

# Gov 1372 - Groups and Identities

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## 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?**

The `inPartyHappy` variable is defined as TRUE if the person is at least somewhat happy with a child-in-law of the same party and FALSE otherwise. The `outPartyUnhappy` variable is similarly defined, but is TRUE when the person is at least somewhat unhappy with a child-in-law of the opposite party and FALSE otherwise. This does seem like a reasonable definition and measurement.

There indeed are missing data points in both the `inPartyHappy` and `outPartyHappy` columns. This happens when a respondent doesn't identify with a particular party and/or have no preference or opinion on a spouse of the opposite/same party. This missing data may skew the data to show that people care more about the political affiliation of their children-in-law than they actually do (because the people who don't care and have no strong opinions are not counted as a data point).

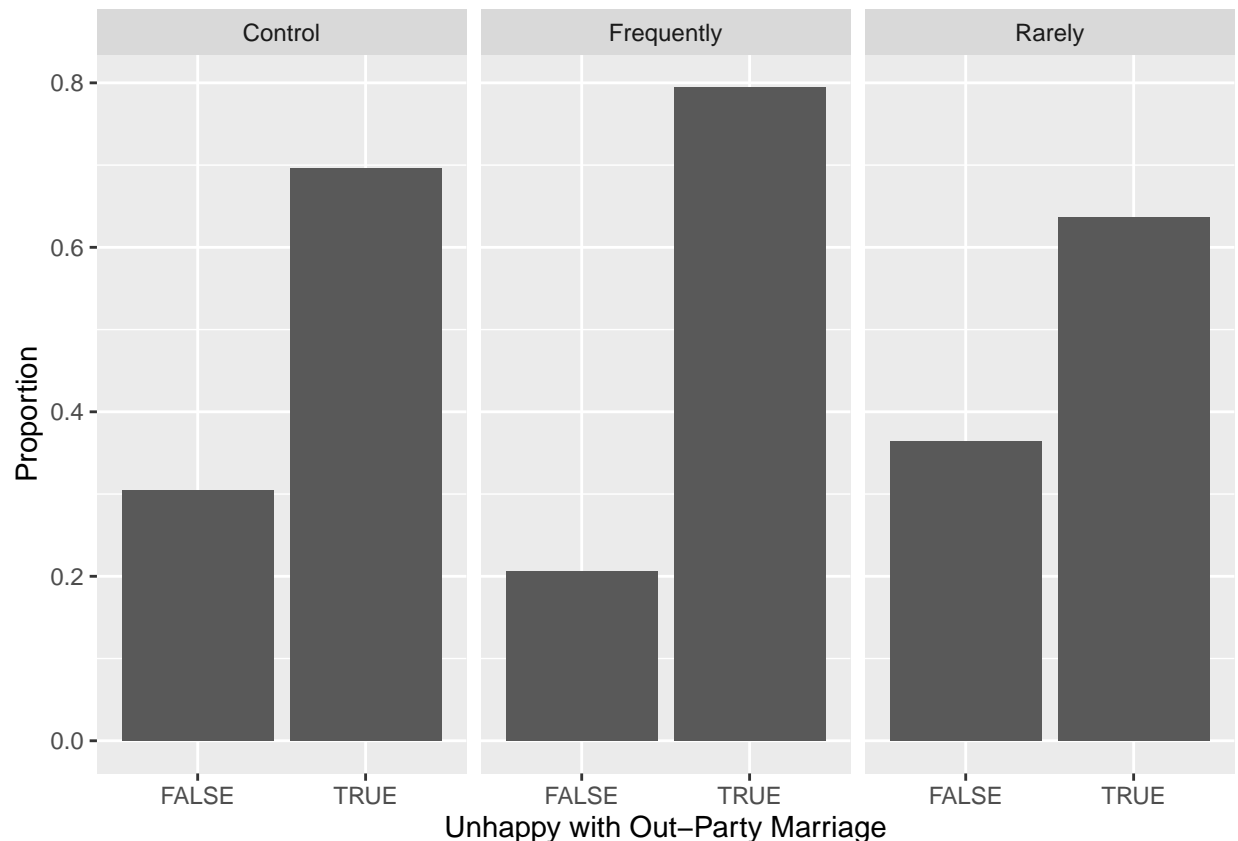
## Question 2

**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?**

The `polarized` variable was defined in the following manner: if both `inPartyHappy` and `outPartyHappy` are TRUE, `polarized` is TRUE. If either one (or both) are FALSE, `polarized` is FALSE as well. We could define `polarized` to be TRUE in the event where just one (or two) of the `inPartyHappy` and `outPartyHappy` variables are TRUE. In this case, we would lower our bar for what counts as polarization. An advantage of this is that we could define polarization in a looser sense. However, we could also have a disadvantage in that there might be very few people we define as unpolarized, since our definition is so loose.

