

wrangle-cdf.R

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```
library(tidyverse)
```

```
## -- Attaching packages -----
## v ggplot2 3.3.0      v purrr 0.3.4
## v tibble 3.0.1       v dplyr 0.8.5
## v tidyr 1.0.2        v stringr 1.4.0
## v readr 1.3.1       v forcats 0.5.0

## -- Conflicts -----
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
```

```
library(sjlabelled)
```

```
##
## Attaching package: 'sjlabelled'
## The following object is masked from 'package:forcats':
##
##   as_factor
## The following object is masked from 'package:dplyr':
##
##   as_label
```

```
library(goji)
```

```
##
## Attaching package: 'goji'
## The following object is masked from 'package:graphics':
##
##     stars
```

```
#anes_df <- read_dta("data/raw/anes_timeseries_2016.dta")%>%
#   select(V161095, V161096, V161086, V161087, V161126, V161128, V161129, V161130, V161131, V161021, V161022, V161023, V161024, V161025, V161026, V161027, V161028, V161029, V161030, V161031, V161032, V161033, V161034, V161035, V161036, V161037, V161038, V161039, V161040, V161041, V161042, V161043, V161044, V161045, V161046, V161047, V161048, V161049, V161050, V161051, V161052, V161053, V161054, V161055, V161056, V161057, V161058, V161059, V161060, V161061, V161062, V161063, V161064, V161065, V161066, V161067, V161068, V161069, V161070, V161071, V161072, V161073, V161074, V161075, V161076, V161077, V161078, V161079, V161080, V161081, V161082, V161083, V161084, V161085, V161086, V161087, V161088, V161089, V161090, V161091, V161092, V161093, V161094, V161095, V161096, V161097, V161098, V161099, V161100, V161101, V161102, V161103, V161104, V161105, V161106, V161107, V161108, V161109, V161110, V161111, V161112, V161113, V161114, V161115, V161116, V161117, V161118, V161119, V161120, V161121, V161122, V161123, V161124, V161125, V161126, V161127, V161128, V161129, V161130, V161131, V161132, V161133, V161134, V161135, V161136, V161137, V161138, V161139, V161140, V161141, V161142, V161143, V161144, V161145, V161146, V161147, V161148, V161149, V161150, V161151, V161152, V161153, V161154, V161155, V161156, V161157, V161158, V161159, V161160, V161161, V161162, V161163, V161164, V161165, V161166, V161167, V161168, V161169, V161170, V161171, V161172, V161173, V161174, V161175, V161176, V161177, V161178, V161179, V161180, V161181, V161182, V161183, V161184, V161185, V161186, V161187, V161188, V161189, V161190, V161191, V161192, V161193, V161194, V161195, V161196, V161197, V161198, V161199, V161200, V161201, V161202, V161203, V161204, V161205, V161206, V161207, V161208, V161209, V161210, V161211, V161212, V161213, V161214, V161215, V161216, V161217, V161218, V161219, V161220, V161221, V161222, V161223, V161224, V161225, V161226, V161227, V161228, V161229, V161230, V161231, V161232, V161233, V161234, V161235, V161236, V161237, V161238, V161239, V161240, V161241, V161242, V161243, V161244, V161245, V161246, V161247, V161248, V161249, V161250, V161251, V161252, V161253, V161254, V161255, V161256, V161257, V161258, V161259, V161260, V161261, V161262, V161263, V161264, V161265, V161266, V161267, V161268, V161269, V161270, V161271, V161272, V161273, V161274, V161275, V161276, V161277, V161278, V161279, V161280, V161281, V161282, V161283, V161284, V161285, V161286, V161287, V161288, V161289, V161290, V161291, V161292, V161293, V161294, V161295, V161296, V161297, V161298, V161299, V161300, V161301, V161302, V161303, V161304, V161305, V161306, V161307, V161308, V161309, V161310, V161311, V161312, V161313, V161314, V161315, V161316, V161317, V161318, V161319, V161320, V161321, V161322, V161323, V161324, V161325, V161326, V161327, V161328, V161329, V161330, V161331, V161332, V161333, V161334, V161335, V161336, V161337, V161338, V161339, V161340, V161341, V161342, V161343, V161344, V161345, V161346, V161347, V161348, V161349, V161350, V161351, V161352, V161353, V161354, V161355, V161356, V161357, V161358, V161359, V161360, V161361, V161362, V161363, V161364, V161365, V161366, V161367, V161368, V161369, V161370, V161371, V161372, V161373, V161374, V161375, V161376, V161377, V161378, V161379, V161380, V161381, V161382, V161383, V161384, V161385, V161386, V161387, V161388, V161389, V161390, V161391, V161392, V161393, V161394, V161395, V161396, V161397, V161398, V161399, V161400, V161401, V161402, V161403, V161404, V161405, V161406, V161407, V161408, V161409, V161410, V161411, V161412, V161413, V161414, V161415, V161416, V161417, V161418, V161419, V161420, V161421, V161422, V161423, V161424, V161425, V161426, V161427, V161428, V161429, V161430, V161431, V161432, V161433, V161434, V161435, V161436, V161437, V161438, V161439, V161440, V161441, V161442, V161443, V161444, V161445, V161446, V161447, V161448, V161449, V161450, V161451, V161452, V161453, V161454, V161455, V161456, V161457, V161458, V161459, V161460, V161461, V161462, V161463, V161464, V161465, V161466, V161467, V161468, V161469, V161470, V161471, V161472, V161473, V161474, V161475, V161476, V161477, V161478, V161479, V161480, V161481, V161482, V161483, V161484, V161485, V161486, V161487, V161488, V161489, V161490, V161491, V161492, V161493, V161494, V161495, V161496, V161497, V161498, V161499, V161500, V161501, V161502, V161503, V161504, V161505, V161506, V161507, V161508, V161509, V161510, V161511, V161512, V161513, V161514, V161515, V161516, V161517, V161518, V161519
```

