

Does Knowing Democracy Affect Answers to Democratic Support Questions? A Survey Experiment in Indonesia

Online Appendix

Appendix A. Description of sample and weighting strategy

	Jakarta		Bandung		Surabaya		Bekasi		Medan	
	Sample	Pop.	Sample	Pop.	Sample	Pop.	Sample	Pop.	Sample	Pop.
Female	48.5	49.7	49.3	48.5	50.5	50.6	50.8	49.0	44.4	50.6
17-24	48.2	20.8	55.1	25.4	48.9	22.9	53.6	25.4	61.46	29.2
25-34	32.5	27.4	27.6	23.1	26.6	23.2	28.2	28.2	29.11	23.7
35-44	10.5	22.3	9.6	19.8	13.5	20.0	12.5	22.1	6.47	19.4
45-54	6.0	15.6	4.9	15.7	6.6	16.6	3.6	14.7	2.70	14.4
55-64	1.9	9.1	2.2	9.7	3.3	11.0	0.9	6.3	0.00	8.5
65+	0.9	4.9	0.7	6.3	1.1	6.4	1.1	3.2	0.27	4.8
No education	0.3	11.3	0.00	7.3	0.3	14.8	0.0	5.8	0.5	1.7
Primary	0.4	17.6	0.37	20.7	1.5	18.6	0.3	9.8	0.5	31.4
Lower Secondary	4.1	19.1	2.4	21.6	2.2	19.9	1.45	13.7	0.8	22.2
Higher Secondary	42.5	37.0	41.9	35.6	38.2	33.1	52.9	45.6	34.3	35.5
University	52.7	15.0	55.4	14.8	57.7	13.6	45.6	25.1	63.8	9.3
Pop > 17y (on 5 cities)	43.9	49.6	20.0	12.5	9.9	14.7	12.7	13.0	13.6	10.2

Note: Entries are % of observations falling in each category in the sample and in the corresponding population (pop.). Population data are official statistics from *Badan Pusat Statistik* DKI Jakarta, West Java, East Java, Bekasi Kota, and North Sumatra.

To construct our weight, we first collapse the five education categories into three groups: Low (no education, primary, or lower secondary), mid (higher secondary), and high education (university and above). We decided to rely on these three education categories because we believe that they reflect the main lines of differentiation in terms of education that exist in the Indonesian population. This choice is also pragmatic as these categories split the sample in groups populated with enough respondents to draw reasonable inferences. We also collapse six age categories into five (original categories presented in Table 1). We collapse the ‘55-64’ and the ‘65+’ categories into one category. The rationale behind this was the need to maintain enough observations in each stratum. We then calculate a joint weight for gender, age, and education in each city using official statistics presented in the table above.

Appendix B. Treatment, democratic support questions, and descriptive statistics

Treatment

At a minimum, democracy requires: 1) universal adult suffrage; 2) recurring, free, competitive, and fair elections; 3) more than one serious political party; and 4) alternative sources of information.

Democracy v/s autocracy question

Please choose the statement with which you most agree:

- Under certain circumstances, an authoritarian government may be better
- Democracy is always preferable to any other kind of government
- For people like me, it does not matter the system of government

Satisfaction with democracy

How satisfied are you with the way democracy works in Indonesia? (1 not satisfied at all – 10 very satisfied)

Living in democracy important

How important it is for you to live in a democracy? (1 not important at all – 10 very important)

Descriptive statistics

	Obs.	Freq (%)	Mean	Std. Dev.
<i>Democracy vs. autocracy</i>	2,545			
Don't know	384	15.09		
Prefer autocracy	467	18.35		
Prefer democracy	1,371	53.87		
It does not matter	323	12.69		
<i>Satisfaction with democracy</i>	2,545		4.02	2.72
<i>Living in democracy important</i>	2,545		8.06	2.43

Appendix C. Balance test

	All respondents	Low-education respondents	Mid-education respondents	Upper-education respondents
Gender	0.03 (0.02)	-0.04 (0.14)	0.03 (0.04)	0.04 (0.03)
Age	-0.01 (0.01)	-0.12 (0.09)	0.03 (0.02)	-0.02 (0.02)
Education	0.00 (0.02)			
Income	-0.01 (0.01)	0.08 (0.06)	-0.02 (0.02)	-0.00 (0.01)
City	(Jakarta as ref)	(Jakarta as ref)	(Jakarta as ref)	(Jakarta as ref)
Bandung	-0.01 (0.03)	-0.01 (0.20)	-0.02 (0.05)	0.00 (0.04)
Surabaya	-0.02 (0.04)		-0.13 (0.06)	0.06 (0.05)
Bekasi	-0.04 (0.04)	0.07 (0.38)	0.01 (0.05)	-0.10 (0.05)
Medan	-0.04 (0.04)	-0.27 (0.25)	-0.05 (0.07)	-0.03 (0.05)
N	1,879	53	725	1,096

