Personality and political beliefs across the lifespan

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Author Note

Abstract

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Methods

Participants

Two-hundred U.S. adults were recruited via Amazon Mechanical Turk to participate in a study listed as "Psychology and society survey." Participants were removed for completing the survey quicker than predetermined time cutoffs or failing to pass attention checks. Of the remaining 131 participants, who were 20 to 68 years old ($M = 40.55$, $SD = 11.98$), 54.2% identified as female and 45.8% identified as male, while 77.1% identified as White of Caucasian, 7.6% as African American or Black, 6.1% as Hispanic or Latinx, 5.3% as Asian or Asian American, 0.8% as Native American, and 9.2% as "Other." The sample leaned liberal, with 45% affiliated with the Democratic Party, 23.7% affiliated with the Republican Party, 22.1% affiliated with no party, and 9.2% affiliated with the Green Party, Libertarian Party, or another party. The participants were compensated $1.50 for completing the survey, which took on average 10.43 minutes ($SD = 3.34$).

Material

Personality. To assess personality traits (openness to experiences, conscientiousness, extraversion, agreeableness, and emotional stability), respondents completed the Ten Item Personality Inventory (Gosling, Rentfrow, & Swann Jr, 2003). Participants were asked to indicate the extent to which they agreed or disagreed with statements describing themselves (e.g. "Extraverted, enthusiastic"; "Critical, quarrelsome"). Respondents rated each statement on a 7-point likert scale (1 = Strongly Disagree to 7 = Strongly Agree). Responses were coded such that higher values reflected greater identification with the personality trait.

Social and Economic Conservatism. To assess participant levels of conservatism,

respondents completed the 12-item Social and Economic Conservatism Scale (Everett, 2013). Participants were asked to indicate the extent to which they feel positively or negatively about seven social issues and five economic issues (eg. Abortion; Fiscal Responsibility). Respondents rated each issue on a 100-point scale (0 indicates greater negativity and 100 indicates greater positivity). Responses were coded such that higher values reflected greater levels of conservatism.

Additional Measures. Incidental affect was induced via video clips (Schaefer, Nils, Sanchez, & Philippot, 2010). Clips from *The Shining* and *The Blair Witch Project* were used to induce fear, clips from *Seven* and *Schindler's List* were used to induce anger, and clips from *Blue* were used to induce no emotion. Participants also read a speech on the prevalence of homelessness in the United States and a corresponding policy varying in complexity and affiliation.

Participants completed additional measures, including an adjusted PANAS Affect Scale assessing current emotional state (Watson, Clark, & Tellegen, 1988), the 18-Point Need for Cognition Scale assessing need for cognition (Cacioppo, Petty, & Feng Kao, 1984), the 10-Point Emotion Regulation Questionnaire assessing the use of two emotional regulation strategies, cognitive reappraisal and expressive supression (Gross & John, 2003), and demographic information, including gender, ethnicity, age, and political orientation and affiliation.

Procedure

Participants accessed the survey through the Amazon Mechanical Turk website. Once informed consent was confirmed, participants were randomly assigned to watch a video intended to induce primarily fear, anger, or no emotion. After watching the video, each participant was presented with information describing the prevalance of homelessness in the United States. Participants were then randomly assigned to read a policy statement

addressing homelessness that was either simple or complex, and liberal or conservative, and were then asked to answer questions measuring their beliefs about the policy. Additional measures followed measuring social and economic conservatism, personality traits, current affective state, neeed for cognition, and emotional regulation. Participants concluded the study by providing demographic information.