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")
```



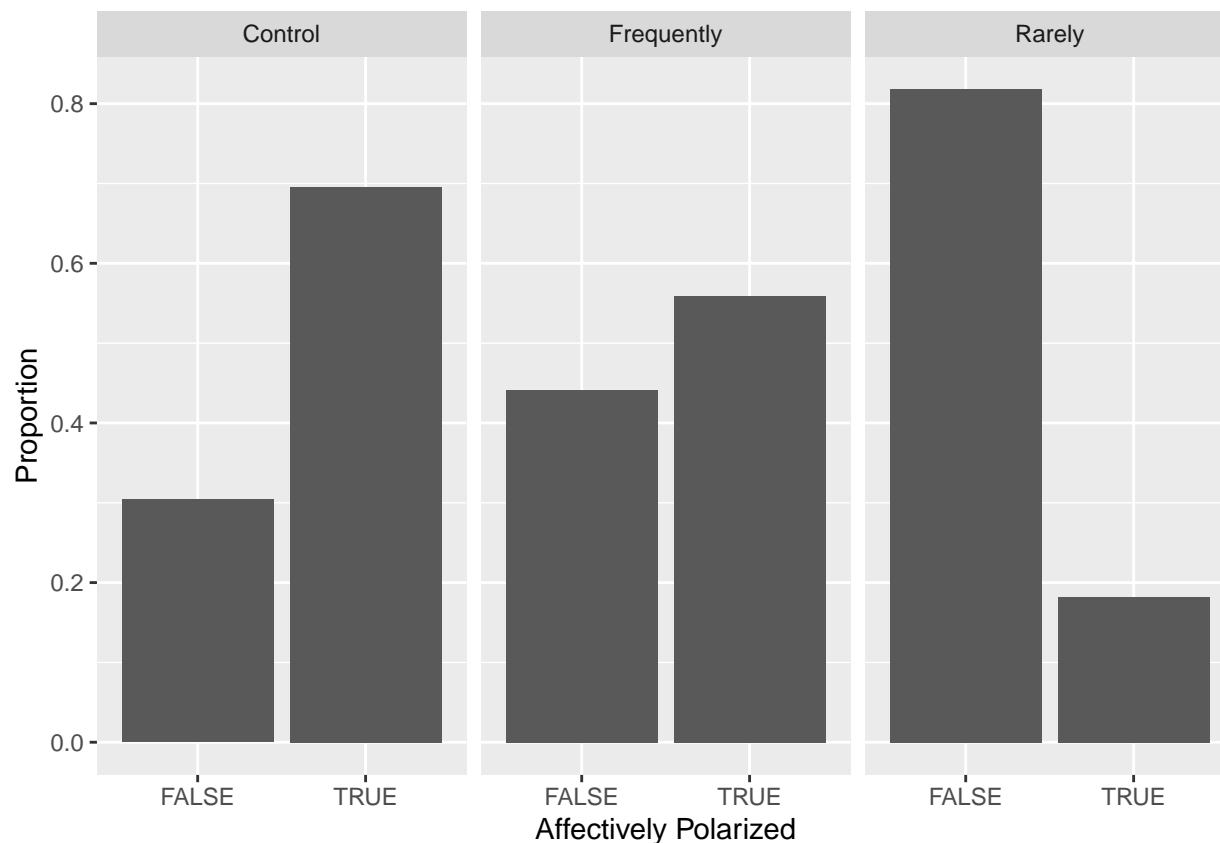
### Question 3

Comment on what you see in the example graph. Did the treatment affect unhappiness with a prospective out-party member coming into the family? Yes, the treatment does affect the unhappiness levels. For example, those sampled who were told their potential child-in-law were frequent speakers about politics were much more likely to say that they were unhappy with out party marriages than those who were told that the person rarely speaks about politics. This was also true when comparing the frequent treatment data with the control treatment data—students were more likely to express negative feelings about the marriage in the former case than the latter.

### Question 4

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

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



Yes, the different treatments also very much affected how affectively polarized the students were, at least under our definition of affective polarization. However, the treatments affected the polarization in an unexpected way. In both the frequent and rare treatment cases, respondents were less polarized than those in the control group. In the rare treatment case, most respondents were not polarized (much more than in the frequent and control treatment cases).

## 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 first graph from above is consistent with the results from Figure 1 in the text. This is because more strongly politically affiliated people were more unhappy with outgroup marriage than less strongly affiliated people, which is similar to what we see with the “frequent” and “rare” group divisions—people who speak more frequently about politics are perceived more negatively by people of the opposite group.

