Original Research Reports

Associations Among Dimensions of Political Ideology and Dark Tetrad Personality Features

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Abstract

Examinations of personality and political ideology have assessed political ideology as a unidimensional construct and primarily focused on the Big Five personality factors. The purpose of the present two-part study was to examine associations among political ideology (assessed using two dimensions [social and economic]) and Dark Tetrad traits in two samples of adults from the United States (N = 579 and 597). The combination of high economic conservatism and high social liberalism was associated with the highest levels of Machiavellianism and the combination of high social conservatism and high economic liberalism was associated with the highest levels of Narcissism. These effects were significant even after accounting for Big Five personality factors and when using a measure of political ideology that was comprised of multiple items for each dimension of political ideology. Implications include the potential application of our findings to altering political interpersonal dynamics. Additionally, study findings highlight the importance of examining political ideology via multiple dimensions to account for heterogeneity of political attitudes.

Keywords: Dark Tetrad, personality, political ideology, liberal, conservative

Because of the real-world impact that political ideology has on society (i.e., one's beliefs about how society should be governed; Jost, Federico, & Napier, 2009), researchers have considered the role that a wide variety of individual differences factors play in the development and maintenance of political ideology, with a recent emphasis on personality characteristics (e.g., Block & Block, 2006; Alford, Funk, & Hibbing, 2005). Although the relation between political ideology and personality has been examined in a number of studies, these examinations have been relatively limited in scope. In the large majority of these studies, personality assessment focused on the Big Five personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism; John, Donahue, & Kentle, 1991; Mondak & Halperin, 2008). The most consistent finding to come out of this line of research is that individuals who report liberal ideology tend to score significantly higher on measures of openness to experience than those who report more conservative ideology (Carney, Jost, Gosling, & Potter, 2008; Gerber, Huber, Doherty, Dowling, & Ha, 2010). Additionally, some evidence suggests that conservatives report significantly higher levels

of conscientiousness than liberals; however, this difference in self-report does not appear to translate into behavioral differences (Carney et al., 2008). That is, while conservatives self-report higher levels of conscientiousness, they do not behave in ways that would reflect greater conscientiousness. A clear pattern has not emerged regarding the traits of extraversion, agreeableness, and neuroticism in relation to political ideology.

To move beyond the "rather socially desirable description of personality" provided by the Big Five, Jonason (2014) examined political ideology in the context of Dark Triad traits (Machiavellianism, Narcissism, and Psychopathy; Paulhus & Williams, 2002). Although Dark Triad traits are related, each has distinct features that suggest construct differentiation. For example, whereas those with higher levels of Machiavellianism tend to plan ahead, develop alliances, and desire to maintain a good reputation, individuals with higher Psychopathy act impulsively, alienate friends and family, and care little about their reputations. Individuals with higher levels of Narcissism pursue rein-forcement of ego, often through self-deceptive acts such as choosing to espouse strongly held beliefs that support their personal narrative even when there is sufficient evidence to the contrary (Jones & Paulhus, 2014). Addition-ally, individuals high in Narcissism tend to have higher levels of entitlement (Bushman, Bonacci, van Dijk, & Baumeister, 2003) and may become aggressive when their beliefs are threatened (Jones & Paulhus, 2010).

In the first of two studies, Jonason (2014) had undergraduate participants complete self-report measures of the Big Five and Dark Triad traits and then rate their political orientation on a 5-point scale ranging from "extremely conservative" to "extremely liberal" (Jonason, 2014). In a multiple regression analysis, which included the Big Five and Dark Triad traits predicting political ideology, higher levels of liberalism were associated with lower levels of extraversion, conscientiousness, and Narcissism, and higher levels of openness and Psychopathy. Conversely, higher levels of conservatism were associated with higher levels of extraversion, conscientiousness, and Narcissism, and lower levels of openness and Psychopathy (Jonason, 2014). In a follow-up study, Jonason (2014) used two indexes to assess political ideology (liberalism and conservatism), rather than using one bipolar scale, in a general population sample of adults. Two regression analyses, similar to that which was conducted in the first study, were conducted. Liberalism and conservatism served as outcome variables in separate models. Higher levels of liber-alism were associated with higher openness and lower Machiavellianism and higher levels of conservatism were associated with higher levels of Psychopathy.

Although Jonason (2014) should be commended for going beyond the Big Five traits, measuring political ideology as a unidimensional construct, or as two dimensions modeled separately, does not account for heterogeneity in political attitudes (Carmines, Ensley, & Wagner, 2012; Carmines & Stimson, 1989; Feldman & Johnston, 2014). Feldman and Johnston (2014) conducted a study in which they assessed both economic and social political attitudes, using seven items with 2-4 possible response options per item, in a large nationally representative sample of adults from the United States. Through the use of latent class analysis, six distinct categories were identified. Two of the six categories consisted of people who had either consistent liberal or conservative views, but these partic-ipants only accounted for 40% of the sample. Importantly, the large majority of the remainder of the sample was not made up of consistent centrists, but of people who held both conservative and liberal attitudes based on the domains of social and economic ideology. For example, 15% of the sample identified as being relatively socially liberal and economically conservative.

In general, individuals with the combination of socially liberal and economically conservative beliefs seek to maximize individual freedom of choice and autonomy and are skeptical of authority. As such, they believe that each individual is responsible for his or her own economic prosperity; it is not the duty, or the right, of the government

to provide for the people (i.e., economic conservatism). Similarly, the government should not step in to tell people how to live their lives when it comes to social issues, such as abortion, drug use, religious convictions, and so on (i.e., social liberalism; Iyer, Koleva, Graham, Ditto, & Haidt, 2012). Iyer et al. (2012) found that these individuals, compared to those with consistently liberal or conservative beliefs, valued the principle of liberty (free will) more strongly than moral concerns that might get in the way of reaching that ideal. Additionally, they are relatively detached from emotional experience and prefer less close knit, binding social relationships (Iyer et al., 2012). These findings are consistent with some of the central aspects of Machiavellianism (e.g., the ends justify the means, remaining emotionally distant from others to ensure that emotional closeness does not become a liability when decisions need to be made). This world-view is not an uncommon one. In fact, there are almost as many individuals in the United States with the combination of socially liberal and economically conservative beliefs as there are individuals who espouse consistent economic and social conservative beliefs (Feldman & Johnston, 2014), thus further highlighting the importance of accounting for heterogeneity in political attitudes in future research. However, if forced to identify their political ideology via a unidimensional scale, these individuals typically identify as conservative (Feldman & Johnston, 2014). Accounting for heterogeneity in political ideology, along the dimensions described by Feldman and Johnston (2014: i.e., economic and social domains), may help to clarify equivocal findings in the extant literature. For example, based on the above rationale, we would expect those who report high economic conservatism in combination with high social liberalism to report relatively higher levels of Machiavellianism.

