

# Can Exposure to Moral Foundations Affect Our Reactions to Policy Proposals?

W241 Experiments and Causality (submitted December 10, 2019)

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## Abstract

TBD

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# 1 Background

[[TBD]]

## 2 Data

[[TBD]]

NORES:

- One problem I see with excluding the 10 control women: 5 of them retook - so we would be including their second take
- Given our test for day of recruitment not being significant I think we can keep them
- plus, even if we drop them after the fact by virtue of limiting to the “balanced” datasets they will have at least added another cohort for our recruit day test

### 2.0.1 Data Cleaning

[[TBD]]<sup>1</sup>

```
## # A tibble: 14 x 7
## # Groups:   ideology_bin [3]
##   ideology_bin arm      Tuesday1 Sunday Monday Tuesday2 Friday
##   <chr>         <fct>         <int>  <int>  <int>  <int>  <int>
## 1 conservative control          18     33     17     12      9
## 2 conservative purity_base       19     28     18     12     NA
## 3 conservative purity_extension   18     30     16     15     NA
## 4 conservative fairness_base      18     NA     NA     NA     NA
## 5 conservative fairness_extension  18     NA     NA     NA     NA
## 6 liberal      control          21     NA     1     25     NA
## 7 liberal      purity_base       19      1     1     24     NA
## 8 liberal      purity_extension   21      2     1     23     NA
## 9 liberal      fairness_base      21     NA     NA     14     NA
## 10 liberal     fairness_extension  19     NA     NA     10     NA
## 11 moderate    control           2      1     1      1     NA
## 12 moderate    purity_base        2      2     1      3     NA
## 13 moderate    purity_extension    2     NA     1      1     NA
## 14 moderate    fairness_extension   3     NA     NA      1     NA
```

### 2.1 Exploratory Analysis

[[TBD]]

#### 2.1.1 Study Setup

#### 2.1.2 Demographics

Example reference to r cell *Figure 2* shows [[TBD]]

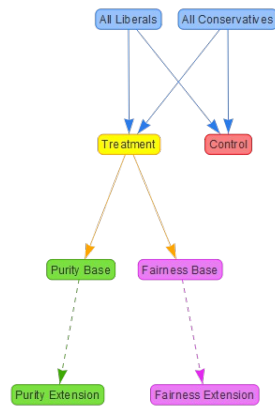


Figure 1: Study Flowchart

### 2.1.3 Reactions

### 2.1.4 Outcome

```
## Warning: Factor `ubi_familiarity` contains implicit NA, consider using
## `forcats::fct_explicit_na`
```

```
## Warning: Factor `ubi_familiarity` contains implicit NA, consider using
## `forcats::fct_explicit_na`
```

