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

W241 Experiments and Causality (submitted December X, 2019)

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Abstract

TBD

Contents

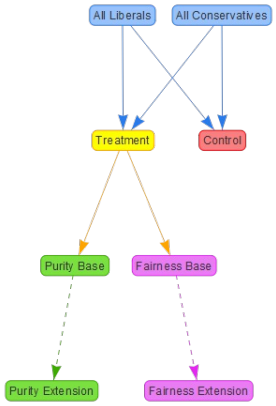

Figure 1: Study Flowchart

1 Background

[[TBD]]

2 Data

[[TBD]]

2.0.1 Data Cleaning

[[TBD]] [1]

2.1 Exploratory Analysis

[[TBD]]

2.1.1 Study Setup

ideology_bin	arm	Count
conservative	control	89
conservative	purity_base	77

[1] *[[Example footnote]]*

ideology_bin	arm	Count
conservative	purity_extension	79
conservative	fairness_base	18
conservative	fairness_extension	18
liberal	control	47
liberal	purity_base	45
liberal	purity_extension	47
liberal	fairness_base	35
liberal	fairness_extension	29
moderate	control	5
moderate	purity_base	8
moderate	purity_extension	4
moderate	fairness_extension	4

2.1.2 Demographics

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

2.1.3 Reactions

2.1.4 Outcome

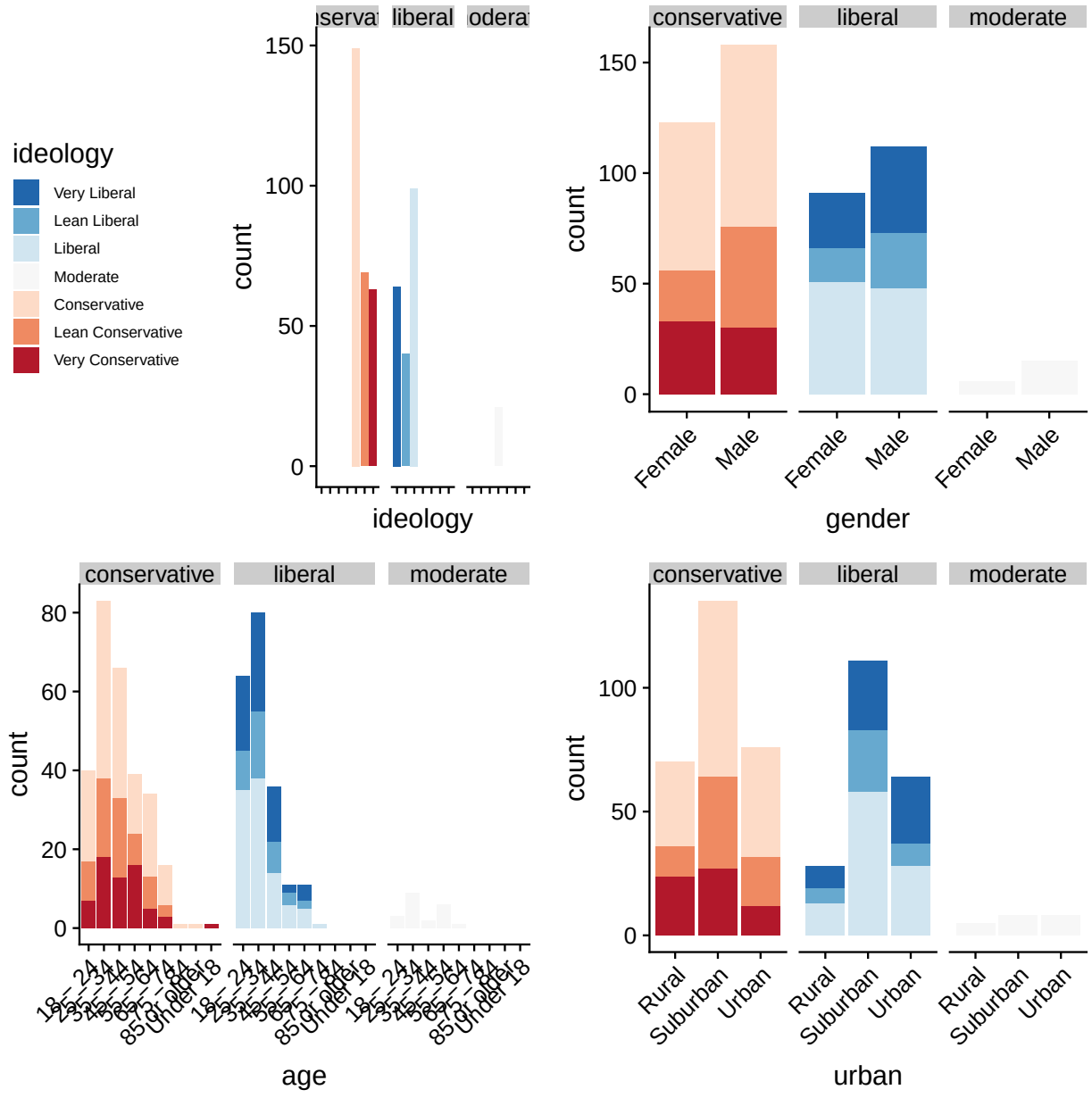

Figure 2: Demographics

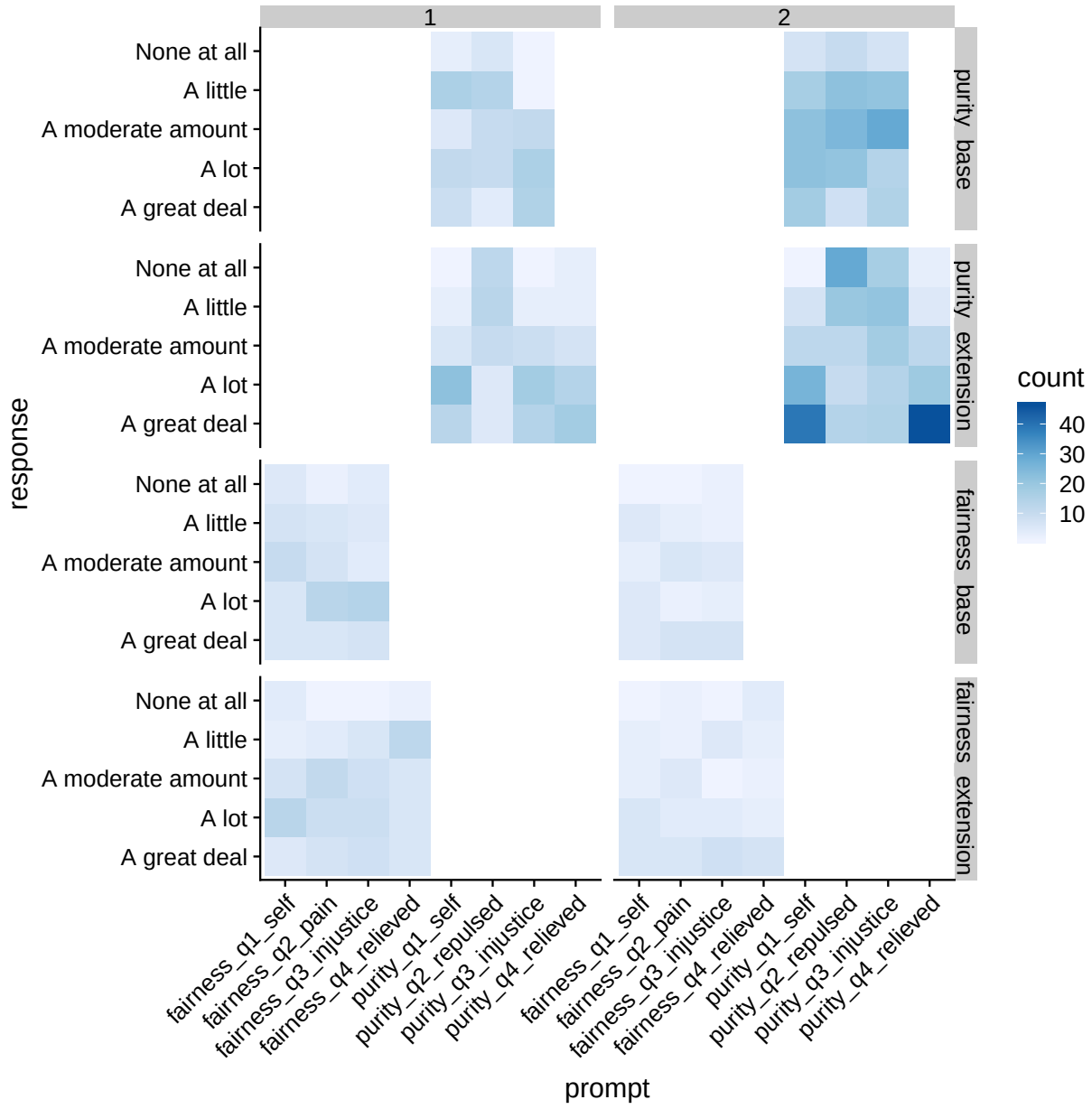

Figure 3: Reactions

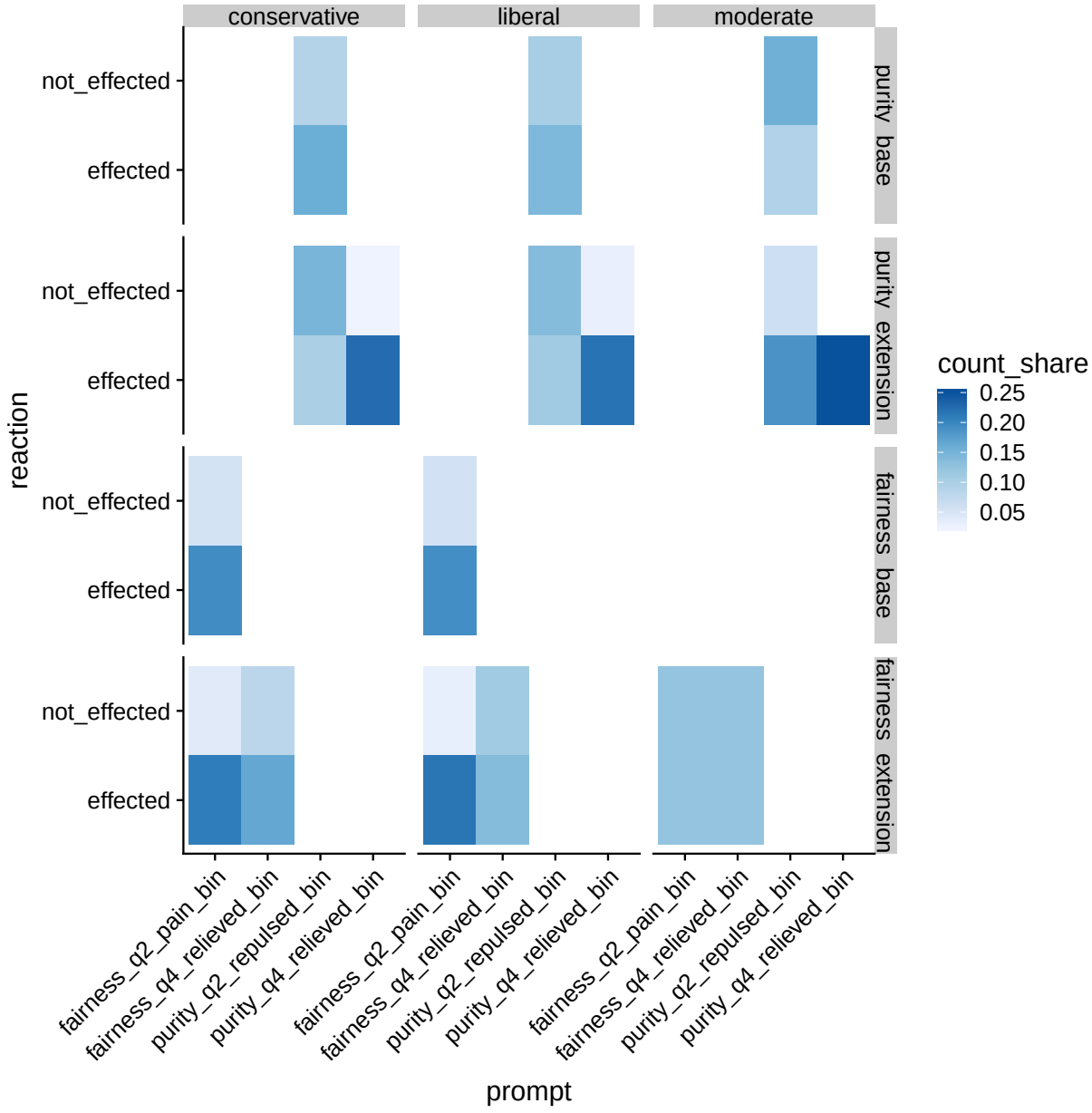

Figure 4: Reactions (Bin)