Conversely, Feldman and Johnston (2014) found that individuals with more socially conservative and economically liberal attitudes had the lowest level of education, political knowledge, and income. As such, these individuals may be among those who are most likely to benefit from government programs that come from economically liberal policies (e.g., social security, minimum wage, progressive income tax), thus explaining their economically liberal attitudes in the context of social conservatism. Individuals who are simultaneously higher on social conservatism and economic liberalism hold strong views regarding societal issues, such as abortion, the role of religion in political matters, and affirmative action. These beliefs may be so central to the individual's sense of self, that s/he may espouse these beliefs even in the face of contradictory evidence. This description is reminiscent of the pursuit of ego reinforcement exhibited by individuals with higher levels of Narcissism. Based on this rationale, we would expect those who report higher levels of economic liberalism in combination with higher levels of social conservatism to report relatively higher levels of Narcissism.

The findings described above highlight potential benefits of assessing political ideology as a multidimensional, rather than unidimensional construct. The limitations of assessing political ideology as a unidimensional construct have been described by a number of other researchers (e.g., Carmines et al., 2012; Carmines & Stimson, 1989; Carney et al., 2008; Duriez, 2003; Johnston & Wronski, 2015). These researchers advocate for using a political ideology assessment method that accounts for heterogeneity of political attitudes. Assessing both economic and social political ideology in future research should increase conceptual clarity of study findings.

Study 1

Examinations of associations between personality factors and political ideology have largely focused on the Big Five and have assessed political ideology as a unidimensional construct. In Study 1, we assessed political ideology via the more ecologically valid two-dimensional model described above. We sought to build on the work of

Jonason (2014), not only through our use of two dimensions of political ideology, but also by assessing the Dark Tetrad, which includes everyday Sadism as well as the three Dark Triad traits described above. Everyday Sadism (i.e., receiving pleasure from enacting cruel behaviors upon others) is strongly associated with the other three Triad traits, but has been shown to provide significant unique variance above the Triad traits in predicting maladaptive outcomes (e.g., anti-social behavior; Chabrol, Van Leeuwen, Rodgers, & Sejourne, 2009).

As described, accounting for heterogeneity in political attitudes may clarify the nature of relations between political ideology and personality characteristics. Thus, we examined the interplay between two dimensions of political ideology (social and economic) as they relate to Dark Tetrad traits using a series of multiple regressions. Personality assessment as it relates to political ideology has focused most prominently on the Big Five traits. As such, the Big Five traits were included as covariates in each regression model to determine whether the interaction between social and economic political ideology predicts each tetrad trait above and beyond the Big Five. Based on the above rationale, we predicted that:

Hypothesis 1: A negative association between social political ideology (from more liberal [lower scores] to more conservative [higher scores]) and Machiavellianism will be observed, but only among those with relatively higher levels of economic conservatism. In other words, those with relatively higher social liberalism (lower social political ideology) and relatively higher economic conservatism (higher economic political ideology) will evidence the highest levels of Machiavellianism. We predicted that this interaction effect would exhibit unique variance in predicting Machiavellianism above any beyond the effects of the Big Five traits.

Hypothesis 2: A positive association between social political ideology (from more liberal [lower scores] to more conservative [higher scores]) and Narcissism will be observed, but only among those with relatively higher levels of economic liberalism. In other words, those with relatively higher social conservatism (higher social political ideology) and relatively higher economic liberalism (lower economic political ideology) will evidence the highest levels of Machiavellianism. We predicted that this interaction effect would exhibit unique variance in predicting Narcissism above any beyond the effects of the Big Five traits.

Exploratory: Analyses that included Psychopathy and Sadism were exploratory in nature, as sufficient empirical and theoretical rationale was lacking to make a-priori hypotheses regarding the interactive effect of social and economic political ideology on these constructs.

Method

Participants and Procedure

As part of a larger study, general population adults from the United States (N = 579; recruited via Amazon Mechanical Turk [MTurk]) completed self-report measures assessing the variables of interest in the present study. MTurk is an online labor market where participants complete questionnaires for financial compensation. Evidence suggests that MTurk data is of high quality, especially with the use of quality control procedures (e.g., Behrend, Sharek, Meade, & Wiebe, 2011; Buhrmester et al., 2011; Paolacci, Chandler, & Ipeirotis, 2010; Shapiro, Chandler, & Mueller, 2013). Moreover, MTurk samples are more demographically diverse than American undergraduate samples (Buhrmester, Kwang, & Gosling, 2011). Informed consent and self-report measures were administered via a secure online survey program and participants were compensated $1.50 for completing the study.

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The majority of the sample was female (58.7%), with an average age of 35.6 (*SD* = 11.3) years. In regard to racial/ethnic identification, 82.0% of the sample self-identified as White, 9.2% as Black/African-American, 5.7% as Asian, 2.8% as "other", and 0.3% as American Indian/Alaska Native. Additionally, 7.9% of the sample identified their ethnicity as Hispanic/Latino.

Measures

Political ideology — To assess social and economic political ideology, participants provided ratings on the following two scales: (1) "In terms of social and cultural issues, such as abortion, separation of church and state, and affirmative action, where would you place yourself on the following scale?" and (2) "In terms of economic issues, such as taxation, welfare, and privatization of social security, where would you place yourself on the following scale?" (Carney et al., 2008). A 5-point scale was used to respond (1 = *Extremely Liberal, 2 = Liberal, 3 = Middle-of-the-road, 4 = Conservative, 5* = Extremely Conservative). The means and standard deviations are as follows: social political ideology (*M* = 2.79, *SD* = 1.19) and economic political ideology (*M* = 2.47, *SD* = 1.20).

