```
######################
##  LOAD LIBRARIES  ##
######################

library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.1 --
## v ggplot2 3.3.5     v purrr   0.3.4
## v tibble  3.1.2     v dplyr   1.0.7
## v tidyr   1.1.3     v stringr 1.4.0
## v readr   1.4.0     v forcats 0.5.1
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(scales)
```

```
##
## Attaching package: 'scales'
## The following object is masked from 'package:purrr':
##
##     discard
## The following object is masked from 'package:readr':
##
##     col_factor
```

```
library(modelsummary)
library(srvyr)
```

```
##
## Attaching package: 'srvyr'
## The following object is masked from 'package:stats':
##
##     filter
```

```
library(margins)


######################
##  DATA CLEANING   ##
######################

ces <- read_csv("CCES20_Common_OUTPUT.csv") %>%
  transmute(vote = case_when(CC20_410 == 1 ~ 1,
                             CC20_410 == 2 ~ 0),
            covid_self = case_when(CC20_309a_1 == 1 ~ 1,
                                   TRUE ~ 0),
            covid_knows = case_when(CC20_309a_2 == 1
                                    | CC20_309a_3 == 1
                                    | CC20_309a_4 == 1 ~ 1,
                                    TRUE ~ 0),
            covid_death = case_when(CC20_309b_1 == 1
                                    | CC20_309b_2 == 1
                                    | CC20_309b_3 == 1 ~ 1,
                                    TRUE ~ 0),
            age = rescale(birthyr, to = 0:1),
            gender = ifelse(gender == 2, 1, 0),
            educ = rescale(educ, to = 0:1),
            income = ifelse(faminc_new == 97, NA, faminc_new),
            income = rescale(income, to = 0:1),
```

```
        race = factor(race),
        marstat = factor(marstat),
        urbancity = factor(urbancity),
        health = rescale(CC20_309e, to = c(-1, 1)),
        income2020 = rescale(CC20_303, to = c(-1, 1)),
        economy = ifelse(CC20_302 == 6, NA, CC20_302),
        economy = rescale(economy, to = c(-1, 1)),
        pid = ifelse(pid7 == 8, NA, pid7),
        pid = rescale(-pid, to = c(-1, 1)),
        ideology = ifelse(ideo5 == 6, NA, ideo5),
        ideology = rescale(-ideology, to = c(-1, 1)),
        vote2016 = case_when(presvote16post == 1 ~ 1,
                             presvote16post == 2 ~ -1,
                             TRUE ~ 0),
        state = inputstate_post,
        state = case_when(state == 1 ~ "Alabama",
                          state == 2 ~ "Alaska",
                          state == 4 ~ "Arizona",
                          state == 5 ~ "Arkansas",
                          state == 6 ~ "California",
                          state == 8 ~ "Colorado",
                          state == 9 ~ "Connecticut",
                          state == 10 ~ "Delaware",
                          state == 11 ~ "District of Columbia",
                          state == 12 ~ "Florida",
                          state == 13 ~ "Georgia",
                          state == 15 ~ "Hawaii",
                          state == 16 ~ "Idaho",
                          state == 17 ~ "Illinois",
                          state == 18 ~ "Indiana",
                          state == 19 ~ "Iowa",
                          state == 20 ~ "Kansas",
                          state == 21 ~ "Kentucky",
                          state == 22 ~ "Louisiana",
                          state == 23 ~ "Maine",
                          state == 24 ~ "Maryland",
                          state == 25 ~ "Massachusetts",
                          state == 26 ~ "Michigan",
                          state == 27 ~ "Minnesota",
                          state == 28 ~ "Mississippi",
                          state == 29 ~ "Missouri",
                          state == 30 ~ "Montana",
                          state == 31 ~ "Nebraska",
                          state == 32 ~ "Nevada",
                          state == 33 ~ "New Hampshire",
                          state == 34 ~ "New Jersey",
                          state == 35 ~ "New Mexico",
                          state == 36 ~ "New York",
                          state == 37 ~ "North Carolina",
                          state == 38 ~ "North Dakota",
                          state == 39 ~ "Ohio",
                          state == 40 ~ "Oklahoma",
                          state == 41 ~ "Oregon",
                          state == 42 ~ "Pennsylvania",
                          state == 44 ~ "Rhode Island",
                          state == 45 ~ "South Carolina",
                          state == 46 ~ "South Dakota",
                          state == 47 ~ "Tennessee",
                          state == 48 ~ "Texas",
                          state == 49 ~ "Utah",
                          state == 50 ~ "Vermont",
```

```
                              state == 51 ~ "Virginia",
                              state == 53 ~ "Washington",
                              state == 54 ~ "West Virginia",
                              state == 55 ~ "Wisconsin",
                              state == 56 ~ "Wyoming"),
            weight = commonpostweight) %>%
  drop_na()
```

```
##
## -- Column specification --------------------------------------------------------
## cols(
##   .default = col_double(),
##   race_other = col_character(),
##   CC20_hisp_t = col_character(),
##   CC20_asian_t = col_character(),
##   multrace_97 = col_logical(),
##   CC20_300d_6 = col_logical(),
##   CC20_309d_t = col_character(),
##   CC20_364a_t = col_character(),
##   CC20_365_voted_t = col_character(),
##   CC20_365b_voted_t = col_character(),
##   CC20_366_voted_t = col_character(),
##   CC20_367_voted_t = col_character(),
##   CC20_364b_t = col_character(),
##   CC20_365_t = col_character(),
##   CC20_365b_t = col_character(),
##   CC20_365c_t = col_character(),
##   CC20_366_t = col_character(),
##   CC20_367_t = col_character(),
##   CC20_367a_t = col_character(),
##   presvote16post_t = col_character(),
##   pid3_t = col_character()
##   # ... with 162 more columns
## )
## i Use `spec()` for the full column specifications.
```

```
####################
##  MAIN RESULTS  ##
####################


# Table 1 ------------------------------------------------------------------------------------------------------------

models <- list(
  "(1)" = lm(vote ~ covid_self + covid_knows + covid_death,
             weights = weight,
             data = ces),
  "(2)" = lm( vote ~ covid_self + covid_knows + covid_death
              + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat),
              weights = weight,
              data = ces),
  "(3)" = lm(vote ~ covid_self + covid_knows + covid_death
             + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
             + health + income2020 + economy,
             weights = weight,
             data = ces),
  "(4)" = lm(vote ~ covid_self + covid_knows + covid_death
             + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
             + health + income2020 + economy
             + pid + ideology + vote2016,
             weights = weight,
```

