



MAKE AMERICA
STRESSED AGAIN

Alla Hale, Grant Whittington,
Adam Yang, and Siobhan Harrington

MIDS W241

December 11, 2018

Introduction

Research Question: Do Americans who are exposed to article summaries specifically about Trump have higher perceived stress levels than those who are exposed to news without mention of Trump?

- **Three Group Experiment:** Do Americans who are exposed to current news summaries in general have higher perceived stress levels than those who did not get exposed to any of our selected news summaries?

Why?

- Depending on the findings of the experiment, people may want to regulate their exposure to certain types news.

Introduction

Hypothesis: The treatment group exposed to Trump related news will have a higher average perceived stress level than the placebo group.

Also:

- Placebo group will have a higher stress level than control group
- Republicans will have a smaller average treatment effect than Democrats

Experiment Design: What is your treatment?

Treatment: Top story of the day from CNN, Reuters, and Fox News including the word “Trump”.

Placebo: Top story of the day from CNN, Reuters, and Fox News without the word “Trump”.

Control: No articles or news stories at all

Experimental Design: The Treatment Articles

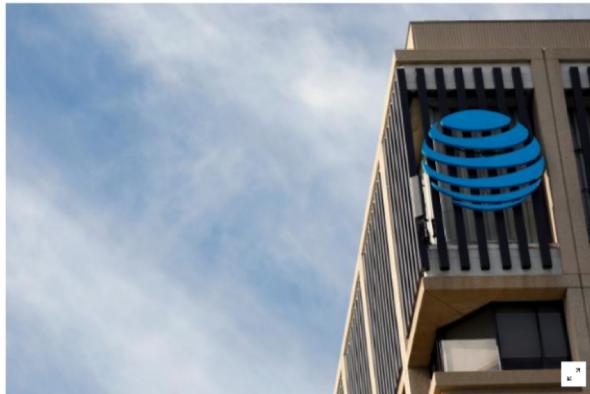
Democrats to probe Trump actions on AT&T, Amazon: aide

David Shepardson, Sarah N. Lynch

5 MIN READ



WASHINGTON (Reuters) - When Democrats take control of the U.S. House they plan to investigate the Trump administration's attempt to block AT&T Inc (T.N) from acquiring Time Warner, and whether officials sought to punish Amazon.com Inc (AMZN.O) by prodding the U.S. Post Office to hike shipping prices for the world's largest e-commerce company, a senior Democrat and a congressional aide said on Sunday.



ON CNN

Trump's tweet on California wildfires angers firefighters, celebrities

President Donald Trump's tweet blaming "gross mismanagement" for the devastating California wildfires is sparking backlash from top firefighters' associations, politicians and celebrities. (102 kB) ▾



ON Fox News

Michelle Obama says she stopped 'trying to smile' during 'misogynist' Trump's inauguration

Michele Obama, the former first lady, said in an interview that aired Sunday that she "stopped even trying to smile" during President Trump inauguration and wondered in her new book why so many women rejected "an exceptionally qualified female candidate and instead choose a misogynist as their president." (57 kB) ▾



Experimental Design: The Placebo Articles

Ferocious winds whip California fires as death toll rises to 31

Stephen Lam

4 MIN READ



PARADISE, Calif. (Reuters) - The death toll from wildfires raging in California rose to 31 on Sunday after six more people were found killed in what was poised to become the deadliest wildfire in state history.



CNN

China's stealth fighters show off missile payload

The Chinese air force saved the big guns for last at its biennial Zhuhai air show, flying its new stealth fighters with full missile loads Sunday for the first time in a public display. (67 kB) ▾



Fox News

Dem-leaning Palm Beach County says it likely won't make recount deadline in Florida governor, Senate races

As Republican Senate candidate Rick Scott openly accused his Democratic opponent, Sen. Bill Nelson, of trying to steal the election, more than half of Florida's 67 counties began recounting votes Sunday in the razor-thin Senate and gubernatorial races. (116 kB) ▾

