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

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1 Background

//TBD]]

2 Data

[[TBD]]

```
# Pilot
# results_panel1_raw = read.xlsx("./data/pilot/survey_results_pilot_panel1.xlsx") %>% filter(StartDate
# results_panel2_raw = read.xlsx("./data/pilot/survey_results_pilot_panel2.xlsx") %>% filter(StartDate
# participant_detail_panel1 = read.csv("./data/pilot/participant_detail_pilot_panel1.csv", stringsAsFac
# participant_detail_panel2 = read.csv("./data/pilot/participant_detail_pilot_panel2.csv", stringsAsFac
# Study
results_panel1_raw = read.xlsx("./data/study/MF Framing Pilot - Full Recruitment - Panel 1_November 20,
results_panel2_raw = read.xlsx("./data/study/MF Framing Pilot - Full Recruitment - Panel 2_November 20,
participant_detail_panel1 = read.csv("./data/study/prolific_export_5dd4a350108b6748b25b5de1.csv", stringparticipant_detail_panel2 = read.csv("./data/study/prolific_export_5dd4a34135582248315dfdca.csv", stringparticipant_detail_panel2 = read.csv("./data/study/
```

2.0.1 Data Cleaning

 $//TBD//^{1}$

```
# Stack panel data
results_stacked = bind_rows(results_panel1_raw %>% mutate(panel = 1)
                            , results_panel2_raw %>% mutate(panel = 2)) %>%
  merge(bind_rows(participant_detail_panel1, participant_detail_panel2) %>% select(-session_id, -status
        , by.x = "PROLIFIC_PID"
        , by.y = "participant_id"
        , all.x = TRUE)
# Adjust all variable names to remove '-' and '.' + lowercase
names(results_stacked) = tolower(gsub(x = names(results_stacked), pattern = "\\-|\\.", replacement = "_
# Discrete variables as factors (manual ordering for plotting)
ideology_levels = c("Very Liberal", "Lean Liberal", "Liberal", "Moderate", "Conservative", "Lean Conser
ubi_group_levels = c("Promoter", "Passive", "Detractor")
ubi_familiarity_levels = c("Extremely familiar", "Very familiar", "Moderately familiar", "Slightly fami
results_full = results_stacked %>%
  # Define arms and nodes
  mutate(arm = case_when(grepl('a', fc_b_1, ignore.case = TRUE) ~ "purity_base"
                         , grepl('a', fc_c_1, ignore.case = TRUE) ~ "purity_extension"
                         , grepl('a', fc_d_1, ignore.case = TRUE) ~ "fairness_base"
                         , grepl('a', fc_e_1, ignore.case = TRUE) ~ "fairness_extension"
                         , TRUE ~ "control") %>% factor()
         , node = paste0(arm, "_panel_", panel)
         # Combine reaction vars from different arms
         , purity_q1_self = case_when(grepl('a', fc_b_1, ignore.case = TRUE) ~ fc_b_1
```

 $^{^{1} \}hbox{\it [[Example\ footnote]]}$

```
, TRUE ~ fc_c_1)
         , purity_q2_repulsed = case_when(grepl('a', fc_b_2, ignore.case = TRUE) ~ fc_b_2
                                  , TRUE \sim fc_c_2)
         , purity_q3_injustice = case_when(grepl('a', fc_b_3, ignore.case = TRUE) ~ fc_b_3
                                  , TRUE \sim fc_c_3)
         , purity_q4_relieved = fc_c_4
         , fairness_q1_self = case_when(grepl('a', fc_d_1, ignore.case = TRUE) ~ fc_d_1
                                  , TRUE ~ fc e 1)
         , fairness_q2_pain = case_when(grepl('a', fc_d_2, ignore.case = TRUE) ~ fc_d_2
                                      , TRUE ~ fc_e_2)
         , fairness_q3_injustice = case_when(grepl('a', fc_d_3, ignore.case = TRUE) ~ fc_d_3
                                  , TRUE \sim fc_e_3)
         , fairness_q4_relieved = fc_e_4
         , open_text_reaction = q3_fc2
         # Factor variables
         , ideology = factor(polispect, levels = ideology_levels)
         , ideology_bin = case_when(is.na(ideology) ~ "missing"
                                     , ideology == "Very Liberal" ~ "liberal"
                                     , ideology == "Lean Liberal" ~ "liberal"
                                     , ideology == "Liberal" ~ "liberal"
                                     , ideology == "Very Conservative" ~ "conservative"
                                     , ideology == "Lean Conservative" ~ "conservative"
                                     , ideology == "Conservative" ~ "conservative"
                                     , TRUE ~ "moderate")
         , ubi_group = factor(ubi_2_nps_group, levels = ubi_group_levels)
         , ubi_familiarity = factor(ubi_f, levels = ubi_familiarity_levels)
         , ubi_familiarity_bin = case_when(is.na(ubi_f) ~ "missing"
                                     , ubi_f == "Not familiar at all" ~ "no"
                                     , TRUE ~ "yes")
         # Numeric variables
         , ubi_number = as.numeric(ubi_2))
results_clean = results_full %>%
  select(prolific_pid, panel, arm, node
         , 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_group, ubi_familiarity)
```