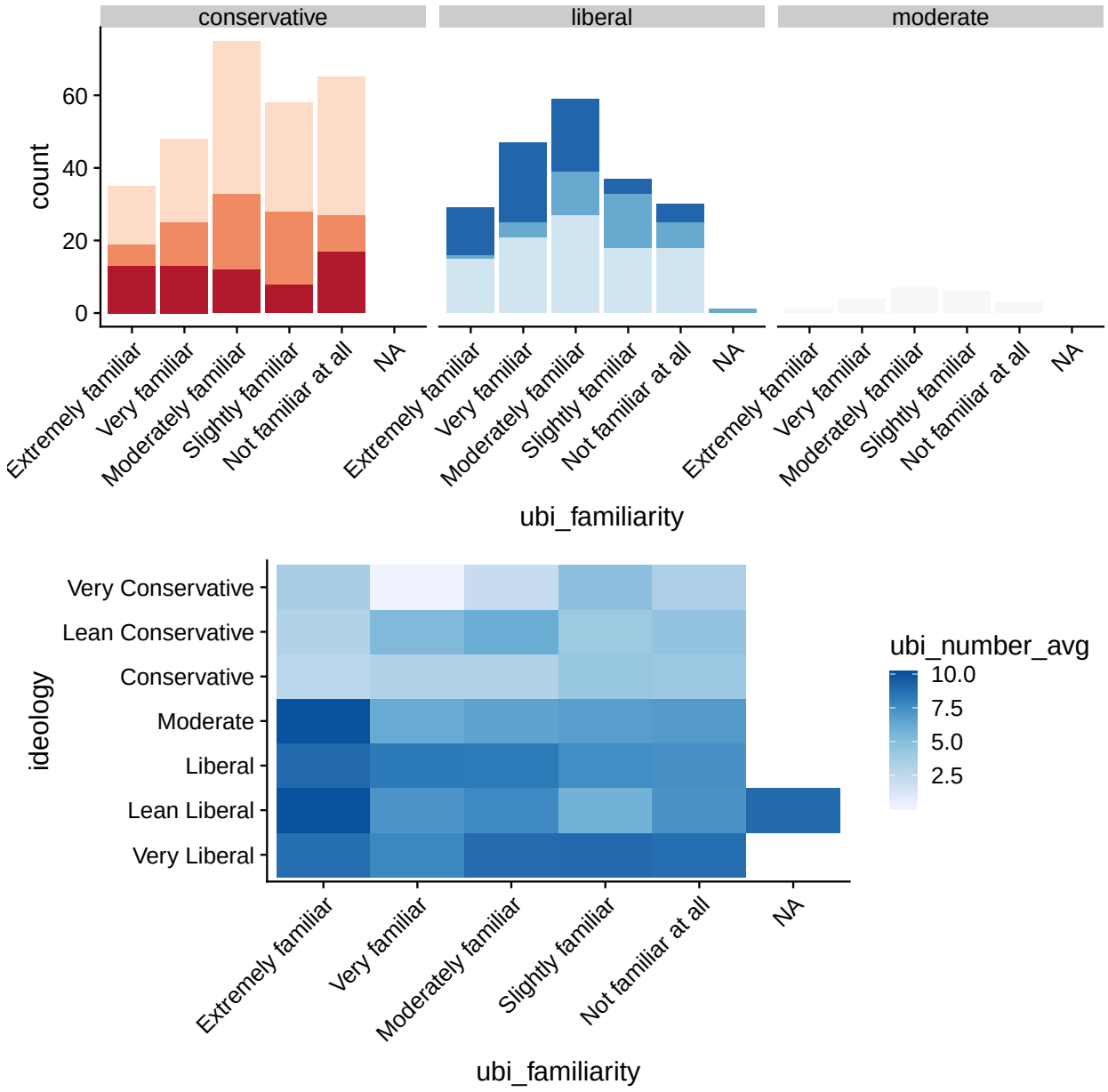

Figure 5: Outcomes

3 Methodology

Independent variable

Dependent variable

Model specification

[[TBD]]. (see **??**)

```
model1_libfair = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level, data = results_armlibfair), clusters_in
model1_libpure = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level, data = results_armlibpure), clusters_in
model1_confair = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level, data = results_armconfair) , clusters_i
model1_conpure = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level, data = results_armconpur), clusters_in =

stargazer(model1_libfair$lm, model1_libpure$lm
          , model1_confair$lm, model1_conpure$lm
          , type = stargazer_type, header = F
          , se = list(model1_libfair$se_robust, model1_libpure$se_robust
                      , model1_confair$se_robust, model1_conpure$se_robust)
          , title = "Moral Foundations Prelim Regression Specifications"
          , column.labels = c("Lib + Fair", "Lib + Purity"
                              , "Con + Fair", "Con + Purity")
          , notes = "HC Robust Standard Errors"
          , report = ('v*c*sp')
)
```

NOTES:
- Purity Extension to the COnservatives if significant at to 0.05 level - key result

```
model1_libfair_gender = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level*gender, data = results_armlibfair
model1_libpure_gender = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level*gender, data = results_armlibpure
model1_confair_gender = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level*gender, data = results_armconfair
model1_conpure_gender = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level*gender, data = results_armconpur)

stargazer(model1_libfair_gender$lm, model1_libpure_gender$lm
          , model1_confair_gender$lm, model1_conpure_gender$lm
          , type = stargazer_type, header = F
          , se = list(model1_libfair_gender$se_robust, model1_libpure_gender$se_robust
                      , model1_confair_gender$se_robust, model1_conpure_gender$se_robust)
          , title = "Moral Foundations Prelim Regression Specifications"
          , column.labels = c("Lib + Fair", "Lib + Purity"
                              , "Con + Fair", "Con + Purity")
          , notes = "HC Robust Standard Errors"
          , report = ('v*c*sp')
)
```

NOTES:
- Gender gap seems to have closed with this new data
- Slightly significant effect with women in con_pure extension arm but we see a stronger effect in aggregate

```
model1_libfair_familiarity = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level*ubi_familiarity_bin, data = 
model1_libpure_familiarity = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level*ubi_familiarity_bin, data = 
model1_confair_familiarity = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level*ubi_familiarity_bin, data = 
```