However, there is also agreement between our second graph and Figure 2. Figure 2 showed that those who were more strongly affiliated with a party were more affectively polarized than those who were less strongly affiliated with a political party. This was true in our graph as well. Those who were in the frequent treatment group were slightly more affectively polarized than those who were in the rare treatment group.

There is a slight confusion in our second graph, however, because both treatment groups were less affectively polarized than the control group. This seems to be true in Klar et al. as well. This is a curious result—when nothing is said (aka control group), people are MORE polarized than they would be given more information (whether that is frequent or rarely) about the potential child-in-law. My hypothesis is that, upon hearing that the potential partner is a frequent speaker, a respondent might feel that they are educated on the topics

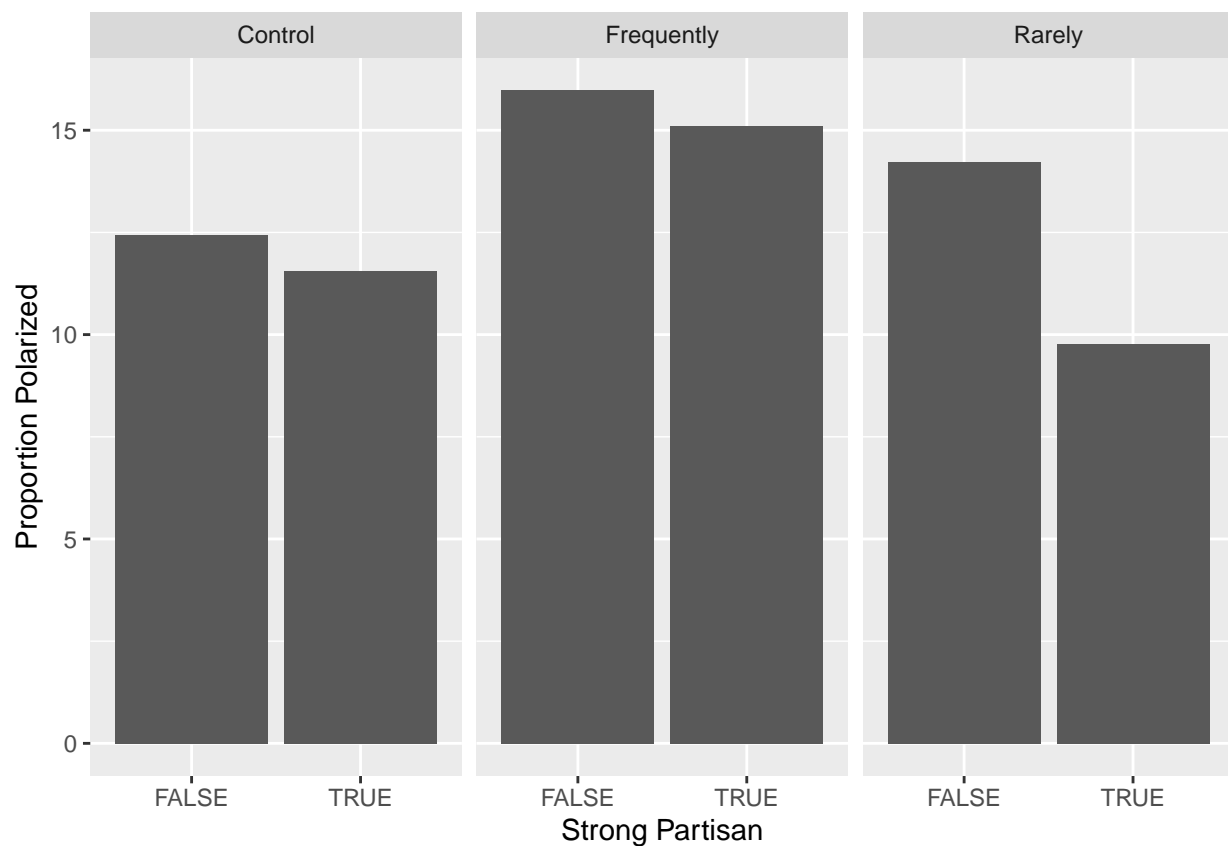
and a thorough thinker, shedding them in a better light. Upon hearing that the potential partner is a rare speaker of politics, the respondent obviously might be more open to that partner since the difference in politics would be a negligible issue if they don't speak about it.

## 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.

```
filteredPolarized <- is.na(marriage_data$polarized)==FALSE

ggplot(data = marriage_data %>% filter(is.na(strongPARTISAN)==FALSE)) +
  geom_bar(mapping = aes(x = strongPARTISAN, y = mean(filteredPolarized==TRUE), group = 1), stat = "identity") +
  facet_wrap(~treatment) + ylab("Proportion Polarized") + xlab("Strong Partisan")
```



## 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?)