Dark triad personality traits — The Short-Dark Triad (SD3; Jones & Paulhus, 2014) is a 27-item self-report measure that assesses Machiavellianism (e.g., "It's wise to keep track of information that you can use against people later."), Narcissism (e.g., "I know that I am special because everyone keeps telling me so."), and Psychopathy (e.g., "People who mess with me always regret it."). Participants rate the degree to which they agree with each statement on a 5-point scale (1 = *Disagree strongly* to 5 = *Agree strongly).* The Narcissism scale most clearly captures grandiosity (i.e., an unrealistic sense of superiority and uniqueness, viewing others as inferior and worthy of disdain), while the Machiavellianism scale appears to capture manipulation of others that is strategic in nature, and the Psychopathy scale more accurately represents secondary psychopathy (i.e., poor behavioral control associated with impulsivity and risky, delinquent behaviors) rather than primary psychopathy (i.e., callousness, lack of remorse/guilt, superficial charm, pathological lying; Jones & Paulhus, 2014). The SD3 has demonstrated adequate psychometric properties, including internal consistency and construct validity (Jones & Paulhus, 2014). In the present sample, internal consistency was adequate for each of the scale scores: Machiavellianism (α = .80; *M* = 25.31, *SD* = 6.27), Narcissism (α = .79; *M* = 23.44, *SD* = 6.28), and Psychopathy (α = .79; *M* = 18.38, *SD* = 6.11).

Sadism — The comprehensive assessment of sadistic tendencies (CAST; Buckels & Paulhus, 2014) is an 18-item self-report measure that assesses direct verbal (e.g., "I enjoy making jokes at the expense of others."), direct physical ("I enjoy physically hurting people."), and vicarious ("I sometimes replay my favorite scenes from gory slasher film.") sadistic tendencies. Participants rate the degree to which they agree with each statement on a 7-point scale (1 = *Strongly disagree* to 7 = *Strongly agree).* The CAST has demonstrated internal consistency and criterion-related validity in previous research (Buckels, Trapnell, & Paulhus, 2014; Greitemeyer, 2015). Internal consistency for the CAST total score was adequate in the present sample (α = .92; *M* = 38.34, *SD* = 19.19).

The Big Five personality dimensions — The Big Five Inventory-10 (BFI-10; Gosling, Rentfrow, & Swann, 2003) is a 10 item abbreviated version of the original 44-item (John, Donahue, & Kentle, 1991) self-report measure assessing the Big Five personality dimensions (i.e., openness, conscientiousness, extraversion, agreeableness, neuroticism). For the BFI-10, each dimension is assessed via two items. Participants rate the degree to which they agree with each statement (e.g., "I see myself as someone who is reserved", "I see myself as someone who gets nervous easily") on a 5-point scale (1 = *Disagree strongly* to 5 = *Agree strongly).* The BFI-10 has demonstrated adequate psychometric properties, including construct validity (including discriminant validity among the five scales) and retest reliability over eight weeks (Gosling, Rentfrow, & Swann, 2003). The means and standard de-

viations are as follows: openness (*M* = 7.46, *SD* = 1.89), conscientiousness (*M* = 7.94, *SD* = 1.80), extraversion (*M* = 5.44, *SD* = 2.25), agreeableness (*M* = 7.14, *SD* = 1.97), and neuroticism (*M* = 5.33, *SD* = 2.35).

Data Analytic Strategy

Four regressions were conducted to examine the interaction between social and economic political ideology in relation to Dark Tetrad personality traits (i.e., Machiavellianism, Narcissism, Psychopathy, Sadism). As per Aiken and West (1991), predictor variables (Big Five personality traits [openness, conscientiousness, extraversion, agreeableness, and neuroticism] and the two political ideology variables [social, economic]) were mean centered and entered simultaneously in the first step of each model. Next, an interaction term, calculated as the product of the two political ideology variables, was entered in the second step of the model. Each Dark Tetrad variable served as an outcome variable in one of the regression models. Significant interaction effects were further explored using simple slopes analysis (Aiken & West, 1991). Simple slopes analysis consists of constructing two simple regression equations in which the relationship between the predictor variable and the outcome variable is tested at both high (+1 *SD*) and low (-1 *SD*) levels of the moderating variable (i.e., economic political ideology).

Results

Testing Interactions

Skew and Kurtosis for all study variables were within acceptable limits as proposed by Kline (2016). For the regression models from this study, the highest variance inflation factor (VIF) was 2.1, a value well below conventional cutoffs (i.e., 10) for indicating problems with multicollinearity (Cohen, Cohen, West, & Aiken, 2003).

Machiavellianism — Among the main effects predictors, conscientiousness and agreeableness were negatively associated with Machiavellianism (*p*s < .05; see Table 1). The interaction term (social political ideology x economic political ideology) significantly predicted Machiavellianism (*p* = .005; see Figure 1). Simple slopes analysis revealed a negative association between social political ideology and Machiavellianism at higher levels of economic political ideology (*β* = -.13, *p* = .02). The nature of the association was such that the combination of more socially liberal political ideology and more conservative economic political ideology was associated with greater Machiavellianism. The relationship between social political ideology and Machiavellianism was not significant at lower levels of economic political ideology (*β* = .08, *p* = .29).
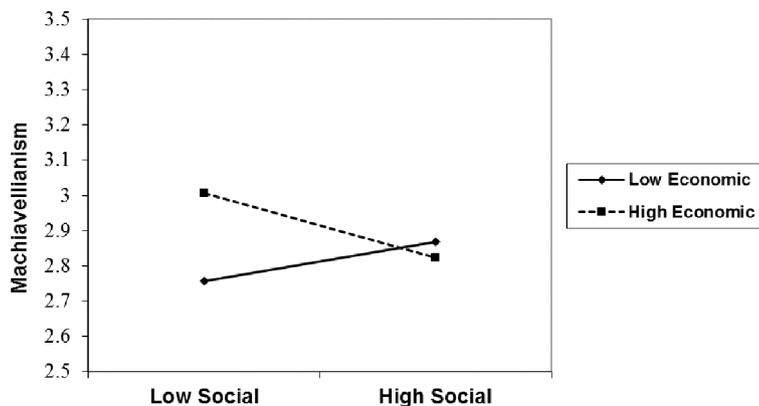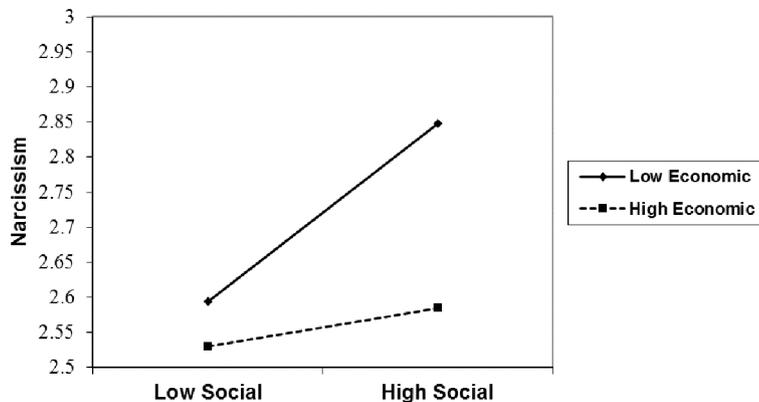

Figure 1. The Study 1 interaction between social and economic political ideology in relation to Machiavellianism.