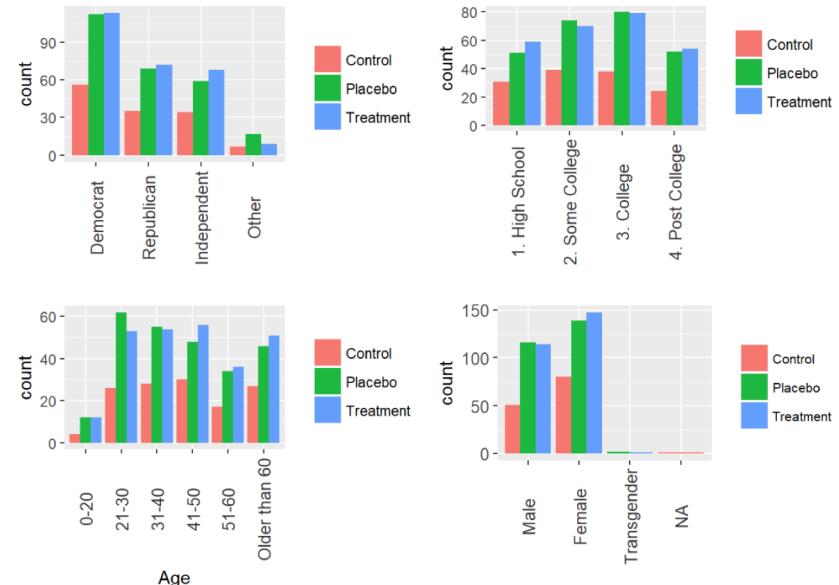


Experiment Design: Measurement Units

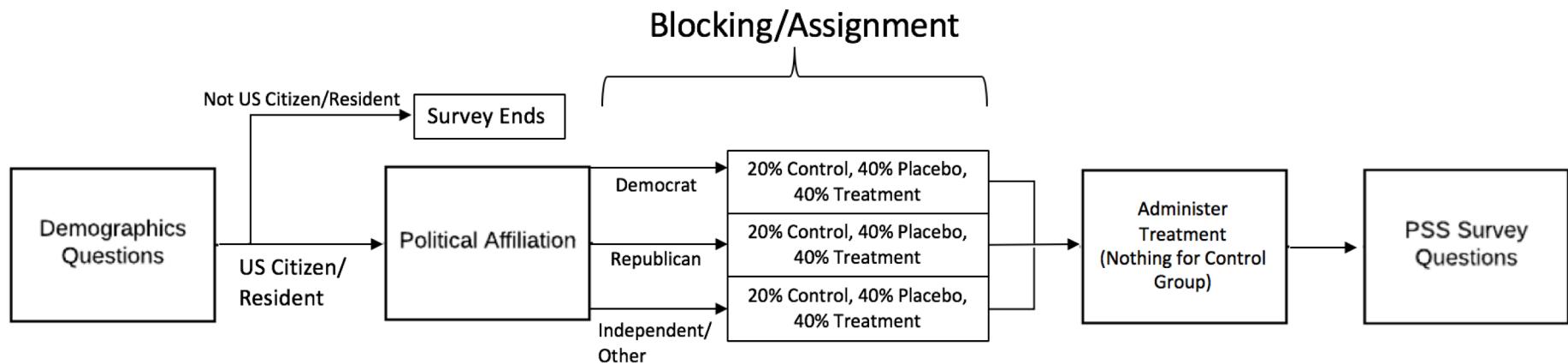
Measurement Units: People from social media outreach and Fulcrum Academia

- Blocking implemented by political affiliation
 - Democrat, Republican, Independent/Other

