

Gov 1372 - Groups and Identities

your name here

September 23, 2021

Marriage and Partisan Polarization

Iyengar and Westwood (2014) use answers to questions about a child marrying an in-party or out-party spouse as one way of characterizing affective partisan polarization. Some authors have questioned if the way this question is framed too coarsely. In particular, [Klar et al. \(2018\)](#) argue that, by making the prospective child-in-law's partisanship salient, the marriage question may be picking up on respondents dislike of partisanship in general, rather than a dislike of the opposing party.

The in-class survey you took was a partial replication of the Klar et al. (2018) study. We randomized whether you were asked about a prospective child-in-law who "frequently talks about politics," "rarely talks about politics," or a person whose frequency of discussing politics was not mentioned. This last, control, condition matches the wording of the question used in Iyengar and Westwood (2014).

Data Details:

- File Name: `Sep23ClassData_clean.csv`
- Source: These data are from the survey you took in class. The questions are slightly adapted versions of some of the questions used in Klar et al (2018) (see [here](#) for the supplemental material of that study with the original questionnaire, if you are interested).

Variable Name	Variable Description
<code>pid3</code>	Political party preference
<code>pid_lean</code>	If a respondent didn't identify with the Democrats or Republicans in QID1, this indicates to which party (or neither) they feel closer
<code>strongGOP</code>	Indicator variable for whether the respondent identifies as a Strong Republican
<code>strongDEM</code>	Indicator variable for whether the respondent identifies as a Strong Democrat
<code>strongPARTISAN</code>	Indicator variable for whether the respondent identifies as a strong member of either major party
<code>party</code>	Party variable where those who lean toward either major party are counted as identifying with that party
<code>treatment</code>	Which treatment condition the respondent was randomly assigned to
<code>marryDemocrat</code>	The respondent's answer to how happy they would be if their child married a Democrat
<code>marryRepublican</code>	The respondent's answer to how happy they would be if their child married a Republican

Variable Name	Variable Description
<code>inPartyHappy</code>	Indicator variable for whether the respondent would be happy if their child married a member of their own party
<code>outPartyUnhappy</code>	Indicator variable for whether the respondent would be unhappy if their child married a member of the other major party
<code>polarized</code>	Indicator variable for whether the respondent was affectively polarized

Once again, the .Rmd version of this file has code you can use to load the data.

These data are *not* the raw output from the survey you took. In particular, all of the indicator variables are the result of coding decisions and data processing done by the instructors (based on the procedures used in Klar et al. (2018)). For the first few questions, just open up the data and take a look at it (ask us if you need help viewing the data in spreadsheet format in RStudio).

Question 1

How were the `inPartyHappy` and `outPartyUnhappy` variables defined? Does this seem like a reasonable procedure? Do you notice any missing values? Why are they missing? How might the missing data affect researchers' inferences?

`inPartyHappy` and `outPartyUnhappy` are defined by comparing the respondent party and their answer to whether they'd be happy if their child married someone of the same party or the opposite party. `inPartyHappy` is TRUE when the respondent's party corresponds to a "happy" response for marriage of the same party – ex: if the respondent's party is Democrat and `marryDemocrat` = "Somewhat happy," `inPartyHappy` will be defined as TRUE. The opposite is true with `outPartyUnhappy`, except the coding is flipped. If the respondent is a Democrat and `marryRepublican` = "Somewhat unhappy," `outPartyUnhappy` = TRUE. Values are missing when there's missing party data.