2.1 Exploratory Analysis

[TBD]

2.1.1 Study Setup

```
arm_counts_bypanel = results_clean %>%
  group_by(arm, panel, node) %>%
  summarise(count = n())
arm_counts_all = results_clean %>%
  group_by(arm) %>%
```

```
summarise(count = n())
# nodes = data.frame(
   id = 1:12
#
    , group = c("liberal", "conservative", arm_counts$arm)
#
    # , label = c("liberal", "conservative", arm_counts$node)
    , label = c("All Liberals", "All Conservatives"
#
                , "Control: Liberal", "Control: Conservative"
                , "Fairness Base: Liberal", "Fairness Base: Conservative"
#
                , "Fairness Extension: Liberal", "Fairness Extension: Conservative"
#
#
                , "Purity Base: Liberal", "Purity Base: Conservative"
                , "Purity Extension: Liberal", "Purity Extension: Conservative")
#
#
    , value = c(sum(arm\_counts\$count[arm\_counts\$panel==1]), sum(arm\_counts\$count[arm\_counts\$panel==2]),
    , shape = rep("box", 12)
#
#
      # color, shape
#
#
# edges = data.frame(
# from = c(1, 2, 1, 2, 1, 2, 5, 6, 9, 10)
   , to = c(3, 4, 5, 6, 9, 10, 7, 8, 11, 12)
    , dashes = c(rep(FALSE, 6), rep(TRUE, 4))
nodes = data.frame(
  id = 1:7
  , group = c("ideology", "ideology"
              , "fairness", "fairness"
              , "purity", "purity"
              , "control"
  # , label = c("liberal", "conservative", arm_counts$node)
  , label = c("All Liberals", "All Conservatives"
              , "Fairness Base"
              , "Fairness Extension"
              , "Purity Base"
              , "Purity Extension"
              , "Control"
  , level = c(1, 1, 2, 3, 2, 3, 2)
  # , mass = c(sum(arm_counts_bypanel$count[arm_counts_bypanel$panel==1])
                , sum(arm_counts_bypanel$count[arm_counts_bypanel$panel==2]), arm_counts_all$count)
  , shape = rep("box", 7)
edges = data.frame(
 from = c(1, 2, 1, 2, 1, 2, 3, 5)
  , to = c(3, 3, 5, 5, 7, 7, 4, 6)
  , dashes = c(rep(FALSE, 6), rep(TRUE, 2))
  )
visNetwork(nodes, edges) %>%
  visEdges(arrows = "to") %>%
  visHierarchicalLayout(direction = "LR")
```

