# Politically Speaking: Ethnic Language and Audience Opinion in Southeast Asia 

Supplementary Materials

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Contents

Experiment Treatment

Descriptive Statistics and Covariate Balance
Alternative Tests on Philippines Data
Page 6

## Experiment Treatment

The experiment's main treatment was a short audio clip based on the text below. This was translated into paired texts for each country and recorded by an adult male native speaker of the ethnic tongue: Indonesia - Indonesian \& Javanese; Philippines - English \& Tagalog; Thailand - Thai \& Isan. The speaker was instructed to keep the recordings to approximately the same length and same tone. The recordings lasted between 1.5 minutes and 2.5 minutes, depending on the language and speaking speed of the speaker. I then asked other native speakers listen to the versions of the recordings to gauge whether they were commensurate.

During the survey, a single version of the recorded text, either the ethnic language or the politically dominant language, was presented to each respondent. Respondents were then presented with a series of 14 statements (listed in Tables 3 \& 4), wherein they were asked to indicate their level of agreement or disagreement with the statements regarding the speaker.

## Treatment Text (English)

Dear listeners, as I have explained, you can see that the government truly wants to develop our beloved nation and country according to a clear plan. In implementing that plan, I will ensure that the civil service and the departments of the government strictly follow the plan to develop the country and society. They will follow the plan so that it has good effect and positive relationships with the people, especially in service provision for the public to help achieve the development goals and dreams of all [nationality] people. The government will endeavor to accomplish all these things, but it will depend on the willingness of the people to work together in building the nation.

Our [country] has great bounty in crops. There are many mineral resources. The [nationality] people have skills that can be trained to fully improve the productivity of the nation. I am confident that the future of the [nationality] people can be bright. I desire to invite you all to join together to develop our beloved [country].

## Descriptive Statistics and Covariate Balance Tests

Here I provide covariate balance tables using the Hotelling statistic for each of the three experiment groups as well as the accompanying descriptive statistics. I provide each of these in the order of Indonesia, Philippines, and then Thailand.

Supplementary Table 1a. Descriptive Statistics and Covariate Balance across Indonesia Treatment Groups, Indonesian versus Javanese

|  | N | Mean | Std. Dev | Min. | Max. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |
| Indonesian | 222 | 30.004 | 9.142 | 18 | 60 |
| Javanese | 220 | 29.332 | 9.527 | 18 | 71 |
| Sex |  |  |  |  |  |
| Indonesian | 222 | 1.743 | 0.438 | 1 | 2 |
| Javanese | 220 | 1.768 | 0.423 | 1 | 2 |
| Monthly Income Quintiles |  |  |  |  |  |
| Indonesian | 222 | 2.212 | 1.289 | 1 | 5 |
| Javanese | 220 | 2.236 | 1.282 | 1 | 5 |
| Education Level |  |  |  |  |  |
| Indonesian | 222 | 3.581 | 0.922 | 1 | 5 |
| Javanese | 220 | 3.655 | 0.916 | 1 | 5 |
| Living Conditions |  |  |  |  |  |
| Indonesian | 222 | 2.986 | 1.190 | 1 | 5 |
| Javanese | 220 | 2.791 | 1.198 | 1 | 5 |
| Indonesian-Javanese 2-group Hotelling |  | $\begin{aligned} & \mathrm{F}(5,436) \\ & \text { Prob }>\mathrm{F} \end{aligned}$ | $\begin{aligned} & 1.149 \\ & .436)=0.3 \end{aligned}$ |  |  |

Notes: Sex is a binary variable $(1=$ Female, $2=\mathrm{Male})$. Income was measured by approximate quintile ranges from 1 (less than 1.8 million rupiah/month) to 5 (more than 7.2 million rupiah/month). Education ranged from 1 (no formal education) to 5 (university degree). Living conditions range from 1 (a big city) to 5 (rural countryside).

The Hotelling statistic allows us to test whether two groups are substantially different across multiple variables. The null hypothesis is that the two groups have the same multivariate mean; in other words, the two groups are comparable. A $p$ value of less than 0.1 would potentially suggest that the two groups are different based upon the combination of variables, and thus give us pause as to whether our treatments were sufficiently randomized.

Here we see that the $p$ value is 0.334 , meaning we cannot reject the null that the treatment groups who heard either Indonesian or Javanese are the same to one another based on their age, sex, income, education levels, and living conditions. In other words, the two groups are comparable. The treatment was sufficiently random for us to use difference of means tests as in the main essay.

