Vicarious Contact PSRM Replication: Main Analysis

Lee-Or Ankori-Karlinsky

Contents

Create Analysis + Plotting Functions: ATEs **1**
Create Analysis + Plotting Functions: CATEs . . . 17
Regression Tables Function . . . 20
Model Summary Lines for Latex . . . 22

Analysis **23**
Figure 1: Vicarious intergroup contact reduced affective polarization among a nationally representative sample of Americans . . . 23
Figure 2: Vicarious contact increases interest but not investment in depolarization activities . . . 24
Figure 3: Vicarious contact increased optimism and strengthened belief in the efficacy of dialogue . 25
Figure 4: Vicarious contact does not affect support for anti-democratic actions . . . 26
Figure 5: Vicarious contact reduced affective polarization primarily among Democrats . . . 27
Figure 6 . . . 29

Supplementary Information Tables and Figures **30**
Descriptive statistics . . . 30
Participants by condition . . . 35
Correlation Tables . . . 36
Balance tests . . . 39
Attrition tables . . . 42
Main outcomes and analyses . . . 49
Donations extra analysis . . . 52
Secondary Outcomes and Mechanisms . . . 55
Extensions . . . 60
Pre-registered analyses not featured in manuscript . . . 65
Ancillary Analyses . . . 73

Create Analysis + Plotting Functions: ATEs

```
####One Model ####

plot_generate_1 <- function(model_x, name_x, plot_title, xlim) {

  #create tidy df with robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  models <- name_x_df

  #plot
  plot <- dwplot(models,
```

```
        vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, shape=c(15)),
       whisker_args = list(size=0.7),
dodge_size = 0.8
) %>%
relabel_predictors(treat_long_collapse2 = "Intention-To-Treat Effect
                   of Vicarious Contact")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[1]),
        values = list("black")
        )+
  scale_shape_manual(
    name= "Legend",
    labels = list(models$model[1]),
    values=list(15)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  #reduce to three decimals
  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)

  #add coefficient value
  plot + annotate(x=models$estimate[1], y=0.9, label=coef_1,geom="label", color="black")
  }


#Short videos
plot_generate_1_short <- function(model_x, name_x, plot_title, xlim) {

  #create tidy df with robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  models <- name_x_df

  #plot
  plot <- dwplot(models,
        vline = geom_vline(
         xintercept = 0,
```

```
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, shape=c(15)),
       whisker_args = list(size=0.7),
dodge_size = 0.8
) %>%
relabel_predictors(treat_short_collapse = "Short Videos vs.
                          Empty Control")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[1]),
        values = list("black")
        )+
  scale_shape_manual(
    name= "Legend",
    labels = list(models$model[1]),
    values=list(15)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  #reduce to three decimals
  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)

  #add coefficient value
  plot + annotate(x=models$estimate[1], y=0.9, label=coef_1,geom="label", color="black")
  }



####Two Models####
plot_generate_2 <- function(model_x, model_y, name_x, name_y, plot_title, xlim) {

  #convert models into tidy dataframes with Robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
  new_model_y <- coeftest(model_y, vcov=vcovHC, type="HC1") #robust SEs for model y
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  name_y_df <- tidy(new_model_y) #create df
  name_y_df <- name_y_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_y}}) #remove inter
  models <- rbind(name_x_df, name_y_df)

#plot
  plot <- dwplot(models,
```

```
        vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, shape=c(15,16)),
       whisker_args = list(size=0.7),
dodge_size = 0.8
) %>%
relabel_predictors(treat_long_collapse2 = "Intention-To-Treat Effect
                   of Vicarious Contact")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[2], models$model[1]),
        values = list("black", "black")
        )+
  scale_shape_manual(
    name= "Legend",
    labels = list(models$model[2], models$model[1]),
    values=list(15,16)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15:16))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)
  coef_2 <- format(round(c(models$estimate[2]), 3), nsmall=3)

  plot + annotate(x=models$estimate[2], y=1.3, label=coef_2,geom="label", color="black") +
  annotate(x=models$estimate[1], y=0.7, label=coef_1,geom="label", color="black")
  }

####Two Models No LABEL####
plot_generate_2_nolabel <- function(model_x, model_y, name_x, name_y, plot_title, xlim) {

  #convert models into tidy dataframes with Robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
  new_model_y <- coeftest(model_y, vcov=vcovHC, type="HC1") #robust SEs for model y
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  name_y_df <- tidy(new_model_y) #create df
  name_y_df <- name_y_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_y}}) #remove inter
  models <- rbind(name_x_df, name_y_df)

#plot
  plot <- dwplot(models,
```

```
        vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, shape=c(15,16)),
       whisker_args = list(size=0.7),
dodge_size = 0.8
) %>%
relabel_predictors(treat_long_collapse2 = "")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[2], models$model[1]),
        values = list("black", "black")
        )+
  scale_shape_manual(
    name= "Legend",
    labels = list(models$model[2], models$model[1]),
    values=list(15,16)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15:16))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)
  coef_2 <- format(round(c(models$estimate[2]), 3), nsmall=3)

  plot + annotate(x=models$estimate[2], y=1.3, label=coef_2,geom="label", color="black") +
  annotate(x=models$estimate[1], y=0.7, label=coef_1,geom="label", color="black")
  }



plot_generate_2_w3 <- function(model_x, model_y, name_x, name_y, plot_title, xlim) {

  #convert models into tidy dataframes with Robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
  new_model_y <- coeftest(model_y, vcov=vcovHC, type="HC1") #robust SEs for model y
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  name_y_df <- tidy(new_model_y) #create df
  name_y_df <- name_y_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_y}}) #remove inter
  models <- rbind(name_x_df, name_y_df)

#plot
```

```
  plot <- dwplot(models,
        vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, shape=c(15,16)),
       whisker_args = list(size=0.7),
dodge_size = 0.8
) %>%
relabel_predictors(treat_long_collapse2 = "Durability of Intention-To-Treat Effect
                   of Vicarious Contact")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[2], models$model[1]),
        values = list("black", "black")
        )+
  scale_shape_manual(
    name= "Legend",
    labels = list(models$model[2], models$model[1]),
    values=list(15,16)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15:16))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)
  coef_2 <- format(round(c(models$estimate[2]), 3), nsmall=3)

  plot + annotate(x=models$estimate[2], y=1.3, label=coef_2,geom="label", color="black") +
  annotate(x=models$estimate[1], y=0.7, label=coef_1,geom="label", color="black")
  }


#short films
plot_generate_2_short <- function(model_x, model_y, name_x, name_y, plot_title, xlim) {

  #convert models into tidy dataframes with Robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
  new_model_y <- coeftest(model_y, vcov=vcovHC, type="HC1") #robust SEs for model y
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  name_y_df <- tidy(new_model_y) #create df
  name_y_df <- name_y_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_y}}) #remove inter
  models <- rbind(name_x_df, name_y_df)
```

```
#plot
  plot <- dwplot(models,
        vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, shape=c(15,16)),
       whisker_args = list(size=0.7),
dodge_size = 0.8
) %>%
relabel_predictors(treat_short_collapse = "Short Videos vs.
                          Empty Control")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[2], models$model[1]),
        values = list("black", "black")
        )+
  scale_shape_manual(
    name= "Legend",
    labels = list(models$model[2], models$model[1]),
    values=list(15,16)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15:16))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)
  coef_2 <- format(round(c(models$estimate[2]), 3), nsmall=3)

  plot + annotate(x=models$estimate[2], y=1.3, label=coef_2,geom="label", color="black") +
  annotate(x=models$estimate[1], y=0.7, label=coef_1,geom="label", color="black")
  }


####Three Models####
plot_generate_3 <- function(model_x, model_y, model_z, name_x, name_y, name_z, plot_title, xlim) {

  #convert models into tidy dataframes with Robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
  new_model_y <- coeftest(model_y, vcov=vcovHC, type="HC1") #robust SEs for model y
  new_model_z <- coeftest(model_z, vcov=vcovHC, type="HC1") #robust SEs for model z
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  name_y_df <- tidy(new_model_y) #create df
  name_y_df <- name_y_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_y}}) #remove inter
```

```
  name_z_df <- tidy(new_model_z) #create df
  name_z_df <- name_z_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_z}})#remove interc
  models <- rbind(name_x_df, name_y_df, name_z_df)

#plot
  plot <- dwplot(models,
        vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, shape=c(15,16,17)),
       whisker_args = list(size=0.7),
dodge_size = 0.8
) %>%
relabel_predictors(treat_long_collapse2 = "Intention-To-Treat Effect
                   of Vicarious Contact")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[3], models$model[2], models$model[1]),
        values = list("black", "black", "black")
        )+
  scale_shape_manual(
    name= "Legend",
    labels = list(models$model[3],models$model[2], models$model[1]),
    values=list(15,16, 17)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15:17))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)
  coef_2 <- format(round(c(models$estimate[2]), 3), nsmall=3)
  coef_3 <- format(round(c(models$estimate[3]), 3), nsmall=3)


  plot + annotate(x=models$estimate[3], y=1.35, label=coef_3,geom="label", color="black")+
    annotate(x=models$estimate[2], y=0.92, label=coef_2,geom="label", color="black") +
  annotate(x=models$estimate[1], y=0.65, label=coef_1,geom="label", color="black")
  }

####Three Models NO LABEL ####
plot_generate_3_nolabel <- function(model_x, model_y, model_z, name_x, name_y, name_z, plot_title, xlim

  #convert models into tidy dataframes with Robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
```

```
  new_model_y <- coeftest(model_y, vcov=vcovHC, type="HC1") #robust SEs for model y
  new_model_z <- coeftest(model_z, vcov=vcovHC, type="HC1") #robust SEs for model z
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  name_y_df <- tidy(new_model_y) #create df
  name_y_df <- name_y_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_y}}) #remove inter
  name_z_df <- tidy(new_model_z) #create df
  name_z_df <- name_z_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_z}})#remove interc
  models <- rbind(name_x_df, name_y_df, name_z_df)

#plot
  plot <- dwplot(models,
        vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, shape=c(15,16,17)),
       whisker_args = list(size=0.7),
dodge_size = 0.8
) %>%
relabel_predictors(treat_long_collapse2 = "")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[3], models$model[2], models$model[1]),
        values = list("black", "black", "black")
        )+
  scale_shape_manual(
    name= "Legend",
    labels = list(models$model[3],models$model[2], models$model[1]),
    values=list(15,16, 17)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15:17))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)
  coef_2 <- format(round(c(models$estimate[2]), 3), nsmall=3)
  coef_3 <- format(round(c(models$estimate[3]), 3), nsmall=3)


  plot + annotate(x=models$estimate[3], y=1.35, label=coef_3,geom="label", color="black")+
    annotate(x=models$estimate[2], y=0.92, label=coef_2,geom="label", color="black") +
  annotate(x=models$estimate[1], y=0.65, label=coef_1,geom="label", color="black")
  }
```

```r
####Four Models####
plot_generate_4 <- function(model_x, model_y, model_z, model_t, name_x, name_y, name_z, name_t, plot_ti

  #convert models into tidy dataframes with Robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
  new_model_y <- coeftest(model_y, vcov=vcovHC, type="HC1") #robust SEs for model y
  new_model_z <- coeftest(model_z, vcov=vcovHC, type="HC1") #robust SEs for model z
  new_model_t <- coeftest(model_t, vcov=vcovHC, type="HC1") #robust SEs for model t
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  name_y_df <- tidy(new_model_y) #create df
  name_y_df <- name_y_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_y}}) #remove inter
  name_z_df <- tidy(new_model_z) #create df
  name_z_df <- name_z_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_z}})#remove interc
  name_t_df <- tidy(new_model_t) #create df
  name_t_df <- name_t_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_t}})#remove interc
  models <- rbind(name_x_df, name_y_df, name_z_df, name_t_df)

#plot
  plot <- dwplot(models,
        vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, shape=c(15,16,17,18)),
       whisker_args = list(size=0.7),
dodge_size = 1
) %>%
relabel_predictors(treat_long_collapse2 = "Intention-To-Treat Effect
                   of Vicarious Contact")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[4], models$model[3], models$model[2], models$model[1]),
        values = list("black", "black", "black", "black")
        )+
  scale_shape_manual(
    name= "Legend",
    labels = list(models$model[4], models$model[3],models$model[2], models$model[1]),
    values=list(15,16, 17, 18)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15:18))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))
```

```
  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)
  coef_2 <- format(round(c(models$estimate[2]), 3), nsmall=3)
  coef_3 <- format(round(c(models$estimate[3]), 3), nsmall=3)
  coef_4 <- format(round(c(models$estimate[4]), 3), nsmall=3)


  plot +
    annotate(x=models$estimate[4], y=1.45, label=coef_4,geom="label", color="black")+
    annotate(x=models$estimate[3], y=1.2, label=coef_3,geom="label", color="black")+
    annotate(x=models$estimate[2], y=0.8, label=coef_2,geom="label", color="black")+
    annotate(x=models$estimate[1], y=0.55, label=coef_1,geom="label", color="black")
  }

#### Four Models Alt####
plot_generate_4_2 <- function(model_x, model_y, model_z, model_t, name_x, name_y, name_z, name_t, plot_

  #convert models into tidy dataframes with Robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
  new_model_y <- coeftest(model_y, vcov=vcovHC, type="HC1") #robust SEs for model y
  new_model_z <- coeftest(model_z, vcov=vcovHC, type="HC1") #robust SEs for model z
  new_model_t <- coeftest(model_t, vcov=vcovHC, type="HC1") #robust SEs for model t
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  name_y_df <- tidy(new_model_y) #create df
  name_y_df <- name_y_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_y}}) #remove inter
  name_z_df <- tidy(new_model_z) #create df
  name_z_df <- name_z_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_z}})#remove interc
  name_t_df <- tidy(new_model_t) #create df
  name_t_df <- name_t_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_t}})#remove interc
  models <- rbind(name_x_df, name_y_df, name_z_df, name_t_df)

#plot
  plot <- dwplot(models,
        vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, shape=c(15,16,17,18)),
       whisker_args = list(size=0.7),
dodge_size = 1
) %>%
relabel_predictors(treat_shortlong_collapse = "Intention-To-Treat Effect
                   of Vicarious Contact")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[4], models$model[3], models$model[2], models$model[1]),
        values = list("black", "black", "black", "black")
        )+
  scale_shape_manual(
    name= "Legend",
```

```
    labels = list(models$model[4], models$model[3],models$model[2], models$model[1]),
    values=list(15,16, 17, 18)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15:18))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)
  coef_2 <- format(round(c(models$estimate[2]), 3), nsmall=3)
  coef_3 <- format(round(c(models$estimate[3]), 3), nsmall=3)
  coef_4 <- format(round(c(models$estimate[4]), 3), nsmall=3)


  plot +
    annotate(x=models$estimate[4], y=1.45, label=coef_4,geom="label", color="black")+
    annotate(x=models$estimate[3], y=1.2, label=coef_3,geom="label", color="black")+
    annotate(x=models$estimate[2], y=0.8, label=coef_2,geom="label", color="black")+
    annotate(x=models$estimate[1], y=0.55, label=coef_1,geom="label", color="black")
  }


####Five Models####
plot_generate_5 <- function(model_x, model_y, model_z, model_t, model_w, name_x, name_y, name_z, name_t

  #convert models into tidy dataframes with Robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model x
  new_model_y <- coeftest(model_y, vcov=vcovHC, type="HC1") #robust SEs for model y
  new_model_z <- coeftest(model_z, vcov=vcovHC, type="HC1") #robust SEs for model z
  new_model_t <- coeftest(model_t, vcov=vcovHC, type="HC1") #robust SEs for model t
  new_model_w <- coeftest(model_w, vcov=vcovHC, type="HC1") #robust SEs for model t
  name_x_df <- tidy(new_model_x) #create df
  name_x_df <- name_x_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) #remove inter
  name_y_df <- tidy(new_model_y) #create df
  name_y_df <- name_y_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_y}}) #remove inter
  name_z_df <- tidy(new_model_z) #create df
  name_z_df <- name_z_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_z}})#remove interc
  name_t_df <- tidy(new_model_t) #create df
  name_t_df <- name_t_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_t}})#remove interc
  name_w_df <- tidy(new_model_w) #create df
  name_w_df <- name_w_df %>% filter(term != "(Intercept)") %>% mutate(model = {{name_w}})#remove interc
  models <- rbind(name_x_df, name_y_df, name_z_df, name_t_df, name_w_df)

#plot
  plot <- dwplot(models,
         vline = geom_vline(
          xintercept = 0,
          linetype= "dashed",
          color = "black"),
```

```
       dot_args = list(size=5, shape=c(15,16,17,18,19)),
       whisker_args = list(size=0.7),
dodge_size = 1
) %>%
relabel_predictors(treat_long_collapse2 = "Intention-To-Treat Effect
                   of Vicarious Contact")+
  ggtitle(plot_title) +
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  scale_colour_manual(
        name = "Legend",
        labels = list(models$model[5], models$model[4], models$model[3], models$model[2], models$model[
        values = list("black", "black", "black", "black", "black")
        )+
  scale_shape_manual(
    name= "Legend",
    labels = list(models$model[5], models$model[4], models$model[3],models$model[2], models$model[1]),
    values=list(15,16, 17, 18, 19)
  )+
  guides(color = guide_legend(override.aes=list(shape=c(15:19))))+
  theme_bw()+
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  coef_1 <- format(round(c(models$estimate[1]), 3), nsmall=3)
  coef_2 <- format(round(c(models$estimate[2]), 3), nsmall=3)
  coef_3 <- format(round(c(models$estimate[3]), 3), nsmall=3)
  coef_4 <- format(round(c(models$estimate[4]), 3), nsmall=3)
  coef_5 <- format(round(c(models$estimate[5]), 3), nsmall=3)


  plot +
    annotate(x=models$estimate[5], y=1.48, label=coef_5,geom="label", color="black") +
    annotate(x=models$estimate[4], y=1.28, label=coef_4,geom="label", color="black")+
    annotate(x=models$estimate[3], y=1.08, label=coef_3,geom="label", color="black")+
    annotate(x=models$estimate[2], y=0.72, label=coef_2,geom="label", color="black")+
    annotate(x=models$estimate[1], y=0.52, label=coef_1,geom="label", color="black")
  }

####Six Models####
plot_generate_6 <- function(model_x, model_y, model_z, model_t, model_w, model_v, name_x, name_y, name_

  # Convert models into tidy dataframes with Robust SEs
  new_model_x <- coeftest(model_x, vcov=vcovHC, type="HC1") # robust SEs for model x
  new_model_y <- coeftest(model_y, vcov=vcovHC, type="HC1") # robust SEs for model y
  new_model_z <- coeftest(model_z, vcov=vcovHC, type="HC1") # robust SEs for model z
  new_model_t <- coeftest(model_t, vcov=vcovHC, type="HC1") # robust SEs for model t
  new_model_w <- coeftest(model_w, vcov=vcovHC, type="HC1") # robust SEs for model w
  new_model_v <- coeftest(model_v, vcov=vcovHC, type="HC1") # robust SEs for model v
```

```
name_x_df <- tidy(new_model_x) %>% filter(term != "(Intercept)") %>% mutate(model = {{name_x}}) # rem
name_y_df <- tidy(new_model_y) %>% filter(term != "(Intercept)") %>% mutate(model = {{name_y}}) # rem
name_z_df <- tidy(new_model_z) %>% filter(term != "(Intercept)") %>% mutate(model = {{name_z}}) # rem
name_t_df <- tidy(new_model_t) %>% filter(term != "(Intercept)") %>% mutate(model = {{name_t}}) # rem
name_w_df <- tidy(new_model_w) %>% filter(term != "(Intercept)") %>% mutate(model = {{name_w}}) # rem
name_v_df <- tidy(new_model_v) %>% filter(term != "(Intercept)") %>% mutate(model = {{name_v}}) # rem

models <- rbind(name_x_df, name_y_df, name_z_df, name_t_df, name_w_df, name_v_df) # Combine models

# Plot
plot <- dwplot(models,
      vline = geom_vline(xintercept = 0, linetype = "dashed", color = "black"),
      dot_args = list(size = 5, shape = c(15, 16, 17, 18, 19, 20)),
      whisker_args = list(size = 0.7),
      dodge_size = 1
    ) %>%
    relabel_predictors(treat_long_collapse2 = "Intention-To-Treat Effect
                       of Vicarious Contact") +
    ggtitle(plot_title) +
    xlab("Coefficient Estimate with 95% Confidence Intervals") +
    xlim(xlim) +
    scale_colour_manual(
      name = "Legend",
      labels = list(models$model[6], models$model[5], models$model[4], models$model[3], models$model[
      values = list("black", "black", "black", "black", "black", "black")
    ) +
    scale_shape_manual(
      name = "Legend",
      labels = list(models$model[6], models$model[5], models$model[4], models$model[3], models$model[
      values = list(15, 16, 17, 18, 19, 20)
    ) +
    guides(color = guide_legend(override.aes = list(shape = c(15:20)))) +
    theme_bw() +
    theme(
      plot.title = element_text(size = 14, face = "bold"),
      axis.text.x = element_text(size = 12),
      axis.text.y = element_text(size = 11),
      axis.title.x = element_text(size = 12),
      legend.title = element_text(size = 11, face = "bold"),
      legend.text = element_text(size = 10)
    )

coef_1 <- format(round(c(models$estimate[1]), 3), nsmall = 3)
coef_2 <- format(round(c(models$estimate[2]), 3), nsmall = 3)
coef_3 <- format(round(c(models$estimate[3]), 3), nsmall = 3)
coef_4 <- format(round(c(models$estimate[4]), 3), nsmall = 3)
coef_5 <- format(round(c(models$estimate[5]), 3), nsmall = 3)
coef_6 <- format(round(c(models$estimate[6]), 3), nsmall = 3)

plot +
  annotate(x = models$estimate[6], y = 1.48, label = coef_6, geom = "label", color = "black") +
  annotate(x = models$estimate[5], y = 1.31, label = coef_5, geom = "label", color = "black") +
  annotate(x = models$estimate[4], y = 1.15, label = coef_4, geom = "label", color = "black") +
```

```
    annotate(x = models$estimate[3], y = 0.86, label = coef_3, geom = "label", color = "black") +
    annotate(x = models$estimate[2], y = 0.70, label = coef_2, geom = "label", color = "black") +
    annotate(x = models$estimate[1], y = 0.53, label = coef_1, geom = "label", color = "black")
}




####Seven Models####
plot_generate_7 <- function(models_list, names_list, plot_title, xlim) {

  models <- lapply(models_list, function(model) {
    coeftest(model, vcov = vcovHC, type = "HC1") %>%
      tidy() %>%
      filter(term != "(Intercept)")
  })

  names_df <- lapply(names_list, function(name) {
    data.frame(model = rep(name, nrow(models[[1]])))
  })

  models <- Map(cbind, models, names_df)

  models <- do.call(rbind, models)

  plot <- dwplot(models,
                 vline = geom_vline(
                   xintercept = 0,
                   linetype = "dashed",
                   color = "black"),
                 dot_args = list(size = 5),
                 whisker_args = list(size = 0.7),
                 dodge_size = 1
  ) %>%
    relabel_predictors(`treat_long_collapse2` = "Long Video vs. Placebo") +
    ggtitle(plot_title) +
    xlab("Coefficient Estimate with 95% Confidence Intervals") +
    xlim(xlim) +
    scale_colour_brewer(palette = "Dark2", name = "Model") +
    scale_shape_manual(values = rep(16, length(names_list))) +
    guides(color = rev(guide_legend(override.aes = list(shape = 16)))) +
    theme_minimal() +
    theme(
      plot.title = element_text(size = 14, face = "bold"),
      axis.text.x = element_text(size = 12),
      axis.text.y = element_text(size = 12),
      axis.title.x = element_text(size = 12),
      legend.title = element_text(size = 11, face = "bold"),
      legend.text = element_text(size = 10)
    )

  plot
}
```

```r
#### Seven Models Fix ####
plot_generate_7b <- function(models_list, names_list, plot_title, x_limits) {
  library(broom)
  library(sandwich)
  library(dotwhisker)
  library(dplyr)
  library(ggplot2)

  models <- lapply(models_list, function(model) {
    message("Tidying model")
    coeftest(model, vcov = vcovHC, type = "HC1") %>%
      tidy() %>%
      filter(term != "(Intercept)")
  })

  message("Tidied all models")

  # Make sure all models have the same number of terms
  term_counts <- sapply(models, nrow)
  if(length(unique(term_counts)) != 1) {
    stop("All models must have the same number of coefficients to bind correctly.")
  }

  names_df <- mapply(function(name, model_df) {
    data.frame(model = rep(name, nrow(model_df)))
  }, names_list, models, SIMPLIFY = FALSE)

  models <- Map(cbind, models, names_df)
  models_df <- do.call(rbind, models)

  message("Creating dwplot")

  p <- tryCatch({
    dwplot(models_df,
           vline = geom_vline(xintercept = 0, linetype = "dashed", color = "black"),
           dot_args = list(size = 5),
           whisker_args = list(size = 0.7),
           dodge_size = 1
    )
  }, error = function(e) {
    stop("dwplot failed: ", e$message)
  })

  message("After dwplot")
  print(class(p))

  p <- tryCatch({
    relabel_predictors(p, treat_long_collapse2 = "Long Video vs. Placebo")
  }, error = function(e) {
    stop("relabel_predictors failed: ", e$message)
  })
```

```
  message("After relabel_predictors")
  print(class(p))

  # Ensure x_limits is numeric
  if (!is.numeric(x_limits) || length(x_limits) != 2) {
    stop("x_limits must be a numeric vector of length 2.")
  }

  # Add aesthetics and return
  p <- p +
    ggtitle(plot_title) +
    xlab("Coefficient Estimate with 95% Confidence Intervals") +
    ggplot2::xlim(x_limits) +
    scale_colour_brewer(palette = "Dark2", name = "Model") +
    scale_shape_manual(values = rep(16, length(names_list))) +
    guides(color = guide_legend(override.aes = list(shape = 16))) +
    theme_minimal() +
    theme(
      plot.title = element_text(size = 14, face = "bold"),
      axis.text.x = element_text(size = 12),
      axis.text.y = element_text(size = 12),
      axis.title.x = element_text(size = 12),
      legend.title = element_text(size = 11, face = "bold"),
      legend.text = element_text(size = 10)
    )

  message("Final plot built successfully.")
  return(p)
}
```

