A Persuadable Type? Personality Traits, Dissonant Information, and Political Persuasion

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Is there anything like a "persuadable type" when it comes to exposure to dissonant information? Who is more likely to be swayed by information that tries to persuade them? Using data from an online sample of American respondents (N = 1,199), we assess whether personality traits (Big Five, Dark Triad) are associated with different perceptions and effectiveness of persuasive political information. In two controlled simulations, we exposed the respondents to dissonant information related to selected political issues (environment and economy) and measured whether they showcased a stable or changed opinion afterward. Results indicate that personality matters partly for the evaluation and persuasiveness of dissonant information positively. They were at the same time also more likely to resist persuasion itself and so were more agreeable respondents. Inversely, to some extent, narcissism and psychopathy are associated with greater susceptibility to persuasion.

Keywords: persuasion, dissonant information, personality, Big Five, Dark Triad

When discussing politics in small groups, people often test their capacity to resist dissonant arguments (Eveland, 2004; Kwak, Williams, Wang, & Lee, 2005). The growing importance of such "minipublics" (Ingham & Levin, 2018) sheds precious light on how opinions are coined, altered, or consolidated and highlights the fundamental role of exposure to opinions we dislike. Exposure to political information in general, most notably during election campaigns, almost necessarily generates a confrontation with persuasive arguments that clash with people's values and beliefs (Cialdini, 2007; O'Keefe, 1990). To what extent are these persuasive attempts successful, and for whom? Research on resistance to persuasion—that is, "the extent to which an attitude change is capable of surviving an attack from contrary information"

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(Petty & Briñol, 2010, p. 240)—has shown that persuasion is more likely when the source is perceived as honest (Priester & Petty, 1995), or credible (e.g., Smith, De Houwer, & Nosek, 2013). Alongside message attributes, individual-level factors can determine the success of persuasive communication: From the recipient's standpoint, research on the affective underpinnings of cognition has shown that the reception and treatment of persuasive information are fostered by issue anxiety (e.g., Nai, Schemeil, & Marie, 2017). When experiencing anxiety, individuals start to pay more attention to information (Steenbergen & Ellis, 2006) and uncouple themselves from previously held beliefs (Marcus, Neuman, & MacKuen, 2000). At the same time, rejection of persuasive information is a function of cognitive abilities, so people tend to reject dissonant arguments "only to the extent that they possess the contextual information necessary to perceive a relationship between the message and their predispositions" (Zaller, 1992, p. 44). We further have a good indication that more dispositional characteristics such as self-esteem (Rhodes & Wood, 1992), argumentativeness (Levine & Badger, 1993), and emotional reactivity (Dillard & Nabi, 2006) influence people's susceptibility to persuasive appeals. Undoubtedly, individual differences matter. As such, it is relatively surprising that only a handful of studies have investigated how higher-order personality factors affect our propensity to be persuaded. Although interest in the relationship between personality and politics has been growing in recent years, most scholars deal with attitudes, beliefs (e.g., Gerber, Huber, Doherty, Dowling, & Ha, 2010; Jonason, 2014, 2015), and political behavior (e.g., Mondak, Hibbing, Canache, Seligson, & Anderson, 2010). A few studies look more specifically at the consumption of political information (e.g., Gerber, Huber, Doherty, & Dowling, 2011; Mondak & Halperin, 2008), but they focus almost exclusively on exposure to political information and media preferences and not on how different personality types receive and process the new information. Moreover, most of the literature neglects the antisocial traits and primarily investigates how the socially accepted personality types interact with the political world (for an exception, see Chen, Pruysers, & Blais, 2020). We fill this gap and test the relationship between personality and persuasion with two established inventories of personality traits-the Big Five (openness, conscientiousness, extraversion, agreeableness, and emotional stability; McCrae & John, 1992) and the Dark Triad (narcissism, psychopathy, and Machiavellianism; Paulhus & Williams, 2002).

We, further, go beyond mere persuadability and examine an additional step in the informationprocessing sequence: The evaluation of the persuasive message. Although clearly related, a positive evaluation of opposing views must not necessarily lead to attitude change—an outcome that occurs later in the information-processing sequence (Minson & Chen, 2022). By studying this additional stage of the information process, we hope to get a more nuanced understanding of how personality relates to our main variable of interest, which is people's susceptibility to persuasion.

Personality and Persuasion

According to the "online" information-processing models, people form judgments as a function of the sequence of news they are exposed to, adjusting or reinforcing their opinion with any new piece of information they receive (McGraw, Lodge, & Stroh, 1990; Redlawsk, 2002). Classic models of information "priming" (Althaus & Kim, 2006), as well as Zaller's (1992) "accessibility axiom," further assume that receiving a new piece of information reshapes the mental structure of beliefs, such that the most recent information is the most likely to be retrieved when asked to form a new judgment. According to these models, we would expect individuals to update their attitude with every new information they receive, even

if this information challenges our preexisting beliefs. Does this mean that we are all equal before political persuasion? Existing literature on political preferences and electoral choices suggests not and indicates that these processes depend on party identification or ideological alignment and, particularly important for this investigation, psychological factors. In the following sections, we describe how personality might inform how individuals respond to persuasive political appeals.

Big Five

Beginning with the Big Five paradigm, we expect people high in *openness* to evaluate new information positively. As this trait is "associated with an attraction to new and challenging stimuli" (Gerber, Huber et al., 2011, p. 37), open individuals "crave experiences that will be cognitively engaging [and] seek information of virtually all sorts" (Mondak, 2010, p. 50). Another central facet of openness is unconventionality, which is defined as "the tendency to accept the unusual [and being] receptive to ideas that might seem strange or radical" (Lee & Ashton, 2004, p. 336). Open individuals are also likely to engage in political discussions (e.g., Boulianne & Koc-Michalska, 2022; Lindell & Strandberg, 2018; Mondak, 2010; for an exception, see Gerber, Huber, Doherty, & Dowling, 2012), have more heterogeneous discussion networks (Kim, Hsu, & Gil de Zúñiga, 2013), and are theorized to be more tolerant toward opposing views (Choi & Shin, 2017). This idea is somewhat supported by a study that shows that openness is positively related to people's "willingness to engage in thought, discuss, or consider opposing points of view" (Hodge, Hook, Van Tongeren, Davis, & McElroy-Heltzel, 2021, p. 2). Openness should, therefore, be associated with a greater willingness to accept and engage with alternative arguments, which could increase a person's responsiveness to persuasive appeals (Gerber, Huber, Doherty, Dowling, & Panagopoulos, 2013).

