

## **CSS 206 Mini-Project Proposal**

### **Group 4**

**Lead Author: Jenna Brooks**

**Co-authors: Shirley Agustin, Sara Hamidi, Allison Park**

**Title: Demographic and Ideological Influence on Voter Intent in Spain**

### **Research Question**

Spain's political system represents a highly pluralistic and decentralized system, with over 20 active political parties. The major political parties use their various stances on issues such as immigration and sexism to differentiate themselves across the political spectrum, with far right parties typically mobilizing anti-feminist and anti-immigrant rhetoric in much of their political discourse (Anduiza and Rico 2024). However, do voters' beliefs on contentious social issues actually align with their preferred party's political stance, and can the beliefs of Spanish citizens be used to predict their intentions to vote for a particular party?

We propose to use Spanish Political Attitudes data to test several methods for classifying respondents' intentions to vote for 6 of the major Spanish political parties spanning from the far left to far right political spectrum (see Appendix A). We hypothesize that methods such as k-nearest neighbors classifiers may be able to predict these political affiliations, using the survey response variables regarding beliefs on demographics (education and income), nativism, sexism, and participation in Women's Day protests. Furthermore, we intend to focus on whether these self-identified beliefs on controversial issues (immigration and sexism) align with the political party for which the respondents intend to vote.

### **Data/Materials**

We will use data from the Spanish Political Attitudes dataset (Hernández Pérez et al. 2021). The survey uses a quota sampling method to ensure a representative sample of the Spanish adult population aged 18 to 56, with quotas based on gender, age, educational background, geographic region, and municipality size. It also includes respondents' answers to questions on sexism, voting intention, participation in feminist protests, and beliefs surrounding immigration. The raw data comprises 7,850 observations and the unit of analysis is individual voters in Spain. The data we will be focusing on is from the period between 2017-2020 and has been cleaned and prepared by authors of the paper "Sexism and the Far-Right Vote: The Individual Dynamics of Gender Backlash". Code to replicate the cleaning is in the [dataverse](#) Stata file.

File Name	Format	Description
<a href="#">Spanish political attitudes dataset 2017 to 2020.tab</a> (raw data)	Comma separated values (CSV)	<p>Post authors' cleaning, the data set has 7850 rows and 123 columns.</p> <p>The cleaned data set's first five columns (codpanelista2, wave, sex, age, and education) reflect the respondent's unique identifier, year the panel survey took place, then followed by respondents' demographics. The proceeding columns, up to column 37, represent the raw numeric measurement of the participant responses; these variables are the variables described in the <a href="#">codebook</a>. The remaining columns, columns 38 - 123, are the data transformations (in Stata) made by the authors to conduct analysis on the responses.</p>

### Course Impact/Relevance

This project connects with the topics of classification and model selection. The data can also be used to explore logistic regression for binary variables such as the prediction of intent to vote for a specific party, cross-validation for investigating model variance and out-of-sample performance, and model selection given different types of classifiers or different predictor variables.

### Outcomes

The outcome of this project will be a comparison of classifiers trained on a subset of the original paper's dataset, only including the respondents who indicated intent to vote for one of the 6 major Spanish political parties. In particular, we may compare models that use a variety of different K values. We may also use other classification or prediction methods such as multinomial logistic regression. To evaluate these models and their performance, we may generate plots and run cross-validation for out-of-sample performance.

Another potential outcome focuses on the use of different sets of predictor variables, investigating whether a particular combination of variables allows the highest accuracy for classification. This would result in more plots to represent classification performance for a fixed K and model.

Citations:

Anduiza, Eva, and Guillem Rico. 2024. "Sexism and the Far-Right Vote: The Individual Dynamics of Gender Backlash." *American Journal of Political Science* 68 (2): 478–493. <https://doi.org/10.1111/ajps.12759>.

Hernández Pérez, Enrique, Eva Anduiza Perea, Carol Galais González, Guillem Rico Camps, Jordi Muñoz Mendoza, María José Hierro Hernández, Roberto Pannico, Berta Barbet Porta, and Dani Marinova. 2021. "POLAT Project: Spanish Political Attitudes Panel Dataset (Waves 1–6)." Universitat Autònoma de Barcelona. <https://ddd.uab.cat/record/243399> (accessed September 13, 2021).

Dataset:

Anduiza, Eva, and Guillem Rico. 2022. *Replication Data for: Sexism and the Far-Right Vote: The Individual Dynamics of Gender Backlash*. Harvard Dataverse. <https://doi.org/10.7910/DVN/A11CD5>.

## Appendix A

### 6 Spanish Political Parties

- These parties were chosen because of their popularity and relevance in the 2017-2020 period.
- They also span a wide range of political beliefs across the left- right spectrum.
- **Numbers in parentheses** denote their numeric code in the data and they are ordered left to right.
- **Vote intention** denotes how many observations these parties have out of the data set of 7,850 total observations.

Podemos (3) Vote intention: 901 obs	PSOE (1) Vote intention: 1230 obs	Republican Left of Catalonia (ERC) (7) Vote intention: 236 obs	Ciudadanos (4) Vote intention: 966 obs	Partido Popular (PP) (2) Vote intention: 590 obs	Vox (23) Vote intention: 299 obs
Far left	Center left	Regional Left (Catalonia Separatist)	Centrist	Center right	Far Right
<b>Pro-feminist:</b> intersectional feminism, inclusive of trans and LGBTQ +, supports laws against GBV,	<b>Moderate feminism:</b> GBV legislation and women's rights	<b>Feminist</b> within the Catalonia nationalist agenda.	Supports equality but opposes "radical feminism" and advocated for gender neutral laws	<b>Limited feminist</b> engagement, Views feminism as ideological or divisive	<b>Anti- feminism:</b> demand removal of law against GBV  Attack feminists as "feminazis", defund feminist organizations
<b>Defends migrant rights</b> , human rights, regularization for undocumented	<b>Pro immigration</b> balanced with border control and asylum management	<b>Supports immigration</b> aligned with Catalanian national agenda <b>Anti -racist</b> with focus on preserving Catalanian identity > Spanish national identity	<b>Nativism:</b> supports controlled immigration and assimilation, warns against "parallel societies"	<b>Nativism:</b> tight immigration control, assimilationist	<b>Very Nativist:</b> anti-immigration, anti Islam, deportations, "Spain for Spaniards"

