

FIGURES

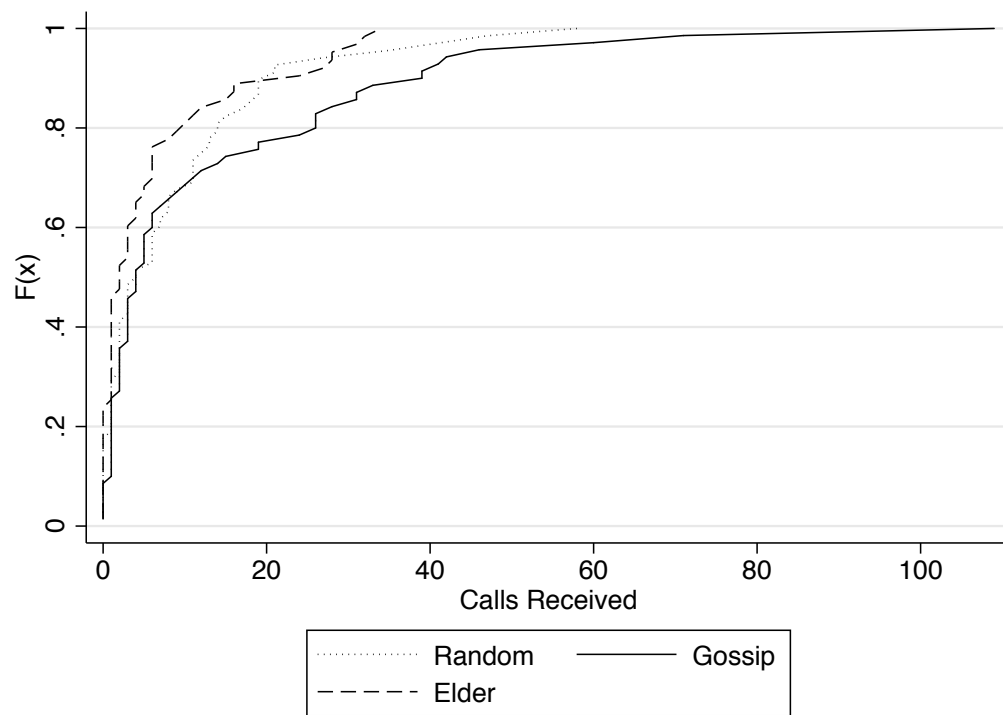
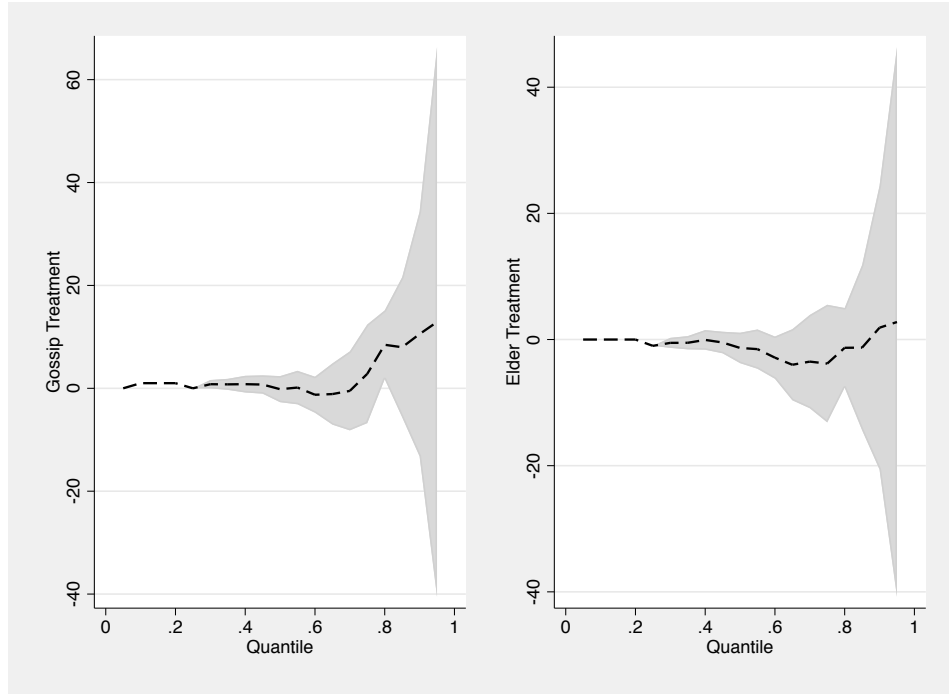
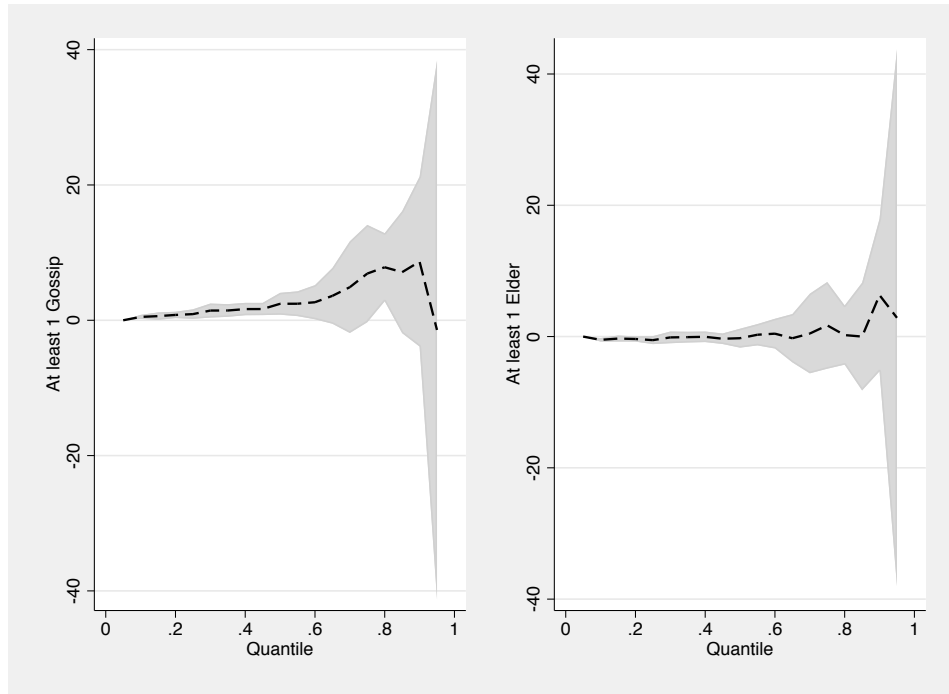