Supplementary Table 1b. Descriptive Statistics and Covariate Balance across Philippines Treatment Groups, English versus Tagalog

|  | N | Mean | Std. Dev | Min. | Max. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |
| English | 205 | 31.151 | 8.568 | 18 | 56 |
| Tagalog | 201 | 30.836 | 8.479 | 18 | 63 |
| Sex |  |  |  |  |  |
| English | 205 | 1.361 | 0.481 | 1 | 2 |
| Tagalog | 201 | 1.408 | 0.493 | 1 | 2 |
| Monthly Income Sextiles |  |  |  |  |  |
| English | 205 | 3.449 | 1.384 | 1 | 6 |
| Tagalog | 201 | 3.522 | 1.371 | 1 | 6 |
| Education Level |  |  |  |  |  |
| English | 205 | 4.317 | 0.881 | 2 | 5 |
| Tagalog | 201 | 4.308 | 0.874 | 3 | 5 |
| Living Conditions |  |  |  |  |  |
| English | 205 | 1.805 | 0.966 | 1 | 4 |
| Tagalog | 201 | 1.716 | 0.907 | 1 | 4 |
| English-Tagalog 2-group Hotelling | Prob $>\mathrm{F}(5,400)=0.8069$ |  |  |  |  |

Notes: Sex is a binary variable ( $1=$ Female, $2=$ Male $)$. Income was measured by sextile ranges following approximate numbers calculated from the 2015 Philippines Family Income and Expenditure Survey from 1 (less than 3,500 pesos/month) to 6 (more than 42,000 pesos/month). Education ranged from 1 (no formal education) to 5 (university degree). Living conditions range from 1 (a big city) to 5 (rural countryside).

Just as with the Indonesian sample, the treatment groups in the Philippines were not significantly different from each other on the same variables ( $p=0.8069$ ). This suggests that the two groups are comparable, and we can use difference of means tests.

Supplementary Table 1c. Descriptive Statistics and Covariate Balance across Thailand Treatment Groups, Thai versus Isan

|  | N | Mean | Std. Dev | Min. | Max. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |
| Thai | 189 | 30.079 | 10.367 | 18 | 63 |
| Isan | 211 | 28.274 | 9.101 | 18 | 59 |
| Sex |  |  |  |  |  |
| Thai | 189 | 1.481 | 0.501 | 1 | 2 |
| Isan | 211 | 1.431 | 0.496 | 1 | 2 |
| Monthly Income Sextiles |  |  |  |  |  |
| Thai | 189 | 2.058 | 1.068 | 1 | 5 |
| Isan | 211 | 1.991 | 1.037 | 1 | 5 |
| Education Level |  |  |  |  |  |
| Thai | 189 | 3.847 | 0.980 | 2 | 5 |
| Isan | 211 | 3.976 | 1.002 | 1 | 5 |
| Living Conditions |  |  |  |  |  |
| Thai | 189 | 2.968 | 1.325 | 1 | 5 |
| Isan | 211 | 2.877 | 1.340 | 1 | 5 |
| Thai-Isan 2-group Hotelling |  | $\begin{aligned} & \mathrm{F}(5,394)=1.5084 \\ & \text { Prob }>\mathrm{F}(5,394)=0.1861 \end{aligned}$ |  |  |  |

Notes: Sex is a binary variable $(1=$ Female, $2=$ Male $)$. Income was measured by approximate quintile ranges from 1 (less than 10,000 baht/month) to 5 (more than 45,000 baht/month). Education ranged from 1 (no formal education) to 5 (university degree). Living conditions range from 1 (a big city) to 5 (rural countryside).

Just as with the Indonesian- and Philippines-based samples, tests of the Thailand treatment groups also show that we cannot say the groups were different ( $p=0.1861$ ). The groups are comparable for the purposes of difference of means tests.

## Alternative Philippines Test

To test whether our results were driven by a large proportion of our sample being based in Manila (197 out of 408), we repeated the analysis using only those respondents who were not in Manila.

## Supplementary Table 3a. Descriptive Statistics and Covariate Balance across

 Philippines Treatment Groups, English versus Tagalog - Excluding Manila Residents|  | N | Mean | Std. Dev | Min. | Max. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |
| $\quad$ English | 106 | 31.519 | 8.972 | 18 | 55 |
| $\quad$ Tagalog | 104 | 30.404 | 8.545 | 18 | 63 |
| Sex |  |  |  |  |  |
| $\quad$ English | 106 | 1.377 | 0.487 | 1 | 2 |
| $\quad$ Tagalog | 104 | 1.452 | 0.500 | 1 | 2 |
| Monthly Income Sextiles |  |  |  |  |  |
| $\quad$ English | 106 | 3.443 | 1.408 | 1 | 6 |
| $\quad$ Tagalog | 104 | 3.356 | 1.427 | 1 | 5 |
| $\quad$ Education Level |  |  |  |  |  |
| $\quad$ English | 106 | 4.406 | 0.848 | 2 | 5 |
| $\quad$ Tagalog | 105 | 4.288 | 0.900 | 3 | 5 |
| $\quad$ Living Conditions |  |  |  |  |  |
| $\quad$ English | 106 | 2.311 | 0.970 | 1 | 4 |
| $\quad$ Tagalog | 104 | 2.163 | 0.904 | 1 | 4 |
| Informal-Bureaucratic 2-group Hotelling | $\mathrm{F}(5,204)=0.8604$ |  |  |  |  |
|  |  | Prob $>\mathrm{F}(5,204)=0.5087$ |  |  |  |