```
anes_raw <- read_rds("data/raw/cdf-raw-trim.rds")%>% # Loads RDS created in `anes-cdf-trim.R`
  glimpse()
```

```
## Rows: 38,100
## Columns: 31
## $ VCF0004 <dbl> 1978, 1978, 1978, 1978, 1978, 1978, 1978, 1978, 1978, 1978...
## $ VCF0301 <dbl> 1, 4, 7, 3, 3, 2, 3, 2, 2, 1, 5, 2, 1, 3, 4, 1, 2, 6, 6, 1...
## $ VCF0303 <dbl> 1, 2, 3, 1, 1, 1, 1, 1, 1, 1, 3, 1, 1, 1, 2, 1, 1, 3, 3, 1...
```

```
## $ VCF0305 <dbl> 4, 1, 4, 2, 2, 3, 2, 3, 3, 4, 2, 3, 4, 2, 1, 4, 3, 3, 3, 4...
## $ VCF0311 <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA...
## $ VCF0312 <dbl> 2, 2, 2, 1, 1, 1, 1, 1, 1, 2, 2, 2, 2, 2, 1, 2, 1, 2, 2, 2...
## $ VCF0803 <dbl> 6, 9, 4, 4, 9, 5, 1, 9, 5, 6, 9, 6, 2, 4, 9, 1, 5, 4, 9, 9...
## $ VCF0218 <dbl> 80, 50, 40, 60, 85, 50, 70, NA, 60, NA, NA, 70, 85, 75, 50...
## $ VCF0224 <dbl> 50, 50, 60, 60, 60, 50, 40, NA, 60, NA, NA, 40, 85, 65, 50...
## $ VCF0723 <dbl> 1, 1, 1, 2, 1, 1, 1, 2, 1, 2, 2, 1, 2, 1, 1, 2, 3, 1, 1, 1...
## $ VCF0503 <dbl> 5, NA, 2, 4, NA, 5, 2, NA, 2, 6, NA, 6, 2, 3, NA, 1, 1, NA...
## $ VCF0504 <dbl> 2, NA, 4, 3, NA, 4, 5, NA, 6, 6, NA, 2, 3, 6, NA, 7, 7, 4,...
## $ VCF9265 <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA...
## $ VCF0806 <dbl> 2, 3, 6, 1, 1, 1, 5, 9, 5, 1, 9, 1, 1, 3, 9, 9, 1, 1, 9, 7...
## $ VCF0809 <dbl> 2, 9, 6, 9, 9, 4, 3, 9, 5, 3, 9, 9, 1, 4, 9, 6, 7, 5, 7, 9...
## $ VCF0839 <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA...
## $ VCF9049 <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA...
## $ VCF0834 <dbl> 4, 4, 5, 4, 1, 4, 1, 6, 1, 7, 9, 1, 1, 4, 9, 9, 1, 6, 9, 7...
## $ VCF0838 <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA...
## $ VCF0876a <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA...
## $ VCF0110 <dbl> 2, 1, 2, 2, 1, 2, 4, 2, 3, 2, 2, 2, 1, 4, 2, 2, 3, 3, 2, 1...
## $ VCF0105a <dbl> 1, 1, 1, 1, 1, 1, 1, 2, 1, 4, 1, 1, 1, 1, 5, 1, 1, 1, 2, 1...
## $ VCF0113 <dbl> 1, 2, 2, 2, 2, 2, 2, 1, 1, 2, 1, 2, 2, 2, 2, 2, 1, 1, 1, 2...