Table 1

Study 1 and Study 2 Regressions Predicting Dark Tetrad Outcome Variables

Predictor	Machiavellianism				Narcissism				Psychopathy				Sadism			
	ΔR²	1 β	Step 2 β	2 CI (LL, UL)	ΔR²	1 β	Step 2 β	2 CI (LL, UL)	ΔR²	1 β	Step 2 β	2 CI (LL, UL)	ΔR²	1 β	Step 2 β	2 CI (LL, UL)
Study 1 Regressions with Single-Item Political Ideology Predictors and Dark Tetrad Outcome Variables																
Step 1	.17***				.26***				.22***				.16***			
Open		-.04	-.03	-.04, .02		.08*	.09*	.01, .06		-.01	-.01	-.03, .03		-.05	-.04	-1.24, .34
Con		-.14*	-.13*	-.08, -.02		-.05	-.04	-.05, .01		-.23***	-.22***	-.12, -.05		-.28***	-.28***	-3.85, -2.04
Extra		-.01	-.01	-.03, .02		.41***	.41***	.10, .15		.19***	.19***	.03, .08		.13**	.13**	.39, 1.80
Agree		-.35***	-.34***	-.15, -.09		-.12*	-.11**	-.07, -.01		-.38***	-.37***	-.15, -.10		-.24***	-.24***	-3.12, -1.53
Neuro		-.03	-.02	-.03, .02		-.21***	-.20***	-.08, -.04		-.08	-.07	-.05, .01		-.05	-.05	-1.14, .30
PI-Soc		-.07	-.03	-.08, .05		.08	.11*	.01, .12		.02	.06	-.02, .10		.08	.10	-.24, 3.29
PI-Econ		-.09	.07	-.02, .11		-.11*	-.12*	-.13, -.01		.02	-.03	-.08, .04		-.04	-.05	-2.49, .95
Step 2	.01**				.01*				.01**				.00			
Soc x Econ			-.11**	-.09, -.02			-.08*	-.07, -.01			-.11**	-.08, -.02			-.05	-1.70, .35
Study 2 Regressions with Single-Item Political Ideology Predictors and Dark Tetrad Outcome Variables																
Step 1	.02***				.01				.01				.03***			
PI-Soc		-.17**	-.12*	-.15, -.01		.04	.09	-.02, .12		-.07	-.03	-.09, .05		.00	.02	-.08, .13
PI-Econ		.24***	.20***	.06, .21		.03	.00	-.07, .07		.13*	.10	-.01, .13		.16**	.14*	.02, .24
Step 2	.04***				.02**				.02**				.03			
Soc x Econ			-.15***	-.13, -.04			-.13**	-.10, -.02			-.12**	-.10, -.02			-.07	-.11, .01
Study 2 Regressions with Multi-Item Political Ideology Predictors and Dark Tetrad Outcome Variables																
Step 1	.00				.01				.01				.02			
PI-Soc		.00	.01	-.02, .02		.02	.03	-.01, .02		.00	.01	-.01, .02		-.03	-.02	-.03, .02
PI-Econ		.06	.07	-.01, .03		.07	.08	-.01, .02		.08	.09*	.00, .03		.16***	.16***	.00, .03
Step 2	.02***				.02*				.02**				.03			
Soc x Econ			-.14***	-.01, -.002			-.11*	-.01, -.001			-.12**	-.01, -.002			.10*	-.01, -.001

Note. Study 1 *N* = 579. Study 2 *N* = 597. Open = BFI-Openness; Con = BFI-Conscientiousness; Extra = BFI-Extraversion; Agree = BFI-Agreeableness; Neuro = BFI-Neuroticism; PI-Soc = social dimension of political ideology; PI-Econ = economic domain of political ideology; Soc x Econ = interaction between PI-Soc and PI-Econ.

*p < .05. **p < .01. ***p < .001.

Narcissism — Among the main effects predictors, agreeableness, neuroticism, and economic political ideology were negatively associated, and openness, extraversion, and social political ideology were positively associated, with Narcissism (*p*s < .05). The interaction term (social political ideology x economic political ideology) significantly predicted Narcissism (*p* = .045). Simple slopes analysis revealed a significant positive association between social political ideology and Narcissism at lower levels of economic political ideology (*β* = .18, *p* = .01; see Figure 2). The nature of the association was such that the combination of more socially conservative political ideology and more liberal economic political ideology was associated with greater Narcissism. The relationship between social political ideology and Narcissism was not significant at higher levels of economic political ideology (*β* = .04, *p* = .18).

Figure 2. The Study 1 interaction between social and economic political ideology in relation to Narcissism.

Psychopathy — Among the main effects predictors, extraversion was positively associated, and conscientiousness and agreeableness were negatively associated, with Psychopathy (*p*s < .05). The interaction term (social political ideology x economic political ideology) significantly predicted Psychopathy (*p* = .005). Consistent with the interaction effect for Narcissism, simple slopes analysis revealed a significant positive association between social political ideology and Psychopathy at lower levels of economic political ideology (*β* = .17, *p* = .02). The nature of the association was such that the combination of more socially conservative political ideology and more liberal economic political ideology was associated with greater Psychopathy. The relationship between social political ideology and Psychopathy was not significant at higher levels of economic political ideology (*β* = -.04, *p* = .49).

Sadism — Consistent with the pattern of main effects observed for Psychopathy, extraversion was positively associated, and conscientiousness and agreeableness were negatively associated, with Sadism (*p*s < .05). The interaction term (social political ideology x economic political ideology) did not significantly predict Sadism (*p* = .20).

Discussion

As predicted, when accounting for the Big Five traits, the combination of high economic conservatism and high social liberalism resulted in the highest levels of Machiavellianism. Conversely, the combination of high social conservatism and high economic liberalism resulted in the highest levels of both secondary Psychopathy and Narcissism. Social and economic political ideology did not interact, nor were main effects observed, in relation to Sadism. Of note, our three interaction effects were significant even after accounting for the Big Five traits.[ii] Consistent with previous unidimensional research (see Carney et al., 2008), individuals who identified as more liberal

on both ideology scales scored significantly higher on openness to experience than those who reported more conservative ideology. A small negative association was observed for agreeableness and economic political ideology, with those identifying as more economically liberal scoring significantly higher on agreeableness than those who identified as more economically conservative. None of the other trait variables were associated with economic or social political ideology at the bivariate level.

