REPLICATION PROJECT

The Personality of the Politically Ambitious

Dynes, Adam M., Hans J. G. Hassell, and Matthew R. Miles. 2019. *Political Behavior*

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May 2022

Brief Background

- **The Personality of the Politically Ambitious**

  Data from "Clear Voice Research".

  Online Panel Data

  1,939 completed survey responses

"Certain types of People do Certain Types of Things"- Attributed to Aristotle (Frede, 1992)

Brief Background

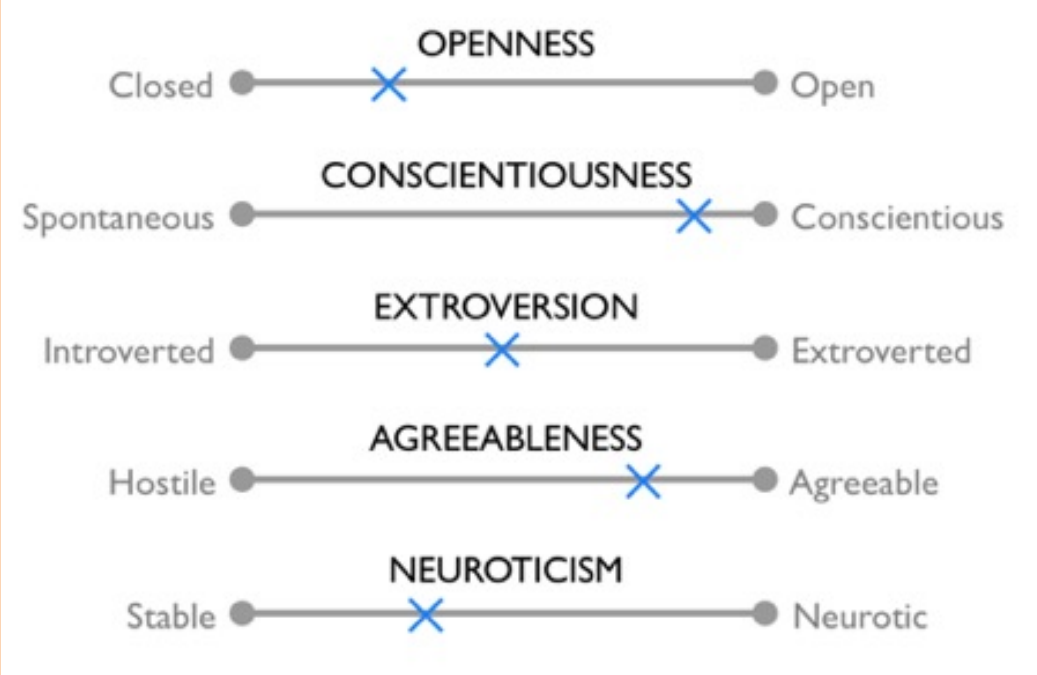
Dependent Variable- Political ambitiousness

I have absolutely no interest in holding elective office at any time in the future. 1,615

I am open to the possibility of holding elective office in the future. 315

I am actively considering running for elective office. 25

Primary Independent Variables →



Main Replication

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)
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

Ordinal Logistic models

	Model 1 **No controls**	Model 2 **Demographic controls**
Extraversion	0.610*** -0.138	0.609*** -0.144
Openness	0.753*** -0.151	0.415** -0.163
Conscientiousness	-0.876*** -0.139	-0.677*** -0.147
Agreeableness	-0.746*** -0.126	-0.506*** -0.135
Emotional stability	0.015 -0.097	-0.024 -0.103

Controls not shown- Gender, education, race, income, ideology, party, Age

Sensitivity check /Additional Variable

	Ordinal Logistic	
	Model 1 **With Demographics**	Model 2 **With Age Squared**
Extraversion	0.609***	0.595***
	(0.144)	(0.110)
Openness	0.415**	0.446***
	(0.163)	(0.056)
conscientiousness	-0.677***	-0.692***
	(0.147)	(0.126)
Agreeableness	-0.506***	-0.506***
	(0.135)	(0.120)
Emotional Stability	-0.024	-0.018
	(0.103)	(0.097)

	Ordinal Logistic	
	Model 1 **With Demographics**	Model 2 **With Age Squared**
Less than High School	-0.521	-0.486***
	(0.602)	(0.002)
Graduate Degree	0.315	0.311***
	(0.206)	(0.065)
Asian	0.060	0.053***
	(0.318)	(0.010)
Native American	0.168	0.222***
	(0.678)	(0.001)
raceHispanic	-0.047	-0.053***
	(0.303)	(0.011)
raceMulti-Racial	0.577	0.615***
	(0.362)	(0.010)
Liberal	0.150	0.167**
	(0.173)	(0.077)
Conservative	0.277	0.285***
	(0.173)	(0.093)
Age	-0.023***	0.023*
	(0.005)	(0.012)
Age^2		-0.0005***
		(0.0001)

Bayesian Ordinal Logistic Model

	Ordinal Logistic	
	Model 1 **With Demographics**	Model 2 **With Age Squared**
Extraversion	0.609***	0.595***
	(0.144)	(0.110)
Openness	0.415**	0.446***
	(0.163)	(0.056)
conscientiousness	-0.677***	-0.692***
	(0.147)	(0.126)
Agreeableness	-0.506***	-0.506***
	(0.135)	(0.120)
Emotional Stability	-0.024	-0.018
	(0.103)	(0.097)