## $ VCF0310 <dbl> 2, 1, 3, 2, 2, 2, 1, 1, 1, 3, 3, 2, 3, 3, 1, 2, 2, 2, 1, 1...
## $ VCF0130 <dbl> 4, 4, 3, 2, 4, 2, 7, 1, 2, 3, 1, 5, 2, 2, 2, 1, 3, 2, 4, 4...
## $ VCF0050a <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA...
## $ VCF0050b <dbl> 4, 3, 2, 4, 3, 3, 2, 5, 2, 2, 4, 2, 3, 4, 5, 2, 2, 3, 4, 5...
## $ VCF9255 <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA...
## $ VCF0729 <dbl> 1, 1, 2, 2, 2, 2, 2, 1, 2, 1, 1, 2, 2, 2, 1, 2, 2, 2, 1, 1...
## $ VCF9036 <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA...
## $ VCF0104 <dbl> 2, 1, 2, 1, 1, 2, 1, 2, 1, 2, 2, 1, 2, 2, 2, 1, 1, 2, 2, 2...
```

```
anes_char <- anes_raw %>%
  remove_all_labels()%>%
  rename(year = VCF0004)%>% # Year of response
  rename(pid_7 = VCF0301)%>% #7 scale Party ID val: 1-7. Strong Democrat 2. Weak Democrat3. Independent
  rename(pid_3 = VCF0303)%>% # Party ID 3 categories val: "Republican", "Independent", "Democrat" (De
  rename(pid_str = VCF0305)%>% # PID strength val: 1. Independent 2. Leaning Independent 3. Weak Part
  rename(win_care_pres = VCF0311)%>% # How much do you care which party wins presidency? val: 1. Don'
  rename(win_care_cong = VCF0312)%>% # How much do you care which party wins congress? val: 1. Don't
  rename(respondent_ideo = VCF0803)%>% # Liberal-conservative scale val: 1(extremely liberal)- 7(extr
  rename(therm_dem = VCF0218)%>% # val 00-96 cold-warm as coded; 97: 97-100, 98: DK, 99. NA
  rename(therm_rep = VCF0224)%>% # val 00-96 cold-warm as coded; 97: 97-100, 98: DK, 99. NA
  rename(activist_6cat = VCF0723)%>%#val: 1-6 low-high participation 0. DKN/NA
  rename(ideo_dem = VCF0503)%>% # val: 1-7 lib-con
  rename(ideo_rep = VCF0504)%>%# val: 1-7 lib-con
  rename(primary_vote = VCF9265)%>%
  select(year,
         pid_7,
         pid_3,
         pid_str,
         win_care_pres,
         win_care_cong,
         respondent_ideo,
         therm_dem,
         therm_rep,
         activist_6cat,
```

