positive effect on evaluations. Importantly, a test for nonlinear combinations of estimators run on the model with full controls (M2) shows that the difference in (absolute) magnitude between the two effects is statistically significant; $b = 27.67$, $z(1300) = 7.19$, $p < 0.001$. This indicates, in other terms, that negative personality cues are more impactful than comparable positive cues, confirming H3. Tables B4 and B5 of Appendix B replicate the main models but use

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[9] In both cases, the difference in (absolute) magnitude between the two effects is statistically significant; $b = 0.29$, $z(1328) = 3.42$, $p < 0.001$ ("*clearly described the personality of the candidate*"); $b = 0.49$, $z(1328) = 5.10$, $p < 0.001$ ("*was useful for you to form an idea about the personality of the candidate*").

Table 4
Feeling thermometer by exposure to candidates with high/low dark traits.

	M1			M2			M3			M4		
	Coef.	Se	sig	Coef.	Se	sig	Coef.	Se	sig	Coef.	Se	sig
High dark traits	−29.25	(2.10)	***	−29.34	(2.42)	***						
Low dark traits							3.86	(1.48)	**	1.98	(1.81)	
Republican				0.50	(0.38)					−0.10	(0.28)	
Female				1.88	(1.69)					2.76	(1.30)	*
Age				−0.14	(0.07)	*				0.03	(0.05)	
Education				−0.73	(0.48)					0.11	(0.37)	
Interest in politics				−0.63	(1.17)					−0.02	(0.85)	
Populism				0.63	(0.86)					0.44	(0.65)	
Extraversion				0.58	(0.53)					0.17	(0.41)	
Agreeableness				1.25	(0.91)					3.73	(0.64)	***
Conscientiousness				1.43	(0.80)	†				1.29	(0.59)	*
Emotional stability				2.00	(0.67)	**				−0.86	(0.49)	†
Openness				−1.31	(0.71)	†				0.02	(0.51)	
Narcissism				3.57	(0.66)	***				2.10	(0.49)	***
Psychopathy				2.52	(1.00)	*				0.50	(0.71)	
Machiavellianism				3.72	(0.84)	***				0.56	(0.65)	
Knows fictive character				0.85	(2.15)					2.91	(1.58)	†
Constant	63.91	(1.82)	***	22.68	(9.25)	*	63.91	(1.29)	***	24.60	(6.83)	***
Observations	753			743			762			760		
R-squared	0.21			0.38			0.01			0.12		

In all models the dependent variable is the feeling thermometer for the candidate, and ranges between 0 "very cold" and 100 "very warm" feelings towards him.
***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, †$p < 0.1$.

Table 5
Feeling thermometer by exposure to candidates with high/low dark traits, compared effects.

	M1			M2		
	Coef.	Se	Sig	Coef.	Se	sig
High dark traits	−29.25	(1.86)	***	−30.36	(2.02)	***
Low dark traits	3.86	(1.85)	*	2.69	(2.02)	
Republican				0.30	(0.27)	
Female				1.77	(1.20)	
Age				−0.05	(0.05)	
Education				−0.48	(0.34)	
Interest in politics				−0.58	(0.80)	
Populism				0.35	(0.60)	
Extraversion				0.49	(0.38)	
Agreeableness				2.25	(0.61)	***
Conscientiousness				1.14	(0.56)	*
Emotional stability				0.61	(0.46)	
Openness				−1.03	(0.49)	*
Narcissism				3.04	(0.46)	***
Psychopathy				1.35	(0.68)	*
Machiavellianism				2.07	(0.60)	***
Knows fictive character				2.02	(1.41)	
Constant	63.91	(1.61)	***	30.25	(6.53)	***
Observations	1,330			1,318		
R-squared	0.35			0.42		

In all models the dependent variable is the feeling thermometer for the candidate, and ranges between 0 "very cold" and 100 "very warm" feelings towards him.
***$p < 0.001$, **$p < 0.01$, *$p < 0.05$, †$p < 0.1$.

alternative specifications. The effects of negative candidate vignettes are more marked for psychopathy and Machiavellianism than narcissism; remarkably, the low Machiavellianism has a rather robust positive effect on candidate evaluations, even after controlling for the respondent's profile (Table B4). This trait is undoubtedly the most "political" of the three - as indicated also by the origins of its name. Table B5 replicates the main analyses but uses an alternative dependent variable (propensity to vote); results are globally robust.