Create Analysis + Plotting Functions: CATEs

```
####Create CATE DF####
get_cate <- function(model_x, name_1, name_2){
  model <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model_x
  model_df <- tidy(model) #create df
  model_df <- model_df %>% #remove intercept
    filter(term != "(Intercept)")

  #get estimate (Beta 1 + Beta 3)
  estimate = model_df$estimate[1] + model_df$estimate[3]

  #get standard errors using vcov matrix
  vc <- vcovHC(model_x, type="HC1")
  varb1 <- vc[2, 2]
  varb3 <- vc[4, 4]
  covb1b3 <- vc[2, 4]
  se <- sqrt(varb1+varb3+2*covb1b3)

  #get degrees of freedom
  df_res <- model_x$df.residual
```

```
  #insert values df
  model_df <- model_df %>%
    add_row(term={{name_2}},
            estimate = estimate,
            std.error = se,
            statistic = estimate/se, #t stat
            p.value = 2*pt(abs(statistic), df_res , lower.tail=F)
    ) %>%
    slice(1,3,4) %>% #reorder variables
    mutate(term = c({{name_1}}, "Interaction", {{name_2}}) #rename terms
           )
}



#no interaction
get_cate_2 <- function(model_x, name_1, name_2){
  model <- coeftest(model_x, vcov=vcovHC, type="HC1") #robust SEs for model_x
  model_df <- tidy(model) #create df
  model_df <- model_df %>% #remove intercept
    filter(term != "(Intercept)")

  #get estimate (Beta 1 + Beta 3)
  estimate = model_df$estimate[1]+ model_df$estimate[3]

  #get standard errors using vcov matrix
  vc <- vcovHC(model_x, type="HC1")
  varb1 <- vc[2, 2]
  varb3 <- vc[4, 4]
  covb1b3 <- vc[2, 4]
  se <- sqrt(varb1+varb3+2*covb1b3)

  #get degrees of freedom
  df_res <- model_x$df.residual

  #insert values df
  model_df <- model_df %>%
    add_row(term={{name_2}},
            estimate = estimate,
            std.error = se,
            statistic = estimate/se, #t stat
            p.value = 2*pt(abs(statistic), df_res , lower.tail=F)
    ) %>%
    slice(1,4) %>% #reorder variables
    mutate(term = c({{name_1}}, {{name_2}}) #rename terms
           )
}


get_cate_covars <- function(model_x, name_1, name_2, covariates = NULL) {
  model <- coeftest(model_x, vcov = vcovHC, type = "HC1") # robust SEs
  model_df <- tidy(model) # create df
  model_df <- model_df %>%
```

```
  filter(!term %in% c("(Intercept)", covars))

  # Calculate estimate and SE for interaction term
  estimate <- model_df$estimate[1] + model_df$estimate[3]
  vc <- vcovHC(model_x, type = "HC1")
  varb1 <- vc[2, 2]
  varb3 <- vc[4, 4]
  covb1b3 <- vc[2, 4]
  se <- sqrt(varb1 + varb3 + 2 * covb1b3)
  df_res <- model_x$df.residual

  # Create the final data frame
  model_df <- model_df %>%
    add_row(
      term = {{name_2}},
      estimate = estimate,
      std.error = se,
      statistic = estimate / se,
      p.value = 2 * pt(abs(estimate / se), df_res, lower.tail = FALSE)
    ) %>%
    slice(1, 3, 4) %>%
    mutate(term = c({{name_1}}, "Interaction", {{name_2}}))
  return(model_df)
}


####Plot CATE####

plot_cate <- function(cate_df, plot_title, xlim){

  #name df
  df <- cate_df %>%
    filter(term !="Interaction")

  #plot
  plot <- dwplot(df,
         vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, color="black"),
       whisker_args = list(size=0.7, color="black"),
       dodge_size = 1) +
  ggtitle(plot_title)+
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  theme_bw() +
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))
```

```
  #create HTE label

  HTE_estimate <- format(round(c(cate_df$estimate[2]), 3), nsmall=3)
  HTE_pvalue <- format(round(c(cate_df$p.value[2]), 3), nsmall=3)
  HTE_label <- paste0("HTE: beta=", HTE_estimate, ", ",
                      "p.value=", HTE_pvalue)

  plot +
    annotate(geom = "label", label = HTE_label, x=0.3, y = 0.7, size = 4)
}

plot_cate2 <- function(cate_df, plot_title, xlim){

  # Extract estimate and p-value for HTE label
  HTE_estimate <- format(round(c(cate_df$estimate[2]), 3), nsmall=3)
  HTE_pvalue <- format(round(c(cate_df$p.value[2]), 3), nsmall=3)
  HTE_label <- paste0("HTE: beta=", HTE_estimate, ", p.value=", HTE_pvalue)

  # Name df and plot
  df <- cate_df %>%
    filter(term != "Interaction")

  plot <- dwplot(df,
         vline = geom_vline(
         xintercept = 0,
         linetype= "dashed",
         color = "black"),
       dot_args = list(size=5, color="black"),
       whisker_args = list(size=0.7, color="black"),
       dodge_size = 1) +
  ggtitle(plot_title)+
  xlab("Coefficient Estimate with 95% Confidence Intervals")+
  xlim(xlim)+
  theme_bw() +
  theme(plot.title = element_text(size=14, face="bold"),
        axis.text.x = element_text(size = 12),
        axis.text.y = element_text(size = 12),
        axis.title.x = element_text(size=12),
        legend.title = element_text(size=11, face="bold"),
        legend.text = element_text(size=10))

  # Add HTE label to the plot
  plot <- plot +
    annotate(geom = "label", label = HTE_label, x = 0.3, y = 0.7, size = 4)

  # Return the plot and the label (HTE_label) for later use
  return(list(plot = plot, label = HTE_label))
}
```

Regression Tables Function

```r
#Table functions take lm_robust models as input (robust standard errors come with the model)

#### One Model####
get_table_1 <- function(model, table_title, model_name){
  texreg(
    model,
    custom.model.names = model_name,
    caption = table_title,
    caption.above = T,
    omit.coef = "(Intercept)",
    include.ci=F,
    fontsize = "large",
    float.pos = "H",
    threeparttable = T,
    custom.note = "\\item %stars. \\\\ Robust standard errors are used."
  )
  }


#### Two Models ####
get_table_2 <- function(model1, model2, table_title, model1_name, model2_name){

  models <- list(model1, model2)

  texreg(
    models,
    custom.model.names = c(model1_name, model2_name),
    caption = table_title,
    caption.above = T,
    omit.coef = "(Intercept)",
    include.ci=F,
    fontsize = "large",
    float.pos = "H",
    threeparttable = T,
    custom.note = "\\item %stars. \\\\ Robust standard errors are used."
  )
  }



#### Three Models ####
get_table_3 <- function(model1, model2, model3, table_title, model1_name, model2_name, model3_name){

  models <- list(model1, model2, model3)

  texreg(
    models,
    custom.model.names = c(model1_name, model2_name, model3_name),
    caption = table_title,
    caption.above = T,
    omit.coef = "(Intercept)",
    include.ci=F,
    fontsize = "large",
```

```
    float.pos = "H",
    threeparttable = T,
    custom.note = "\\item %stars. \\\\ Robust standard errors are used."
  )
  }


####Four Models####
get_table_4 <- function(model1, model2, model3, model4, table_title, model1_name, model2_name, model3_na

  models <- list(model1, model2, model3, model4)

  texreg(
    models,
    custom.model.names = c(model1_name, model2_name, model3_name, model4_name),
    caption = table_title,
    caption.above = T,
    omit.coef = "(Intercept)",
    include.ci=F,
    fontsize = "large",
    float.pos = "H",
    threeparttable = T,
    custom.note = "\\item %stars. \\\\ Robust standard errors are used."
  )
  }
```

Model Summary Lines for Latex

```
#Regular

latex_summary <- function(model) {
  # Compute robust standard errors (HC1)
  robust_se <- sqrt(diag(vcovHC(model, type = "HC1")))

  # Include the coefficient estimate
  coef_est <- coef(model)[-1]

  # Construct robust confidence intervals
  ci_str <- paste0(", 95\\% CI ", format(round(coef_est - 1.96 * robust_se, 3), nsmall = 3), " to ", fo

  # Calculate p-value using robust standard errors
  robust_p_value <- 2 * (1 - pnorm(abs(coef_est) / robust_se))
  p_value_str <- format(round(robust_p_value, 3), nsmall = 3)

  # Get the number of observations
  n_obs <- length(model$model[, 1])
  n_obs_str <- paste0("$N$ = ", n_obs)

  latex_line <- paste("$\beta$ =", format(round(coef_est, 3), nsmall = 3), ci_str, "$P$ =", p_value_str

  return(latex_line)
}
```

```r
#CATE
latex_summary_cate <- function(df, model) {
  output_lines <- df %>%
    rowwise() %>%
    mutate(
      term = paste("$\\beta$ =", format(round(estimate, 3), nsmall = 3)),
      ci_str = paste0("95\\% CI", format(round(estimate - 1.96 * std.error, 3), nsmall = 3), " to ", fo
      p_value_str = paste0("$P$=", format(round(p.value,3), nsmall = 3))
    ) %>%
    select(term, ci_str, p_value_str) %>%
    summarise(latex_line = paste(term, ci_str, p_value_str, collapse = " "))

  # Extract the number of observations from the model object
  n_obs <- nobs(model)
  n_obs_str <- paste0("$N$=", n_obs)

  output_lines$latex_line <- paste(output_lines$latex_line, n_obs_str)

  return(output_lines$latex_line)
}
```

Analysis

Figure 1: Vicarious intergroup contact reduced affective polarization among a nationally representative sample of Americans

```r
####Regression####

#placebo vs long (with IPWs)
H1.1 <- lm(aff_pol_idx~treat_long_collapse2, final_drops, weights=ipw_matched_w2_noimp)
#summary(H1.1)
#coeftest(H1.1, vcov = vcovHC, type="HC1") #Validated using Stata on 3/29/23 by RB


#placebo vs. long: outparty only (with IPWs)
H1.1_out <- lm(aff_pol_idx_outparty~treat_long_collapse2, final_drops, weights=ipw_matched_w2_noimp)
#summary(H1.1_out)
#coeftest(H1.1_out, vcov = vcovHC, type="HC1")

#summary statistics for in-text references
latex_summary(H1.1)
```

```
## [1] "$\beta$ = -0.140 , 95\\% CI -0.223 to -0.058, $P$ = 0.001 , $N$ = 584"
## [2] "$\beta$ = -0.140 , 95\\% CI -0.274 to -0.007, $P$ = 0.039 , $N$ = 584"
```

```r
latex_summary(H1.1_out)
```

```
## [1] "$\beta$ = -0.163 , 95\\% CI -0.248 to -0.079, $P$ = 0.000 , $N$ = 584"
## [2] "$\beta$ = -0.163 , 95\\% CI -0.297 to -0.030, $P$ = 0.017 , $N$ = 584"
```

```r
####Plot####
Main_AffPol_plot <- plot_generate_2(H1.1, H1.1_out, "Affective Polarization", "Outparty Only", "", c(-0
```

```r
#save to Figures folder
ggsave("Figures/Figure1.png", plot = Main_AffPol_plot, width=10, height=7)
```

Figure 2: Vicarious contact increases interest but not investment in depolarization activities

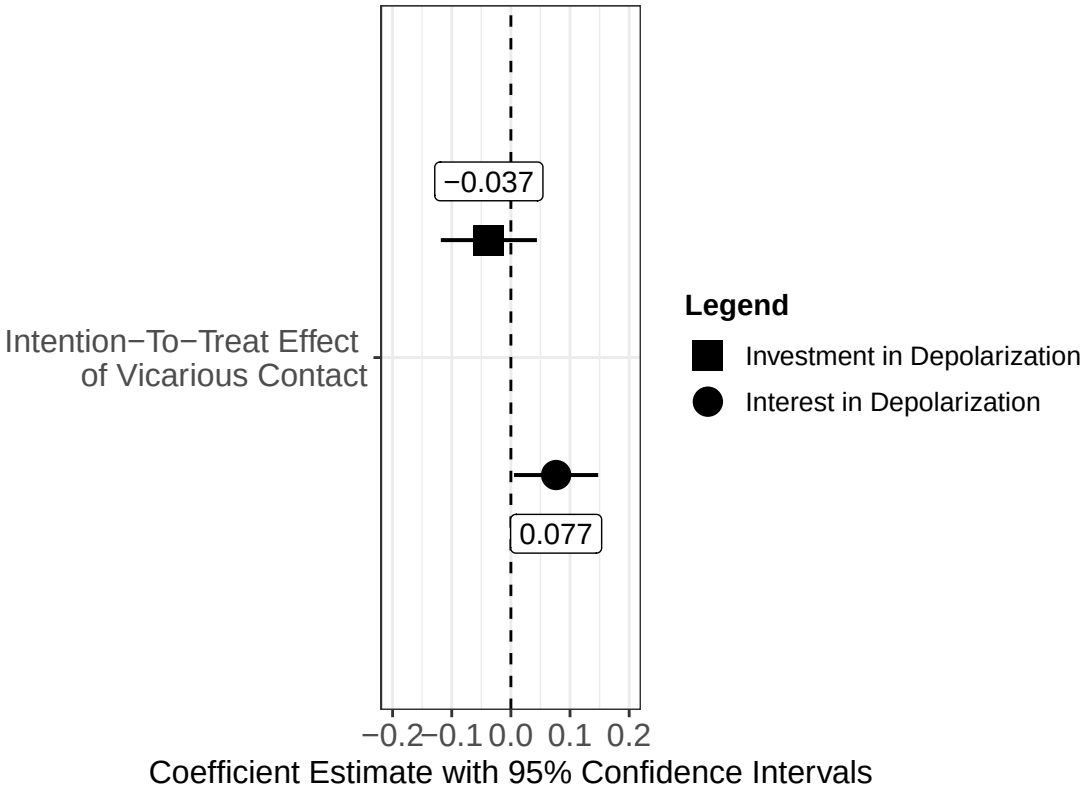
```r
##### Regressions ####

#BA newsletter click
H1.2a_click <- lm(BA_newsletter_clicked~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noi
#summary(H1.2a_click)
#coeftest(H1.2a_click, vcov = vcovHC, type="HC1") #Validated using Stata on 3/29/23 by RB

latex_summary(H1.2a_click)
```

```
## [1] "$\beta$ = 0.077 , 95\\% CI 0.039 to 0.114, $P$ = 0.000 , $N$ = 509"
## [2] "$\beta$ = 0.077 , 95\\% CI 0.005 to 0.148, $P$ = 0.035 , $N$ = 509"
```

```r
#donations
H1.2b <- lm(donate_any~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)
#summary(H1.2b)
#coeftest(H1.2b, vcov = vcovHC, type="HC1") #Validated using Stata on 3/29/23 by RB

latex_summary(H1.2b)
```

```
## [1] "$\beta$ = -0.037 , 95\\% CI -0.097 to 0.023, $P$ = 0.224 , $N$ = 583"
## [2] "$\beta$ = -0.037 , 95\\% CI -0.118 to 0.044, $P$ = 0.369 , $N$ = 583"
```

```r
#### Plot ####

#investment and interest plot
behavior_plot <- plot_generate_2(H1.2a_click, H1.2b, "Interest in Depolarization", "Investment in Depol

#show
print(behavior_plot)
```




```
#save to figures folder
ggsave("Figures/Figure2.png", plot = behavior_plot, width=10, height=7)
```

Figure 3: Vicarious contact increased optimism and strengthened belief in the efficacy of dialogue

```
#### Regression ####

#belief in possibility of non-violent democratic change
Y1.1 <- lm(nonviol_change_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)

#belief in efficacy of dialogue
Y1.4 <- lm(dialogue_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)

#optimism about restoring civility
Y2.1 <- lm(optimism_civil_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)

#optimism about survival of democratic institutions
Y2.2 <- lm(optimism_survive_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)

latex_summary(Y1.1)
```

```
## [1] "$\beta$ = 0.176 , 95\\% CI  0.025 to 0.327, $P$ = 0.022 , $N$ = 583"
## [2] "$\beta$ = 0.176 , 95\\% CI -0.055 to 0.407, $P$ = 0.135 , $N$ = 583"
```

```
latex_summary(Y1.4)
```

```
## [1] "$\beta$ = 0.457 , 95\\% CI 0.319 to 0.596, $P$ = 0.000 , $N$ = 528"
## [2] "$\beta$ = 0.457 , 95\\% CI 0.249 to 0.665, $P$ = 0.000 , $N$ = 528"
```

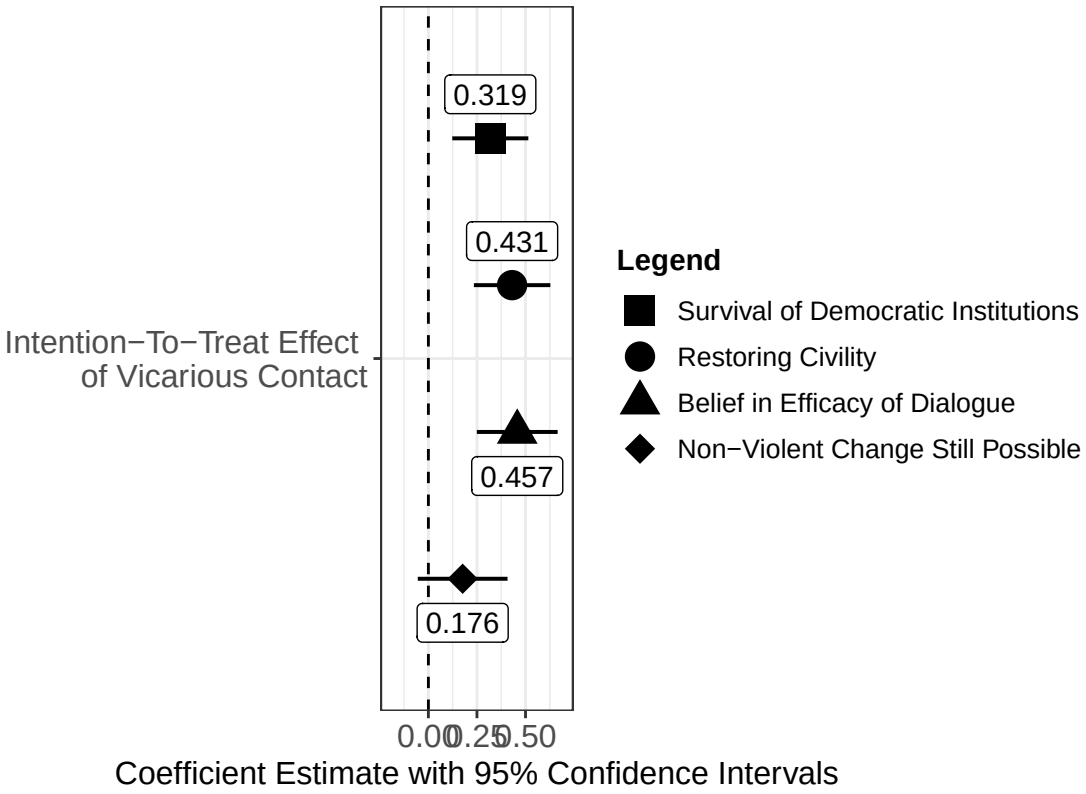
```
latex_summary(Y2.1)
```

```
## [1] "$\beta$ = 0.431 , 95\\% CI 0.301 to 0.561, $P$ = 0.000 , $N$ = 583"
## [2] "$\beta$ = 0.431 , 95\\% CI 0.234 to 0.628, $P$ = 0.000 , $N$ = 583"
```

```
latex_summary(Y2.2)
```

```
## [1] "$\beta$ = 0.319 , 95\\% CI 0.192 to 0.446, $P$ = 0.000 , $N$ = 583"
## [2] "$\beta$ = 0.319 , 95\\% CI 0.123 to 0.515, $P$ = 0.001 , $N$ = 583"
```

```
#### Plot ####

#New plot, created 11/26 for paper
optimism_plot_PAP <- plot_generate_4(Y1.1, Y1.4, Y2.1, Y2.2, "Non-Violent Change Still Possible", "Beli

print(optimism_plot_PAP)
```



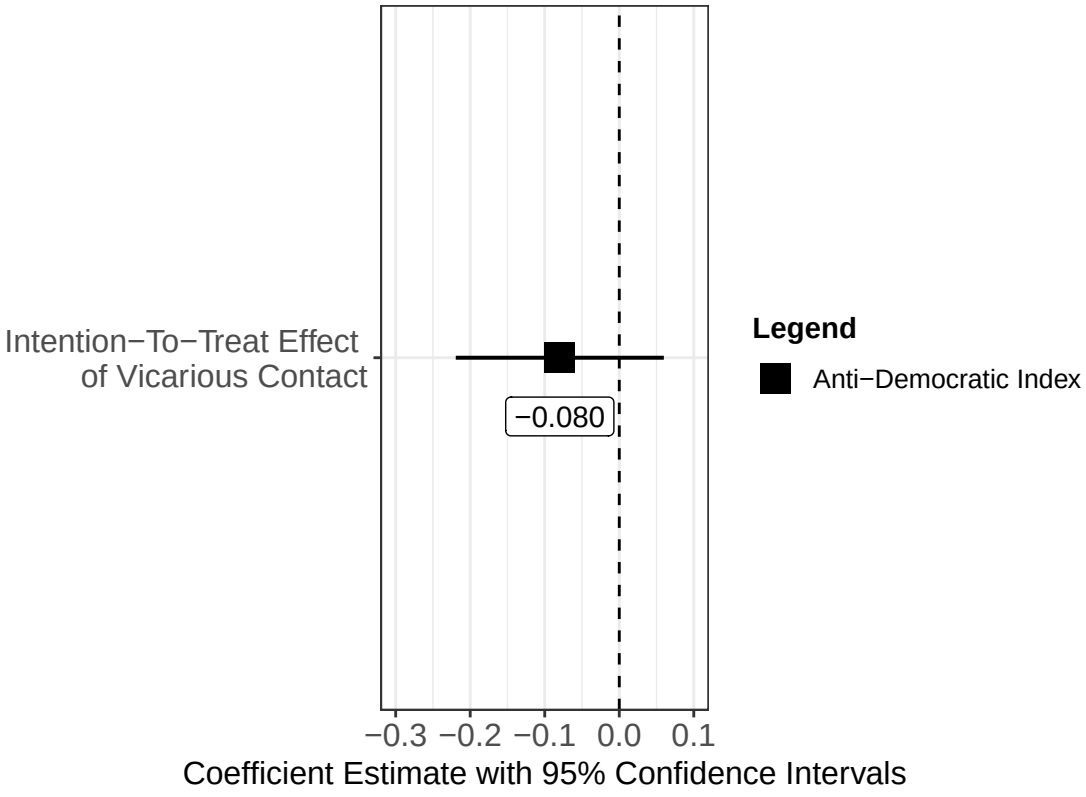

```
#save
ggsave("Figures/Figure3.png", plot = optimism_plot_PAP, width=10, height=7)
```

Figure 4: Vicarious contact does not affect support for anti-democratic actions

```
####Regression####
H2.1 <- lm(antidem_idx~treat_long_collapse2, final_drops, weights=ipw_matched_w2_noimp)

latex_summary(H2.1)
```

```
## [1] "$\beta$ = -0.080 , 95\\% CI -0.167 to 0.007, $P$ = 0.071 , $N$ = 583"
## [2] "$\beta$ = -0.080 , 95\\% CI -0.219 to 0.060, $P$ = 0.263 , $N$ = 583"
```

```
Antidem_main_plot <- plot_generate_1(H2.1, "Anti-Democratic Index", "", c(-.3, .1))

#check
print(Antidem_main_plot)
```




```
#save plot
ggsave("Figures/Figure4.png", plot = Antidem_main_plot, width=10, height=7)
```

Figure 5: Vicarious contact reduced affective polarization primarily among Democrats

```
####Regressions####
HTE1.1 <- lm(aff_pol_idx~treat_long_collapse2*partyID, final_drops, weights = ipw_matched_w2_noimp)

#get df for cate
HTE1.1_df <- get_cate(HTE1.1, "Democrats", "Republicans")

head(HTE1.1_df)
```

```
## # A tibble: 3 x 5
##   term         estimate std.error statistic p.value
##   <chr>           <dbl>     <dbl>     <dbl>   <dbl>
## 1 Democrats    -0.191     0.0958    -1.99   0.0469
## 2 Interaction   0.121     0.135      0.899  0.369
## 3 Republicans  -0.0698    0.0947    -0.737  0.461
```

```
summary(HTE1.1)
```