---

<sup>1</sup> *[[Example footnote]]*

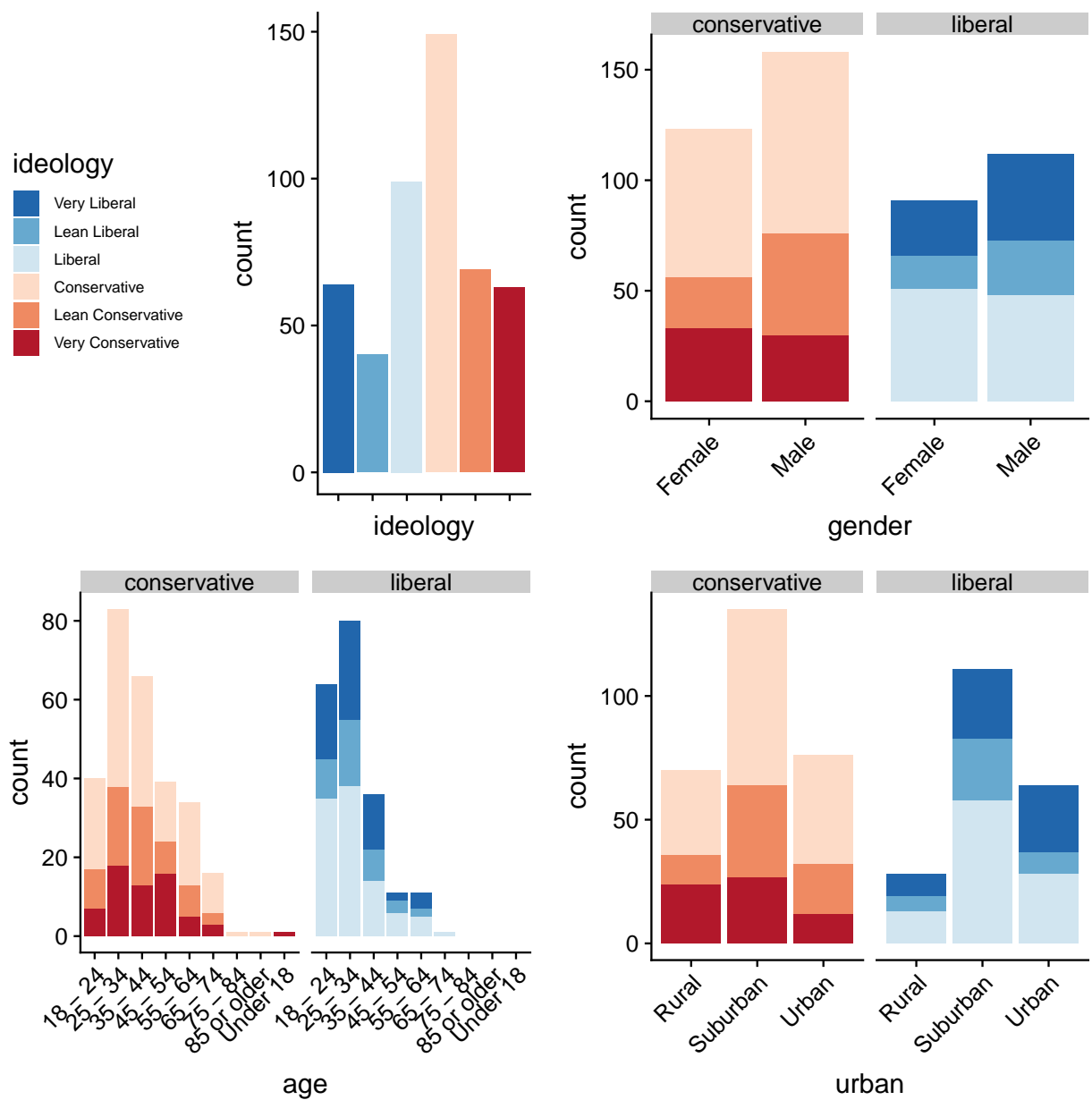


Figure 2: Demographics