Note: Entries marginal effects estimated from logit regressions predicting the experimental group of the respondent (treatment v/s control). There is no estimate for the city of Surabaya in the second column, because there are not enough low-education respondents in this city. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Appendix D. Manipulation check

	All respondents		Low education		Mid education		High education	
	Control	Treatment	Control	Treatment	Control	Treatment	Control	Treatment
Not provide any answer (poor understanding)	23.7	23.2	38.3	27.0	25.7	27.0	19.1	19.2
Non-meaningful answer (poor understanding)	5.1	6.7	10.6	5.4	4.9	7.4	4.6	6.0
Procedural answer	23.5	21.7	19.2	27.0	24.8	22.3	23.4	20.5
Freedom/equality	42.2	45.0	29.8	32.4	38.6	39.6	47.5	50.7
Outcomes	5.5	3.7	2.13	8.1	6.0	3.7	5.4	3.6
N	2,545		84		1,028		1,352	
P-value	0.06		0.5		0.2		0.2	

Note: Entries are % of respondents falling in each category of the open-ended meaning of democracy question. P-values are calculated from Chi². The 81 respondents who did not report their education level are included in the group ‘all respondents’ and excluded from other groups.

In the survey, we asked respondents: “To you personally, what is the meaning of democracy?” We manually coded the responses to this open-ended question into five categories: (1) references to procedural aspect of democracy (e.g. elections, parliament, checks and balances); (2) references to liberal aspects of democracy (e.g. rights, freedom, equality); and (3) references to perceived outcomes of the system (e.g. economic prosperity, peace, welfare provisions). We then coded those who did not provide any answer (e.g. don’t know, missing), as well as definitions that are not related to democracy (non-meaningful answers) separately. These last two categories are the most important for the purpose of our study, as they indicate poor democratic understanding. We manually coded the responses to these questions ourselves. Then, we asked a researcher who is also a native Indonesian speaker to code the same responses completely independently. The two coding efforts are extremely similar. An intercoder reliability test reveals the agreement rate is of 93.61%, kappa statistics = 0.89, $p < 0.001$.

The first columns show that the proportion of respondents who did not provide any definition of democracy decreases only by 0.5 percentage points when exposed to the treatment (23.7% in the control group, 23.2% for the treatment group). To better understand this result, we split the sample between low (no education, primary, or lower secondary), mid (higher secondary), and high education (university and above). Unsurprisingly, the probability for providing an answer and a meaningful answer increased with education level. More importantly, the table shows that respondents reacted differently to the treatment depending on their education level. Those with low education levels were about 11.3 percentage points less likely to respond with ‘don’t know’ and 5.2 points more likely to provide a meaningless definition of democracy when treated. Although the p-value corresponding to a chi-square test is not statistically significant (due to the low number of respondents in this category), the treatment effect is substantial. As a matter of comparison, once treated, low education respondents provided (meaningful) definitions of democracy at the same rate as mid-education respondents. This suggests that the treatment indeed induced democratic respondent understanding among low-education respondents.

The probability of providing an answer or a meaningful answer did not increase with the treatment for mid- and high-education respondents, probably because they already had a clear idea of democracy prior being exposed to the treatment. The table indicates that about 20-25% did not provide any answer to the open-ended question, but these may be individuals who did not bother answering rather than individuals who did not know the answer. Yet, it does not

mean that highly educated respondents did not notice the treatment. They provided fewer procedural definitions (by about 3 points), and offer alternative definitions, such as definitions referring to freedom/equality or outcomes once treated. We interpret this as reluctance to repeat the procedural-heavy characteristics to which they were exposed.