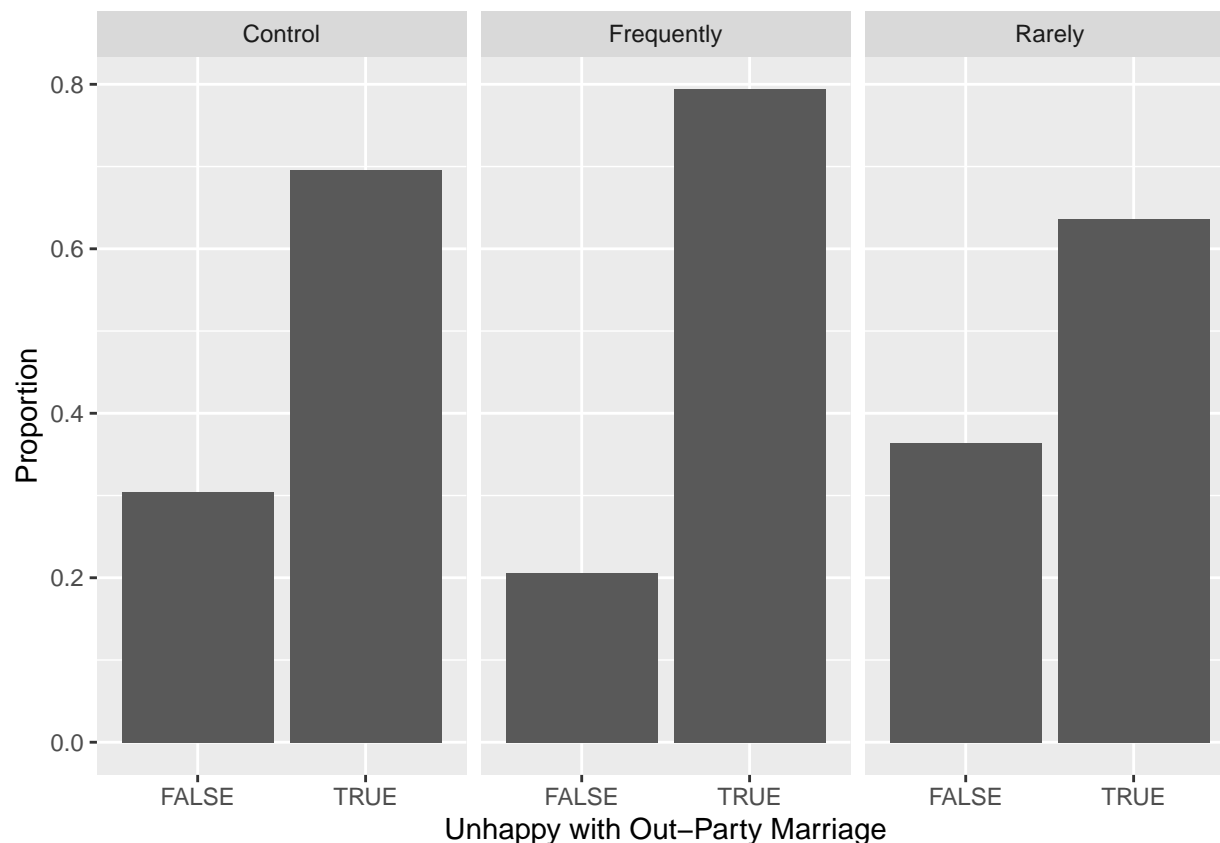
Question 2

How was the `polarized` variable defined? Is there another way you might consider coding this variable for individual polarization? What would be an advantage and a disadvantage of your alternative approach?

`Polarized` is coded to indicate "affective polarization." The value is TRUE when both `inPartyHappy` and `outPartyUnhappy` are also both TRUE. If either `inPartyHappy` or `outPartyUnhappy` are not TRUE, `polarized` will be defined as FALSE.

Now let's take a look at if there are differences in some of the key outcome variables depending on treatment status. Here is an example of how you might make a graph to look at if the rates of unhappiness with a prospective out-party in-law differ depending on the frequency with which they talk about politics.

```
ggplot(data = marriage_data %>% filter(is.na(outPartyUnhappy)==FALSE)) +
  geom_bar(mapping = aes(x = outPartyUnhappy, y = ..prop.., group = 1), stat = "count") +
  facet_wrap(~treatment) + ylab("Proportion") + xlab("Unhappy with Out-Party Marriage")
```