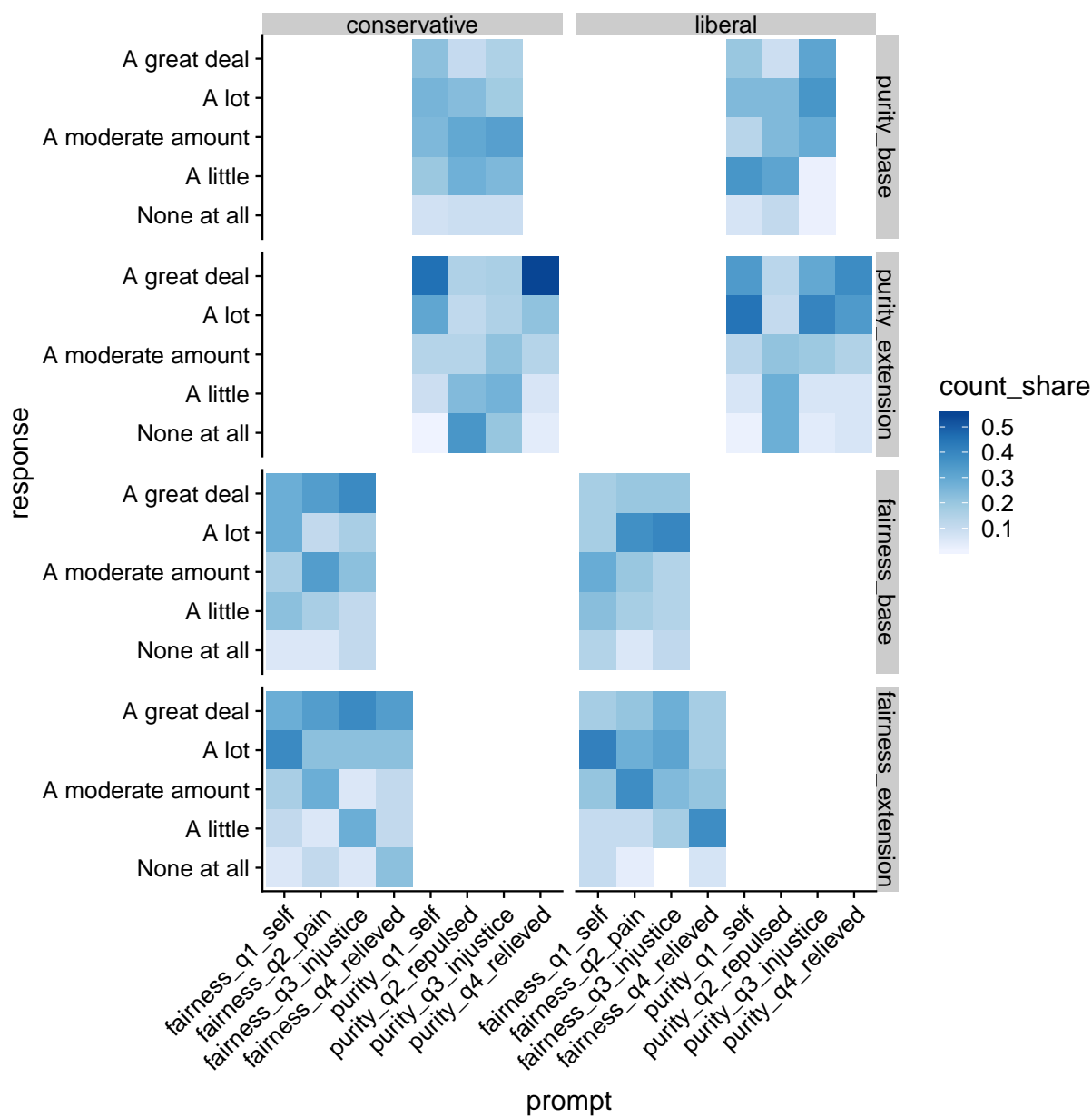


Figure 3: Reactions

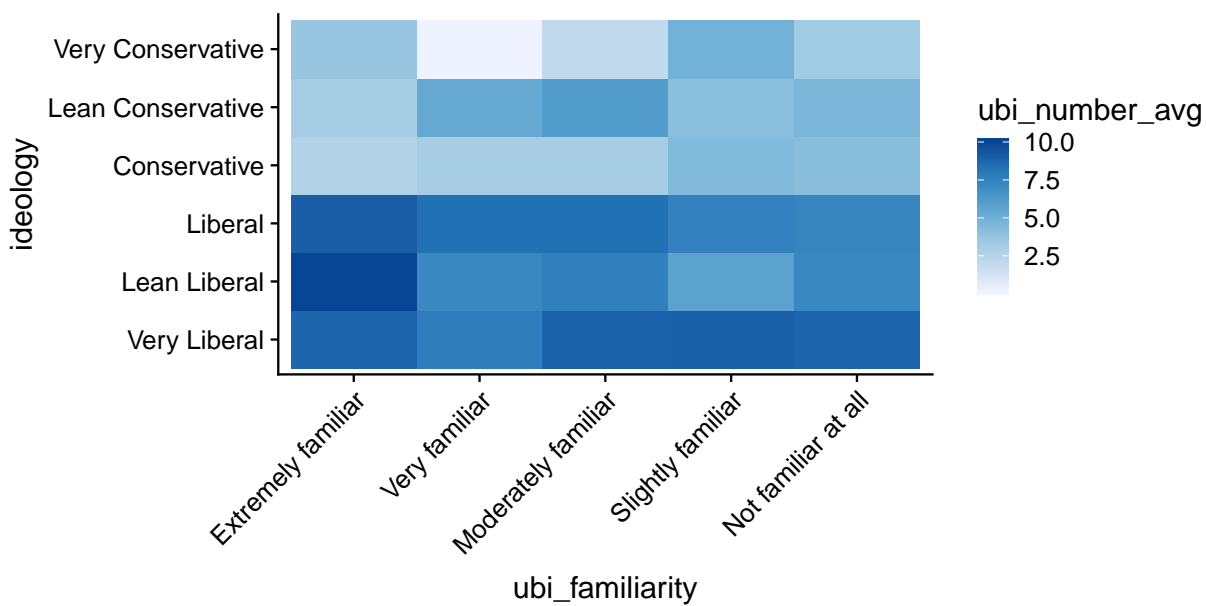
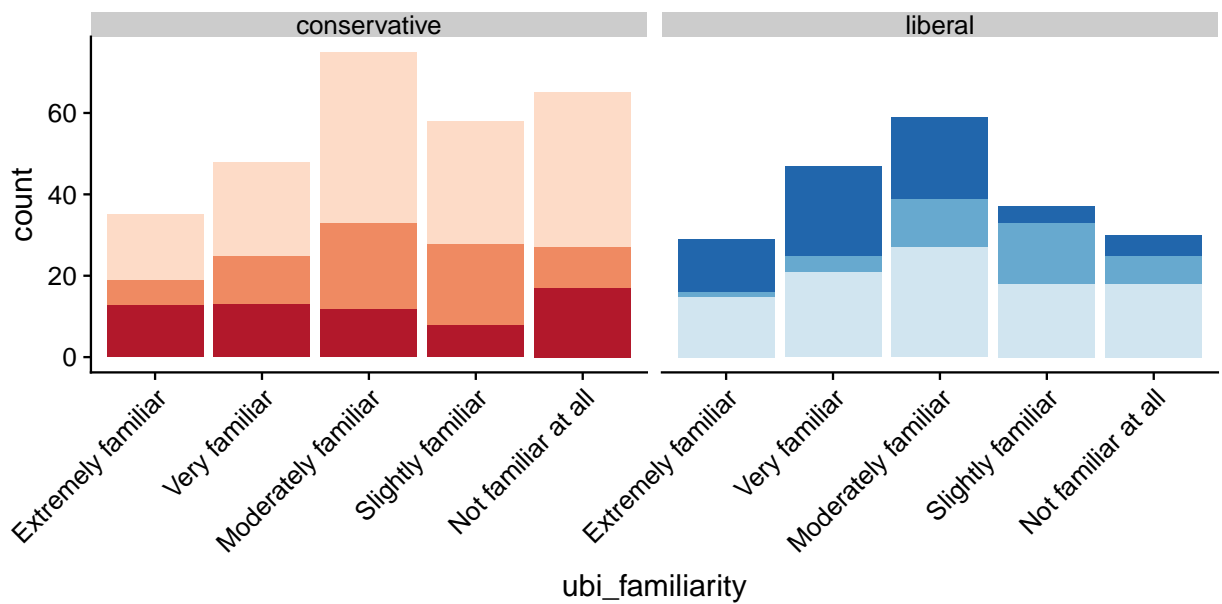


Figure 4: Outcomes

### 3 Methodology

Independent variable

Dependent variable

Model specification

[[TBD]]. (see ??)