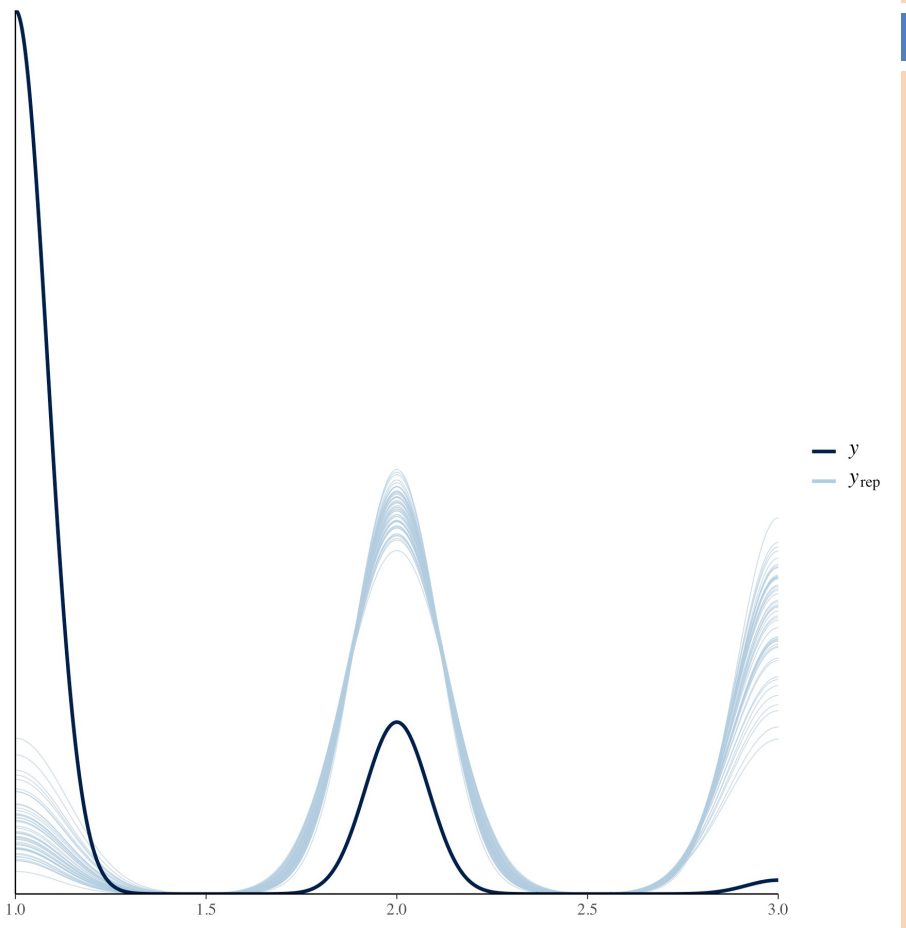
	Bayesian Ordinal Logistic	
	Model 1 **With Demographics**	Model 2 **With Age Squared**
	Model 1	Model 2
Extraversion	0.416	0.405
	[0.198, 0.661]	[0.187, 0.632]
Openness	0.302	0.316
	[0.050, 0.575]	[0.049, 0.585]
Conscientiousness	−0.492	−0.487
	[−0.754, −0.247]	[−0.724, −0.246]
Agreeableness	−0.350	−0.354
	[−0.579, −0.119]	[−0.561, −0.128]
Emotional Stability	−0.023	−0.019
	[−0.180, 0.146]	[−0.185, 0.167]

Alt Model – Binary/Logistic

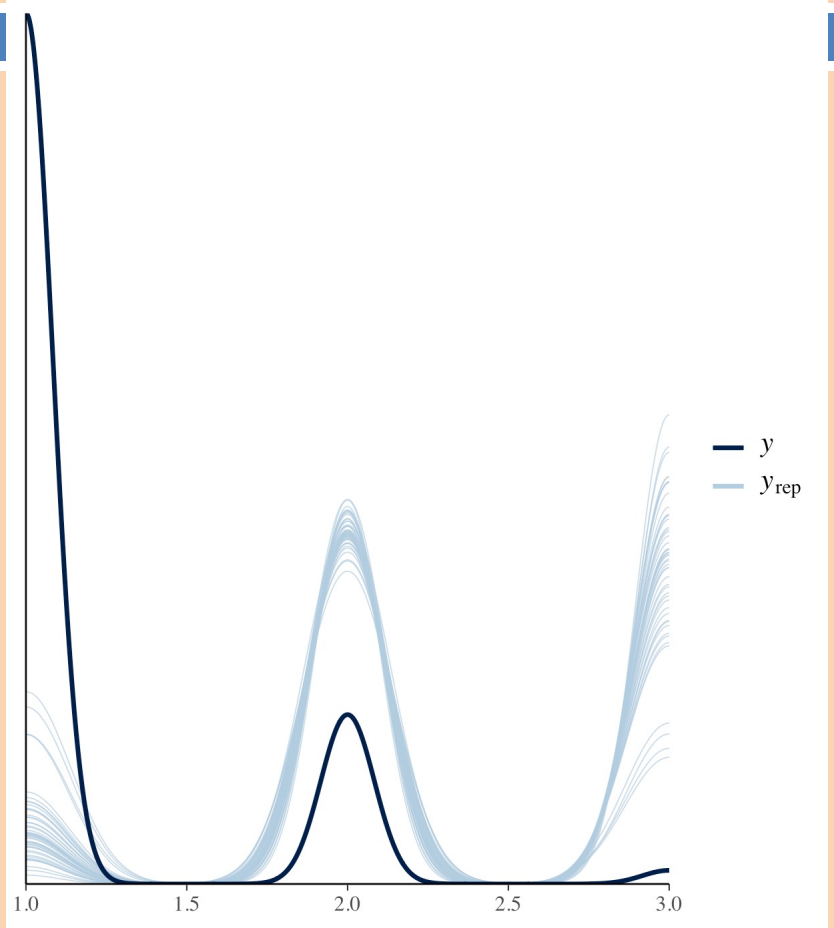
	Model 1 Logistic **With Demographics**	Model 2 Logistic **With Age Squared**
	Model 1	Model 2
Extraversion	0.601***	0.586***
	(0.145)	(0.145)
Openness	0.424***	0.459***
	(0.163)	(0.165)
conscientiousness	-0.661***	-0.678***
	(0.147)	(0.148)
Agreeableness	-0.497***	-0.499***
	(0.136)	(0.135)
Emotional Stability	-0.025	-0.019
	(0.103)	(0.103)