Table 1: Exposure to COVID-19 and Vote Choice in the 2020 Presidential Election

	(1)	(2)	(3)	(4)	(5)
Has been diagnosed with COVID-19	-0.0254	-0.0331+	0.0127	-0.0013	-0.0009
	(0.0182)	(0.0171)	(0.0137)	(0.0107)	(0.0105)
Knows someone diagnosed with COVID-19	0.0838***	0.0783***	0.0298***	0.0133***	0.0140***
	(0.0081)	(0.0074)	(0.0062)	(0.0037)	(0.0037)
Knows someone who died from COVID-19	0.1308***	0.0851***	0.0561***	0.0202***	0.0202***
	(0.0103)	(0.0096)	(0.0083)	(0.0052)	(0.0051)
Sociodemographic Controls	No	Yes	Yes	Yes	Yes
Pandemic-related Controls	No	No	Yes	Yes	Yes
Political Controls	No	No	No	Yes	Yes
State Fixed-Effects	No	No	No	No	Yes
Observations	37641	37641	37641	37641	37641
Adjusted R-squared	0.023	0.187	0.442	0.795	0.795

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

```
            data = ces),
  "(5)" = lm(vote ~ covid_self + covid_knows + covid_death
            + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
            + health + income2020 + economy
            + pid + ideology + vote2016
            + factor(state),
            weights = weight,
            data = ces))

rows <- tribble(~term,                          ~"(1)",  ~"(2)",  ~"(3)",  ~"(4)",  ~"(5)",
                'Sociodemographic Controls',      'No',   'Yes',   'Yes',   'Yes',   'Yes',
                'Pandemic-related Controls',      'No',    'No',   'Yes',   'Yes',   'Yes',
                'Political Controls',             'No',    'No',    'No',   'Yes',   'Yes',
                'State Fixed-Effects',            'No',    'No',    'No',    'No',   'Yes')
attr(rows, 'position') <- 7:10

gm <- modelsummary::gof_map
gm$clean[gm$clean == 'R2 Adj.'] <- 'Adjusted R-squared'
gm$clean[gm$clean == 'Num.Obs.'] <- 'Observations'

modelsummary(models,
             vcov = "HC2",
             fmt = "%.4f",
             stars = TRUE,
             add_rows = rows,
             gof_map = gm,
             gof_omit = "AIC|BIC|Log.Lik.|F|Deviance|Sigma|Statistics|p|R2|Std. Errors",
             coef_map = c("covid_self"="Has been diagnosed with COVID-19",
                          "covid_knows"="Knows someone diagnosed with COVID-19",
                          "covid_death"="Knows someone who died from COVID-19"),
             title = "Exposure to COVID-19 and Vote Choice in the 2020 Presidential Election")
```

```
# No-Pandemic Simulation: National-Level ------------------------------------------------------------------

means <- ces %>%
  select(covid_self, covid_knows, covid_death,
         weight) %>%
  as_survey(weights = c(weight)) %>%
  summarize(across(1:3, survey_mean, vartype = NULL))

prediction(models[["(5)"]],
```

```
          at = list(covid_self = c(0, means[[1,1]]),
                    covid_knows = c(0, means[[1,2]]),
                    covid_death = c(0, means[[1,3]])))
```

```
## Data frame with 301128 predictions from
##  lm(formula = vote ~ covid_self + covid_knows + covid_death +
##     factor(race) + educ + age + gender + income + factor(urbancity) +
##     factor(marstat) + health + income2020 + economy + pid + ideology +
##     vote2016 + factor(state), data = ces, weights = weight)
## with average predictions:
##  covid_self covid_knows covid_death      x
##     0.00000      0.0000      0.0000 0.5779
##     0.04544      0.0000      0.0000 0.5778
##     0.00000      0.5122      0.0000 0.5850
##     0.04544      0.5122      0.0000 0.5850
##     0.00000      0.0000      0.1595 0.5811
##     0.04544      0.0000      0.1595 0.5810
##     0.00000      0.5122      0.1595 0.5882
##     0.04544      0.5122      0.1595 0.5882
```

```
####################
##    APPENDIX    ##
####################


# Descriptive statistics ------------------------------------------------------------------------------------------

options(scipen=999)

ces_descriptives <- ces %>%
  transmute(`Vote choice (1 = Biden, 0 = Trump)` = vote,
            `Has been diagnosed with COVID-19` = covid_self,
            `Knows someone diagnosed with COVID-19` = covid_knows,
            `Knows someone who died from COVID-19` = covid_death,
            `Age (18-95)` = age,
            `Gender (female = 1)` = gender,
            `Education level` = educ,
            `Household income` = income,
            `Race: White` = ifelse(race == 1, 1, 0),
            `Race: Black or African-American` = ifelse(race == 2, 1, 0),
            `Race: Hispanic or Latino` = ifelse(race == 3, 1, 0),
            `Race: Asian or Asian-American` = ifelse(race == 4, 1, 0),
            `Race: Native American` = ifelse(race == 5, 1, 0),
            `Race: Middle Eastern` = ifelse(race == 8, 1, 0),
            `Race: Two or more races` = ifelse(race == 6, 1, 0),
            `Race: Other` = ifelse(race == 7, 1, 0),
            `Marital Status: Married` = ifelse(marstat == 1, 1, 0),
            `Marital Status: Separated` = ifelse(marstat == 2, 1, 0),
            `Marital Status: Divorced` = ifelse(marstat == 3, 1, 0),
            `Marital Status: Widowed` = ifelse(marstat == 4, 1, 0),
            `Marital Status: Never married` = ifelse(marstat == 5, 1, 0),
            `Marital Status: Domestic/civil partnership` = ifelse(marstat == 6, 1, 0),
            `Residence Area: City` = ifelse(urbancity == 1, 1, 0),
            `Residence Area: Suburb` = ifelse(urbancity == 2, 1, 0),
            `Residence Area: Town` = ifelse(urbancity == 3, 1, 0),
            `Residence Area: Rural area` = ifelse(urbancity == 4, 1, 0),
            `Residence Area: Other` = ifelse(urbancity == 5, 1, 0),
            `General health self-assessment` = health,
            `Household income increased/decreased in 2020` = income2020,
            `Nation's economy got better/worse in 2020` = economy,
            `Party identification (Republican-Democrat)` = pid,
```

```
            `Ideology (Conservative-Liberal)` = ideology,
            `2016 Vote choice (Trump-Clinton)` = vote2016)

W.Mean <- function(x) weighted.mean(x, ces$weight)
W.Median <- function(x) spatstat.geom::weighted.median(x, ces$weight)
W.SD <- function(x) radiant.data::weighted.sd(x, ces$weight)

datasummary(`Vote choice (1 = Biden, 0 = Trump)`
            + `Has been diagnosed with COVID-19`
            + `Knows someone diagnosed with COVID-19`
            + `Knows someone who died from COVID-19`
            + `Age (18-95)`
            + `Gender (female = 1)`
            + `Education level`
            + `Household income`
            + `Race: White`
            + `Race: Black or African-American`
            + `Race: Hispanic or Latino`
            + `Race: Asian or Asian-American`
            + `Race: Native American`
            + `Race: Middle Eastern`
            + `Race: Two or more races`
            + `Race: Other`
            + `Marital Status: Married`
            + `Marital Status: Separated`
            + `Marital Status: Divorced`
            + `Marital Status: Widowed`
            + `Marital Status: Never married`
            + `Marital Status: Domestic/civil partnership`
            + `Residence Area: City`
            + `Residence Area: Suburb`
            + `Residence Area: Town`
            + `Residence Area: Rural area`
            + `Residence Area: Other`
            + `General health self-assessment`
            + `Household income increased/decreased in 2020`
            + `Nation's economy got better/worse in 2020`
            + `Party identification (Republican-Democrat)`
            + `Ideology (Conservative-Liberal)`
            + `2016 Vote choice (Trump-Clinton)`
            ~ (`Unique (#)` = NUnique)
            + Min * Arguments(fmt = "%.0f")
            + Max * Arguments(fmt = "%.0f")
            + (Median = W.Median)
            + (Mean = W.Mean)
            + (SD = W.SD),
            fmt = 4,
            data = ces_descriptives,
            title = "Descriptive statistics")
```

```
## Registered S3 method overwritten by 'spatstat.geom':
##   method     from
##   print.boxx cli
```

```
# Main results using logistic regression ------------------------------------------------------------

logit_models <- list(
  "(1)" = glm(vote ~ covid_self + covid_knows + covid_death,
              weights = weight, family = binomial('logit'), data = ces),
  "(2)" = glm(vote ~ covid_self + covid_knows + covid_death
              + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat),
```