Question 3

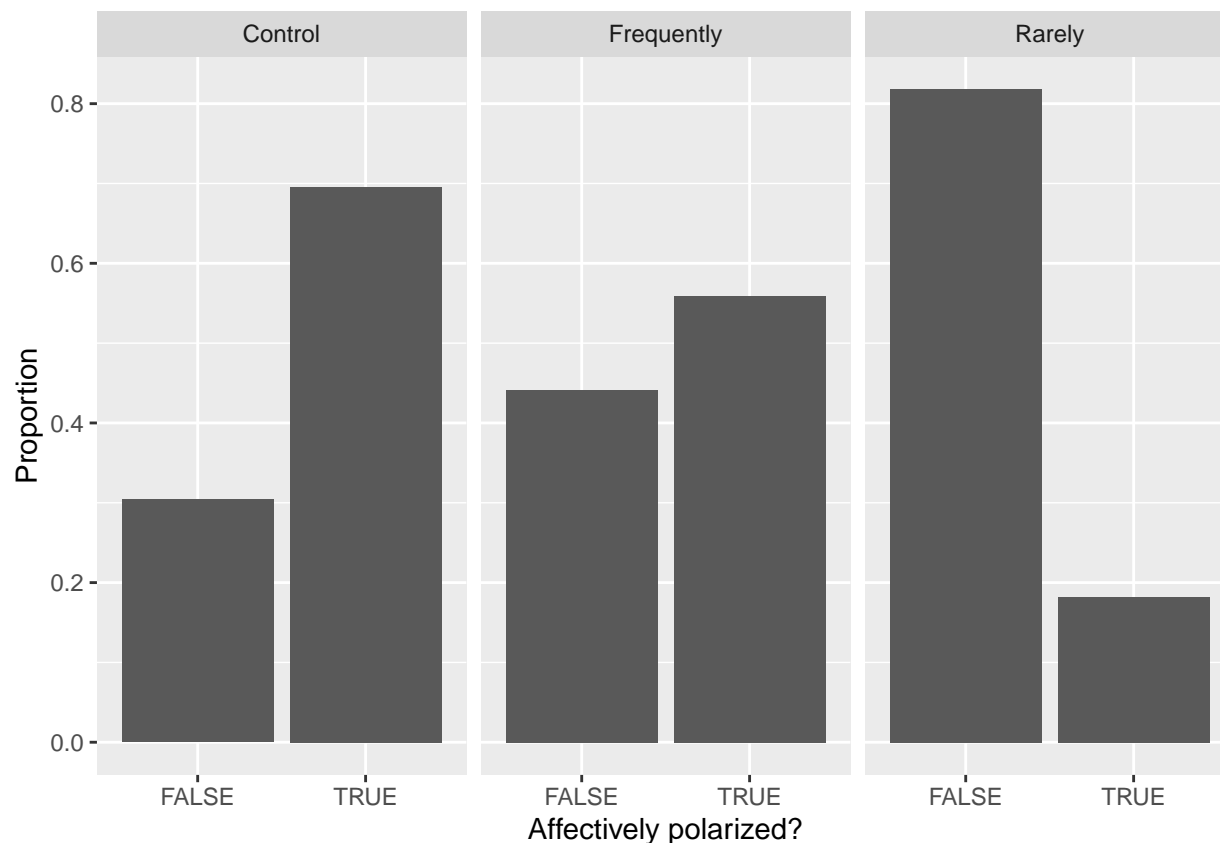
Comment on what you see in the example graph. Did the treatment affect unhappiness with a prospective out-party member coming into the family?

Treatment affected the results – the frequently group had a higher rate of unhappiness and a lower rate of happiness with an out-party marriage. The rarely group has a lower rate of unhappiness and a higher rate of happiness with an out-party marriage.

Question 4

Did the different treatment conditions affect the proportions of people who were affectively polarized? Make a plot and explain what you found.

```
marriage_data %>%
  filter(is.na(outPartyUnhappy) == FALSE) %>%
  ggplot() +
  geom_bar(mapping = aes(x = polarized, y = ..prop.., group = 1)) +
  facet_wrap(~treatment) + ylab("Proportion") + xlab("Affectively polarized?")
```



Question 5

Take a quick look at Figure 1 and Figure 2 in [Klar et al. \(2018\)](#). How do the results from our in-class data compare to their results? What might explain any differences? If there aren't any notable differences, is there a common pattern across the two datasets that is puzzling? What hypothesis do you have to explain it.

The class data matches the Klar study. For unhappiness with an out-party marriage, frequently was the highest, control was in the middle, and rarely was the lowest. For affective polarization, control was the highest, frequently was the middle, and rarely was the lowest. This would imply that affective polarization and dislike of partisanship is indistinguishable in the control group.