	Bayesian Logistic With Demographics	Bayesian Logistic With age Squared
	Model 1	Model 2
(Intercept)	0.47	−0.582
	[−0.285, 1.273]	[−2.000, 0.688]
Extra	0.613	0.592
	[0.329, 0.879]	[0.319, 0.878]
Open	0.428	0.463
	[0.115, 0.739]	[0.146, 0.780]
consc	−0.669	−0.691
	[−0.954, −0.379]	[−0.976, −0.399]
Agree	−0.502	−0.506
	[−0.765, −0.239]	[−0.769, −0.237]
emotstab	−0.025	−0.017
	[−0.230, 0.188]	[−0.216, 0.183]

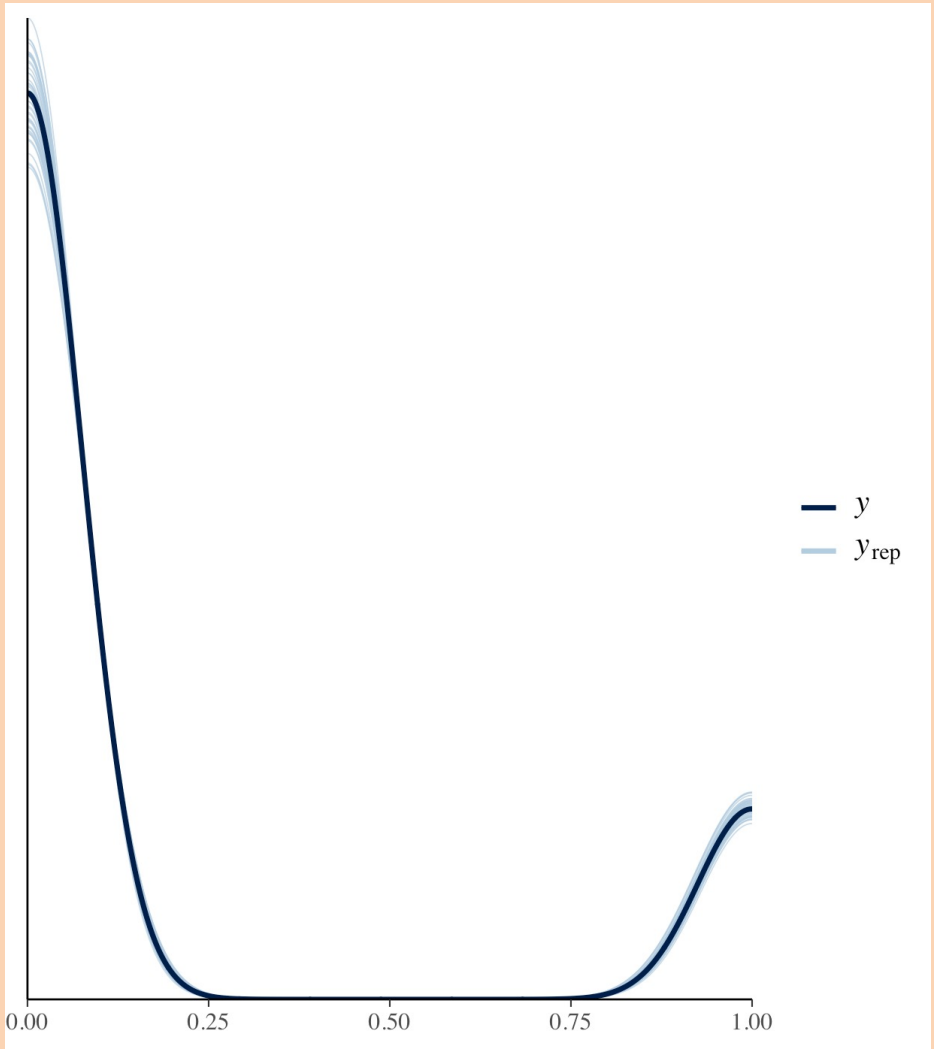
Bayesian Ordinal Logistic



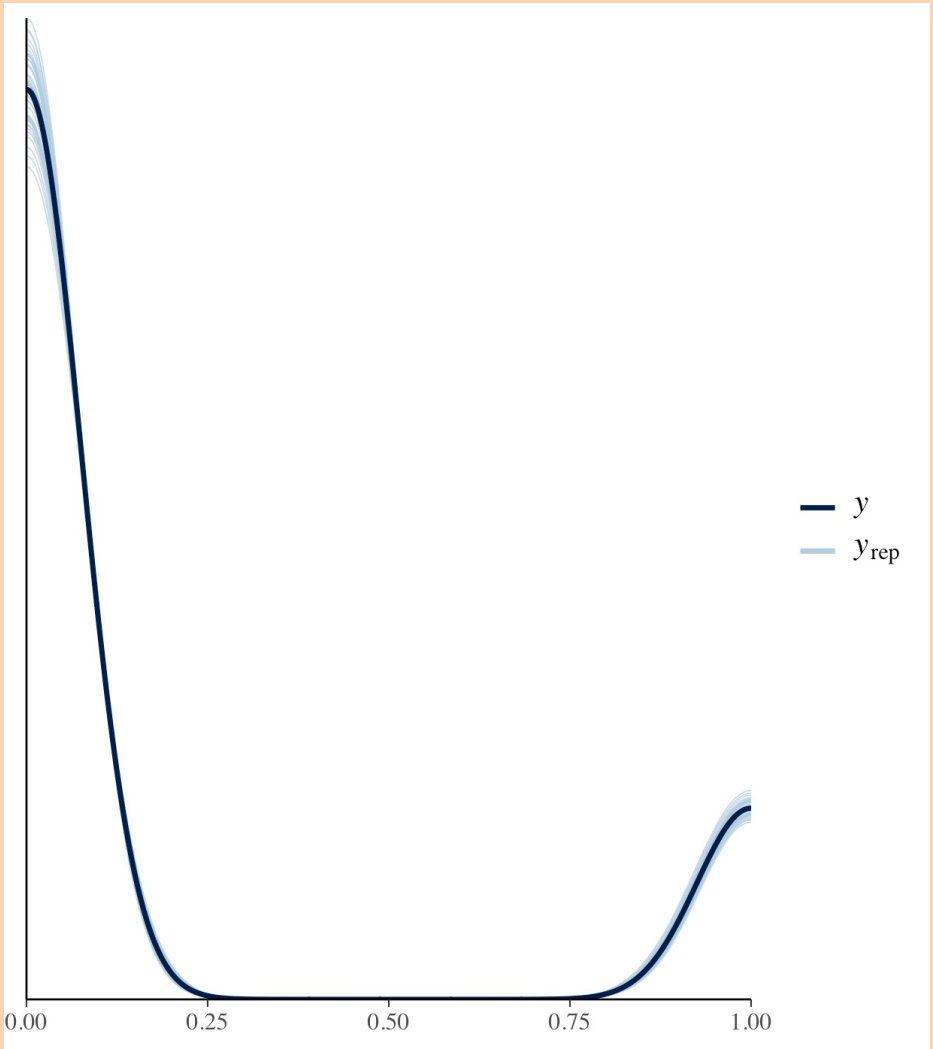
Bayesian Ordinal Logistic
With Age squared



Bayesian Logistic



Bayesian Logistic with Age squared



Loo Compare

Bayesian Logistic (age squared)	0.0	0.0
Bayesian Logistic	-1.2	1.9
Bayesian Logistic Ordinal	-92.3	13.7
Bayesian Logistic Ordinal (age sq)	-92.4	13.7

Conclusions

Main effects Robust,

Age squared seemed to add statistical significance to several control variables,

This extended analysis does not seem to provide any significantly different findings.

Thank you!

Family Structure Transitions and Changes in Maternal Resources and Well-being

Osborne, Berger, and Magnuson (2012).

YJ Chae

Family structure transitions and maternal well-being

- How is moving from the **two-parent family structure to another** associated with changes in maternal well-being?
- Selection bias: families experiencing family instability often initially have lower levels of resources, well-being, and general health.
- This study controls for initial family structure status (FS)
  - FS between Y0 (child's birth) and Y1 is controlled.
- Independent variable: FS between Y1 and Y5.

Model formula

- $Y_{ti} = P_{0i} + P_{1i}AGE + E_{ti}$

