



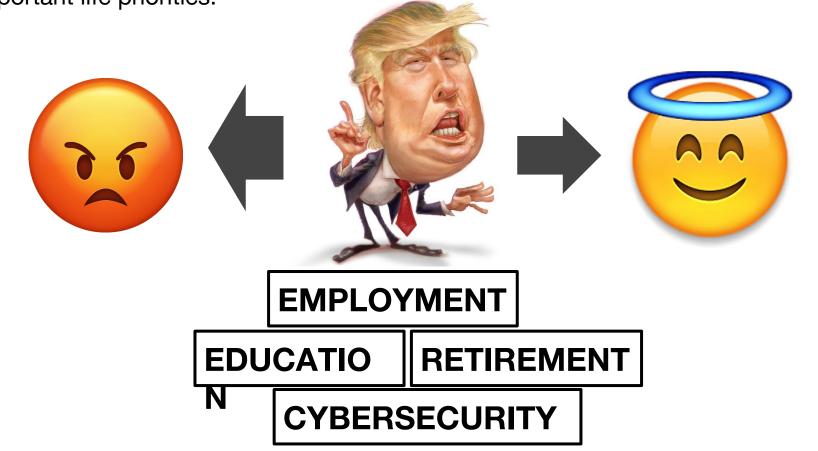
### **Research Question:**

Does even a subtle reminder of a particularly polarizing political figure (here, Donald Trump) cause cognitive dissonance, i.e. inconsistent beliefs largely driven by an emotional response?

Why? To understand whether deep political division and unrest portrayed by media result in significant gaps in optimism and economic outlook

### **Hypothesis**

Given the strong emotional response that Trump elicits from people across the political spectrum, we hypothesize that even a *subtle mention* of his name can momentarily affect the immediate level of optimism some people have on important life priorities.



### **Control**

#### **Employment Opportunities**

Now approaching a decade since the worst of the 2008 financial crisis, a steady recovery in the United States has brought a return of modest, sustained economic growth averaging roughly 2% annually, along with rising wage growth of over 3%. While rapid technological advancement has brought new efficiency and growth opportunities to many segments of the economy, many geographic areas and industries also face difficulties competing in global markets and continuing to provide economic opportunities. Overall, however, the unemployment rate has reached a decade-low of close to 4% in 2018, a level lower than pre-crisis unemployment and considered by some economists to be full employment.

# How do you feel about the general employment outlook for Americans over the next two decades?

Not Optimistic				Neutral			Very Optimistic			
0	10	20	30	40	50	60	70	80	90	100

#### **Treatment**

#### **Employment Opportunities**

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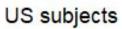
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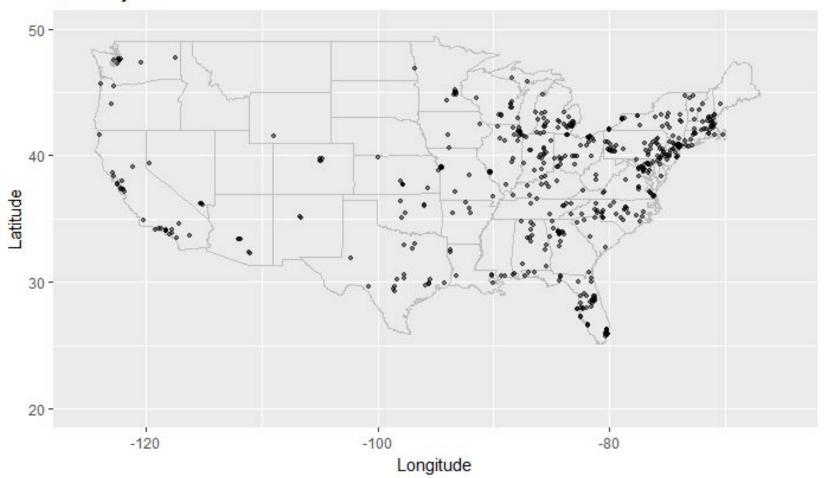
Not Optimistic					Neutral		
0	10	20	30	40	50	60	70