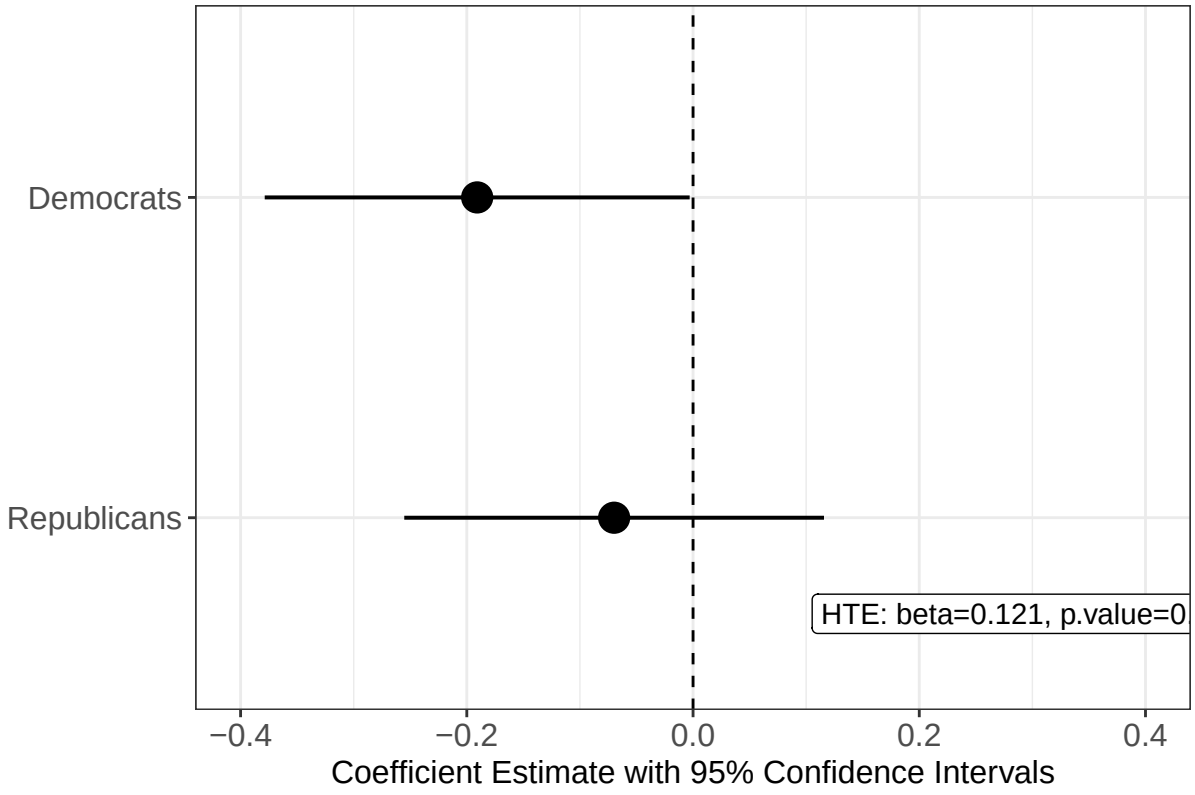
```
##
```

```
## Call:
## lm(formula = aff_pol_idx ~ treat_long_collapse2 * partyID, data = final_drops,
##     weights = ipw_matched_w2_noimp)
##
## Weighted Residuals:
##     Min      1Q  Median      3Q     Max
## -3.8174 -0.5520 -0.0236  0.6110  2.9313
##
## Coefficients:
##                              Estimate Std. Error t value Pr(>|t|)
## (Intercept)                   0.13432    0.05095   2.636  0.00860 **
## treat_long_collapse2         -0.19083    0.07004  -2.725  0.00663 **
## partyID                      -0.13549    0.07876  -1.720  0.08591 .
## treat_long_collapse2:partyID  0.12107    0.10794   1.122  0.26249
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.849 on 580 degrees of freedom
##   (1989 observations deleted due to missingness)
## Multiple R-squared:  0.01682,    Adjusted R-squared:  0.01174
## F-statistic: 3.308 on 3 and 580 DF,  p-value: 0.01991
```

```
#stats table
xtable::xtable(HTE1.1_df, "CATE Statistics: Affective Polarization")
```

```
## % latex table generated in R 4.1.3 by xtable 1.8-4 package
## % Sun Jun  8 00:20:30 2025
## \begin{table}[ht]
## \centering
## \begin{tabular}{rlrrrr}
##   \hline
##  & term & estimate & std.error & statistic & p.value \\
##   \hline
## 1 & Democrats & -0.19 & 0.10 & -1.99 & 0.05 \\
##   2 & Interaction & 0.12 & 0.13 & 0.90 & 0.37 \\
##   3 & Republicans & -0.07 & 0.09 & -0.74 & 0.46 \\
##    \hline
## \end{tabular}
## \caption{CATE Statistics: Affective Polarization}
## \end{table}
```

```
#plot
AffPol_CATE_partyID <- plot_cate(HTE1.1_df, "", c(-0.4, 0.4))

#check
print(AffPol_CATE_partyID)
```




```
#save plot
ggsave("Figures/Figure5.png", plot = AffPol_CATE_partyID, width=10, height=7)
```

Figure 6

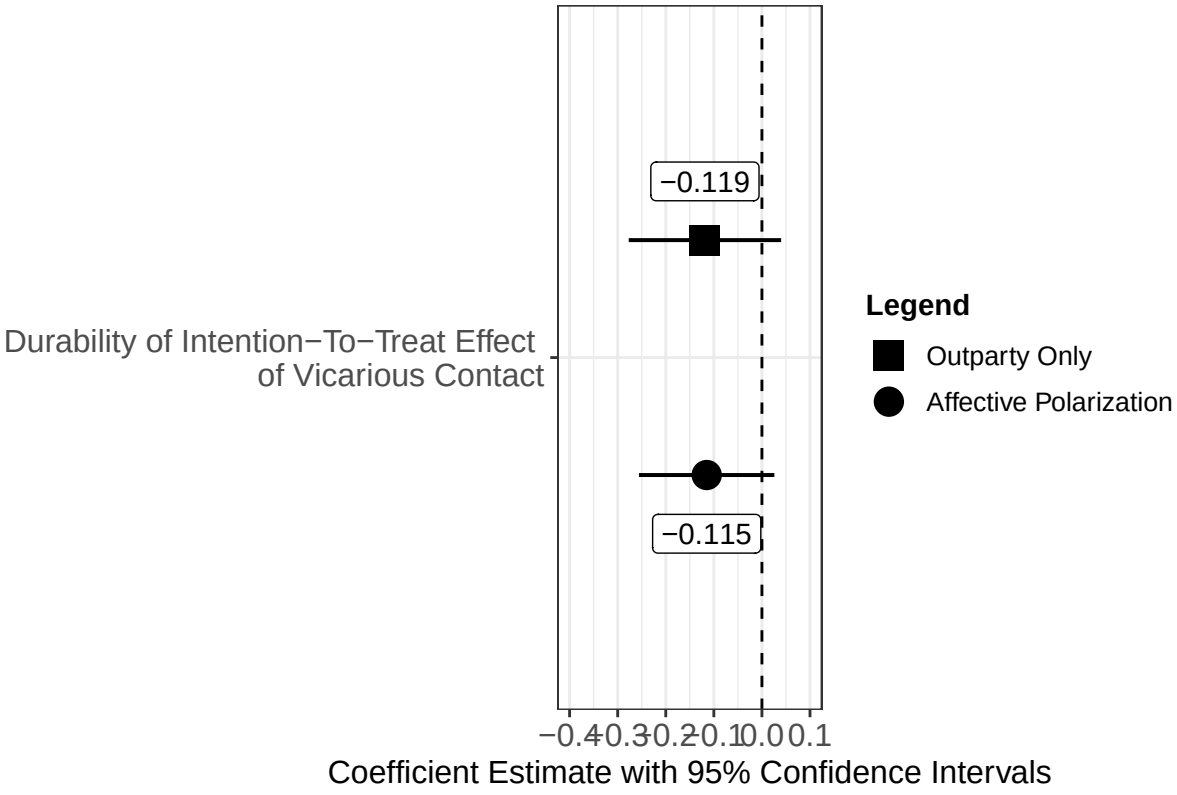
```
####Regression####
#placebo vs long (with IPWs)
R3.1 <- lm(aff_pol_idx_w3~treat_long_collapse2, final_drops, weights=ipw_matched_w3_noimp)

#placebo vs. long: outparty only (with IPWs)
R3.1_out <- lm(aff_pol_idx_outparty_w3~treat_long_collapse2, final_drops, weights=ipw_matched_w3_noimp)

latex_summary(R3.1)
```

```
## [1] "$\beta$ = -0.115 , 95\\% CI -0.206 to -0.023, $P$ = 0.014 , $N$ = 506"
## [2] "$\beta$ = -0.115 , 95\\% CI -0.256 to  0.026, $P$ = 0.110 , $N$ = 506"
```

```
latex_summary(R3.1_out)
```

```
## [1] "$\beta$ = -0.119 , 95\\% CI -0.225 to -0.012, $P$ = 0.029 , $N$ = 506"
## [2] "$\beta$ = -0.119 , 95\\% CI -0.277 to  0.040, $P$ = 0.143 , $N$ = 506"
```

```
####Plot####
W3_AffPol_plot <- plot_generate_2_w3(R3.1, R3.1_out, "Affective Polarization", "Outparty Only", "", c(-0

#check
print(W3_AffPol_plot)
```




```
#save
ggsave("Figures/Figure6.png", plot = W3_AffPol_plot, width=10, height=7)
```

Supplementary Information Tables and Figures

Descriptive statistics

```
demos <- final_drops %>%
  group_by(video_treatment) %>%
  summarise(N = length(video_treatment),
            mean_age = mean(age),
            pct_college = (sum(educ_dum)/N)*100, #4-year or more=1
            pct_female =  (sum(sex)/N)*100, #male is 0
            pct_republican = (sum(partyID)/N)*100,
            pct_child = sum(child/N, na.rm = T)*100, #child
            pct_white = sum(white/N, na.rm = T)*100,
            pct_christian = sum(christian/N, na.rm = T)*100
  )

demos_2 <- final_drops %>%
  summarise(
            mean_age = mean(age),
            pct_college = sum(educ_dum/2573)*100, #4-year or more=1
            pct_female =  sum(sex/2573)*100, #male is 0
            pct_republican = sum(partyID/2573)*100,
            pct_child = sum(child/2573, na.rm = T)*100, #child
            pct_white = sum(white/2573, na.rm = T)*100,
```

```
            pct_christian = sum(christian/2573, na.rm = T)*100
  ) %>%
    mutate(
    video_treatment = "Total",
    N = 2573) %>%
  select(video_treatment, N, mean_age, pct_college, pct_female, pct_republican, pct_child, pct_white, pc

demos <- rbind(demos, demos_2)

####Means and SDs####

#create new variables
descriptives <- final_drops %>%
  mutate(
    Republican = if_else(partyID == 1,1,0),
    Democrat = if_else(partyID == 0,1,0),
    Black = if_else(race_2 == 1, 1,0),
    Hispanic = if_else(race_2 == 2, 1,0),
    Asian = if_else(race_2 == 4, 1,0),
    Male = if_else(sex == 0, 1, 0),
    Female = if_else(sex==1,1,0)
    )

# List of variables
variable_list <- list(
  descriptives$Republican,
  descriptives$Democrat,
  descriptives$age,
  descriptives$Male,
  descriptives$Female,
  descriptives$white,
  descriptives$Black,
  descriptives$Hispanic,
  descriptives$Asian,
  descriptives$educ_dum
)

# List of variable names
variable_names <- c(
  "Republican", "Democrat", "Age", "Male", "Female",
  "White", "Black", "Hispanic", "Asian", "College"
)

# Function to calculate descriptive statistics
calculate_stats <- function(variable_name, variable) {
  n <- ifelse(variable_name == "Age", sum(!is.na(variable)), sum(variable))
  mean_val <- mean(variable)
  sd_val <- sd(variable)
  return(c(n, format(mean_val, digits = 2), format(sd_val, digits = 2)))
}

# Calculate statistics for each variable
stats_list <- mapply(calculate_stats, variable_names, variable_list, SIMPLIFY = FALSE)
```

```r
# Convert the list of statistics to a matrix and add column names
stats_matrix <- do.call(rbind, stats_list)
col_names <- c("N", "Mean", "SD")
rownames(stats_matrix) <- variable_names
colnames(stats_matrix) <- col_names

# Create a data frame for the results
stats_df <- as.data.frame(stats_matrix, stringsAsFactors = FALSE)



####Nationally representative (matched)####

d2 <- descriptives %>%
  dplyr::filter(!is.na(weight))

# List of variables
variable_list <- list(
  d2$Republican,
  d2$Democrat,
  d2$age,
  d2$Male,
  d2$Female,
  d2$white,
  d2$Black,
  d2$Hispanic,
  d2$Asian,
  d2$educ_dum
)


# Calculate statistics for each variable
stats_list2 <- mapply(calculate_stats, variable_names, variable_list, SIMPLIFY = FALSE)

# Convert the list of statistics to a matrix and add column names
stats_matrix2 <- do.call(rbind, stats_list2)
col_names <- c("N", "Mean", "SD")
rownames(stats_matrix2) <- variable_names
colnames(stats_matrix2) <- col_names

# Create a data frame for the results
stats_df2 <- as.data.frame(stats_matrix2, stringsAsFactors = FALSE)

#combine
descriptive_stats <- cbind(stats_df2, stats_df)

#Tables
xtable::xtable(descriptive_stats, caption = "Descriptive statistics")
```

```
## % latex table generated in R 4.1.3 by xtable 1.8-4 package
## % Sun Jun  8 00:20:31 2025
## \begin{table}[ht]
## \centering
```

```
## \begin{tabular}{rlllll}
##   \hline
##  & N & Mean & SD & N & Mean & SD \\
##   \hline
## Republican & 812 & 0.41 & 0.49 & 1059 & 0.41 & 0.49 \\
##   Democrat & 1188 & 0.59 & 0.49 & 1514 & 0.59 & 0.49 \\
##   Age & 2000 & 50 & 18 & 2573 & 48 & 19 \\
##   Male & 929 & 0.46 & 0.5 & 1168 & 0.45 & 0.5 \\
##   Female & 1071 & 0.54 & 0.5 & 1405 & 0.55 & 0.5 \\
##   White & 1418 & 0.71 & 0.45 & 1786 & 0.69 & 0.46 \\
##   Black & 212 & 0.11 & 0.31 & 284 & 0.11 & 0.31 \\
##   Hispanic & 189 & 0.095 & 0.29 & 254 & 0.099 & 0.3 \\
##   Asian & 52 & 0.026 & 0.16 & 65 & 0.025 & 0.16 \\
##   College & 679 & 0.34 & 0.47 & 866 & 0.34 & 0.47 \\
##    \hline
## \end{tabular}
## \caption{Descriptive statistics}
## \end{table}
```

```r
# Variable name
# List of variables
variable_list_w2 <- list(
  descriptives$aff_pol_idx,
  descriptives$aff_pol_idx_outparty,
  descriptives$BA_newsletter_clicked,
  descriptives$donate_all,
  descriptives$antidem_idx,
  descriptives$stereo_outparty_neg,
  descriptives$stereo_outparty_pos,
  descriptives$mass_abortion_diff,
  descriptives$mass_marriage_diff,
  descriptives$mass_leave_diff,
  descriptives$optimism_survive,
  descriptives$optimism_pol,
  descriptives$optimism_civil,
  descriptives$dialogue
)


# List of variable names
DV_names <- c(
  "Affective Polarization", "Affective Polarization (Outparty Animus)", "BA Newsletter Clicks", "All Do
  "Positive Outparty Stereotypes", "Negative Outparty Stereotypes", "Mass Perceptions: Abortion", "Mass

# Function to calculate descriptive statistics
calculate_DVs <- function(variable_name, variable) {
  n <- sum(!is.na(variable))
  mean_val <- mean(variable, na.rm = T)
  sd_val <- sd(variable, na.rm = T)
  return(c(n, format(mean_val, digits = 2), format(sd_val, digits = 2)))
}

# Calculate statistics for each variable
stats_list_3 <- mapply(calculate_DVs, DV_names, variable_list_w2, SIMPLIFY = FALSE)
```

```r
# Convert the list of statistics to a matrix and add column names
stats_matrix_3 <- do.call(rbind, stats_list_3)
col_names <- c("N", "Mean", "SD")
rownames(stats_matrix_3) <- DV_names
colnames(stats_matrix_3) <- col_names

# Create a data frame for the results
DV_df_3 <- as.data.frame(stats_matrix_3, stringsAsFactors = FALSE)

DV_df_3 <- DV_df_3 %>%
  select("Mean", "SD", "N")


#### Nationally representative sample####
# List of variables
variable_list_w2_2 <- list(
  d2$aff_pol_idx,
  d2$aff_pol_idx_outparty,
  d2$BA_newsletter_clicked,
  d2$donate_all,
  d2$antidem_idx,
  d2$stereo_outparty_neg,
  d2$stereo_outparty_pos,
  d2$mass_abortion_diff,
  d2$mass_marriage_diff,
  d2$mass_leave_diff,
  d2$optimism_survive,
  d2$optimism_pol,
  d2$optimism_civil,
  d2$dialogue
)


# Function to calculate descriptive statistics
calculate_DVs <- function(variable_name, variable) {
  n <- sum(!is.na(variable))
  mean_val <- mean(variable, na.rm = T)
  sd_val <- sd(variable, na.rm = T)
  return(c(n, format(mean_val, digits = 2), format(sd_val, digits = 2)))
}

# Calculate statistics for each variable
stats_list_4 <- mapply(calculate_DVs, DV_names, variable_list_w2_2, SIMPLIFY = FALSE)

# Convert the list of statistics to a matrix and add column names
stats_matrix_4 <- do.call(rbind, stats_list_4)
col_names <- c("N", "Mean", "SD")
rownames(stats_matrix_4) <- DV_names
colnames(stats_matrix_4) <- col_names

# Create a data frame for the results
DV_df_4 <- as.data.frame(stats_matrix_4, stringsAsFactors = FALSE)
```

```r
DV_df_4 <- DV_df_4 %>%
  select("Mean", "SD", "N")

#combine
DV_descriptives <- cbind(DV_df_4, DV_df_3)

xtable::xtable(DV_descriptives)
```

```
## % latex table generated in R 4.1.3 by xtable 1.8-4 package
## % Sun Jun  8 00:20:31 2025
## \begin{table}[ht]
## \centering
## \begin{tabular}{rlllllll}
##   \hline
##  & Mean & SD & N & Mean & SD & N \\
##   \hline
## Affective Polarization & 0.015 & 0.64 & 1826 & -0.0016 & 0.63 & 2105 \\
##   Affective Polarization (Outparty Animus) & 0.016 & 0.65 & 1826 & -0.0015 & 0.65 & 2105 \\
##   BA Newsletter Clicks & 0.088 & 0.28 & 1622 & 0.091 & 0.29 & 1827 \\
##   All Donations & 14 & 33 & 1814 & 17 & 36 & 2090 \\
##   Anti-Democratic Attitudes & -0.031 & 0.67 & 1819 & -4.2e-05 & 0.68 & 2094 \\
##   Positive Outparty Stereotypes & 4 & 1.8 & 1816 & 3.9 & 1.8 & 2091 \\
##   Negative Outparty Stereotypes & 3.2 & 2.4 & 1816 & 3.3 & 2.4 & 2091 \\
##   Mass Perceptions: Abortion & 34 & 44 & 1618 & 32 & 44 & 1825 \\
##   Mass Perceptions: Marriage & 31 & 42 & 1594 & 30 & 42 & 1796 \\
##   Mass Perceptions: Parental Leave & 26 & 35 & 1527 & 25 & 35 & 1733 \\
##   Optimism: survival of demcoratic institutions & 2 & 1.2 & 1818 & 2 & 1.2 & 2094 \\
##   Optimism: overcoming polarization & 2.6 & 1.6 & 1819 & 2.6 & 1.6 & 2095 \\
##   Optimism: restoring civility & 2 & 1.2 & 1819 & 2 & 1.2 & 2095 \\
##   Dialogue as effective tool for change & 55 & 26 & 1676 & 55 & 26 & 1889 \\
##    \hline
## \end{tabular}
## \end{table}
```

Participants by condition

```r
#nationally representative (Table SI.3)
matched_sample <- final_drops %>%
  dplyr::filter(!is.na(weight))

treatment2 <- matched_sample %>%
  group_by(video_treatment) %>%
  summarise(Randomized = length(video_treatment),
            Wave2_Attriters = sum(matched_attriter_w2),
            N_Wave2 = Randomized-Wave2_Attriters,
            Wave3_Attriters = sum(matched_attriter_w3),
            N_Wave3 = Randomized-Wave3_Attriters)

xtable::xtable(treatment2, digits = 0)
```

```
## % latex table generated in R 4.1.3 by xtable 1.8-4 package
## % Sun Jun  8 00:20:32 2025
## \begin{table}[ht]
## \centering
```

```
## \begin{tabular}{rlrrrrr}
##   \hline
##  & video\_treatment & Randomized & Wave2\_Attriters & N\_Wave2 & Wave3\_Attriters & N\_Wave3 \\
##   \hline
## 1 & Empty Control & 458 & 99 & 359 & 156 & 302 \\
##   2 & Placebo Control & 380 & 82 & 298 & 111 & 269 \\
##   3 & Treatment Long & 351 & 65 & 286 & 112 & 239 \\
##   4 & Treatment Short PMC & 405 & 78 & 327 & 133 & 272 \\
##   5 & Treatment Short VC & 406 & 76 & 330 & 128 & 278 \\
##    \hline
## \end{tabular}
## \end{table}
```

```
#full sample (Table SI.4)
treatment <- final_drops %>%
  group_by(video_treatment) %>%
  summarise(Randomized = length(video_treatment),
            Wave2_Attriters = sum(rand_attriter),
            N_Wave2 = Randomized-Wave2_Attriters,
            Wave3_Attriters = sum(rand_attriter_w3),
            N_Wave3 = Randomized-Wave3_Attriters)

xtable::xtable(treatment, digits = 0)
```

```
## % latex table generated in R 4.1.3 by xtable 1.8-4 package
## % Sun Jun  8 00:20:32 2025
## \begin{table}[ht]
## \centering
## \begin{tabular}{rlrrrrr}
##   \hline
##  & video\_treatment & Randomized & Wave2\_Attriters & N\_Wave2 & Wave3\_Attriters & N\_Wave3 \\
##   \hline
## 1 & Empty Control & 506 & 60 & 446 & 169 & 337 \\
##   2 & Placebo Control & 514 & 113 & 401 & 188 & 326 \\
##   3 & Treatment Long & 524 & 146 & 378 & 235 & 289 \\
##   4 & Treatment Short PMC & 514 & 83 & 431 & 196 & 318 \\
##   5 & Treatment Short VC & 515 & 66 & 449 & 173 & 342 \\
##    \hline
## \end{tabular}
## \end{table}
```