6.2.3. The mediating role of perceived personality

Thus far, in Study 2 we have tested for the direct effect of exposure to candidates with specific manipulated personality profiles. In other

terms, the trends shown above for Study 2 assume that the personality of candidates exert an independent exogenous effect on voters. While indeed we were able to shown that exposing voters to specific personality profiles can alter the way they assess candidates, the way respondents *perceive* the personality of candidates is likely to matter as well. This is, indeed, what emerges from Study 1. Looking at exposure to candidates with specific personality profiles, like we do here, needs to take into account that not all respondents might perceive a candidate that scores high on, say, narcissism, in the same way; where some voters might identify patterns of narcissism for what they are, other voters might be more oblivious to personality cues. With this in mind, we present below results of series of additional models that replicate the main effects discussed above but add an important nuance: they also include a *mediated effect* via the *perceived* candidate personality (see Fig. 3).

Fig. 3 presents first the results of mediated models for exposure vignettes cueing a candidate as high or low on the Dark Triad. The left-hand panel compares the direct effect on candidate evaluation of exposure to a candidate with a personality scoring high on the Dark Triad with the indirect effect via perceived candidate personality. As shown, both the direct and the indirect effect are statistically significant. This indicates that part of the negative impact of *exposure* to dark personality traits on candidate evaluation runs through the *perceived* dark personality of the candidate. More precisely, the proportion of the total effect that is mediated (that is, the proportion between the indirect and the direct effect) is almost 0.6, which is substantial and indicates the presence of an important mediation via perceived personality. The right-hand panel of Fig. 3 replicates the same logic, but tests the direct and mediated effect of exposure to a personality scoring low on the Dark Triad. In this case, the direct (positive) effect is only marginally significant, while the indirect path shows a positive and significant effect. This means that exposure to personality traits that score low on the Dark Triad only marginally affects candidate evaluation, but the mechanism runs through perceived personality.

Fig. 4 tests for the comparative effect of exposure to positive and negative personality cues compared to the neutral vignette. As shown, exposure to any personality vignette (thus: the respondents that were exposed to either the positive or the negative personality vignette) decreases positive candidate evaluations - indicating that negative cues are more effective in influencing citizen's perception of the personality of
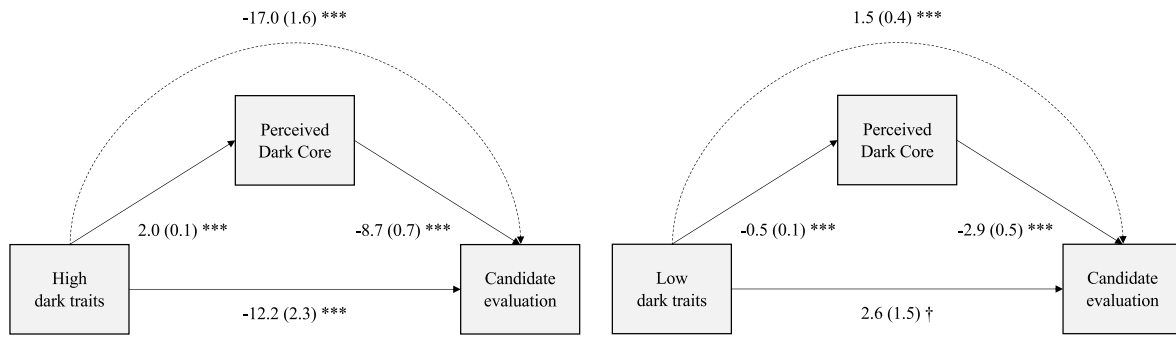
Fig. 3. Mediated effects: Feeling thermometer by exposure to candidates with high/low dark core
Note. Coefficients are unstandardized regression coefficients. Full results in Tables B5 and B6, Appendix B. The dashed arrow represents the indirect effect.
***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1.

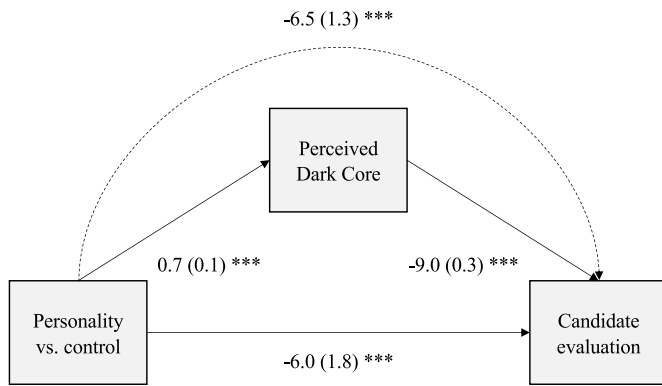**Fig. 4.** Mediated effects: Feeling thermometer by exposure to candidates with high/low dark core, compared effects
Note. Coefficients are unstandardized regression coefficients. Full results in Table B7, Appendix B. The dashed arrow represents the indirect effect.
***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1.

the candidate than comparable positive cues, as expected in the "negativity bias" hypothesis (H3). The figure shows a negative significant direct and indirect effect – the latter representing slightly more than 50% of the total effect - suggesting the presence of successful mediation via perceived personality. The general conclusion holds also when replicating the mediation models with the full set of covariates used for the previous analyses - even if the direct effect of low Dark Triad on candidate evaluation is no longer significant. Finally, the effects are mediated to a much lower extent by perceptions of the vignettes as positive or negative (our manipulation check), indicating that such perceptions are, after all, less relevant than how respondents perceived the personality of the candidate. Materials in in the OSF repository allow replicating our models using these alternative specifications.