Data analysis

We used R (Version 3.6.1; R Core Team, 2019) and the R-packages *}MBESS* [@}R-MBESS], *dplyr* (Version 0.8.3; Wickham, François, Henry, & Müller, 2019), *forcats* (Version 0.4.0; Wickham, 2019a), *ggplot2* (Version 3.2.1; Wickham, 2016), *here* (Version 0.1; Müller, 2017), *janitor* (Version 1.2.0; Firke, 2019), *knitr* (Version 1.25; Xie, 2015), *papaja* (Version 0.1.0.9842; Aust & Barth, 2018), *psych* (Version 1.8.12; Revelle, 2018), *purrr* (Version 0.3.3; Henry & Wickham, 2019), *readr* (Version 1.3.1; Wickham, Hester, & Francois, 2018), *rio* (Version 0.5.16; C.-h. Chan, Chan, Leeper, & Becker, 2018), *stringr* (Version 1.4.0; Wickham, 2019b), *tibble* (Version 2.1.3; Müller & Wickham, 2019), *tidyr* (Version 1.0.0; Wickham & Henry, 2019), *tidyverse* (Version 1.2.1; Wickham, 2017), *viridis* (Version 0.5.1; Garnier, 2018a, 2018b), and *viridisLite* (Version 0.3.0; Garnier, 2018b) for all our analyses.

Results

In order to explore relation between conservatism and personality, we created a table of the Big Five personality trait (openness to experiences, conscientiousness, extraversion, agreeableness, and emotional stability) scores across different levels of social (see Table 1) and economic (see Table 2) conservatism.

To see whether there were significant relations between social conservatism and the Big Five traits, we then ran a multiple regression predicting social conservatism from the

Big Five personality traits. We found that together the personality traits explain about 13.5% of the variance in social conservatism scores, $F(5, 125) = 5.05$, $p < .001$, with an adjusted R^2 of .14 (see Table 3). We found that agreeablessness, $\beta = 3.93$, $t(125) = 2.40$, $p = .018$, and emotional stability, $\beta = 4.30$, $t(125) = 2.37$, $p = .020$, significantly predict social conservatism, such that, controlling for the other personality traits, those who scored higher on agreeableness and emotional stability measures tended to also score higher on the social conservatism measure. Additionally, openness to experiences margionally predicted social conservatism, $\beta = $ -3.73, $t(125) = $ -1.96, $p = .052$, such that, controlling for other personality traits, those who scored higher on conservatism tended to score lower on the openness to experience measure.

To see whether there were significant relations between economic conservatism and the Big Five traits, we then ran a multiple regression predicting economic conservatism from the Big Five personality traits. The personality traits taken together did not significantly explain variance in economic conservatism scores, $F(5, 125) = 2.21$, $p = .058$ (see Table 4). However, openness to experience was a significant predictor of economic conservatism, $\beta = $ -3.79, $t(125) = $ -2.35, $p = .021$, such that, controlling for other personality traits, those who scored high on economic conservatism subscale tended to score lower on the openness to experiences measure.

To better understand the relation between social and economic conservatism, we examined the correlation between social and economic conservatism scores, and found it to be $r = .65$. Neither social nor economic extraversion were strongly correlated with any of the Big Five personality traits (see Figure 1).

Discussion

References

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Call:corr.test(x = untidy$economic_conservatism, y = untidy$social_conservatism)
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    multiple tests. [1] 0

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Table 1

Mean Personality Trait Scores by Social Conservatism Score

	Social Conservatism Score				
personality_trait	[0-19]	[20-39]	[40-59]	[60-79]	[80-100]
Agreeableness	4.67	5.20	4.88	5.76	5.90
Conscientiousness	5.37	5.44	5.32	5.84	6.03
Emotional stability	4.07	4.38	4.82	5.50	5.57
Extraversion	2.73	3.16	3.57	3.90	3.72
Openness to experiences	4.93	5.40	5.43	5.25	5.12

Note. Personality trait scores reported on a 1-7 scale.

Table 2

Mean Personality Trait Scores by Economic Conservatism Score

personality_trait	Economic Conservatism Score				
	[0-19]	[20-39]	[40-59]	[60-79]	[80-100]
Agreeableness	6.14	5.21	5.29	5.40	5.43
Conscientiousness	5.50	5.31	5.60	5.77	6.00
Emotional stability	4.29	4.67	5.09	4.85	5.62
Extraversion	2.79	3.67	3.61	3.42	3.50
Openness to experiences	6.43	5.44	5.12	5.05	5.21

Note. Personality trait scores reported on a 1-7 scale.

Table 3

Regression Table Predicting Social Conservatism From Big-Five Personality Traits.