Correlation Tables

```
#pre-registered index
index_items <- final_drops[, c("trust_diff_scale", "therm_diff_scale", "discomfort_outparty_friends_scal


#change names of index items
colnames(index_items) <- c("Trust", "FT", "Friends", "Marriage", "Neighbors", "Threat", "Negative_Par")


#confirm Cronbach's alpha is 0.74 (confirmed by LAK, 11/24/24)
alpha(index_items)
```

```
## Number of categories should be increased  in order to count frequencies.
```

```
##
## Reliability analysis
## Call: alpha(x = index_items)
##
##   raw_alpha std.alpha G6(smc) average_r S/N    ase    mean   sd median_r
##       0.74      0.74     0.8      0.29 2.9 0.0077 -0.0016 0.63     0.28
##
##     95% confidence boundaries
##          lower alpha upper
## Feldt     0.73  0.74  0.76
## Duhachek  0.73  0.74  0.76
##
##  Reliability if an item is dropped:
##              raw_alpha std.alpha G6(smc) average_r S/N alpha se var.r med.r
## Trust             0.72      0.72    0.75      0.30 2.5   0.0085 0.066  0.28
## FT                0.71      0.71    0.75      0.29 2.4   0.0088 0.066  0.24
## Friends           0.67      0.67    0.73      0.26 2.1   0.0099 0.053  0.28
## Marriage          0.68      0.68    0.73      0.26 2.1   0.0099 0.055  0.27
## Neighbors         0.68      0.68    0.73      0.26 2.1   0.0099 0.055  0.27
## Threat            0.71      0.71    0.78      0.29 2.5   0.0087 0.084  0.24
## Negative_Par      0.80      0.80    0.83      0.40 4.1   0.0063 0.039  0.29
##
##  Item statistics
##                 n raw.r std.r r.cor r.drop     mean sd
## Trust        2095  0.61  0.62  0.55  0.441 -2.8e-16  1
## FT           1976  0.64  0.65  0.59  0.481  1.9e-16  1
## Friends      2104  0.76  0.75  0.75  0.626  1.3e-15  1
## Marriage     2104  0.75  0.75  0.74  0.617 -1.9e-15  1
## Neighbors    2104  0.75  0.75  0.73  0.616  1.5e-15  1
## Threat       2103  0.63  0.63  0.52  0.463  3.7e-16  1
## Negative_Par 2098  0.26  0.25  0.04  0.026  3.6e-16  1
```

```
#outparty only
index_items_out <- final_drops[, c("trust_outparty_scale", "therm_outparty_scale", "discomfort_outparty

#change names of index items
colnames(index_items_out) <- c("Trust (out)", "FT (out)", "Friends", "Marriage", "Neighbors", "Threat",

#confirm Cronbach's alpha is 0.77 (confirmed by LAK, 11/24/24; rounded up here)
alpha(index_items_out)
```

```
## Number of categories should be increased  in order to count frequencies.
```

```
##
## Reliability analysis
## Call: alpha(x = index_items_out)
##
##   raw_alpha std.alpha G6(smc) average_r S/N    ase    mean   sd median_r
##       0.77      0.77     0.8      0.32 3.3 0.0071 -0.0015 0.65     0.28
##
##     95% confidence boundaries
##          lower alpha upper
## Feldt     0.75  0.77  0.78
## Duhachek  0.75  0.77  0.78
##
```

```
##  Reliability if an item is dropped:
##              raw_alpha std.alpha G6(smc) average_r S/N alpha se var.r med.r
## Trust (out)       0.73      0.73    0.76      0.31 2.7   0.0082 0.058  0.28
## FT (out)          0.73      0.73    0.76      0.31 2.7   0.0081 0.059  0.28
## Friends           0.70      0.70    0.73      0.28 2.4   0.0090 0.035  0.28
## Marriage          0.71      0.71    0.74      0.29 2.4   0.0089 0.038  0.28
## Neighbors         0.71      0.71    0.74      0.29 2.4   0.0089 0.038  0.28
## Threat            0.74      0.74    0.78      0.32 2.9   0.0079 0.063  0.29
## Negative_Par      0.81      0.81    0.83      0.41 4.2   0.0060 0.032  0.30
##
##  Item statistics
##                    n raw.r std.r r.cor r.drop     mean sd
## Trust (out)  2096  0.66  0.66  0.59   0.51 -2.4e-16  1
## FT (out)     1989  0.66  0.66  0.58   0.50 -8.4e-16  1
## Friends      2104  0.76  0.75  0.76   0.63  1.3e-15  1
## Marriage     2104  0.74  0.74  0.73   0.61 -1.9e-15  1
## Neighbors    2104  0.74  0.74  0.73   0.61  1.5e-15  1
## Threat       2103  0.62  0.62  0.51   0.46  3.7e-16  1
## Negative_Par 2098  0.33  0.33  0.12   0.11  3.6e-16  1
```

```
#regular index
aff_polidx_cor_matrix <- cor(index_items, use = "pairwise.complete.obs")  # Use pairwise deletion for m

#round
aff_polidx_cor_matrix <- round(aff_polidx_cor_matrix, 3)

print(aff_polidx_cor_matrix)
```

```
##               Trust     FT Friends Marriage Neighbors Threat Negative_Par
## Trust         1.000  0.673   0.236    0.244     0.227  0.409       -0.074
## FT            0.673  1.000   0.294    0.274     0.294  0.404       -0.087
## Friends       0.236  0.294   1.000    0.738     0.735  0.268        0.043
## Marriage      0.244  0.274   0.738    1.000     0.699  0.283        0.047
## Neighbors     0.227  0.294   0.735    0.699     1.000  0.283        0.046
## Threat        0.409  0.404   0.268    0.283     0.283  1.000        0.134
## Negative_Par -0.074 -0.087   0.043    0.047     0.046  0.134        1.000
```

```
xtable::xtable(aff_polidx_cor_matrix)
```

```
## % latex table generated in R 4.1.3 by xtable 1.8-4 package
## % Sun Jun  8 00:20:32 2025
## \begin{table}[ht]
## \centering
## \begin{tabular}{rrrrrrrr}
##   \hline
##  & Trust & FT & Friends & Marriage & Neighbors & Threat & Negative\_Par \\
##   \hline
## Trust & 1.00 & 0.67 & 0.24 & 0.24 & 0.23 & 0.41 & -0.07 \\
##   FT & 0.67 & 1.00 & 0.29 & 0.27 & 0.29 & 0.40 & -0.09 \\
##   Friends & 0.24 & 0.29 & 1.00 & 0.74 & 0.73 & 0.27 & 0.04 \\
##   Marriage & 0.24 & 0.27 & 0.74 & 1.00 & 0.70 & 0.28 & 0.05 \\
##   Neighbors & 0.23 & 0.29 & 0.73 & 0.70 & 1.00 & 0.28 & 0.05 \\
##   Threat & 0.41 & 0.40 & 0.27 & 0.28 & 0.28 & 1.00 & 0.13 \\
##   Negative\_Par & -0.07 & -0.09 & 0.04 & 0.05 & 0.05 & 0.13 & 1.00 \\
##    \hline
```

```
## \end{tabular}
## \end{table}
```

```
#outparty index
aff_polidx_out_cor_matrix <- cor(index_items_out, use = "pairwise.complete.obs")  # Use pairwise deleti

aff_polidx_out_cor_matrix <- round(aff_polidx_out_cor_matrix, 3)

print(aff_polidx_out_cor_matrix)
```

```
##              Trust (out) FT (out) Friends Marriage Neighbors Threat
## Trust (out)        1.000    0.574   0.299    0.298     0.283  0.443
## FT (out)           0.574    1.000   0.322    0.281     0.294  0.408
## Friends            0.299    0.322   1.000    0.738     0.735  0.268
## Marriage           0.298    0.281   0.738    1.000     0.699  0.283
## Neighbors          0.283    0.294   0.735    0.699     1.000  0.283
## Threat             0.443    0.408   0.268    0.283     0.283  1.000
## Negative_Par       0.107    0.097   0.043    0.047     0.046  0.134
##              Negative_Par
## Trust (out)         0.107
## FT (out)            0.097
## Friends             0.043
## Marriage            0.047
## Neighbors           0.046
## Threat              0.134
## Negative_Par        1.000
```

```
xtable::xtable(aff_polidx_out_cor_matrix)
```

```
## % latex table generated in R 4.1.3 by xtable 1.8-4 package
## % Sun Jun  8 00:20:32 2025
## \begin{table}[ht]
## \centering
## \begin{tabular}{rrrrrrrr}
##   \hline
##  & Trust (out) & FT (out) & Friends & Marriage & Neighbors & Threat & Negative\_Par \\
##   \hline
## Trust (out) & 1.00 & 0.57 & 0.30 & 0.30 & 0.28 & 0.44 & 0.11 \\
##   FT (out) & 0.57 & 1.00 & 0.32 & 0.28 & 0.29 & 0.41 & 0.10 \\
##   Friends & 0.30 & 0.32 & 1.00 & 0.74 & 0.73 & 0.27 & 0.04 \\
##   Marriage & 0.30 & 0.28 & 0.74 & 1.00 & 0.70 & 0.28 & 0.05 \\
##   Neighbors & 0.28 & 0.29 & 0.73 & 0.70 & 1.00 & 0.28 & 0.05 \\
##   Threat & 0.44 & 0.41 & 0.27 & 0.28 & 0.28 & 1.00 & 0.13 \\
##   Negative\_Par & 0.11 & 0.10 & 0.04 & 0.05 & 0.05 & 0.13 & 1.00 \\
##    \hline
## \end{tabular}
## \end{table}
```

Balance tests

```
long_placebo <- final_drops %>%
  dplyr::filter(!is.na(treat_long_collapse2)) %>%
  mutate(
    matched = if_else(!is.na(weight), 1, 0)
  )
```

```r
full_model <- lm(treat_long_collapse2~partyID+age+white+Black+Asian+Hispanic+Female+educ_dum+ideology_yg

full_model_2 <- lm(treat_all_collapse~partyID+age+white+Black+Asian+Hispanic+Female+educ_dum+ideology_yg

full_model_3 <- lm(treat_long_collapse2~partyID+age+white+Black+Asian+Hispanic+Female+educ_dum+ideology

full_model_4 <- lm(treat_all_collapse~partyID+age+white+Black+Asian+Hispanic+Female+educ_dum+ideology_yg


stargazer::stargazer(list(full_model_3, full_model_4), omit = "Constant", title = "Balance Test: Assignm
```

```
##
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac a
## % Date and time: Sun, Jun 08, 2025 - 00:20:32
## \begin{table}[!htbp] \centering
##   \caption{Balance Test: Assignment to Treatment as Predicted by Covariates}
##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}}lcc}
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
##  & \multicolumn{2}{c}{\textit{Dependent variable:}} \\
## \cline{2-3}
## \\[-1.8ex] & treat\_long\_collapse2 & treat\_all\_collapse \\
## \\[-1.8ex] & (1) & (2)\\
## \hline \\[-1.8ex]
##  partyID & $-$0.022 & 0.033 \\
##   & (0.044) & (0.026) \\
##   & & \\
##  age & 0.001 & 0.0001 \\
##   & (0.001) & (0.001) \\
##   & & \\
##  white & $-$0.019 & $-$0.008 \\
##   & (0.074) & (0.046) \\
##   & & \\
##  Black & 0.079 & 0.009 \\
##   & (0.092) & (0.056) \\
##   & & \\
##  Asian & 0.131 & $-$0.069 \\
##   & (0.144) & (0.082) \\
##   & & \\
##  Hispanic & 0.029 & 0.008 \\
##   & (0.092) & (0.057) \\
##   & & \\
##  Female & $-$0.043 & $-$0.030 \\
##   & (0.037) & (0.022) \\
##   & & \\
##  educ\_dum & 0.079$^{**}$ & 0.021 \\
##   & (0.040) & (0.024) \\
##   & & \\
##  ideology\_yg & 0.022 & $-$0.003 \\
##   & (0.016) & (0.010) \\
##   & & \\
```

```
## \hline \\[-1.8ex]
## Observations & 731 & 2,000 \\
## R$^{2}$ & 0.016 & 0.003 \\
## Adjusted R$^{2}$ & 0.003 & $-$0.002 \\
## Residual Std. Error & 0.499 (df = 721) & 0.494 (df = 1990) \\
## F Statistic & 1.276 (df = 9; 721) & 0.572 (df = 9; 1990) \\
## \hline
## \hline \\[-1.8ex]
## \textit{Note:}  & \multicolumn{2}{r}{$^{*}$p$<$0.1; $^{**}$p$<$0.05; $^{***}$p$<$0.01} \\
## \end{tabular}
## \end{table}
```

```
stargazer::stargazer(list(full_model, full_model_2), omit = "Constant", title = "Balance Test: Assignmer
```

```
##
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac a
## % Date and time: Sun, Jun 08, 2025 - 00:20:32
## \begin{table}[!htbp] \centering
##   \caption{Balance Test: Assignment to Treatment as Predicted by Covariates}
##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}}lcc}
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
##  & \multicolumn{2}{c}{\textit{Dependent variable:}} \\
## \cline{2-3}
## \\[-1.8ex] & treat\_long\_collapse2 & treat\_all\_collapse \\
## \\[-1.8ex] & (1) & (2)\\
## \hline \\[-1.8ex]
##  partyID & $-$0.012 & 0.021 \\
##   & (0.036) & (0.023) \\
##   & & \\
##  age & 0.001 & 0.0002 \\
##   & (0.001) & (0.001) \\
##   & & \\
##  white & $-$0.001 & $-$0.029 \\
##   & (0.062) & (0.038) \\
##   & & \\
##  Black & 0.051 & $-$0.024 \\
##   & (0.076) & (0.047) \\
##   & & \\
##  Asian & 0.111 & $-$0.106 \\
##   & (0.120) & (0.071) \\
##   & & \\
##  Hispanic & 0.053 & $-$0.020 \\
##   & (0.076) & (0.048) \\
##   & & \\
##  Female & $-$0.050 & $-$0.022 \\
##   & (0.031) & (0.020) \\
##   & & \\
##  educ\_dum & 0.040 & 0.005 \\
##   & (0.033) & (0.021) \\
##   & & \\
##  ideology\_yg & 0.020 & 0.0001 \\
##   & (0.013) & (0.008) \\
##   & & \\
```

```
## \hline \\[-1.8ex]
## Observations & 1,038 & 2,573 \\
## R$^{2}$ & 0.010 & 0.002 \\
## Adjusted R$^{2}$ & 0.001 & $-$0.002 \\
## Residual Std. Error & 0.500 (df = 1028) & 0.490 (df = 2563) \\
## F Statistic & 1.140 (df = 9; 1028) & 0.570 (df = 9; 2563) \\
## \hline
## \hline \\[-1.8ex]
## \textit{Note:}  & \multicolumn{2}{r}{$^{*}$p$<$0.1; $^{**}$p$<$0.05; $^{***}$p$<$0.01} \\
## \end{tabular}
## \end{table}
```

Attrition tables

```
#### Table SI.9 ####

# Function to extract OLS estimates and format results
extract_ols_results <- function(model) {
  coef_summary <- summary(model)$coefficients
  estimate <- coef_summary[2, 1]
  p_value <- coef_summary[2, 4]

  # Add stars based on p-value
  stars <- case_when(
    p_value < 0.001 ~ "***",
    p_value < 0.01  ~ "**",
    p_value < 0.05  ~ "*",
    TRUE            ~ ""
  )

  # Return formatted string with estimate and stars
  sprintf("%.3f (p=%.3f)%s", estimate, p_value, stars)
}

# Run models for different conditions and waves (example)
conditions <- c("Full Film vs. Placebo", "Full Film vs. Placebo + Control", "Full Film vs. Short PMC",
models_w2 <- list(
  lm(matched_attriter_w2 ~ treat_long_collapse2, final_drops), #long vs. placebo
  lm(matched_attriter_w2 ~ treat_long_collapse1, final_drops), #long vs. placebo+control
  lm(matched_attriter_w2 ~ treat_pmclong, final_drops), #long vs. PMC
  lm(matched_attriter_w2 ~ treat_vclong, final_drops), #long vs. VC
  lm(matched_attriter_w2 ~ treat_shortlong_collapse, final_drops), #long vs. both short videos
  lm(matched_attriter_w2 ~ short_pmc, final_drops), #short pmc vs. empty control
  lm(matched_attriter_w2 ~ short_vc, final_drops), #short vc vs. empty control
  lm(matched_attriter_w2 ~ treat_short_collapse, final_drops), #short vc vs. empty control
  lm(matched_attriter_w2 ~ pmc_vs_vc, final_drops) #short vs. short
)

table(final_drops$pmc_vs_vc)
```

```
##
##   0   1
## 515 514
```

```r
models_w3 <- list(
  lm(matched_attriter_w3 ~ treat_long_collapse2, final_drops), #long vs. placebo
  lm(matched_attriter_w3 ~ treat_long_collapse1, final_drops), #long vs. placebo+control
  lm(matched_attriter_w3 ~ treat_pmclong, final_drops), #long vs. PMC
  lm(matched_attriter_w3 ~ treat_vclong, final_drops), #long vs. VC
  lm(matched_attriter_w3 ~ treat_shortlong_collapse, final_drops), #long vs. both short videos
  lm(matched_attriter_w3 ~ short_pmc, final_drops), #short pmc vs. empty control
  lm(matched_attriter_w3 ~ short_vc, final_drops), #short vc vs. empty control
  lm(matched_attriter_w3 ~ treat_short_collapse, final_drops), #short vc vs. empty control
  lm(matched_attriter_w3 ~ pmc_vs_vc, final_drops) #short vs. short
)

models_w2_full <- list(
  lm(rand_attriter ~ treat_long_collapse2, final_drops), #long vs. placebo
  lm(rand_attriter ~ treat_long_collapse1, final_drops), #long vs. placebo+control
  lm(rand_attriter ~ treat_pmclong, final_drops), #long vs. PMC
  lm(rand_attriter ~ treat_vclong, final_drops), #long vs. VC
  lm(rand_attriter ~ treat_shortlong_collapse, final_drops), #long vs. both short videos
  lm(rand_attriter ~ short_pmc, final_drops), #short pmc vs. empty control
  lm(rand_attriter ~ short_vc, final_drops), #short vc vs. empty control
  lm(rand_attriter ~ treat_short_collapse, final_drops), #short vc vs. empty control
  lm(rand_attriter ~ pmc_vs_vc, final_drops) #short vs. short
)

models_w3_full <- list(
  lm(rand_attriter_w3 ~ treat_long_collapse2, final_drops), #long vs. placebo
  lm(rand_attriter_w3 ~ treat_long_collapse1, final_drops), #long vs. placebo+control
  lm(rand_attriter_w3 ~ treat_pmclong, final_drops), #long vs. PMC
  lm(rand_attriter_w3 ~ treat_vclong, final_drops), #long vs. VC
  lm(rand_attriter_w3 ~ treat_shortlong_collapse, final_drops), #long vs. both short videos
  lm(rand_attriter_w3 ~ short_pmc, final_drops), #short pmc vs. empty control
  lm(rand_attriter_w3 ~ short_vc, final_drops), #short vc vs. empty control
  lm(rand_attriter_w3 ~ treat_short_collapse, final_drops), #short vc vs. empty control
  lm(rand_attriter_w3 ~ pmc_vs_vc, final_drops) #short vs. short
)

# Create summary table
summary_table <- data.frame(
  Conditions = conditions,
  Wave2 = sapply(models_w2, extract_ols_results),
  Wave3 = sapply(models_w3, extract_ols_results),
  Wave2_FullSample = sapply(models_w2_full, extract_ols_results),
  Wave3_FullSample = sapply(models_w3_full, extract_ols_results)
)


means <- final_drops %>%
  dplyr::group_by(video_treatment) %>%
  summarize(
    n = n(),
    mean_w2 =mean(matched_attriter_w2),
    mean_w3 =mean(matched_attriter_w3),
    mean_w2_full = mean(rand_attriter),
```

```
    mean_w3_full = mean(rand_attriter_w3)
  )


# Print the table
print(summary_table)
```

```
##                           Conditions              Wave2              Wave3
## 1               Full Film vs. Placebo    0.034 (p=0.270)   0.067 (p=0.030)*
## 2     Full Film vs. Placebo + Control 0.098 (p=0.000)*** 0.104 (p=0.000)***
## 3             Full Film vs. Short PMC  0.090 (p=0.003)**   0.073 (p=0.019)*
## 4              Full Film vs. Short VC  0.095 (p=0.002)**  0.084 (p=0.007)**
## 5     Full Film vs. Both Short Videos 0.093 (p=0.000)***  0.078 (p=0.003)**
## 6         Short PMC vs. Empty Control   0.073 (p=0.013)*   0.068 (p=0.029)*
## 7          Short VC vs. Empty Control   0.069 (p=0.019)*    0.057 (p=0.066)
## 8 Both Short Videos vs. Empty Control  0.071 (p=0.006)**   0.062 (p=0.021)*
## 9              Short VC vs. Short PMC    0.005 (p=0.878)    0.011 (p=0.733)
##     Wave2_FullSample   Wave3_FullSample
## 1   0.059 (p=0.029)*  0.083 (p=0.007)**
## 2 0.109 (p=0.000)*** 0.098 (p=0.000)***
## 3 0.117 (p=0.000)***   0.067 (p=0.028)*
## 4 0.150 (p=0.000)*** 0.113 (p=0.000)***
## 5 0.134 (p=0.000)*** 0.090 (p=0.001)***
## 6   0.043 (p=0.049)*    0.047 (p=0.115)
## 7    0.010 (p=0.642)    0.002 (p=0.948)
## 8    0.026 (p=0.159)    0.025 (p=0.342)
## 9    0.033 (p=0.129)    0.045 (p=0.129)
```

```
# Create LaTeX table with xtable
latex_table <- xtable(
  summary_table,
  caption = "Summary of Attrition Across Conditions and Waves",
  label = "tab:attrition_summary",
  align = c("l", "l", "c", "c", "c", "c")
)

# Specify column names
colnames(summary_table) <- c("Conditions", "Wave 2 (Matched)", "Wave 3 (Matched)", "Wave 2 (Full Sample)


# Pare down to five rows (Fill film vs. placebo, full film vs. placebo+control, full film vs. both shor

summary_table <- summary_table %>%
  dplyr::filter(Conditions %in% c(
    "Full Film vs. Placebo",
    "Full Film vs. Placebo + Control",
    "Full Film vs. Both Short Videos",
    "Both Short Videos vs. Empty Control",
    "Short VC vs. Short PMC"
  ))

# Print LaTeX table to file
output_file <- "Figures/SI/attrition_summary.tex"
```

```r
print(
  latex_table,
  file = output_file,
  include.rownames = FALSE,
  floating = TRUE,
  sanitize.text.function = identity, # To keep formatting like stars
  booktabs = TRUE, # For cleaner table style
  hline.after = c(-1, 0, nrow(summary_table)) # Horizontal lines at the top, header, and bottom
)

cat("LaTeX file saved as:", output_file, "\n")
```

```
## LaTeX file saved as: Figures/SI/attrition_summary.tex
```

```r
output_file
```

```
## [1] "Figures/SI/attrition_summary.tex"
```

```r
#### Table SI.10 ####

#For this table, we manually moved the row with the count to the top and added an explanation column. W

#factor variables if needed...
final_drops <- final_drops %>%
  mutate(
    region_2 = as.factor(region_2),
    vote_2016 = as.factor(vote_2016),
    vote_2020 = as.factor(vote_2020)
  )


# Convert factor variables to dummy variables and calculate means (if necessary)
final_drops_with_dummies <- final_drops %>%
  mutate(across(c(vote_2020, vote_2016, region_2), as.factor)) %>%
  clean_names() %>% # To ensure column names are compatible
  dummy_cols(select_columns = c("vote_2020", "vote_2016", "region_2"), remove_first_dummy = F)

demos_with_dummies <- c("party_id", "ideology_yg", "age", "sex", "educ_dum", "white", "christian", "chil
                        colnames(final_drops_with_dummies %>% select(starts_with("vote_2020_"), starts_


demos <- c("party_id", "ideology_yg", "age", "sex", "educ_dum", "white", "christian", "child", "job", "


# Function to calculate mean, difference, SMD, and counts
calculate_smd <- function(group_1, group_2) {
  # Calculate mean and standard deviation for each group
  mean_1 <- mean(group_1, na.rm = TRUE)
  mean_2 <- mean(group_2, na.rm = TRUE)
  sd_1 <- sd(group_1, na.rm = TRUE)
  sd_2 <- sd(group_2, na.rm = TRUE)

  # Calculate difference in means
  difference <- mean_1 - mean_2
```

```r
  # Calculate standardized mean difference (SMD)
  smd <- difference / sqrt((sd_1^2 + sd_2^2) / 2)

  # Calculate counts
  count_1 <- sum(!is.na(group_1))
  count_2 <- sum(!is.na(group_2))

  # Return the results as a list
  list(
    mean_1 = mean_1,
    mean_2 = mean_2,
    sd_1 = sd_1,
    sd_2 = sd_2,
    difference = difference,
    smd = smd,
    count_1 = count_1,
    count_2 = count_2
  )
}

# Filter the data to exclude NA values in treat_long_collapse2
filtered_data <- final_drops_with_dummies %>%
  filter(!is.na(treat_long_collapse2))



# Apply the function to every variable in demos_with_dummies
results <- map_dfr(demos, function(var) {
  group_1 <- filtered_data %>% filter(matched_attriter_w2 == FALSE) %>% pull(!!sym(var))
  group_2 <- filtered_data %>% filter(matched_attriter_w2 == TRUE) %>% pull(!!sym(var))

  smd_result <- calculate_smd(group_1, group_2)

  tibble(
    Variable = var,
    Mean_Non_Attriter = smd_result$mean_1,
    Mean_Attriter = smd_result$mean_2,
    Difference = smd_result$difference,
    SMD = smd_result$smd
  )
})

# Manually add the count row
count_row <- tibble(
  Variable = "Count",
  Mean_Non_Attriter = sum(!is.na(filtered_data %>% filter(matched_attriter_w2 == FALSE) %>% pull(demos_
  Mean_Attriter = sum(!is.na(filtered_data %>% filter(matched_attriter_w2 == TRUE) %>% pull(demos_with_
  Difference = NA,
  SMD = NA
)

# Bind the count row to the results
results <- bind_rows(results, count_row)
```

```r
# Create LaTeX table
latex_table <- results %>%
  kbl(caption = "Comparison of Means for Attriters vs. Non-Attriters", format = "latex", booktabs = TRU
  kable_styling(latex_options = c("hold_position"))

print(latex_table)
```

```
## \begin{table}[!h]
##
## \caption{\label{tab:tables SI.9-11}Comparison of Means for Attriters vs. Non-Attriters}
## \centering
## \begin{tabular}[t]{lrrrr}
## \toprule
## Variable & Mean\_Non\_Attriter & Mean\_Attriter & Difference & SMD\\
## \midrule
## party\_id & 0.38 & 0.41 & -0.03 & -0.07\\
## ideology\_yg & 2.66 & 2.62 & 0.04 & 0.03\\
## age & 49.12 & 46.63 & 2.49 & 0.14\\
## sex & 0.52 & 0.56 & -0.04 & -0.08\\
## educ\_dum & 0.33 & 0.35 & -0.02 & -0.05\\
## \addlinespace
## white & 0.71 & 0.69 & 0.02 & 0.05\\
## christian & 0.49 & 0.46 & 0.03 & 0.06\\
## child & 0.22 & 0.25 & -0.03 & -0.06\\
## job & 0.48 & 0.48 & 0.00 & -0.01\\
## marr\_dum & 0.51 & 0.55 & -0.04 & -0.09\\
## \addlinespace
## turnout2020 & 0.82 & 0.77 & 0.05 & 0.14\\
## Count & 584.00 & 454.00 & NA & NA\\
## \bottomrule
## \end{tabular}
## \end{table}
```

```r
#### Table SI.11 ####

#create df for long vs. placebo (nationally representative)
long_placebo <- final_drops %>%
  filter(!is.na(treat_long_collapse2))

#treatment assignment (w2 attrition)
attrition1 <- lm(matched_attriter_w2~treat_long_collapse2, long_placebo)


covariates_noimp <- paste("treat_long_collapse2", "partyID", "ideology_yg", "age", "sex", "educ_dum", "

test1_noimp <- paste("matched_attriter_w2 ~ ", covariates_noimp, sep = "")

#model with covariates
attrition1_covariates_noimp <- lm(test1_noimp, long_placebo)

####Interaction Terms####
interactions_noimp <-  paste("treat_long_collapse2*partyID", "ideology_yg*treat_long_collapse2", "age*t

test1_int_noimp <- paste("matched_attriter_w2 ~ ", interactions_noimp, sep = "")
```

```r
#model with covariates + interactions
attrition1_interactions_noimp <- lm(test1_int_noimp, long_placebo)

attrition1_tables_noimp <- list(attrition1, attrition1_covariates_noimp, attrition1_interactions_noimp)

stargazer::stargazer(attrition1_tables_noimp, type="latex", title = "Likelihood of Attrition in National
```

```
##
## % Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac a
## % Date and time: Sun, Jun 08, 2025 - 00:20:33
## \begin{table}[!htbp] \centering
##   \caption{Likelihood of Attrition in Nationally Representative Sample: Non-Imputed Values (Long Vid
##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}}lccc}
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
##  & \multicolumn{3}{c}{Attriter} \\
## \cline{2-4}
## \\[-1.8ex] & \multicolumn{3}{c}{(Long vs. Placebo)} \\
## \\[-1.8ex] & (1) & (2) & (3)\\
## \hline \\[-1.8ex]
##  treat\_long\_collapse2 & 0.034 (0.031) & 0.034 (0.031) & $-$0.005 (0.136) \\
##   partyID &  & 0.039 (0.037) & 0.014 (0.051) \\
##   ideology\_yg &  & 0.005 (0.014) & 0.0004 (0.019) \\
##   age &  & $-$0.001 (0.001) & $-$0.003$^{*}$ (0.001) \\
##   sex &  & 0.027 (0.032) & 0.125$^{***}$ (0.045) \\
##   educ\_dum &  & 0.043 (0.035) & 0.095$^{*}$ (0.049) \\
##   white &  & $-$0.013 (0.037) & $-$0.016 (0.052) \\
##   region\_21 &  & $-$0.034 (0.046) & $-$0.066 (0.065) \\
##   region\_22 &  & $-$0.033 (0.049) & $-$0.024 (0.068) \\
##   region\_23 &  & $-$0.006 (0.042) & 0.008 (0.058) \\
##   christian &  & $-$0.035 (0.033) & $-$0.070 (0.047) \\
##   child &  & $-$0.002 (0.040) & 0.009 (0.057) \\
##   job &  & $-$0.012 (0.034) & $-$0.101$^{**}$ (0.049) \\
##   marr\_dum &  & 0.057$^{*}$ (0.033) & 0.109$^{**}$ (0.047) \\
##   turnout2020 &  & $-$0.079$^{*}$ (0.044) & $-$0.030 (0.059) \\
##   treat\_long\_collapse2:partyID &  &  & 0.064 (0.074) \\
##   treat\_long\_collapse2:ideology\_yg &  &  & 0.005 (0.027) \\
##   treat\_long\_collapse2:age &  &  & 0.003 (0.002) \\
##   treat\_long\_collapse2:sex &  &  & $-$0.204$^{***}$ (0.064) \\
##   treat\_long\_collapse2:educ\_dum &  &  & $-$0.108 (0.069) \\
##   treat\_long\_collapse2:white &  &  & $-$0.007 (0.073) \\
##   treat\_long\_collapse2:region\_21 &  &  & 0.080 (0.092) \\
##   treat\_long\_collapse2:region\_22 &  &  & $-$0.006 (0.099) \\
##   treat\_long\_collapse2:region\_23 &  &  & $-$0.025 (0.083) \\
##   treat\_long\_collapse2:christian &  &  & 0.068 (0.066) \\
##   treat\_long\_collapse2:child &  &  & $-$0.012 (0.080) \\
##   treat\_long\_collapse2:job &  &  & 0.181$^{***}$ (0.069) \\
##   treat\_long\_collapse2:marr\_dum &  &  & $-$0.108 (0.067) \\
##   treat\_long\_collapse2:turnout2020 &  &  & $-$0.092 (0.088) \\
##   Constant & 0.420$^{***}$ (0.022) & 0.485$^{***}$ (0.069) & 0.494$^{***}$ (0.095) \\
##  \hline \\[-1.8ex]
## Observations & 1,038 & 1,009 & 1,009 \\
```

```
## R$^{2}$ & 0.001 & 0.015 & 0.040 \\
## Adjusted R$^{2}$ & 0.0002 & 0.0002 & 0.012 \\
## Residual Std. Error & 0.496 (df = 1036) & 0.494 (df = 993) & 0.491 (df = 979) \\
## F Statistic & 1.216 (df = 1; 1036) & 1.014 (df = 15; 993) & 1.408$^{*}$ (df = 29; 979) \\
## \hline
## \hline \\[-1.8ex]
## \textit{Note:}  & \multicolumn{3}{r}{$^{*}$p$<$0.1; $^{**}$p$<$0.05; $^{***}$p$<$0.01} \\
## \end{tabular}
## \end{table}
```

