Fear and Favoritism in the Time of COVID-19

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Introduction

Abstract

- This study employs a survey experiment in which we use a standard social psychology induction of feelings of fear in the aftermath of the COVID-19 pandemic in South Korea to test in-group favoritism and out-group bias toward immigrants. This is done by measuring the effect of fear on political attitudes and its impact on in-group favoritism in a standard dictator game.
- The study will help us understand the importance of fear in inducing anti-immigrant sentiments and could shed some light on the role of the media in creating division.

Motivation

- We seek to understand how crises exacerbate group polarization and, in particular, the role of fear.
- A long literature in psychology shows how an external threat could both bridge group divides but also exacerbate them (Bansak, Hainmueller, and Hangartner 2016; Hainmueller and Hangartner 2013; Hainmueller and Hopkins 2014; Sniderman, Hagendoorn, and Prior 2004).
- For example, in the fear of an external threat such as COVID-19, different groups could come together as the in-group becomes "humanity" uniting together against the disease (instead of the in-group comprising natives versus non-natives). Alternatively, terror management theory suggests that fear leads to an aggravation of group differences (Renkema et al. 2008; Routledge et al. 2013; Jonas et al. 2002).
- Our contribution lies in that we use a salient case of fear at large scale and take advantage of established survey instruments to measure the effect of changes in economic preferences such as risk aversion, patience, altruism, and trust on the role

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of fear in provoking either positive or negative feelings in natives vis-à-vis non-natives when the former are confronted with fear.
● We have chosen a large-scale survey instrument in order to get a demographically rich sample of people at a time when the large external threat (COVID-19) remains particularly salient.

Research Questions

● Does fear of an external threat such as COVID-19 provoke positive or negative feelings toward non-natives? Does fear exacerbate or mitigate how we respond to norm violations by non-natives? Can different responses be explained by different preferences for risk aversion, patience, trust, or altruism? Or does exposure to fear change our fundamental economic preferences for risk aversion, patience, trust, or altruism?

Research Strategy

Sampling

Sampling Frame

● 4000 adult (19+) respondents will be drawn from a master sample maintained by a survey firm, Hankook Research, located in Seoul, South Korea. The master sample consists of 535,086 people (as of June 2020) and is representative of the South Korean population with respect to location, sex, age, occupation, educational attainment, and income distribution.
● Although the master sample is designed to be representative of the South Korean population, the sample may differ from the general population especially in regards to their access to the internet and related communication devices and technology as the survey will be conducted online.

Statistical Power

● Using Kritikos and Tan (IZA 2014), who ran a similar style dictator game, we are assuming a donation rate of 20% and a standard deviation of 32%.
● We assume the usual alpha of .05 and a beta of .80.
● Our full sample size is 4000, and so our 2x3 design has 666 people in each subsample. This will allow us to detect a treatment size of 5% (e.g. from 20% to 25%) between our subsample treatment.

- Just comparing our fear (2000 subjects) versus hope (2000 subjects) interventions allows us to detect a treatment effect of 2.8% for an alpha value of 0.1.

Assignment to Treatment

- Individuals will be randomly assigned to treatment and control groups.
- 2x3 factorial design where subjects are exposed to a fear/hope induction interacted with exposure to one of three recent media accounts of quarantine violations that differ only by the ethnicity of the quarantine violator.

Attrition from the Sample

- We do not anticipate any systematic, differential attrition of the sample across the treatment and control groups.

Fieldwork

Data Collection

- The data collection is expected to take approximately 2 weeks (2 days for the pilot of 100 respondents, 2 weeks for the actual survey of 4000 people).
- The data collection will entail respondents answering a web-based survey.
- We will make sure that the data collection is confidential by using password-protected data files.

Data Processing

- The data processing is expected to take a week.
- The collected data will include various measures of individual level characteristics as well as attitudinal and perceptual questions. See the attached questionnaire for more details.
- The collected data will be stored on a research computer at the KDI School of Public Policy and Management, will be password protected, and will be used only for academic research purposes.

