The Personality of the Politically Ambitious

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Agenda

Introduction

Data

Replication of results

My contribution

Conclusion

Introduction

- Interested in investigating the effects of personality on a person's ambition to run for office
- Utilises the Big 5 model (McCrae & John, 1992)
  - Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism (Emotional Stability)
- Differentiating Nascent Political Ambition and Progressive Political Ambition

Introduction - Hypotheses

Direct quotes from paper (Dynes et al., 2019)

- "H1a (Extraversion and Political Ambition)
  - Individuals with higher levels of extraversion will be more likely to express nascent political ambition.
- H1b (Extraversion and Progressive Ambition)
  - Local officials with higher levels of extraversion will be more likely to express progressive ambition."

- "H2 (Openness and Political Ambition)
  - Individuals with higher levels of openness to experience will be more likely to express nascent political ambition"

- "H3a (Agreeableness and Political Ambition)
  - Individuals with higher levels of agreeableness will be less likely to express nascent political ambition.
- H3b (Agreeableness and Progressive Ambition)
  - Local officials with higher levels of agreeableness will be less likely to express progressive political ambition.
- H3c (Agreeableness, the Likelihood of Winning, and Progressive Ambition)
  - Local officials with lower levels of agreeableness will be more likely to express progressive ambition than local officials with higher levels of agreeableness as their perceived probability of winning higher office increases."

- "H4 (Emotional Stability and Progressive Ambition)
  - Local officials with higher levels of emotional stability will be more likely to express nascent progressive ambition."

Data

Study 1

- 1939 complete observations (general public)
- DV: Factor with 3 levels
  - Actively considering running for public office
  - Open to the possibility of running for public office
  - Absolutely no interest

Study 2

- 1679 complete observations
- Sample of elected mayors and legislators
- DV: Factor with 4 levels (Q about running for higher office)
  - Something I would never do
  - Would not rule it out, currently no interest
  - Might undertake if opportunity was there
  - Definitely

Replication Study 1 – Table 1

Table 1 The influence of personality on the attractiveness of elective office. *Source* 2015 Survey of US Adults

	(1) No controls	(2) Demographic controls
Extraversion	0.610***	0.609***
	(0.138)	(0.144)
Openness to experience	0.753***	0.415**
	(0.151)	(0.163)
Agreeableness	− 0.876***	− 0.677***
	(0.139)	(0.147)
Conscientiousness	− 0.746***	− 0.506***
	(0.126)	(0.135)
Emotional stability	0.015	− 0.024
	(0.097)	(0.103)
Education: Less than high school		− 0.521
		(0.602)
Education: High school		− 0.404**
		(0.195)
Education: Bachelor's degree		0.016
		(0.160)
Education: Graduate degree		0.315
		(0.206)
Income		0.010
		(0.032)
Race: African American		0.506**
		(0.213)
Race: Asian		0.059
		(0.318)
Race: Native American		0.168
		(0.678)
Race: Hispanic		− 0.047
		(0.303)
Race: Multi-racial		0.577
		(0.362)
Ideology: Liberal		0.150
		(0.173)
Ideology: Conservative		0.277
		(0.173)
Party ID: Democrat		0.027
		(0.162)
Party ID: Republican		− 0.159
		(0.192)
Gender: Female		− 0.897***
		(0.141)
Age (in years)		− 0.023***
		(0.005)
Constant cut1	0.560	− 0.4822
	(0.304)	(0.385)
Constant cut2	3.419 ***	2.4356***
	(0.357)	(0.426)
Observations	1954	1935
AIC	1880.695	1810.338
Pseudo R^2	0.057	0.106

Entries are ordered logistic regression coefficients, robust standard errors in parentheses. Baseline categories are some college, white, moderate, independent, and male. Models with additional control variables and using a multinomial logistic regression model are in the Online Appendix. Results are not dependent on various model specifications