Table 2: Descriptive statistics

	Unique (#)	Min	Max	Median	Mean	SD
Vote choice (1 = Biden, 0 = Trump)	2	0	1	1.0000	0.5396	0.4984
Has been diagnosed with COVID-19	2	0	1	0.0000	0.0454	0.2083
Knows someone diagnosed with COVID-19	2	0	1	1.0000	0.5122	0.4999
Knows someone who died from COVID-19	2	0	1	0.0000	0.1595	0.3661
Age (18-95)	78	0	1	0.5455	0.5714	0.2247
Gender (female = 1)	2	0	1	0.0000	0.4938	0.5000
Education level	6	0	1	0.4000	0.5259	0.3061
Household income	16	0	1	0.3333	0.3788	0.2290
Race: White	2	0	1	1.0000	0.7215	0.4483
Race: Black or African-American	2	0	1	0.0000	0.1250	0.3308
Race: Hispanic or Latino	2	0	1	0.0000	0.0865	0.2811
Race: Asian or Asian-American	2	0	1	0.0000	0.0363	0.1871
Race: Native American	2	0	1	0.0000	0.0059	0.0764
Race: Middle Eastern	2	0	1	0.0000	0.0009	0.0292
Race: Two or more races	2	0	1	0.0000	0.0143	0.1187
Race: Other	2	0	1	0.0000	0.0096	0.0975
Marital Status: Married	2	0	1	1.0000	0.5125	0.4998
Marital Status: Separated	2	0	1	0.0000	0.0150	0.1217
Marital Status: Divorced	2	0	1	0.0000	0.1056	0.3073
Marital Status: Widowed	2	0	1	0.0000	0.0581	0.2339
Marital Status: Never married	2	0	1	0.0000	0.2606	0.4389
Marital Status: Domestic/civil partnership	2	0	1	0.0000	0.0483	0.2143
Residence Area: City	2	0	1	0.0000	0.2619	0.4397
Residence Area: Suburb	2	0	1	0.0000	0.4000	0.4899
Residence Area: Town	2	0	1	0.0000	0.1365	0.3433
Residence Area: Rural area	2	0	1	0.0000	0.1987	0.3990
Residence Area: Other	2	0	1	0.0000	0.0029	0.0541
General health self-assessment	5	-1	1	0.0000	-0.1712	0.4907
Household income increased/decreased in 2020	5	-1	1	0.0000	0.0296	0.4542
Nation's economy got better/worse in 2020	5	-1	1	0.5000	0.3653	0.6853
Party identification (Republican-Democrat)	7	-1	1	0.0000	0.0659	0.7908
Ideology (Conservative-Liberal)	5	-1	1	0.0000	-0.0400	0.6280
2016 Vote choice (Trump-Clinton)	3	-1	1	0.0000	0.0327	0.9159

Table 3: Main results using logistic regression

	(1)	(2)	(3)	(4)	(5)
Has been diagnosed with COVID-19	-0.1049*	-0.1616**	0.0944	-0.0883	-0.0832
	(0.0534)	(0.0586)	(0.0742)	(0.1331)	(0.1335)
Knows someone diagnosed with COVID-19	0.3363***	0.3703***	0.2064***	0.2761***	0.2551***
	(0.0243)	(0.0272)	(0.0337)	(0.0631)	(0.0642)
Knows someone who died from COVID-19	0.5622***	0.4479***	0.4111***	0.4291***	0.4658***
	(0.0350)	(0.0383)	(0.0475)	(0.0861)	(0.0879)
Sociodemographic Controls	No	Yes	Yes	Yes	Yes
Pandemic-Related Controls	No	No	Yes	Yes	Yes
Political Controls	No	No	No	Yes	Yes
State Fixed-Effects	No	No	No	No	Yes
Observations	37641	37641	37641	37641	37641
AIC	46643.5	40058.5	28040.8	9498.6	9465.9
BIC	46677.7	40263.4	28271.2	9754.7	10148.8
Log.Lik.	-23317.764	-20005.261	-13993.378	-4719.289	-4652.941
Deviance	45202.50	38934.21	27317.28	9428.78	9309.29