Main outcomes and analyses

```
####Nationally Representative (SI.12)####
C1.1 <- lm_robust(aff_pol_idx~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp, se_typ
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
C1.2 <- lm_robust(aff_pol_idx_outparty~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noim
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
C1.3 <- lm_robust(BA_newsletter_clicked~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noi
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
C1.4 <- lm_robust(donate_any~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp, se_type
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
get_table_4(C1.1, C1.2, C1.3, C1.4, "Main Analysis: Nationally Representative Sample (Long vs. Placebo)
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Nationally Representative Sample (Long vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Affective Polarization & Outparty Only & BA Newsletter & Any Donation \\
## \hline
## treat\_long\_collapse2 & $-0.14^{*}$ & $-0.16^{*}$ & $0.08^{*}$ & $-0.04$  \\
##                        & $(0.07)$    & $(0.07)$    & $(0.04)$   & $(0.04)$ \\
## \hline
## R$^2$                  & $0.01$      & $0.02$      & $0.01$     & $0.00$   \\
## Adj. R$^2$             & $0.01$      & $0.01$      & $0.01$     & $0.00$   \\
## Num. obs.              & $584$       & $584$       & $509$      & $583$    \\
```

```
## RMSE                    & $0.85$      & $0.86$      & $0.41$     & $0.46$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
####no IPWs (SI.13)####
C1.1_noipws <- lm_robust(aff_pol_idx~treat_long_collapse2, final_drops, weights = weight_w2, se_type =
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
C1.2_noipws <- lm_robust(aff_pol_idx_outparty~treat_long_collapse2, final_drops, weights = weight_w2, s
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
C1.3_noipws <- lm_robust(BA_newsletter_clicked~treat_long_collapse2, final_drops, weights = weight_w2,
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
C1.4_noipws <- lm_robust(donate_any~treat_long_collapse2, final_drops, weights = weight_w2, se_type = "
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
get_table_4(C1.1_noipws, C1.2_noipws, C1.3_noipws, C1.4_noipws, "Main Analysis: Nationally Representati
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Nationally Representative Sample (Long vs. Placebo; NO IPWs)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Affective Polarization & Outparty Only & BA Newsletter & Any Donation \\
## \hline
## treat\_long\_collapse2 & $-0.13^{*}$ & $-0.15^{*}$ & $0.09^{*}$ & $-0.02$  \\
##                        & $(0.07)$    & $(0.07)$    & $(0.04)$   & $(0.04)$ \\
## \hline
## R$^2$                  & $0.01$      & $0.01$      & $0.02$     & $0.00$   \\
## Adj. R$^2$             & $0.01$      & $0.01$      & $0.02$     & $-0.00$  \\
## Num. obs.              & $584$       & $584$       & $509$      & $583$    \\
## RMSE                   & $0.64$      & $0.65$      & $0.31$     & $0.34$   \\
```

```
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
####Full Sample (SI.14)####
D1.1 <- lm_robust(aff_pol_idx~treat_long_collapse2, final_drops, weights = ipw_full_w2_noimp, se_type =

D1.2 <- lm_robust(aff_pol_idx_outparty~treat_long_collapse2, final_drops, weights = ipw_full_w2_noimp, s

D1.3 <- lm_robust(BA_newsletter_clicked~treat_long_collapse2, final_drops, weights = ipw_full_w2_noimp,

D1.4 <- lm_robust(donate_any~treat_long_collapse2, final_drops, weights = ipw_full_w2_noimp, se_type =


get_table_4(D1.1, D1.2, D1.3, D1.4, "Main Analysis: Full Sample (Long vs. Placebo)", "Affective Polariza
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Full Sample (Long vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Affective Polarization & Outparty Only & BA Newsletter & Any Donation \\
## \hline
## treat\_long\_collapse2 & $-0.08$  & $-0.10^{*}$ & $0.05^{*}$ & $-0.03$  \\
##                        & $(0.05)$ & $(0.05)$    & $(0.02)$   & $(0.03)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.01$      & $0.01$     & $0.00$   \\
## Adj. R$^2$             & $0.00$   & $0.00$      & $0.01$     & $0.00$   \\
## Num. obs.              & $779$    & $779$       & $667$      & $776$    \\
## RMSE                   & $0.72$   & $0.74$      & $0.35$     & $0.43$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
####Full Sample no IPWs (SI.15)####
D1.1_noipw <- lm_robust(aff_pol_idx~treat_long_collapse2, final_drops, se_type = "HC1")
```

```r
D1.2_noipw <- lm_robust(aff_pol_idx_outparty~treat_long_collapse2, final_drops, se_type = "HC1")

D1.3_noipw <- lm_robust(BA_newsletter_clicked~treat_long_collapse2, final_drops, se_type = "HC1")

D1.4_noipw <- lm_robust(donate_any~treat_long_collapse2, final_drops, se_type = "HC1")


get_table_4(D1.1_noipw, D1.2_noipw, D1.3_noipw, D1.4_noipw, "Main Analysis: Full Sample (Long vs. Placel
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Full Sample (Long vs. Placebo; NO IPWs)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Affective Polarization & Outparty Only & BA Newsletter & Any Donation \\
## \hline
## treat\_long\_collapse2 & $-0.08$  & $-0.10^{*}$ & $0.06^{*}$ & $-0.03$  \\
##                        & $(0.05)$ & $(0.05)$    & $(0.02)$   & $(0.03)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.01$      & $0.01$     & $0.00$   \\
## Adj. R$^2$             & $0.00$   & $0.00$      & $0.01$     & $-0.00$  \\
## Num. obs.              & $779$    & $779$       & $667$      & $776$    \\
## RMSE                   & $0.63$   & $0.65$      & $0.31$     & $0.37$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

Donations extra analysis

```r
#create binary donation variables
final_drops <- final_drops %>%
  mutate(
    donate_BA_any = if_else(donate_BA > 0, 1,0),
    donate_allsides_any = if_else(donate_allsides > 0, 1,0),
    donate_lrc_any = if_else(donate_lrc > 0, 1,0)
  )

####All Donations (Table SI.16)####
H1.2b_BA_t <- lm_robust(donate_BA~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp, se_
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
```

```
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
H1.2b_AS_t <- lm_robust(donate_allsides~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noi
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
H1.2b_LRC_t <- lm_robust(donate_lrc~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp, 
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
H1.2b_all_t <- lm_robust(donate_all~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp, 
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
get_table_4(H1.2b_BA_t, H1.2b_AS_t, H1.2b_LRC_t, H1.2b_all_t, "All Donations by Depolarization Organiza
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{All Donations by Depolarization Organization}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Braver Angels & AllSides & LivingRoom Conversations & Total \\
## \hline
## treat\_long\_collapse2 & $-0.52$  & $-2.43$  & $-1.31$  & $-4.26$  \\
##                        & $(1.28)$ & $(1.24)$ & $(1.57)$ & $(3.83)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.01$   & $0.00$   & $0.00$   \\
## Adj. R$^2$             & $-0.00$  & $0.01$   & $0.00$   & $0.00$   \\
## Num. obs.              & $583$    & $583$    & $583$    & $583$    \\
## RMSE                   & $14.92$  & $14.28$  & $16.80$  & $40.44$  \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#### NO IPWs (Table SI.17)####
H1.2b_BA_t_noIPWS <- lm_robust(donate_BA~treat_long_collapse2, final_drops, weights = weight_w2, se_typ
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
```

```
## dropped.
```

```
H1.2b_AS_t_noIPWS <- lm_robust(donate_allsides~treat_long_collapse2, final_drops, weights = weight_w2, s
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
H1.2b_LRC_t_noIPWS <- lm_robust(donate_lrc~treat_long_collapse2, final_drops, weights = weight_w2, se_ty
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
H1.2b_all_t_noIPWS <- lm_robust(donate_all~treat_long_collapse2, final_drops, weights = weight_w2, se_ty
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
get_table_4(H1.2b_BA_t_noIPWS, H1.2b_AS_t_noIPWS, H1.2b_LRC_t_noIPWS, H1.2b_all_t_noIPWS, "All Donations
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{All Donations by Depolarization Organization (NO IPWs)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Braver Angels & AllSides & LivingRoom Conversations & Total \\
## \hline
## treat\_long\_collapse2 & $-0.16$  & $-2.03$  & $-0.92$  & $-3.12$  \\
##                        & $(1.29)$ & $(1.27)$ & $(1.56)$ & $(3.89)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.01$   & $0.00$   & $0.00$   \\
## Adj. R$^2$             & $-0.00$  & $0.01$   & $-0.00$  & $0.00$   \\
## Num. obs.              & $583$    & $583$    & $583$    & $583$    \\
## RMSE                   & $11.29$  & $10.98$  & $12.54$  & $30.63$  \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#### Any Donation (Table SI.18)
```

```
H1.2b_BA_any <- lm_robust(donate_BA_any~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noi
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
```

```
## dropped.
```

```
H1.2b_AS_any <- lm_robust(donate_allsides_any~treat_long_collapse2, final_drops, weights = ipw_matched_
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
H1.2b_LRC_any <- lm_robust(donate_lrc_any~treat_long_collapse2, final_drops, weights = ipw_matched_w2_n
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
get_table_3(H1.2b_BA_any, H1.2b_AS_any, H1.2b_LRC_any, "Any Donations by Depolarization Organization",
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Any Donations by Depolarization Organization}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c}
## \hline
##  & Braver Angels & AllSides & Living Room Conversations \\
## \hline
## treat\_long\_collapse2 & $-0.02$  & $-0.06$  & $-0.04$  \\
##                        & $(0.04)$ & $(0.04)$ & $(0.04)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.01$   & $0.00$   \\
## Adj. R$^2$             & $-0.00$  & $0.01$   & $0.00$   \\
## Num. obs.              & $583$    & $583$    & $583$    \\
## RMSE                   & $0.44$   & $0.43$   & $0.44$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

Secondary Outcomes and Mechanisms

```
####Optimism About Survival of Institutions: Table SI.19####
K1.1 <- lm_robust(optimism_survive_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_no
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
K1.2 <- lm_robust(optimism_survive_scale~treat_long_collapse2, final_drops, weights = weight_w2, se_type
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
K1.3 <- lm_robust(optimism_survive_scale~treat_long_collapse2, final_drops, weights = ipw_full_w2_noimp

K1.4 <- lm_robust(optimism_survive_scale~treat_long_collapse2, final_drops, se_type = "HC1")

get_table_4(K1.1, K1.2, K1.3, K1.4, "Main Analysis: Optimism about Survival of Democratic Institutions
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Optimism about Survival of Democratic Institutions Wave 2 (Long vs. Placebo)
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2 & $0.32^{**}$ & $0.30^{**}$ & $0.18^{*}$ & $0.18^{*}$ \\
##                        & $(0.10)$    & $(0.10)$    & $(0.07)$   & $(0.07)$   \\
## \hline
## R$^2$                  & $0.03$      & $0.02$      & $0.01$     & $0.01$     \\
## Adj. R$^2$             & $0.03$      & $0.02$      & $0.01$     & $0.01$     \\
## Num. obs.              & $583$       & $583$       & $776$      & $776$      \\
## RMSE                   & $1.26$      & $0.96$      & $1.13$     & $0.99$     \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
####Optimism about Restoring Civility (Table SI.20) ###
M1.1 <- lm_robust(optimism_civil_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noim
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
M1.2 <- lm_robust(optimism_civil_scale~treat_long_collapse2, final_drops, weights = weight_w2, se_type =
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
M1.3 <- lm_robust(optimism_civil_scale~treat_long_collapse2, final_drops, weights = ipw_full_w2_noimp, s

M1.4 <- lm_robust(optimism_civil_scale~treat_long_collapse2, final_drops, se_type = "HC1")

get_table_4(M1.1, M1.2, M1.3, M1.4, "Main Analysis: Optimism about Restoring Civility Wave 2 (Long vs. P
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Optimism about Restoring Civility Wave 2 (Long vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2 & $0.43^{***}$ & $0.39^{***}$ & $0.16^{*}$ & $0.15^{*}$ \\
##                        & $(0.10)$     & $(0.10)$     & $(0.07)$   & $(0.07)$   \\
## \hline
## R$^2$                  & $0.05$       & $0.04$       & $0.01$     & $0.01$     \\
## Adj. R$^2$             & $0.04$       & $0.04$       & $0.00$     & $0.00$     \\
## Num. obs.              & $583$        & $583$        & $776$      & $776$      \\
## RMSE                   & $1.29$       & $0.98$       & $1.15$     & $1.01$     \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```r
####Dialogue as effective tool for change (SI.21) ####
N1.1 <- lm_robust(dialogue_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp, se_
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
N1.2 <- lm_robust(dialogue_scale~treat_long_collapse2, final_drops, weights = weight_w2, se_type = "HC1
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
N1.3 <- lm_robust(dialogue_scale~treat_long_collapse2, final_drops, weights = ipw_full_w2_noimp, se_type

N1.4 <- lm_robust(dialogue_scale~treat_long_collapse2, final_drops, se_type = "HC1")

get_table_4(N1.1, N1.2, N1.3, N1.4, "Main Analysis: Dialogue as Effective Tool For Change Wave 2 (Long v
```

```
##
```

```
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Dialogue as Effective Tool For Change Wave 2 (Long vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2 & $0.46^{***}$ & $0.45^{***}$ & $0.28^{***}$ & $0.29^{***}$ \\
##                        & $(0.11)$     & $(0.10)$     & $(0.07)$     & $(0.07)$     \\
## \hline
## R$^2$                  & $0.05$       & $0.05$       & $0.02$       & $0.02$       \\
## Adj. R$^2$             & $0.05$       & $0.05$       & $0.02$       & $0.02$       \\
## Num. obs.              & $528$        & $528$        & $682$        & $682$        \\
## RMSE                   & $1.27$       & $0.96$       & $1.10$       & $0.97$       \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#### Anti-Democratic Attitudes (SI.22) ####

#ipws
E1.1 <- lm_robust(antidem_idx~treat_long_collapse2, final_drops, se_type = "HC1", weights = ipw_matched
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
#no IPWs
E1.2 <- lm_robust(antidem_idx~treat_long_collapse2, final_drops, se_type = "HC1", weights = weight_w2)
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
#full sample
E1.3 <- lm_robust(antidem_idx~treat_long_collapse2, final_drops, se_type = "HC1", weights = ipw_full_w2

#no IPWs
E1.4 <- lm_robust(antidem_idx~treat_long_collapse2, final_drops, se_type = "HC1")

get_table_4(E1.1, E1.2, E1.3,E1.4, "Main Analysis: Anti-Democratic Attitudes Wave 2 (Long vs. Placebo)"
```

```
##
## \usepackage{threeparttable}
##
```

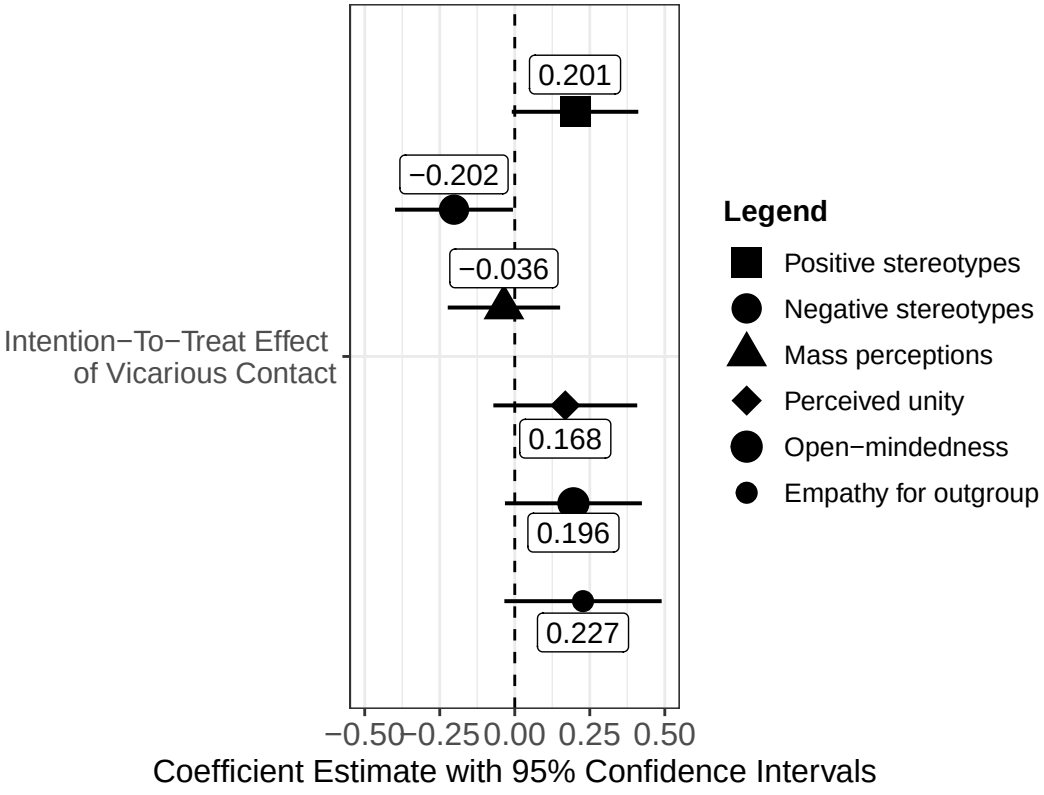
```
## \begin{table}[H]
## \caption{Main Analysis: Anti-Democratic Attitudes Wave 2 (Long vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched Sample (IPWs) & Matched Sample (No IPWs) & Full Sample (IPWs) & Full Sample (No IPWs \\
## \hline
## treat\_long\_collapse2 & $-0.08$  & $-0.10$  & $-0.06$  & $-0.05$  \\
##                        & $(0.07)$ & $(0.07)$ & $(0.05)$ & $(0.05)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.01$   & $0.00$   & $0.00$   \\
## Adj. R$^2$             & $0.00$   & $0.00$   & $0.00$   & $0.00$   \\
## Num. obs.              & $583$    & $583$    & $776$    & $776$    \\
## RMSE                   & $0.89$   & $0.67$   & $0.77$   & $0.67$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#higher more united
final_drops <- final_drops %>%
  mutate(
    division = as.numeric(Q52_w2),
    division= if_else(division>100, NA, division),
    division_scaled = scale(division)
  )
```

```
## Warning: There was 1 warning in `mutate()`.
## i In argument: `division = as.numeric(Q52_w2)`.
## Caused by warning:
## ! NAs introduced by coercion
```

```
#Regression models
med_mass.perc <- lm(mass_perc_idx~treat_long_collapse2, final_drops, weights=ipw_matched_w2_noimp)

med_division <- lm(division_scaled~treat_long_collapse2, final_drops, weights=ipw_matched_w2_noimp)

med_openmind <- lm(understand_total~treat_long_collapse2, final_drops, weights=ipw_matched_w2_noimp)

med_empathy <- lm(empathy_scale~treat_long_collapse2, final_drops, weights=ipw_matched_w2_noimp)

stereo_neg <- lm(stereo_outparty_neg_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_

stereo_pos <- lm(stereo_outparty_pos_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_


#Plot
```

```
modelslist <- list(med_empathy, med_openmind, med_division, med_mass.perc, stereo_neg, stereo_pos)

nameslist <- as.character(c("Empathy for outgroup", "Open-mindedness", "Perceived division", "Mass perc

mediators <- plot_generate_6(med_empathy, med_openmind, med_division, med_mass.perc, stereo_neg, stereo

mediators
```




```
#save
ggsave("Figures/SI/Figure_SI.8.png", plot = mediators, width=10, height=7)
```