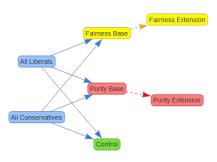


Figure 1: Study Setup

2.1.2 Demographics

```
grpstackbar_plot = ggplot() +
  facet_grid( ~ panel) +
  scale_fill_brewer(type = "div", palette = 5, direction = -1, aesthetics = "fill") +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
# Ideology
plot_ideology = grpstackbar_plot +
  geom_bar(data = results_clean %>% group_by(ideology, panel) %>% summarise(count = n())
           , aes(x = ideology, y = count, fill = ideology)
           , stat = "identity") +
  theme(legend.position = "left", axis.text.x=element_blank())
# Age
plot_age = grpstackbar_plot +
  geom_bar(data = results_clean %>% group_by(age, ideology, panel) %>% summarise(count = n())
           , aes(x = age, y = count, fill = ideology)
           , stat = "identity", show.legend = FALSE)
# Gender
plot_gender = grpstackbar_plot +
  geom_bar(data = results_clean %>% group_by(gender, ideology, panel) %>% summarise(count = n())
           , aes(x = gender, y = count, fill = ideology)
           , stat = "identity", show.legend = FALSE)
# Urban
```

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

2.1.3 Reactions

```
response_levels = c("A great deal", "A lot", "A moderate amount", "A little", "None at all")
results_response = results_clean %>%
  select(panel, arm
         , purity_q1_self, purity_q2_repulsed, purity_q3_injustice, purity_q4_relieved
         , fairness_q1_self, fairness_q2_pain, fairness_q3_injustice, fairness_q4_relieved) %>%
  gather(prompt, value, -panel, -arm) %>%
  filter(!is.na(value)) %>%
  group_by(panel, arm, prompt, value) %>% summarise(count = n()) %>%
  mutate(response = factor(value, levels = response_levels))
  # spread(value, count) %>%
  # arrange(panel, arm, prompt) %>%
  # select("panel", "arm", "prompt", "A great deal", "A lot", "A moderate amount", "A little", "None at
ggplot(data = results_response
       , aes(x = prompt, y = response, fill = count)) +
  geom tile() +
  facet_grid(rows = vars(arm), cols = vars(panel)) +
  scale fill distiller(direction = 1) +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
```

2.1.4 Outcome

```
# Histogram of familiarity
plot_familiarity = ggplot(data = results_clean %>% group_by(ubi_familiarity, ideology, panel) %>% summat
        , aes(x = ubi_familiarity, y = count, fill = ideology)) +
geom_bar(stat="identity", show.legend = FALSE) +
facet_grid( ~ panel) +
scale_fill_brewer(type = "div", palette = 5, direction = -1, aesthetics = "fill") +
theme(axis.text.x = element_text(angle = 45, hjust = 1))

# Heat map of number UBI like
plot_ubi = ggplot(data = results_clean %>% group_by(ubi_familiarity, ideology) %>% summarise(ubi_number
        , aes(x = ubi_familiarity, y = ideology, fill = ubi_number_avg)) +
geom_tile() +
scale fill distiller(direction = 1) +
```