```

ideo_dem,
ideo_rep,
primary_vote,
VCF0806, #insurance Government Health Insurance Scale #1-7 Gov ins- Private ins 9DK, 0
VCF0809, #jobs Jobs Gurantee, same scale as above
VCF0839, #services Gov should provide 1 (few services)--7 (many services) 9DK, ONA
VCF9049, #ss SS: 1 (increase), 2 (same), 3 Decreased, 7 cut entirely 8DK 9NA
VCF0834, #women 1(equal) -- 7 (home) 9DK, ONA
VCF0838, #abortion 1 (never), 2(rape, incest, danger), 3(need est.), 4(always) 9DK, ONA
VCF0876a, #gayrights 1(Favor Strongly),2, 4, 5 (Oppose Strongly). 7DK, 9NA
VCF0110, #education 1 (grade school), 2(High School), 3(Some College), 4(College/advan
VCF0105a, #race 1(white), 2(Black), 3 (asian/pacific), 4(Am. indian/alaska native), 5(
VCF0113, #south 1(south), 2(nonsouth)
VCF0310, #interest 1(not much), 2(somewhat), 3(very) 9dk, Ona
VCF0130, #worship 1(every week), 2(almost every week), 3 (once or twice a month), 4 (f
VCF0050a, # iwrpkpre 1(very high)-5(very low)
VCF0050b, # iwrpkpst (same above), take mean
VCF9255, #satisfied_democ 1(very), 2(fairly), 3(not very), 4(not at all) -8,-9NA
VCF0729, #know_house which party has the most seats in house 1(wrong), 2(right), ONA
VCF9036, #know_sen 1-2(correct), 3-4(wrong), 7-9NA
VCF0104

)%>%
rename(female = VCF0104)%>%
mutate(female = as.numeric(recode(female,

                                "1" = "0",
                                "2" = "1")))%>%

rename(insurance = VCF0806)%>%
mutate(insurance = na_if(insurance, 9))%>%
mutate(insurance = na_if(insurance, 0))%>%
mutate(insurance = zero1(insurance))%>%#standardize between 0-1
rename(jobs = VCF0809)%>%
mutate(jobs = na_if(jobs, 9))%>%
mutate(jobs = na_if(jobs, 0))%>%
mutate(jobs = zero1(jobs))%>%
rename(services = VCF0839)%>%
mutate(services = na_if(services, 9))%>%
mutate(services = na_if(services, 0))%>%
mutate(services = as.numeric(recode(services, #recoding so that liberal values are lower, in accord

                                "1" = "7",
                                "2" = "6",
                                "3" = "5",
                                "4" = "4",
                                "5" = "3",
                                "6" = "2",
                                "7" = "1"

))))%>%
mutate(services = zero1(services))%>%
rename(ss = VCF9049)%>%
mutate(ss = na_if(ss, 8))%>%
mutate(ss = na_if(ss, 9))%>%
mutate(no_ss = if_else(ss == 7, 1, 0))%>%
mutate(ss = na_if(ss, 7))%>%
mutate(ss = zero1(ss))%>%

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```

rename(women = VCF0834)%>%
mutate(women = na_if(women, 9))%>%
mutate(women = na_if(women, 0))%>%
mutate(women = zero1(women))%>%
rename(abortion = VCF0838)%>%
mutate(abortion = as.numeric(recode(abortion, #recoding so that liberal values are lower, in accord
"1" = "4",
"2" = "3",
"3" = "2",
"4" = "1"

