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Abstract

This paper uses a randomized experiment to study whether social networks affect vote choice. In a fiercely contested presidential election in Peru with ten candidates, only 35% of subjects were aware how their friends intended to vote. We compare people who were randomly informed how one of their friends intended to vote to people who were randomly informed how an unnamed stranger intended to vote. We find no evidence that informing people people how their friends intended to vote affects their vote choice.

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Keywords: Social networks, Voting, Social learning

*__PRELIMINARY: COMMENTS WELCOME. PLEASE DO NOT CITE WITHOUT PERMISSION.__ Hoffman and Leon are doctoral candidates in economics and agricultural and resource economics, respectively, at UC Berkeley. Contact: hoffman@econ.berkeley.edu, gianmarco@berkeley.edu. Josh Blumenstock, Willa Friedman, Sean Gailmard, Jeremy Magruder, Jamie McCasland, Edward Miguel, John Morgan, Gautam Rao, Adam Szeidl, and especially Donald Green provided helpful comments. We are grateful to our amazing team of enumerators in Peru, and especially to Roberto Rodrguez who provided invaluable support coordinating all the data collection. Financial support from the NET Institute (www.NETinst.org), the Center for Evaluation and Global Action (CEGA), the Robert D. Burch Center for Tax Policy and Public Finance, and the Center for Equitable Growth is gratefully acknowledged.

1 Introduction

Social scientists have long argued that voting decisions are not made in isolation.[1] It is argued that people do not simply privately take in information and then decide for whom to vote. Rather, we make our decisions after interacting with other people, discussing our ideas and beliefs. Understanding how other people affect our voting decisions has deep implications for political economy, for example, for models of turnout and electoral competition, and to assess the informational efficiency properties of elections.

While the idea that social networks affect vote choice is intuitive, credible causal evidence on the question is quite scant. The basic challenge for identification is that social networks are unlikely to be random. If we observe that people within a social network vote similarly, we do not know whether this is due to social influence, homophily (the tendency of similarly-minded people to be friends), or to a common environmental influence (e.g. happening to live in an area with a strong Republican tradition). We break the identification problem using a randomized experiment where we randomly inform some people how their friends intend to vote. In order for social influence to occur, one seemingly necessary condition is for people to be aware how their friends intend to vote. However, because the real-world is complex and time is scarce, information sharing within social networks may be incomplete. If this is so, then randomly sharing information within a social network will serve as means of increasing the amount of social influence.

We performed our experiment using the first round of the 2011 Peruvian Presidential Election. The election was hotly contested with ten candidates, five of whom gathered over ten percent of the vote. The election was highly volatile. As seen in Figure 1, there was substantial fluctuation in the pre-election polls. On March 13th, now-president Ollanta Humala was in fourth place in the polls at around 17%, but only four weeks later he had risen to a commanding lead. In contrast, former President Alejandro Toledo was the frontrunner on March 13th only to see his share in the polls fall by roughly 40 percent. In contrast to American presidential elections, where preference for Democrats or Republicans is fixed for much of the electorate, voters opinions here seemed fluid

[1] That people's opinions and voting decisions are affected by their friends has a long intellectual history in political science and sociology, e.g. Lazarsfeld (1948).

and potentially subject to social influence.

As a basic first step, we asked: How informed are people about the voting decisions of other people within their social networks? In order for other people's behavior to affect our own, a seemingly necessary condition is for us to be aware of their behavior. In economic theory, social networks are often defined as collections of persons where interactions occur and information is freely shared. However, we know from introspection that even among our closest friends, not all information is shared. People have busy lives and constantly exchanging all the information at our disposal is not feasible, even if such information is informative. It remains an empirical question whether people can correctly forecast their friends' likely voting behavior. In our setting, we find that only 35% of people were aware how their friends intended to vote.