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

```
              weights = weight, family = binomial('logit'), data = ces),
  "(3)" = glm(vote ~ covid_self + covid_knows + covid_death
              + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
              + health + income2020 + economy,
              weights = weight, family = binomial('logit'), data = ces),
  "(4)" = glm(vote ~ covid_self + covid_knows + covid_death
              + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
              + health + income2020 + economy
              + pid + ideology + vote2016,
              weights = weight, family = binomial('logit'), data = ces),
  "(5)" = glm(vote ~ covid_self + covid_knows + covid_death
              + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
              + health + income2020 + economy
              + pid + ideology + vote2016
              + factor(state),
              weights = weight, family = binomial('logit'), data = ces))

rows <- tribble(~term,                          ~"(1)",  ~"(2)",  ~"(3)",  ~"(4)",  ~"(5)",
                'Sociodemographic Controls',      'No',   'Yes',   'Yes',   'Yes',   'Yes',
                'Pandemic-Related Controls',      'No',    'No',   'Yes',   'Yes',   'Yes',
                'Political Controls',             'No',    'No',    'No',   'Yes',   'Yes',
                'State Fixed-Effects',            'No',    'No',    'No',    'No',   'Yes')
attr(rows, 'position') <- 7:10

gm <- modelsummary::gof_map
gm$clean[gm$clean == 'Num.Obs.'] <- 'Observations'

modelsummary(logit_models,
             fmt = "%.4f",
             stars = TRUE,
             add_rows = rows,
             gof_map = gm,
             gof_omit = "Deviance Null|DF Null|DF Resid",
             coef_map = c("covid_self"="Has been diagnosed with COVID-19",
                          "covid_knows"="Knows someone diagnosed with COVID-19",
                          "covid_death"="Knows someone who died from COVID-19"),
             title = "Main results using logistic regression")
```

```r
# Exposure to COVID-19 and vote choice in in the four closest battlegrounds: Interactions ----------------------

interactions <- list(
  "State heterogeneous effects" = lm(vote ~ covid_self + covid_knows + covid_death
                                     + factor(race) + educ + age + gender + income + factor(urbancity) + factor(
                                     + health + income2020 + economy
                                     + pid + ideology + vote2016
                                     + battleground
                                     + covid_self * battleground
                                     + covid_knows * battleground
                                     + covid_death * battleground,
                                     weights = weight,
                                     data = ces %>%
                                       mutate(battleground = case_when(state == "Arizona" ~ "Arizona",
                                                                       state == "Pennsylvania" ~ "Pennsylvania",
                                                                       state == "Wisconsin" ~ "Wisconsin",
                                                                       state == "Georgia" ~ "Georgia",
                                                                       TRUE ~ "0"))))

rows <- tribble(~term,  ~"State heterogeneous effects",
                'Sociodemographic Controls',     'Yes',
                'Pandemic-Related Controls',     'Yes',
                'Political Controls',            'Yes',
                'State Fixed-Effects',           'No')
attr(rows, 'position') <- 20:23

gm <- modelsummary::gof_map
gm$clean[gm$clean == 'R2 Adj.'] <- 'Adjusted R-squared'
gm$clean[gm$clean == 'Num.Obs.'] <- 'Observations'

cm <- c("covid_self"="Has been diagnosed with COVID-19",
        "covid_knows"="Knows someone diagnosed with COVID-19",
        "covid_death"="Knows someone who died from COVID-19",
        "battlegroundGeorgia"="Georgia",
        "covid_self:battlegroundGeorgia"="Has been diagnosed with COVID-19 × Georgia",
        "covid_knows:battlegroundGeorgia"="Knows someone diagnosed with COVID-19 × Georgia",
        "covid_death:battlegroundGeorgia"="Knows someone who died from COVID-19 × Georgia",
        "battlegroundArizona"="Arizona",
        "covid_self:battlegroundArizona"="Has been diagnosed with COVID-19 × Arizona",
        "covid_knows:battlegroundArizona"="Knows someone diagnosed with COVID-19 × Arizona",
        "covid_death:battlegroundArizona"="Knows someone who died from COVID-19 × Arizona",
        "battlegroundWisconsin"="Wisconsin",
        "covid_self:battlegroundWisconsin"="Has been diagnosed with COVID-19 × Wisconsin",
        "covid_knows:battlegroundWisconsin"="Knows someone diagnosed with COVID-19 × Wisconsin",
        "covid_death:battlegroundWisconsin"="Knows someone who died from COVID-19 × Wisconsin",
        "battlegroundPennsylvania"="Pennsylvania",
        "covid_self:battlegroundPennsylvania"="Has been diagnosed with COVID-19 × Pennsylvania",
        "covid_knows:battlegroundPennsylvania"="Knows someone diagnosed with COVID-19 × Pennsylvania",
        "covid_death:battlegroundPennsylvania"="Knows someone who died from COVID-19 × Pennsylvania")

modelsummary(interactions,
             vcov = "HC2",
             fmt = "%.4f",
             stars = TRUE,
             add_rows = rows,
             gof_map = gm,
             estimate = "{estimate} ({std.error}){stars}",
             statistic = NULL,
             gof_omit = "AIC|BIC|Log.Lik.|F|Deviance|Sigma|Statistics|p|R2|Std. Errors",
             coef_map = cm,
             title = "Exposure to COVID-19 and vote choice in in the four closest battlegrounds: Interactions ")
```

Table 4: Exposure to COVID-19 and vote choice in in the four closest battlegrounds: Interactions