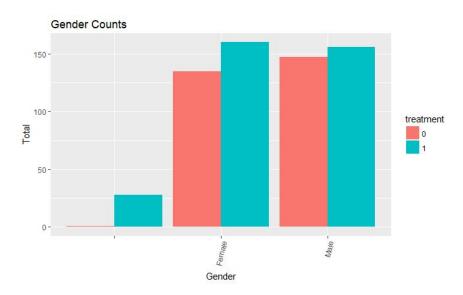
# **Subjects**

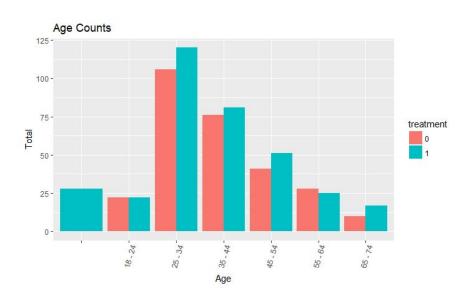
amazon mechanical turk

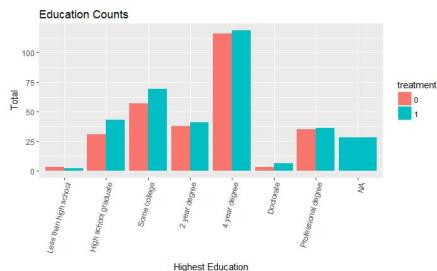


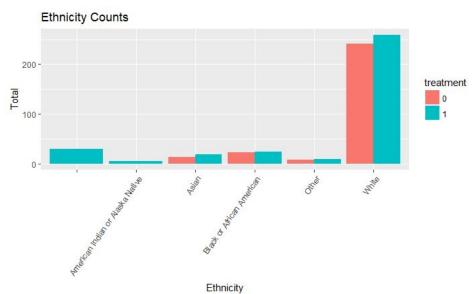


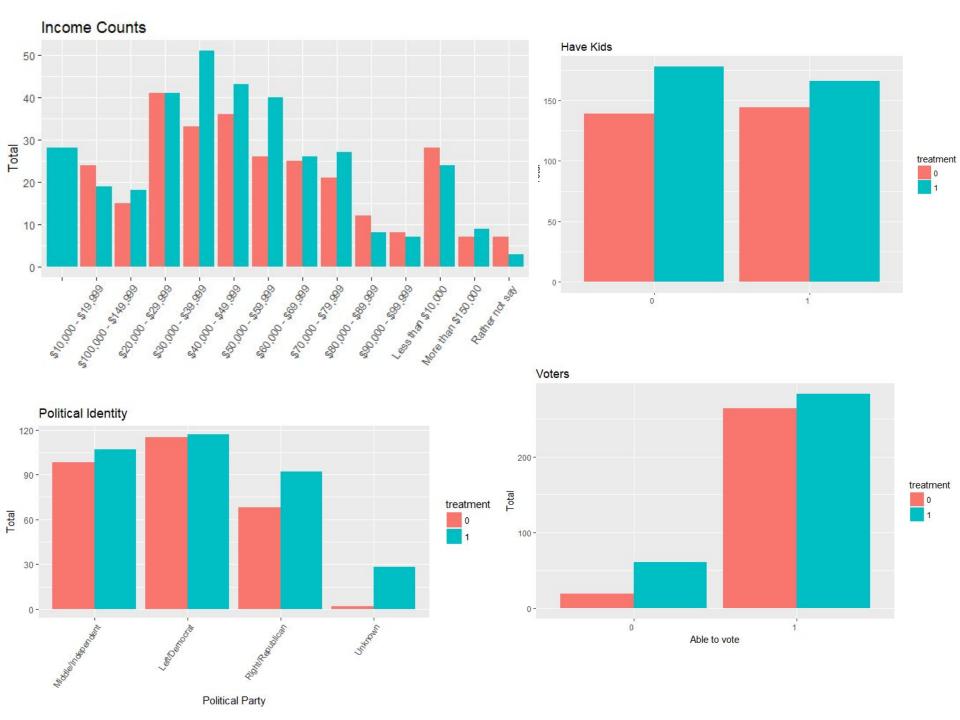
# **Subject Profile**

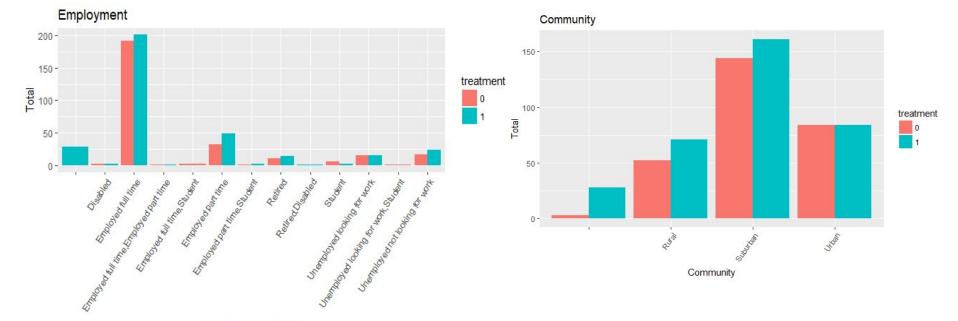




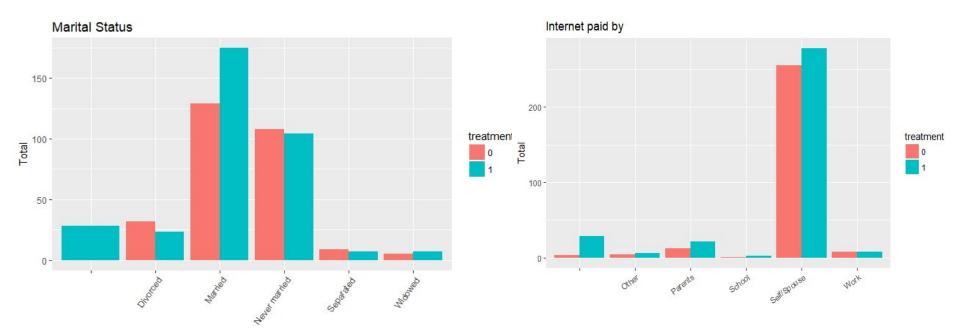