This set the stage for our experiment. We interviewed a random sample of voters in four districts of Lima (Peru's capital city), asked them for whom they intended to vote, and for a list of their four closest friends. We then contacted the subjects' friends (after receiving the subjects' permission), and we randomly pass on the subjects' voting intentions to half of them. Throughout, we paid special attention to people's beliefs, analyzing people's beliefs about the voting behavior of other people within and outside their social network. When people are informed how their friends intend to vote, does this make them more likely to vote the same way? That is, are voting decisions socially influenced? If so, what is the mechanism for this effect? For example, are people engaging in social learning, where they infer information about a politician's quality or position based on their friend's voting intention? Or, instead, is the effect due to conformity, where people derive utility from making the same decision as others in their social network?

Our main finding is that being informed how a friend intends to vote appears to have no effect on vote choice. This result is consistent across different specifications. However, due to small sample size, we cannot rule out economically meaningful magnitudes of social influence.

To our knowledge, ours is the first randomized experiment on social networks and vote choice. Problems of endogeneity arise in most non-experimental work on this topic.[2] In terms of experiments, the existing ones we are aware of are experiments in the US which provide a treatment

[2]However, see the very interesting work by the political scientist Betsy Sinclair.

to one person and then see if other people are affected. McConnell et al. (2010) vary the number of people they treat in a zip code with a social pressure experiment and see if other non-treated people are more likely to vote, finding no effect on untreated people. One concern with interpreting these results in the context of social networks is that people's friends in the US context are not particularly more likely to live within the same zip code compared to another zip code within the same town (see e.g. the work of James Fowler).[3] Our experiment goes further by eliciting individually who a person's friends are. In addition, we are the first to ask people to try to predict their friends' vote choice. Voters' beliefs here (and their potential overconfidence) may be of interest in their own right.[4]

While our findings are of general relevance to political economy, understanding whether and how social networks affect voting may be of particular importance for developing countries. First, many people in the developing world lack access to a wide range of media sources (e.g. a variety of newspapers or television channels) affecting the way information about the political process is disseminated. A person's neighbors or social network may play a substitute role for the media. Second, many political institutions in the developing world have an inherently social character. Consider, for example, a patronage network. In a patronage network, a landlord, big-man, or other local influential leader instructs other people how to vote. The initial people receiving the information from the leader often relay this information to others. What role does social influence play in allowing patronage networks to operate? Finally, understanding the connection between social networks and voting may be useful for empowering the poor. In most developing countries, the poor outnumber the rich, yet governments fail to implement redistributive policies and to provide the poor with critical services. Efforts to politically empower the poor must crucially understand the way by which the poor form opinions and ultimately decide for whom to vote. Although we

[3]Experiments on social pressure have shown to be effective in the US (Gerber et al., 2008), but social pressure is very different from analyzing the effect of social networks.

[4]We also make a small contribution to the growing literature in psychology and economics on overconfidence. See Moore and Healy (2008) for an excellent discussion of the recent overconfidence literature. We believe that overconfidence may be related to the fact that people are uninformed on how their friends are voting to start with. In situations where information acquisition is endogenous, overconfidence may lead individuals to under-acquire information (Hoffman, 2010). If I mistakenly believe that I already know how everyone votes, then I won't take the time to speak with people and learn about their actual political views. Understanding whether people are overconfident in this manner is important for understanding what networks do and do not do in transmitting political information.

our cautious in drawing strong conclusions from our results, they appear to support the idea that voting decisions in developing countries are more private than one might expect.

Our paper proceeds as follows. Section 2 describes the experimental design. Section 3 presents our results. Section 4 concludes.

2 The Experiment

The basic design for our experiment is passing on information from one friend to another about whom they intend to vote for, as well as the reason for their vote (e.g. "Mr. X is voting for candidate Y because he's tough on corruption"). Since people often provide reasons for their preferences in everyday conversation, we decided that our experimental treatment would be most natural and effective if we included subjects' reasons for their vote preferences. We refer to the first people interviewed as "subjects," and the people to whom information may be passed to as "friends."