)))%>%
mutate(abortion = zero1(abortion))%>%
rename(gayrights = VCF0876a)%>%
mutate(gayrights = na_if(gayrights, 7))%>%
mutate(gayrights = na_if(gayrights, 9))%>%
mutate(gayrights = zero1(gayrights))%>%
rename(education = VCF0110)%>%#education 1 (grade school), 2(High School), 3(Some College), 4(College)
mutate(education = na_if(education, 0))%>%
mutate(high_school = if_else(education == 2, 1, 0))%>% #creating education dummies. grade school is 1
mutate(some_college = if_else(education == 3, 1, 0))%>%
mutate(college_adv = if_else(education == 4, 1, 0))%>%
rename(white = VCF0105a)%>%
mutate(white = na_if(white, 9))%>%
mutate(white = if_else(white==1, 1, 0))%>%
rename(south = VCF0113)%>%
mutate(south = if_else(south==1, 1, 0))%>%
rename(interest = VCF0310)%>%
mutate(interest = na_if(interest, 9))%>%
mutate(interest = na_if(interest, 0))%>%
rename(worship = VCF0130)%>%
mutate(worship = if_else(worship == 1 | worship == 2, 1, 0))%>%
rename(iwrpk_pre = VCF0050a)%>%
mutate(iwrpk_pre = na_if(iwrpk_pre, 9))%>%
mutate(iwrpk_pre = as.numeric(recode(iwrpk_pre, #recoding so that liberal values are lower, in accord
"1" = "5",
"2" = "4",
"3" = "3",
"4" = "2",
"5" = "1"

)))%>%
mutate(iwrpk_pre = zero1(iwrpk_pre))%>%
rename(iwrpk_post = VCF0050b)%>%
mutate(iwrpk_post = na_if(iwrpk_post, 9))%>%
mutate(iwrpk_post = na_if(iwrpk_post, 0))%>%
mutate(iwrpk_post = as.numeric(recode(iwrpk_post, #recoding so that liberal values are lower, in accord
"1" = "5",
"2" = "4",
"3" = "3",
"4" = "2",
"5" = "1"

)))%>%
mutate(iwrpk_post = zero1(iwrpk_post))%>%
# mutate(iwrpk_mean = (iwrpk_post + iwrpk_pre)/2)%>%

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rename(dis_democ = VCF9255)%>%
mutate(dis_democ = na_if(dis_democ, -9))%>%
mutate(dis_democ = na_if(dis_democ, -8))%>%
mutate(dis_democ = if_else(dis_democ == 3 | dis_democ ==4, 1, 0))%>%
rename(know_house = VCF0729)%>%
mutate(know_house = na_if(know_house, 0))%>%
mutate(know_house = if_else(know_house==1, 1, 0))%>%
rename(know_sen = VCF9036)%>%
mutate(know_sen = na_if(know_sen, 0))%>%
mutate(know_sen = if_else(know_sen==1, 1, 0))%>%
mutate(know_cong = (know_sen + know_house)/2)%>%
# rowwise()%>%
# mutate(cult_att = mean(c(abortion, gayrights, women), na.rm = TRUE))%>%
# mutate(cult_att = (abortion + gayrights + women)/3)%>%
# mutate(cult_att = zero1(cult_att))%>%
# mutate(econ_att = (ss + services + jobs + insurance)/4)%>%
# mutate(econ_att = zero1(econ_att))%>%
glimpse()%>%# adds only these variables to the df
mutate(win_care_pres = na_if(win_care_pres, 0))%>% #these functions set the specified value to NA,
mutate(win_care_cong = na_if(win_care_cong, 0))%>%
mutate(respondent_ideo = na_if(respondent_ideo, 9))%>%#the recode() function is used in the next 4
mutate(ideo_rep = na_if(ideo_rep, 8))%>%
mutate(ideo_rep = na_if(ideo_rep, 0))%>%
mutate(ideo_dem = na_if(ideo_dem, 8))%>%
mutate(ideo_dem = na_if(ideo_dem, 0))%>%
mutate(primary_vote = na_if(primary_vote, -8))%>%
mutate(primary_vote = na_if(primary_vote, -9))%>%
mutate(primary_vote = as.numeric(recode(primary_vote,
                                         "1" = "1",
                                         "2" = "0")))%>%