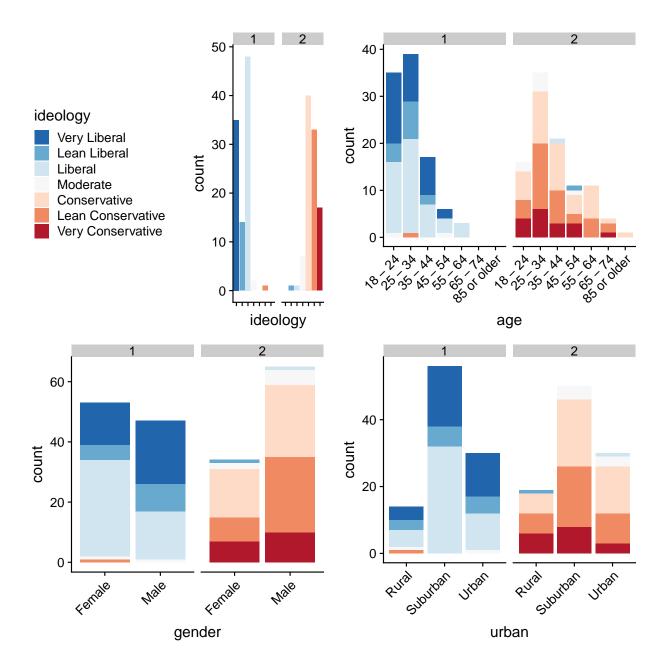


Figure 2: Demographics

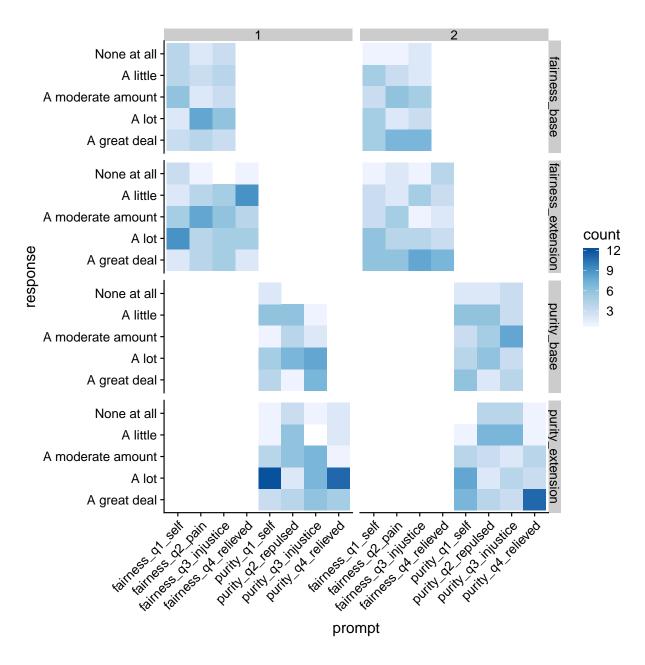


Figure 3: Reactions

```
theme(axis.text.x = element_text(angle = 45, hjust = 1)
    , legend.position = "right")

grid.arrange(plot_familiarity, plot_ubi
    , nrow = 2)
```