2.1 Data Collection for Subjects

Before the election, we interviewed 168 subjects in four districts in the region of Lima. The region of Lima contains the capital city of the same name, and the region contains one third of the national population. The election was held on Sunday and subjects were interviewed several days before on Monday, Tuesday, or Wednesday. Two of the districts are middle-income and two are lower-income districts. Subjects were interviewed at home. We collected information on (i) basic demographics, (ii) political preferences, (iii) intention to vote, (iv) intended vote choice, and (v) a person's main reason for supporting their intended vote choice. Additionally, we asked each subject to list four friends and to provide their friends' contact information.[5] Subjects were asked questions about the nature of their friendship (e.g. how often they interact, if they lend money to one another, whether they were friends on Facebook), as well as to predict their friend's vote. Subjects were asked "Just to satisfy our curiosity, for whom do you think each of your friends will vote?" We also asked subjects to state their confidence level from 0 to 100 percent about the chance their

[5]We chose this based on a pilot where almost all subjects could successfully name four friends.

prediction of their friends' vote would be correct. We used the survey tools developed by Charles Manski for eliciting subject probabilities (as used in political economy research, for example, by Delavande and Manski (2010)). As in Delavande and Manski (2010), beliefs were elicited without financial incentives. At the end of initial survey, we asked subjects for their approval to share the information provided with their friends.[6]

2.2 Randomization and Data Collection for Friends

We interviewed 668 friends on the Wednesday, Thursday, Friday, and Saturday before the Sunday election. For each subject, two of the four friends received information about how the subject intended to vote and the reason for their vote. The other half of friends were informed how someone else the enumerators spoke with recently intended to vote. They friends were simply told that the enumerators had been interviewing many people and that one of the people we spoke to (who the enumerator does not name) intended to vote a certain way.[7] The translated scripts for the experiment were as follows:

TREATMENT: As you know, people have different ideas about for whom to vote, as well as different reasons for their vote choice. I recently talked to your friend, Mr / Ms. (NAME OF SUBJECT), and he / she told us at the next election he / she intends to vote for (PREFERRED CANDIDATE FOR THE SUBJECT) because (REASON CITED BY SUBJECT). CONTROL: As you know, people have different ideas about for whom to vote, as well as different reasons for their vote choice. For example, during this work we are interviewing people around Lima, and one of the people we spoke with told me that in the next election he / she intends to vote for (CANDIDATE PREFERRED BY LAST RESPONDENT) because (REASON CITED BY LAST RESPONDENT).

About 50 of the friends had subjects who reported that they were not sure how they intended to vote. Since these subjects did not have any vote choice for which to treat the friends, they are dropped from the analysis. The friends were asked background questions about the subjects. They are also asked questions about the nature of their relationship with the subjects.

[6] A concern is that this may induce selection bias in our experiment. However, only two subjects refused to do so, and they are excluded from the analysis.

[7] We do this to mitigate the possibility of getting a positive effect of the treatment solely to a politician's name being salient. See also Cai et al. (2009) for a similar strategy in a different context to separate salience from social learning.

2.3 Follow-up

The follow-up survey began on the Wednesday after the election and lasted for nine days. The official results of the election were released before the follow-up survey began.[8] We interviewed all subjects and friends, with the main goal of assessing how people voted. Our main way of doing this was by asking the subjects to reproduce their vote on a blank ballot *in private*. Subjects fill out the ballot in private and return it sealed to the enumerator.[9] In addition, we asked subjects for a candidate ranking and for a likeability index. We find very high correlation among all three measures. While not being able to observe subjects' official vote is a concern, this very high correlation is suggestive of nearly all subjects truthfully reporting to us how they voted. Though subjects have no incentive for truthful reporting, it is difficult to construct reasons for misreporting. We also asked several additional questions including a survey battery about conformity (taken from the psychology literature).

