

1 Personality and political beliefs across the lifespan

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4 Author Note

5 This project was completed as part of the EDLD Introduction to Data Science class
6 at the University of Oregon.

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Abstract

9

10 Here is where we will write our abstract.

11 *Keywords:* keywords

12 Word count: X

Personality and political beliefs across the lifespan

Methods

Participants

Two hundred US adults were recruited through Amazon Mechanical Turk to participate in the “Psychology and society survey” (Dimakis & Mauro, 2019). Of the two hundred survey takers, 66 were excluded from data analysis ($N = 131$) due to failing the included attention checks. The gender of participants in this study was 54.2% female and 45.8% male. Age of participants ranged from 20 to 68 years old ($M = 40.55$, $SD = 11.98$). Participants that chose to self-identify their ethnicity included 77.1% Caucasian or White, 7.6% African American or Black, 5.3% Asian, 6.1% Hispanic or Latino, .8% Native American, and 3.1% identified their ethnicity as other. Political affiliation of respondents include 45.0% Democrat, 23.7% Republican, 22.1% no party, 5.3% other, 2.3% Green Party, and 1.5% Libertarian. Participants were compensated \$1.50 for taking the survey, which took on average 11 minutes and 19 seconds to complete.

Material

Personality To assess participant personality traits, 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 Researchers created video manipulations to induce different emotions: 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. Researchers also created a statement on the prevalence of homelessness with corresponding policy statements varying in complexity and politics. Additional measures used in the study include the PANAS Affect Scale (Watson, Clark, & Tellegen, 1988), the 18-Point Need for Cognition Scale [cacioppo1984efficient], and the 10-Point Emotion Regulation Scale [gross2003individual].

Procedure

Participants accessed the “Psychology and society survey” through the online Amazon Mechanical Turk website. Once informed consent was confirmed, participants were randomly assigned to watch a video that would induce fear, anger, or no emotion. After watching the video, each participant was presented with information describing homelessness in America. Participants were then randomly assigned to read a policy statement addressing homelessness that was either simple or complex, liberal or conservative, and were then asked to answer questions measuring their beliefs about the policy. Additional measures followed including the Social and Economic Conservatism Scale, Ten Item Personality Scale, PANAS Affect Scale, Need for Cognition Scale, and the Emotional Regulation Scale. 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 et al., 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 0.3.2; Henry & Wickham, 2019), *readr* (Version 1.3.1; Wickham, Hester, & Francois, 2018), *rio* (Version 0.5.16; 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 understand the relation between conservatism and personality, we first looked at Big Five personality trait (Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Emotional Stability) scores across the spectrum of Social Conservatism (Table 1) and Economic Conservatism (Table 2) scores.

To see whether there were significant relations between Social Conservatism and the Big Five, we then ran a multiple regression predicting Social Conservatism from the Big Five personality traits. A significant regression equation was found ($F(5, 125) = 5.051, p < .001$), with an adjusted R^2 of 0.135 (Table 2). Thus, personality traits taken together explained 13.48% of variance in Social Conservatism scores. Participants' predicted Social Conservatism scores were equal to $25.82 - 3.73(\text{Openness to Experience}) + 0.07(\text{Conscientiousness}) + 1.56(\text{Extraversion}) + 3.93(\text{Agreeableness}) + 4.30(\text{Emotional Stability})$. Agreeableness and Emotional Stability were significant predictors of Social Conservatism.

To see whether there were significant relations between Economic Conservatism and the Big Five, we then ran a multiple regression predicting Economic Conservatism from the Big Five personality traits. No significant regression equation was found ($F(5, 125) = 2.207, p = .058$) (Table 3). Thus, personality traits taken together did not significantly explain variance in Economic Conservatism scores. However, Openness to Experience was a significant predictor of Economic Conservatism.

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 $r = 0.65$. Neither social nor economic extraversion were strongly correlated with any of the Big Five personality traits.