Predictor	b	95% CI	$t(125)$	p
Intercept	25.82	[0.07, 51.58]	1.98	.049
Openness to experiences	-3.73	[−7.50, 0.04]	-1.96	.052
Conscientiousness	0.07	[−3.98, 4.11]	0.03	.974
Extraversion	1.56	[−1.42, 4.55]	1.04	.302
Agreeableness	3.93	[0.69, 7.17]	2.40	.018
Emotional stability	4.30	[0.70, 7.91]	2.37	.020

Note. Residual standard error: 25.13 on 125 degrees of freedom. Multiple R-squared: 0.168, Adjusted R-squared: 0.135. F(5, 125): 5.051, p-value: 0.0003.

Table 4

Regression Table Predicting Economic Conservatism From Big-Five Personality Traits.

Predictor	b	95% CI	$t(125)$	p
Intercept	56.54	[34.71, 78.37]	5.13	$< .001$
Openness to experiences	-3.79	$[-6.98, -0.59]$	-2.35	.021
Conscientiousness	1.78	$[-1.65, 5.20]$	1.03	.307
Extraversion	0.61	$[-1.92, 3.14]$	0.48	.632
Agreeableness	-1.13	$[-3.88, 1.61]$	-0.82	.415
Emotional stability	2.34	$[-0.71, 5.39]$	1.52	.131

Note. Residual standard error: 21.3 on 125 degrees of freedom. Multiple R-squared: 0.081, Adjusted R-squared: 0.044. F(5, 125): 2.207, p-value: 0.058.

Table 5

Correlation Matrix for Conservatism and Big Five Personality Traits

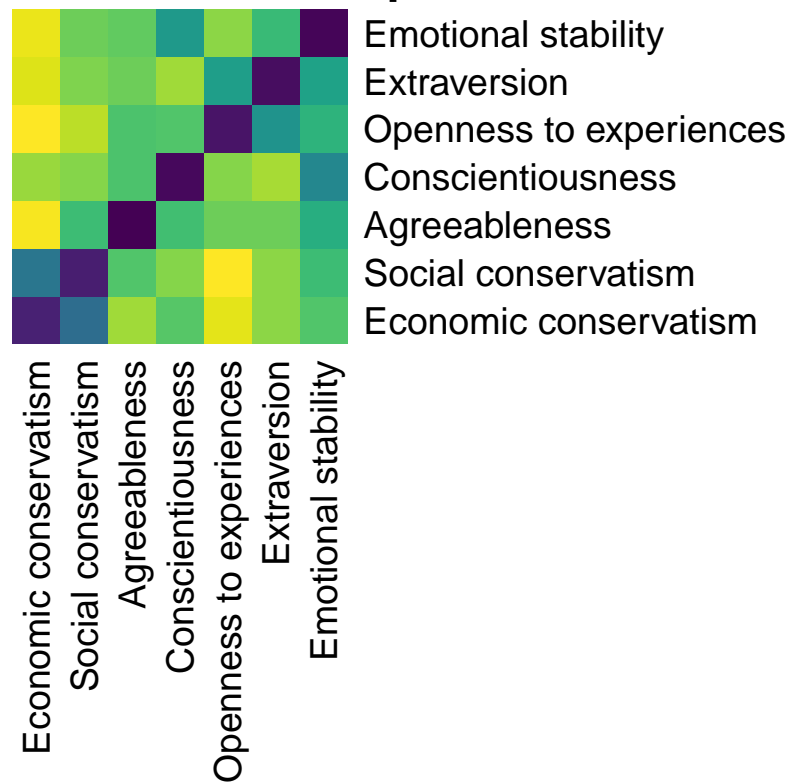|	Economic conservatism	Social conservatism	Agreeableness	Conscientiousness	Openness to experiences	Extraversion	Emotional stability
Economic conservatism	1						
Social conservatism	0.65	1					
Agreeableness	-0.02	0.29	1				
Conscientiousness	0.14	0.18	0.28	1			
Openness to experiences	-0.15	-0.02	0.2	0.18	1		
Extraversion	0.02	0.17	0.2	0.12	0.44	1	
Emotional stability	0.16	0.33	0.35	0.54	0.28	0.42	1