FIGURE 1. Distribution of calls received by treatment in the Karnataka cell phone RCT.



(A) Quantile treatment effect by treatment - Reduced Form



(B) Quantile treatment effect by hitting at least one gossip or elder

FIGURE 2. Quantile treatment effects where for $j \in \{Gossip, Elder\}$, $\hat{\beta}_j(u)$ is computed for $u = \{0.05, \dots, 0.95\}$. The intercept $\alpha(u)$ (not pictured) in each case is the omitted category corresponding to the random treatment.

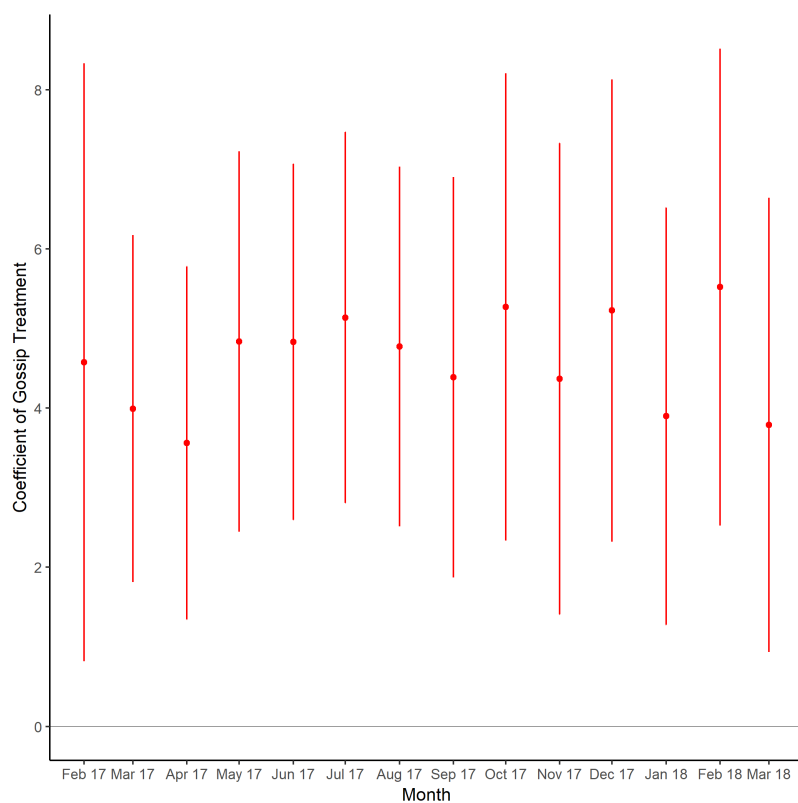
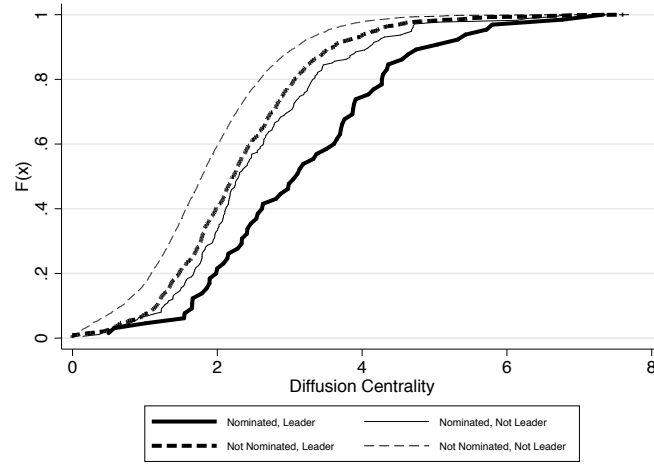
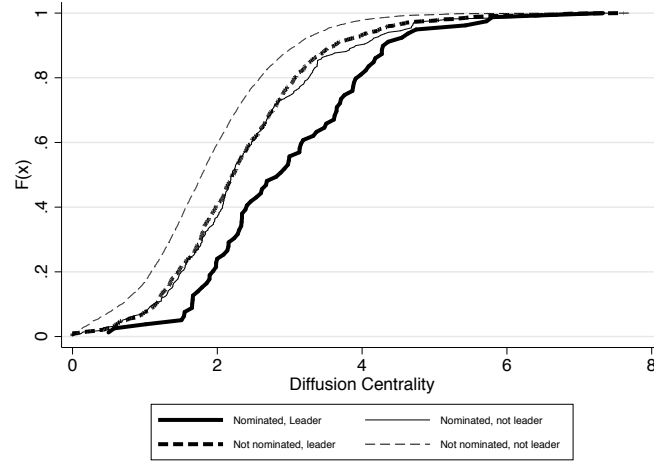


FIGURE 3. Effect of the “gossip” treatment on the number of children who attended an immunization session by month in the Haryana Immunization RCT.