3 Experimental Results

We first provide summary statistics about subjects and friends. One interesting fact is that alignment between subjects and friends voting is not particularly high. Only about 28% of people are voting the same way as their friends. This is not terribly surprising given the large number of candidates.

3.1 Predicting Friends' Votes

We first examine whether people can predict the voting patterns of their friends. For this question, no regression is required–we simply look at what share of people can answer this question correctly. Subjects were only correct about 35% percent of the time in predicting their friends' voting choices. In an election with 10 candidates, most people do not know how their friends intend to vote. Further results are shown in Table 3. Subjects who report being closer to their friends are better

[8] The official results showed results for 85% of the electorate, but the differences were large enough to predict who was going to go to the run-off.

[9] This is the methodology used by Peruvian polling firms, as well as the methodology used in Leon (2011).

able to predict how their friends are voting, whereas the effect of closeness of friend to subject is insignificant. Whether subjects report talking about politics is also highly predictive, whereas other forms of interaction such as whether one lends money to their friend or leaves their kids with their friend are not predictive. Subjects confidence in their guess is also highly predictive beyond other variable. The analysis is continued using subject fixed effects. That is, within subject, what determines whether they can predict the vote of some friends better than others? Subject confidence in their guess remains predictive after network fixed effects are added.

3.2 Effect of Information on Vote Choice

To investigate whether the introduction of information about who is your friend voting for affects the way in which you vote, we exploit our randomization. First, we will isolate the effect of information flows within the network, by including network specific fixed effects. Further, within the network, we compare the vote of two members of the same network, one who receives the information about the Subject's vote and one who doesn't. Equation (1) will test this hypothesis:

$$y_{ik} = \alpha + \beta_2 J_{ik} + \gamma Z_k + \eta F_{ik} + \delta_i + \epsilon_{ik} \tag{1}$$

where, y_{ik} is a dummy that represents the alignment between friend k and subject i's vote. Here, we include term J_{ik}, which indicates whether subject k in network i received information about subject i's vote. Z_k is a set of individual characteristics of friend k, while F_{ik} is a vector containing information specific to the relationship between the friend and the subject. Importantly, we are able to control for all the network specific unobservables, by including δ_i in the equation. The fact that we are able to isolate the network specific factors in this regressions allow us to identify the sole effect of information sharing within the network, which will be independent of the effect of the endogenous nature of networks. The coefficient that captures the effect of interest is β_2.

Further, we will explore the causal mechanisms though which this effect is going through, and for which particular groups of the population is this effect more relevant. For this, we will exploit the broad set of information collected in the baseline and follow-up interviews.

Results from running equation (2) are shown in Table 4. In this case, our dependent variable

is whether the subject's voting intention is the same as the friend's actual vote. The information treatment actually lowers the probability of alignment by 2 percentage points, but the effect is highly insignificant. When controls are added, the effects tends almost exactly toward zero, though the magnitude is essentially the same.

We explore further the treatment effect in Table 5 by examining a number of interaction effects. The zero treatment effect appears to be fairly constant across types of friendships, though large standard errors limit the confidence of our inference. The treatment is larger when the friend reports being closer to the subject. The treatment is also larger when the friend says that the subject and themselves are closer to one another politically. However, these interactions are all statistically insignificant. Further, our index of conformity is not predictive of voting alignment, nor is the interaction statistically significant.

4 Conclusion

Identifying the effect of social networks on voting is difficult. Rather than randomizing networks, this paper takes a different tack of *randomizing information* about voting by other network members. By using a randomized experiment, we avoid the usual confounds of homophily and common environmental shocks. We find that informing people how their friend intended to vote appears to have no effect on vote choice. That is, people do not appear to respond differently to advice about how one of their friends intends to vote compared to information from an unnamed stranger.

In ongoing work, we seek to further understand our treatment effects. In addition, we are working on interpreting our results through a model of social learning. We may also estimate a structural discrete choice model of vote choice.