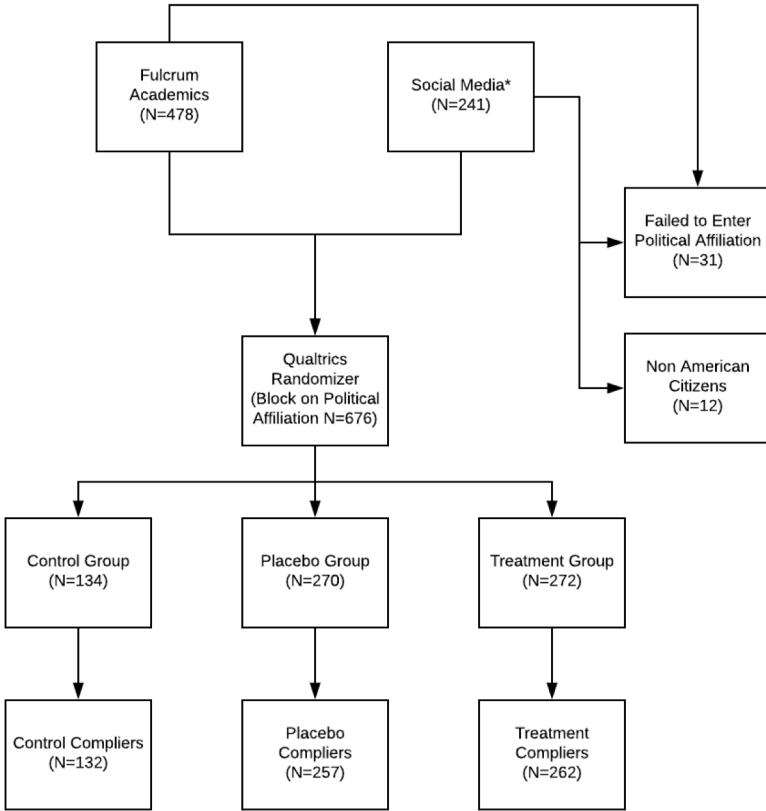
1. 11/13 - Facebook- commented on Ivanka Trump's share of the WSJ jobs news article.
2. 11/13 - Facebook- commented on Beto O'Rourke's latest post (edited)
3. 11/13 - Siobhan Harrington's personal Facebook page
4. 11/13 - Siobhan Harrington's extended in law family facebook page
5. 11/13 - Siobhan Harrington's personal facebook page
6. 11/13 - Virginia Moms Running Group
7. 11/13 - Comment on Donald trump's share of a jobs article.
8. 11/13 - MIDS Slack channel
9. 11/14 - Grant's Facebook page
10. 11/14 - NY Article Comment
11. 11/14 - Adam's Facebook page
12. 11/14 - University of Illinois at Urbana Champaign Asian American Social Groups



High Level Flow of the Survey

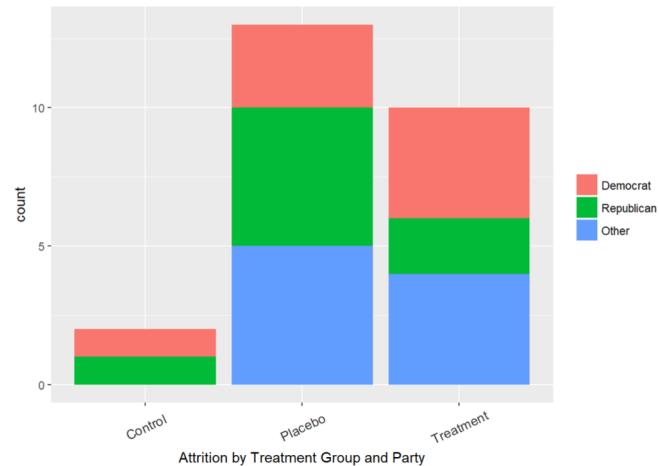


Observation Flow Diagram



- No differential attrition found
 - Chi Squared test results are not statistically significant
 - We can not reject the null hypothesis of independence among the groups.