***p < 0.01, **p < 0.05, *p < 0.1, two-tailed test

	No controls	Demographic controls

	Q23_1	
	Model 1	Model 2
Extraversion	0.610***	0.609***
	(0.138)	(0.144)
Openness	0.753***	0.415**
	(0.151)	(0.163)
Conscientiousness	-0.876***	-0.677***
	(0.139)	(0.147)
Agreeableness	-0.746***	-0.506***
	(0.126)	(0.135)
Emotional Stability	0.015	-0.024
	(0.097)	(0.103)
Education: Less than High School		-0.521
		(0.602)
Education: High School		-0.404**
		(0.195)
Education: Bachelors Degree		0.016
		(0.160)
Education: Graduate Degree		0.315
		(0.206)
Income		0.010
		(0.032)
Race: Black		0.506**
		(0.213)
Race: Asian		0.060
		(0.318)
Race: Native American		0.168
		(0.678)
Race: Hispanic		-0.047
		(0.303)
Race: Multi-Racial		0.577
		(0.362)
Ideology: Liberal		0.150
		(0.173)
Ideology: Conservative		0.277
		(0.173)
PartyID: Democrat		0.027
		(0.162)
PartyID: Republican		-0.159
		(0.192)
Gender: Female		-0.897***
		(0.141)
Age		-0.023***
		(0.005)
Constant Cut1	0.5606	-0.5051
	(0.304)	(0.388)
Constant Cut2	3.4190***	2.4127***
	(0.357)	(0.428)
N	1954	1935
AIC	1880.695	1810.379
Pseudo R^2	0.058	0.102

***p < .01; **p < .05; *p < .1

```
#ordered logit models they used for paper - study1 TABLE 1
mod.50 = polr(Q23_1~Extra+Open+consc+Agree+emotstab+educ+income+race+dideo+PartyID+gender+Age, data=d1)
mod.150 = polr(Q23_1~Extra+Open+consc+Agree+emotstab, data=d1)
stargazer(mod.150,mod.50, type='html', style='ajps', out='tab1.html')
```

Replication Study 1 – Figure 1

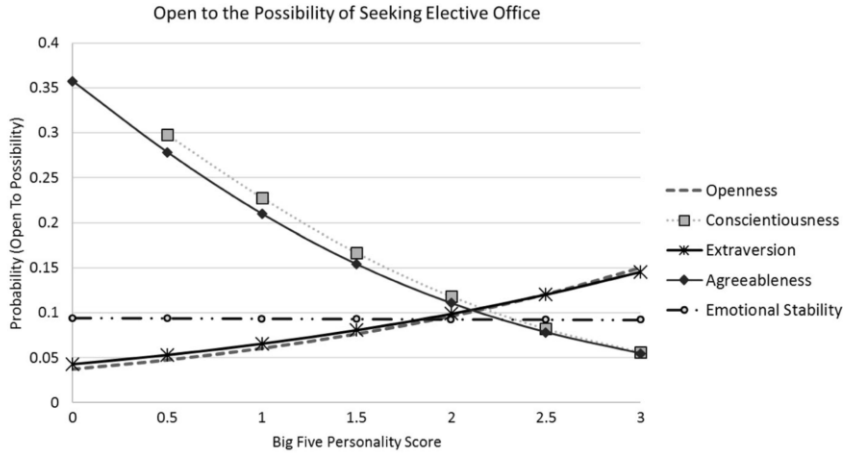
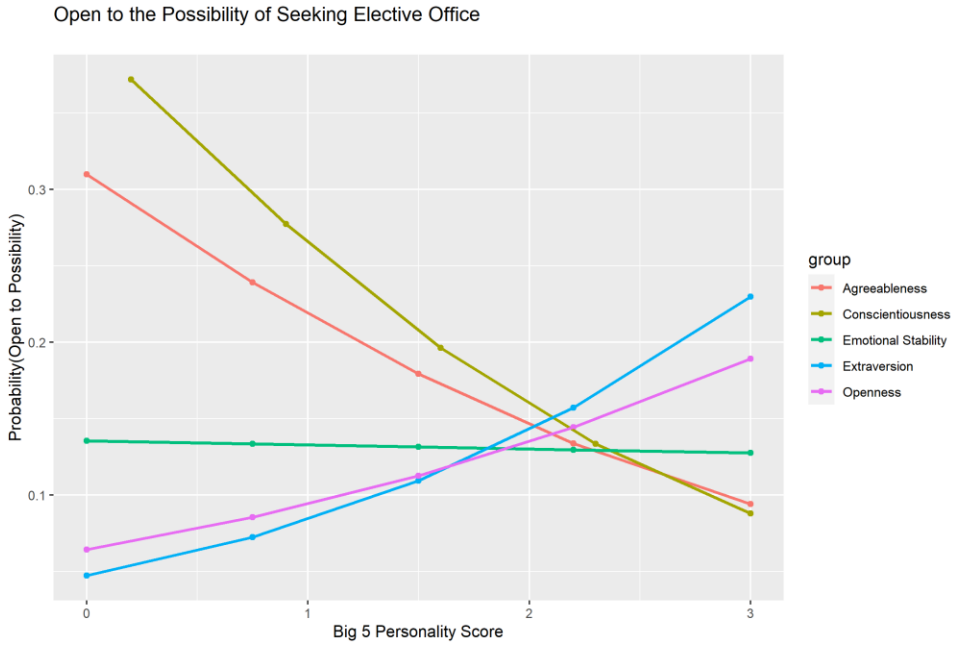