References

Cai, Hongbin, Yuyu Chen, and Hanming Fang, "Observational Learning: Evidence from a Randomized Natural Field Experiment," *American Economic Review*, 2009, *99* (3), 864–82.

Delavande, Adeline and Charles F. Manski, "Probabilistic Polling And Voting In The 2008 Presidential Election: Evidence From The American Life Panel," *Public Opinion Quarterly*, 2010, pp. 1–27.

Gerber, Alan S., Donald P. Green, and Christopher W. Larimer, "Social Pressure and Voter Turnout: Evidence from a Large-Scale Field Experiment," *American Political Science Review*, 2008, *102* (01), 33–48.

Hoffman, Mitchell, "How Is Information (Under-)valued? Evidence from Framed Field Experiments," 2010. Working paper, UC Berkeley.

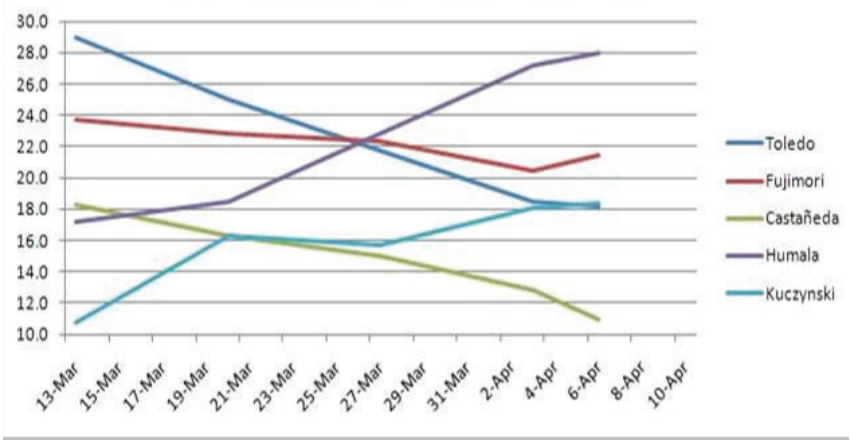
Lazarsfeld, Paul, *The People's Choice: How the Voter Makes Up His Mind in a Presidential Campaign*, New York, NY: Colubmia University Press, 1948.

Leon, Gianmarco, "Incnetives to Vote, Political Preferencs, and Information: Evidence from a Randomized Experiment in Peru," 2011. Working paper, UC Berkeley.

McConnell, Margaret, Betsy Sinclair, and Donald Green, "Detecting Social Networks: Design and Analysis of Multilevel Experiments," 2010. Working paper, Harvard University.

Moore, Don A. and Paul J. Healy, "The Trouble With Overconfidence," *Psychological Review*, 2008, *115* (2), 502 – 517.

Figure 1: Pre-Election Polls, Peruvian Presidential Election



Notes: This figure plots the poll results for the leading candidates in the first round of the 2011 Peruvian Presidential Election. On the x-axis is the date and on the y-xais is the candidate's vote share in the poll. The polls are conducted in person by the polling firm Ipsos-Apoyo.

Table 1: Summary Statistics - Subject

	Obs	Mean	Std. Dev.	Min	Max
Age	168	38.70	13.67	18	70
Gender	168	0.46	0.50	0	1
Years of Education	162	11.43	3.16	0	21
No interest in politics	166	0.12	0.33	0	1
Little interest in politics	166	0.40	0.49	0	1
Somewhat interested in politics	166	0.36	0.48	0	1
Very interested in politics	166	0.13	0.33	0	1
Extreme Left	162	0.04	0.20	0	1
Left	162	0.10	0.31	0	1
Center	162	0.49	0.50	0	1
Right	162	0.25	0.44	0	1
Extreme Right	162	0.10	0.31	0	1
Political information from: Family	168	0.58	0.50	0	1
Political information from: Friends	168	0.55	0.50	0	1
Political information from: Radio	168	0.54	0.50	0	1
Political information from: Newspaper	168	0.73	0.44	0	1
Political information from: TV	168	0.96	0.19	0	1
Political information from: Internet	168	0.20	0.40	0	1
Closeness to the friend	668	0.60	0.32	0.1	1
Trust friend with money	664	0.78	0.42	0	1
Trust subject with kids	664	0.58	0.49	0	1
Trust subject to return money	661	0.78	0.42	0	1
Confidence in the prediction	668	34.59	39.86	0	100
How often do you discuss politics with your friend?	668	2.22	1.67	0	5
Correct prediction	668	0.35	0.48	0	1