People high in *extraversion* have a strong need for social interaction (Mondak, 2010) and tend to have larger and more heterogenous discussion networks, which increases their likelihood of being exposed to crosscutting political discourse (Kim et al., 2013; Mondak, 2010). Similar to the previous argument, this should lead to greater political tolerance (Choi & Shin, 2017; see also Marcus, Sullivan, Theiss-Morse, & Wood, 1995) and is partly mirrored in a person's propensity to discuss sensitive political topics (Gerber et al., 2012). Although willing to engage in alternative views, extraverts are not necessarily easy to persuade. Because of their selfassured nature, extraverts have an assertive approach to the social world, which makes them less concerned with social sanctions (Gerber et al., 2013). In line with this, studies show that extraverted individuals experience less psychological discomfort when faced with opposing arguments and, as a result, are less likely to change their attitude (Matz, Hofstedt, & Wood, 2008; Norman & Watson, 1976; see also Carment, Miles, & Cervin, 1965). Extraversion is also associated with a competitive conflict style characterized as assertive and uncooperative (Wood & Bell, 2008). Extraverted individuals further have a tendency to convince others of their viewpoints (Tehrani & Yamini, 2020) and dominate political conversations (Grill, 2021). In the light of these findings, we expect lower persuasibility for people high on extraversion.

Individuals low in *emotional stability* tend to be anxious and nervous. Because they experience conflictual interactions as threatening and emotionally upsetting (Gerber, Raso et al., 2011), they generally avoid controversial activities and contentious discussions (Gerber et al., 2012; Grill, 2021; John, Naumann, & Soto, 2008). In this sense, we might expect low emotional stability to be associated with a negative evaluation and lower acceptance of arguments that threaten one's beliefs.

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Conscientious individuals are usually willing to "comply with conventional rules, norms, and standards" (Costa & McCrae, 1992, p. 9). They also engage in political discussions more frequently (Hibbing, Ritchie, & Anderson, 2011; Mondak & Halperin, 2008; but see also Gerber et al., 2012) and are, thus, more likely to expose themselves to opinions different from their own. Nevertheless, prudence is a central facet of this trait, which makes conscientious individuals more likely "to inhibit impulses . . . , consider their options carefully and . . . be cautious and self-controlled" (Lee & Ashton, 2004, p. 336). Indeed, excessive conscientiousness "can be associated with obsessionality, perfectionism, rigidity and slowness to respond [such that a person high in conscientiousness] may be over conventional and traditionalist, . . . rejecting change and innovation" (Furnham, 2017, p. 1880). Although conscientiousness can be associated with a more positive evaluation of new information—especially if people high in this trait view the discussion of different political views as a social norm—on balance, we expect lower opinion change for people high in conscientiousness.

Individuals high in *agreeableness* generally seek "harmonious relations with others" (Costa & McCrae, 1992, p. 9) and tend to avoid conflict (e.g., Gerber et al., 2012). A central facet of agreeableness is flexibility, which is defined as "one's willingness to compromise and cooperate with others. Low scorers are seen as stubborn and are willing to argue, whereas high scorers avoid arguments and accommodate others' suggestions, even when these may be unreasonable" (Lee & Ashton, 2004, p. 335). Going in a similar direction, Muradova and Arceneaux (2022) recently showed that attitudinal empathy increases people's reflectiveness about opposing views and encourages them to change their attitude in the direction of dissonant arguments. All this suggests that agreeable individuals should be more prone to evaluate incongruent information positively and be more attuned to political persuasion.

Dark Triad

As the Dark Triad is commonly associated with "aggressiveness, impulsivity, and callousness" (Jonason & Webster, 2010, p. 420) we generally expect these traits to drive rejection of counterarguments. To start with, a central facet of *psychopathy* is antagonism, which describes a tendency to be distrustful, arrogant, and self-centered (Lynam et al., 2011). Moreover, psychopathy is related to interpersonal manipulation, antisocial behaviors, and callousness toward others (Hare, 2003). Evidence further suggests that psychopathy is associated with low cognitive dissonance (Murray, Wood, & Lilienfeld, 2012), potentially leading to less opinion change. Based on these findings, we expect that people high in psychopathy are more likely to reject dissonant information and stick to their initial opinion.

For narcissists, "derogating the dissenter could be a form of interpersonal self-regulation with the goal of bolstering one's own view of the self" (Saucier & Webster, 2010, p. 20; see also Morf & Rhodewalt, 2001). Indeed, it has been shown that individuals high in social vigilantism—that is, "the tendency of individuals to impress and propagate their 'superior' beliefs onto others to correct others' more 'ignorant' opinions" (Saucier & Webster, 2010, p. 2010, p. 2010, p. 2010, p. 19)—are prone to resist persuasion. Evidence also suggests that under certain circumstances, narcissists tend to be overconfident in their opinions (Campbell, Goodie, & Foster, 2004). In light of these findings, we expect that such individuals will generally reject information that goes against their beliefs.

Lastly, *Machiavellianism* may increase the propensity to resist counterarguments and enhance opinion stability. This trait, along with psychopathy, has been shown to decrease the likelihood of perspective-taking, which describes "an individual's ability to adopt the point-of-view of other people"

(Giammarco & Vernon, 2014, p. 24). The effects of the three dark traits are expected to go broadly in the same direction. In this sense, we thus expect a generalized negative effect of the "Dark Core" (presence of the three dark traits) on both the evaluation of the counterarguments and the capacity to be persuaded. Our hypotheses are summarized in Table 1.

	Evaluation of counterargument	Persuasion
Extraversion	+	-
Agreeableness	+	+
Conscientiousness	+	-
Emotional stability	+	
Openness	+	+
Narcissism	_	-
Psychopathy	_	-
Machiavellianism	_	-

Table 1. Theoretical Expectation	Table	. Theo	retical Ex	pectations
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Note. + Positive effect expected; – negative effect expected.

Methods

Participants

An opt-in sample of U.S. citizens filled out a survey via the online platform Amazon Mechanical Turk (MTurk; Paolacci & Chandler, 2014) in early November 2018; participants were recompensed with 0.60 cents. Besides self-selection concerns, several studies positively assessed the quality of MTurk data (for a more critical perspective, see e.g., Ford, 2017): MTurkers tend to be more attentive to instructions than students (Hauser & Schwarz, 2016), more representative of the U.S. population (Berinsky, Huber, & Lenz, 2012), more diverse (Casler, Bickel, & Hackett, 2013), and more representative of the psychological divisions of liberals and conservatives in the United States (Clifford, Jewell, & Waggoner, 2015). Buhrmester, Kwang, and Gosling (2011) show, furthermore, that compensating MTurkers is not detrimental to the data quality.

The final sample¹ contains 1,199 respondents and is composed of 51% of females, with an average age of 39.6 years (SD = 12.6). The sample consists of mostly White/Caucasian respondents (79.5%), followed by Blacks/African-Americans (9.5%), respondents of Asian origin (7.6%), and Hispanics/Latinos (6.3%). The respondents are generally well-educated (bachelor's degree or higher = 55.2%) and show high interest in politics (45.6% are "very" interested, 44.5% "somewhat" interested, and only 2.7% are "not interested at all"). Turning to the political ideology, we find that the sample is skewed to the left of the political spectrum: The average self-reported left-right position is 4.1 (SD = 3.1) on a 0–10 scale, and 47.5% think of themselves as Democrat (24.6% Republican, 23.7% independent).

¹ We excluded respondents who failed a "screener" (Berinsky, Margolis, & Sances, 2014), set up as a digressive question within which a specific instruction to follow is hidden (n = 19, 1.5% of the initial sample).