Fig. 1 The influence of personality traits on interest in elective office. Lines are the predicted probabilities from the ordered logistic regression model using the effects package in R 3.13. Confidence intervals omitted intentionally for ease of interpretation. Full results with confidence intervals are in the Online Appendix. *Source* 2015 Survey of US Adults



Replication Study 2 – Table 2

Table 2 The influence of personality on progressive political ambition. *Source* 2016 American Municipal Officials Survey

	(1) No controls	(2) Ambition/gender controls
Extraversion	0.162***	0.154**
	(0.056)	(0.060)
Openness to experience	0.022	0.003
	(0.059)	(0.063)
Agreeableness	− 0.106	− 0.169*
	(0.082)	(0.087)
Conscientiousness	0.0003	0.060
	(0.077)	(0.083)
Emotional stability	0.112*	0.102
	(0.061)	(0.067)
Won previous election by 5% pts. or less		0.028
		(0.136)
Years in office		− 0.005***
		(0.002)
Anticipated length in current office		0.006***
		(0.001)
Term limits exist for current office		− 0.001
		(0.005)
Partisan elections		− 0.015*
		(0.008)
Probability current seat filled by similar candidate		− 0.003**
		(0.002)
Probability similar candidate could win state legislative seat		0.006***
		(0.002)
Gender: Female		− 0.028
		(0.091)
Cut 1	− 1.289***	− 1.425***
	(0.269)	(0.301)
Cut 2	0.770**	0.753**
	(0.267)	(0.299)
Cut 3	2.233***	2.253***
	(0.272)	(0.304)
Observations	2398	2133
AIC	6126.833	5389.561
McFadden Pseudo R^2	0.279	0.364

Entries are ordered logistic regression coefficients, robust standard errors in parentheses

***p < 0.01, **p < 0.05, *p < 0.1, two-tailed test

	runhigher	
	Model 1	Model 2
Extraversion	0.162***	0.170***
	(0.056)	(0.064)
Openness	0.022	-0.002
	(0.059)	(0.067)
Agreeableness	-0.106	-0.130
	(0.082)	(0.093)
Conscientiousness	0.0003	-0.005
	(0.077)	(0.090)
Emotional Stability	0.112*	0.130*
	(0.061)	(0.071)
Won previous election by 5% pts. or less		0.009
		(0.145)
Years in office		-0.058***
		(0.008)
Anticipated length in current office		0.029***
		(0.009)
Term limits exist for current office		0.098
		(0.110)
Partisan Elections		0.007
		(0.100)
Probability current seat filled by similar candidate		-0.004*
		(0.002)
Probability similar candidate could win state legislative seat		0.006***
		(0.002)
Gender: Female		-0.070
		(0.098)
Cut1	-1.290	-1.673
	(0.269)	(0.334)
Cut2	0.770	0.520
	(0.268)	(0.331)
Cut3	2.233	2.063
	(0.272)	(0.335)
N	2398	1875
AIC	6126.833	4712.199
Pseudo R^2	0.002	0.018

***p < .01; **p < .05; *p < .1

```
# Models for study 2 - TABLE 2
mod.71=polr(runhigher~extra4pt+ open4pt+agree4pt+ consc4pt+ stable4pt, data=d2)
mod.73=polr(runhigher~extra4pt+ open4pt+agree4pt+ consc4pt+ stable4pt+ closevote+ tenure+ progamb_current+termlimits+ partisanelect+ progamb_similar_1+ progamb_winlegis_1+gender, data=d2)
stargazer(mod.71, mod.73, type='html', style='ajps', out="tab2.html")
```

Findings of replication

- As you can see, was not able to exactly replicate the second model, despite using the same code as the replication file
- Possible explanation:
  - Number of observations cut way down compared to original study
  - Affected results, replication did not find significance for one covariate
  - R removing NAs?