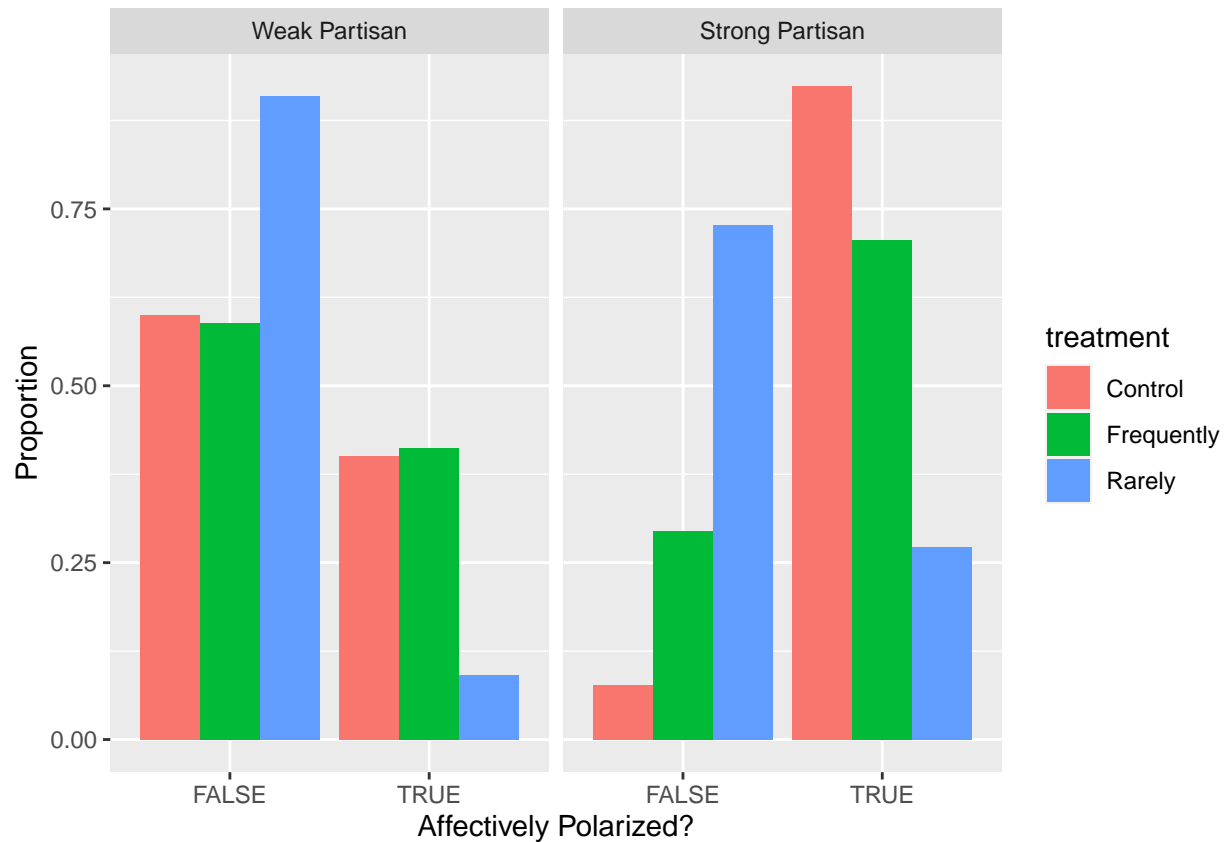
Question 6 (Data Science Question)

We might also be interested in if things looked different for weak vs. strong partisans. Pick one of the two outcome variables you just examined and make a plot that would help us understand if responses within and across treatment groups differ between weak and strong partisans.

```
labels <- c("TRUE" = "Strong Partisan", "FALSE" = "Weak Partisan")

marriage_data %>%
  filter(is.na(outPartyUnhappy) == FALSE) %>%
  ggplot() +
```

```
geom_bar(mapping = aes(x = polarized, y = ..prop.., fill = treatment,
                      group = treatment), position = "dodge") +
facet_wrap("strongPARTISAN", labeller = as_labeller(labels)) +
ylab("Proportion") +
xlab("Affectively Polarized?")
```