mutate(strong_partisan = if_else(pid_7 == 1|pid_7 ==7, 1, 0))%>%
mutate(pid_7_num = as.numeric(pid_7),
       pid_7 = recode(pid_7,
                      "1" = "Strong Democrat",
                      "2" = "Weak Democrat",
                      "3" = "Independent - Democrat",
                      "4" = "Independent - Independent",
                      "5" = "Independent - Republican",
                      "6" = "Weak Republican",
                      "7" = "Strong Republican"),
       pid_7 = reorder(pid_7, pid_7_num))%>%
mutate(pid_3_num = as.numeric(pid_3),
       pid_3 = recode(pid_3,
                      "1" = "Democrat",
                      "2" = "Independent",
                      "3" = "Republican"),
       pid_3 = reorder(pid_3, pid_3_num))%>%
mutate(pid_str_num = as.numeric(pid_str),
       pid_str = recode(pid_str,
                        "1" = "Independent",
                        "2" = "Leaning Independent",
                        "3" = "Weak Partisan",
                        "4" = "Strong Partisan"),

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        pid_str = reorder(pid_str, pid_str_num))%>%
mutate(respondent_ideo_num = as.numeric(respondent_ideo),
       respondent_ideo = recode(respondent_ideo,
                                "1" = "Extremely Liberal",
                                "2" = "Liberal",
                                "3" = "Somewhat Liberal",
                                "4" = "Moderate",
                                "5" = "Somewhat Conservative",
                                "6" = "Conservative",
                                "7" = "Extremely Conservative"),

       respondent_ideo = reorder(respondent_ideo, respondent_ideo_num))%>%
mutate(parties_therm_dif = sqrt((therm_dem - therm_rep)^2))%>% #creates a variable showing the diff
mutate(parties_ideo_dif = abs(ideo_dem - ideo_rep))%>%
# mutate(cult_att = if_else(pid_3_num == 3, (1-cult_att), cult_att))%>%
# mutate(econ_att = if_else(pid_3_num == 3, (1-econ_att), econ_att))%>% #DO NOT USE UNLESS YOU ARE WO
# select(-ends_with("_num")) %>% # drop the numeric versions of the factors that i used for reorder
glimpse()%>%
write_rds("data/tidy-cdf.rds") %>%
write_csv("data/tidy-cdf.csv")

```

```

## Warning: Unreplaced values treated as NA as .x is not compatible. Please specify
## replacements exhaustively or supply .default

```

```

## Warning: Unreplaced values treated as NA as .x is not compatible. Please specify
## replacements exhaustively or supply .default

```