Replication Study 2 – Figure 2

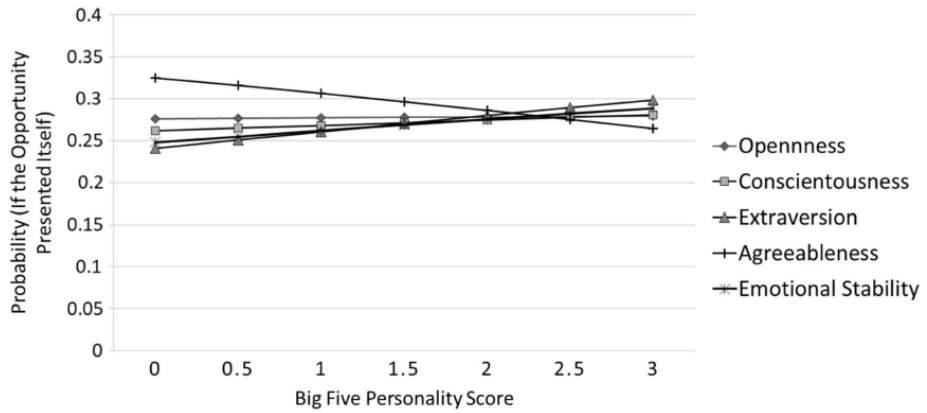
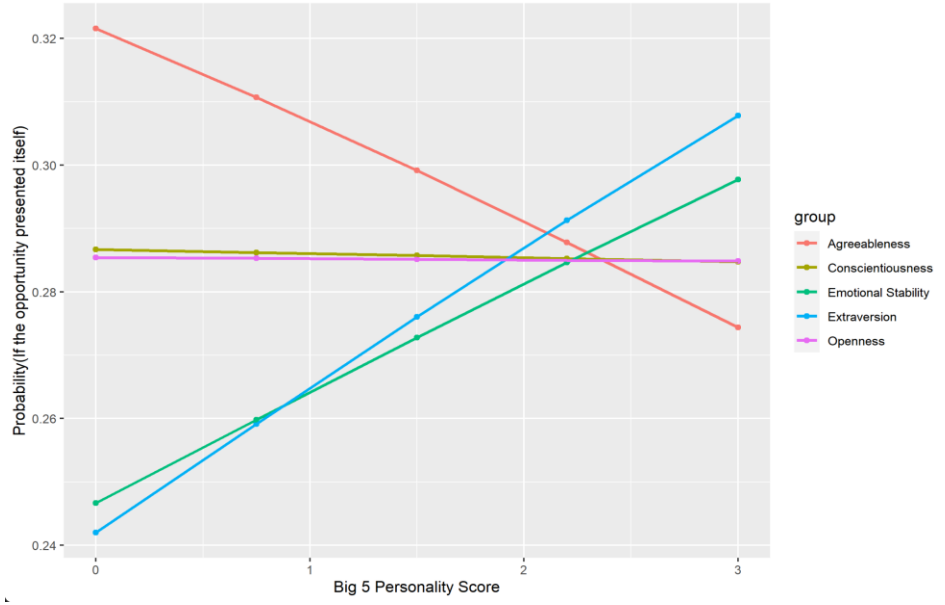


Fig. 2 The influence of personality traits on progressive political ambition. Lines are the predicted probabilities from the ordered logistic regression calculated using the effects package in R 3.13. Confidence intervals omitted intentionally for ease of interpretation. Full results with confidence intervals are in the Online Appendix. *Source* 2016 American Municipal Officials Survey



Replication Study 2 – Table 3

Table 3 The influence of personality on the attractiveness higher elected offices. *Source* 2016 American Municipal Officials Survey

	(1) No controls	(2) Ambition/gender controls
Extraversion	0.080	0.103
	(0.062)	(0.066)
Openness	0.149**	0.154**
	(0.066)	(0.069)
Agreeableness	− 0.235**	− 0.253***
	(0.092)	(0.097)
Conscientiousness	− 0.026	− 0.001
	(0.085)	(0.091)
Emotional stability	0.113	0.091
	(0.070)	(0.075)
Won previous election by 5% or less		− 0.291*
		(0.153)
Years in office		− 0.0001
		(0.002)
Anticipated length in current office		0.004**
		(0.002)
Term limits for current office		0.001
		(0.006)
Partisan elections		− 0.003
		(0.008)
Current seat filled with similar candidate		− 0.003*
		(0.002)
Legislative spot filled with similar candidate		0.003**
		(0.002)
Gender: Female		− 0.072
		(0.099)
Cut 1	− 0.108	− 0.149
	(0.296)	(0.329)
Cut 2	1.94***	1.93***
	(0.299)	(0.332)
Observations	2096	1901
AIC	4177.963	3815.435
McFadden Pseudo R^2	0.25	0.31