  - $P_{0i} = B_{00} + B_{01}FS_{0i} + B_{02}FAM_{0i} + \boldsymbol{B_{03}}FS_{ti} + E_{0i}$ *When AGE = 0 (: Year 1)*

    Falsification test

  - $P_{1i} = B_{t0} + \boldsymbol{B_{t1}}FS_{ti} + B_{t3}FAM_{0i} + E_{1i}$ *When AGE = t*

    Parameter of interest

- FS_{ti}: Family Structure transition between Y1 and Y5
- FAM_{0i}: Time-invariant background characteristics (e.g., race)
- Falsification test: tests if future transition affects past outcome. Evidence of selection bias.

Replication result

Table 2: Replication Results

	Replicated	Original
Intercept		
To 2 BioParents b/w Y0 and Y1	−0.099	−0.071
	(0.055)	(0.057)
To SocialFather b/w Y0 and Y1	0.172	0.167
	(0.089)	(0.092)
To SingleMother b/w Y0 and Y1	0.106	−0.045
	(0.092)	(0.082)
Always SingleMother b/w Y0 and Y1	0.149	0.021
	(0.088)	(0.077)
Ever Transit to 2 BioParents b/w Y1 and Y5	−0.232*	−0.059
	(0.095)	(0.083)
Ever Transit to SocialFather b/w Y1 and Y5	0.068	0.148*
	(0.072)	(0.068)
Ever Transit to SingleMother b/w Y1 and Y5	−0.014	−0.044
	(0.050)	(0.047)
Stable SingleMother b/w Y1 and Y5	−0.024	0.106
	(0.087)	(0.080)
Stable SocialFather b/w Y1 and Y5	−0.167	−0.137
	(0.157)	(0.162)
Slope		
AGE x Ever Transit to 2 BioParents b/w Y1 and Y5	0.011	−0.015
	(0.017)	(0.016)
AGE x Ever Transit to SocialFather b/w Y1 and Y5	−0.017	−0.016
	(0.013)	(0.013)
AGE x Ever Transit to SingleMother b/w Y1 and Y5	0.030**	0.029**
	(0.011)	(0.011)
AGE x Stable SingleMother b/w Y1 and Y5	−0.004	−0.011
	(0.012)	(0.013)
AGE x Stable SocialFather b/w Y1 and Y5	−0.060	−0.060
	(0.035)	(0.036)
Num.Obs.	10 359	
Num.Imp.	10	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Alternative result