	State heterogeneous effects
Has been diagnosed with COVID-19	-0.0028 (0.0116)
Knows someone diagnosed with COVID-19	0.0142 (0.0041)***
Knows someone who died from COVID-19	0.0190 (0.0054)***
Georgia	0.0146 (0.0147)
Has been diagnosed with COVID-19 × Georgia	0.0454 (0.0384)
Knows someone diagnosed with COVID-19 × Georgia	-0.0196 (0.0180)
Knows someone who died from COVID-19 × Georgia	0.0282 (0.0300)
Arizona	0.0171 (0.0131)
Has been diagnosed with COVID-19 × Arizona	0.0536 (0.0677)
Knows someone diagnosed with COVID-19 × Arizona	-0.0014 (0.0174)
Knows someone who died from COVID-19 × Arizona	0.0042 (0.0426)
Wisconsin	0.0118 (0.0147)
Has been diagnosed with COVID-19 × Wisconsin	-0.0646 (0.0300)*
Knows someone diagnosed with COVID-19 × Wisconsin	0.0069 (0.0190)
Knows someone who died from COVID-19 × Wisconsin	0.0339 (0.0288)
Pennsylvania	0.0124 (0.0109)
Has been diagnosed with COVID-19 × Pennsylvania	-0.0064 (0.0252)
Knows someone diagnosed with COVID-19 × Pennsylvania	-0.0113 (0.0150)
Knows someone who died from COVID-19 × Pennsylvania	-0.0142 (0.0212)
Sociodemographic Controls	Yes
Pandemic-Related Controls	Yes
Political Controls	Yes
State Fixed-Effects	No
Observations	37641
Adjusted R-squared	0.795

```
# Exposure to COVID-19 and vote choice in the four closest battlegrounds: Aggregated states ----------------------

battlegrounds <- list(
  "Four Closest States" = lm(vote ~ covid_self + covid_knows + covid_death
                             + health + income2020 + economy
                             + factor(race) + educ + age + gender
                             + income + factor(urbancity) + factor(marstat)
                             + pid + ideology + vote2016
                             + factor(state),
                             weights = weight,
                             data = subset(ces,
                                           state %in% c("Pennsylvania", "Wisconsin",
                                                        "Arizona", "Georgia"))))

gm <- modelsummary::gof_map
gm$clean[gm$clean == 'R2 Adj.'] <- 'Adjusted R-squared'
gm$clean[gm$clean == 'Num.Obs.'] <- 'Observations'

rows <- tribble(~term,                          ~"Four Battlegrounds",
                'Sociodemographic Controls',     'Yes',
                'Pandemic-Related Controls',      'Yes',
                'Political Controls',           'Yes',
                'State Fixed-Effects',           'Yes')
attr(rows, 'position') <- 7:10

modelsummary(battlegrounds,
             vcov = "HC2",
             fmt = "%.3f",
             stars = TRUE,
```

Table 5: Exposure to COVID-19 and vote choice in the four closest battlegrounds: Aggregated states

	Four Closest States
Has been diagnosed with COVID-19	0.004
	(0.022)
Knows someone diagnosed with COVID-19	0.009
	(0.009)
Knows someone who died from COVID-19	0.029+
	(0.016)
Sociodemographic Controls	Yes
Pandemic-Related Controls	Yes
Political Controls	Yes
State Fixed-Effects	Yes
Observations	4970
Adjusted R-squared	0.809

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

```
            add_rows = rows,
            gof_map = gm,
            gof_omit = "AIC|BIC|Log.Lik.|F|Deviance|Sigma|Statistics|p|R2|Std. Errors",
            coef_map = c("covid_self"="Has been diagnosed with COVID-19",
                         "covid_knows"="Knows someone diagnosed with COVID-19",
                         "covid_death"="Knows someone who died from COVID-19"),
            title = "Exposure to COVID-19 and vote choice in the four closest battlegrounds: Aggregated states"
```

```
# Exposure to COVID-19 and vote choice in the four closest battlegrounds: Individual states

individual_states <- list(
  "Georgia" = lm(vote ~ covid_self + covid_knows + covid_death
                 + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                 + health + income2020 + economy
                 + pid + ideology + vote2016,
                 weights = weight,
                 data = subset(ces, state == "Georgia")),
  "Arizona" = lm(vote ~ covid_self + covid_knows + covid_death
                 + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                 + health + income2020 + economy
                 + pid + ideology + vote2016,
                 weights = weight,
                 data = subset(ces, state == "Arizona")),
  "Wisconsin" = lm(vote ~ covid_self + covid_knows + covid_death
                   + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                   + health + income2020 + economy
                   + pid + ideology + vote2016,
                   weights = weight,
                   data = subset(ces, state == "Wisconsin")),
  "Pennsylvania" = lm(vote ~ covid_self + covid_knows + covid_death
                      + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                      + health + income2020 + economy
                      + pid + ideology + vote2016,
                      weights = weight,
                      data = subset(ces, state == "Pennsylvania")))

rows <- tribble(~term,                      ~"Georgia",  ~"Arizona",  ~"Wisconsin", ~"Pennsylvania",
                'Sociodemographic Controls',    'Yes',       'Yes',         'Yes',           'Yes',
                'Pandemic-Related Controls',    'Yes',       'Yes',         'Yes',           'Yes',
                'Political Controls',           'Yes',       'Yes',         'Yes',           'Yes')
attr(rows, 'position') <- 7:10
```

Table 6: Exposure to COVID-19 and vote choice in the four closest battlegrounds: Individual states

	Georgia	Arizona	Wisconsin	Pennsylvania
Has been diagnosed with COVID-19	0.01	0.05	-0.07*	-0.02
	(0.03)	(0.05)	(0.03)	(0.02)
Knows someone diagnosed with COVID-19	0.00	0.02	0.01	0.00
	(0.02)	(0.02)	(0.02)	(0.01)
Knows someone who died from COVID-19	0.04+	0.02	0.05+	0.00
	(0.02)	(0.03)	(0.03)	(0.02)
Sociodemographic Controls	Yes	Yes	Yes	Yes
Pandemic-Related Controls	Yes	Yes	Yes	Yes
Political Controls	Yes	Yes	Yes	Yes
Observations	1169	956	804	2041
Adjusted R-squared	0.834	0.815	0.807	0.805