Discussion

References

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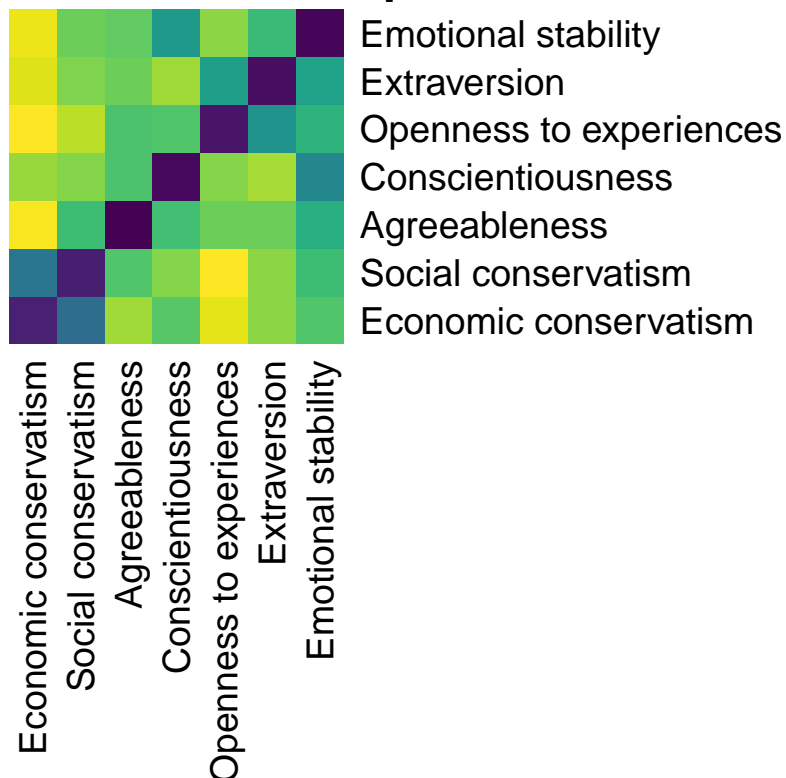
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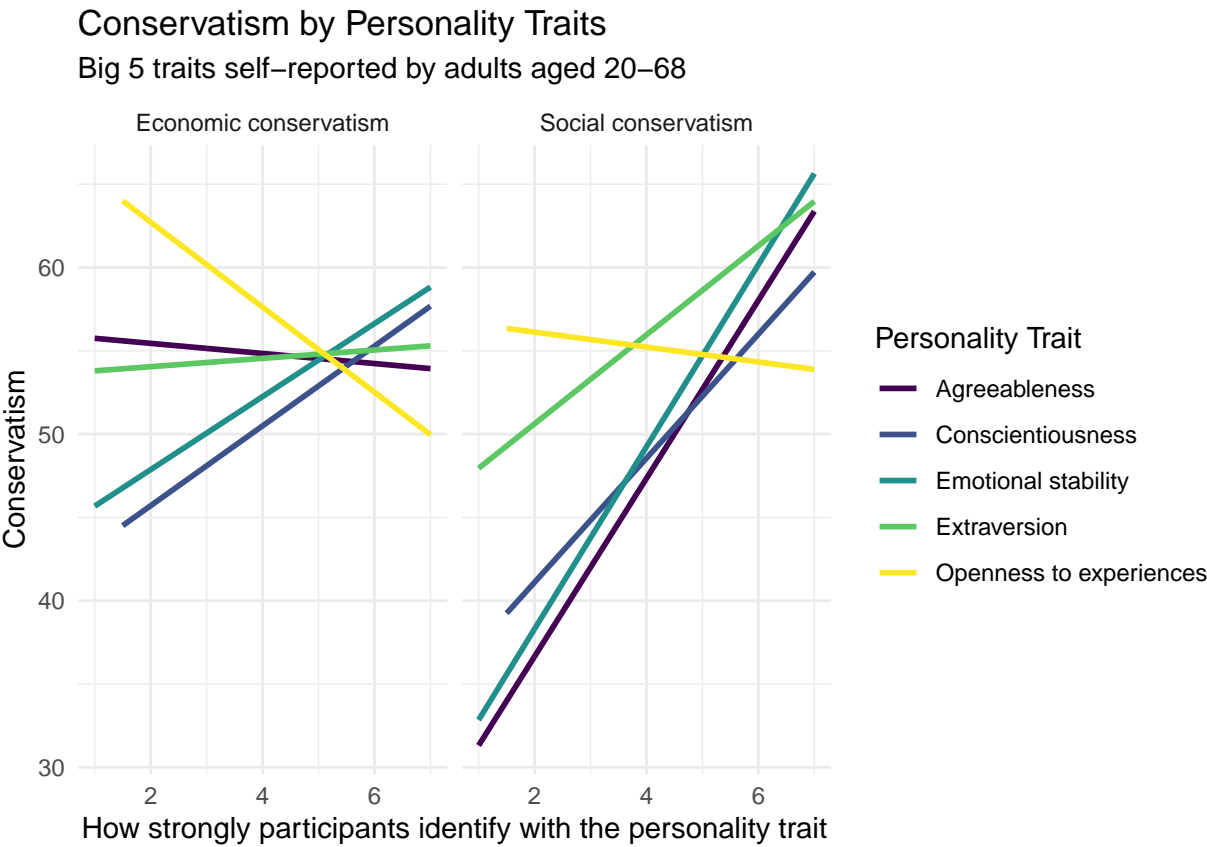
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148 Call:corr.test(x = untidyeconomic_conservatism, y = untidysocial_conservatism)
149      Correlation matrix [1] 0.65 Sample Size [1] 131 Probability values adjusted for
150      multiple tests. [1] 0
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151 To see confidence intervals of the correlations, print with the short=FALSE option

Correlation Heatmap





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Table 1

Mean Personality Trait Scores by Social Conservatism Score

personality_trait	Social Conservatism Score				
	[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	<i>b</i>	95% CI	<i>t</i> (125)	<i>p</i>
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	<i>b</i>	95% CI	<i>t</i> (125)	<i>p</i>
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