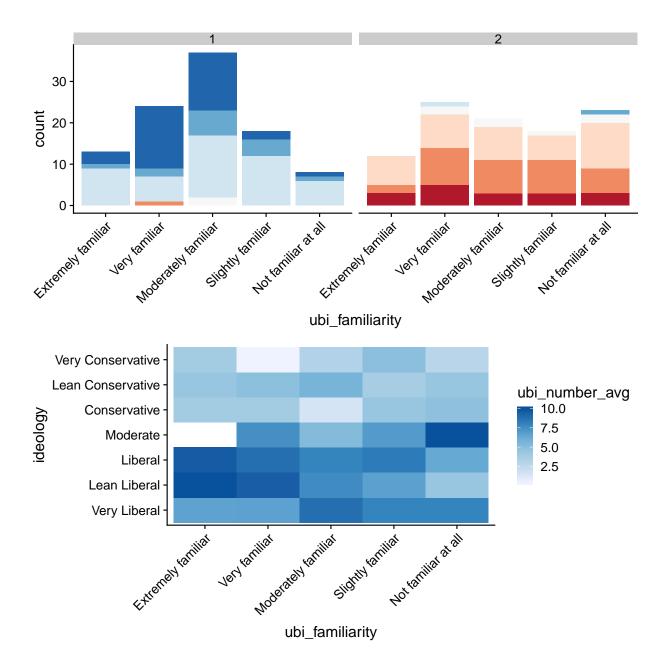


Figure 4: Outcomes

3 Methodology

3.1 Model 1

Independent variable

Dependent variable

Model specification

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

```
my_lm_calcs = function(lm_in, clusters_in){
  # Robust
  vcov_robust = vcovHC(lm_in)
  se_robust = sqrt(diag(vcov_robust))
  # Cluster
  if(length(clusters_in) > 1){
   vcov_cluster = cluster.vcov(lm_in, clusters_in)
   se_cluster = sqrt(diag(vcov_cluster))
 } else {
   vcov_cluster = NA
   se_cluster = NA
  }
  # Output
  lm_out = list(lm = lm_in
                , vcov_robust = vcov_robust
                , se_robust = se_robust
                , vcov_cluster = vcov_cluster
                , se_cluster = se_cluster
  )
  return(lm_out)
}
```

```
# Summaries
all_data = data.table(results_full)
all_data[, ideology_bin := case_when(is.na(ideology) ~ "missing",
                                           ideology=="Very Liberal" ~ "liberal",
                                           ideology=="Lean Liberal" ~ "liberal",
                                           ideology=="Liberal" ~ "liberal",
                                           ideology=="Very Conservative" ~ "conservative",
                                           ideology=="Lean Conservative" ~ "conservative",
                                           ideology=="Conservative" ~ "conservative",
                                           TRUE ~ "moderate"), ]
all_data[, story := case_when(is.na(arm) ~ "missing",
                                           arm=="control" ~ "",
                                           arm=="purity_base" ~ "homeless",
                                           arm=="purity_extension" ~ "homeless-cleaned",
                                           arm=="fairness_base" ~ "bullying",
                                           arm=="fairness_extension" ~ "bullying-addressed",
                                           TRUE ~ "others"), ]
all_data[, FemaleReader := ifelse(gender!='Male', 1, 0), ]
all_data[, ubi_familiarity_dummy := ifelse(ubi_familiarity_bin!='yes', 1, 0), ]
all data[, ubi := as.numeric(ubi 2), ]
all_data[ , .(ubi=mean(as.numeric(ubi_2)), .N), keyby=list(ideology_bin, story, FemaleReader) ]
```

```
## 3: conservative
                             bullying
                                                  0 4.363636 11
                             bullying
   4: conservative
                                                  1 1.857143
                                                  0 4.500000 10
## 5: conservative bullying-addressed
## 6: conservative bullying-addressed
                                                  1 4.750000 8
                                                  0 5.416667 12
## 7: conservative
                             homeless
## 8: conservative
                             homeless
                                                  1 1.714286 7
## 9: conservative homeless-cleaned
                                                  0 4.666667 12
## 10: conservative homeless-cleaned
                                                  1 3.166667 6
## 11:
                                                  0 9.142857 7
           liberal
## 12:
           liberal
                                                  1 7.500000 14
## 13:
                                                  0 7.700000 10
           liberal
                              bullying
## 14:
                                                  1 8.000000 10
           liberal
                              bullying
## 15:
           liberal bullying-addressed
                                                  0 8.100000 10
## 16:
           liberal bullying-addressed
                                                  1 6.111111 9
## 17:
           liberal
                             homeless
                                                  0 7.909091 11
## 18:
           liberal
                                                  1 9.428571 7
                             homeless
           liberal homeless-cleaned
## 19:
                                                  0 7.444444
                                                  1 8.666667 12
## 20:
           liberal homeless-cleaned
## 21:
          moderate
                                                  0 7.000000 1
## 22:
                                                  1 8.000000 1
          moderate
## 23:
          moderate bullying-addressed
                                                  0 4.333333
## 24:
          moderate
                             homeless
                                                  0 7.500000 2
## 25:
          moderate homeless-cleaned
                                                  1 10.000000 2
##
       ideology_bin
                                story FemaleReader
                                                          ubi N
# augment model with results from coefteest and coefci using
# the supplied variance/covariance matrix
apply_robust_estimates = function(model, vcovmatrix) {
  model$robust.coeftest = coeftest(model, vcov. = vcovmatrix)
  model$robust.estimate = model$robust.coeftest[, 'Estimate']
  model$robust.std.error = model$robust.coeftest[, 'Std. Error']
  model$robust.statistic = model$robust.coeftest[, 't value']
  model$robust.p.value = model$robust.coeftest[, 'Pr(>|t|)']
  model$robust.coefci = coefci(model, vcov. = vcovmatrix)
  model$robust.ci.low = model$robust.coefci[, "2.5 %"]
  model$robust.ci.high = model$robust.coefci[, "97.5 %"]
  model
}
# liberals - homeless story
hom_lib_mod<-all_data[ ideology_bin=='liberal' & story != 'bullying' & story != 'bullying-addressed',
hom_lib_mod<-apply_robust_estimates(hom_lib_mod, vcovHC(hom_lib_mod))
# conservatives - homeless story
hom_con_mod<-all_data[ ideology_bin=='conservative' & story != 'bullying' & story != 'bullying-addresse
hom_con_mod<-apply_robust_estimates(hom_con_mod, vcovHC(hom_con_mod))
# liberals - jacket story
jac_lib_mod<-all_data[ ideology_bin=='liberal' & story != 'homeless' & story != 'homeless-cleaned', lm
jac_lib_mod<-apply_robust_estimates(jac_lib_mod, vcovHC(jac_lib_mod))</pre>
# conservatives - jacket story
jac_con_mod<-all_data[ ideology_bin=='conservative' & story != 'homeless' & story != 'homeless-cleaned'</pre>
jac_con_mod<-apply_robust_estimates(jac_con_mod, vcovHC(jac_con_mod))</pre>
stargazer(hom_lib_mod, hom_con_mod,
```