(A) Event question



(B) Loan question

FIGURE 4. This figure uses the Karnataka microfinance village (wave 2) dataset. It presents CDFs of the (normalized) diffusion centrality, diffusion centrality divided by the standard deviation, conditional on classification (whether or not it is nominated under the event question in Panel A and the loan question in Panel B and whether or not it has a village leader).

TABLES

TABLE 1. Calls received by treatment

VARIABLES	(1) RF Calls Received	(2) OLS Calls Received	(3) IV 1: First Stage At least 1 Gossip	(4) IV 2: First Stage At least 1 Elder	(5) IV: Second Stage Calls Received
Gossip Treatment	3.651 (2.786)		0.644 (0.0660)	0.328 (0.0824)	
Elder Treatment	-1.219 (2.053)		0.230 (0.0807)	0.842 (0.0509)	
At least 1 Gossip		3.786 (1.858)			7.436 (4.266)
At least 1 Elder		0.792 (2.056)			-3.475 (2.259)
Observations	212	212	212	212	212
Control Group Mean	8.077	5.846	0.391	0.184	5.805
Gossip Treatment=Elder Treatment (pval.)	0.0300		0	0	
At least 1 Gossip=At least 1 Elder (pval.)		0.330			0.0300
VARIABLES	(1) RF <u>Calls Received</u> Seeds	(2) OLS <u>Calls Received</u> Seeds	(3) IV 1: First Stage At least 1 Gossip	(4) IV 2: First Stage At least 1 Elder	(5) IV: Second Stage <u>Calls Received</u> Seeds
Gossip Treatment	1.053 (0.698)		0.644 (0.0660)	0.328 (0.0824)	
Elder Treatment	-0.116 (0.518)		0.230 (0.0807)	0.842 (0.0509)	
At least 1 Gossip		0.952 (0.501)			1.979 (1.071)
At least 1 Elder		0.309 (0.511)			-0.677 (0.588)
Observations	212	212	212	212	212
Control Group Mean	1.967	1.451	0.391	0.184	1.317
Gossip Treatment=Elder Treatment (pval.)	0.0400		0	0	
At least 1 Gossip=At least 1 Elder (pval.)		0.410			0.0400

Notes: This table uses data from the Karnataka cell phone RCT dataset. Panel A uses the number of calls received as the outcome variable. Panel B normalizes the number of calls received by the number of seeds, 3 or 5, which is randomly assigned. For both panels, Column (1) shows the reduced form results of regressing number of calls received on dummies for gossip treatment and elder treatment. Column (2) regresses number of calls received on the dummies for if at least 1 gossip was hit and for if at least 1 elder was hit in the village. Columns (3) and (4) show the first stages of the instrumental variable regressions, where the dummies for “at least 1 gossip” and “at least 1 elder” are regressed on the exogenous variables: gossip treatment dummy and elder treatment dummy. Column (5) shows the second stage of the IV; it regresses the number of calls received on the dummies for if at least 1 gossip was hit and if at least 1 elder was hit, both instrumented by treatment status of the village (gossip treatment or not, elder treatment or not). All columns control for number of gossips, number of elders, and number of seeds. For columns (1), (3), and (4) the control group mean is calculated as the mean expectation of the outcome variable when the treatment is “random”. For columns (2) and (5) the control group mean is calculated as the mean expectation of the outcome variable when no gossips or elders are reached. The control group mean for the second stage IV is calculated using IV estimates. Robust standard errors are reported in parentheses.

TABLE 2. Summary Statistics of Haryana Immunization RCT

	(1)	(2)	(3)	(4)
	Random Seed	Gossip Seed	Trusted Seed	Trusted Gossip Seed
<i>Nominations Statistics (per village)</i>				
Number of Nominations	.	19.915	20.313	19.993
	.	(8.585)	(8.670)	(11.351)
Nominations for top 6 individuals	.	11.217	10.560	10.769
	.	(4.576)	(4.265)	(5.575)
<i>Seed Characteristics</i>				
Refused to Participate	0.186	0.165	0.219	0.175
	(0.389)	(0.372)	(0.414)	(0.380)
Age	49.233	48.569	52.040	48.890
	(14.617)	(14.347)	(14.130)	(14.082)
Female	0.054	0.108	0.055	0.098
	(0.227)	(0.311)	(0.228)	(0.297)
Education (years)	6.980	8.499	8.116	8.753
	(4.280)	(3.966)	(4.073)	(3.930)
Owns Land	0.586	0.675	0.680	0.687
	(0.493)	(0.469)	(0.467)	(0.464)
Wealth index from assets	0.183	0.218	0.217	0.226
	(0.098)	(0.121)	(0.114)	(0.120)
Hindu	0.705	0.731	0.684	0.736
	(0.456)	(0.444)	(0.465)	(0.441)
Muslim	0.084	0.090	0.080	0.071
	(0.278)	(0.286)	(0.272)	(0.257)
Scheduled Caste/ Tribe	0.188	0.167	0.135	0.165
	(0.391)	(0.373)	(0.342)	(0.371)
Other Backwards Caste	0.193	0.211	0.192	0.172
	(0.395)	(0.409)	(0.394)	(0.378)
Panchayat Member	0.106	0.320	0.259	0.300
	(0.308)	(0.467)	(0.438)	(0.459)
Numberdaar or Chaukidaar	0.091	0.295	0.204	0.269
	(0.288)	(0.456)	(0.403)	(0.444)
Interacts with Others: Very Often	0.263	0.455	0.371	0.444
	(0.441)	(0.498)	(0.483)	(0.497)
Participates in Community Activities: Very Often	0.264	0.457	0.371	0.445
	(0.441)	(0.499)	(0.483)	(0.497)
Aware of Immunization Camps	0.687	0.758	0.689	0.762
	(0.464)	(0.428)	(0.463)	(0.426)
Aware of ANMs	0.432	0.646	0.574	0.622
	(0.496)	(0.479)	(0.495)	(0.485)
Aware of Ashas	0.605	0.794	0.706	0.780
	(0.489)	(0.404)	(0.456)	(0.415)
Observations	570	648	712	674