Extensions

```
## Note that treat_long_collapse2 is the binary treatment indicator. In the manuscript, the name is man

#####Party ID (Table SI.23)####
O1.1 <- lm_robust(aff_pol_idx~treat_long_collapse2*partyID, final_drops, weights = ipw_matched_w2_noimp

## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
O1.2 <- lm_robust(aff_pol_idx~treat_long_collapse2*partyID, final_drops, weights = weight_w2, se_type =

## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
O1.3 <- lm_robust(aff_pol_idx~treat_long_collapse2*partyID, final_drops, weights = ipw_full_w2_noimp, s

O1.4 <- lm_robust(aff_pol_idx~treat_long_collapse2*partyID, final_drops, se_type = "HC1")

get_table_4(O1.1, O1.2, O1.3, O1.4, "Main Analysis: Affective Polarization HTE by Party ID Wave 2 (Long
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Affective Polarization HTE by Party ID Wave 2 (Long vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2         & $-0.19^{*}$ & $-0.17$  & $-0.07$      & $-0.08$      \\
##                                & $(0.10)$    & $(0.09)$ & $(0.06)$     & $(0.06)$     \\
## partyID                        & $-0.14$     & $-0.13$  & $-0.17^{**}$ & $-0.18^{**}$ \\
##                                & $(0.08)$    & $(0.08)$ & $(0.06)$     & $(0.06)$     \\
## treat\_long\_collapse2:partyID & $0.12$      & $0.09$   & $-0.03$      & $-0.02$      \\
##                                & $(0.13)$    & $(0.13)$ & $(0.09)$     & $(0.09)$     \\
## \hline
## R$^2$                          & $0.02$      & $0.02$   & $0.03$       & $0.03$       \\
## Adj. R$^2$                     & $0.01$      & $0.01$   & $0.02$       & $0.02$       \\
## Num. obs.                      & $584$       & $584$    & $779$        & $779$        \\
## RMSE                           & $0.85$      & $0.64$   & $0.71$       & $0.63$       \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```r
####Ideology (Table SI.24)####
P1.1 <- lm_robust(aff_pol_idx~treat_long_collapse2*ideo, final_drops, weights = ipw_matched_w2_noimp, s
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
P1.2 <- lm_robust(aff_pol_idx~treat_long_collapse2*ideo, final_drops, weights = weight_w2, se_type = "H
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
P1.3 <- lm_robust(aff_pol_idx~treat_long_collapse2*ideo, final_drops, weights = ipw_full_w2_noimp, se_ty

P1.4 <- lm_robust(aff_pol_idx~treat_long_collapse2*ideo, final_drops, se_type = "HC1")
```

```
get_table_4(P1.1, P1.2, P1.3, P1.4, "Main Analysis: Affective Polarization HTE by Ideology Wave 2 (Long
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Affective Polarization HTE by Ideology Wave 2 (Long vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2      & $-0.56^{**}$  & $-0.49^{**}$  & $-0.26^{*}$   & $-0.26^{*}$   \\
##                             & $(0.20)$      & $(0.19)$      & $(0.13)$      & $(0.12)$      \\
## ideo                        & $-0.12^{***}$ & $-0.12^{***}$ & $-0.13^{***}$ & $-0.13^{***}$ \\
##                             & $(0.03)$      & $(0.03)$      & $(0.03)$      & $(0.03)$      \\
## treat\_long\_collapse2:ideo & $0.13^{*}$    & $0.10$        & $0.06$        & $0.06$        \\
##                             & $(0.06)$      & $(0.06)$      & $(0.04)$      & $(0.04)$      \\
## \hline
## R$^2$                       & $0.05$        & $0.04$        & $0.04$        & $0.04$        \\
## Adj. R$^2$                  & $0.04$        & $0.04$        & $0.04$        & $0.04$        \\
## Num. obs.                   & $538$         & $538$         & $714$         & $714$         \\
## RMSE                        & $0.82$        & $0.62$        & $0.71$        & $0.62$        \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#### Media Index (Table SI.26)####
# media_truth_dum is manually changed to Media Trust in the SI for ease of interpretation

Q1.1 <- lm_robust(aff_pol_idx~treat_long_collapse2*media_truth_dum, final_drops, weights = ipw_matched_w
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
Q1.2 <- lm_robust(aff_pol_idx~treat_long_collapse2*media_truth_dum, final_drops, weights = weight_w2, se
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
Q1.3 <- lm_robust(aff_pol_idx~treat_long_collapse2*media_truth_dum, final_drops, weights = ipw_full_w2_n

Q1.4 <- lm_robust(aff_pol_idx~treat_long_collapse2*media_truth_dum, final_drops, se_type = "HC1")
```

```
get_table_4(Q1.1, Q1.2, Q1.3, Q1.4, "Main Analysis: Affective Polarization HTE by Partisan Media Confid
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Affective Polarization HTE by Partisan Media Confidence Wave 2 (Long vs. Pla
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2                   & $-0.27^{*}$   & $-0.23^{*}$   & $-0.24^{**}$  & $-0.23^{*
##                                          & $(0.11)$      & $(0.10)$      & $(0.08)$      & $(0.08)$
## media\_truth\_dum                        & $-0.32^{***}$ & $-0.31^{***}$ & $-0.36^{***}$ & $-0.36^{*
##                                          & $(0.09)$      & $(0.09)$      & $(0.07)$      & $(0.07)$
## treat\_long\_collapse2:media\_truth\_dum & $0.19$        & $0.16$        & $0.27^{*}$    & $0.25^{*}$
##                                          & $(0.15)$      & $(0.14)$      & $(0.11)$      & $(0.11)$
## \hline
## R$^2$                                    & $0.05$        & $0.05$        & $0.05$        & $0.05$
## Adj. R$^2$                               & $0.05$        & $0.05$        & $0.05$        & $0.05$
## Num. obs.                                & $422$         & $422$         & $558$         & $558$
## RMSE                                     & $0.82$        & $0.62$        & $0.71$        & $0.62$
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#Table SI.26
R1.1 <- lm_robust(aff_pol_idx_w3~treat_long_collapse2, final_drops, weights = ipw_matched_w3_noimp, se_
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
R1.2 <- lm_robust(aff_pol_idx_w3~treat_long_collapse2, final_drops, weights = weight_w3, se_type = "HC1
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
R1.3 <- lm_robust(aff_pol_idx_w3~treat_long_collapse2, final_drops, weights = ipw_full_w3_noimp, se_typ
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
R1.4 <- lm_robust(aff_pol_idx_w3~treat_long_collapse2, final_drops, se_type = "HC1")

get_table_4(R1.1, R1.2, R1.3,R1.4, "Main Analysis: Affective Polarization Wave 3 (Long vs. Placebo)", "
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Affective Polarization Wave 3 (Long vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2 & $-0.11$  & $-0.10$  & $-0.03$  & $-0.04$  \\
##                        & $(0.07)$ & $(0.07)$ & $(0.05)$ & $(0.05)$ \\
## \hline
## R$^2$                  & $0.01$   & $0.01$   & $0.00$   & $0.00$   \\
## Adj. R$^2$             & $0.01$   & $0.00$   & $-0.00$  & $-0.00$  \\
## Num. obs.              & $506$    & $508$    & $613$    & $615$    \\
## RMSE                   & $0.91$   & $0.63$   & $0.81$   & $0.63$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```r
#Table SI.26
S1.1 <- lm_robust(aff_pol_idx_outparty_w3~treat_long_collapse2, final_drops, weights = ipw_matched_w3_n
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
S1.2 <- lm_robust(aff_pol_idx_outparty_w3~treat_long_collapse2, final_drops, weights = weight_w3, se_ty
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
S1.3 <- lm_robust(aff_pol_idx_outparty_w3~treat_long_collapse2, final_drops, weights = ipw_full_w3_noim
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
S1.4 <- lm_robust(aff_pol_idx_outparty_w3~treat_long_collapse2, final_drops, se_type = "HC1")

get_table_4(S1.1, S1.2, S1.3,S1.4, "Main Analysis: Affective Polarization Outparty Only Wave 3 (Long vs
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Affective Polarization Outparty Only Wave 3 (Long vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2 & $-0.12$  & $-0.11$  & $-0.04$  & $-0.03$  \\
##                        & $(0.08)$ & $(0.07)$ & $(0.05)$ & $(0.05)$ \\
## \hline
## R$^2$                  & $0.01$   & $0.01$   & $0.00$   & $0.00$   \\
## Adj. R$^2$             & $0.01$   & $0.01$   & $-0.00$  & $-0.00$  \\
## Num. obs.              & $506$    & $508$    & $613$    & $615$    \\
## RMSE                   & $0.95$   & $0.64$   & $0.82$   & $0.64$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

Pre-registered analyses not featured in manuscript

```
####Table SI.28####
A1.1 <- lm_robust(aff_pol_idx~treat_long_collapse1, final_drops, weights = ipw_matched_w2_noimp, se_typ
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
summary(A1.1)
```

```
##
## Call:
## lm_robust(formula = aff_pol_idx ~ treat_long_collapse1, data = final_drops,
##     weights = ipw_matched_w2_noimp, se_type = "HC1")
##
## Weighted, Standard error type:  HC1
##
## Coefficients:
##                      Estimate Std. Error t value Pr(>|t|) CI Lower CI Upper  DF
## (Intercept)           0.03264    0.03319  0.9834   0.3257  -0.0325  0.09777 941
## treat_long_collapse1 -0.09526    0.06289 -1.5147   0.1302  -0.2187  0.02816 941
##
## Multiple R-squared:  0.004961 ,  Adjusted R-squared:  0.003904
## F-statistic: 2.294 on 1 and 941 DF,  p-value: 0.1302
```

```r
A1.2 <- lm_robust(aff_pol_idx_outparty~treat_long_collapse1, final_drops, weights = ipw_matched_w2_noimp
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
summary(A1.2)
```

```
##
## Call:
## lm_robust(formula = aff_pol_idx_outparty ~ treat_long_collapse1,
##     data = final_drops, weights = ipw_matched_w2_noimp, se_type = "HC1")
##
## Weighted, Standard error type:  HC1
##
## Coefficients:
##                      Estimate Std. Error t value Pr(>|t|) CI Lower  CI Upper
## (Intercept)           0.04959    0.03332   1.488  0.13699  -0.0158  0.114972
## treat_long_collapse1 -0.12839    0.06245  -2.056  0.04006  -0.2509 -0.005835
##                       DF
## (Intercept)          941
## treat_long_collapse1 941
##
## Multiple R-squared:  0.008925 ,  Adjusted R-squared:  0.007872
## F-statistic: 4.227 on 1 and 941 DF,  p-value: 0.04006
```

```r
A1.3 <- lm_robust(BA_newsletter_clicked~treat_long_collapse1, final_drops, weights = ipw_matched_w2_noi
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
summary(A1.3)
```

```
##
## Call:
## lm_robust(formula = BA_newsletter_clicked ~ treat_long_collapse1,
##     data = final_drops, weights = ipw_matched_w2_noimp, se_type = "HC1")
##
## Weighted, Standard error type:  HC1
##
## Coefficients:
##                      Estimate Std. Error t value  Pr(>|t|) CI Lower CI Upper
## (Intercept)           0.05659    0.01108   5.107 4.065e-07  0.03484  0.07834
## treat_long_collapse1  0.08881    0.03284   2.704 6.981e-03  0.02435  0.15326
##                       DF
## (Intercept)          834
## treat_long_collapse1 834
##
## Multiple R-squared:  0.0224 ,    Adjusted R-squared:  0.02123
## F-statistic: 7.314 on 1 and 834 DF,  p-value: 0.006981
```

```r
A1.4 <- lm_robust(donate_any~treat_long_collapse1, final_drops, weights = ipw_matched_w2_noimp, se_type
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
summary(A1.4)
```

```
##
## Call:
## lm_robust(formula = donate_any ~ treat_long_collapse1, data = final_drops,
##     weights = ipw_matched_w2_noimp, se_type = "HC1")
##
## Weighted, Standard error type:  HC1
##
## Coefficients:
##                      Estimate Std. Error t value  Pr(>|t|) CI Lower CI Upper
## (Intercept)           0.16243    0.02204    7.37 3.748e-13   0.1192  0.20568
## treat_long_collapse1 -0.04165    0.03559   -1.17 2.422e-01  -0.1115  0.02819
##                       DF
## (Intercept)          939
## treat_long_collapse1 939
##
## Multiple R-squared:  0.003127 ,  Adjusted R-squared:  0.002065
## F-statistic:  1.37 on 1 and 939 DF,  p-value: 0.2422
```

```r
get_table_4(A1.1, A1.2, A1.3, A1.4, "Main Analysis: Nationally Representative Sample Wave 2 (Long vs. P
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Nationally Representative Sample Wave 2 (Long vs. Placebo+Control)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Affective Polarization & Outparty Only & BA Newsletter & Any Donation \\
## \hline
## treat\_long\_collapse1 & $-0.10$  & $-0.13^{*}$ & $0.09^{**}$ & $-0.04$  \\
##                        & $(0.06)$ & $(0.06)$    & $(0.03)$    & $(0.04)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.01$      & $0.02$      & $0.00$   \\
## Adj. R$^2$             & $0.00$   & $0.01$      & $0.02$      & $0.00$   \\
## Num. obs.              & $943$    & $943$       & $836$       & $941$    \\
## RMSE                   & $0.83$   & $0.83$      & $0.36$      & $0.46$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```r
####Table SI.29####
B1.1 <- lm_robust(aff_pol_idx~treat_long_collapse1, final_drops, weights = ipw_full_w2_noimp, se_type =
```

```r
B1.2 <- lm_robust(aff_pol_idx_outparty~treat_long_collapse1, final_drops, weights = ipw_full_w2_noimp, s


B1.3 <- lm_robust(BA_newsletter_clicked~treat_long_collapse1, final_drops, weights = ipw_full_w2_noimp,


B1.4 <- lm_robust(donate_any~treat_long_collapse1, final_drops, weights = ipw_full_w2_noimp, se_type = '

get_table_4(B1.1, B1.2, B1.3, B1.4, "Main Analysis: Full Sample Wave 2 (Long vs. Placebo+Control)", "Af
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Full Sample Wave 2 (Long vs. Placebo+Control)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Affective Polarization & Outparty Only & BA Newsletter & Any Donation \\
## \hline
## treat\_long\_collapse1 & $-0.07$  & $-0.09^{*}$ & $0.07^{**}$ & $-0.04$  \\
##                        & $(0.04)$ & $(0.04)$    & $(0.02)$    & $(0.02)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.00$      & $0.01$      & $0.00$   \\
## Adj. R$^2$             & $0.00$   & $0.00$      & $0.01$      & $0.00$   \\
## Num. obs.              & $1225$   & $1225$      & $1070$      & $1218$   \\
## RMSE                   & $0.70$   & $0.71$      & $0.32$      & $0.43$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```r
####Table SI.30####
#ensure factor varialbe
final_drops <- final_drops %>%
  mutate(
    short_vs_long = as.factor(treat_long_short)
  )

#0 is empty control; 1 is Short PMC; 2 is Short VC; 3 is full film.

#Short vs. long 1
U1.1 <- lm_robust(aff_pol_idx~short_vs_long, final_drops, weights = ipw_matched_w2_noimp, se_type = "HC
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
```

```
## dropped.
```

```
U1.2 <- lm_robust(aff_pol_idx_outparty~short_vs_long, final_drops, weights = ipw_matched_w2_noimp, se_ty
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
U1.3 <- lm_robust(BA_newsletter_clicked~short_vs_long, final_drops, weights = ipw_matched_w2_noimp, se_
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
U1.4 <- lm_robust(donate_any~short_vs_long, final_drops, weights = ipw_matched_w2_noimp, se_type = "HC1
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
get_table_4(U1.1, U1.2, U1.3, U1.4, "Main Analysis: Nationally Representative Sample  Wave 2 (Full Film
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Nationally Representative Sample  Wave 2 (Full Film vs. Short Videos)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Affective Polarization & Outparty Only & BA Newsletter & Any Donation \\
## \hline
## short\_vs\_long1 & $-0.02$  & $-0.05$  & $0.02$      & $-0.04$  \\
##                  & $(0.06)$ & $(0.06)$ & $(0.02)$    & $(0.04)$ \\
## short\_vs\_long2 & $0.01$   & $-0.02$  & $0.05^{*}$  & $0.01$   \\
##                  & $(0.07)$ & $(0.07)$ & $(0.02)$    & $(0.04)$ \\
## short\_vs\_long3 & $-0.06$  & $-0.10$  & $0.10^{**}$ & $-0.05$  \\
##                  & $(0.07)$ & $(0.07)$ & $(0.03)$    & $(0.04)$ \\
## \hline
## R$^2$            & $0.00$   & $0.00$   & $0.02$      & $0.00$   \\
## Adj. R$^2$       & $-0.00$  & $0.00$   & $0.02$      & $0.00$   \\
## Num. obs.        & $1302$   & $1302$   & $1151$      & $1301$   \\
## RMSE             & $0.81$   & $0.82$   & $0.36$      & $0.45$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#### Table SI.31####

T1.1 <- lm_robust(aff_pol_idx~short_vs_long, final_drops, weights = ipw_full_w2_noimp, se_type = "HC1")


T1.2 <- lm_robust(aff_pol_idx_outparty~short_vs_long, final_drops, weights = ipw_full_w2_noimp, se_type


T1.3 <- lm_robust(BA_newsletter_clicked~short_vs_long, final_drops, weights = ipw_full_w2_noimp, se_typ


T1.4 <- lm_robust(donate_any~short_vs_long, final_drops, weights = ipw_full_w2_noimp, se_type = "HC1")

get_table_4(T1.1, T1.2, T1.3, T1.4, "Main Analysis: Full Sample  Wave 2 (Full Film vs. Short Videos)",

##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Full Sample  Wave 2 (Full Film vs. Short Videos)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Affective Polarization & Outparty Only & BA Newsletter & Any Donation \\
## \hline
## short\_vs\_long1 & $-0.06$  & $-0.07$     & $0.03$       & $-0.01$  \\
##                  & $(0.04)$ & $(0.04)$    & $(0.02)$     & $(0.03)$ \\
## short\_vs\_long2 & $-0.04$  & $-0.07$     & $0.06^{**}$  & $0.02$   \\
##                  & $(0.04)$ & $(0.04)$    & $(0.02)$     & $(0.03)$ \\
## short\_vs\_long3 & $-0.06$  & $-0.09^{*}$ & $0.09^{***}$ & $-0.04$  \\
##                  & $(0.04)$ & $(0.05)$    & $(0.02)$     & $(0.03)$ \\
## \hline
## R$^2$            & $0.00$   & $0.00$      & $0.01$       & $0.00$   \\
## Adj. R$^2$       & $-0.00$  & $0.00$      & $0.01$       & $0.00$   \\
## Num. obs.        & $1704$   & $1704$      & $1479$       & $1691$   \\
## RMSE             & $0.69$   & $0.71$      & $0.32$       & $0.43$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
#### Table SI.32 ####
R2.1 <- lm_robust(aff_pol_idx~treat_short_collapse, final_drops, weights = ipw_full_w2_noimp, se_type =

R2.2 <- lm_robust(aff_pol_idx_outparty~treat_short_collapse, final_drops, weights = ipw_full_w2_noimp, s
```

```
R2.3 <- lm_robust(BA_newsletter_clicked~treat_short_collapse, final_drops, weights = ipw_full_w2_noimp,

R2.4 <- lm_robust(donate_any~treat_short_collapse, final_drops, weights = ipw_full_w2_noimp, se_type =

get_table_4(R2.1, R2.2, R2.3, R2.4, "Excluded Pre-Specified Analysis: Short Films Main Outcomes Wave 2
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Excluded Pre-Specified Analysis: Short Films Main Outcomes Wave 2 (Pooled short vs. Empty c
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Affective Polarization & Outparty Affective Polarization & BA Newsletter Clicks & Any Donation \\
## \hline
## treat\_short\_collapse & $-0.05$  & $-0.07$  & $0.05^{**}$ & $0.00$   \\
##                        & $(0.04)$ & $(0.04)$ & $(0.02)$    & $(0.02)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.00$   & $0.01$      & $0.00$   \\
## Adj. R$^2$             & $0.00$   & $0.00$   & $0.01$      & $-0.00$  \\
## Num. obs.              & $1326$   & $1326$   & $1160$      & $1314$   \\
## RMSE                   & $0.67$   & $0.69$   & $0.29$      & $0.43$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#### Table SI.33 ####
V1.1 <- lm_robust(UA_interest~treat_long_collapse2, final_drops, weights = ipw_matched_w3_noimp, se_typ

## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
V1.2 <- lm_robust(UA_interest~treat_long_collapse2, final_drops, weights = weight_w3, se_type = "HC1")

## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
V1.3 <- lm_robust(UA_interest~treat_long_collapse2, final_drops, weights = ipw_full_w3_noimp, se_type =

## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
V1.4 <- lm_robust(UA_interest~treat_long_collapse2, final_drops, se_type = "HC1")

get_table_4(V1.1, V1.2, V1.3, V1.4, "Excluded Pre-Specified Analysis: Unify America Sign-Ups (Full Film
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Excluded Pre-Specified Analysis: Unify America Sign-Ups (Full Film vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2 & $-0.01$  & $0.00$   & $-0.01$  & $-0.01$  \\
##                        & $(0.05)$ & $(0.05)$ & $(0.03)$ & $(0.04)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.00$   & $0.00$   & $0.00$   \\
## Adj. R$^2$             & $-0.00$  & $-0.00$  & $-0.00$  & $-0.00$  \\
## Num. obs.              & $506$    & $508$    & $615$    & $617$    \\
## RMSE                   & $0.60$   & $0.44$   & $0.55$   & $0.44$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```r
#### Table SI.34 ####
W1.1 <- lm_robust(antidem_idx_w3~treat_long_collapse2, final_drops, weights=ipw_matched_w3_noimp, se_ty
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
W1.2 <- lm_robust(antidem_idx_w3~treat_long_collapse2, final_drops, weights=weight_w3, se_type = "HC1")
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
W1.3 <- lm_robust(antidem_idx_w3~treat_long_collapse2, final_drops, weights=ipw_full_w3_noimp, se_type =
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
W1.4 <- lm_robust(antidem_idx_w3~treat_long_collapse2, final_drops, se_type = "HC1")

get_table_4(W1.1, W1.2, W1.3, W1.4, "Excluded Pre-Specified Analysis: Anti-Democratic Attitudes Wave 3
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Excluded Pre-Specified Analysis: Anti-Democratic Attitudes Wave 3 (Full Film vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2 & $-0.13$  & $-0.11$  & $-0.06$  & $-0.04$  \\
##                        & $(0.09)$ & $(0.08)$ & $(0.06)$ & $(0.06)$ \\
## \hline
## R$^2$                  & $0.01$   & $0.01$   & $0.00$   & $0.00$   \\
## Adj. R$^2$             & $0.01$   & $0.00$   & $0.00$   & $-0.00$  \\
## Num. obs.              & $506$    & $508$    & $612$    & $614$    \\
## RMSE                   & $1.03$   & $0.71$   & $0.89$   & $0.70$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

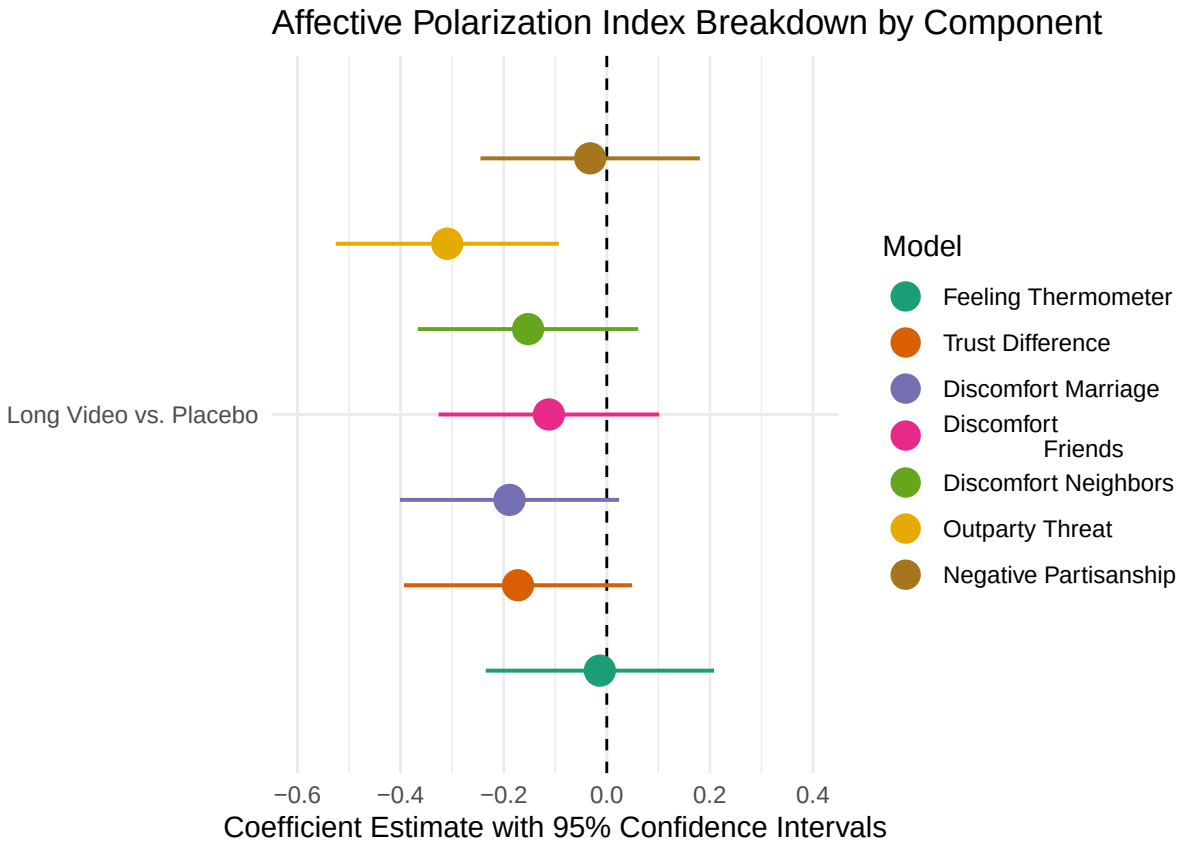
Ancillary Analyses

```
#### Figure SI.9 ####
therm <- lm(therm_diff_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)

trust <- lm(trust_diff_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)

discomfort_marr <- lm(discomfort_outparty_marriage_scale~treat_long_collapse2, final_drops, weights = ip

discomfort_friend <- lm(discomfort_outparty_friends_scale~treat_long_collapse2, final_drops, weights = i

discomfort_neighbor <- lm(discomfort_outparty_neighbors_scale~treat_long_collapse2, final_drops, weights

threat <- lm(threat_outparty_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)

neg_par <- lm(neg_partisan_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)


models_list <- list(therm, trust, discomfort_marr, discomfort_friend, discomfort_neighbor, threat, neg_p

names_list <- c("Feeling Thermometer", "Trust Difference",
                "Discomfort Marriage", "Discomfort
                Friends", "Discomfort Neighbors",
                "Outparty Threat", "Negative Partisanship")
```

```
affpol_components <- plot_generate_7b(models_list, names_list, "Affective Polarization Index Breakdown
```

```
## Tidying model
## Tidying model
## Tidying model
## Tidying model
## Tidying model
## Tidying model
## Tidying model
## Tidied all models
## Creating dwplot
## After dwplot
## [1] "gg"     "ggplot"
## After relabel_predictors
## [1] "gg"     "ggplot"
## Final plot built successfully.
```

```
affpol_components
```




```
ggsave("Figures/SI/Figure_SI.9.png", plot = affpol_components, width=10, height=7)


#### Figure SI.10 ####
```

```r
#Outparty Only
therm_out <- lm(therm_outparty_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)

trust_out <- lm(trust_outparty_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp)


models_list2 <- list(therm_out, trust_out, discomfort_marr, discomfort_friend, discomfort_neighbor, thr

names_list2 <- c("Feeling Thermometer Outparty", "Trust Outparty","Discomfort Marriage", "Discomfort Fr


affpol_components_outparty <- plot_generate_7b(models_list2, names_list2, "Affective Polarization Index
```

```
## Tidying model
```

```
## Tidying model
## Tidying model
## Tidying model
## Tidying model
## Tidying model
## Tidying model
```

```
## Tidied all models
```

```
## Creating dwplot
```

```
## After dwplot
```