story FemaleReader

0 4.642857 14 1 0.500000 4

##

##

ideology_bin

1: conservative

2: conservative

```
##
##
                                         Dependent variable:
##
##
##
                                       (1)
                                                         (2)
                                     -1.234**
                                                       0.774
## storyhomeless
                                                      (1.605)
##
                                      (0.616)
                                                    p = 0.630
##
                                     p = 0.046
                                     -1.698*
                                                       0.024
## storyhomeless-cleaned
                                      (1.003)
##
                                                      (1.401)
##
                                     p = 0.091
                                                     p = 0.987
##
                                                     -4.143***
## FemaleReader
                                     -1.643**
##
                                      (0.813)
                                                      (1.038)
                                                   p = 0.0001
##
                                     p = 0.044
##
## storyhomeless:FemaleReader
                                     3.162***
                                                        0.440
##
                                      (0.976)
                                                      (1.902)
##
                                     p = 0.002
                                                    p = 0.817
##
## storyhomeless-cleaned:FemaleReader
                                     2.865**
                                                       2.643
##
                                      (1.271)
                                                      (1.774)
##
                                     p = 0.025
                                                     p = 0.137
##
## Constant
                                     9.143***
                                                     4.643***
                                      (0.436)
                                                      (0.983)
##
                                     p = 0.000
                                                    p = 0.00001
##
                                     Liberal Conservative
## Ideology
## Observations
                                       60
                                                       55
## R2
                                                        0.188
                                      0.154
## Adjusted R2
                                      0.075
                                                       0.105
                                 1.815 (df = 54) 3.320 (df = 49)
## Residual Std. Error
                              1.962* (df = 5; 54) 2.267* (df = 5; 49)
## F Statistic
## -----
## Note:
                                           *p<0.1; **p<0.05; ***p<0.01
```

```
report=('v*c*sp'),
add.lines=list(c("Ideology", "Liberal", "Conservative")))
```

```
##
##
                                               Dependent variable:
##
##
##
                                             (1)
                                                               (2)
                                           -1.443
                                                              -0.279
## storybullying
                                           (1.097)
##
                                                            (1.446)
##
                                          p = 0.189
                                                          p = 0.847
## storybullying-addressed
                                          -1.043*
                                                             -0.143
##
                                           (0.612)
                                                             (1.673)
##
                                          p = 0.089
                                                           p = 0.932
                                          -1.643**
                                                            -4.143***
## FemaleReader
                                           (0.813)
                                                            (1.038)
##
##
                                          p = 0.044
                                                          p = 0.0001
##
## storybullying:FemaleReader
                                           1.943
                                                             1.636
                                           (1.538)
##
                                                             (2.001)
##
                                         p = 0.207
                                                           p = 0.414
##
## storybullying-addressed:FemaleReader
                                           -0.346
                                                             4.393*
##
                                           (1.218)
                                                             (2.286)
##
                                          p = 0.777
                                                           p = 0.055
##
## Constant
                                           9.143***
                                                            4.643***
##
                                           (0.436)
                                                             (0.983)
                                          p = 0.000
                                                          p = 0.00001
##
##
## Ideology
                                          Liberal
                                                          Conservative
## Observations
                                             60
                                                                54
                                                              0.136
## R2
                                            0.126
## Adjusted R2
                                            0.045
                                                              0.046
                                     2.278 \text{ (df = 54)} \quad 3.546 \text{ (df = 48)}
## Residual Std. Error
## F Statistic
                                     1.555 (df = 5; 54) 1.510 (df = 5; 48)
## Note:
                                                *p<0.1; **p<0.05; ***p<0.01
# augment model with results from coefteest and coefci using
# the supplied variance/covariance matrix
# liberals - homeless story
hom_lib_mod_2<-all_data[ ideology_bin=='liberal' & story != 'bullying' & story != 'bullying-addressed',
hom_lib_mod_2<-apply_robust_estimates(hom_lib_mod_2, vcovHC(hom_lib_mod_2))
# conservatives - homeless story
hom_con_mod_2<-all_data[ ideology_bin=='conservative' & story != 'bullying' & story != 'bullying-addres
hom_con_mod_2<-apply_robust_estimates(hom_con_mod_2, vcovHC(hom_con_mod_2))
# liberals - jacket story
```