Design²

To investigate the dynamics of political persuasion, the questionnaire included two sequential simulations of exposure to dissonant information from a bipartisan, unbiased expert report.³ In both simulations (hereafter referred to as "scripts") the respondents were first asked their opinion about a political issue on a 0–10 scale.⁴ More specifically, they were asked to what extent they support an economic slowdown to counter the effects of climate change (script 1), and to what extent they support free trade versus protectionism (script 2). Based on their answer to this initial question, they were exposed to a tailored counterargument. Respondents were asked to rate how "reasonable" this counterargument was and then asked their opinion about the issue again. Comparing their opinions before and after the exposure to the counterarguments provides a direct measure of how respondents' opinions resist persuasive attempts (Nai et al., 2017; Valli & Nai, 2022; see Appendix A).

The environment and the economy represented major political issues in the 2018 midterm elections and were decisive for people's vote choices (Pew Research Center, 2018), which makes them a particularly intriguing case for studying the effects of persuasion and resistance. To circumvent the exogenous effects of issue saliency, and because we could not exclude the presence of learning effects during the second script, we pooled the data of the two scripts. As the units of analysis were now at the respondent-script level, the pooled data set allowed us to test for the direct effect of personality traits beyond the specificities of each issue. Such a restructured (pooled) data set reflects the idea that the effects of personality are assumed to be independent of the issue at stake. All models will control for the specific script, and throughout the article, we will present the results for script 1 and script 2 next to the main models run on the pooled data set.

Measures⁵

Evaluation of the Counterargument

To measure openness toward dissonant information, respondents were asked to evaluate the persuasive argument by rating how "reasonable" they found this "other way to look at the issue" (from 0 to 4). On average, respondents evaluated the persuasive arguments as averagely reasonable (M = 2.05, SD = 1.32 for script 1; M = 2.33, SD = 1.17 for script 2).

² The project received full approval from the Ethics Review Board (ERB) of the Faculty of Social and Behavioral Sciences of the University of Amsterdam on October 31, 2018 (ref. 2018-PCJ-9625).

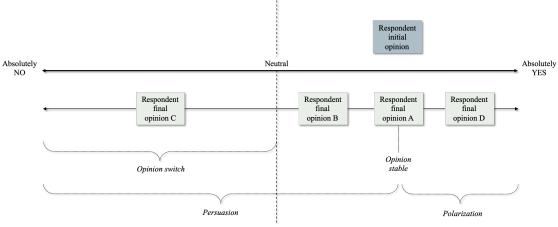
³ Because the relationship between personality and persuasion is still relatively unexplored, especially with regard to the Dark Triad, it seems important to first analyze the broader, context-independent tendencies, which is why we present the information in the most neutral manner possible.

⁴ Respondents who scored 5 on the 0–10 scale (n = 149 in script 1 and n = 184 in script 2) were encouraged to pick a side. In script 1 (environment) 42% of the respondents initially opposed the economic slowdown whereas 57.6% were in favor of it. In script 2 (economy), 70.4% of the respondents were initially in favor of free trade while 29.3% supported protectionism.

⁵ All data, code, and materials are available for replication via the following Open Science Foundation repository, which also includes the appendices: https://osf.io/y2a85/

Persuasion

Persuasion is measured by comparing the answers with the opinion questions before and after exposure to the counterarguments, as illustrated in the conceptual diagram in Figure 1.





The diagram illustrates the situation of a fictive respondent who was initially in favor of the initial statement, indicated by the position on the right-hand side of the opinion scale ("initial opinion"). In the bottom half of the figure, we illustrate four possible scenarios after exposure to the counterarguments. Respondents could, first, exhibit a final opinion perfectly in line with their initial one. For them, exposure to the new information did not affect their issue-related opinions. Those respondents have a "stable" opinion and represent about half of the sample (48.9% for script 1 and 47.7% for script 2).

The rest of the respondents did, however, change their opinion. Some of them were persuaded and adjusted their opinion in the direction of the counterarguments (43.4% of all respondents in script 1; 43% in script 2). Given the initial scale, the magnitude of such persuasion ranges theoretically between 1 and 10 (M = 2.6, SD = 1.8 for script 1, and M = 2.2, SD = 1.4 for script 2). Among the persuaded respondents, about a third (30.1% for script 1; 26.3% for script 2) "switched" their opinion and went from being in favor to being against the initial statement after exposure to the counterargument or vice versa. Those "switchers" represent the "hard case" scenario when it comes to persuasion as they did not simply update their initial opinion but completely changed their mind about the issue. The magnitude of persuasion (expressed on a 0–10 scale) and the presence of an opinion "switch" are our two main dependent variables when investigating persuasion. Figure 1 also shows the existence of a fourth category of respondents on the right-hand side of the scheme. Those respondents changed their initial opinion *against* the direction of the counterargument and reported a stronger opinion than the one they initially had (7.8% in script 1; 9.4% in script 2). Because we believe that different mechanisms drive attitudinal polarization, separate from the mechanisms associated with political persuasion, we will not investigate those respondents here and exclude them from our analyses. Further investigations on attitude polarization as a parallel response to persuasion are foreseen.

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Big Five and Dark Triad

To measure the Big Five, we use the Ten Items Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003).⁶ Respondents had to indicate their agreement (1 for "disagree strongly" to 7 for "agree strongly") with 10 statements describing them (e.g., "I see myself as sympathetic, warm"). Respondents' values on each of the five traits are computed as average scores for the pairs of statements. Next to the five separate traits, our models are replicated using the "Huge Two" of stability and plasticity (Silvia, Nusbaum, Berg, Martin, & O'Connor, 2009; Silvia et al., 2008), which are second-order meta-traits behind the structure of the Big Five. Stability, on the one hand, reflects high levels of agreeableness, conscientiousness, and emotional stability and indicates a proclivity "to maintain stability and avoid disruption in emotional, social, and motivational domains" (DeYoung, 2006, p. 1138). Plasticity, on the other hand, indicates high levels of extraversion and openness and reflects the desire "to explore and engage flexibly with novelty, in both behavior and cognition" (DeYoung, 2006, p. 1138). These meta-traits are simply computed as the average score of the traits that compose them and thus also vary between 1 and 7. To measure the three dark personality traits we used the "Dirty Dozen" battery developed by Jonason and Webster (2010). Again, respondents had to rate their agreement from 1 to 7 on a series of statements that describe them (e.g., "I have used deceit or lied to get my way"). Respondents' values on each of the three traits are computed as average scores for pairs of statements. The average score across the three traits gives an indication of respondents' "Dark Core." All personality variables vary between 1 and 7.