Table 2: Moral Foundations Prelim Regression Specifications

	Dependent variable:			
	ubi_number			
	Lib + Fair	Lib + Purity	Con + Fair	Con + Purity
	(1)	(2)	(3)	(4)
arm_levelbase	−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
arm_levelextension	−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
Observations	111	139	125	245
R^2	0.023	0.001	0.017	0.018
Adjusted R^2	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

Table 3: Moral Foundations Prelim Regression Specifications

	Dependent variable:			
	ubi_number			
	Lib + Fair	Lib + Purity	Con + Fair	Con + Purity
	(1)	(2)	(3)	(4)
arm_levelbase	0.580	0.358	−0.862	0.119
	(0.765)	(0.750)	(1.462)	(0.714)
	p = 0.449	p = 0.634	p = 0.556	p = 0.868
arm_levelextension	−1.253	0.343	2.031	1.281*
	(0.789)	(0.749)	(1.628)	(0.765)
	p = 0.113	p = 0.647	p = 0.213	p = 0.094
genderMale	0.625	0.625	0.860	0.860
	(0.573)	(0.573)	(0.753)	(0.753)
	p = 0.275	p = 0.275	p = 0.254	p = 0.254
arm_levelbase:genderMale	−1.506	−0.977	1.646	0.652
	(0.991)	(0.938)	(1.869)	(1.030)
	p = 0.129	p = 0.298	p = 0.379	p = 0.527
arm_levelextension:genderMale	0.922	−0.710	−1.110	−0.185
	(0.947)	(0.977)	(2.172)	(1.077)
	p = 0.331	p = 0.468	p = 0.610	p = 0.864
Constant	7.920***	7.920***	2.719***	2.719***
	(0.445)	(0.445)	(0.579)	(0.579)
	p = 0.000	p = 0.000	p = 0.00001	p = 0.00001
Observations	111	139	125	245
R^2	0.081	0.009	0.045	0.043
Adjusted R^2	0.038	−0.028	0.005	0.022
Residual Std. Error	2.074 (df = 105)	2.315 (df = 133)	3.533 (df = 119)	3.326 (df = 239)
F Statistic	1.860 (df = 5; 105)	0.248 (df = 5; 133)	1.112 (df = 5; 119)	2.123* (df = 5; 239)

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

```
model1_conpure_familiarity = my_lm_calcs(lm_in = lm(ubi_number ~ arm_level*ubi_familiarity_bin, data = i

stargazer(model1_libfair_familiarity$lm, model1_libpure_familiarity$lm
          , model1_confair_familiarity$lm, model1_conpure_familiarity$lm
          , type = stargazer_type, header = F
          , se = list(model1_libfair_familiarity$se_robust, model1_libpure_familiarity$se_robust
                      , model1_confair_familiarity$se_robust, model1_conpure_familiarity$se_robust)
          , title = "Moral Foundations Prelim Regression Specifications"
          , column.labels = c("Lib + Fair", "Lib + Purity"
                              , "Con + Fair", "Con + Purity")
          , notes = "HC Robust Standard Errors"
          , report = ('v*c*sp')
)
```

Notes:
- Being familiar with UBI makes liberals higher and conservatives lower at baseline
- No treatment interactions are significant
- Interation of familiarity and purity is actually fascintating 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

```
model2_conpure_base_reaction = my_lm_calcs(lm_in = lm(ubi_number ~ purity_q2_repulsed_bin
                                                      , data = results_armconpur %>% filter(arm_level !=
model2_conpure_ext_reaction = my_lm_calcs(lm_in = lm(ubi_number ~ purity_q4_relieved_bin
                                                      , data = results_armconpur %>% filter(arm_level !=

stargazer(model2_conpure_base_reaction$lm, model2_conpure_ext_reaction$lm
          , type = stargazer_type, header = F
          , se = list(model2_conpure_base_reaction$se_robust, model2_conpure_ext_reaction$se_robust)
          , title = "Moral Foundations Prelim Regression Specifications"
          , column.labels = c("Con + Purity Base", "Con + Purity Ext")
          , notes = "Bin 1 = None/A Little; Bin 2 = Everythign Positive"
          , report = ('v*c*sp')
)
```