TABLE 3. Haryana immunization program, communication treatment effects

	(1) Children received Penta1	(2) Children received Penta2	(3) Children received Penta3	(4) Children received Measles	(5) Children attended session
Gossip	1.017 (0.603)	1.022 (0.561)	1.030 (0.523)	1.078 (0.500)	4.903 (2.503)
Trusted	0.261 (0.486)	0.302 (0.448)	0.490 (0.418)	0.439 (0.408)	1.849 (2.047)
Trusted Gossip	0.479 (0.470)	0.526 (0.429)	0.514 (0.396)	0.444 (0.376)	2.376 (1.917)
Observations	6697	6697	6697	6697	6712
Villages	521	521	521	521	521
Mean (Random seeds)	4.31	4.06	3.71	3.53	18.11
Gossip=Random (pval.)	0.092	0.069	0.049	0.032	0.051
Gossip=Trusted (pval.)	0.176	0.168	0.268	0.182	0.192
Gossip=Trusted Gossip (pval.)	0.343	0.338	0.281	0.166	0.271
	(1) Children received Penta1	(2) Children received Penta2	(3) Children received Penta3	(4) Children received Measles	(5) Children attended session
Gossip	1.056 (0.604)	1.056 (0.563)	1.060 (0.525)	1.099 (0.501)	5.052 (2.509)
Trusted	0.250 (0.486)	0.295 (0.449)	0.486 (0.419)	0.436 (0.409)	1.821 (2.052)
Trusted Gossip	0.474 (0.471)	0.535 (0.432)	0.528 (0.400)	0.452 (0.378)	2.423 (1.934)
SMS Blast 33%	0.799 (0.547)	0.801 (0.515)	0.750 (0.484)	0.516 (0.456)	3.507 (2.293)
SMS Blast 66%	0.024 (0.535)	0.144 (0.504)	0.184 (0.478)	0.111 (0.466)	0.723 (2.338)
Observations	6697	6697	6697	6697	6712
Villages	521	521	521	521	521
Mean (Random seeds)	4.31	4.06	3.71	3.53	18.11
Gossip = SMS Blast 33% (pval.)	0.746	0.725	0.656	0.382	0.643
Gossip = SMS Blast 66% (pval.)	0.214	0.236	0.226	0.153	0.211
Gossip=Random (pval.)	0.081	0.061	0.044	0.029	0.045
Gossip=Trusted (pval.)	0.153	0.148	0.241	0.168	0.169
Gossip = Trusted Gossip (pval.)	0.309	0.319	0.272	0.16	0.256

Notes: This table uses data from the Haryana immunization program. It reports estimates of the communication treatment effects. The outcomes are the number of children who received a vaccine by month in a village. Regressions include incentive treatment and the interaction between month and district fixed effects. Standard errors (clustered at the village level) are reported in parentheses.

TABLE 4. Summary Statistics

	mean	sd
households per village	196	61.70
household degree	17.72	9.81
clustering in a household's neighborhood	0.29	0.16
avg distnace between nodes in a village	2.37	0.33
fraction in the giant component	0.98	0.01
is a leader	0.12	0.32
nominated someone for event	0.38	0.16
nominated someone for loan	0.48	0.16
was nominated for event	0.04	0.2
was nominated for loan	0.05	0.3
number of nominations received for event	0.34	3.28
number of nominations received for loan	0.45	3.91

Notes: This table presents summary statistics from the Karnataka microfinance village (wave 2) dataset: 33 villages of the Banerjee et al. (2013) networks dataset where nomination data was originally collected in 2011/2012. For the variables “nominated someone for loan (event),” and “was nominated for loan (event)” we present the cross-village standard deviation.

TABLE 5. Leader Gossip Overlap

	share
leaders who are nominated (loan)	0.11
nominated who are leaders (loan)	0.27
leaders who are not nominated (loan)	0.89
nominated who are not leaders (loan)	0.73
leaders who are nominated (event)	0.09
nominated who are leaders (event)	0.27
leaders who are not nominated (event)	0.91
nominated who are not leaders (event)	0.73

Notes: This table presents the overlap between “leaders” in the sample and those nominated as gossips (under loan and event questions, separately).

TABLE 6. Factors predicting nominations

VARIABLES	(1) Event	(2) Event	(3) Event	(4) Event	(5) Event
Diffusion Centrality (12 dimensions)	0.607 (0.085)				
Degree Centrality (12 dimensions)		0.460 (0.078)			
Eigenvector Centrality (12 dimensions)			0.605 (0.094)		
Leader				0.915 (0.279)	
Geographic Centrality					-0.078 (0.139)
Observations	6,466	6,466	6,466	6,466	6,466
VARIABLES	(1) Loan	(2) Loan	(3) Loan	(4) Loan	(5) Loan
Diffusion Centrality (12 dimensions)	0.625 (0.075)				
Degree Centrality (12 dimensions)		0.490 (0.067)			
Eigenvector Centrality (12 dimensions)			0.614 (0.084)		
Leader				1.013 (0.263)	
Geographic Centrality					-0.113 (0.083)
Observations	6,466	6,466	6,466	6,466	6,466

Notes: This table uses data from the Karnataka microfinance village (wave 2) dataset. It reports estimates of Poisson regressions where the outcome variable is the expected number of nominations. Panel A presents results for the event question, and Panel B presents results for the loan question. Degree centrality, eigenvector centrality, and diffusion centrality, $DC(1/E[\lambda_1]\mathbf{g}, E[Diam(\mathbf{g}(n, p))])$, are normalized by their standard deviations. Standard errors (clustered at the village level) are reported in parentheses.