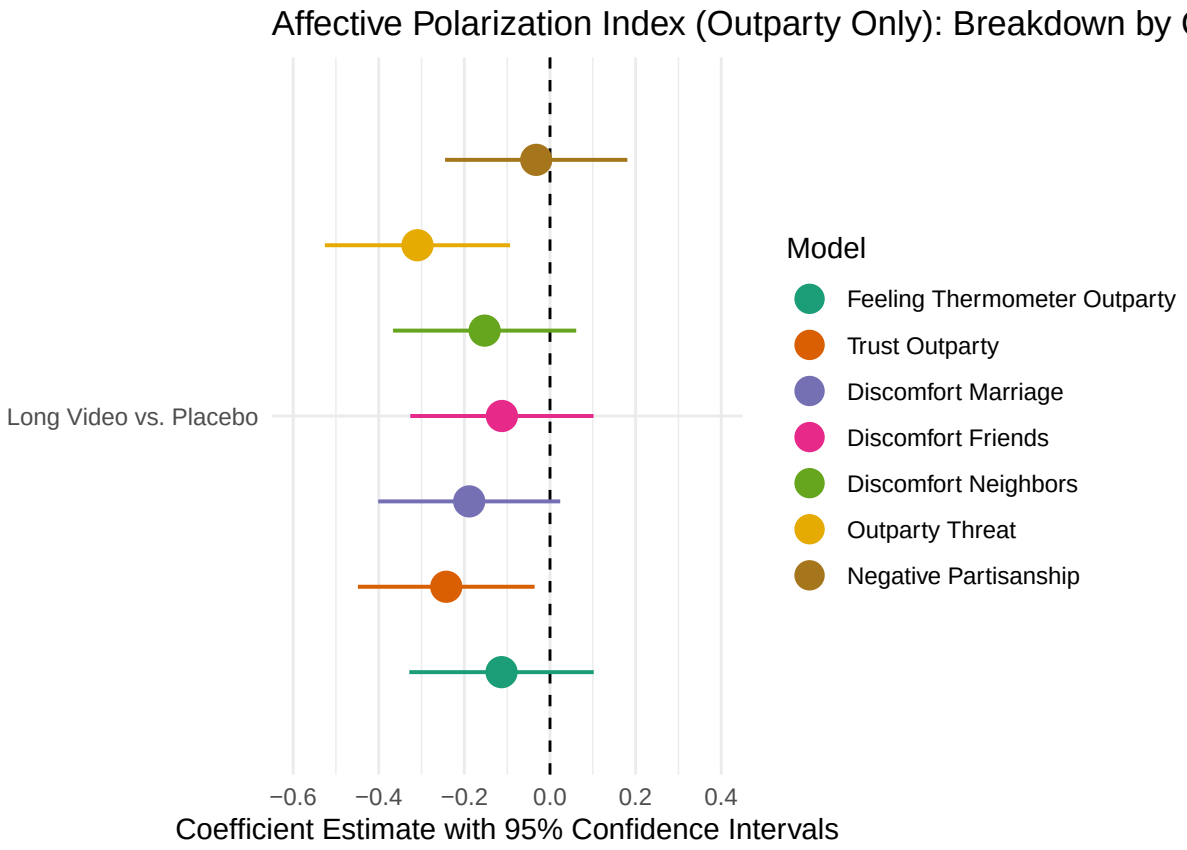
```
## [1] "gg"     "ggplot"
```

```
## After relabel_predictors
```

```
## [1] "gg"     "ggplot"
```

```
## Final plot built successfully.
```

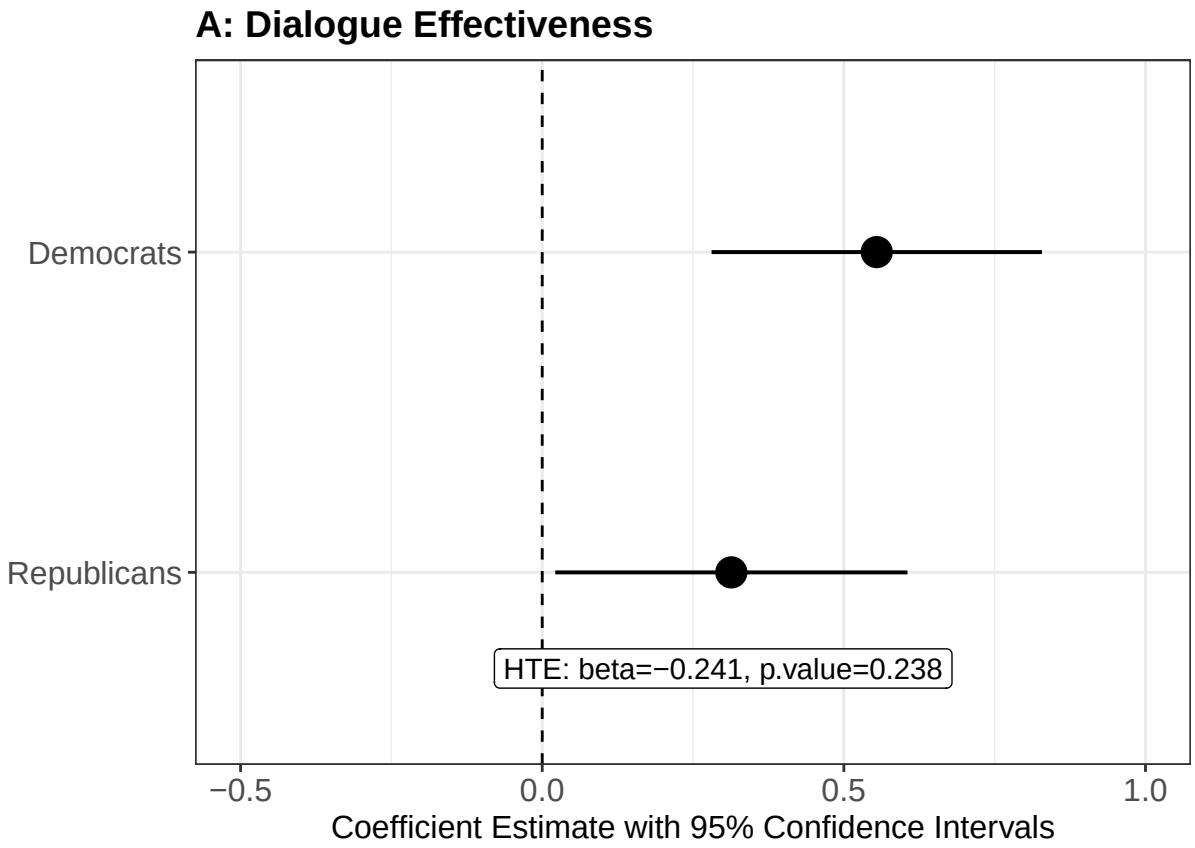
```r
affpol_components_outparty
```



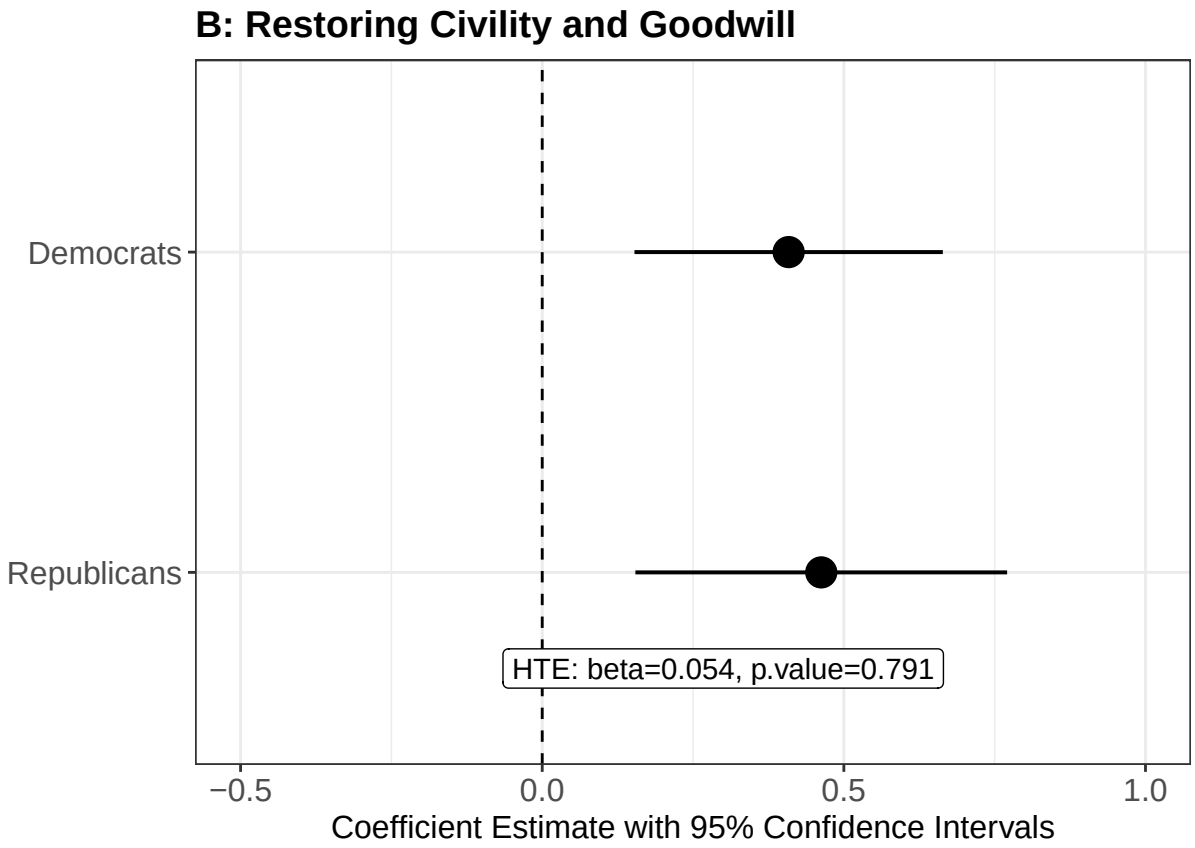

```
ggsave("Figures/SI/Figure_SI.10.png", plot = affpol_components_outparty, width=10, height=7)


#### Table SI.35 ####
final_drops <- final_drops %>%
  mutate(
    therm_inparty_scale = scale(therm_inparty),
    therm_inparty_w3_scale = scale(therm_inparty_w3),
    trust_inparty_scale = scale(trust_inparty),
    trust_inparty_w3_scale = scale(trust_inparty_w3)
  )

trust_inparty_only <- lm_robust(trust_inparty_scale~treat_long_collapse2, final_drops, weights = ipw_ma

## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
therm_inparty_only <- lm_robust(therm_inparty_scale~treat_long_collapse2, final_drops, weights = ipw_ma

## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
get_table_2(trust_inparty_only, therm_inparty_only, "Effect of Documentary on Ingroup Affective Polariz

##
## \usepackage{threeparttable}
##
```

```
## \begin{table}[H]
## \caption{Effect of Documentary on Ingroup Affective Polarization Measures}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c}
## \hline
##  & Ingroup Trust & Ingroup Warmth \\
## \hline
## treat\_long\_collapse2 & $-0.01$  & $0.10$   \\
##                        & $(0.11)$ & $(0.10)$ \\
## \hline
## R$^2$                  & $0.00$   & $0.00$   \\
## Adj. R$^2$             & $-0.00$  & $0.00$   \\
## Num. obs.              & $583$    & $563$    \\
## RMSE                   & $1.33$   & $1.27$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

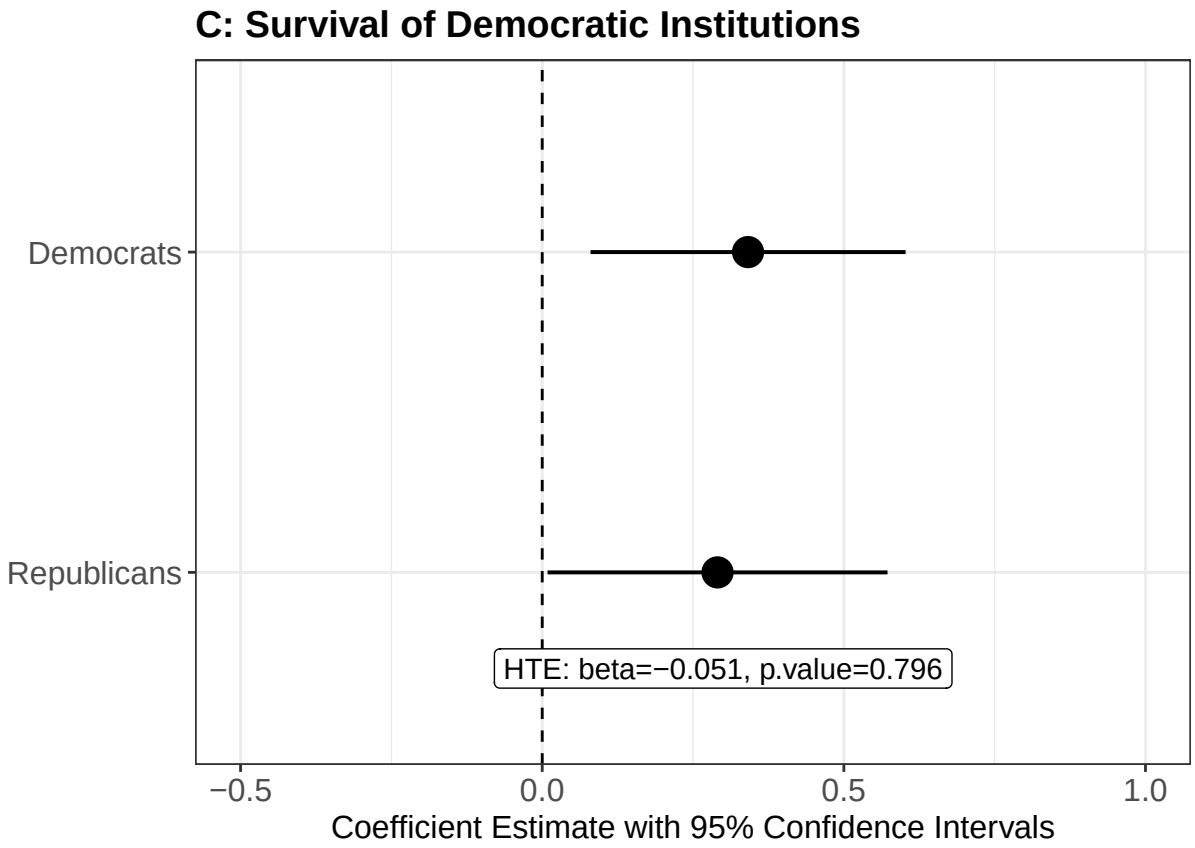
```
#### Figure SI.11 ####
HTE1.3_dialogue <- lm(dialogue_scale~treat_long_collapse2*partyID, final_drops, weights = ipw_matched_w

#generate df and plot
HTE1.3_df <- get_cate(HTE1.3_dialogue, "Democrats", "Republicans")
dialogue_cate <- plot_cate(HTE1.3_df, "A: Dialogue Effectiveness", c(-0.5,1))

dialogue_cate
```



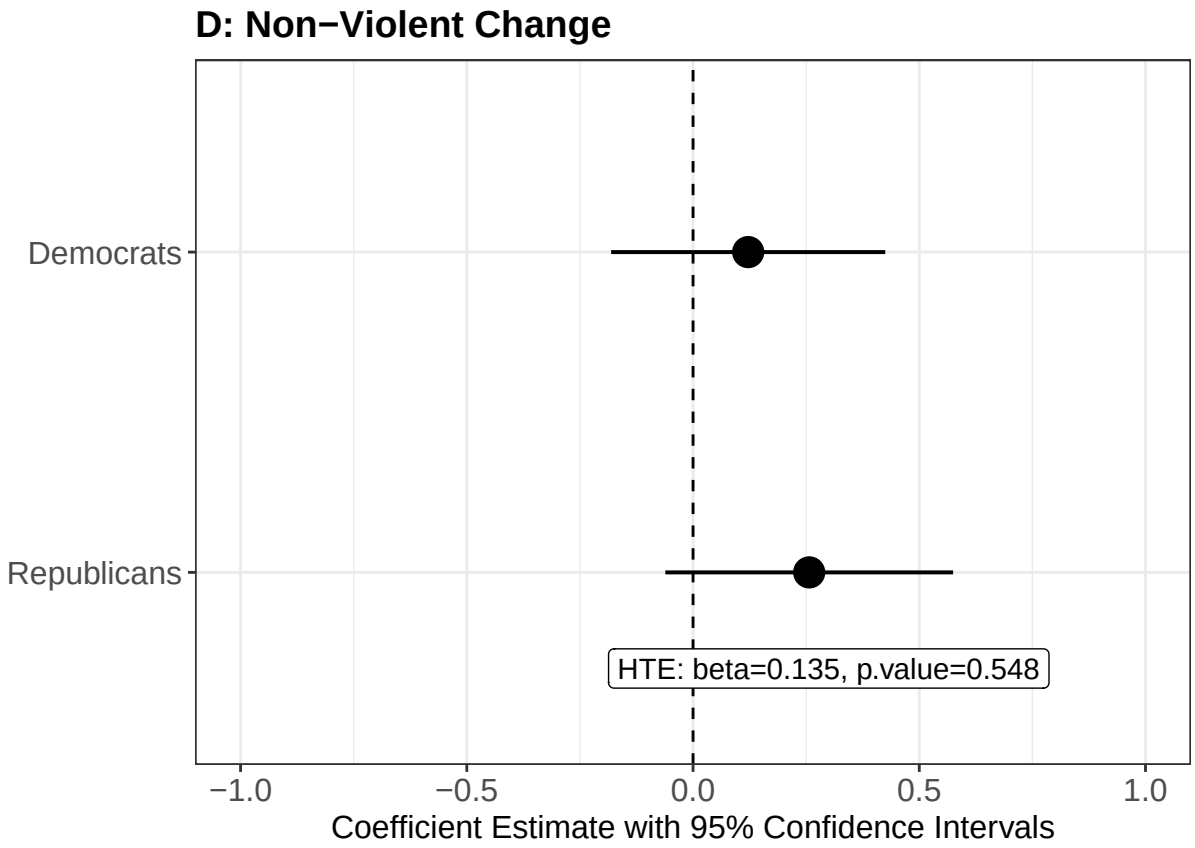

```
#optimism about restoring civility
HTE1.5_optimism_civil <- lm(optimism_civil_scale~treat_long_collapse2*partyID, final_drops, weights = ip

#generate df and plot
HTE1.5_df <- get_cate(HTE1.5_optimism_civil, "Democrats", "Republicans")
optimism_civil_cate <- plot_cate(HTE1.5_df, "B: Restoring Civility and Goodwill", c(-0.5,1))

optimism_civil_cate
```



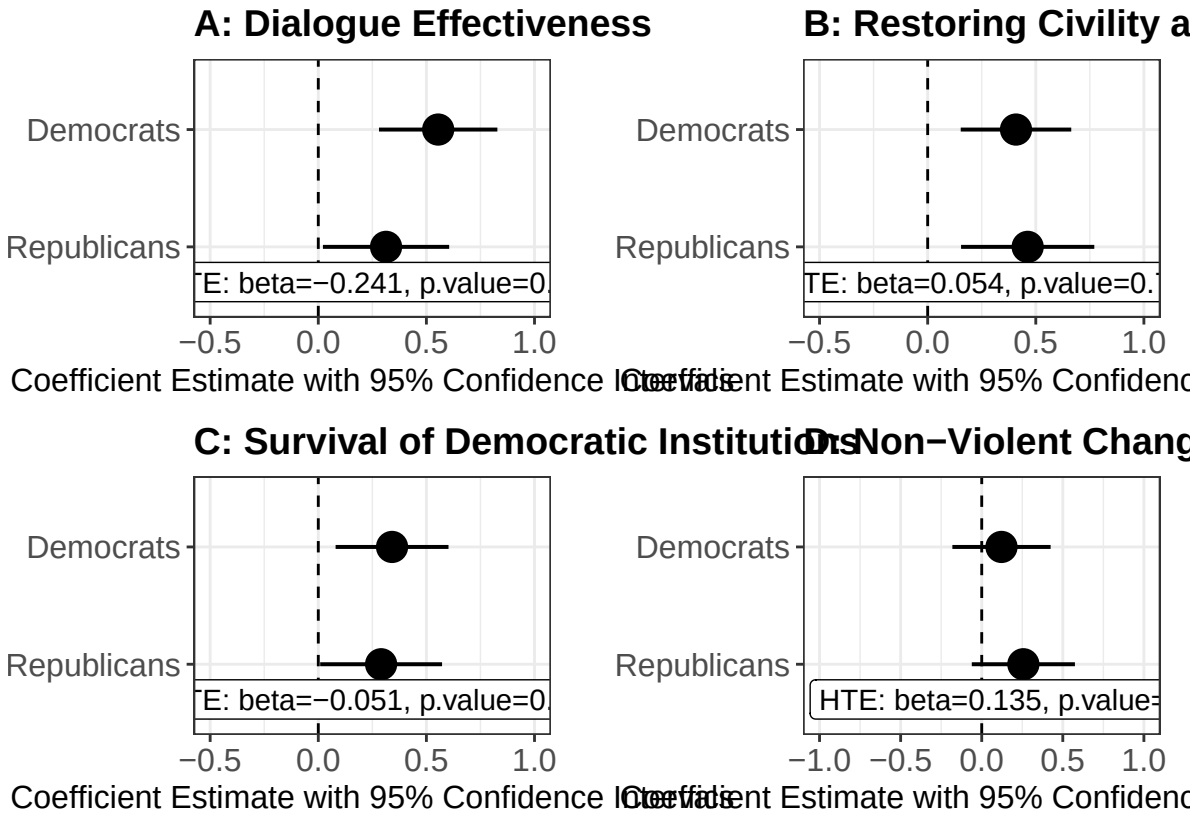

```
#optimism about survival of democratic institutions
HTE1.6_optimism_survive <- lm(optimism_survive_scale~treat_long_collapse2*partyID, final_drops, weights

#generate df and plot
HTE1.6_df <- get_cate(HTE1.6_optimism_survive, "Democrats", "Republicans")
optimism_democracy_cate <- plot_cate(HTE1.6_df, "C: Survival of Democratic Institutions", c(-0.5,1))

optimism_democracy_cate
```



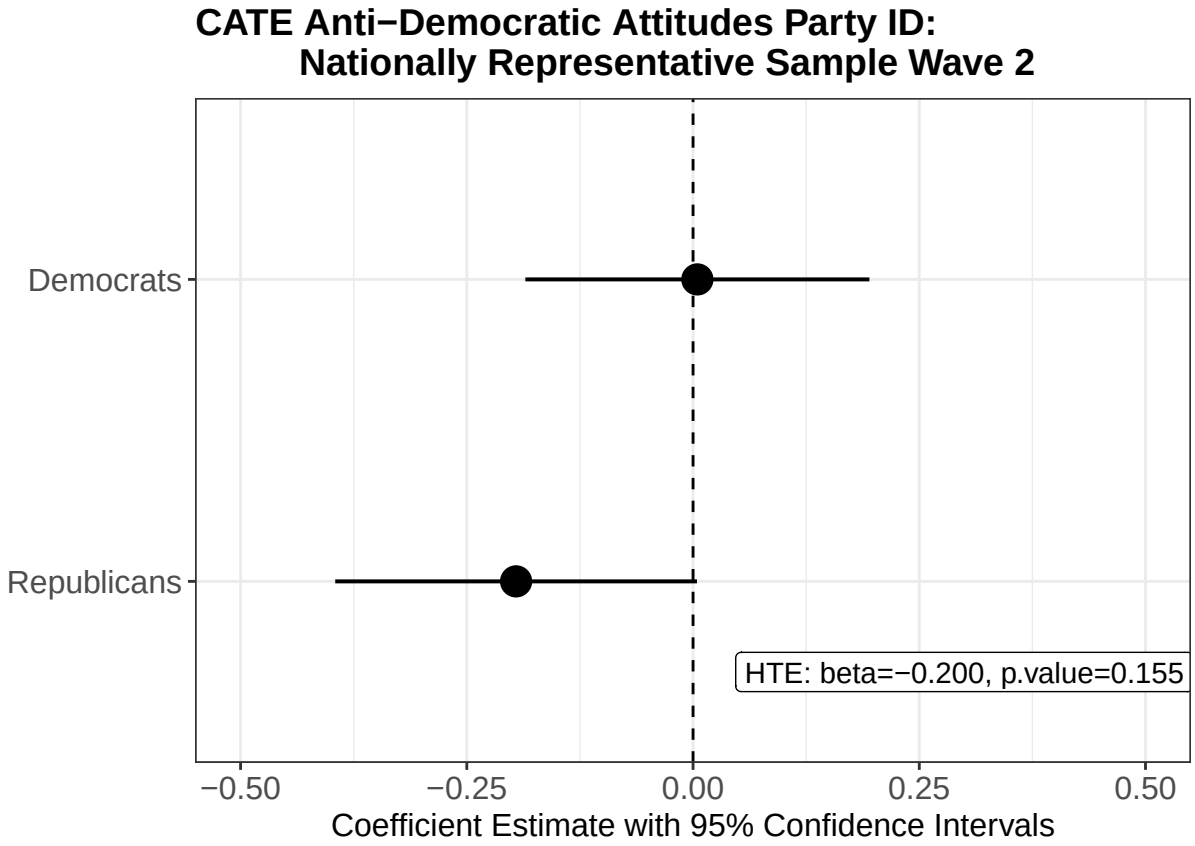

```
#non-violent change still possible
HTE1.8_nonviol <- lm(nonviol_change_scale~treat_long_collapse2*partyID, final_drops, weights = ipw_matc