	All	Control	Placebo	Treatment
Attrition	25	2	13	10
Percentage	3.70%	1.49%	4.81%	3.68%
Total Respondants	676	134	270	272



Outcome Measures- PSS

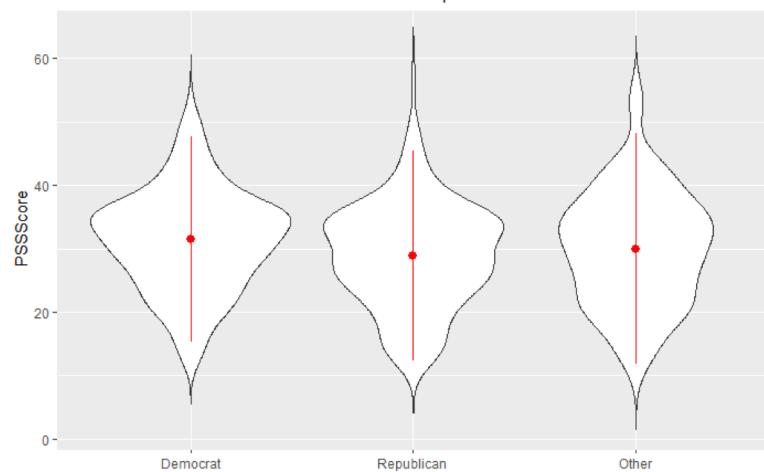
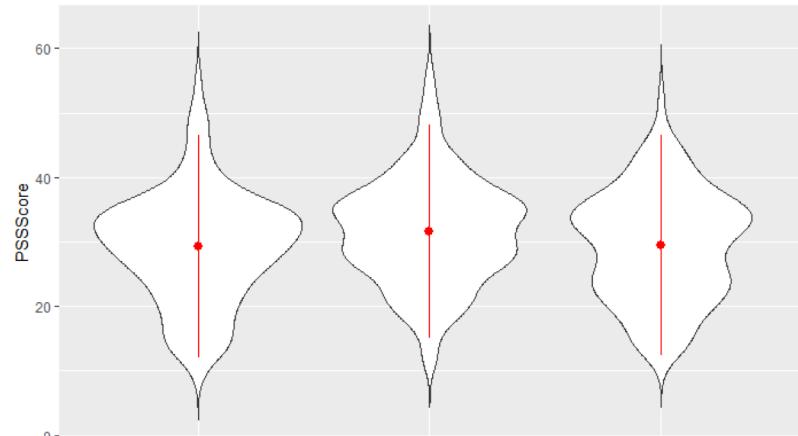
Y Variable: PSS-14 Score ranging from 0 to 56 (higher = more stress)

In the last week, how often have you felt nervous and “stressed”?

- Never
- Almost Never
- Sometimes
- Fairly Often
- Very Often

In the last week, how often have you dealt successfully with day to day problems and annoyances?

- Never
- Almost Never
- Sometimes
- Fairly Often
- Very Often



Results: Placebo vs. Control

- ATE: 2.312 (0.899**)
 - Power: 0.77
- Control group stress levels:
 - Democrat > Independent > Republican
- Placebo increases stress among all groups
 - Effect size: Republican > Independent > Democrat
 - Not statistically significant
- Covariates not significant, with exception of age
 - Control group: Older people are less stressed
 - Placebo effects: Older people increase stress more

	Dependent variable:		
	PSSScore		
	(1)	(2)	(3)
GroupPlacebo	2.312 (0.899)**	0.607 (1.858)	0.068 (2.519)
Q5Independent		-4.665 (1.804)**	-2.588 (1.062)**
Q5Other		-2.782 (8.827)	-0.677 (1.761)
Q5Republican		-5.075 (1.788)***	-2.289 (1.018)**
GroupPlacebo:Q5Independent		2.582 (2.244)	
GroupPlacebo:Q5Other		2.989 (8.967)	
GroupPlacebo:Q5Republican		8.117 (2.193)	
Q3Female			-2.077 (8.832)
Q3Male			-2.077 (8.838)
Q3Transgender			0.481 (10.553)
as.numeric(age)			-0.172 (0.044)***
Q9Bachelor's degree in college (4-year)			1.299 (1.641)
Q9Doctoral degree			3.689 (8.874)
Q9High school graduate			2.174 (1.720)
Q9Less than high school degree			8.584 (8.211)
Q9Master's degree			0.488 (1.788)
Q9Professional degree (JD, MD)			2.579 (8.215)
Q9Some college but no degree			8.098 (1.704)*
GroupPlacebo:as.numeric(age)			0.048 (0.054)
Constant	29.926 (0.730)***	32.018 (1.109)***	38.653 (0.174)***
Observations	389	389	389
R ²	0.017	0.058	0.141