6.3. Summary

Exposure to a candidate framed as having a dark personality (high Dark Triad) significantly and substantially reduces positive evaluations for the candidate. This finding is very much in line with the effect discussed in Study 1 for *perceived* dark personality. In other words, we find consistent evidence that candidates with dark personality traits - either real ones perceived as such or fictive ones framed as such - are assessed more harshly across two very different studies. The direct effect of negative cues on candidate evaluation runs through (is mediated by) perceptions of the candidate as scoring high on the Dark Triad, suggesting that both the personality of candidates and how such personality is perceived have a separate, but complementary role to play to shape candidate evaluations. Exposure to positive personality cues (i.e.,

scoring low on Dark Triad personality traits) however does not substantively increase positive perceptions of the candidate. Furthermore, models comparing exposure to the two types of personality cues (high vs low Dark Triad) confirm our general intuition that negative cues exert a stronger effect on subsequent attitudes than comparable positive cues.

7. Discussion and conclusion

To what extent does the (perceived) dark personality traits of candidates matter for how voters evaluate them? Are dark traits an asset or a liability? In tackling this fundamental question, this article makes a three-fold contribution. First, it extends the scope of explanatory factors beyond traditional leadership traits in the candidate evaluation literature (e.g., Bittner, 2011; Funk, 1999). We argued that (perceived) personality traits of politicians are equally important for the extent to which voters approve of individual candidates, and focused more specifically on the *Dark Triad* or narcissism, Machiavellianism, and psychopathy. Study 1, via data from a representative sample of the American voting population gathered in November 2020, showed that indeed respondents who perceived Trump and Biden as scoring higher on the *Dark Triad* tend to evaluate them less favorably, and vice versa. Study 2 relied on experimental evidence from American voters exposed to fictive candidates with simulated personality traits, and showed again that exposure to politicians (perceived as) as scoring high on the *Dark Triad* significantly and substantially reduces their positive image in the eye of the voter.

To be sure, prominence of Trump in recent times may have made voters more sensitive to dark politics. It therefore remains to be seen whether these results would replicate in contexts characterized by lower political antagonism - after all, negativity and harsh campaigns are "as American as apple pie" (Scher, 1997, p. 27), but this is not necessarily the case outside of the US. Future research needs furthermore to shed light on the question whether certain voter attributes, such as authoritarianism, education, political interest and sophistication, moderate the strength of the relationship between (perceived) dark personality traits and candidate evaluations. Recent research by Nai et al. (2021), also relying on experimental data, has highlighted the existence of a "homophily" effect: voters tend to have a more positive image of candidates that share their own personality traits - including the dark ones. But further research able to replicate these trends in different contexts, ideally also using non-WEIRD (White, Educated, Industrialized, Rich, and Democratic) samples, is necessary.

The second contribution of this manuscript concerns the comparison of positive and negative effects. We applied a prominent argument of the extant literature concerning the relatively stronger effect of negative information compared to positive information (e.g., Lau, 1982; Soroka, 2014) and proposed that as the *Dark Triad* personality traits are inherently negatively charged and rather undesirable, this asymmetry could be even more pronounced with respect to candidate evaluations. Results

from Study 1, however, show that this is only the case for voter evaluations of Trump, but not those of Biden. On the one hand, this may suggest that individual candidates play a role for the strength of the detected relationship between personality assessments and candidate evaluations. Since we asked all respondents to evaluate both candidates, Trump may have served as benchmark for voters with the result that negative effects are not stronger than positive effects for the rivalling Democratic candidate. On the other hand, these differences could also be due to actual variation in personality between the two politicians (see Book et al., 2020), or even driven by the fact that one was an incumbent and the other a challenger; given the small number of cases, testing the intervening roles of these differences is hard.

Importantly, study 2 allowed us to hold the individual candidate constant across experimental conditions and gave us control over the personality profiles. This not only provided us with an opportunity to test independent effects, but also shed further light on the central mechanism of *perceived* personality in the relationship between the dark triad and candidate evaluations established in Study 1. The results show that exposure to positive personality cues does not substantively increase positive perceptions of the candidate, providing further empirical evidence for the negativity bias. However, we should underline that this asymmetry is only present when voters do not have any prior knowledge of the candidate (in this case because he does not exist) and may not translate universally to real candidates given the mixed results from Study 1. Moreover, although conceptually the positive and negative manipulations are equal in strength, our manipulation checks suggest that the low and high Dark Triad conditions deviate to differentiated degrees from the control group, indicating a negativity bias already in the early stages of processing this information. We openly invite scholars to replicate our experimental research design to provide further information on the construct validity of mediated candidate personalities.