### 4 Moral Foundations Regression Specifications

Four Study Arms											
-----											
UBI Ranking											
Lib + Fair				Lib + Pure		Con + Fair			Con + Pure		
(1)				(2)		(3)			(4)		
<hr/>											
Base	-0.212	-0.161	-0.333	0.294	(0.452)	(1.208)	(0.536)	p = 0.722	p = 0.783	p = 0.584	
Extension	-0.748	-0.037	0.889	1.054*	(0.499)	(1.289)	(0.556)	p = 0.942	p = 0.491	p = 0.058	
Sunday	0.769	-0.571	-0.347	(1.242)	(1.084)	(0.606)	p = 0.536	p = 0.599	p = 0.567		
Monday	-1.027	-2.243	0.278	0.226	(1.872)	(1.261)	(0.682)	p = 0.231	p = 0.826	p = 0.740	
Tuesday	2 0.390	-0.091	-1.556	-0.852	(0.398)	(1.216)	(0.654)	p = 0.820	p = 0.201	p = 0.193	
recruitment_day	Friday	-0.833	-0.646	(1.420)	(1.265)	p = 0.558	p = 0.610				
Constant	8.027	8.309***	3.722***	3.535***	(0.386)	(0.868)	(0.579)	p = 0.000	p = 0.00002	p = 0.000	
<hr/>											
Observations	111	139	125	245							
R2	0.035	0.024	0.036	0.029							
Adjusted R2	-0.002	-0.013	-0.013	0.005							
Residual Std. Error	2.115	(df = 106)	2.297	(df = 133)	3.564	(df = 118)	3.356	(df = 238)			
F Statistic	0.953	(df = 4; 106)	0.652	(df = 5; 133)	0.738	(df = 6; 118)	1.192	(df = 6; 238)			
=====											
Note: $p<0.1$ ; $p<0.05$ ; $p<0.01$ HC Robust Standard Errors NOTES:											
- Purity Extension to the Conservatives BY ITSELF is significant at to 0.1 level											
- Day of recruitment not significant across any arms											
- Therefore, no need to stratify (see below for example of stratification specification)											
## Warning in svydesign.default(id = ~1, strata = ~recruitday, data =											
## results_armconpur): No weights or probabilities supplied, assuming equal											
## probability											

### 5 Moral Foundations Regression Specifications

Dependent variable:
-----
ubi_number
Con + Pure
<hr/>
Base 0.354 (0.516) p = 0.495

---

Extension	1.072**	(0.531)	p = 0.045
Constant	3.270***	(0.369)	p = 0.000

---

Observations 245

Log Likelihood -643.124

Akaike Inf. Crit. 1,292.249

===== Note:  $p < 0.1$ ;  $p < 0.05$ ;  
 $p < 0.01$  HC Robust Standard Errors NOTES: - 1.072\*\* is the same here when stratifying as with below not stratifying - further evidence day doesn't matter?

## 6 Moral Foundations Regression Specifications

Dependent variable:												
-----												
				ubi_number								
Lib + Fair				Lib + Pure		Con + Fair		Con + Pure				
(1)				(2)		(3)		(4)				
<hr/>												
Base	-0.241	-0.146	0.119	0.354	(0.488)	(0.451)	(0.919)	(0.518)	p = 0.621	p = 0.746	p = 0.897	p = 0.495
Extension	-0.799	0.000	1.341	1.072**	(0.493)	(0.479)	(1.022)	(0.533)	p = 0.105	p = 1.000	p = 0.190	p = 0.045
Constant	8.213***	8.213***	3.270***	3.270***	(0.288)	(0.288)	(0.370)	(0.370)	p = 0.000	p = 0.000	p = 0.000	p = 0.000
<hr/>												

Observations 111 139 125 245

R2 0.023 0.001 0.017 0.018

Adjusted R2 0.005 -0.014 0.001 0.010

Residual Std. Error 2.108 (df = 108) 2.299 (df = 136) 3.539 (df = 122) 3.347 (df = 242)

F Statistic 1.299 (df = 2; 108) 0.061 (df = 2; 136) 1.082 (df = 2; 122) 2.200 (df = 2; 242)

===== Note:  $p < 0.1$ ;  $p < 0.05$ ;  $p < 0.01$  HC Robust Standard Errors NOTES:

- Still not sure if using the balanced is necessary if we're saying that day of the week is not significant  
- We lost some significance on the Con + Pure Extension, because we removed the 10 control women? Think we can add them back.