Table 4: Comparison 2: Alternative Specifications

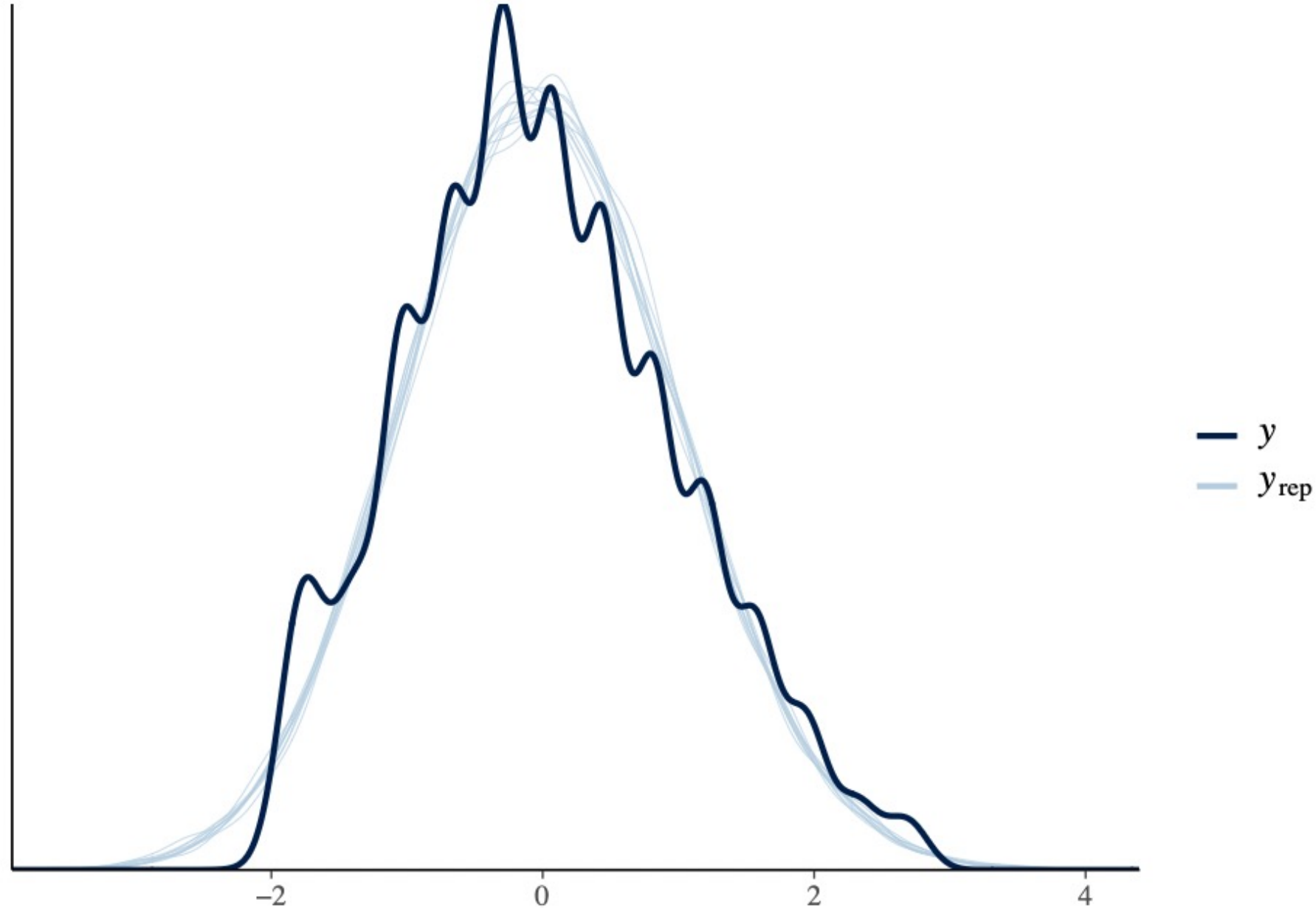
	Replicated	Random Intercept	Extensive Control	Alt. Independent
Intercept				
To 2 BioParents b/w Y0 and Y1	−0.10	−0.10	−0.10	−0.10
	(0.05)	(0.05)	(0.05)	(0.06)
To SocialFather b/w Y0 and Y1	0.17	0.17	0.17	0.15
	(0.09)	(0.09)	(0.09)	(0.08)
To SingleMother b/w Y0 and Y1	0.11	0.10	0.11	−0.02
	(0.09)	(0.09)	(0.09)	(0.06)
Always SingleMother b/w Y0 and Y1	0.15	0.15	0.15	0.05
	(0.09)	(0.09)	(0.09)	(0.06)
Ever Transit to 2 BioParents b/w Y1 and Y5	−0.23*	−0.23*	−0.23*	0.00
	(0.09)	(0.09)	(0.10)	(0.05)
Ever Transit to SocialFather b/w Y1 and Y5	0.07	0.07	0.07	−0.02
	(0.07)	(0.07)	(0.07)	(0.07)
Ever Transit to SingleMother b/w Y1 and Y5	−0.01	−0.01	−0.01	0.10
	(0.05)	(0.05)	(0.05)	(0.05)
Stable SingleMother b/w Y1 and Y5	−0.02	−0.02	−0.03	0.07
	(0.09)	(0.09)	(0.09)	(0.05)
Stable SocialFather b/w Y1 and Y5	−0.17	−0.17	−0.17	−0.25
	(0.16)	(0.16)	(0.16)	(0.18)
Slope				
AGE x Ever Transit to 2 BioParents b/w Y1 and Y5	0.01	0.01	0.01	−0.02
	(0.02)	(0.02)	(0.02)	(0.02)
AGE x Ever Transit to SocialFather b/w Y1 and Y5	−0.02	−0.02	−0.02	0.02
	(0.01)	(0.01)	(0.01)	(0.02)
AGE x Ever Transit to SingleMother b/w Y1 and Y5	0.03**	0.03**	0.03*	−0.01
	(0.01)	(0.01)	(0.01)	(0.02)
AGE x Stable SingleMother b/w Y1 and Y5	0.00	0.00	0.00	−0.01
	(0.01)	(0.01)	(0.01)	(0.01)
AGE x Stable SocialFather b/w Y1 and Y5	−0.06	−0.06	−0.06	−0.01
	(0.03)	(0.03)	(0.04)	(0.06)
Num.Obs.	10 359	10 359	10 359	10 359
Num.Imp.	10	10	10	10