Additional Variables

As partisan preferences often shape opinions on the environment and the economy, we controlled every model for partisanship. More specifically, we asked respondents if they considered themselves Democrat, Republican, or independent, and to what extent. By combining answers to these two variables, we obtained a measure of partisanship on a 5-point scale, from 1 "strongly Democrat" to 5 "strongly Republican." Because anxiety is a powerful driver of opinion change (Nai et al., 2017) we also controlled our models for issue anxiety, which was measured by asking respondents to what extent thinking about climate change and free trade made them feel anxious (from 0 "disagree strongly" to 4 "agree strongly"). Next to gender, age, education, and race (White vs. non-White), our models also controlled for issue knowledge, which was captured with three multiple-choice factual questions each about climate change and free trade (0–3 scale). All models were further controlled for initial opinion and opinion extremity, measured by folding the initial opinion on itself to create a scale ranging from 0 "weak initial opinion" to 5 "strong initial opinion." Table B2 in Appendix B presents the bivariate intercorrelations among all personality traits and additional covariates (script 1). Table B1 (Appendix B) has all the descriptive statistics.

⁶ The TIPI is unable to capture all nuances and facets of personality (Bakker & Lelkes, 2018). Yet, it has the advantage of being relatively quick to administer while achieving comparatively satisfactory results (Ehrhart et al., 2009).

Results

Evaluation of Counterarguments

Figure 2 reports the results of a series of models that estimate how favorably respondents evaluated the counterarguments. The left-hand panel reports results for the pooled sample (both scripts jointly), whereas the two other panels report results for the first and second script, respectively. All panels show results for three models, the first including the effect of the Big Five, the second including the effects of the Dark Triad, and the third including the results for the three meta-traits of plasticity, stability, and the "Dark Core." All models include the full set of covariates described above and are run on standardized variables (M = 0, SD = 1) to allow for an adjusted comparison of effect sizes. In other words, the magnitude of all effects reported in Figure 2 is perfectly comparable both within and across panels. Full results of the models run on the original, non-standardized variables can be found in Appendix B (Tables B3–B5). The figure presents regression coefficients with 95% and 90% confidence intervals.

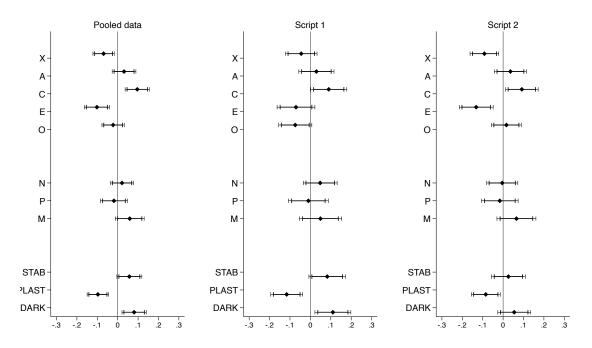


Figure 2. Evaluation of the counterargument, coefficients plots. 95% (outer-cap) and 90% (inner-cap) confidence intervals. All variables were standardized (M = 0, SD = 1). All panels report three sets of models, including, respectively, the effect of the Big Five (M1), Dark Triad (M2), and meta-traits (M3). All models include the full set of covariates. X, Extraversion; A, Agreeableness; C, Conscientiousness; E, Emotional stability, O, Openness; N, Narcissism; P, Psychopathy; M, Machiavellianism; STAB, Stability; PLAST, Plasticity; DARK, Dark Core.

As expected, Figure 1 shows that conscientious respondents are more likely to have a positive opinion of the persuasive information. This is the case for the pooled data set and the two separate scripts. Contrary to our expectations, extraverted and emotionally stable respondents are less likely to evaluate counterarguments positively, even if the effects are somewhat muted in script 1. Agreeableness and openness seem unrelated to the evaluation of the counterarguments, even if a slightly negative effect for openness is picked up in script 2. Models with meta-traits confirm the positive effect of stability (driven by conscientiousness) and the negative effect of plasticity (likely driven by extraversion).

Turning to the dark traits, our models show a relative lack of effects, excluding a (weak) positive effect for Machiavellianism in the pooled data. All in all, dark traits seem unrelated to argument evaluation.

Persuasion

Figure 3 presents two sets of models. The three top panels report results for models that estimate the presence and magnitude of persuasion on a 0–10 scale. The variable is very skewed, with more than half of respondents scoring zero points of persuasion. We account for this zero inflation by using negative binomial models. The three bottom panels report results from models that estimate the presence of opinion switch among respondents who have been persuaded (i.e., have a nonzero value on the persuasion scale). As the "switch" variable is binary, models are binary logistic regressions. As for argument evaluation, all models are based on standardized variables (M = 0, SD = 1) and include the full set of covariates, including argument evaluation. Full results with the original, non-standardized variables are in Appendix B (Tables B6–B11).

Looking at the Big Five, two effects stand out: As expected, more conscientious individuals are less likely to be persuaded. However, this effect is not extremely strong and is significant only in the pooled data. On the other hand, extraverted individuals, when persuaded, are significantly more likely to actually switch their opinion when exposed to counterarguments. This effect is relatively strong and exists in the pooled data and the second script, whereas it is more muted in script 1. The magnitude of this effect is also big enough to create a positive effect of plasticity on opinion switch, the only meta-trait that reveals a significant effect. Finally, agreeable individuals are significantly and consistently less likely to switch their opinion when persuaded. Neither emotional stability nor openness directly affects persuasion or opinion switch.

The trends for the Dark Triad are somewhat inconsistent: Our models only show a positive effect for narcissism on persuasion (but less so in script 2) and for psychopathy on opinion switch (in the pooled data). Machiavellianism does not seem to significantly affect persuasion or opinion switch.

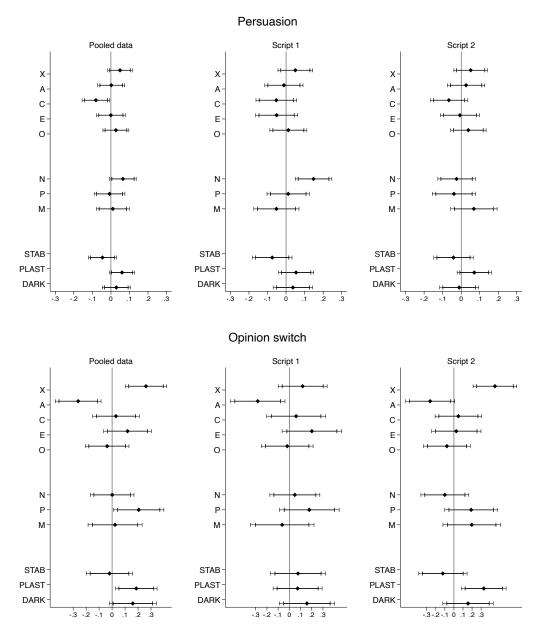


Figure 3. Persuasion and opinion switch, coefficients plots. 95% confidence intervals, all variables standardized (M = 0, SD = 1). All panels report three sets of models, including, respectively, the effect of the Big Five (M1), Dark Triad (M2), and meta-traits (M3). All models include the full set of covariates. X, Extraversion; A, Agreeableness; C, Conscientiousness; E, Emotional stability, O, Openness; N, Narcissism; P, Psychopathy; M, Machiavellianism; STAB, Stability; PLAST, Plasticity; DARK, Dark Core.