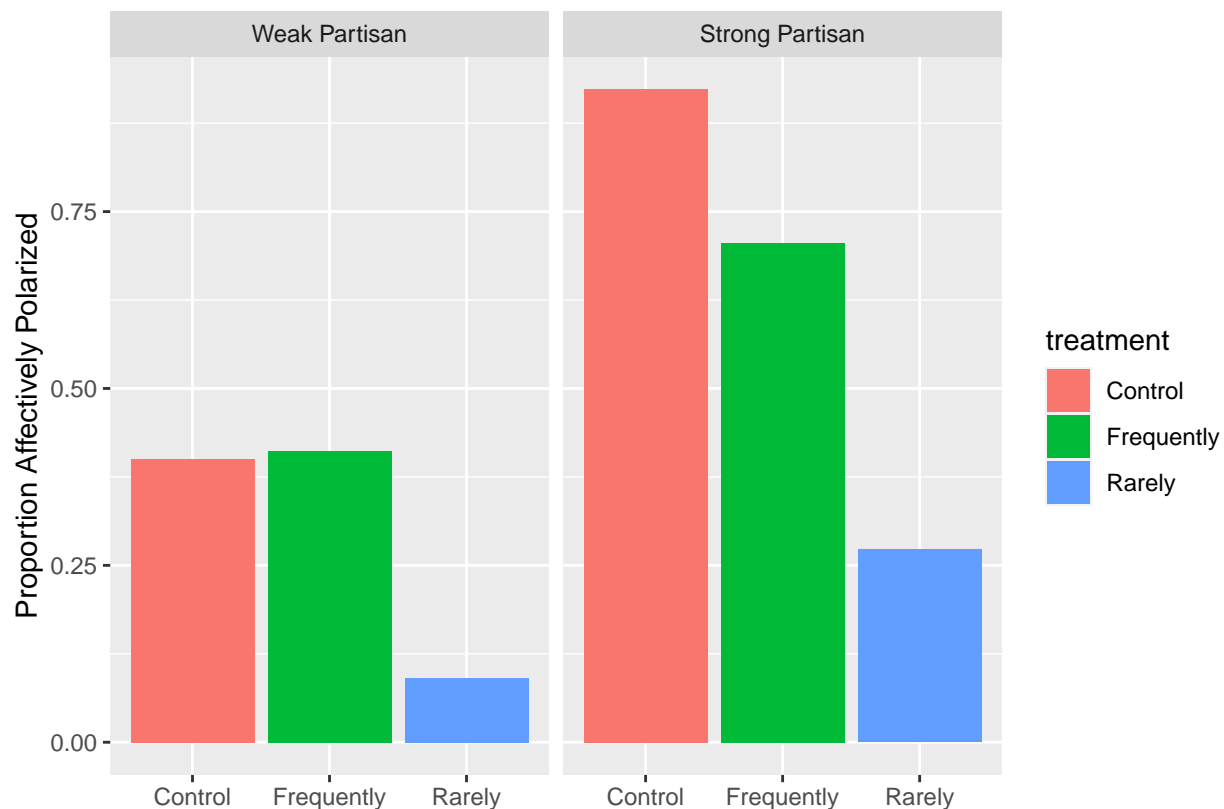


*# Redo the same chart but include only proportions for polarized = TRUE to make
it more readable*

```
marriage_data %>%
  filter(is.na(outPartyUnhappy) == FALSE,
         is.na(strongPARTISAN) == FALSE,
         is.na(polarized) == FALSE) %>%

# Filtering and then using aes(y = ..prop..) messed with the proportions so
# just calculate the proportions first

group_by(strongPARTISAN, treatment) %>%
summarize(prop_polar = sum(polarized == TRUE)/n(), .groups = "drop") %>%
ggplot(aes(x = treatment, y = prop_polar, fill = treatment)) +
  geom_col() +
  facet_wrap("strongPARTISAN", labeller = as_labeller(labels)) +
  labs(x = "", y = "Proportion Affectively Polarized")
```



```
marriage_data %>%
  group_by(party) %>%
  summarize(strong = sum(strongPARTISAN == TRUE),
            weak = sum(strongPARTISAN == FALSE), .groups = "drop")
```

```
## # A tibble: 4 x 3
##   party      strong weak
##   <chr>      <int> <int>
## 1 Democrat      40    32
## 2 Independent     0     3
## 3 Republican     1     6
## 4 <NA>           0     7
```

Question 7

Are there any other issues you can think of that might confound the utility of the marriage question as a measure of affective polarization? If you have any concerns, how might you design a study to evaluate your hypotheses?

Question 8

Based on the data and your work on this assignment, are there any changes you would make to the Iyengar and Westwood (2014) study or the Klar et al. (2018) study or extensions of

the research that you would like to see? (For example, would you alter the wording of any questions, change the experimental protocol, or come to any different conclusions?)