```

## Rows: 38,100
## Columns: 36
## $ year      <dbl> 1978, 1978, 1978, 1978, 1978, 1978, 1978, 1978, 197...
## $ pid_7     <dbl> 1, 4, 7, 3, 3, 2, 3, 2, 2, 1, 5, 2, 1, 3, 4, 1, 2, ...
## $ pid_3     <dbl> 1, 2, 3, 1, 1, 1, 1, 1, 1, 1, 3, 1, 1, 1, 2, 1, 1, ...
## $ pid_str   <dbl> 4, 1, 4, 2, 2, 3, 2, 3, 3, 4, 2, 3, 4, 2, 1, 4, 3, ...
## $ win_care_pres <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ win_care_cong <dbl> 2, 2, 2, 1, 1, 1, 1, 1, 1, 2, 2, 2, 2, 2, 1, 2, 1, ...
## $ respondent_ideo <dbl> 6, 9, 4, 4, 9, 5, 1, 9, 5, 6, 9, 6, 2, 4, 9, 1, 5, ...
## $ therm_dem   <dbl> 80, 50, 40, 60, 85, 50, 70, NA, 60, NA, NA, NA, 70, 85,...
## $ therm_rep   <dbl> 50, 50, 60, 60, 60, 50, 40, NA, 60, NA, NA, NA, 40, 85,...
## $ activist_6cat <dbl> 1, 1, 1, 2, 1, 1, 1, 2, 1, 2, 2, 1, 2, 1, 1, 2, 3, ...
## $ ideo_dem    <dbl> 5, NA, 2, 4, NA, 5, 2, NA, 2, 6, NA, 6, 2, 3, NA, 1...
## $ ideo_rep    <dbl> 2, NA, 4, 3, NA, 4, 5, NA, 6, 6, NA, 2, 3, 6, NA, 7...
## $ primary_vote <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ insurance   <dbl> 0.1666667, 0.3333333, 0.8333333, 0.0000000, 0.00000...
## $ jobs        <dbl> 0.1666667, NA, 0.8333333, NA, NA, 0.5000000, 0.3333...
## $ services    <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ ss         <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ women       <dbl> 0.5000000, 0.5000000, 0.6666667, 0.5000000, 0.00000...
## $ abortion    <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ gayrights   <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ education   <dbl> 2, 1, 2, 2, 1, 2, 4, 2, 3, 2, 2, 2, 1, 4, 2, 2, 3, ...
## $ white       <dbl> 1, 1, 1, 1, 1, 1, 1, 0, 1, 0, 1, 1, 1, 1, 0, 1, 1, ...
## $ south       <dbl> 1, 0, 0, 0, 0, 0, 0, 1, 1, 0, 1, 0, 0, 0, 0, 0, 1, ...
## $ interest    <dbl> 2, 1, 3, 2, 2, 2, 1, 1, 1, 3, 3, 2, 3, 3, 1, 2, 2, ...
## $ worship     <dbl> 0, 0, 0, 1, 0, 1, 0, 1, 1, 0, 1, 0, 1, 1, 1, 1, 0, ...
## $ iwrpk_pre   <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...

```