TABLE 7. Factors predicting nominations

VARIABLES	(1) Event	(2) Event	(3) Event	(4) Event	(5) Event	(6) Event
Diffusion Centrality (12 dimensions)	0.642 (0.127)	0.354 (0.176)	0.567 (0.091)	0.606 (0.085)	0.374 (0.206)	0.607 (0.085)
Degree Centrality (12 dimensions)	-0.039 (0.101)				-0.020 (0.101)	
Eigenvector Centrality (12 dimensions)		0.283 (0.186)			0.281 (0.186)	
Leader			0.535 (0.301)			
Geographic Centrality				-0.078 (0.145)		
Observations	6,466	6,466	6,466	6,466	6,466	6,466
Post-LASSO						✓
VARIABLES	(1) Loan	(2) Loan	(3) Loan	(4) Loan	(5) Loan	(6) Loan
Diffusion Centrality (12 dimensions)	0.560 (0.122)	0.431 (0.130)	0.578 (0.081)	0.624 (0.075)	0.339 (0.170)	0.560 (0.122)
Degree Centrality (12 dimensions)	0.070 (0.086)				0.088 (0.084)	0.070 (0.086)
Eigenvector Centrality (12 dimensions)		0.219 (0.138)			0.231 (0.138)	
Leader			0.623 (0.288)			
Geographic Centrality				-0.114 (0.092)		
Observations	6,466	6,466	6,466	6,466	6,466	6,466
Post-LASSO						✓

Notes: This table uses data from the Karnataka microfinance village (wave 2) dataset. It reports estimates of Poisson regressions where the outcome variable is the expected number of nominations. Panel A presents results for the event question, and Panel B presents results for the loan question. Degree centrality, eigenvector centrality, and diffusion centrality, $DC(1/E[\lambda_1]\mathbf{g}, E[Diam(\mathbf{g}(n, p))])$, are normalized by their standard deviations. Column (6) uses a post-LASSO procedure where in the first stage LASSO is implemented on all regressors and in the second stage the regression in question is run on those regressors. Omitted variables indicate they were not selected in the first stage. Standard errors (clustered at the village level) are reported in parentheses.

TABLE 8. Does network gossip differentially predict nominations?

VARIABLES	(1) Nominated	(2) Nominated	(3) Nominated	(4) Nominated	(5) Nominated	(6) Nominated
Percentile of Network Gossip j, i	0.256 (0.090)	0.245 (0.105)	0.348 (0.049)	0.356 (0.057)	0.068 (0.030)	0.080 (0.032)
Observations	665,301	665,301	665,301	665,301	665,301	665,301
Dep. var mean	0.382	0.382	0.382	0.382	0.382	0.382
Respondent FE		✓		✓		✓
Rankee FE					✓	✓
Flexible Controls for DC			✓	✓		

Notes: This table uses data from the Karnataka microfinance village (wave 2) dataset. The data consists of an individual level panel and the outcome variable is whether a given respondent i nominated j or not under the lottery gossip question. The key regressor is the percentile of j in i 's network gossip assessment. Columns 2 and 4 include individual fixed effects, columns 3 and 4 control flexibly for a third-degree polynomial of diffusion centrality of j , column 5 includes rankee (j level) fixed effects, and column 6 has both i and j level fixed effects. Standard errors (clustered at the village level) are reported in parentheses.

TABLE 9. Calls received by seed type

VARIABLES	(1) Calls Received	(2) Calls Received	(3) Calls Received	(4) <u>Calls Received</u> Seeds	(5) <u>Calls Received</u> Seeds	(6) <u>Calls Received</u> Seeds
At least 1 Gossip	6.645 (3.867)	5.574 (4.119)		1.637 (0.949)	1.370 (0.992)	
At least 1 Elder	0.346 (3.602)	0.0566 (3.576)		0.245 (0.926)	0.173 (0.912)	
At least 1 High <i>DC</i> Seed		3.663 (2.494)	5.183 (2.383)		0.916 (0.623)	1.312 (0.649)
Observations	68	68	68	68	68	68
Control Group Mean	5.586	5.586	5.719	1.353	1.353	1.402
At least 1 Gossip=At least 1 Elder (pval.)	0.260	0.340		0.310	0.400	
At least 1 Gossip=At least 1 High <i>DC</i> Seed (pval.)		0.730			0.720	
At least 1 Elder=At least 1 High <i>DC</i> Seed (pval.)		0.420			0.480	

Notes: This table uses data from the Karnataka cell phone RCT and follow-up network dataset. It presents OLS regressions of number of calls received (and number of calls received normalized by the number of seeds, 3 or 5, which is randomly assigned) on characteristics of the set of seeds. High *DC* refers to a seed being above the mean by one standard deviation of the centrality distribution. All columns control for total number of gossips, number of elders, and number of seeds. For columns (1), (2), (4), and (5), the control group mean is calculated as the mean expectation of the outcome variable when no gossips or elders are reached. For columns (3) and (6), the control group mean is calculated as the mean expectation of the outcome variable when no high *DC* seeds are reached. Robust standard errors are reported in parentheses.