## Repeater: same IP, different zip codes

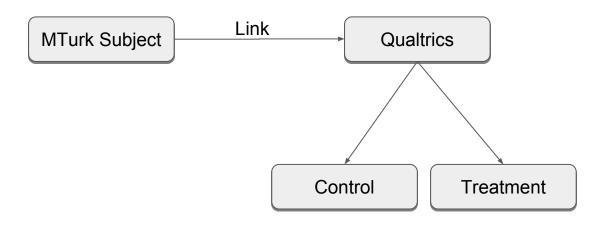
#### Randomization

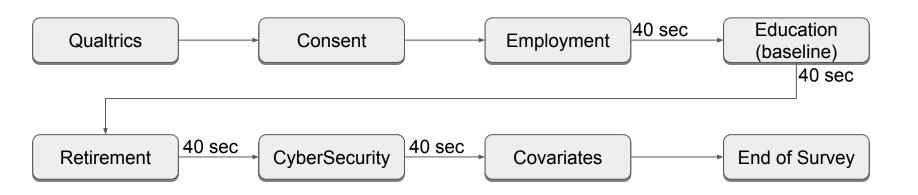
Out of 638 subjects,

*US*: 580 *non-US*: 58

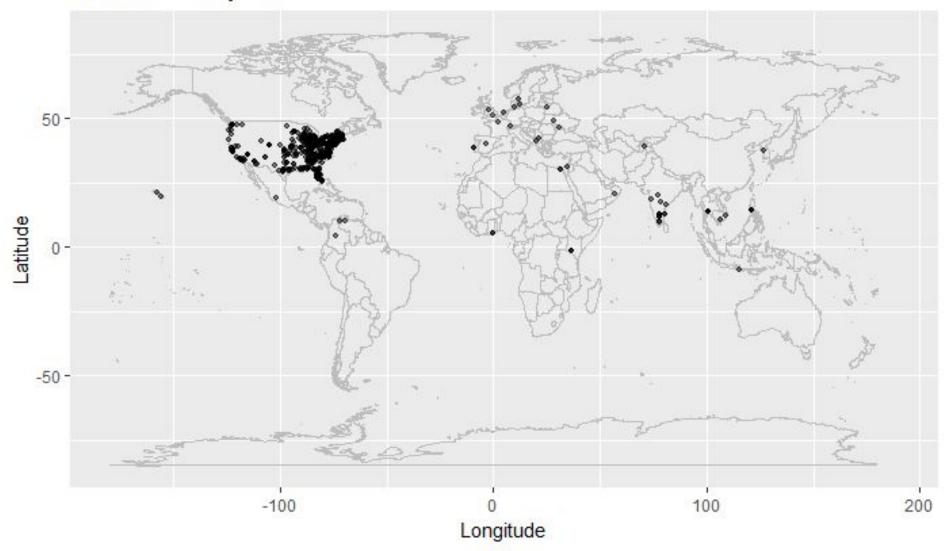
IPAddress <chr></chr>	freq <int></int>
170.185.202.19	2
24.46.117.154	3
50.88.107.50	3
67.183.210.112	6