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Bayesian result

Table 3: Comparison 1: Frequentist vs. Bayesian Models

	Frequentist	Bayesian
Intercept		
To 2 BioParents b/w Y0 and Y1	−0.10	−0.10
	[−0.21, 0.01]	[−0.21, 0.00]
To SocialFather b/w Y0 and Y1	0.17	0.17
	[0.00, 0.35]	[−0.01, 0.33]
To SingleMother b/w Y0 and Y1	0.11	0.08
	[−0.07, 0.29]	[−0.08, 0.24]
Always SingleMother b/w Y0 and Y1	0.15	0.12
	[−0.02, 0.32]	[−0.03, 0.27]
Ever Transit to 2 BioParents b/w Y1 and Y5	−0.23	−0.21
	[−0.42, −0.05]	[−0.38, −0.03]
Ever Transit to SocialFather b/w Y1 and Y5	0.07	0.08
	[−0.07, 0.21]	[−0.05, 0.22]
Ever Transit to SingleMother b/w Y1 and Y5	−0.01	0.00
	[−0.11, 0.08]	[−0.10, 0.10]
Stable SingleMother b/w Y1 and Y5	−0.02	0.00
	[−0.19, 0.15]	[−0.15, 0.16]
Stable SocialFather b/w Y1 and Y5	−0.17	−0.15
	[−0.48, 0.14]	[−0.45, 0.15]
Slope		
AGE x Ever Transit to 2 BioParents b/w Y1 and Y5	0.01	0.01
	[−0.02, 0.04]	[−0.02, 0.05]
AGE x Ever Transit to SocialFather b/w Y1 and Y5	−0.02	−0.01
	[−0.04, 0.01]	[−0.04, 0.01]
AGE x Ever Transit to SingleMother b/w Y1 and Y5	0.03	0.03
	[0.01, 0.05]	[0.00, 0.05]
AGE x Stable SingleMother b/w Y1 and Y5	0.00	−0.01
	[−0.03, 0.02]	[−0.03, 0.02]
AGE x Stable SocialFather b/w Y1 and Y5	−0.06	−0.06
	[−0.13, 0.01]	[−0.13, 0.01]
Num.Obs.	10 359	10 359
Num.Imp.	10	
RMSE		0.55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Conclusion

- Some discrepancies b/w what authors say and and the actual data.
  - TANF, dependent variables, etc.
- Information on the paper is not often enough.
  - Operationalization strategies that require readers' serious attention explained too briefly.
- The findings were quite robust, but a differently operationalized independent variable took away most of the statistical significance *even when it is intended to measure the same underlying concept* (Family Structure transition)

A Replication of *Comparing Internet Experiences and Prosociality in Amazon Mechanical Turk and Population-Based Survey Samples* by Eszter Hargittai and Aaron Shaw

Presented by Brent Hoagland

Statistics 542 May 2, 2022

Introduction to Paper

- Nationally representative sample (NORC)
  vs. Amazon Mechanical Turk (AMT)
- Ways of dealing with discrepancies:
  - Just leave it – not representative but doesn't seem to undermine validity
  - Benchmark – but Amazon doesn't provide public demographic data
- Problem Addressed:
  previous literature overlooks most likely sources of variation
  - Internet experiences and skills
  - Prosocial attitudes and behavior

Main Replication

Table 3. Regression Models on Internet Experiences.

	Frequency of Use			Autonomy of Use			Internet Skills			Number of Activities			Social Media Use		
	Coefficient	*SE*	Significance	Coefficient	*SE*	Significance	Coefficient	*SE*	Significance	Coefficient	*SE*	Significance	Coefficient	*SE*	Significance
Age	−.19	.02	***	−.04	.00	***									
Female	.76	.43		.16	.08	*									
Income (sq. root)	−.01	.00	***	.00	.00	***									
Employed	−2.80	.47	***	.54	.09	***									
Rural resident	−.66	.60		−.25	.11	*									
Education (base: BA or more)															
HS or less	−.12	.61		−.87	.11	***									
Some college	.13	.50		−.30	.09	**									
Race and ethnicity (base: white)															
Hispanic	1.11	.73		−.28	.13	*									
Black	2.73	.72	***	−.28	.13	*									
Asian	3.02	.95	**	−.26	.17										
Native American	.30	1.77		−.17	.33										
Other	4.28	2.51		.17	.46										
AMT sample	6.07	.51	***	.40	.09	***									
N		2,638			2,664										
Adj. R^2		.21			.18										

Note: sq. = square; HS = high school; AMT = Amazon Mechanical Turk; adj. = adjusted.
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 3: Regression models on Internet experiences