APPENDIX A. THRESHOLD PARAMETERS

APPENDIX B. PROOFS

APPENDIX C. EXTENSION OF MICROFINANCE VILLAGE (WAVE 2) NETWORK RESULTS

This section extends the descriptive analysis from the Microfinance Village (wave 2) network data on 33 villages. We repeat all of our analyses with OLS specifications instead of Poisson specifications. Additionally, we include a Post-LASSO estimation which conducts a LASSO to select which variables best explain our outcome of interest (number of nominations) and then does a post-estimation to recover consistent parameter estimates.

TABLE C.1. Factors predicting nominations

VARIABLES	(1) Event	(2) Event	(3) Event	(4) Event	(5) Event
Diffusion Centrality (12 dimensions)	0.285 (0.060)				
Degree Centrality (12 dimensions)		0.250 (0.061)			
Eigenvector Centrality (12 dimensions)			0.283 (0.064)		
Leader				0.436 (0.168)	
Geographic Centrality					-0.024 (0.040)
Observations	6,466	6,466	6,466	6,466	6,466
VARIABLES	(1) Loan	(2) Loan	(3) Loan	(4) Loan	(5) Loan
Diffusion Centrality (12 dimensions)	0.391 (0.071)				
Degree Centrality (12 dimensions)		0.367 (0.065)			
Eigenvector Centrality (12 dimensions)			0.378 (0.074)		
Leader				0.653 (0.224)	
Geographic Centrality					-0.045 (0.030)
Observations	6,466	6,466	6,466	6,466	6,466

Notes: This table uses data from the microfinance village (wave 2) dataset. It reports estimates of OLS regressions where the outcome variable is the expected number of nominations under the event question. Panel A presents results for the event question, and Panel B presents results for the loan question. Degree centrality, eigenvector centrality, and diffusion centrality, $DC(1/E[\lambda_1]\mathbf{g}, E[Diam(\mathbf{g}(n, p))])$, are normalized by their standard deviations. Standard errors (clustered at the village level) are reported in parentheses.

TABLE C.2. Factors predicting nominations

VARIABLES	(1) Event	(2) Event	(3) Event	(4) Event	(5) Event	(6) Event
Diffusion Centrality (12 dimensions)	0.303 (0.091)	0.161 (0.087)	0.269 (0.061)	0.285 (0.060)	0.173 (0.107)	0.285 (0.060)
Degree Centrality (12 dimensions)	-0.020 (0.066)				-0.013 (0.068)	
Eigenvector Centrality (12 dimensions)		0.138 (0.095)			0.137 (0.095)	
Leader			0.294 (0.174)			
Geographic Centrality				-0.024 (0.040)		
Observations	6,466	6,466	6,466	6,466	6,466	6,466
Post-LASSO						✓
VARIABLES	(1) Loan	(2) Loan	(3) Loan	(4) Loan	(5) Loan	(6) Loan
Diffusion Centrality (12 dimensions)	0.310 (0.112)	0.266 (0.089)	0.366 (0.071)	0.391 (0.071)	0.175 (0.124)	0.310 (0.112)
Degree Centrality (12 dimensions)	0.091 (0.079)				0.098 (0.079)	0.091 (0.079)
Eigenvector Centrality (12 dimensions)		0.138 (0.089)			0.144 (0.087)	
Leader			0.461 (0.229)			
Geographic Centrality				-0.045 (0.031)		
Observations	6,466	6,466	6,466	6,466	6,466	6,466
Post-LASSO						✓

Notes: This table uses data from the microfinance village (wave 2) dataset. It reports estimates of OLS regressions where the outcome variable is the expected number of nominations. Panel A presents results for the event question, and Panel B presents results for the loan question. Degree centrality, eigenvector centrality, and diffusion centrality, $DC(1/E[\lambda_1]\mathbf{g}, E[Diam(\mathbf{g}(n, p))])$, are normalized by their standard deviations. Column (6) uses a post-LASSO procedure where in the first stage LASSO is implemented to select regressors and in the second stage the regression in question is run on those regressors. Omitted terms indicate they were not selected in the first stage. Standard errors (clustered at the village level) are reported in parentheses.

APPENDIX D. EXTENSION OF EXPERIMENT ANALYSIS

This section extends the analysis of the experiment results to using four instruments.

TABLE D.1. Calls received by treatment

VARIABLES	(1) RF Calls Received	(2) OLS Calls Received	(3) IV 1: First Stage At least 1 Gossip	(4) IV 2: First Stage At least 1 Elder	(5) IV: Second Stage Calls Received
Gossip Treatment	4.559 (3.121)		0.795 (0.0753)	0.430 (0.108)	
5 Gossip Seeds	-1.785 (5.290)		-0.303 (0.110)	-0.206 (0.153)	
Elder Treatment	2.279 (2.424)		0.370 (0.106)	0.872 (0.0685)	
5 Elder Seeds	-6.798 (3.487)		-0.272 (0.149)	-0.0578 (0.100)	
At least 1 Gossip		3.786 (1.858)			8.063 (3.845)
At least 1 Elder		0.792 (2.056)			-3.684 (2.266)
Observations	212	212	212	212	212
Control Group Mean	8.019	5.846	0.389	0.183	5.496
VARIABLES	(1) RF <u>Calls Received</u> Seeds	(2) OLS <u>Calls Received</u> Seeds	(3) IV 1: First Stage At least 1 Gossip	(4) IV 2: First Stage At least 1 Elder	(5) IV: Second Stage <u>Calls Received</u> Seeds
Gossip Treatment	1.593 (1.030)		0.795 (0.0753)	0.430 (0.108)	
5 Gossip Seeds	-1.083 (1.348)		-0.303 (0.110)	-0.206 (0.153)	
Elder Treatment	0.622 (0.770)		0.370 (0.106)	0.872 (0.0685)	
5 Elder Seeds	-1.430 (0.912)		-0.272 (0.149)	-0.0578 (0.100)	
At least 1 Gossip		0.952 (0.501)			2.169 (1.043)
At least 1 Elder		0.309 (0.511)			-0.676 (0.578)
Observations	212	212	212	212	212
Control Group Mean	1.953	1.451	0.389	0.183	1.186