4 rows





#### Worldwide subjects



List of subjects N = 638

Dataset amendments

**Non-consent:** N = 10

Non-US subjects: N = 58

Repeater: N = 14

Randomized Subjects N = 557

Control Group N = 262

Treatment Group N = 295

# **Causal Design**

**OLS** Regression:

Treatment Group N = 295

Control Group N = 262

**EMPLOYMENT** 

Treatment,
Treatment + Key Cov,
Treatment + Cov + HTEs

**EDUCATION** 

Baseline, no treatment

Treatment,
Treatment + Key Cov,
Treatment + Cov + HTEs

**RETIREMENT** 

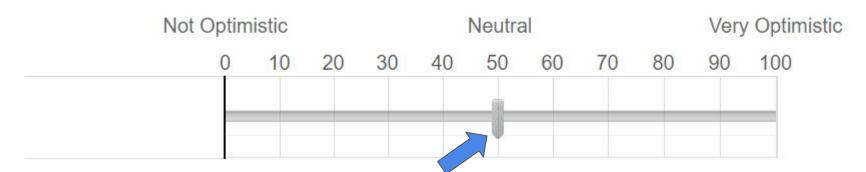
Treatment,
Treatment + Key Cov,
Treatment + Cov + HTEs

**CYBERSECURITY** 

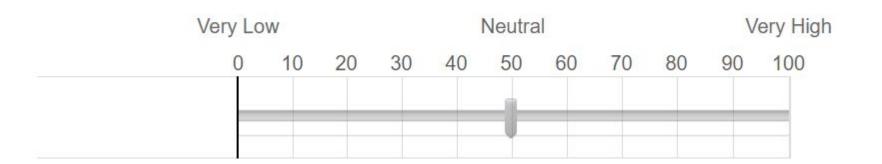
Treatment,
Treatment + Key Cov,
Treatment + Cov + HTEs

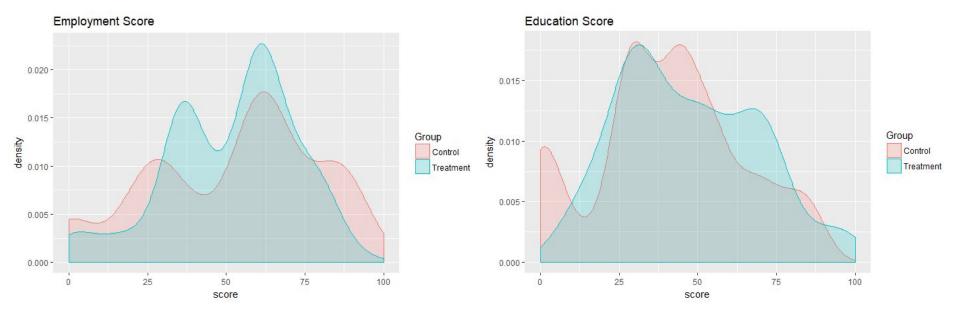
### **Outcome Measures**

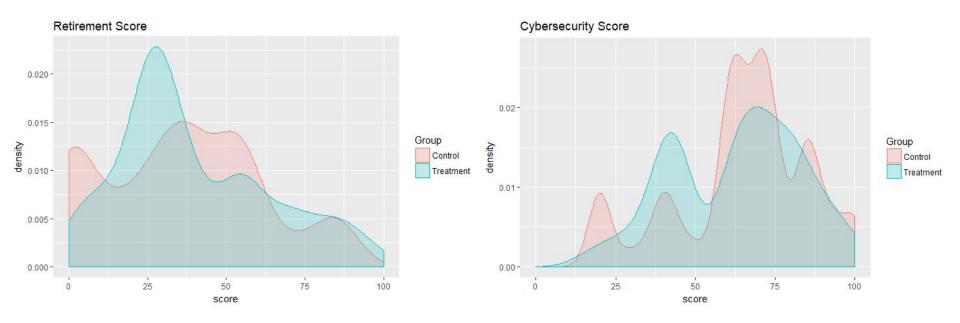
- How do you feel about the general employment outlook for Americans over the next two decades?
- How do you feel about how the education system is preparing students to enter the workforce?
- How do you feel about your prospects for saving enough for retirement?