#generate df and plot
HTE1.8_df <- get_cate(HTE1.8_nonviol, "Democrats", "Republicans")
nonviol_cate <- plot_cate(HTE1.8_df, "D: Non-Violent Change", c(-1,1))

nonviol_cate
```




```
library(patchwork)

combined_secondary_HTE_plots <- dialogue_cate + optimism_civil_cate+ optimism_democracy_cate + nonviol_

combined_secondary_HTE_plots
```




```
#save
ggsave("Figures/SI/Figure_SI.12.png", plot = combined_secondary_HTE_plots, width=10, height=7)


#### Figure SI.12 ####
antidem_cate_ID <- lm(antidem_idx~treat_long_collapse2*partyID, final_drops, weights = ipw_matched_w2_n

antidem_partyID <- get_cate(antidem_cate_ID, "Democrats", "Republicans")

antidem_partyID_plot <- plot_cate(antidem_partyID, "CATE Anti-Democratic Attitudes Party ID:
          Nationally Representative Sample Wave 2", c(-0.5,0.5))

antidem_partyID_plot
```




```
ggsave("Figures/SI/Figure_SI.12.png", plot = antidem_partyID_plot, width=10, height=7)
```

```
#### Table SI.36 ####

# Create time bins by 24 hours
final_drops <- final_drops %>%
  mutate(
    time_bins = case_when(
      post_treat_w2 <= 24 ~ 0,  # First bin: 24 hours or less
      post_treat_w2 > 24 & post_treat_w2 <= 48 ~ 1,  # Second bin: 25-48 hours
      post_treat_w2 > 48 & post_treat_w2 <= 72 ~ 2,  # Third bin: 49-72 hours
      post_treat_w2 > 72 & post_treat_w2 <= 96 ~ 3,  # Fourth bin: 73-96 hours
      post_treat_w2 > 96 & post_treat_w2 <= 120 ~ 4, # Fifth bin: 97-120 hours
      post_treat_w2 > 120 & post_treat_w2 <= 144 ~ 5, # Sixth bin: 121-144 hours
      post_treat_w2 > 144 & post_treat_w2 <= 168 ~ 6, # Seventh bin: 145-168 hours
      post_treat_w2 > 168 & post_treat_w2 <= 192 ~ 7, # Eighth bin: 169-192 hours
      post_treat_w2 > 192 & post_treat_w2 <= 216 ~ 8, # Ninth bin: 193-216 hours
      post_treat_w2 > 216 ~ 9  # Tenth bin: 217 hours or more
    )
  )

by_time <- lm_robust(aff_pol_idx~treat_long_collapse2*time_bins, final_drops, weights=ipw_matched_w2_no
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```r
summary(by_time)
```

```
##
## Call:
## lm_robust(formula = aff_pol_idx ~ treat_long_collapse2 * time_bins,
##     data = final_drops, weights = ipw_matched_w2_noimp, se_type = "HC1")
##
## Weighted, Standard error type:  HC1
##
## Coefficients:
##                               Estimate Std. Error t value Pr(>|t|) CI Lower
## (Intercept)                    0.118417    0.10861  1.0903  0.27602 -0.09489
## treat_long_collapse2          -0.296945    0.17812 -1.6671  0.09604 -0.64679
## time_bins                     -0.009045    0.02199 -0.4113  0.68100 -0.05224
## treat_long_collapse2:time_bins  0.035750    0.03341  1.0701  0.28502 -0.02987
##                               CI Upper  DF
## (Intercept)                    0.33173 580
## treat_long_collapse2           0.05290 580
## time_bins                      0.03415 580
## treat_long_collapse2:time_bins  0.10137 580
##
## Multiple R-squared:  0.0157 ,    Adjusted R-squared:  0.01061
## F-statistic: 1.531 on 3 and 580 DF,  p-value: 0.2055
```

```r
by_time_out <- lm_robust(aff_pol_idx_outparty~treat_long_collapse2*time_bins, final_drops, weights=ipw_m
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

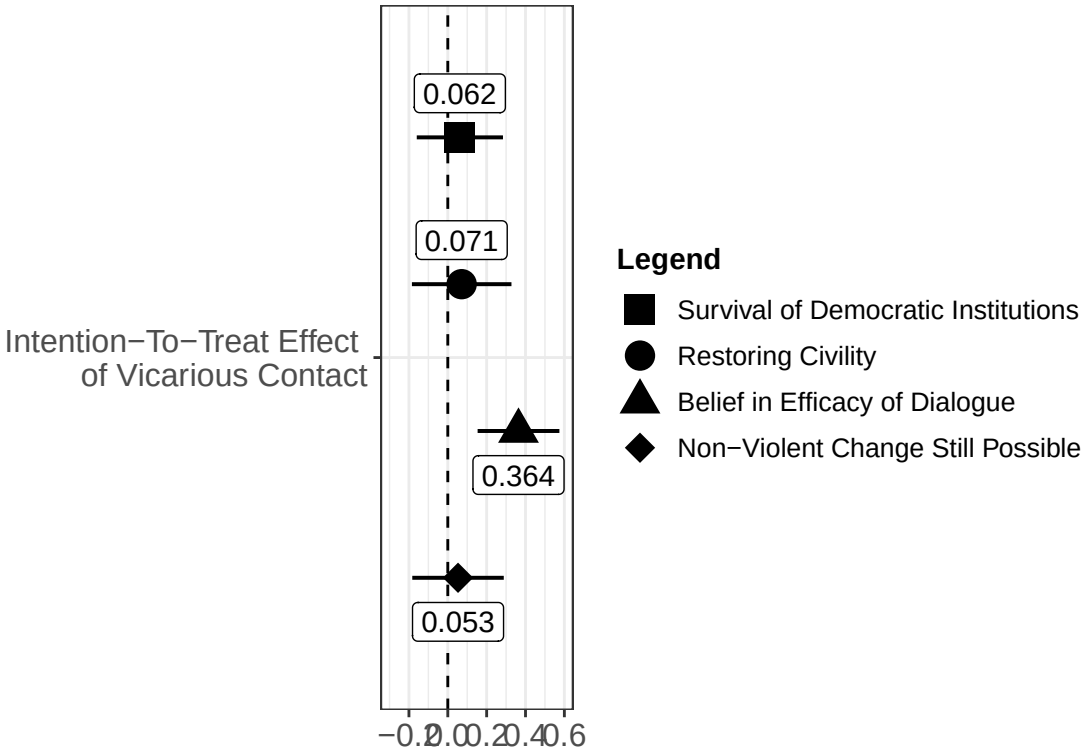
```r
summary(by_time_out)
```

```
##
## Call:
## lm_robust(formula = aff_pol_idx_outparty ~ treat_long_collapse2 *
##     time_bins, data = final_drops, weights = ipw_matched_w2_noimp,
##     se_type = "HC1")
##
## Weighted, Standard error type:  HC1
##
## Coefficients:
##                               Estimate Std. Error t value Pr(>|t|) CI Lower
## (Intercept)                    0.10757    0.12196  0.8820   0.3781 -0.13197
## treat_long_collapse2          -0.31105    0.18560 -1.6759   0.0943 -0.67558
## time_bins                     -0.00510    0.02417 -0.2110   0.8330 -0.05257
## treat_long_collapse2:time_bins  0.03382    0.03496  0.9675   0.3337 -0.03484
##                               CI Upper  DF
## (Intercept)                    0.34712 580
## treat_long_collapse2           0.05348 580
## time_bins                      0.04237 580
## treat_long_collapse2:time_bins  0.10249 580
##
## Multiple R-squared:  0.01989 ,   Adjusted R-squared:  0.01482
## F-statistic: 1.992 on 3 and 580 DF,  p-value: 0.1141
```

```r
#make table
get_table_2(by_time, by_time_out, "Affective Polarization by Wave 2 Response Time", "Affective Polariza
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Affective Polarization by Wave 2 Response Time}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c}
## \hline
##  & Affective Polarization & Outparty Only \\
## \hline
## treat\_long\_collapse2            & $-0.30$  & $-0.31$  \\
##                                   & $(0.18)$ & $(0.19)$ \\
## time\_bins                        & $-0.01$  & $-0.01$  \\
##                                   & $(0.02)$ & $(0.02)$ \\
## treat\_long\_collapse2:time\_bins & $0.04$   & $0.03$   \\
##                                   & $(0.03)$ & $(0.03)$ \\
## \hline
## R$^2$                             & $0.02$   & $0.02$   \\
## Adj. R$^2$                        & $0.01$   & $0.01$   \\
## Num. obs.                         & $584$    & $584$    \\
## RMSE                              & $0.85$   & $0.85$   \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```r
#### Figure SI.13 ####
#belief in possibility of non-violent democratic change
Y1.1_w3 <- lm(nonviol_change_scale_w3~treat_long_collapse2, final_drops, weights = ipw_matched_w3_noimp

Y1.4_w3 <- lm(dialogue_scale_w3~treat_long_collapse2, final_drops, weights = ipw_matched_w3_noimp)

Y2.1_w3 <- lm(optimism_civil_scale_w3~treat_long_collapse2, final_drops, weights = ipw_matched_w3_noimp

Y2.2_w3 <- lm(optimism_survive_scale_w3~treat_long_collapse2, final_drops, weights = ipw_matched_w3_noi


optimism_plot_PAP_w3 <- plot_generate_4(Y1.1_w3, Y1.4_w3, Y2.1_w3, Y2.2_w3, "Non-Violent Change Still P

print(optimism_plot_PAP_w3)
```




```
#save
ggsave("Figures/SI/Figure_SI.13.png", plot = optimism_plot_PAP_w3, width=10, height=7)
```

```
#### Table SI.37 ####
#HTEs covariates
covars <- c("age", "sex", "educ_dum", "white", "christian", "child", "job", "marr_dum", "turnout2020",
covars_formula <- paste(covars, collapse = " + ")
formula <- as.formula(paste("aff_pol_idx ~ treat_long_collapse2 * partyID +", covars_formula))

HTE1.1_covars <- lm_robust(formula, data = final_drops, weights = ipw_matched_w2_noimp, se_type = "HC1"
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
HTE1.1_covars_2 <- lm(formula, data = final_drops, weights = ipw_matched_w2_noimp)

summary(HTE1.1_covars_2)
```

```
##
## Call:
## lm(formula = formula, data = final_drops, weights = ipw_matched_w2_noimp)
##
## Weighted Residuals:
##      Min       1Q   Median       3Q      Max
## -2.91501 -0.53122 -0.04036  0.55875  2.80462
##
## Coefficients:
##                               Estimate Std. Error t value Pr(>|t|)
## (Intercept)                   0.074649   0.107682   0.693  0.48847
```

```
## treat_long_collapse2         -0.218283   0.071825  -3.039  0.00249 **
## partyID                      -0.005290   0.096576  -0.055  0.95634
## age                          -0.001143   0.001758  -0.650  0.51588
## sex                           0.004435   0.054706   0.081  0.93541
## educ_dum                      0.049399   0.062778   0.787  0.43170
## white                        -0.035353   0.060817  -0.581  0.56129
## christian                    -0.085212   0.058896  -1.447  0.14854
## child                        -0.142988   0.068252  -2.095  0.03665 *
## job                          -0.030023   0.059426  -0.505  0.61362
## marr_dum                     -0.084390   0.059190  -1.426  0.15454
## turnout2020                   0.313886   0.076037   4.128 4.26e-05 ***
## ideo_scale                   -0.095549   0.037583  -2.542  0.01130 *
## treat_long_collapse2:partyID  0.128129   0.110065   1.164  0.24490
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.8046 on 524 degrees of freedom
##   (2035 observations deleted due to missingness)
## Multiple R-squared:  0.09506,    Adjusted R-squared:  0.0726
## F-statistic: 4.234 on 13 and 524 DF,  p-value: 9.476e-07
```

```
#HTEs covariates outparty
formula_out <- as.formula(paste("aff_pol_idx_outparty ~ treat_long_collapse2 * partyID +", covars_formu

HTE1.1_covars_out <- lm_robust(formula_out, data = final_drops, weights = ipw_matched_w2_noimp, se_type
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
summary(HTE1.1_covars_out)
```

```
##
## Call:
## lm_robust(formula = formula_out, data = final_drops, weights = ipw_matched_w2_noimp,
##     se_type = "HC1")
##
## Weighted, Standard error type:  HC1
##
## Coefficients:
##                               Estimate Std. Error  t value Pr(>|t|)  CI Lower
## (Intercept)                   0.211872   0.142957  1.48207  0.13892 -0.068968
## treat_long_collapse2         -0.224803   0.087578 -2.56690  0.01054 -0.396849
## partyID                       0.022587   0.103081  0.21912  0.82664 -0.179915
## age                          -0.002532   0.002706 -0.93576  0.34983 -0.007848
## sex                           0.005841   0.066147  0.08831  0.92966 -0.124104
## educ_dum                      0.064062   0.074684  0.85778  0.39141 -0.082655
## white                        -0.054422   0.074718 -0.72837  0.46671 -0.201206
## christian                    -0.118547   0.071547 -1.65692  0.09813 -0.259101
## child                        -0.194753   0.085327 -2.28244  0.02286 -0.362378
## job                          -0.028202   0.078547 -0.35904  0.71971 -0.182507
## marr_dum                     -0.082185   0.066662 -1.23286  0.21818 -0.213142
## turnout2020                   0.242592   0.112983  2.14715  0.03224  0.020636
## ideo_scale                   -0.116404   0.045177 -2.57658  0.01025 -0.205155
## treat_long_collapse2:partyID  0.140295   0.133277  1.05266  0.29298 -0.121528
```

```
##                                CI Upper  DF
## (Intercept)                    0.492712 524
## treat_long_collapse2          -0.052757 524
## partyID                        0.225090 524
## age                            0.002784 524
## sex                            0.135787 524
## educ_dum                       0.210779 524
## white                          0.092361 524
## christian                      0.022006 524
## child                         -0.027129 524
## job                            0.126103 524
## marr_dum                       0.048772 524
## turnout2020                    0.464548 524
## ideo_scale                    -0.027652 524
## treat_long_collapse2:partyID   0.402119 524
##
## Multiple R-squared:  0.1058 ,    Adjusted R-squared:  0.08363
## F-statistic:  3.55 on 13 and 524 DF,  p-value: 2.361e-05
```

```
HTE1.1_covars_out_2 <- lm(formula_out, data = final_drops, weights = ipw_matched_w2_noimp)


#create table
get_table_2(HTE1.1_covars, HTE1.1_covars_out, "", "Affective polarization", "Outparty only")
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c}
## \hline
##  & Affective polarization & Outparty only \\
## \hline
## treat\_long\_collapse2         & $-0.22^{**}$ & $-0.22^{*}$ \\
##                                & $(0.08)$     & $(0.09)$    \\
## partyID                        & $-0.01$      & $0.02$      \\
##                                & $(0.10)$     & $(0.10)$    \\
## age                            & $-0.00$      & $-0.00$     \\
##                                & $(0.00)$     & $(0.00)$    \\
## sex                            & $0.00$       & $0.01$      \\
##                                & $(0.07)$     & $(0.07)$    \\
## educ\_dum                      & $0.05$       & $0.06$      \\
##                                & $(0.07)$     & $(0.07)$    \\
## white                          & $-0.04$      & $-0.05$     \\
##                                & $(0.07)$     & $(0.07)$    \\
## christian                      & $-0.09$      & $-0.12$     \\
##                                & $(0.07)$     & $(0.07)$    \\
## child                          & $-0.14$      & $-0.19^{*}$ \\
##                                & $(0.08)$     & $(0.09)$    \\
## job                            & $-0.03$      & $-0.03$     \\
##                                & $(0.08)$     & $(0.08)$    \\
```

```
## marr\_dum                       & $-0.08$      & $-0.08$     \\
##                                 & $(0.07)$     & $(0.07)$    \\
## turnout2020                     & $0.31^{**}$  & $0.24^{*}$  \\
##                                 & $(0.11)$     & $(0.11)$    \\
## ideo\_scale                     & $-0.10^{*}$  & $-0.12^{*}$ \\
##                                 & $(0.04)$     & $(0.05)$    \\
## treat\_long\_collapse2:partyID & $0.13$       & $0.14$      \\
##                                 & $(0.13)$     & $(0.13)$    \\
## \hline
## R$^2$                           & $0.10$       & $0.11$      \\
## Adj. R$^2$                      & $0.07$       & $0.08$      \\
## Num. obs.                       & $538$        & $538$       \\
## RMSE                            & $0.80$       & $0.82$      \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#### Table SI.38 ####
L1.1 <- lm_robust(optimism_pol_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp,
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
L1.2 <- lm_robust(optimism_pol_scale~treat_long_collapse2, final_drops, weights = weight_w2, se_type =
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
L1.3 <- lm_robust(optimism_pol_scale~treat_long_collapse2, final_drops, weights = ipw_full_w2_noimp, se

L1.4 <- lm_robust(optimism_pol_scale~treat_long_collapse2, final_drops, se_type = "HC1")

get_table_4(L1.1, L1.2, L1.3, L1.4, "Main Analysis: Optimism about Overcoming Polarization Wave 2 (Long
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Optimism about Overcoming Polarization Wave 2 (Long vs. Placebo)}
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2 & $0.37^{***}$ & $0.34^{**}$ & $0.25^{***}$ & $0.25^{***}$ \\
```

```
##                         & $(0.11)$     & $(0.11)$    & $(0.07)$     & $(0.07)$     \\
## \hline
## R$^2$                   & $0.04$       & $0.03$      & $0.02$       & $0.02$       \\
## Adj. R$^2$              & $0.03$       & $0.03$      & $0.01$       & $0.01$       \\
## Num. obs.               & $583$        & $583$       & $776$        & $776$        \\
## RMSE                    & $1.27$       & $0.96$      & $1.12$       & $0.98$       \\
## \hline
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#### Table SI.39 ####
Y1.1 <- lm_robust(rebuild_trust_scale~treat_long_collapse2, final_drops, weights = ipw_matched_w2_noimp
```

```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
Y1.2 <- lm_robust(rebuild_trust_scale~treat_long_collapse2, final_drops, weights = weight_w2, se_type =
```

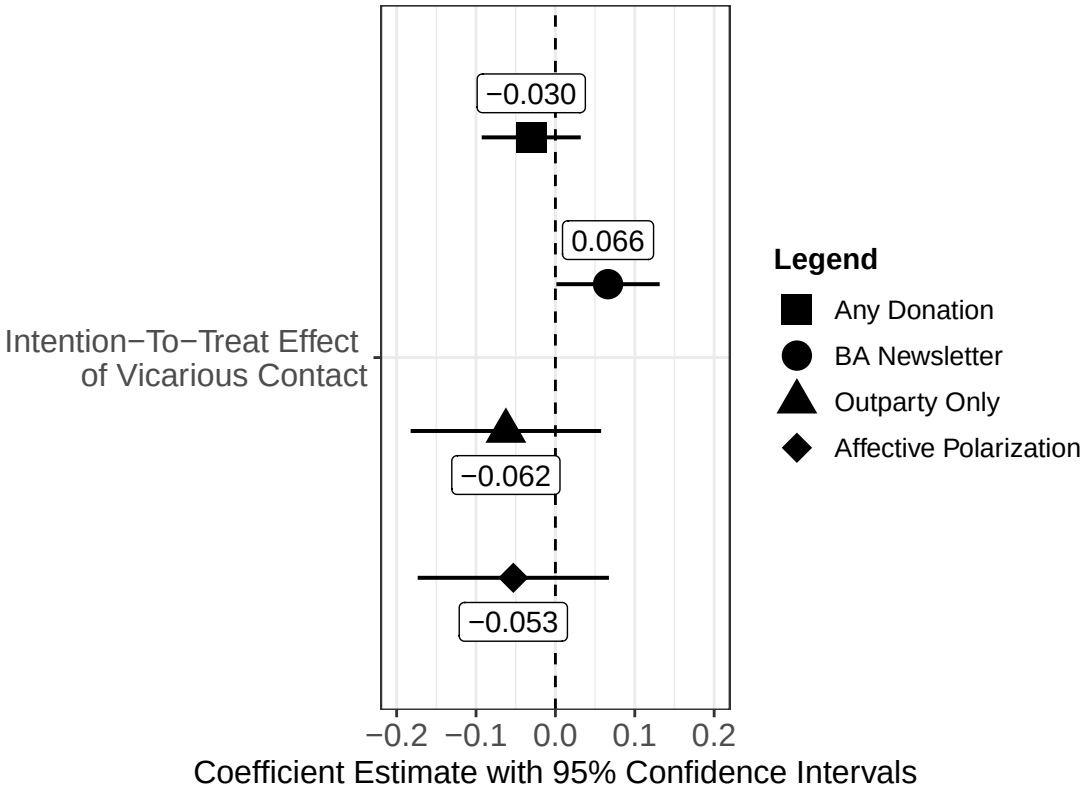
```
## Warning in eval(quote({: Some observations have missingness in the weights
## variable(s) but not in the outcome or covariates. These observations have been
## dropped.
```

```
Y1.3 <- lm_robust(rebuild_trust_scale~treat_long_collapse2, final_drops, weights = ipw_full_w2_noimp, s

Y1.4 <- lm_robust(rebuild_trust_scale~treat_long_collapse2, final_drops, se_type = "HC1")

get_table_4(Y1.1, Y1.2, Y1.3, Y1.4, "Main Analysis: Time It Would Take to Rebuild Trust (reverse-coded)
```

```
##
## \usepackage{threeparttable}
##
## \begin{table}[H]
## \caption{Main Analysis: Time It Would Take to Rebuild Trust (reverse-coded) Wave 2 (Long vs. Placebo
## \begin{center}
## \begin{large}
## \begin{threeparttable}
## \begin{tabular}{l c c c c}
## \hline
##  & Matched (IPWs) & Matched (No IPWs) & Full (IPWs) & Full (No IPWs) \\
## \hline
## treat\_long\_collapse2 & $0.33^{**}$ & $0.31^{**}$ & $0.20^{**}$ & $0.19^{**}$ \\
##                         & $(0.10)$    & $(0.10)$    & $(0.07)$    & $(0.07)$    \\
## \hline
## R$^2$                   & $0.03$      & $0.02$      & $0.01$      & $0.01$      \\
## Adj. R$^2$              & $0.03$      & $0.02$      & $0.01$      & $0.01$      \\
## Num. obs.               & $583$       & $583$       & $776$       & $776$       \\
## RMSE                    & $1.28$      & $0.97$      & $1.12$      & $0.99$      \\
## \hline
```

```
## \end{tabular}
## \begin{tablenotes}[flushleft]
## \footnotesize{\item $^{***}p<0.001$; $^{**}p<0.01$; $^{*}p<0.05$. \\ Robust standard errors are used
## \end{tablenotes}
## \end{threeparttable}
## \end{large}
## \label{table:coefficients}
## \end{center}
## \end{table}
```

```
#### Figure SI.14 ####
#both short videos vs. long video
final_drops <- final_drops %>%
  mutate(
    treat_shortlong_collapse =
      case_when(
      video_treatment == "Treatment Long" ~ 1,
      video_treatment == "Treatment Short PMC" ~ 0,
      video_treatment == "Treatment Short VC" ~ 0
    )
  )

#polarization
full_vs_short <- lm(aff_pol_idx~treat_shortlong_collapse, final_drops, weights = ipw_matched_w2_noimp)

#outparty
full_vs_short_out <- lm(aff_pol_idx_outparty~treat_shortlong_collapse, final_drops, weights = ipw_matche


#BA newsletter
full_vs_short_newsletter <- lm(BA_newsletter_clicked~treat_shortlong_collapse, final_drops, weights = ip

#donation
full_vs_short_donate <- lm(donate_any~treat_shortlong_collapse, final_drops, weights = ipw_matched_w2_n


short_vs_long_plot <- plot_generate_4_2(full_vs_short, full_vs_short_out, full_vs_short_newsletter, full

short_vs_long_plot
```




```
#save
ggsave("Figures/SI/Figure_SI.14.png", plot = short_vs_long_plot, width=10, height=7)
```