#		Dependent variable:		
# #		ubi		
#		(1)	(2)	
‡ ‡	storyhomeless	0.196	0.633	
ŧ	·		(1.374)	
ŧ			p = 0.645	
ŧ				
	storyhomeless-cleaned	0.111	1.049	
ŧ			(1.269)	
‡			p = 0.409	
‡ ±	ubi_familiarity_dummy	-2.000	1.492	
#	abi_tamifiar roy_adminy	2.000	(2.321)	
#			p = 0.521	
#			P	
‡	storyhomeless:ubi_familiarity_dummy	1.471	-0.433	
ŧ			(7.504)	
#			p = 0.954	
#	-t	0 444	-2.349	
# #	storyhomeless-cleaned:ubi_familiarity_dummy	-0.111	(3.322)	
# #			p = 0.480	
# #			p - 0.400	
•	Constant	8.333	3.308***	
‡			(0.982)	
#			p = 0.001	
#				
#				
	Ideology	Liberal	Conservative	
	Observations	60	55	
	R2 Adjusted R2	0.115 0.033	0.021 -0.078	
	Residual Std. Error	1.856 (df = 54)		
	F Statistic	1.403 (df = 5; 54)		

```
##
##
##
                                                     Dependent variable:
##
##
##
                                                   (1)
                                                                     (2)
                                                   -0.228
                                                                    -0.522
## storybullying
##
                                                                   (1.357)
##
                                                                  p = 0.701
##
## storybullying-addressed
                                                  -1.111
                                                                    1.615
##
                                                                   (1.549)
##
                                                                  p = 0.298
##
## ubi_familiarity_dummy
                                                  -2.000
                                                                    1.492
##
                                                                   (2.321)
##
                                                                  p = 0.521
##
## storybullying:ubi_familiarity_dummy
                                                  -3.105
                                                                   1.222
##
                                                                   (3.152)
##
                                                                  p = 0.699
##
  storybullying-addressed:ubi_familiarity_dummy
                                                  0.778
                                                                    -2.615
                                                                   (3.162)
##
##
                                                                  p = 0.409
##
## Constant
                                                   8.333
                                                                   3.308***
                                                                   (0.982)
##
##
                                                                  p = 0.001
##
                                                               Conservative
## Ideology
                                                 Liberal
## Observations
                                                    60
                                                                     54
                                                                    0.071
## R2
                                                  0.140
## Adjusted R2
                                                  0.061
                                                                    -0.025
                                              2.259 (df = 54) 3.676 (df = 48)
## Residual Std. Error
## F Statistic
                                             1.765 (df = 5; 54) 0.738 (df = 5; 48)
## Note:
                                                      *p<0.1; **p<0.05; ***p<0.01
```

```
# Exploratory
```

```
model1_liberal = my_lm_calcs(lm_in = lm(ubi_number ~ arm, data = results_clean %>% filter(ideology_bin model1_conservative = my_lm_calcs(lm_in = lm(ubi_number ~ arm, data = results_clean %>% filter(ideology_bin model1_conservative)
```

```
stargazer(model1_liberal$lm, model1_conservative$lm
    , type = stargazer_type, header = F
    , se = list(model1_liberal$se_robust, model1_conservative$se_robust)
    , title = "Moral Foundations Prelim Regression Specifications"
    , column.labels = c("Liberals", "Conservative")
    , notes = "HC Robust Standard Errors"
    , report = ('v*c*sp')
)
```