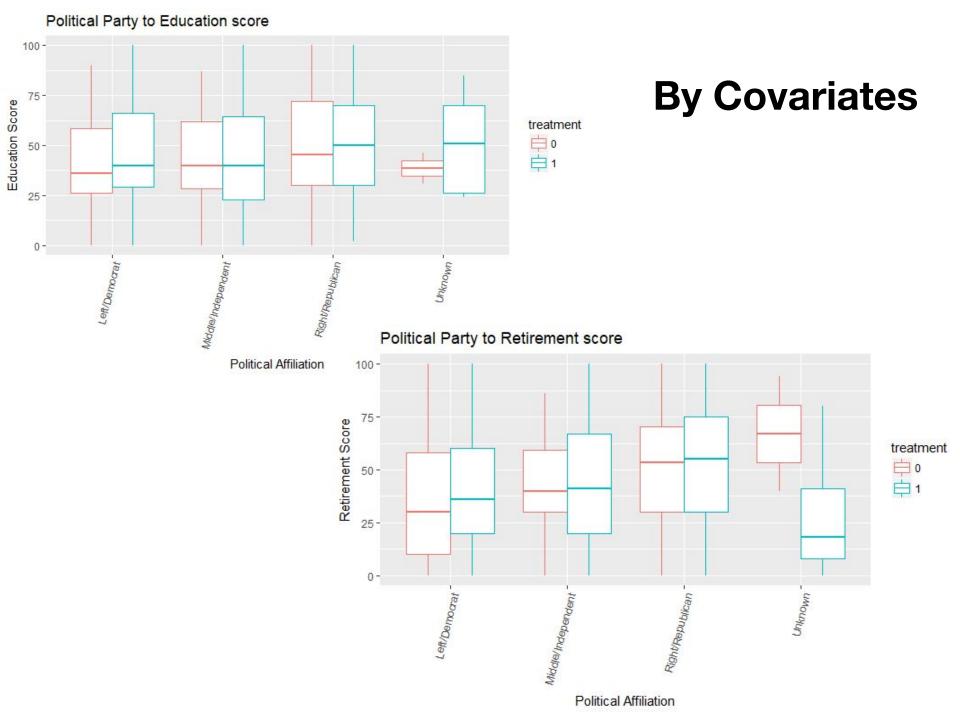


How would you rate the threat of cyber-attacks to your security, private information or livelihood?









## **Analysis and Results**

- EDA on key covariates for inclusion and additional grouping of categories
- 3 sets of OLS: 1) treatment indicator only, 2) plus covariates, 3) plus HTEs
- While not statistically significant: estimated ATE on employment optimism is negative while positive for retirement savings
  - No significant HTEs by political preference or other key covariates
- No surprise: "Right/Republican" more bullish on employment than other groups
  - They also see cybersecurity risk as significantly higher than rest, however less so when in treatment (HTE)
- Surprising: "Right/Republican" also rank value of education higher
- "Left/Democrat" significantly less optimistic about retirement saving than
   "Right/Republican" and "Middle/Independent"