```

## $ iwrpk_post      <dbl> 0.25, 0.50, 0.75, 0.25, 0.50, 0.50, 0.75, 0.00, 0.7...
## $ dis_democ       <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ know_house      <dbl> 1, 1, 0, 0, 0, 0, 0, 1, 0, 1, 1, 0, 0, 0, 1, 0, 0, ...
## $ know_sen        <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ female          <dbl> 1, 0, 1, 0, 0, 1, 0, 1, 0, 1, 1, 0, 1, 1, 1, 0, 0, ...
## $ no_ss           <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ high_school     <dbl> 1, 0, 1, 1, 0, 1, 0, 1, 0, 1, 1, 1, 0, 0, 1, 1, 0, ...
## $ some_college    <dbl> 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 1, ...
## $ college_adv     <dbl> 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, ...
## $ know_cong       <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## Rows: 38,100
## Columns: 43
## $ year            <dbl> 1978, 1978, 1978, 1978, 1978, 1978, 1978, 1978, 1978,...
## $ pid_7           <fct> Strong Democrat, Independent - Independent, Str...
## $ pid_3           <fct> Democrat, Independent, Republican, Democrat, De...
## $ pid_str         <fct> Strong Partisan, Independent, Strong Partisan, ...
## $ win_care_pres    <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ win_care_cong    <dbl> 2, 2, 2, 1, 1, 1, 1, 1, 1, 2, 2, 2, 2, 2, 1, 2,...
## $ respondent_ideo <fct> Conservative, NA, Moderate, Moderate, NA, Somew...
## $ therm_dem       <dbl> 80, 50, 40, 60, 85, 50, 70, NA, 60, NA, NA, 70,...
## $ therm_rep       <dbl> 50, 50, 60, 60, 60, 50, 40, NA, 60, NA, NA, 40,...
## $ activist_6cat   <dbl> 1, 1, 1, 2, 1, 1, 1, 2, 1, 2, 2, 1, 2, 1, 1, 2,...
## $ ideo_dem        <dbl> 5, NA, 2, 4, NA, 5, 2, NA, 2, 6, NA, 6, 2, 3, N...
## $ ideo_rep        <dbl> 2, NA, 4, 3, NA, 4, 5, NA, 6, 6, NA, 2, 3, 6, N...
## $ primary_vote    <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ insurance       <dbl> 0.1666667, 0.3333333, 0.8333333, 0.0000000, 0.0...
## $ jobs            <dbl> 0.1666667, NA, 0.8333333, NA, NA, 0.5000000, 0....
## $ services        <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ ss              <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ women           <dbl> 0.5000000, 0.5000000, 0.6666667, 0.5000000, 0.0...
## $ abortion        <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ gayrights       <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ education       <dbl> 2, 1, 2, 2, 1, 2, 4, 2, 3, 2, 2, 2, 1, 4, 2, 2,...
## $ white           <dbl> 1, 1, 1, 1, 1, 1, 1, 0, 1, 0, 1, 1, 1, 1, 0, 1,...
## $ south           <dbl> 1, 0, 0, 0, 0, 0, 0, 1, 1, 0, 1, 0, 0, 0, 0, 0,...
## $ interest        <dbl> 2, 1, 3, 2, 2, 2, 1, 1, 1, 3, 3, 2, 3, 3, 1, 2,...
## $ worship         <dbl> 0, 0, 0, 1, 0, 1, 0, 1, 1, 0, 1, 0, 1, 1, 1, 1,...
## $ iwrpk_pre       <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ iwrpk_post      <dbl> 0.25, 0.50, 0.75, 0.25, 0.50, 0.50, 0.75, 0.00,...
## $ dis_democ       <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ know_house      <dbl> 1, 1, 0, 0, 0, 0, 0, 1, 0, 1, 1, 0, 0, 0, 1, 0,...
## $ know_sen        <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ female          <dbl> 1, 0, 1, 0, 0, 1, 0, 1, 0, 1, 1, 0, 1, 1, 1, 0,...
## $ no_ss           <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ high_school     <dbl> 1, 0, 1, 1, 0, 1, 0, 1, 0, 1, 1, 1, 0, 0, 1, 1,...
## $ some_college    <dbl> 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0,...
## $ college_adv     <dbl> 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 0, 0,...
## $ know_cong       <dbl> NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA, NA,...
## $ strong_partisan <dbl> 1, 0, 1, 0, 0, 0, 0, 0, 1, 0, 0, 1, 0, 0, 1,...
## $ pid_7_num       <dbl> 1, 4, 7, 3, 3, 2, 3, 2, 2, 1, 5, 2, 1, 3, 4, 1,...
## $ pid_3_num       <dbl> 1, 2, 3, 1, 1, 1, 1, 1, 1, 1, 3, 1, 1, 1, 2, 1,...
## $ pid_str_num     <dbl> 4, 1, 4, 2, 2, 3, 2, 3, 3, 4, 2, 3, 4, 2, 1, 4,...
## $ respondent_ideo_num <dbl> 6, NA, 4, 4, NA, 5, 1, NA, 5, 6, NA, 6, 2, 4, N...
## $ parties_therm_dif <dbl> 30, 0, 20, 0, 25, 0, 30, NA, 0, NA, NA, 30, 0, ...

```

```
## $ parties_ideo_dif      <dbl> 3, NA, 2, 1, NA, 1, 3, NA, 4, 0, NA, 4, 1, 3, N...
```