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

```
gm <- modelsummary::gof_map
gm$clean[gm$clean == 'R2 Adj.'] <- 'Adjusted R-squared'
gm$clean[gm$clean == 'Num.Obs.'] <- 'Observations'

modelsummary(individual_states,
             vcov = "HC1",
             fmt = "%.2f",
             stars = TRUE,
             add_rows = rows,
             gof_map = gm,
             gof_omit = "AIC|BIC|Log.Lik.|F|Deviance|Sigma|Statistics|p|R2|Std. Errors",
             coef_map = c("covid_self"="Has been diagnosed with COVID-19",
                          "covid_knows"="Knows someone diagnosed with COVID-19",
                          "covid_death"="Knows someone who died from COVID-19"),
             title = "Exposure to COVID-19 and vote choice in the four closest battlegrounds: Individual states"
```

```
# Exposure to COVID-19 and vote choice among the overall electorate, Democrats, Independents, and Republicans --

pid_models <- list(
  "Overall (1)" = lm(vote ~ covid_self + covid_knows + covid_death
                     + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                     + health + income2020 + economy
                     + pid + ideology + vote2016
                     + factor(state),
                     weights = weight,
                     data = ces),
  "Democrats (2)" = lm(vote ~ covid_self + covid_knows + covid_death
                       + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                       + health + income2020 + economy
                       + pid + ideology + vote2016
                       + factor(state),
                       weights = weight,
                       data = subset(ces, pid > .5)),
  "Independents (3)" = lm(vote ~ covid_self + covid_knows + covid_death
                          + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                          + health + income2020 + economy
                          + pid + ideology + vote2016
                          + factor(state),
                          weights = weight,
                          data = subset(ces, between(pid, -.5, .5))),
  "Republicans (4)" = lm(vote ~ covid_self + covid_knows + covid_death
                         + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
```

Table 7: Exposure to COVID-19 and vote choice among the overall electorate, Democrats, Independents, and Republicans

	Overall (1)	Democrats (2)	Independents (3)	Republicans (4)
Has been diagnosed with COVID-19	-0.001	-0.007	-0.025	0.015
	(0.010)	(0.009)	(0.028)	(0.017)
Knows someone diagnosed with COVID-19	0.014***	0.003	0.041***	0.000
	(0.004)	(0.004)	(0.008)	(0.005)
Knows someone who died from COVID-19	0.020***	0.000	0.029*	0.040***
	(0.005)	(0.005)	(0.011)	(0.011)
Sociodemographic Controls	Yes	Yes	Yes	Yes
Pandemic-Related Controls	Yes	Yes	Yes	Yes
Political Controls	Yes	Yes	Yes	Yes
State Fixed-Effects	Yes	Yes	Yes	Yes
Observations	37641	16168	11183	10290
Adjusted R-squared	0.795	0.284	0.707	0.277

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

```
                        + health + income2020 + economy
                        + pid + ideology + vote2016
                        + factor(state),
                        weights = weight,
                        data = subset(ces, pid < -.5)))

rows <- tribble(~term,                              ~"(1)", ~"(2)", ~"(3)", ~"(4)",
                'Sociodemographic Controls',         'Yes',  'Yes',  'Yes',  'Yes',
                'Pandemic-Related Controls',         'Yes',  'Yes',  'Yes',  'Yes',
                'Political Controls',                'Yes',  'Yes',  'Yes',  'Yes',
                'State Fixed-Effects',               'Yes',  'Yes',  'Yes',  'Yes')
attr(rows, 'position') <- 7:10

gm <- modelsummary::gof_map
gm$clean[gm$clean == 'R2 Adj.'] <- 'Adjusted R-squared'
gm$clean[gm$clean == 'Num.Obs.'] <- 'Observations'

modelsummary(pid_models,
             vcov = "HC2",
             fmt = 3,
             stars = TRUE,
             add_rows = rows,
             gof_map = gm,
             gof_omit = "AIC|BIC|Log.Lik.|F|Deviance|Sigma|Statistics|p|R2|Std. Errors",
             coef_map = c("covid_self"="Has been diagnosed with COVID-19",
                          "covid_knows"="Knows someone diagnosed with COVID-19",
                          "covid_death"="Knows someone who died from COVID-19"),
             title = "Exposure to COVID-19 and vote choice among the overall electorate, Democrats, Independents
```

```
# Exposure to COVID-19 and vote choice in North Carolina, Nevada, Michigan, and Florida ----------------------

individual_states_other <- list(
  "North Carolina" = lm(vote ~ covid_self + covid_knows + covid_death
                        + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                        + health + income2020 + economy
                        + pid + ideology + vote2016,
                        weights = weight,
                        data = subset(ces, state == "North Carolina")),
  "Nevada" = lm(vote ~ covid_self + covid_knows + covid_death
                + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                + health + income2020 + economy
```

Table 8: Exposure to COVID-19 and vote choice in North Carolina, Nevada, Michigan, and Florida

	North Carolina	Nevada	Michigan	Florida
Has been diagnosed with COVID-19	-0.02	0.03	0.03	0.03
	(0.03)	(0.08)	(0.04)	(0.03)
Knows someone diagnosed with COVID-19	0.04*	0.02	0.01	0.01
	(0.02)	(0.03)	(0.02)	(0.01)
Knows someone who died from COVID-19	-0.02	0.02	0.03	0.03+
	(0.03)	(0.04)	(0.02)	(0.02)
Sociodemographic Controls	Yes	Yes	Yes	Yes
Pandemic-Related Controls	Yes	Yes	Yes	Yes
Political Controls	Yes	Yes	Yes	Yes
Observations	1186	460	1287	2909
Adjusted R-squared	0.813	0.759	0.802	0.797