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Robustness Checks and Additional Analyses

The empirical protocol we used to simulate exposure to persuasive information was set up so that respondents received a tailored counterargument that challenged their initial opinion. Respondents who initially showcased an ambivalent position (5 on the 0–10 scale) were asked to pick a side if they could (i.e., either in favor or against the issue). This is potentially problematic: First, those respondents might have responded to a desirability bias (itself likely driven by personality traits; but see Graziano & Tobin, 2002) and might have reported a fabricated opinion after the additional prompt. Second, from a conceptual standpoint, changing an opinion from a neutral starting point (i.e., neither in favor nor against) is not the persuasive outcome. With this in mind, we replicated all analyses but omitted these initially "neutral" respondents. Results in Figures B1 and B2 (Appendix B) are similar to the results from models that include them, even if some effects are weaker.

A case could be made that opinion change is artificially created by repeatedly asking respondents issue-related questions, thus providing respondents with an incentive to showcase an opinion they do not really have. To be sure, all models control for opinion extremity, which should capture variance associated with opinion (un)certainty, but from a conceptual standpoint, the issue remains. While we have no way to ensure that all initial opinions are genuine, the problem should be a function of issue-related knowledge, such that opinions become more unstable with decreasing levels of knowledge (Zaller, 1992; Zaller & Feldman, 1992). Figures B3 and B4 (Appendix B) present the interaction effects between issue knowledge and each personality trait (including the three meta-traits) for the evaluation of counterarguments and persuasion in the separate models. As the figures show, the moderating role of knowledge on the effect of personality traits and meta-traits is largely irrelevant. In two cases (conscientiousness for evaluation of counterarguments and agreeableness for persuasion) a significant interaction term exists with issue knowledge. The magnitude of these moderation effects is extremely small, however (see Figures B5 and B6 for marginal effects). All in all, the results hold across different levels of issue knowledge, suggesting that the issue of artificially generated initial opinions should not be overestimated.

Discussion and Conclusion

Are we equally able to resist persuasive attempts or are some individuals more vulnerable to counterarguments than others? Research on motivated reasoning suggests that ideological predispositions play a major role so individuals are prepared to reject information that is inconsistent with their previously held beliefs (Taber & Lodge, 2006). Simply showing that liberals are likely to reject information framed in a conservative way (or vice versa) does not provide a satisfactory answer to the fundamental question of whether individual differences matter, however. In this article, we filled this gap by assessing the effects of personality traits on people's capability to resist persuasive attempts. We designed two scripts where respondents were, first, asked about their opinion on political issues (environment and economy) and, depending on their initial answer, exposed to a tailored counterargument. After exposure to this persuasive information, their opinion was asked again, which allowed us to assess to what extent and under which conditions respondents adjusted their opinions.

Main Results

Taking stock of all our analyses, the following trends emerge: First, as expected, conscientiousness is associated with a more positive evaluation of the counterarguments but also with resistance to persuasion. Because conscientious people are known to comply with social norms (Costa & McCrae, 1992, p. 9) and are generally more open to political discussions, we expected that they would be more accepting of opposing views, which is indeed the case in our data. At the same time, as they tend to be self-controlled and less impulsive (Lee & Ashton, 2004), conscientious individuals should be more likely to exhibit more rigid attitudes, which again our results seem to confirm.

Second, agreeable individuals are significantly less likely to switch their opinion when persuaded. While against our general expectations, this finding could be an indication that agreeable individuals tend to weaken their initial opinion not because there are persuaded *per se* but as a way to prevent a potential conflict and accommodate their opponents.

Third, contrary to what we hypothesized, extraversion is associated with more negative evaluations of the counterarguments. Considering that extraverts are more assertive and uncooperative (Wood & Bell, 2008) and often try to convince others of their viewpoints (Tehrani & Yamini, 2020) by dominating political conversations (Grill, 2021), this finding is not completely unreasonable. Extraverted individuals, in this sense, would showcase their energy and social dominance by explicitly rejecting persuasive information. At the same time, our results show that extraversion is associated with an increased likelihood of being persuaded (opinion switch), which could be associated with the impulsivity intrinsic to this trait. In other words, our results seem to suggest that extraverts are more likely to reject persuasive information explicitly, but they are affected by it implicitly (by changing their mind). A similar effect exists for psychopathy, suggesting that disinhibition and boldness—key aspects of both extraversion and psychopathy (Newman, 1987; Newman, Widom, & Nathan, 1985)—are associated with more daring and fearless opinion change. Except for some marginal effects here and there, emotional stability and openness seem to be unrelated to both argument evaluation and persuasion.

Finally, we did find a rather consistent effect for narcissism, which was associated with greater persuasion. While our measures are not sophisticated enough to capture more nuanced effects of the trait facets, this result could be associated with the more "vulnerable" side of narcissism (Miller et al., 2011), itself related to insecurity, low self-esteem, and feelings of incompetence.

Importantly, these results exist similarly across the two scripts. Neither for the evaluation of the counterarguments nor for persuasion did we find substantial differences across the two scripts but only differences in effect magnitude. This could provide a preliminary indication that the specific issue remains a marginal matter when it comes to how personality affects information processing and opinion change. This presents an important methodological result per se, especially given that experimental investigations are often not powerful enough to also vary the issue at stake.

Limitations

These results are not without limitations. First, our tests were based on "short" personality measures, which cannot capture all facets and nuances of human personality (e.g., Bakker & Lelkes, 2018). Given that differential effects on persuasion for different personality facets cannot be excluded, our results probably suffer from oversimplification—as shown perhaps for narcissism. Yet, they set the stage for further research in a context where still very little is known about how these two sets of personalities interact with persuasive messages.

Second, even if our results globally exist across the two issues, we cannot exclude that the results shown here are, in part, driven by the issues' controversial nature. Indeed, evidence exists that individuals are more likely to engage in selective exposure when thinking about current salient issues (Jonas, Greenberg, & Frey, 2003). As such, a case could be made that our results are unlikely to hold for less-salient issues. The opposite case is, of course, equally likely, that is that individual differences are especially important for low-saliency issues whereas high-saliency issues are more likely to be processed similarly by everyone. As noted above, more research that manipulates issue content is foreseen.

Third, our design did not manipulate any source attributes. All counterarguments presented information from an unnamed authority, which was implicitly given legitimate scientific authority over the veracity of the information. With this, we aimed to focus on the general tendencies and minimize potential context effects, which are highly likely to influence the relationship between personality and politics (see Gerber et al., 2012). Scientific evidence cannot be considered intrinsically neutral, however. Mounting evidence suggests that a non-negligible part of the public distrusts scientific evidence (e.g., Gauchat, 2012) and that this is a function of their ideological profile (McCright, Dentzman, Charters, & Dietz, 2013). Further research should manipulate the source to (i) test for mechanisms related to perceived honesty and credibility and (ii) control for the fact that different sources are trusted differently by different people. Moreover, we urge future research to explore how these mechanisms differ among persuasive environments (e.g., interpersonal versus mediated contexts).

