Research Protocol—Wrong Leader, Unequal Society?

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RESEARCH QUESTION

What best predicts perceptions of inequality, a high GINI index, voting for a left-leaning party, or the leadership of a leader one opposes? Stated as three hypotheses, this means: (1) A high GINI index has the highest probability of predicting perceptions of inequality; (2) Voting for a left-leaning party has the highest probability of predicting perceptions of inequality; (3) The leadership of a leader that goes against one's political views in year of survey has the highest probability of predicting perceptions of inequality.

DATA

All materials and analyses for this pre-registered study can be accessed through the public github account: https://github.com/AlexanderTheAlright/git/tree/main/issp. The data for this study merges three datasets: The 2019 "Inequality Module" of the International Social Survey Programme (N = 44,975), the World Bank's World Development Indicators, and the Political Institution Database. The International Social Survey Programme is a cross-national collaboration of annual cross-sectional surveys from all over the world. The "Inequality Module" is one of their sections that is specifically focused on individual perceptions of inequality. The goal of their sample is to represent the national population 18 years or older. The sampling procedure used is a multistage simple random probability sample which collects data through a combination of web-based surveys, telephone, and face-to-face interviews. The ISSP is the largest international investigation of perceptions of inequality, making it ideal for navigating competing hypotheses driving perceptions of inequality. The World Development Indicators and 2020 Political Institutions Database are collections of national, regional, and global estimates of economic and social development as well as political leadership. It was added as a supplementary component of the data since the inequality module did not include country-level data such as the election of a leader one opposes.

The focal variables are four: (DV) perceivedinequality; (IV1) gini; (IV2) left; (IV3) opposed. They are combined with seven controls. To ensure that my open code can be read easily, I will refer to these variables as they have been coded. Any missing data will be dealt with through listwise deletion.

perceivedinequality. The ordinal variable, perceived inequality, is recoded from their "type of society" question, v48. The type of society question provides five pictorial representations of the distribution of wealth in one's society before asking the respondents to select which society represents their own. TYPE A, "A society with few elite and a mass at the bottom," represents the most inequality, whereas TYPE D and E represent the least (the largest middle class). These response choices were coded from TYPE A = 4, TYPE B = 3, TYPE C = 2, TYPE D = 1, and TYPE E = 0.

gini. The GINI index value will be treated as a continuous variable out of 100. The gini value will be appended to the existing ISSP dataset by country. The GINI coefficient is a measure of inequality ranging from 0, perfect inequality, to 1 perfect equality. It is measured by calculating the absolute differences between the incomes of all pairs of individuals in a population.

left. Support for left-wing party will be recoded from the PARTY_LR variable. The ISSP's PARTY_LR variable classifies the vote of the respondent in the last election on a unified

'left' and 'right' scale. This variable was recoded as dummy variable, 1 = left-wing party and 0 = neutral or right-wing party.

opposed. This variable was taken by merging the data from the *Political Institutions* Database on the leader of the country in 2018 that ranks the current leader as 'left' or 'right.' To avoid disjunction in the election, I will code the leader of the country in the year preceding the ISSP survey. This variable was transformed into a dummy code whereby if the leader in 2018 = 1 left and left = 1, then opposed = 0 and vice versa.

controls. Seven controls known to effect perceived inequality were used in ascending analyses. Age, sex, education, subjective social status (SSS), and mode of survey. Age was treated as a continuous variable, from 18 onwards. Sex was treated as a binary, female = 1 and male = 0. Education was measured in terms of years from EDUCYRS and was treated as continuous in analysis. Education and leftism have been known to be associated, which would therefore confound the full effect if not controlled for. Income is also included since higher income tends to be associated with perceptions of inequality. Subjective social status measures an individual's sense of where they are relative "to those with the best jobs, highest incomes, and best educations" on a scale from 1 to 10. Subjective social status was included to reduce the effect of personal position in society and emphasize the country or political ideology level indicators of perceived inequality. Subjective social status is commonly found to be associated with perceived inequality. Subjective social status was treated as a continuous variable. Perceived inequality can sometimes be affected by the social desirability, potentially meaning that in-person surveys will lead to lower reports of perceived inequality; as a consequence, survey mode will be treated as a categorical "online," "in-person," and "telephone."

PLAN OF ANALYSIS

To adjudicate the three hypotheses, my study conducts four ordinal logistic regression models and compares their bayes factors. Ordinal logistic regression is used because the dependent variable is ordinal and categorical, perceived inequality ranging from most equal (type D) to most inequal (type A). The bayes factors are used because they are crucial in integrating prior probability of expecting each of the predictors with the posteriori evidence to establish meaningful levels of significance. Given the evidence supporting each independent variable as a predictor of perceived inequality, I have chosen to set a normal distribution prior and a standard deviation of two.

- 1. **Model one, gini**: perceivedinequality gini + age + sex + education + sss + survey_mode
- 2. **Model two, lefty:** perceived inequality lefty: age + sex + education + sss + survey_mode
- 3. **Model three, opposed**: perceived inequality opposed + age + sex + education + sss + survey_mode
- 4. **Model four, combined:** perceived inequality gini + left + opposed + age + sex + education + sss + survey mode

These four basic models will be interpreted in light of their bayes factors, where the highest score will suggest the model that best explains variation in perceived inequality. After the initial analyses, which will be presented no matter what, sensitivity analyses will also be conducted using different priors and combinations of the controls. Results based on different priors and different controls might also be presented if they contribute significantly different answers.