Study 2

The purpose of Study 2 was twofold. First, we sought to replicate the interaction effects observed in Study 1. Replicating these interaction effects in a second sample should increase confidence in the robustness of the observed effects. Second, we sought to allay potential concerns regarding our method of assessing political ideology in Study 1. Specifically, the reliability of single item measures may be quite low. Additionally, the rating scale used for both dimensions of political ideology in Study 1 contained the terms Liberal and Conservative. It could be argued that the use of these terms may bias responding so that participants endorse allegiance to either liberalism or conservatism without considering that they may identify simultaneously with both liberal and conservative views based on the specific dimensions of political ideology that are being assessed. To address this issue, we incorporated multi-item measures of both dimensions of political ideology in Study 2. Importantly, the items from these measures did not explicitly identify a response as being Liberal or Conservative in nature. We predicted that interactions observed in Study 1 would be replicated in the absence of the Big Five personality traits and when using multi-item measures of social and economic political ideology.

Method

Participants and Procedure

Consistent with Study 1, adult participants (N = 597; recruited via MTurk) completed a battery of self-report measures. Informed consent and self-report measures were administered via a secure online survey program and participants were compensated $1.50 for completing the study. The majority of the sample was female (58.3%), with an average age of 35.2 (SD = 10.8) years. In regard to racial/ethnic identification, 81.1% of the sample self-identified as White, 8.4% as Asian, 7.5% as Black/African-American, 1.3% as "other", and 1.7% as American Indian/Alaska Native. Additionally, 7.7% of the sample identified their ethnicity as Hispanic/Latino.

Measures

In addition to the SD3, CAST, and the single item measures of political ideology used in Study 1, participants completed multi-item measures of social and economic political ideology (Johnston & Wronski, 2015). Specifically, two items assessed preferences in the social domain (i.e., abortion and gay marriage) and four items assessed preferences in the economic domain (i.e., health insurance, social security, regulation of the financial industry, unemployment insurance). For each item, participants were asked where they would place themselves on a 7-point scale (e.g., 1 = "Strongly oppose legalizing gay marriage," 7 = "Strongly support legalizing gay marriage"). Items within each domain were summed to create total scores with higher scores indicating more conservative views and lower scores indicating more liberal views. In Sample 2, internal consistency was adequate for each of the scale scores: social political ideology (α = .67; M = 6.42, SD = 3.83) and economic political ideology (α = .67; M = 13.50, SD = 4.92).

Data Analytic Strategy

Consistent with Study 1, a series of regressions was conducted to examine the interaction between social and economic political ideology in relation to Dark Tetrad personality traits (i.e., Machiavellianism, Narcissism, Psychopathy, Sadism). The primary difference between the approach used in Study 1 and Study 2 is that the four regressions from Study 1 were conducted twice in Study 2; the multi-item political ideology variables replaced the single-item political ideology variables for the second repetition. Consistent with Study 1, significant interaction effects were further explored using simple slopes analysis (Aiken & West, 1991) and economic political ideology served as the moderating variable.

Results

Testing Interactions

Skew and Kurtosis for all study variables were within acceptable limits as proposed by Kline (2016). For the regression models from this study, the highest variance inflation factor (VIF) was 2.3, a value well below conventional cutoffs (i.e., 10) for indicating problems with multicollinearity (Cohen, Cohen, West, & Aiken, 2003).

Machiavellianism — As seen in Table 1, the interaction term (social political ideology x economic political ideology), for both the single- and multi-item political ideology measures, significantly predicted Machiavellianism (ps < .001). Using the single-item political ideology measures, simple slopes analysis revealed a pattern of associations that was consistent with that which was observed in Study 1 (see Figure 3). Specifically, the relation between social political ideology and Machiavellianism was significant at high (β = -.21, p < .001), but not low levels of economic political ideology (β = .03, p = .74). Examination of the second significant interaction effect (i.e., incorporating the multi-item political ideology measures) via simple slopes analysis revealed a similar pattern of effects (see Figure 4). The relation between social political ideology and Machiavellianism was significantly stronger at high (β = -.27, p < .001) versus low levels of economic political ideology (β = .14, p = .02).
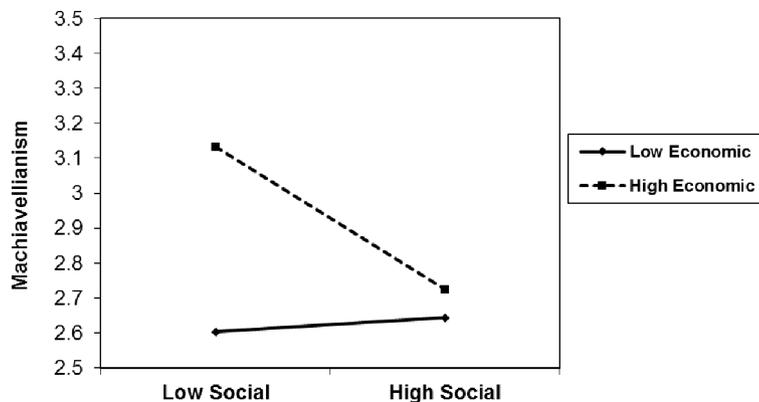

Figure 3. The Study 2 interaction between social and economic political ideology (measured via single-item measures) in relation to Machiavellianism.
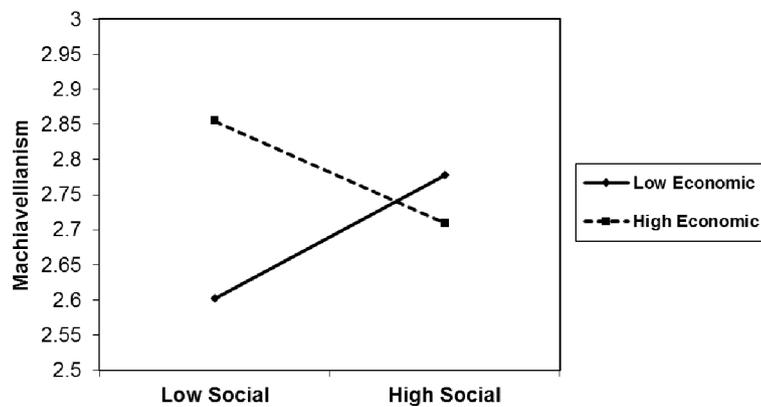
Figure 4. The Study 2 interaction between social and economic political ideology (measured via multi-item measures) in relation to Machiavellianism.