Fourth, our analysis voluntarily omitted respondents who changed their opinion against the direction of the counterargument. While such "polarization" is a change in opinion as much as persuasion is, the root mechanisms leading to stronger instead of weaker opinions are likely quite different. Further research on attitude polarization, as a complementary process to persuasion, seems necessary—especially in light of the current disciplinary interest in the affective components of attitude polarization (e.g., Levendusky, 2018), the structuring effects of partisanship on exposure to congruent information (e.g., Stroud, 2010), and the rejection of incongruent messages (Taber & Lodge, 2006).

Finally, our study could not test for the underlying causal mechanisms associating personality traits and message evaluation and persuasion. Yet, proximate phenomena, such as the need for cognitive closure, are likely to play a role and foster resistance to persuasion (e.g., Kruglanski, Webster, & Klem, 1993). Further research should consider the intervening and mediating role of such proximate phenomena toward an integrated model of individual dispositional differences and susceptibility to persuasion.

Implications

From a theoretical standpoint, our results indicate that opinion change is (also) a function of individual differences. Existing work has granted extensive attention to the intervening role of factors associated with the specific persuasion dynamics including message, source, channel, issues, and respondent idiosyncrasies (Cialdini, 2007; O'Keefe, 1990). However, research showing the intervening role of higher-order personality factors is relatively scarce. Focusing on such drivers is not simply an academic exercise in filling blatant gaps. Individual differences are assumed to be mostly stable over time (McCrae & Costa, 1982; but see Ardelt, 2000), which makes them relevant for social dynamics beyond suspicions of endogeneity—in the short term, at least. In this sense, the results presented here offer an important missing piece—and, potentially, an exogenous one—to the puzzle of individual drivers of persuasion.

From the practitioners' standpoint, our results suggest that silver bullets in persuasive campaigns are unlikely to exist and that persuasive campaigns are always destined to fail for some. Recent research by Hirsh, Kang, and Bodenhausen (2012) shows that tailoring the message to the personality profile of the targets increases its persuasiveness substantially. Our results contribute to the emerging research and practice on "tailored persuasion" (e.g., Rimer & Kreuter, 2006) by showing that personality differences are likely to set up a baseline for general persuasiveness of the messages—something that existing studies have not yet adopted.

References

- Althaus, S. L., & Kim, Y. M. (2006). Priming effects in complex information environments: Reassessing the impact of news discourse on presidential approval. *Journal of Politics*, 68(4), 960–976. doi:10.1111/j.1468-2508.2006.00483.x
- Ardelt, M. (2000). Still stable after all these years? Personality stability theory revisited. *Social Psychology Quarterly*, 63(4), 392–405. doi:10.2307/2695848
- Bakker, B. N., & Lelkes, Y. (2018). Selling ourselves short? How abbreviated measures of personality change the way we think about personality and politics. *Journal of Politics*, 80(4), 1311–1325. doi:10.1086/698928
- Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis*, 20(3), 351–368. doi:10.1093/pan/mpr057
- Berinsky, A. J., Margolis, M. F., & Sances, M. W. (2014). Separating the shirkers from the workers? Making sure respondents pay attention on self-administered surveys. *American Journal of Political Science*, 58(3), 739–753. doi:10.1111/ajps.12081
- Boulianne, S., & Koc-Michalska, K. (2022). The role of personality in political talk and like-minded discussion. *International Journal of Press/Politics*, 27(1), 285–310. doi:10.1177/1940161221994096

- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3–5. doi:10.1177/1745691610393980
- Campbell, W. K., Goodie, A. S., & Foster, J. D. (2004). Narcissism, confidence, and risk attitude. *Journal* of Behavioral Decision Making, 17(4), 297–311. doi:10.1002/bdm.475
- Carment, D. W., Miles, C. G., & Cervin, V. B. (1965). Persuasiveness and persuasibility as related to intelligence and extraversion. *British Journal of Social and Clinical Psychology*, 4(1), 1–7. doi:10.1111/j.2044-8260.1965.tb00433.x
- Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. *Computers in Human Behavior, 29*, 2156–2160. doi:10.1016/j.chb.2013.05.009
- Chen, P., Pruysers, S., & Blais, J. (2020). The dark side of politics: Participation and the dark triad. *Political Studies*, 69(3), 577–601. doi:10.1177/0032321720911566
- Choi, D. H., & Shin, D. H. (2017). Exploring political compromise in the new media environment: The interaction effects of social media use and the Big Five personality traits. *Personality and Individual Differences, 106*, 163–171. doi:10.1016/j.paid.2016.11.022
- Cialdini, R. B. (2007). Influence: The psychology of persuasion. New York, NY: HarperCollins.
- Clifford, S., Jewell, R. M., & Waggoner, P. D. (2015). Are samples drawn from Mechanical Turk valid for research on political ideology? *Research & Politics*, 2(4), 1–9. doi:10.1177/2053168015622072
- Costa, P. T., & McCrae, R. R. (1992). *Neo PI-R professional manual*. Odessa, FL: Psychological Assessment Resources.
- DeYoung, C. G. (2006). Higher-order factors of the Big Five in a multi-informant sample. *Journal of Personality and Social Psychology*, *91*(6), 1138–1151. doi:10.1037/0022-3514.91.6.1138
- Dillard, J. P., & Nabi, R. L. (2006). The persuasive influence of emotion in cancer prevention and detection messages. *Journal of Communication, 56*, 123–139. doi:10.1111/j.1460-2466.2006.00286.x
- Ehrhart, M. G., Ehrhart, K. H., Roesch, S. C., Chung-Herrera, B. G., Nadler, K., & Bradshaw, K. (2009).
 Testing the latent factor structure and construct validity of the Ten-Item Personality Inventory.
 Personality and Individual Differences, 47(8), 900–905. doi:10.1016/j.paid.2009.07.012
- Eveland, W. P., Jr. (2004). The effect of political discussion in producing informed citizens: The roles of information, motivation, and elaboration. *Political Communication*, 21(2), 177–193. doi:10.1080/10584600490443877