		Dependent variable:	
	Emp Treatment Only (1)	loyment Feeling Score (0 With Covariates (2)	to 100) With HTEs (3)
treatment_ind	-0.111 (2.035)	-1.308 (1.920)	-5.641* (3.275)
political_partyLeft/Democrat		0.942 (2.247)	-2.247 (3.197)
political_partyRight/Republican		19.614*** (2.506)	15.609*** (3.779)
political_partyUnknown		21.455 (16.146)	19.160 (16.197)
income_grouphigh		4.793 (2.930)	4.868* (2.930)
income_grouplow		2.396 (2.203)	2.440 (2.202)
income_groupunknown		0.047 (3.525)	0.163 (3.523)
age_groupover 45		1.584 (2.124)	1.483 (2.124)
treatment_ind:political_partyLeft/Democrat			6.170 (4.458)
treatment_ind:political_partyRight/Republican			7.239 (4.994)
treatment_ind:political_partyUnknown			
Constant	59.481*** (1.481)	52.460*** (2.329)	54.732*** (2.711)
Observations R2 Adjusted R2 Residual Std. Error F Statistic	557 0.00001 -0.002 23.974 (df = 555) 0.003 (df = 1: 555)	557 0.136 0.124 22.420 (df = 548) 10.822*** (df = 8; 548)	557 0.141 0.125 22.406 (df = 546) 8.940*** (df = 10: 5

	Dependent variable:				
	Retin Treatment Only (1)	rement Feeling Score (0	to 100)		
treatment_ind	2.997 (2.281)	2.585 (2.207)	0.794 (3.776)		
political_partyLeft/Democrat		-5.736** (2.590)	-6.991* (3.684)		
political_partyRight/Republican		6.145** (2.882)	4.379 (4.353)		
political_partyUnknown		16.946 (18.575)	15.988 (18.677)		
age_groupover 45		-4.336* (2.445)	-4.379* (2.450)		
high_ed_ind		6.739*** (2.355)	6.698*** (2.360)		
income_grouphigh		7.910** (3.451)	7.948** (3.459)		
income_grouplow		-3.780 (2.588)	-3.773 (2.592)		
income_groupunknown		-4.973 (4.062)	-4.931 (4.069)		
treatment_ind:political_partyLeft/Democrat			2.429 (5.139)		
treatment_ind:political_partyRight/Republican	i		3.178 (5.754)		
treatment_ind:political_party∪nknown					
Constant	41.691*** (1.660)	40.942*** (2.973)	41.905*** (3.401)		
Observations R2 Adjusted R2 Residual Std. Error F Statistic	557 0.003 0.001 26.867 (df = 555)	557 0.096 0.081 25.769 (df = 547) 6.460*** (df = 9; 547)	557 0.097 0.078 25.808 (df = 545 5.302*** (df = 11:		

	Dependent variable:					
	Cybersec	Cybersecurity Risk Feeling Score (0 to 100)				
	Treatment Only (1)	With Covariates (2)	With HTES (3)			
treatment_ind	-0.143 (1.805)	-0.427 (1.796)	4.692 (3.066)			
political_partyLeft/Democrat		-0.685 (2.090)	2.758 (2.980)			
political_partyRight/Republican		4.886** (2.334)	10.216*** (3.529)			
political_partyUnknown		18.333 (14.987)	21.004 (15.007)			
age_groupover 45		4.980** (1.978)	5.086** (1.974)			
treatment_ind:political_partyLeft/Democrat			-6.639 (4.172)			
treatment_ind:political_partyRight/Republical	n		-9.544** (4.676)			
treatment_ind:political_partyUnknown						
Constant	70.069*** (1.314)	67.677*** (1.875)	64.953*** (2.292)			
Observations R2	557 0.00001	557 0.029	557 0.037			
Adjusted R2 Residual Std. Error F Statistic			0.025 20.980 (df = 549) 1) 3.049*** (df = 7; 549			

## **Possible Explanations**

- 1. Most simply, there may be no treatment effect across topics (a good thing)
  - a. For most respondents, the level of optimism isn't affected by a divisive president
  - b. Political media portrayals of opposition aren't representative; e.g. election-day shock
- 2. Those who are most affected by Trump are already highly cognizant of him
  - a. ATE may not be a good measure for a group of individuals with diverse preferences
  - b. The real effect may be heterogeneous by factor(s) not readily captured in a survey
- 3. Perhaps a decline over time in any effect from what it was, say, one year ago
- 4. Mechanical Turk respondents are distinctly different from greater population
  - a. Particularly those who took the survey at odd hours on a weekend
  - b. Young MTurks tend to pretty representative of population (Huff & Tingley, 2015)

### **Challenges and Takeaways**

- 1. No way to guarantee reading of prompts
- 2. Identifying and collecting factors that might reveal HTEs
- 3. Few topics devoid of politics but still related to Trump

### **Questions?**