Empirical Analysis

Variables

- Key outcome variables:
    - Non-native sentiment (in-group favoritism) as measured by dictator game allocations toward a non-native charity in comparison with allocations to a general charity or money kept by the subject.
    - Non-native sentiment as measured by economic preferences variables of reciprocity, altruism, risk, patience from Pew, Gallop, Global Preferences Survey, etc.
- Manipulation Check
    - The extent to which participants felt each of six primary emotions (anger, fear, disgust, sadness, surprise, and happiness).
- Demographic characteristics
    - Gender, Education, Media Consumption, Political Views, etc.

Balancing Checks

- How will you check balance between treatment and control groups?
    - We will run t-tests of differences in means between key demographic characteristics, such as age, gender, education, and income level, with a Bonferroni Correction for multiple hypotheses tests.
- How will you check balance between attritors and non-attritors?
    - We will replicate the t-tests for the mean difference between those who completed the survey and those who failed to complete it using the same approach as the balancing test for the treatment and control groups.

Treatment Effects

Intent to Treat

- How will you estimate the (causal) effect of the offer of the treatment?
    - What is the specification that you will run?
        i. H1a: regress favoritism fear if Korean == true
        ii. H1b: regress favoritism news if Korean == true
        iii. H1c: regress favoritism fear##news if Korean == true
    b. Where fear is an indicator for the fear vs hope induction, and news is an indicator for the news about the outgroup norm transgression treatment.

- What controls will you include in your specification?

- Demographic controls
- Economic variables
- Media controls
- Political views

Treatment on the Treated

- How will you estimate the (causal) effect of the receipt of the treatment?
  - We will replace the fear and news indicator variables above with the psych measure of actual fear and use the fear treatment as a first stage in an IV analysis.

Heterogeneous Effects

- Which groups do you anticipate will display heterogeneous effects?
  - We are interested in heterogeneity by economic variables such as risk aversion, patience, trust, altruism.
  - But also by demographics and political views.

Intent to Treat

- How will you estimate the heterogeneous effects of the offer of the treatment?
- What are the specifications that you will run?
  - We will use split sample regressions as well as augment our main specification with interaction terms between the treatment variables and the demographic variables.

Treatment on the Treated

- How will you estimate the heterogeneous effects of the receipt of the treatment?
  - We will use the same IV strategy as above.

Mediation Analysis

- We will also use mediation analysis following Imai et al. (2011) and conduct the analysis using the R package provided by Tingley et al. (2014). The figure below shows an example regarding what is the causal chain of how fear impacts our outcome variables.
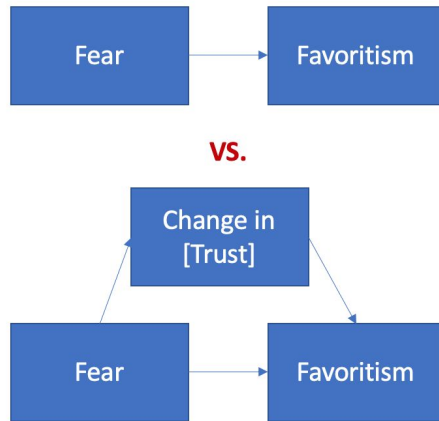
Standard Error Adjustments

- How will you account for clustering in your data?
  - Although there are not many theoretical grounds to expect the need for clustering, we will consider using standard errors clustered at admin level 1 (province and metropolitan cities) as a robustness check.
- How will you address false positives from multiple hypothesis testing?
  - We will use the Benjamini–Hochberg procedure to control the FDR and use simulation under the sharp null hypothesis of no effect to control the FWER.

Research Team

- Baran Han, Chrysostomos Tabakis, and Inbok Rhee (KDI School of Public Policy and Management), Benjamin Ho (Vassar College).
- There are two research assistants to assist with proofreading the survey questions as well as with data cleaning.

Deliverables

- Survey data, working paper.

Calendar

- Total duration: Oct. 7, 2020–Aug. 31, 2020
- October 2020: Survey programming, testing, and data collection
  - Oct. 6–Oct. 11: Survey programming and logic testing
  - Oct. 12–Oct. 23: Data collection

- November 2020: Data cleaning, analysis
- December 2020–: Writing

Budget

- Survey cost: 44,000,000 KRW
- The research will be supported by KDI School Research Lab Projects Fund

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