Third, the endogenous relationship between partisanship and candidate evaluations poses a considerable empirical challenge (e.g., Aaldering, 2018; Aaldering et al., 2018; Garzia, 2012; Gattermann et al., 2017). Voters may be more favorable towards a particular candidate because they represent a party to which voters feel close. Indeed, consistent evidence suggests that voters perceive the personality of political figures through the lens of their partisan attitudes (e.g., Fiala et al., 2020; Hyatt et al., 2018; Nai and Martinez i Coma, 2019). Our results from Study 1 confirm this trend. Conservatives tend to have a more "positive" image of Trump's personality (i.e., they score him significantly lower on the dark personality traits than liberals) and a more "negative" image of Biden's personality, and vice versa for liberals. However, as the data are observational and deal with real candidates, we were unable to fully account for the role of partisanship. Furthermore, it is possible that our results are in part driven by the specific nature of Trump supporters included in our sample, perhaps not fully representative of Trump voters in real terms. Given the difficulties inherent in sampling "shy" voters, our sample might not fully reflect the position of "socially distrustful" respondents who might be less likely to take part in scientific surveys (e.g., Enns et al., 2017; Coppock, 2017). And a good case can likely be made that such "hidden" base has different perceptions of their preferred candidate than more "trustful" voters. Unfortunately, the data we rely on is not granular enough to assess such a claim.

Such limitations are also why we set up study 2. The controlled nature of the experimental design allowed us to exclude any intervening effect of partisan attitudes on both how respondents perceive the personality of the candidate and their subsequent evaluation, because no explicit partisan cues were provided. The results underline that a candidate's (perceived) personality affects voters while holding partisanship constant. Considering a fictional candidate instead of the real candidates used in Study 1, on the other hand, undermines the ecological validity of the stimulus material. This limitation also extends to the candidate's party affiliation (or rather absence thereof) as most members enter the House of Representatives on a party ticket. It remains to be seen whether voter perceptions of dark personality traits differ between partisan and non-partisan candidates and whether this is consequential for candidate evaluations. Nonetheless, the combination of both observational and experimental data could provide preliminary evidence tackling the endogeneity dilemma concerning partisanship and candidate evaluations.

Additionally, the extent to which candidates might project specific personality profiles strategically – e.g., portraying themselves as particularly energetic, caring, or though, without this necessarily reflecting their underlying personality profile – remains an open question. Are candidates sincere in their projected personality? Or, in other terms, does projected personality reflect deep personality constructs? This question is too broad to address here in a satisfactory way. Yet, two elements can be put forward that somewhat reduce the urgency of the matter. On the one hand, evidence exists that external observers are usually rather effective to assess the (dark) personality of individuals (Jones and Paulhus, 2014), even if this is mostly the case when they have a relationship with them. On the other hand, even more importantly, what matters ultimately for voters to form their opinions about candidates is likely what candidates project, more than their inner psychological profile. Further research able to match personality self-assessments with observer ratings about political figures, for instance using candidate surveys (e.g., Maier and Nai, 2021), could be able to disentangle this matter.

Study 2 was certainly also limited by our incapacity, due to sample size restrictions, to manipulate other potentially relevant candidate characteristics beyond their personality profile - most notably, their gender, age, ethnicity, or name. It is quite likely that these characteristics interact with projected personality profiles, making the external validity of the results found in Study 2 limited to middle-aged white males. The fact that this socio-demographic profile remains the most common in politics across the (Western) world – beyond highlighting profound diversity issues in politics worldwide – partly assuages the worries about external validity.

These limitations notwithstanding, taken together both studies confirm the relevance of dark personality traits for candidate evaluations. Our findings have important implications for our understanding of electoral politics in the US and elsewhere, most notably in an age of increased political aggressiveness driven by affective polarization and populism (see also Galais and Guillem Rico, 2021; Nai, 2022). Substantively, we propose that researchers consider the role that personality traits play for candidate evaluations and beyond. Voters may, for example, make their assessment of a politician's professional performance and past achievements conditional upon the politician's personality. While the results of both studies suggest that personality assessments have consequences for voting behavior, we propose that future research elaborates on this relationship, both theoretically and empirically. Our results imply that a focus on negative personality traits in political campaigning may lead to vote losses at the polls, although we were unable to provide insight into the extent to which certain voters are more prone to favor negative traits in political candidates and thereby willing to vote for politicians with such traits. On the other hand, candidates who score low on the Dark Triad personality traits may not necessarily be rewarded in elections and this thus poses questions about the sustainability of "positive" politics in contemporary democracies.

Declaration of competing interest

None

Data availability

Acknowledgments

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.electstud.2023.102715.

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