Notes: This table presents summary statistics about the subjects in the data. Each subject was asked about four of his or her friends. Alignment refers to the subject and the friend voting the same way.

Table 2: Summary Statistics - Friend

	Obs	Mean	Std. Dev.	Min	Max
Age	664	37.366	13.808	18	70
Gender	668	0.482	0.500	0	1
Years of Education	668	11.314	3.178	0	21
Political information from: Family	660	0.526	0.500	0	1
Political information from: Friends	660	0.550	0.498	0	1
Political information from: Radio	660	0.502	0.500	0	1
Political information from: Newspaper	660	0.717	0.451	0	1
Political information from: TV	660	0.942	0.233	0	1
Political information from: Internet	660	0.189	0.392	0	1
No interest in politics	654	0.162	0.369	0	1
Little interest in politics	654	0.384	0.487	0	1
Somewhat interested in politics	654	0.317	0.465	0	1
Very interested in politics	654	0.138	0.345	0	1
Extreme Left	667	0.037	0.190	0	1
Left	667	0.135	0.342	0	1
Center	667	0.550	0.498	0	1
Right	667	0.210	0.408	0	1
Extreme Right	667	0.067	0.251	0	1
Trust friend with money	660	0.736	0.441	0	1
Trust subject with kids	660	0.579	0.494	0	1
Trust subject to return money	659	0.795	0.404	0	1
Subject and opinion leader?	643	0.619	0.239	0.1	1
Closeness to the subject	660	0.622	0.315	0.1	1
Closeness to the subject in political ideas	640	0.453	0.277	0.1	1
Alignment in vote intention (Baseline)	590	0.278	0.448	0	1
Alignment in vote (Follow-up)	664	0.283	0.451	0	1

Notes: This table presents summary statistics about the friends in the data. Each subject was asked about four of his or her friends. Alignment refers to the subject and the friend voting the same way.

Table 3: Determinants of Correctly Predicting How Your Friend Will Vote

	(1)	(2)	(3)	(4)	(5)	(6)
Closeness of S to F		0.196	0.155	0.102	0.136	-0.005
		(0.086)**	(0.082)*	(0.071)	(0.124)	(0.104)
Closeness of F to S		0.098	0.066	0.013	0.116	0.088
		(0.084)	(0.085)	(0.075)	(0.123)	(0.113)
Subject's confidence in prediction				0.006		0.006
				(0.001)***		(0.001)***
S talks with F about politics			0.070	0.021	0.031	0.003
			(0.014)***	(0.012)*	(0.030)	(0.028)
S trusts F with money			0.059	-0.014	-0.014	-0.066
			(0.056)	(0.052)	(0.094)	(0.088)
S trusts F with taking care of kids			-0.038	-0.047	0.024	-0.023
			(0.048)	(0.047)	(0.075)	(0.073)
Age subject		0.002	0.000	0.001		
		(0.002)	(0.002)	(0.001)		
Age friend		0.000	0.000	0.000	0.001	0.000
		(0.002)	(0.001)	(0.001)	(0.002)	(0.002)
Male subject		0.014	-0.010	-0.047		
		(0.053)	(0.049)	(0.041)		
Male friend		0.002	-0.010	-0.008	-0.067	-0.062
		(0.045)	(0.045)	(0.040)	(0.057)	(0.053)
Yrs education, S		-0.002	-0.004	-0.002		
		(0.009)	(0.008)	(0.006)		
Yrs education, F		-0.001	-0.001	-0.002	-0.003	-0.005
		(0.006)	(0.007)	(0.006)	(0.009)	(0.009)
Constant	0.355	0.152	0.091	0.093	0.164	0.261
	(0.024)***	(0.163)	(0.159)	(0.131)	(0.159)	(0.157)*
Subject FE	No	No	No	No	Yes	Yes
Obs	668	631	627	627	627	627
R-squared	0.00	0.03	0.10	0.28	0.42	0.49