Narcissism — The interaction term (social political ideology x economic political ideology), for both the single- and multi-item political ideology measures, significantly predicted Narcissism (p = .003 and .01, respectively). Using the single-item political ideology measures, simple slopes analysis revealed a pattern of associations that was consistent with that which was observed in Study 1 (see Figure 5). Specifically, the relation between social political ideology and Narcissism was significant at low (β = .21, p = .01), but not high levels of economic political ideology (β = .00, p = .99). Examination of the second significant interaction effect (i.e., incorporating the multi-item political ideology measures) via simple slopes analysis revealed a similar pattern of effects (see Figure 6). The relation between social political ideology and Narcissism was significant at low (β = .13, p = .04), but not high levels of economic political ideology (β = -.04, p = .57).
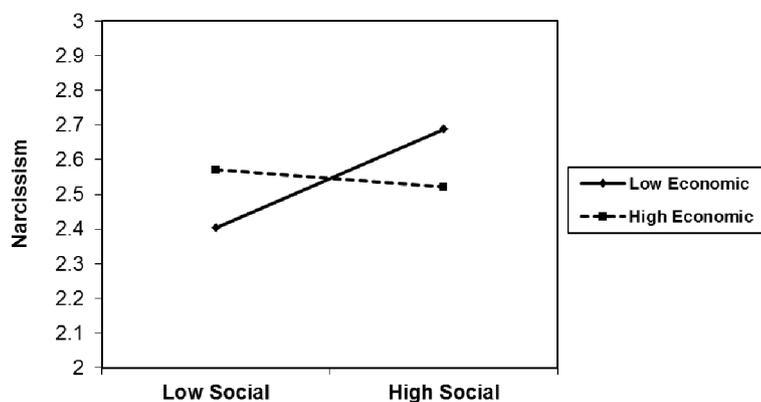

Figure 5. The Study 2 interaction between social and economic political ideology (measured via single-item measures) in relation to Narcissism.
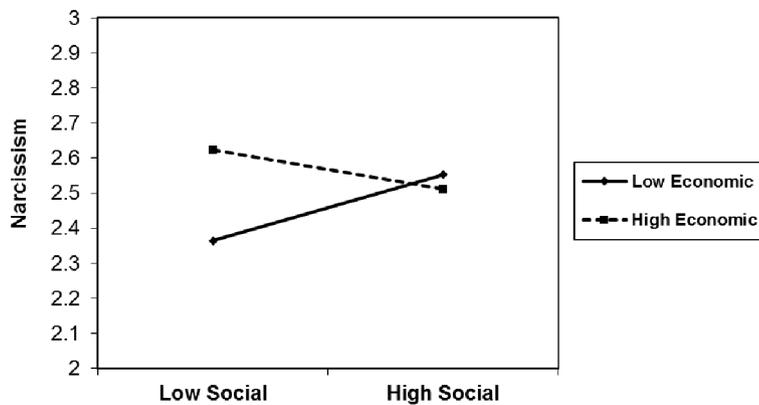
Figure 6. The Study 2 interaction between social and economic political ideology (measured via multi-item measures) in relation to Narcissism.

Psychopathy — The interaction term (social political ideology x economic political ideology), for both the single- and multi-item political ideology measures, significantly predicted Psychopathy (p = .004 and .003, respectively). The simple slopes for the interaction in which single-item political ideology measures were used is not consistent with the simple slopes analysis from Study 1. The positive association between social political ideology and Psychopathy was significant at lower levels of economic political ideology in Study 1 (β = .17, p = .02), but not in Study 2 (β = .09, p = .29). Conversely, the negative association between social political ideology and Psychopathy was significant at higher levels of economic political ideology in Study 2 (β = -.15, p = .02), but not in Study 1 (β = -.04, p = .49). Examination of the second significant interaction effect (i.e., incorporating the multi-item political ideology measures) via simple slopes analysis revealed the relation between social political ideology and Psychopathy was significant at low (β = .13, p = .03), but not high levels of economic political ideology (β = -.11, p = .08).

Sadism — Consistent with Study 1, the interaction term (social political ideology x economic political ideology) did not predict Sadism when the single-item political ideology measures were used (p = .12). However, when the multi-item political ideology measures replaced the single-item measures, the interaction term significantly predicted Sadism (p = .01). Although the simple slopes exhibited opposite directional relations (i.e., low [β = .08, p = .20] and high economic political ideology [β = -.04, p = .54]), neither slope differed significantly from zero.

Discussion

We sought to replicate the interaction effects observed in Study 1 while substituting a multi-item measure of political ideology for the single-item measure used in Study 1. Results from Study 2 largely supported Study 1 findings. Consistent with Study 1, (a) the combination of more socially liberal political ideology and more conservative economic political ideology was associated with greater Machiavellianism and (b) the combination of more socially conservative political ideology and more liberal economic political ideology was associated with greater Narcissism. These effects were observed using single- and multi-item measures of political ideology. Although the interaction between social political ideology x economic political ideology was significantly associated with Psychopathy when both measures of political ideology were used (i.e., single- and multi-item), the nature of these significant interaction effects were not consistent within and across studies. Finally, results related to Sadism were largely consistent with Study 1. Although the interaction effect was significantly associated with Sadism when the multi-item measure

of political ideology was used, the magnitude of the effect was small and neither of the simple slopes were significantly different from zero (i.e., a horizontal plane).

General Discussion

In the present study, we examined the relations among Dark Tetrad traits and political ideology using a two-dimensional, rather than a one-dimensional, model of political ideology. Modeling political ideology as two dimensions resulted in findings that differed from previous research. Specifically, Jonason (2014) found that liberalism was associated with Psychopathy and conservatism was associated with Narcissism in an undergraduate sample, and conservatism, rather than liberalism, was associated with Psychopathy in a community sample. By examining the interplay between two dimensions of political ideology (social and economic) as they relate to Dark Tetrad traits, our findings may help to reconcile these discrepant results.

As predicted, the combination of high economic conservatism and high social liberalism resulted in the highest levels of Machiavellianism. Conversely, the combination of high social conservatism and high economic liberalism resulted in the highest levels of Narcissism. The interaction between social and economic political ideology was not associated with Sadism when the single-item measure of political ideology was used, and when the multi-item measure of political ideology was used, the relations among social political ideology and Sadism differed in direction as a function of Economic political ideology, but Social political ideology was not significantly related to Sadism at either level of Economic political ideology.

