

```
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr      1.1.3      v readr      2.1.4
## v forcats    1.0.0      v stringr   1.5.0
## v ggplot2    3.4.3      v tibble    3.2.1
## v lubridate  1.9.2      v tidyr     1.3.0
## v purrr      1.0.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
library(haven)
dat <- read_sav("W110_Jun22/ATP W110.sav")
dat1 <- read_sav("W110_Jun22/ATP W110.sav")
altdat <- read_sav("W52_Jul19/ATP W52.sav")
altdat1 <- read_sav("W52_Jul19/ATP W52.sav")
```

```
dat <- dat |>
  mutate(
    Party = if_else(PARTY_W110 == 1, "Republican", "Democrat"),
    Approval = if_else(POL1JB_W110 == 1, "Approve", "Disapprove"),
    Gender = if_else(F_GENDER == 1, "Man", "Woman"),
    Age = if_else(
      F_AGECA1 == 1, "18-29",
      if_else(F_AGECA1 == 2, "30-49",
        if_else(F_AGECA1 == 3, "50-64",
          if_else(F_AGECA1 == 4, "65+", "N/A")))))
```

```
altdat <-
  altdat |>
  mutate(
    Party = if_else(F_PARTY_FINAL == 1, "Republican", "Democrat"),
    Gender = if_else(F_SEX == 1, "Man", "Woman"),
    Approval = if_else(POL1DT_W52 == 1, "Approve", "Disapprove"),
    Age = if_else(
      F_AGECA1 == 1, "18-29",
      if_else(F_AGECA1 == 2, "30-49",
        if_else(F_AGECA1 == 3, "50-64",
          if_else(F_AGECA1 == 4, "65+", "N/A")))))
```

```
# Combine the two datasets
combined_data <- bind_rows(
  mutate(dat, dataset = "W110_Jun22"),
  mutate(altdat, dataset = "W52_Jul19")
)
```

```
## Warning: ‘..1$F_AGECA1’ and ‘..2$F_AGECA1’ have conflicting value labels.
## i Labels for these values will be taken from ‘..1$F_AGECA1’.
## x Values: 99
```

```
## Warning: '..1$F_EDUCCAT' and '..2$F_EDUCCAT' have conflicting value labels.
## i Labels for these values will be taken from '..1$F_EDUCCAT'.
## x Values: 99
```

```
## Warning: '..1$F_EDUCCAT2' and '..2$F_EDUCCAT2' have conflicting value labels.
## i Labels for these values will be taken from '..1$F_EDUCCAT2'.
## x Values: 99
```

```
## Warning: '..1$F_RACECMB' and '..2$F_RACECMB' have conflicting value labels.
## i Labels for these values will be taken from '..1$F_RACECMB'.
## x Values: 2
```

```
## Warning: '..1$F_RELIG' and '..2$F_RELIG' have conflicting value labels.
## i Labels for these values will be taken from '..1$F_RELIG'.
## x Values: 1 and 11
```

```
# Create a summary similar to your previous code
summary_data <- combined_data |>
  group_by(Approval, Party, Gender, dataset) |>
  summarize(count = n()) |>
  mutate(altmean = count / sum(count))
```

```
## 'summarise()' has grouped output by 'Approval', 'Party', 'Gender'. You can
## override using the '.groups' argument.
```

```
print(summary_data)
```

```
## # A tibble: 16 x 6
## # Groups:   Approval, Party, Gender [8]
##   Approval  Party    Gender dataset    count altmean
##   <chr>     <chr>    <chr>   <chr>    <int>   <dbl>
## 1 Approve  Democrat  Man     W110_Jun22    960  0.739
## 2 Approve  Democrat  Man     W52_Jul19    339  0.261
## 3 Approve  Democrat  Woman   W110_Jun22  1404  0.825
## 4 Approve  Democrat  Woman   W52_Jul19    297  0.175
## 5 Approve  Republican Man     W110_Jun22    23  0.0466
## 6 Approve  Republican Man     W52_Jul19    471  0.953
## 7 Approve  Republican Woman   W110_Jun22    27  0.0499
## 8 Approve  Republican Woman   W52_Jul19    514  0.950
## 9 Disapprove Democrat  Man     W110_Jun22    983  0.498
## 10 Disapprove Democrat  Man     W52_Jul19    989  0.502
## 11 Disapprove Democrat  Woman   W110_Jun22  1276  0.469
## 12 Disapprove Democrat  Woman   W52_Jul19  1444  0.531
## 13 Disapprove Republican Man     W110_Jun22    646  0.940
## 14 Disapprove Republican Man     W52_Jul19     41  0.0597
## 15 Disapprove Republican Woman   W110_Jun22    855  0.914
## 16 Disapprove Republican Woman   W52_Jul19     80  0.0856
```

```
# Bar plot
ggplot(summary_data, aes(x = Approval, y = altmean, fill = Party)) +
  geom_bar(stat = "identity", position = "dodge") +
```

```
facet_grid(rows = vars(Gender), cols = vars(dataset)) +
labs(title = "Approval Ratings by Party, Gender, and Dataset",
     x = "Approval",
     y = "Proportion")
```