Entries are ordered logit estimates, robust standard errors in parentheses

***p < 0.01, **p < 0.05, *p < 0.1, two-tailed test. Alternative models including other controls did not change the results

	office	
	Model 1	**Model 2**
Extraversion	0.080	0.093
	(0.062)	(0.071)
Openness	0.149**	0.148**
	(0.066)	(0.073)
Agreeableness	-0.235**	-0.241**
	(0.092)	(0.103)
Conscientiousness	-0.026	0.032
	(0.085)	(0.098)
Emotional Stability	0.113	0.109
	(0.070)	(0.080)
Won previous election by 5% or less		-0.207
		(0.163)
Years in office		-0.032***
		(0.009)
Anticipated length in current office		0.019**
		(0.009)
Term limits for current office		-0.086
		(0.121)
Partisan Elections		-0.055
		(0.109)
Current seat filled with similar candidate		-0.001
		(0.002)
Legislative spot filled with similar candidate		0.003
		(0.002)
Gender: Female		-0.086
		(0.107)
Constant Cut1	-0.108	-0.138
	(0.296)	(0.363)
Constant Cut2	1.941	1.959
	(0.299)	(0.367)
N	2096	1679
AIC	4177.963	3376.953
Pseudo R^2	0.003	0.009

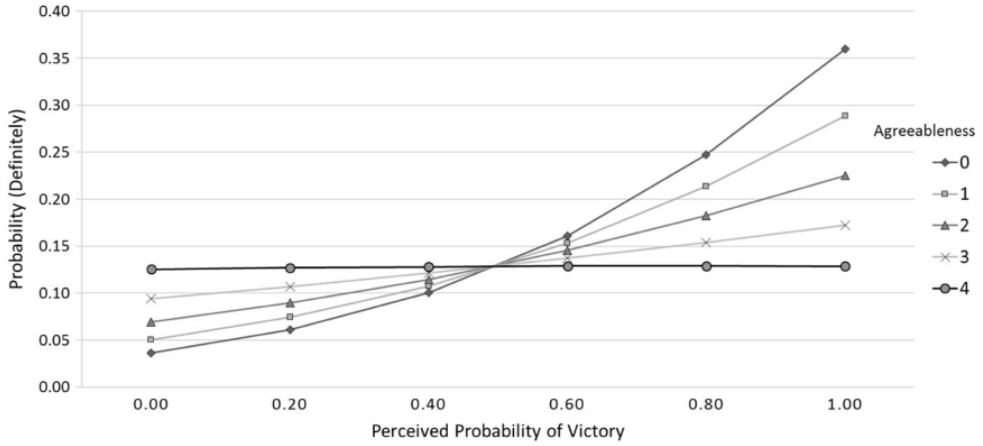
***p < .01; **p < .05; *p < .1

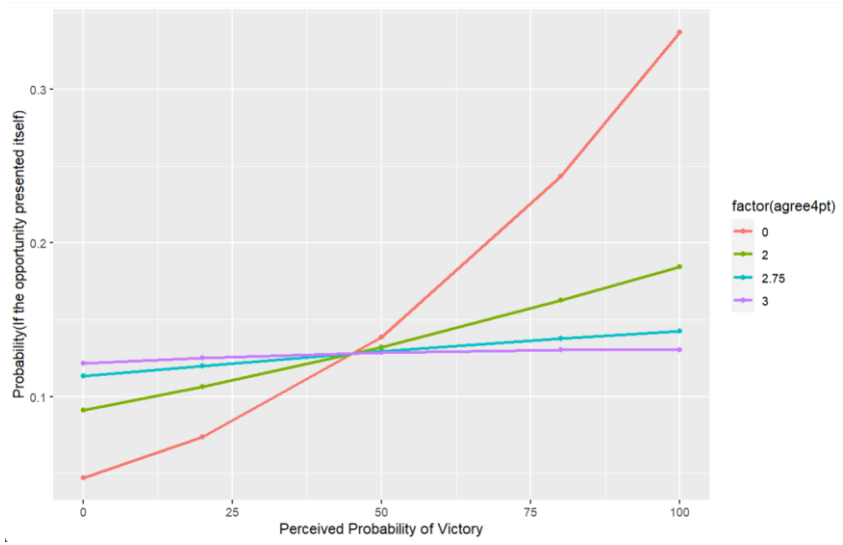
```
# Models for study 2 - TABLE 3
mod.100 = polr(office~extra4pt+ open4pt+agree4pt+ consc4pt+ stable4pt, data=d2)
mod.101 = polr(office~extra4pt+ open4pt+agree4pt+ consc4pt+ stable4pt+ closevote+ tenure+ progamb_current+termlimits+ partisanelect+ progamb_similar_1+ progamb_winlegis_1+gender, data=d2)
stargazer(mod.100,mod.101, type='html', style='ajps', out="tab3_2.html")
```