Notes: The dependent variable is whether or not a subject's prediction of their friend's vote choice is correct. Standard errors are clustered at the network (subject) level. * significant at 10%; ** significant at 5%; *** significant at 1%

Table 4: Effects of Information Sharing on Voting

	(1)	(2)	(3)	(4)
Dep Var	Alignment (Intent Vote Subject = Vote Friend)			
Treatment	-0.024	-0.020	-0.019	0.004
	(0.035)	(0.035)	(0.035)	(0.033)
Age - Friend			0.002	0.003
			(0.002)	(0.002)*
Gender - Friend			-0.032	-0.056
			(0.046)	(0.041)
Yrs. Of education - Friend			0.008	0.012
			(0.008)	(0.006)*
Alignment (Baseline)				0.587
				(0.051)***
Constant	0.274	0.272	0.128	-0.078
	(0.028)***	(0.017)***	(0.127)	(0.094)
Network FE	No	Yes	Yes	Yes
Observations	664	664	660	585
R-squared	0.00	0.00	0.01	0.34

Notes: The dependent variable is whether or not the subject votes the same way as their friend. Standard errors clustered at the network (subject) level. * significant at 10%; ** significant at 5%; *** significant at 1%

Table 5: Treatment Effect Interactions

	(1)	(2)	(3)	(4)	(5)	(6)
Dep Var	Alignment (Intent Vote Subject = Vote Friend)					
Treatment	-0.019	-0.008	0.033	0.058	0.023	0.030
	(0.035)	(0.105)	(0.129)	(0.079)	(0.069)	(0.197)
Age - Friend	0.002	0.002	0.003	0.002	0.002	0.003
	(0.002)	(0.002)	(0.001)*	(0.001)	(0.002)	(0.001)*
Gender - Friend	-0.032	-0.056	-0.056	-0.043	-0.041	-0.056
	(0.046)	(0.041)	(0.041)	(0.041)	(0.041)	(0.041)
Yrs. Of education - Friend	0.008	0.012	0.013	0.013	0.015	0.012
	(0.008)	(0.006)*	(0.008)*	(0.006)**	(0.006)**	(0.006)*
Alignment (Baseline)		0.587	0.587	0.597	0.592	0.587
		(0.051)***	(0.051)***	(0.051)***	(0.051)***	(0.051)***
Age*Treatment		0.000				
		(0.003)				
Education*Treatment			-0.003			
			(0.010)			
Closeness				-0.082		
				(0.113)		
Closeness*Treat				0.047		
				(0.080)		
Political Closeness					-0.057	
					(0.126)	
Political Closeness*Treat					0.035	
					(0.096)	
Conformity Index						-0.048
						(0.349)
Conformity Index*Treat						-0.008
						(0.268)
Constant	0.128	-0.072	-0.095	-0.125	-0.126	-0.074
	(0.127)	(0.104)	(0.109)	(0.106)	(0.106)	(0.172)
Network FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	660	585	585	577	562	585
R-squared	0.01	0.34	0.34	0.36	0.36	0.34

Notes: The dependent variable is whether or not the subject votes the same way as their friend. Standard errors clustered at the network (subject) level. * significant at 10%; ** significant at 5%; *** significant at 1%