- Ford, J. B. (2017). Amazon's Mechanical Turk: A comment. *Journal of Advertising*, *46*(1), 156–158. doi:10.1080/00913367.2016.1277380
- Furnham, A. (2017). The dark side of conscientiousness. *Psychology*, 8(11), 1879–1893. doi:10.4236/psych.2017.811122
- Gauchat, G. (2012). Politicization of science in the public sphere: A study of public trust in the United States, 1974 to 2010. *American Sociological Review*, *77*(2), 167–187. doi:10.1177/0003122412438225
- Gerber, A. S., Huber, G. A., Doherty, D., & Dowling, C. M. (2011). Personality traits and the consumption of political information. *American Politics Research*, *39*(1), 32–84. doi:10.1177/1532673X10381466
- Gerber, A. S., Huber, G. A., Doherty, D., & Dowling, C. M. (2012). Disagreement and the avoidance of political discussion: Aggregate relationships and differences across personality traits. *American Journal of Political Science*, 56(4), 849–874. doi:10.1111/j.1540-5907.2011.00571.x
- Gerber, A. S., Huber, G. A., Doherty, D., Dowling, C. M., & Ha, S. E. (2010). Personality and political attitudes: Relationships across issue domains and political contexts. *American Political Science Review*, 104(1), 111–133. doi:10.1017/S0003055410000031
- Gerber, A. S., Huber, G. A., Doherty, D., Dowling, C. M., & Panagopoulos, C. (2013). Big five personality traits and responses to persuasive appeals: Results from voter turnout experiments. *Political Behavior*, 35(4), 687–728. doi:10.1007/s11109-012-9216-y
- Gerber, A. S., Huber, G. A., Doherty, D., Dowling, C. M., Raso, C., & Ha, S. E. (2011). Personality traits and participation in political processes. *Journal of Politics*, 73(3), 692–706. doi:10.1017/S0022381611000399
- Giammarco, E. A., & Vernon, P. A. (2014). Vengeance and the Dark Triad: The role of empathy and perspective taking in trait forgivingness. *Personality and Individual Differences, 67*, 23–29. doi:10.1016/j.paid.2014.02.010
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37(6), 504–528. doi:10.1016/S0092-6566(03)00046-1
- Graziano, W. G., & Tobin, R. M. (2002). Agreeableness: Dimension of personality or social desirability artifact? *Journal of Personality*, *70*(5), 695–728. doi:10.1111/1467-6494.05021
- Grill, C. (2021). *Personality traits and citizens' conversations about politics* (Working Paper No. 176). Retrieved from https://www.mzes.uni-mannheim.de/publications/wp/wp-176.pdf

Hare, R. D. (2003). The psychopathy checklist-revised. Toronto, Canada: Springer.

- Hauser, D. J., & Schwarz, N. (2016). Attentive Turkers: MTurk participants perform better on online attention checks than do subject pool participants. *Behavior Research Methods*, 48, 400–407. doi:10.3758/s13428-015-0578-z
- Hibbing, M., Ritchie, M., & Anderson, M. (2011). Personality and political discussion. *Political Behavior*, 33(4), 601–624. doi:10.1007/s11109-010-9147-4
- Hirsh, J. B., Kang, S. K., & Bodenhausen, G. V. (2012). Personalized persuasion: Tailoring persuasive appeals to recipients' personality traits. *Psychological Science*, 23(6), 578–581. doi:10.1177/0956797611436349
- Hodge, A. S., Hook, J. N., Van Tongeren, D. R., Davis, D. E., & McElroy-Heltzel, S. E. (2021). Political humility: Engaging others with different political perspectives. *Journal of Positive Psychology*, 16(4), 526–535. doi:10.1080/17439760.2020.1752784
- Ingham, S., & Levin, I. (2018). Can deliberative minipublics influence public opinion? Theory and experimental evidence. *Political Research Quarterly*, *71*(3), 654–667. doi:10.1177/1065912918755508
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), Handbook of personality: Theory and research (pp. 114–158). New York, NY: Guilford.
- Jonas, E., Greenberg, J., & Frey, D. (2003). Connecting terror management and dissonance theory: Evidence that mortality salience increases the preference for supporting information after decisions. *Personality and Social Psychology Bulletin, 29*(9), 1181–1189. doi:10.1177/0146167203254599
- Jonason, P. K. (2014). Personality and politics. *Personality and Individual Differences, 71*, 181–184. doi:10.1016/j.paid.2014.08.002
- Jonason, P. K. (2015). How "dark" personality traits and perceptions come together to predict racism in Australia. *Personality and Individual Differences, 72*, 47–51. doi:10.1016/j.paid.2014.08.030
- Jonason, P. K., & Webster, G. D. (2010). The dirty dozen: A concise measure of the dark triad. *Psychological Assessment, 22*(2), 420–432. doi:10.1037/a0019265
- Kim, Y., Hsu, S. H., & Gil de Zúñiga, H. (2013). Influence of social media use on discussion network heterogeneity and civic engagement: The moderating role of personality traits. *Journal of Communication, 63*(3), 498–516. doi:10.1111/jcom.12034

- Kruglanski, A. W., Webster, D. M., & Klem, A. (1993). Motivated resistance and openness to persuasion in the presence or absence of prior information. *Journal of Personality and Social Psychology*, 65(5), 861–876. doi:10.1037/0022-3514.65.5.861
- Kwak, N., Williams, A. E., Wang, X., & Lee, H. (2005). Talking politics and engaging politics: An examination of the interactive relationships between structural features of political talk and discussion engagement. *Communication Research*, 32(1), 87–111. doi:10.1177/0093650204271400
- Lee, K., & Ashton, M. C. (2004). Psychometric properties of the HEXACO personality inventory. *Multivariate Behavioral Research*, *39*(2), 329–358. doi:10.1207/s15327906mbr3902_8
- Levendusky, M. S. (2018). Americans, not partisans: Can priming American national identity reduce affective polarization? *Journal of Politics*, *80*(1), 59–70. doi:10.1086/693987
- Levine, T. R., & Badger, E. E. (1993). Argumentativeness and resistance to persuasion. *Communication Reports, 6*(2), 71–78. doi:10.1080/08934219309367567
- Lindell, M., & Strandberg, K. (2018). A participatory personality? Examining the influence of personality traits on political participation. *Scandinavian Political Studies*, 41(3), 239–262. doi:10.1111/1467-9477.12118
- Lynam, D. R., Gaughan, E. T., Miller, J. D., Miller, D. J., Mullins-Sweatt, S., & Widiger, T. A. (2011). Assessing the basic traits associated with psychopathy: Development and validation of the Elemental Psychopathy Assessment. *Psychological Assessment*, 23(1), 108–124. doi:10.1037/a0021146
- Marcus, G. E., Neuman, R., & MacKuen, M. B. (2000). *Affective intelligence and political judgment*. Chicago, IL: University of Chicago Press.
- Marcus, G. E., Sullivan, J. L., Theiss-Morse, E., & Wood, S. L. (1995). *With malice toward some: How people make civil liberties judgments*. New York, NY: Cambridge University Press.
- Matz, D. C., Hofstedt, P. M., & Wood, W. (2008). Extraversion as a moderator of the cognitive dissonance associated with disagreement. *Personality and Individual Differences*, 45(5), 401–405. doi:10.1016/j.paid.2008.05.014
- McCrae, R. R., & Costa, P. T. (1982). Self-concept and the stability of personality: Cross-sectional comparisons of self-reports and ratings. *Journal of Personality and Social Psychology*, 43(6), 1282–1292. doi:10.1037/0022-3514.43.6.1282
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal* of Personality, 60(2), 175–215. doi:10.1111/j.1467-6494.1992.tb00970.x