## 7 Moral Foundations Prelim Regression Specifications

Con + Pure Arm									
-----									
Base		Gender		UBI Ranking		Reaction - Base		React.	
(1)		(2)		Familiarity		(4)			
				(3)					
<hr/>									
Base	0.354	0.476	0.371	(0.518)	(0.518)	(0.519)	p = 0.495	p = 0.358	p = 0.475
Extension	1.072**	1.207**	1.074**	0.784	(0.533)	(0.537)	(0.534)	(0.544)	p = 0.045
							p = 0.025	p = 0.045	
							p = 0.150		
Male	1.009**	(0.426)		p = 0.018					



---

Familiar w/ UBI -0.330 (0.520) p = 0.526  
Repulsed 0.285 (0.546) p = 0.602  
Relieved 2.606\* (1.352) p = 0.055  
Constant 3.270\*\*\* 2.623\*\*\* 3.518\*\*\* 3.442\*\*\* 2.000 (0.370) (0.445) (0.552) (0.517) (1.294) p = 0.000 p = 0.000 p = 0.000 p = 0.000 p = 0.123

---

Observations 245 245 245 156 79  
R2 0.018 0.040 0.020 0.014 0.055  
Adjusted R2 0.010 0.028 0.007 0.001 0.042  
Residual Std. Error 3.347 (df = 242) 3.316 (df = 241) 3.351 (df = 241) 3.281 (df = 153) 3.313 (df = 77)  
F Statistic 2.200 (df = 2; 242) 3.330\*\* (df = 3; 241) 1.603 (df = 3; 241) 1.074 (df = 2; 153) 4.448\*\* (df = 1; 77)

=====

Note:  $p < 0.1$ ;  **$p < 0.05$** ;  $p < 0.01$  HC Robust Standard Errors

#### NOTES:

##### Gender

- Gender gap still interesting - a significant baseline difference between genders

##### Familiarity

- Being familiar with UBI makes conservatives lower at baseline
- Really just noise based on no change in treatment effect

below notes from previous factorial setup

- Interaction of familiarity and purity is actually fascinating directionally-speaking
- Liberals higher at baseline if familiar BUT the treatment actually lowered their scores while those unfamiliar moved up when treated
- The absolute opposite happens for conservatives: if you're familiar you start lower and then treatment nudges you higher but those unfamiliar move down

##### Reaction

- Running out of N and no interaction with other arm - hard to read

[[Example Table]]

Model	Specification	Interpretation	Figure
Model 1	$ubinumber \sim armlevel$	$\Delta armlevel = \beta_1 \Delta ubinumber$	??

# Stargazer

## 8 Results

*[[TBD]]*

## 9 Conclusion

*[[TBD]]*

## 10 Discussion

*[[TBD]]*

### 10.1 Limitations

*[[TBD]]*

## 11 Technical Appendix

### 11.1 Data Dictionary

Variable Name	Variable	Values	Notes
prolific_pid	User ID	10-digit numeric	
panel			
arm			
node			
arm_level			
ideology			
ideology_bin			
age			
gender			
urban			
employment_status			
student_status			
purity_q1_self			
purity_q2_repulsed			
purity_q3_injustice			
purity_q4_relieved			
fairness_q1_self			
fairness_q2_pain			
fairness_q3_injustice			
fairness_q4_relieved			
open_text_reaction			
ubi_number	UBI Number	Integer 0-10	
ubi_group			
ubi_familiarity			
ubi_familiarity_bin			

## 11.2 Exploratory Data Analysis

Additional steps taken not included in the body of the report

*[[TBD]]*