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

```
                + pid + ideology + vote2016,
                weights = weight,
                data = subset(ces, state == "Nevada")),
  "Michigan" = lm(vote ~ covid_self + covid_knows + covid_death
                  + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                  + health + income2020 + economy
                  + pid + ideology + vote2016,
                  weights = weight,
                  data = subset(ces, state == "Michigan")),
  "Florida" = lm(vote ~ covid_self + covid_knows + covid_death
                 + factor(race) + educ + age + gender + income + factor(urbancity) + factor(marstat)
                 + health + income2020 + economy
                 + pid + ideology + vote2016,
                 weights = weight,
                 data = subset(ces, state == "Florida")))

rows <- tribble(~term,                  ~"North Carolina",  ~"Nevada",  ~"Michigan",  ~"Florida",
                'Sociodemographic Controls',       'Yes',      'Yes',        'Yes',       'Yes',
                'Pandemic-Related Controls',       'Yes',      'Yes',        'Yes',       'Yes',
                'Political Controls',              'Yes',      'Yes',        'Yes',       'Yes')
attr(rows, 'position') <- 7:10

gm <- modelsummary::gof_map
gm$clean[gm$clean == 'R2 Adj.'] <- 'Adjusted R-squared'
gm$clean[gm$clean == 'Num.Obs.'] <- 'Observations'

modelsummary(individual_states_other,
             fmt = 2,
             vcov = "HC1",
             stars = TRUE,
             add_rows = rows,
             gof_map = gm,
             gof_omit = "AIC|BIC|Log.Lik.|F|Deviance|Sigma|Statistics|p|R2|Std. Errors",
             coef_map = c("covid_self"="Has been diagnosed with COVID-19",
                          "covid_knows"="Knows someone diagnosed with COVID-19",
                          "covid_death"="Knows someone who died from COVID-19"),
             title = "Exposure to COVID-19 and vote choice in North Carolina, Nevada, Michigan, and Florida")
```

```
# No-Pandemic Simulation: State-Level ------------------------------------------------------------------------

four_closest_states <- ces %>%
  filter(state %in% c("Pennsylvania", "Wisconsin",
```

```
                      "Arizona", "Georgia")) %>%
  select(covid_self, covid_knows, covid_death, weight) %>%
  as_survey(weights = c(weight)) %>%
  summarize(across(1:3, survey_mean, vartype = NULL))

prediction(battlegrounds[["Four Closest States"]],
           at = list(covid_self = c(0, four_closest_states[1,1]),
                     covid_knows = c(0, four_closest_states[1,2]),
                     covid_death = c(0, four_closest_states[1,3])))
```

```
## Data frame with 39760 predictions from
##  lm(formula = vote ~ covid_self + covid_knows + covid_death +
##     health + income2020 + economy + factor(race) + educ + age +
##     gender + income + factor(urbancity) + factor(marstat) + pid +
##     ideology + vote2016 + factor(state), data = subset(ces, state %in%
##     c("Pennsylvania", "Wisconsin", "Arizona", "Georgia")), weights = weight)
## with average predictions:
```

```
##  covid_self covid_knows covid_death      x
##     0.00000      0.0000        0.00 0.5425
##     0.04063      0.0000        0.00 0.5426
##     0.00000      0.5048        0.00 0.5471
##     0.04063      0.5048        0.00 0.5473
##     0.00000      0.0000        0.16 0.5471
##     0.04063      0.0000        0.16 0.5472
##     0.00000      0.5048        0.16 0.5517
##     0.04063      0.5048        0.16 0.5519
```

```
Pennsylvania <- ces %>%
  filter(state == "Pennsylvania") %>%
  select(covid_self, covid_knows, covid_death, weight) %>%
  as_survey(weights = c(weight)) %>%
  summarize(across(1:3, survey_mean, vartype = NULL))

prediction(individual_states[["Pennsylvania"]],
           at = list(covid_self = c(0, Pennsylvania[1,1]),
                     covid_knows = c(0, Pennsylvania[1,2]),
                     covid_death = c(0, Pennsylvania[1,3])))
```

```
## Data frame with 16328 predictions from
##  lm(formula = vote ~ covid_self + covid_knows + covid_death +
##     factor(race) + educ + age + gender + income + factor(urbancity) +
##     factor(marstat) + health + income2020 + economy + pid + ideology +
##     vote2016, data = subset(ces, state == "Pennsylvania"), weights = weight)
## with average predictions:
```

```
##  covid_self covid_knows covid_death      x
##     0.00000      0.0000       0.000 0.5352
##     0.02967      0.0000       0.000 0.5347
##     0.00000      0.4361       0.000 0.5368
##     0.02967      0.4361       0.000 0.5363
##     0.00000      0.0000       0.126 0.5358
##     0.02967      0.0000       0.126 0.5353
##     0.00000      0.4361       0.126 0.5374
##     0.02967      0.4361       0.126 0.5369
```

```
Georgia <- ces %>%
  filter(state == "Georgia") %>%
  select(covid_self, covid_knows, covid_death, weight) %>%
  as_survey(weights = c(weight)) %>%
  summarize(across(1:3, survey_mean, vartype = NULL))

prediction(individual_states[["Georgia"]],
```

```
          at = list(covid_self = c(0, Georgia[1,1]),
                    covid_knows = c(0, Georgia[1,2]),
                    covid_death = c(0, Georgia[1,3])))
```

```
## Data frame with 9352 predictions from
##  lm(formula = vote ~ covid_self + covid_knows + covid_death +
##     factor(race) + educ + age + gender + income + factor(urbancity) +
##     factor(marstat) + health + income2020 + economy + pid + ideology +
##     vote2016, data = subset(ces, state == "Georgia"), weights = weight)
## with average predictions:
```

```
##  covid_self covid_knows covid_death      x
##     0.00000      0.0000      0.0000 0.5387
##     0.04108      0.0000      0.0000 0.5393
##     0.00000      0.5794      0.0000 0.5408
##     0.04108      0.5794      0.0000 0.5414
##     0.00000      0.0000      0.2501 0.5493
##     0.04108      0.0000      0.2501 0.5499
##     0.00000      0.5794      0.2501 0.5514
##     0.04108      0.5794      0.2501 0.5520
```

```
Arizona <- ces %>%
  filter(state == "Arizona") %>%
  select(covid_self, covid_knows, covid_death, weight) %>%
  as_survey(weights = c(weight)) %>%
  summarize(across(1:3, survey_mean, vartype = NULL))

prediction(individual_states[["Arizona"]],
          at = list(covid_self = c(0, Arizona[1,1]),
                    covid_knows = c(0, Arizona[1,2]),
                    covid_death = c(0, Arizona[1,3])))
```

```
## Data frame with 7648 predictions from
##  lm(formula = vote ~ covid_self + covid_knows + covid_death +
##     factor(race) + educ + age + gender + income + factor(urbancity) +
##     factor(marstat) + health + income2020 + economy + pid + ideology +
##     vote2016, data = subset(ces, state == "Arizona"), weights = weight)
## with average predictions:
```