Correlation Heatmap

Figure 1. A correlation heatmap demonstrating the correlations between the Big Five personality traits and social and economic conservatism.
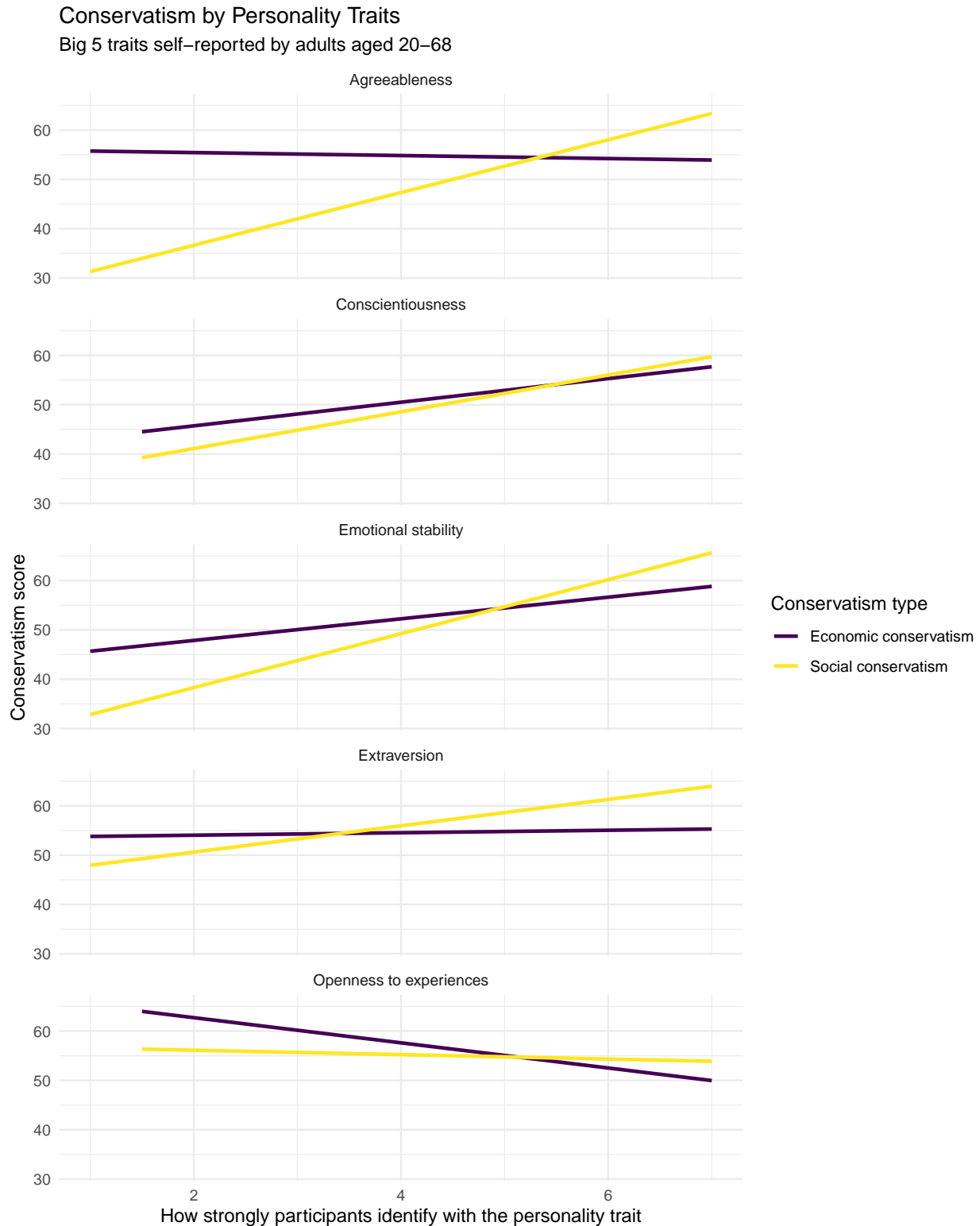
Figure 2. We found a significant positive relation between emotional stability and social conservatism, a positive relation between agreeableness and social conservatism, and a negative relation between openness to experiences and economic conservatism.