Notes: This table uses data from the cell phone RCT dataset. Panel A uses the number of calls received as the outcome variable. Panel B normalizes the number of calls received by the number of seeds, 3 or 5, which is randomly assigned. For both panels, Column (1) shows the reduced form results of regressing number of calls received on dummies for gossip treatment and elder treatment. Column (2) regresses number of calls received on the dummies for if at least 1 gossip was hit and for if at least 1 elder was hit in the village. Columns (3) and (4) show the first stages of the instrumental variable regressions, where the dummies for “at least 1 gossip” and “at least 1 elder” are regressed on the exogenous variables: gossip treatment dummy, 5 gossip seeds dummy, elder treatment dummy, 5 elder seeds dummy. Column (5) shows the second stage of the IV; it regresses the number of calls received on the dummies for if at least 1 gossip was hit and if at least 1 elder was hit, both instrumented by treatment status of the village (gossip treatment or not, elder treatment or not) and seed number dummies for the village (5 gossip seeds or not, 5 elder seeds or not). All columns control for number of gossips, number of elders and number of seeds. For columns (1), (3), and (4) the control group mean is calculated as the mean expectation of the outcome variable when the treatment is “random”. For columns (2) and (5), the control group mean is calculated as the mean expectation of the outcome variable when no gossips or elders are reached. The control group mean for the second stage IV is calculated using IV estimates. Robust standard errors are reported in parentheses.

APPENDIX E. EXPERIMENT ANALYSIS WITH BROADCAST VILLAGE

This section repeats our main experimental analyses but includes the broadcast village where the poster was made by one of the seeds.

TABLE E.1. Calls received by treatment

VARIABLES	(1) RF Calls Received	(2) OLS Calls Received	(3) IV 1: First Stage At least 1 Gossip	(4) IV 2: First Stage At least 1 Elder	(5) IV: Second Stage Calls Received
Gossip Treatment	2.266 (3.116)		0.636 (0.0660)	0.331 (0.0821)	
Elder Treatment	-2.809 (2.577)		0.220 (0.0807)	0.846 (0.0502)	
At least 1 Gossip		5.005 (2.210)			6.122 (4.532)
At least 1 Elder		-0.619 (2.472)			-4.914 (2.628)
Observations	213	213	213	213	213
Control Group Mean	9.534	6.277	0.400	0.180	7.971
Gossip Treatment=Elder Treatment (pval.)	0.0300		0	0	
At least 1 Gossip=At least 1 Elder (pval.)		0.160			0.0300
VARIABLES	(1) RF <u>Calls Received</u> <u>Seeds</u>	(2) OLS <u>Calls Received</u> <u>Seeds</u>	(3) IV 1: First Stage At least 1 Gossip	(4) IV 2: First Stage At least 1 Elder	(5) IV: Second Stage <u>Calls Received</u> <u>Seeds</u>
Gossip Treatment	0.591 (0.841)		0.636 (0.0660)	0.331 (0.0821)	
Elder Treatment	-0.646 (0.738)		0.220 (0.0807)	0.846 (0.0502)	
At least 1 Gossip		1.359 (0.644)			1.535 (1.179)
At least 1 Elder		-0.162 (0.691)			-1.164 (0.748)
Constant				0.109 (0.160)	
Observations	213	213	213	213	213
Control Group Mean	2.452	1.595	0.400	0.180	2.048
Gossip Treatment=Elder Treatment (pval.)	0.0400		0	0	
At least 1 Gossip=At least 1 Elder (pval.)		0.190			0.0400

Notes: This table uses data from the cell phone RCT dataset. Panel A uses the number of calls received as the outcome variable. Panel B normalizes the number of calls received by the number of seeds, 3 or 5, which is randomly assigned. For both panels, Column (1) shows the reduced form results of regressing number of calls received on dummies for gossip treatment and elder treatment. Column (2) regresses number of calls received on the dummies for if at least 1 gossip was hit and for if at least 1 elder was hit in the village. Columns (3) and (4) show the first stages of the instrumental variable regressions, where the dummies for “at least 1 gossip” and “at least 1 elder” are regressed on the exogenous variables: gossip treatment dummy and elder treatment dummy. Column (5) shows the second stage of the IV; it regresses the number of calls received on the dummies for if at least 1 gossip was hit and if at least 1 elder was hit, both instrumented by treatment status of the village (gossip treatment or not, elder treatment or not). All columns control for number of gossips, number of elders, and number of seeds. For columns (1), (3), and (4) the control group mean is calculated as the mean expectation of the outcome variable when the treatment is “random”. For columns (2) and (5), the control group mean is calculated as the mean expectation of the outcome variable when no gossips or elders are reached. The control group mean for the second stage IV is calculated using IV estimates. Robust standard errors are reported in parentheses.