Notes: - Interesting that feeling relieved in the extension was significant and positive, while notbeing relieved was negative (with much more noise)

[[Example Table]]

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

```
# Stargazer
```

Table 4: Moral Foundations Prelim Regression Specifications

	Dependent variable:			
	ubi_number			
	Lib + Fair	Lib + Purity	Con + Fair	Con +
	(1)	(2)	(3)	(4
arm_levelbase	−1.477	0.873	1.364	−0.4
	(1.477)	(1.114)	(2.075)	(1.1
	p = 0.318	p = 0.434	p = 0.512	p = 0
arm_levelextension	−0.727	0.106	−0.336	−0.0
	(0.993)	(1.173)	(1.953)	(1.0
	p = 0.464	p = 0.928	p = 0.864	p = 0
ubi_familiarity_bin1	0.634	0.634	−1.151	−1.1
	(0.799)	(0.799)	(0.903)	(0.9
	p = 0.428	p = 0.428	p = 0.203	p = 0
arm_levelbase:ubi_familiarity_bin1	1.310	−1.234	−1.563	1.0
	(1.564)	(1.218)	(2.315)	(1.3
	p = 0.403	p = 0.311	p = 0.500	p = 0
arm_levelextension:ubi_familiarity_bin1	−0.154	−0.199	2.274	1.5
	(1.136)	(1.285)	(2.329)	(1.2
	p = 0.893	p = 0.878	p = 0.329	p = 0
Constant	7.727***	7.727***	4.136***	4.136
	(0.736)	(0.736)	(0.800)	(0.8
	p = 0.000	p = 0.000	p = 0.00000	p = 0.0
Observations	111	139	125	24
R^2	0.059	0.009	0.049	0.0
Adjusted R^2	0.014	−0.028	0.009	0.0
Residual Std. Error	2.098 (df = 105)	2.315 (df = 133)	3.525 (df = 119)	3.353 (df
F Statistic	1.322 (df = 5; 105)	0.247 (df = 5; 133)	1.232 (df = 5; 119)	1.305 (df =

Note: *p<0.1; **p<0.05; *
HC Robust Standar

Table 5: Moral Foundations Prelim Regression Specifications

	Dependent variable:	
	ubi_number	
	Con + Purity Base	Con + Purity Ext
	(1)	(2)
purity_q2_repulsed_bin1	0.730	
	(0.733)	
	p = 0.320	
purity_q2_repulsed_bin2	0.139	
	(0.579)	
	p = 0.812	
purity_q4_relieved_bin1		−1.270
		(1.346)
		p = 0.346
purity_q4_relieved_bin2		1.336**
		(0.541)
		p = 0.014
Constant	3.270***	3.270***
	(0.370)	(0.370)
	p = 0.000	p = 0.000
Observations	166	168
R^2	0.006	0.048
Adjusted R^2	−0.006	0.037
Residual Std. Error	3.334 (df = 163)	3.399 (df = 165)
F Statistic	0.513 (df = 2; 163)	4.194** (df = 2; 165)
Note:		*p<0.1; **p<0.05; ***p<0.01
		Bin 1 = None/A Little; Bin 2 = Everythign Positive

4 Results

[[TBD]]

5 Conclusion

[[TBD]]

6 Discussion

[[TBD]]

6.1 Limitations

[[TBD]]

7 Technical Appendix

7.1 Data Dictionary

Variable Name	Variable	Values	Source	Notes
prolific_pid				
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				

7.2 Exploratory Data Analysis

Additional steps taken not included in the body of the report

[[TBD]]