Appendix E. Full regression results (treatment effects)

Democracy vs autocracy

	Provide an answer (non-weighted)	Provide an answer (non-weighted)	Provide an answer (weighted)	Provide an answer (weighted)
Treatment	0.00 (0.01)	-0.00 (0.02)	-0.03 (0.02)	-0.08*** (0.02)
Gender		-0.00 (0.02)		-0.07*** (0.02)
Education		0.03* (0.02)		0.09*** (0.01)
Age		0.01 (0.01)		0.02 (0.01)
Income		-0.00 (0.01)		0.01 (0.01)
Observations	2,545	1,879	2,440	1,879
City FE	No	Yes	No	Yes

Note: Entries are marginal effects estimated with logit regression. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05.

	Provide a preference (non-weighted)	Provide a preference (non-weighted)	Provide a preference (weighted)	Provide a preference (weighted)
Treatment	-0.01 (0.02)	0.01 (0.02)	0.03 (0.02)	0.02 (0.02)
Gender		-0.02 (0.02)		0.01 (0.02)
Education		0.01 (0.02)		-0.01 (0.01)
Age		0.02* (0.01)		0.03*** (0.01)
Income		0.01 (0.01)		-0.00 (0.01)
Observations	2,161	1,622	2,089	1,622
City FE	No	Yes	No	Yes

Note: Entries are marginal effects estimated with logit regression. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05.

	Prefer democracy (non- weighted)	Prefer democracy (non- weighted)	Prefer democracy (weighted)	Prefer democracy (weighted)
Treatment	-0.01 (0.02)	0.01 (0.02)	-0.12*** (0.02)	-0.08*** (0.02)
Gender		-0.01 (0.02)		0.02 (0.02)
Education		-0.01 (0.02)		-0.07*** (0.02)
Age		0.02 (0.01)		0.05*** (0.01)
Income		-0.02* (0.01)		0.01 (0.01)
Observations	1,838	1,388	1,782	1,388
City FE	No	Yes	No	Yes

Note: Entries are marginal effects estimated with logit regression. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05.

Living in democracy important

	Living in democracy important (non-weighted)	Living in democracy important (non-weighted)	Living in democracy important (weighted)	Living in democracy important (weighted)
Treatment	0.03 (0.10)	0.07 (0.11)	0.00 (0.10)	-0.15 (0.12)
Gender		-0.01 (0.11)		-0.03 (0.12)
Education		-0.16 (0.11)		0.13 (0.08)
Age		0.10 (0.06)		0.11* (0.05)
Income		0.05 (0.05)		0.02 (0.05)
Constant	8.04*** (0.07)	8.09*** (0.28)	8.07*** (0.07)	7.48*** (0.21)
Observations	2,545	1,879	2,176	1,692
City FE	No	Yes	No	Yes

Note: entries are marginal effects estimated with OLS regression. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05.

Satisfaction with democracy

	Satisfaction with democracy (non-weighted)	Satisfaction with democracy (non-weighted)	Satisfaction with democracy (weighted)	Satisfaction with democracy (weighted)
Treatment	0.08 (0.11)	0.15 (0.13)	-0.47*** (0.13)	-0.40** (0.15)
Gender		-0.17 (0.13)		-0.56*** (0.14)
Education		-0.31* (0.12)		-0.46*** (0.10)
Age		0.11 (0.07)		0.55*** (0.06)
Income		-0.06 (0.05)		-0.06 (0.06)
Constant	3.98*** (0.08)	4.72*** (0.32)	4.70*** (0.08)	4.56*** (0.25)
Observations	2,545	1,879	2,176	1,692
City FE	No	Yes	No	Yes

Note: Entries are marginal effects estimated with OLS regression. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05.

Appendix F. Multinomial logit regression results

	Don't Know	Prefer autocracy	Doesn't make a difference	Don't know	Prefer autocracy	Doesn't make a difference
Treatment	0.33** (0.11)	0.75*** (0.13)	-0.11 (0.15)	0.63*** (0.15)	0.57*** (0.15)	-0.07 (0.18)
Gender				0.49*** (0.14)	-0.11 (0.15)	-0.12 (0.18)
Education				-0.58*** (0.10)	0.43*** (0.11)	0.17 (0.13)
Age				-0.21** (0.06)	-0.35*** (0.07)	-0.42*** (0.08)
Income				-0.07 (0.06)	-0.03 (0.07)	0.02 (0.08)
Observations	2,440	2,440	2,440	1,879	1,879	1,879
City FE	No	No	No	Yes	Yes	Yes

Note: Entries are coefficients estimated with multinomial logistic regression. Reference category in outcome variable: prefer democracy. Sample weighted by socio-demographics. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05.