TABLE E.2. Calls received by seed type

VARIABLES	(1) Calls Received	(2) Calls Received	(3) Calls Received	(4) <u>Calls Received</u> <u>Seeds</u>	(5) <u>Calls Received</u> <u>Seeds</u>	(6) <u>Calls Received</u> <u>Seeds</u>
At least 1 Gossip	12.89 (7.225)	13.02 (8.157)		3.751 (2.282)	3.871 (2.584)	
At least 1 Elder	-3.371 (5.155)	-3.321 (4.946)		-1.012 (1.547)	-0.962 (1.456)	
At least 1 High <i>DC</i> Seed		-0.485 (4.803)	2.262 (3.834)		-0.478 (1.515)	0.342 (1.189)
Observations	69	69	69	69	69	69
Control Group Mean	4.840	4.840	8.828	1.101	1.101	2.433
At least 1 Gossip=At least 1 Elder (pval.)	0.150	0.170		0.190	0.200	
At least 1 Gossip=At least 1 High <i>DC</i> Seed (pval.)		0.270			0.270	
At least 1 Elder=At least 1 High <i>DC</i> Seed (pval.)		0.580			0.710	

Notes: This table uses data from the cell phone RCT and follow-up network dataset. The table presents OLS regressions of number of calls received (and number of calls received normalized by the number of seeds, 3 or 5, which is randomly assigned) on characteristics of the set of seeds. High *DC* refers to a seed being above the mean by one standard deviation of the centrality distribution. All columns control for total number of gossips, number of elders, and number of seeds. For columns (1), (2), (4), and (5), the control group mean is calculated as the mean expectation of the outcome variable when no gossips or elders are reached. For columns (3) and (6), the control group mean is calculated as the mean expectation of the outcome variable when no high *DC* seeds are reached. Robust standard errors are reported in parentheses.

APPENDIX F. WHEN PEOPLE DON'T NOMINATE ANYONE

TABLE F.1. Does the tail of network gossip drive nominations?

VARIABLES	(1)	(2)	(3)	(4)
	Nominated Anyone	Nominated Anyone	Nominated Anyone	Nominated Anyone
99th percentile of NG_{ji}	3.739 (2.348)	8.134 (4.651)		
98th percentile of NG_{ji}			3.499 (2.620)	6.174 (4.409)
Observations	2,951	2,951	2,951	2,951
99th Percentile	✓	✓		
Village FE		✓		✓
98th Percentile			✓	✓

Notes: This table uses data from the microfinance village (wave 2) dataset. The data consists of a individual level observations and the outcome is whether the individual nominated anyone in response to the lottery gossip question. The key regressor is the value of the person who is at the 99th (or 9th) percentile from the distribution network gossip for i . Columns 2 and 4 include village fixed effects, estimated by a conditional logit. Standard errors (clustered at the village level) are reported in parentheses.

TABLE F.2. Demographics of those who choose to nominate

VARIABLES	(1) Nominates Someone (Loan)	(2) Nominates Someone (Event)
Diffusion Centrality (Standardized)	0.024 (0.008)	0.015 (0.008)
No. of Nominations (Loans)	-0.000 (0.003)	-0.001 (0.003)
No. of Nominations (Events)	0.004 (0.003)	0.008 (0.003)
Leader	0.004 (0.020)	-0.007 (0.018)
SCST	-0.010 (0.026)	0.006 (0.022)
Electrified	-0.031 (0.031)	-0.002 (0.028)
Private Electrification	0.013 (0.017)	-0.003 (0.017)
Own House	-0.036 (0.026)	-0.049 (0.028)
No. of Rooms	-0.002 (0.005)	0.002 (0.005)
Land Owner	-0.020 (0.028)	-0.013 (0.026)
Farm Laborer	-0.032 (0.022)	-0.014 (0.021)
Business Owner	-0.020 (0.027)	-0.014 (0.025)
GPS Centrality	-0.007 (0.008)	-0.008 (0.006)
Female Respondent	0.009 (0.015)	0.014 (0.013)
Observations	5,707	5,707

Notes: This table uses data from the microfinance village (wave 2) dataset. The data consists of a individual level observations and the outcome is whether the individual nominated anyone in response to the lottery gossip question. Standard errors (clustered at the village level) are reported in parentheses and all specifications include village fixed effects.

APPENDIX G. CHARACTERISTICS OF GOSSIPS, ELDERS, AND RANDOM

TABLE G.1. Characteristics of gossip, elder, and random households

VARIABLES	(1) SCST	(2) Laborer	(3) Land Owner	(4) Electrified	(5) Private Electricity	(6) Own House	(7) No. of Rooms
Gossip Nominee	-0.0278 (0.0258)	-0.0729 (0.0189)	0.0793 (0.0241)	0.0173 (0.00637)	0.0455 (0.0173)	0.0197 (0.00810)	0.229 (0.0492)
Elder Nominee	-0.107 (0.0250)	-0.217 (0.0215)	0.291 (0.0279)	0.0196 (0.00636)	0.0903 (0.0227)	0.0262 (0.00744)	0.687 (0.0849)
Observations	13,660	13,660	13,660	13,660	13,660	13,590	13,590
Random Household Mean	0.377	0.406	0.275	0.962	0.727	0.948	2.846
Gossip = Elder p-val	0.0382	3.32e-05	2.03e-06	0.820	0.174	0.577	6.02e-05

Notes: This table uses data from the Karnataka cell phone RCT dataset. The data consists of a individual level observations and the outcome is whether the individual nominated (as a gossip or elder, omitted is random) has the characteristic noted. Column 1 is whether the individual is SCST, column 2 is whether the primary occupation of the household is farm labor, column 3 is whether the primary income comes from land ownership, column 4 is whether the household is electrified, column 5 is whether electrification is from private purchase, column 6 is whether they own their house, column 7 is the number of rooms in the house. Standard errors (clustered at the village level) are reported in parentheses.