Notes: Sex is a binary variable ( $1=$ Female, $2=$ Male). Income was measured by sextile ranges following approximate numbers calculated from the 2015 Philippines Family Income and Expenditure Survey from 1 (less than 3,500 pesos $/$ month) to 6 (more than 42,000 pesos $/$ month). Education ranged from 1 (no formal education) to 5 (university degree). Living conditions range from 1 (a big city) to 5 (rural countryside).

Just as with the first analysis, the two groups are sufficiently similar to warrant comparison.

| Table 3b: Treatment Effects of Tagalog over English |  |  |
| :---: | :---: | :---: |
| Statements | Tagalog vs English (excluding Manila) | Tagalog vs English (full sample) |
| Electoral Support Category |  |  |
| The speaker would be a good representative in the national assembly from my area. | $\begin{aligned} & \hline 0.170 \\ & (0.110) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.102 \\ & (0.076) \\ & \hline \end{aligned}$ |
| The speaker would be a good member of the local government. | $\begin{aligned} & \hline 0.126 \\ & (0.099) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.120^{*} \\ & (0.072) \\ & \hline \end{aligned}$ |
| I would consider voting for the speaker if he were running for office. | $\begin{aligned} & \hline 0.003 \\ & (0.122) \end{aligned}$ | $\begin{aligned} & \hline 0.033 \\ & (0.086) \\ & \hline \end{aligned}$ |
| I would trust the speaker to represent my village or hometown. | $\begin{aligned} & \hline 0.113 \\ & (0.116) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.059 \\ & (0.082) \\ & \hline \end{aligned}$ |
| Kinship Category |  |  |
| The speaker was likely born in the same region as me. | $\begin{aligned} & \hline 0.192 \\ & (0.125) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.074 \\ & (0.087) \\ & \hline \end{aligned}$ |
| The speaker likely has a similar background to my own. | $\begin{aligned} & \hline 0.125 \\ & (0.124) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.067 \\ & (0.086) \\ & \hline \end{aligned}$ |
| The speaker likely understands the challenges facing me and my family. | $\begin{aligned} & \hline 0.088 \\ & (0.104) \end{aligned}$ | $\begin{aligned} & \hline 0.076 \\ & (0.074) \end{aligned}$ |
| The speaker likely comes from the same social class as I do. | $\begin{aligned} & 0.255^{* *} \\ & (0.108) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.190^{* *} \\ & (0.079) \\ & \hline \end{aligned}$ |
| The speaker and I likely share some of the same political opinions. | $\begin{aligned} & \hline 0.162 \\ & (0.105) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.010 \\ & (0.076) \end{aligned}$ |
| Fitness for Office Category |  |  |
| The speaker is well-prepared for national leadership. | $\begin{aligned} & \hline-0.011 \\ & (0.112) \end{aligned}$ | $\begin{aligned} & \hline 0.038 \\ & (0.080) \end{aligned}$ |
| The speaker would likely be able to represent my interests in policymaking. | $\begin{aligned} & \hline 0.046 \\ & (0.110) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.024 \\ & (0.074) \end{aligned}$ |
| The speaker is well-educated. | $\begin{aligned} & \hline 0.066 \\ & (0.089) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-0.038 \\ & (0.062) \\ & \hline \end{aligned}$ |
| The speaker's suggestions are good. | $\begin{aligned} & \hline 0.084 \\ & (0.091) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.005 \\ & (0.063) \\ & \hline \end{aligned}$ |
| The speaker is persuasive. | $\begin{aligned} & \hline 0.194^{*} \\ & (0.113) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.069 \\ & (0.076) \\ & \hline \end{aligned}$ |
| Note: Numbers report the difference of means between responses from the group that heard the statement in their native tongue and the group that heard the statement in the common political language as indicated. Standard errors are in parentheses. Data in the final column is as reported in the main document.$* p<0.1, * * p<0.05$ |  |  |

This table shows that the results were not driven by any difference between Manila residents and those outside of the city. Results as the $95 \%$ confidence interval ( $p<0.05$ ) remain the same. There were two small differences at the $90 \%$ confidence interval, where the statement on whether the speaker would be a good member of the local government lost its impact by excluding Manila residents while the statement on speaker persuasiveness seems to have gained in impact. The difference of means for the statement "The speaker is persuasive" between the two groups became statistically significant at the 0.1 level ( $\mathrm{p}=0.09$ ) after removing Manila residents from the sample, but its direction remained the same with the Tagalog speech ranked slightly higher.