- McCright, A. M., Dentzman, K., Charters, M., & Dietz, T. (2013). The influence of political ideology on trust in science. *Environmental Research Letters*, 8(4), 1–9. doi:10.1088/1748-9326/8/4/044029
- McGraw, K. M., Lodge, M., & Stroh, P. (1990). On-line processing in candidate evaluation: The effects of issue order, issue importance, and sophistication. *Political Behavior*, 12(1), 41–58. doi:10.1007/BF00992331
- Miller, J. D., Hoffman, B. J., Gaughan, E. T., Gentile, B., Maples, J., & Keith Campbell, W. (2011). Grandiose and vulnerable narcissism: A nomological network analysis. *Journal of Personality*, 79(5), 1013–1042. doi:10.1111/j.1467-6494.2010.00711.x
- Minson, J. A., & Chen, F. S. (2022). Receptiveness to opposing views: Conceptualization and integrative review. *Personality and Social Psychology Review*, 26(2), 93–111. doi:10.1177/10888683211061037
- Mondak, J. J. (2010). *Personality and the foundations of political behavior*. New York, NY: Cambridge University Press.
- Mondak, J. J., & Halperin, D. K. (2008). A framework for the study of personality and political behaviour. British Journal of Political Science, 38(2), 335–362. doi:10.1017/S0007123408000173
- Mondak, J. J., Hibbing, M. V., Canache, D., Seligson, M. A., & Anderson, M. R. (2010). Personality and civic engagement: An integrative framework for the study of trait effects on political behavior. *American Political Science Review*, 104(1), 85–110. doi:10.1017/S0003055409990359
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, *12*(4), 177–196. doi:10.1207/S15327965PLI1204_1
- Muradova, L., & Arceneaux, K. (2022). Reflective political reasoning: Political disagreement and empathy. *European Journal of Political Research*, *61*(3), 740–761. doi:10.1111/1475-6765.12490
- Murray, A. A., Wood, J. M., & Lilienfeld, S. O. (2012). Psychopathic personality traits and cognitive dissonance: Individual differences in attitude change. *Journal of Research in Personality*, 46(5), 525–536. doi:10.1016/j.jrp.2012.05.011
- Nai, A., Schemeil, Y., & Marie, J. L. (2017). Anxiety, sophistication, and resistance to persuasion: Evidence from a quasi-experimental survey on global climate change. *Political Psychology*, 38(1), 137–156. doi:10.1111/pops.12331
- Newman, J. P. (1987). Reaction to punishment in extraverts and psychopaths: Implications for the impulsive behavior of disinhibited individuals. *Journal of Research in Personality*, 21(4), 464–480. doi:10.1016/0092-6566(87)90033-X

- Newman, J. P., Widom, C. S., & Nathan, S. (1985). Passive avoidance in syndromes of disinhibition: Psychopathy and extraversion. *Journal of Personality and Social Psychology*, 48(5), 1316–1327. doi:10.1037/0022-3514.48.5.1316
- Norman, R. M. G., & Watson, L. D. (1976). Extraversion and reactions to cognitive inconsistency. *Journal* of Research in Personality, 10(4), 446–456. doi:10.1016/0092-6566(76)90058-1
- O'Keefe, D. J. (1990). Persuasion: Theory and research. Newbury Park, CA: SAGE Publications.
- Paolacci, G., & Chandler, J. (2014). Inside the Turk: Understanding Mechanical Turk as a participant pool. *Current Directions in Psychological Science*, 23(3), 184–188. doi:10.1177/0963721414531598
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36(6), 556–563. doi:10.1016/S0092-6566(02)00505-6
- Petty, R. E., & Briñol, P. (2010). Attitude change. In R. F. Baumeister & E. J. Finkel (Eds.), Advanced social psychology: The state of the science (pp. 217–259). New York, NY: Oxford University Press.
- Pew Research Center. (2018, October 4). 2018 midterm voters: Issues and political values. Retrieved from https://www.pewresearch.org/politics/2018/10/04/2018-midterm-voters-issues-and-political-values/
- Priester, J. R., & Petty, R. E. (1995). Source attributions and persuasion: Perceived honesty as a determinant of message scrutiny. *Personality and Social Psychology Bulletin*, 21(6), 637–654. doi:10.1177/0146167295216010
- Redlawsk, D. P. (2002). Hot cognition or cool consideration? Testing the effects of motivated reasoning on political decision making. *Journal of Politics*, *64*(4), 1021–1044. doi:10.1111/1468-2508.00161
- Rhodes, N., & Wood, W. (1992). Self-esteem and intelligence affect influenceability: The mediating role of message reception. *Psychological Bulletin*, *111*(1), 156–171. doi:10.1037/0033-2909.111.1.156
- Rimer, B. K., & Kreuter, M. W. (2006). Advancing tailored health communication: A persuasion and message effects perspective. *Journal of Communication*, 56, 184–201. doi:10.1111/j.1460-2466.2006.00289.x
- Saucier, D. A., & Webster, R. J. (2010). Social vigilantism: Measuring individual differences in belief superiority and resistance to persuasion. *Personality and Social Psychology Bulletin*, 36(1), 19– 32. doi:10.1177/0146167209346170
- Silvia, P. J., Nusbaum, E. C., Berg, C., Martin, C., & O'Connor, A. (2009). Openness to experience, plasticity, and creativity: Exploring lower-order, high-order, and interactive effects. *Journal of Research in Personality*, 43(6), 1087–1090. doi:10.1016/j.jrp.2009.04.015

- Silvia, P. J., Winterstein, B. P., Willse, J. T., Barona, C. M., Cram, J. T., Hess, K. I., . . . Richard, C. A. (2008). Assessing creativity with divergent thinking tasks: Exploring the reliability and validity of new subjective scoring methods. *Psychology of Aesthetics, Creativity, and the Arts, 2*(2), 68–85. doi:10.1037/1931-3896.2.2.68
- Smith, C. T., De Houwer, J., & Nosek, B. A. (2013). Consider the source: Persuasion of implicit evaluations is moderated by source credibility. *Personality and Social Psychology Bulletin*, 39(2), 193–205. doi:10.1177/0146167212472374
- Steenbergen, M. R., & Ellis, C. (2006). Fear and loathing in American elections: Context, traits, and negative candidate affect. In D. P. Redlawsk (Ed.), *Feeling politics: Emotion in political information processing* (pp. 109–133). New York, NY: Palgrave.
- Stroud, N. J. (2010). Polarization and partisan selective exposure. *Journal of Communication, 60*(3), 556– 576. doi:10.1111/j.1460-2466.2010.01497.x
- Taber, C. S., & Lodge, M. (2006). Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science*, *50*(3), 755–769. doi:10.1111/j.1540-5907.2006.00214.x
- Tehrani, H. D., & Yamini, S. (2020). Personality traits and conflict resolution styles: A meta-analysis. *Personality and Individual Differences*, *157*, 1–10. doi:10.1016/j.paid.2019.109794
- Valli, C., & Nai, A. (2022). Let me think about it: Cognitive elaboration and strategies of resistance to political persuasion. *Media Psychology*, 1–24. doi:10.1080/15213269.2022.2098774
- Wood, V. F., & Bell, P. A. (2008). Predicting interpersonal conflict resolution styles from personality characteristics. *Personality and Individual Differences*, 45(2), 126–131. doi:10.1016/j.paid.2008.03.010
- Zaller, J. R. (1992). The nature and origins of mass opinion. New York, NY: Cambridge University Press.
- Zaller, J., & Feldman, S. (1992). A simple theory of the survey response: Answering questions versus revealing preferences. *American Journal of Political Science*, 36(3), 579–616. doi:10.2307/2111583