```
##  covid_self covid_knows covid_death      x
##     0.00000      0.0000      0.0000 0.5170
##     0.06246      0.0000      0.0000 0.5199
##     0.00000      0.5073      0.0000 0.5296
##     0.06246      0.5073      0.0000 0.5325
##     0.00000      0.0000      0.1653 0.5207
##     0.06246      0.0000      0.1653 0.5236
##     0.00000      0.5073      0.1653 0.5333
##     0.06246      0.5073      0.1653 0.5362
```

```
Wisconsin <- ces %>%
  filter(state == "Wisconsin") %>%
  select(covid_self, covid_knows, covid_death, weight) %>%
  as_survey(weights = c(weight)) %>%
  summarize(across(1:3, survey_mean, vartype = NULL))

prediction(individual_states[["Wisconsin"]],
          at = list(covid_self = c(0, Wisconsin[1,1]),
                    covid_knows = c(0, Wisconsin[1,2]),
                    covid_death = c(0, Wisconsin[1,3])))
```

```
## Data frame with 6432 predictions from
##  lm(formula = vote ~ covid_self + covid_knows + covid_death +
##     factor(race) + educ + age + gender + income + factor(urbancity) +
```

```
##     factor(marstat) + health + income2020 + economy + pid + ideology +
##     vote2016, data = subset(ces, state == "Wisconsin"), weights = weight)
## with average predictions:
```

```
##  covid_self covid_knows covid_death      x
##      0.0000      0.0000      0.0000 0.5961
##      0.0415      0.0000      0.0000 0.5932
##      0.0000      0.5567      0.0000 0.6032
##      0.0415      0.5567      0.0000 0.6003
##      0.0000      0.0000      0.0921 0.6006
##      0.0415      0.0000      0.0921 0.5977
##      0.0000      0.5567      0.0921 0.6077
##      0.0415      0.5567      0.0921 0.6048
```

```
Nevada <- ces %>%
  filter(state == "Nevada") %>%
  select(covid_self, covid_knows, covid_death, weight) %>%
  as_survey(weights = c(weight)) %>%
  summarize(across(1:3, survey_mean, vartype = NULL))

prediction(individual_states_other[["Nevada"]],
           at = list(covid_self = c(0, Nevada[1,1]),
                     covid_knows = c(0, Nevada[1,2]),
                     covid_death = c(0, Nevada[1,3])))
```

```
## Data frame with 3680 predictions from
##  lm(formula = vote ~ covid_self + covid_knows + covid_death +
##     factor(race) + educ + age + gender + income + factor(urbancity) +
##     factor(marstat) + health + income2020 + economy + pid + ideology +
##     vote2016, data = subset(ces, state == "Nevada"), weights = weight)
## with average predictions:
```

```
##  covid_self covid_knows covid_death      x
##     0.00000      0.0000      0.0000 0.5418
##     0.06282      0.0000      0.0000 0.5435
##     0.00000      0.4365      0.0000 0.5499
##     0.06282      0.4365      0.0000 0.5516
##     0.00000      0.0000      0.1265 0.5448
##     0.06282      0.0000      0.1265 0.5465
##     0.00000      0.4365      0.1265 0.5530
##     0.06282      0.4365      0.1265 0.5547
```

```
Florida <- ces %>%
  filter(state == "Florida") %>%
  select(covid_self, covid_knows, covid_death, weight) %>%
  as_survey(weights = c(weight)) %>%
  summarize(across(1:3, survey_mean, vartype = NULL))

prediction(individual_states_other[["Florida"]],
           at = list(covid_self = c(0, Florida[1,1]),
                     covid_knows = c(0, Florida[1,2]),
                     covid_death = c(0, Florida[1,3])))
```

```
## Data frame with 23272 predictions from
##  lm(formula = vote ~ covid_self + covid_knows + covid_death +
##     factor(race) + educ + age + gender + income + factor(urbancity) +
##     factor(marstat) + health + income2020 + economy + pid + ideology +
##     vote2016, data = subset(ces, state == "Florida"), weights = weight)
## with average predictions:
```

```
##  covid_self covid_knows covid_death      x
##     0.00000      0.0000        0.00 0.5358
##     0.04434      0.0000        0.00 0.5371
##     0.00000      0.5053        0.00 0.5396
```

```
##     0.04434      0.5053        0.00 0.5410
##     0.00000      0.0000        0.18 0.5413
##     0.04434      0.0000        0.18 0.5426
##     0.00000      0.5053        0.18 0.5451
##     0.04434      0.5053        0.18 0.5465
```

```
NC <- ces %>%
  filter(state == "North Carolina") %>%
  select(covid_self, covid_knows, covid_death, weight) %>%
  as_survey(weights = c(weight)) %>%
  summarize(across(1:3, survey_mean, vartype = NULL))

prediction(individual_states_other[["North Carolina"]],
           at = list(covid_self = c(0, NC[1,1]),
                     covid_knows = c(0, NC[1,2]),
                     covid_death = c(0, NC[1,3])))
```

```
## Data frame with 9488 predictions from
##  lm(formula = vote ~ covid_self + covid_knows + covid_death +
##     factor(race) + educ + age + gender + income + factor(urbancity) +
##     factor(marstat) + health + income2020 + economy + pid + ideology +
##     vote2016, data = subset(ces, state == "North Carolina"),
##     weights = weight)
## with average predictions:
```

```
##  covid_self covid_knows covid_death      x
##     0.00000      0.0000       0.000 0.5655
##     0.03978      0.0000       0.000 0.5647
##     0.00000      0.4895       0.000 0.5827
##     0.03978      0.4895       0.000 0.5819
##     0.00000      0.0000       0.145 0.5630
##     0.03978      0.0000       0.145 0.5622
##     0.00000      0.4895       0.145 0.5802
##     0.03978      0.4895       0.145 0.5794
```

```
Michigan <- ces %>%
  filter(state == "Michigan") %>%
  select(covid_self, covid_knows, covid_death, weight) %>%
  as_survey(weights = c(weight)) %>%
  summarize(across(1:3, survey_mean, vartype = NULL))

prediction(individual_states_other[["Michigan"]],
           at = list(covid_self = c(0, Michigan[1,1]),
                     covid_knows = c(0, Michigan[1,2]),
                     covid_death = c(0, Michigan[1,3])))
```

```
## Data frame with 10296 predictions from
##  lm(formula = vote ~ covid_self + covid_knows + covid_death +
##     factor(race) + educ + age + gender + income + factor(urbancity) +
##     factor(marstat) + health + income2020 + economy + pid + ideology +
##     vote2016, data = subset(ces, state == "Michigan"), weights = weight)
## with average predictions:
```

```
##  covid_self covid_knows covid_death      x
##     0.00000      0.0000      0.0000 0.5849
##     0.04025      0.0000      0.0000 0.5863
##     0.00000      0.5064      0.0000 0.5893
##     0.04025      0.5064      0.0000 0.5906
##     0.00000      0.0000      0.1746 0.5898
##     0.04025      0.0000      0.1746 0.5912
##     0.00000      0.5064      0.1746 0.5942
##     0.04025      0.5064      0.1746 0.5955
```