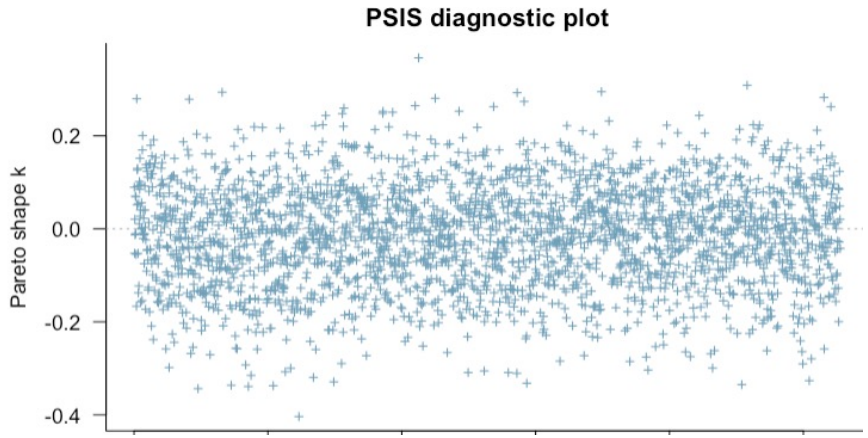
	Dependent variable:				
	Autonomy of Use	Frequencey of Use	Internet Skills	Social Media Use	Number of Activities
	(1)	(2)	(3)	(4)	(5)
age	-0.04*** (0.00)	-0.19*** (0.02)	-0.02*** (0.00)	-0.04*** (0.00)	-0.03*** (0.00)
female	0.16** (0.08)	-0.76* (0.43)	-0.22*** (0.04)	0.51*** (0.06)	0.44*** (0.08)
incomesqrt	0.00*** (0.00)	-0.01*** (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00 (0.00)
employed	0.54*** (0.09)	-2.80*** (0.47)	0.12*** (0.04)	0.21*** (0.07)	0.19** (0.09)
rural	-0.25** (0.11)	-0.66 (0.60)	-0.03 (0.05)	-0.11 (0.09)	0.03 (0.11)
eduhsorless	-0.87*** (0.11)	-0.12 (0.61)	-0.47*** (0.05)	-0.57*** (0.09)	-0.59*** (0.11)
edusc	-0.30*** (0.09)	0.13 (0.50)	-0.06 (0.04)	-0.15** (0.07)	0.10 (0.09)
hispanic	-0.28** (0.13)	1.11 (0.73)	-0.11* (0.06)	0.01 (0.11)	-0.27** (0.14)
black	-0.28** (0.13)	2.73*** (0.72)	-0.02 (0.06)	0.10 (0.11)	0.04 (0.13)
asian	-0.26 (0.17)	3.02*** (0.95)	-0.16** (0.08)	0.11 (0.14)	-0.57*** (0.18)
nativeam	-0.17 (0.33)	0.30 (1.77)	0.04 (0.15)	-0.50* (0.26)	0.11 (0.33)
raceother	0.17 (0.46)	4.28* (2.51)	0.04 (0.21)	0.33 (0.38)	0.70 (0.47)
amtsample	0.39*** (0.09)	6.07*** (0.51)	0.31*** (0.04)	0.89*** (0.08)	0.46*** (0.09)
Constant	6.12*** (0.22)	27.60*** (1.19)	0.49*** (0.10)	3.81*** (0.18)	3.87*** (0.22)
Observations	2,664	2,638	2,663	2,664	2,664
Adjusted R2	0.18	0.21	0.19	0.28	0.12
Note:					*p<0.1; **p<0.05; ***p<0.01

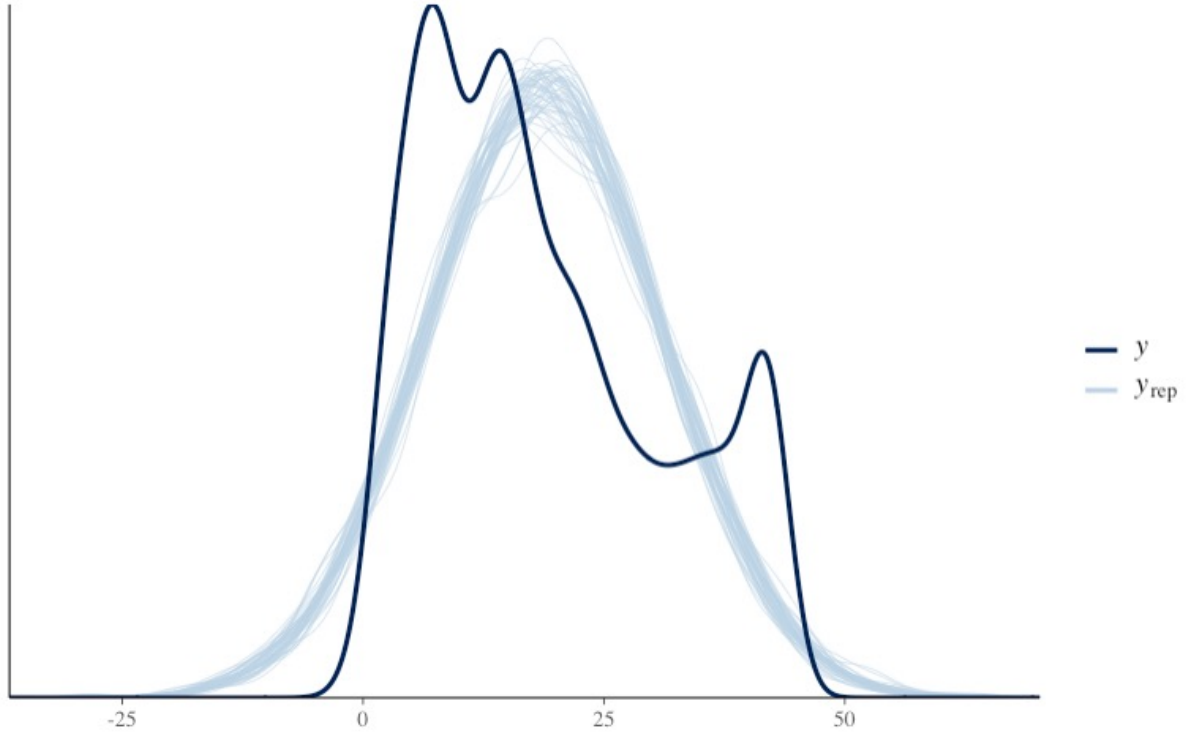
Bayesian Replication

Table 3: Frequency of Use - Comparison between Original & Baysian

	Orig	Bayes
age	-0.19 (0.02) ***	-0.20 (0.02)
female	-0.76 (0.43) +	-0.65 (0.42)
incomesqrt	-0.01 (0.00) ***	-0.01 (0.00)
employed	-2.80 (0.47) ***	-2.42 (0.43)
rural	-0.66 (0.60)	-0.54 (0.50)
eduhsorless	-0.12 (0.61)	-0.36 (0.50)
edusc	0.13 (0.50)	0.08 (0.42)
hispanic	1.11 (0.73)	0.42 (0.60)
black	2.73 (0.72) ***	1.60 (0.57)
asian	3.02 (0.95) **	1.55 (0.66)
nativeam	0.30 (1.77)	-0.02 (0.90)
raceother	4.28 (2.51) +	0.55 (0.94)
amtsample	6.07 (0.51) ***	4.88 (0.44)
Num.Obs.	2638	2638
R2	0.212	
R2 Adj.	0.208	