The discrepant results related to Psychopathy, between Study's 1 and 2 using the single-item measures of political ideology, appear to be a function of effect size rather than differences in the directional relations between the predictor and outcome variable. That is, the directional relations among the simple slopes are the same across all three analyses, but the magnitude of the effects are inconsistent. Based on null hypothesis testing, results from the multi-item political ideology analysis appear to be more consistent with the results from Study 1 than the Study 2 results in which the single-item political ideology measures were used. In any case, these inconsistent effect sizes preclude sound conclusions regarding the nature of relations among social political ideology, economic political ideology, and Psychopathy. Equivocal findings surrounding the relation between Psychopathy and political ideology have been previously observed. For example, in a two-part study, Jonason (2014) found that Psychopathy was associated with (a) higher levels of liberalism and lower levels of conservatism in and undergraduate sample, and (b) higher levels of conservatism, but not liberalism, in an MTurk sample of adults. One might cite the different samples as an explanation for these differences, but it would be difficult to provide a coherent rationale, based on sound theory, for such an explanation. It seems more likely that equivocal findings to date regarding Psychopathy in the context of political ideology are the result of misspecification of the model (i.e., failing to account for potentially important variables).

Of note, our replicated interaction effects (i.e., Machiavellianism and Narcissism) were significant (a) in the presence of the Big Five traits and (b) while substituting a multi-item measure of political ideology for the single-item measure used in Study 1. Together, these findings should increase confidence in the robustness of these effects. Consistent with previous unidimensional research (see Carney et al., 2008), individuals from Study 1 who identified as more liberal on both ideology scales scored significantly higher on openness to experience than those who reported more conservative ideology. A small negative association was observed for agreeableness and economic political

ideology, with those identifying as more economically liberal scoring significantly higher on agreeableness than those who identified as more economically conservative. None of the other trait variables were associated with economic or social political ideology at the bivariate level.

It is important to consider our primary findings in the context of our measure of Dark Tetrad traits. In regard to the SD3, the Machiavellianism scale appears to capture strategic manipulation of others toward desired ends. Our finding regarding the significant association between the interaction of high economic conservatism and high social liberalism and Machiavellianism is consistent with a worldview in which one believes that each individual is responsible for his/her economic prosperity and the principle of liberty (free will) is valued more strongly than moral concerns that might get in the way of reaching that ideal. The Narcissism scale of the SD3 is thought to most clearly capture an unrealistic sense of superiority and a view of others as inferior and worthy of disdain. As previously described, individuals with a political ideology profile consisting if higher levels of social conservativism and more liberal economic political ideology likely hold strong views regarding societal issues, which may be so central to the individual's sense of self, that s/he may espouse these beliefs even in the face of overwhelming evidence. Because of the combination of behavioral dyscontrol, grandiosity, and entitlement suggested by study findings, as well as moral and ethnic intolerance and intolerance of uncertainty associated with this profile in previous research (Napier & Jost, 2008), these individuals may feel such contempt for those who oppose or question their beliefs that they become verbally or physically aggressive when challenged.

There is considerable debate regarding the directional relations among personality traits and political attitudes and ideologies (see Hatemi & McDermott, 2016, for a review). To date, empirical evidence supports personality as a prospective predictor of future political attitudes (e.g., Block & Block, 2006) and vice versa (Stanley, Wilson, & Milfont, 2017). Additionally, evidence suggests that the covariance between political ideology and personality is due to a common latent genetic predisposition that mutually influences both rather than one causing the other (Hatemi & Verhulst, 2015). Given the equivocal nature of temporal findings related to political ideology and personality, and our cross-sectional study design, we chose to describe study hypotheses and results in terms of associations rather than suggesting temporal associations. Additional research is needed, using longitudinal designs and experimental paradigms that will allow researchers to understand the temporal relationship between personality and multi-dimensional conceptualizations of political ideology.

However, we acknowledge that the dominate conceptualization of the relationship between these constructs is one in which personality characteristics predispose one to specific political ideologies (Jost, Federico, & Napier, 2009). To date, political ideology has been examined most often in the context of a socially desirable model of personality (i.e., the Big Five). In combination with a conceptual model in which personality traits play a role in the development of political ideology, the results of the present study suggest that "darker", socially undesirable personality characteristics (i.e., Machiavellianism, Narcissism), account for unique variance in specific political ideologies. This is important because these personality traits are associated with behaviors and attitudes that have been deemed "morally disturbing." Some have argued that political ideologies and associated behaviors (e.g., restricting reproductive rights, promoting negative attitudes towards immigrants, ignoring/promoting prejudice and discrimination) that develop as a function of personality traits that are morally disconcerting may be cause for discrediting such political ideologies (Arvan, 2013). While we agree that this position is worthy of debate, we believe that a more productive implication of the results of the present set of studies, relying less on culture-bound moral judgments, relates to political interpersonal dynamics. While those with deeply embedded political beliefs may spend considerable time trying to justify or defend their relative positions, they rarely convince those with

opposing political beliefs to change positions (Lord, Ross, & Lepper, 1979). Identifying psychological differences that may underlie divergent political beliefs and behaviors may help partisans move away from simply trying to prove their political opponents wrong and toward acknowledging basic differences in how one another views themselves and the world. Acknowledging that others view the world through a different lens may facilitate dialog and increase willingness to compromise.

Study limitations must be acknowledged. Evidence supports MTurk as a viable method for collecting data for psychological research (Chandler & Shapiro, 2016) and established quality control methods were used in the present study to improve study data (e.g., using high reputation MTurk workers [i.e., workers with a 95% approval rating from requesters]; Peer, Vosgerau, & Acquisti, 2014). Nonetheless, MTurk samples are not representative of the general population. As such, replicating study findings in samples with more racial/ethnic diversity, male representation, and higher levels of psychopathology will be important in the future to ensure that study findings generalize. Additionally, some evidence suggests that the relationship between personality characteristics and political ideology varies across countries (Fatke, 2017). Study findings should not be considered generalizable to individuals outside of the United States.