Appendix G. Full regression results (interaction effects)

	Democracy vs autocracy		Living in democracy important	Satisfaction with democracy
	Provide a preference	Prefer democracy		
Treatment x Education	-0.07** (0.02)	0.18*** (0.03)	0.30 (0.15)	0.72*** (0.19)
Treatment	0.15** (0.05)	-0.45*** (0.07)	-0.70* (0.31)	-1.75*** (0.38)
Education	0.02 (0.02)	-0.16*** (0.02)	-0.00 (0.11)	-0.78*** (0.13)
Gender	0.01 (0.02)	0.01 (0.02)	-0.05 (0.12)	-0.58*** (0.14)
Age	0.04*** (0.01)	0.04*** (0.01)	0.10 (0.05)	0.52*** (0.06)
Income	-0.00 (0.01)	0.01 (0.01)	0.04 (0.05)	-0.03 (0.06)
Observations	1,622	1,388	1,879	1,879
City FE	Yes	Yes	Yes	Yes

Note: Entries are marginal effects estimated with logit regression (provide a preference, prefer democracy) and coefficients estimated with OLS regressions (satisfaction with democracy, living in democracy important). Sample weighted by socio-demographics. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05.

Appendix H. Interaction effects with education as categorical variable

	Democracy vs autocracy		Living in democracy important	Satisfaction with democracy
	Provide a preference	Prefer democracy		
Treatment x Low education	0.15** (0.05)	-0.38*** (0.06)	-0.50 (0.31)	-1.09** (0.37)
Treatment x Mid education	0.08 (0.04)	-0.06 (0.05)	0.56 (0.31)	1.51*** (0.37)
Treatment	-0.06 (0.04)	0.04 (0.04)	-0.21 (0.24)	-0.53 (0.29)
Low education	-0.04 (0.03)	0.29*** (0.04)	0.05 (0.22)	1.27*** (0.26)
Med education	-0.06* (0.03)	0.09 (0.05)	-0.03 (0.23)	-0.60* (0.27)
Gender	0.01 (0.02)	0.01 (0.02)	-0.05 (0.12)	-0.62*** (0.14)
Age	0.03*** (0.01)	0.04*** (0.01)	0.08 (0.05)	0.45*** (0.06)
Income	-0.01 (0.01)	0.01 (0.01)	0.07 (0.05)	-0.02 (0.06)
Observations	1,622	1,388	1,879	1,879
City FE	Yes	Yes	Yes	Yes

Note: Entries are marginal effects estimated with logit regression (provide an answer, provide a preference, prefer democracy) and coefficients estimated with OLS regressions (satisfaction with democracy, living in democracy important). The reference category in the variable education is 'high education'. Sample weighted by socio-demographics. Standard errors are in parentheses. ***p<0.001, **p<0.01, *p<0.05.

Appendix I. Treatment effects with bootstrapped confidence intervals

	Democracy vs autocracy				Living in democracy important	Satisfaction with democracy			
	Provide a preference		Prefer democracy			No		Yes	
Treatment	0.03 (0.02)	0.02 (0.01)	-0.12*** (0.03)	-0.08*** (0.02)	0.00 (0.19)	-0.15 (0.12)	-0.47 (0.31)	-0.40* (0.16)	
Education		0.01 (0.01)		0.02 (0.02)		-0.03 (0.11)		-0.56*** (0.15)	
Gender		-0.01 (0.01)		-0.07*** (0.01)		0.13 (0.07)		-0.46*** (0.11)	
Age		0.03*** (0.01)		0.05*** (0.01)		0.11* (0.04)		0.55*** (0.07)	
Income		-0.00 (0.01)		0.01 (0.01)		0.02 (0.04)		-0.06 (0.06)	
Constant					8.07*** (0.14)	7.48*** (0.26)	4.70*** (0.25)	4.56*** (0.35)	
Observations	2,089	1,622	1,782	1,388	2,440	1,879	2,440	1,879	
City FE	No	Yes	No	Yes	No	Yes	No	Yes	

Note: Entries are marginal effects estimated with logit regression (provide an answer, provide a preference, prefer democracy) and coefficients estimated with OLS regressions (living in democracy important, satisfaction with democracy). Sample weighted by socio-demographics. Standard errors are calculated with bootstrapped (1,000 repetitions) and are in parentheses. ***p<0.001, **p<0.01, *p<0.05.