Table 1: Moral Foundations Prelim Regression Specifications

	$Dependent\ variable:$		
	ubi_number		
	Liberals	Conservative	
	(1)	(2)	
armfairness_base	-0.198	-0.333	
	(0.794)	(1.208)	
	p = 0.804	p = 0.783	
armfairness extension	-0.890	0.889	
	(0.691)	(1.289)	
	p = 0.198	p = 0.491	
armpurity_base	0.452	0.330	
1 v —	(0.600)	(1.282)	
	p = 0.451	p = 0.797	
armpurity_extension	0.095	0.444	
1 v —	(0.662)	(1.138)	
	p = 0.886	p = 0.697	
Constant	8.048***	3.722***	
	(0.497)	(0.868)	
	p = 0.000	p = 0.00002	
Observations	99	91	
R^2	0.042	0.013	
Adjusted R ²	0.001	-0.032	
Residual Std. Error	2.117 (df = 94)		
F Statistic	$1.034 \ (df = 4; 94)$		
Note:	*p<0.1; **p<0.05; ***p<0.01 HC Robust Standard Errors		

```
model_1 = lm(ubi_number ~ arm+ideology_bin, data = results_full)
stargazer(model_1, type = stargazer_type)
```

[%] Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu

[%] Date and time: Sun, Nov 24, 2019 - 1:17:02 PM

Table 2:

	Dependent variable:
	ubi number
armfairness base	-0.296
arimanness_base	(0.662)
armfairness_extension	-0.253
	(0.652)
armpurity_base	0.353
- •	(0.656)
armpurity_extension	0.366
· -	(0.648)
ideology_binliberal	3.954***
	(0.426)
ideology_binmoderate	2.973***
	(1.031)
Constant	3.951***
	(0.514)
Observations	199
\mathbb{R}^2	0.316
Adjusted \mathbb{R}^2	0.295
Residual Std. Error	2.932 (df = 192)
F Statistic	$14.805^{***} (df = 6; 192)$
Note:	*p<0.1; **p<0.05; ***p<0.01

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[[Example Table]]

Model	Specification	Interpretation	Figure
Model 1	$crmrte \sim prbarr$	$\Delta crmrte = \beta_1 \Delta prbarr$??

Stargazer

Table 3: Moral Foundations Prelim Regression Specifications

	Dependent variable:	
	ubi_n	umber
	Liberals	Conservative
	(1)	(2)
armfairness_base	0.500	1.357
	(1.078)	(1.383)
	p = 0.643	p = 0.327
armfairness_extension	-1.389	4.250***
_	(1.053)	(1.558)
	p = 0.188	p = 0.007
armpurity_base	1.929**	1.214
	(0.757)	(1.020)
	p = 0.011	p = 0.234
armpurity_extension	1.167	2.667**
	(0.780)	(1.088)
	p = 0.135	p = 0.015
genderMale	1.643**	4.143***
Schachiane	(0.813)	(1.038)
	p = 0.044	p = 0.0001
armfairness_base:genderMale	-1.943	-1.636
saso-8enderman	(1.538)	(2.001)
	p = 0.207	p = 0.414
armfairness_extension:genderMale	0.346	-4.393^{*}
	(1.218)	(2.286)
	p = 0.777	p = 0.055
armpurity_base:genderMale	-3.162***	-0.440
	(0.976)	(1.902)
	p = 0.002	p = 0.817
armpurity_extension:genderMale	-2.865**	-2.643
F 3	(1.271)	(1.774)
	p = 0.025	p = 0.137
Constant	7.500***	0.500
	(0.686)	(0.333)
	p = 0.000	p = 0.134
Observations	99	91
Diservations \mathbb{R}^2	0.154	0.145
Adjusted R ²	0.154 0.069	0.145 0.050
Residual Std. Error	2.044 (df = 89)	3.477 (df = 81)
F Statistic	$1.806^* (df = 9; 89)$	1.521 (df = 9; 8)

Note:

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

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
county	County ID	Odd Integers		Few missing

7.2 Exploratory Data Analysis

Additional steps taken not included in the body of the report [[TBD]]