Reference categories: BA or more, white





Sensitivity Checks

Table 3: Frequency of Use - Alternative Specification

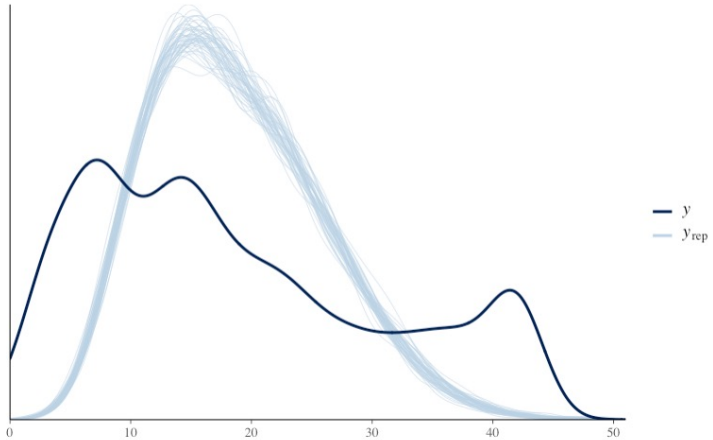
	Orig	Alt Var
age	-0.19 (0.02) ***	-0.18 (0.02) ***
female	-0.76 (0.43) +	-0.74 (0.43) +
incomesqrt	-0.01 (0.00) ***	
employed	-2.80 (0.47) ***	-2.69 (0.47) ***
rural	-0.66 (0.60)	-0.69 (0.60)
eduhsorless	-0.12 (0.61)	-0.15 (0.60)
edusc	0.13 (0.50)	0.11 (0.50)
hispanic	1.11 (0.73)	1.09 (0.73)
black	2.73 (0.72) ***	2.69 (0.72) ***
asian	3.02 (0.95) **	3.02 (0.95) **
nativeam	0.30 (1.77)	0.32 (1.76)
raceother	4.28 (2.51) +	4.35 (2.51) +
amtsample	6.07 (0.51) ***	6.15 (0.50) ***
lincome		-1.04 (0.25) ***
Num.Obs.	2638	2638
R2	0.212	0.214
R2 Adj.	0.208	0.210

Reference categories: BA or more, white

Table 3: Frequency of Use - Alternative Specification

	OLS	Poisson
age	-0.19 (0.02) ***	-0.01 (0.00) ***
female	-0.76 (0.43) +	-0.03 (0.01) ***
incomesqrt	-0.01 (0.00) ***	0.00 (0.00) ***
employed	-2.80 (0.47) ***	-0.13 (0.01) ***
rural	-0.66 (0.60)	-0.04 (0.01) **
eduhsorless	-0.12 (0.61)	-0.01 (0.01)
edusc	0.13 (0.50)	0.00 (0.01)
hispanic	1.11 (0.73)	0.06 (0.02) ***
black	2.73 (0.72) ***	0.15 (0.01) ***
asian	3.02 (0.95) **	0.14 (0.02) ***
nativeam	0.30 (1.77)	0.02 (0.04)
raceother	4.28 (2.51) +	0.23 (0.05) ***
amtsample	6.07 (0.51) ***	0.31 (0.01) ***
Num.Obs.	2638	2638
R2	0.212	
R2 Adj.	0.208	

Reference categories: BA or more, white



	elpd_diff	se_diff
b.freq.model	0.0	0.0
pb.freq.model	-4478.4	160.6

Conclusion

- Difference along demographic dimensions
- Difference along all measures of Internet experience and skills
- Difference along all measures of Prosocial attitudes and behaviors
- Covariance adjustment strategies would not eliminate biases
- Future work to explore comparative performance of different weighting schemes

Table 3: Frequency of Use - Alternative Specification

	NORC Weighted	Sample w/o control	Sample w/ control
age	-0.19 (0.02) ***	-0.27 (0.01) ***	-0.19 (0.02) ***
female	0.07 (0.54)	-0.86 (0.44) *	-0.76 (0.43) +
incomesqrt	-0.01 (0.00) **	-0.01 (0.00) ***	-0.01 (0.00) ***
employed	-2.02 (0.60) ***	-3.53 (0.48) ***	-2.80 (0.47) ***
rural	-0.03 (0.80)	-0.24 (0.61)	-0.66 (0.60)
eduhsorless	-1.28 (0.67) +	-1.85 (0.61) **	-0.12 (0.61)
edusc	1.15 (0.73)	-0.63 (0.51)	0.13 (0.50)
hispanic	0.85 (0.80)	-0.06 (0.75)	1.11 (0.73)
black	3.42 (0.81) ***	2.00 (0.74) **	2.73 (0.72) ***
asian	3.72 (1.49) *	3.64 (0.97) ***	3.02 (0.95) **
nativeam	3.37 (1.87) +	0.08 (1.81)	0.30 (1.77)
raceother	2.46 (2.87)	3.61 (2.58)	4.28 (2.51) +
amtsample			6.07 (0.51) ***
Num.Obs.	1491	2638	2638
R2	0.126	0.169	0.212
R2 Adj.	0.119	0.165	0.208

Reference categories: BA or more, white