Relations among study variables may be inflated due to our monomethod assessment approach. However, evidence suggests that rather than resulting in spurious interactions, monomethod assessment is more likely to attenuate these effects (Evans, 1985). Moreover, although our significant interaction effects were relatively small, these effects were well within the range considered meaningful in Monte Carlo studies (i.e., at least 1%; Evans, 1985). The measure that we used to examine Dark Triad traits (i.e., SD3) did not allow us to examine different domains of Narcissism and Psychopathy that can be assessed through the use of longer self-report measures (e.g., 40-item Narcissistic Personality Inventory, Raskin & Terry, 1988; 64-item Psychopathy Scale-III; Paulhus, Neumann, & Hare, in press). Use of these measures in future research may add to the extant literature by providing a more fine-grained understanding of the specific personality characteristics associated with political ideology. For example, some evidence suggests that different facets of Narcissism may be differentially related to liberal and conservative ideologies (Hatemi & Fazekas, 2018). Additionally, the measures used to assess the Big Five personality dimensions and political ideology (the multi-item assessment) consisted of relatively few items. Although internal consistency of the multi-item political ideology measures was adequate and the BFI-10 has demonstrated adequate psychometric properties in a number of other studies, use of longer measures with better internal consistency and content validity in future research will increase confidence in study findings (see Bakker & Lelkes, 2018, for a discussion of this issue).

It may be important to measure social desirability responding in this line of research in the future because several of the items of the SD3 and CAST reflect socially stigmatized attitudes and behaviors. The anonymous online data collection procedure used in the present study may have reduced the likelihood of social desirability responding, but this should be considered in future research. Finally, the associations examined in the present study are part of a much larger nomological network. Constructs that may be particularly important for understanding the personality-political ideology relationship should be included in this line of research in the future (e.g., political engagement, needs for security and certainty, see Federico & Malka, 2018, for a review).[iiii] Results from the present study highlight the importance of assessing multiple dimensions of political ideology when considering constructs of interest in the context of political ideology.

Political ideology has been measured as a unidimensional construct in many studies in the extant literature, thus, potentially obscuring our understanding of political ideology as it relates to personality and other important constructs. A number of other researchers have described this problem and have prescribed the use of at least two measures of political ideology (social and economic) in future research to remedy this issue (e.g., Carmines et al., 2012; Carmines & Stimson, 1989; Carney et al., 2008; Duriez, 2003; Johnston & Wronski, 2015). Again, we hope that findings from the present study provide clarity regarding relations among "darker" personality characteristics and political ideology and highlight the importance of assessing political ideology as a multidimensional construct.

Notes

i) When the Big Five traits were removed from the regression models in Study 1 (see Table 1), the pattern of effects was largely unchanged. First, the magnitude of the effects of the interaction term (social political ideology x economic political ideology) on Machiavellianism and Psychopathy slightly increased (βs = -.16, ps < .001). Second, while the magnitude of the effect of the interaction term on Narcissism remained the same (β = -.08) the p value changed from .045 to .065. Finally, the magnitude of the effect of the interaction term on Sadism increased from β = -.05 to β = -.09 and the p value changed from .20 to .04. Importantly, simple slopes analysis revealed that although the interaction effect was significantly associated with Sadism when the Big Five traits were removed from the model, neither of the simple slopes were significantly different from zero (i.e., a horizontal plane). This is consistent with the results from the Study 2 model predicting Sadism using the multi-item measure of political ideology. The magnitude of the effects of the interaction term predicting Sadism across all four models was small in size (βs from .05 to .10).

ii) Self-report measures of right-wing authoritarianism (Zakrisson, 2005) and social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994) were completed by participants as part of the larger study from which Study 1 data was extracted. As suggested by a Reviewer, we added both total scores from these measures as covariates in the regression models from Study 1. When these covariates were added to the models, the pattern of interaction effects was unchanged; statistically significant path coefficients remained significant (i.e., Machiavellianism β = -.12, p = .002, Narcissism β = -.08, p = .043, Psychopathy β = -.12, p < .001) and nonsignificant findings were unchanged (i.e., Sadism β = -.07, p = .09).

Competing Interests

The authors have declared that no competing interests exist.

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Appendix

Table A.1

Descriptive Statistics and Bivariate Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Single PI-Social	--	.73***	.01	.07	.02	.12**	--	--	--	--	--	.67***	.50***
2. Single PI-Economic	.69***	--	.12**	.07	.08	.16***	--	--	--	--	--	.49***	.56***
3. Machiavellianism	.00	.07	--	.45***	.59***	.44***	--	--	--	--	--	.03	.06
4. Narcissism	-.01	-.07	.34***	--	.54***	.42***	--	--	--	--	--	.05	.08
5. Psychopathy	.00	.01	.63***	.40***	--	.72***	--	--	--	--	--	.04	.08*
6. Sadism	.04	.02	.47***	.34***	.67***	--	--	--	--	--	--	.04	.15***
7. Openness	-.16***	-.12**	-.07	.10*	-.04	-.08*	--	--	--	--	--	--	--
8. Conscientiousness	.06	.06	-.21***	.09*	-.26***	-.29***	.08	--	--	--	--	--	--
9. Extraversion	-.04	-.04	-.09*	.46***	.10*	.05	.08*	.19***	--	--	--	--	--
10. Agreeableness	-.02	-.09*	-.38***	.01	-.38***	-.27***	.07	.24***	.17***	--	--	--	--
11. Neuroticism	-.06	-.03	.12**	-.30***	.05	.07	.00	-.39***	-.34***	-.27***	--	--	.41***
12. Multi PI-Social	--	--	--	--	--	--	--	--	--	--	--	--	--
13. Multi PI-Economic	--	--	--	--	--	--	--	--	--	--	--	--	--
Study 1 *M*	2.47	2.79	25.31	23.44	18.38	38.34	7.46	7.94	5.44	7.14	5.33	--	--
Study 1 *SD*	1.20	1.19	6.27	6.28	6.11	19.19	1.89	1.79	2.25	1.97	2.35	--	--
Study 1 *Range*	1 – 5	1 – 5	9 – 45	9 – 45	9 – 45	18 – 121	2 – 10	2 – 10	2 – 10	2 – 10	2 – 10	--	--
Study 2 *M*	2.65	2.84	24.25	22.36	18.59	38.19	--	--	--	--	--	6.42	13.50
Study 2 *SD*	1.20	1.13	6.77	6.12	6.20	18.86	--	--	--	--	--	3.83	4.92
Study 2 *range*	1 – 5	1 – 5	9 – 43	9 – 41	9 – 38	18 – 114	--	--	--	--	--	2 – 14	4 – 28

Note. $N = 579$ (Study 1 sample below the diagonal) and $N = 597$ (Study 2 sample above the diagonal). Single = single-item measure; PI = political ideology; Multi = multi-item measure; *M* = mean; *SD* = standard deviation.

*$p < .05$. **$p < .01$. ***$p < .001$.

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