Findings of replication

- Same as the previous table – less observations
- ‘Years’ covariate significant in replication, not in original
- Also another interesting finding, Pseudo R-Squared values *very* different

Replication Study 2 – Figure 3





My contribution – Parallel lines

- Researchers made a LOT of models
  - For every ordered logit model they ran, they also ran an unordered multinomial model
- Regardless, important to check whether the assumptions of the model stands
- Proportional odds assumption:
  - Assumes coefficients are consistent throughout the different categories

```
# parallel lines assumption for study 1
d4 <- na.omit(d1)
for(i in 1:length(unique(d4$Q23_1))) {
  assign(paste("logit_model", i, sep=""),
         glm(ifelse(Q23_1==unique(d4$Q23_1)[i], 1, 0) ~ Extra+Open+consc+Agree+emotstab, data=d4, family = "binomial"),
         envir = globalenv())
}

stargazer(logit_model1,logit_model2,logit_model3, type="html", out="assumption2.html")

# parallel lines assumption for study 2
d3 <- na.omit(d2)
for(i in 1:length(unique(d3$runhigher))) {
  assign(paste("logit_model", i, sep=""),
  glm(ifelse(runhigher==unique(d3$runhigher)[i], 1, 0) ~ extra4pt+ open4pt+agree4pt+ consc4pt+ stable4pt, data=d3, family = "binomial"),
  envir = globalenv())
}

stargazer(logit_model1,logit_model2,logit_model3,logit_model4, type="html", out="assumption.html")
```

My contribution – Parallel lines

Nascent political ambition (Study 1)

	Dependent variable:		
	Q23_1		
	(1)	(2)	(3)
Extra	0.540***	-0.606***	1.119**
	(0.141)	(0.139)	(0.501)
Open	0.737***	-0.756***	0.567
	(0.155)	(0.152)	(0.491)
consc	-0.739***	0.853***	-1.546***
	(0.142)	(0.139)	(0.440)
Agree	-0.678***	0.739***	-0.993**
	(0.129)	(0.127)	(0.404)
emotstab	0.001	-0.010	0.090
	(0.099)	(0.097)	(0.321)
Constant	-0.924***	0.616**	-2.285***
	(0.314)	(0.303)	(0.855)
Observations	1,935	1,935	1,935
Log Likelihood	-808.608	-837.416	-121.142
Akaike Inf. Crit.	1,629.217	1,686.831	254.283
Note:		*p<0.1; **p<0.05; ***p<0.01	

Progressive political ambition (Study 2)

	Dependent variable:			
	runhigher			
	(1)	(2)	(3)	(4)
extra4pt	-0.052	-0.032	-0.271*	0.295***
	(0.073)	(0.079)	(0.143)	(0.104)
open4pt	-0.023	0.070	0.005	-0.079
	(0.077)	(0.083)	(0.153)	(0.107)
agree4pt	0.152	-0.094	0.198	-0.229
	(0.108)	(0.115)	(0.217)	(0.147)
consc4pt	-0.205**	0.209*	0.105	0.004
	(0.102)	(0.112)	(0.207)	(0.142)
stable4pt	-0.004	-0.036	-0.131	0.139
	(0.082)	(0.088)	(0.159)	(0.117)
Constant	0.204	-1.119***	-2.579***	-1.918***
	(0.352)	(0.384)	(0.708)	(0.492)
Observations	1,679	1,679	1,679	1,679
Log Likelihood	-1,157.496	-1,039.080	-414.171	-709.474
Akaike Inf. Crit.	2,326.993	2,090.159	840.343	1,430.947
Note:		*p<0.1; **p<0.05; ***p<0.01		

Conclusion

- Was able to reproduce statistically significant findings
  - However, was not able to get the same figures – messy replication file
- Pseudo R Squared values were not reported in main paper, generally quite poor
- Ordered logit models violated proportional odds assumptions, but multinomial models produced the same results (any need for ordered models?)

References

Dynes, A. M., Hassell, H. J. G., & Miles, M. R. (2019). The Personality of the Politically Ambitious. *Political Behavior*, *41*(2), 309–336. https://doi.org/10.1007/s11109-018-9452-x

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