Note:

* p<0.1; ** p<0.05; *** p<0.01

Results: Treatment vs. Placebo

- ATE: -2.138 (0.737***)
 - Power: 0.82
- Treatment effect size by affiliation (all reduce PSS score)
 - Democrat > Independent > Republican
 - **EFFECT IS OPPOSITE OF HYPOTHESIS**
- Covariates yield little impact to analysis
 - Treatment decreases stress more for older people than younger

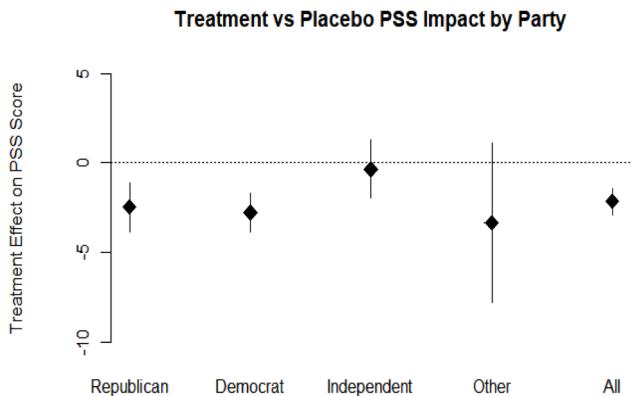
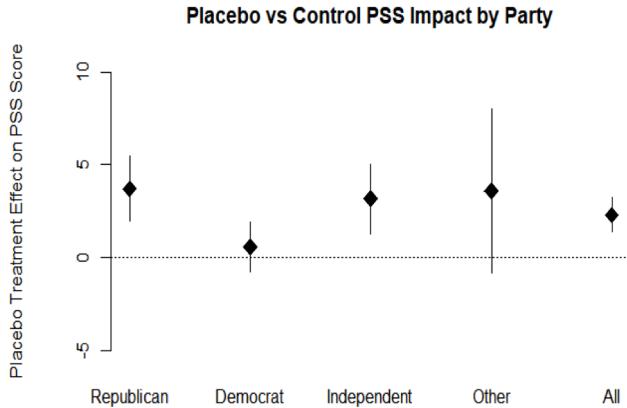
	Dependent variable: PSSScore		
	(1)	(2)	(3)
GroupTreatment	-2.138 (0.737)***	-2.781 (1.119)**	1.061 (2.017)
Q5Independent		-2.088 (1.850)	-0.626 (0.886)
Q5Other		0.257 (2.184)	0.192 (1.647)
Q5Republican		-1.958 (1.284)	-1.368 (0.860)
GroupTreatment:Q5Independent		2.895 (1.866)	
GroupTreatment:Q5Other		-0.596 (3.636)	
GroupTreatment:Q5Republican		0.273 (1.803)	
Q8Male			-0.926 (0.709)
Q8Transgender			5.145 (4.604)
as.numeric(age)			-0.184 (0.081)***
Q9Bachelor's degree in college (4-year)			1.929 (1.412)
Q9Doctoral degree			1.647 (2.930)
Q9High school graduate			2.188 (1.482)
Q9Less than high school degree			1.522 (2.564)
Q9Master's degree			0.078 (1.522)
Q9Professional degree (JD, MD)			8.270 (2.629)
Q9Some college but no degree			8.825 (1.470)**
GroupTreatment:as.numeric(age)			-0.067 (0.044)
Constant	81.638 (0.624)***	82.625 (0.798)***	86.877 (1.978)***
Observations	519	519	519
R ²	0.016	0.028	0.160

Note:

* p<0.1; ** p<0.05; *** p<0.01

Conclusions and Explanations

- Small ATE and the opposite of our hypothesis
 - Normalization of Trump's hyperbole
 - Timing in relation to midterms
 - Limited Number of Articles
 - Treatment was too limited and could be confounding other mechanisms
-
- *Any other explanations?*



Questions?