Econometrica Supplementary Material

SUPPLEMENT TO "SOCIAL NETWORKS, REPUTATION, AND COMMITMENT: EVIDENCE FROM A SAVINGS MONITORS EXPERIMENT"

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APPENDIX B: QUOTES

"FOR THOSE WHO want to save in a bank or post office account but do not have the habit of doing so, having a monitor may help... Having a more important person as a monitor may help in comparison to a person who is not well known by people in the village. A person may save more if it is an important person knowing they might get more benefits from this person later on."—Subject 1

"If the monitor was a very important person in the village, and the saver did not meet a goal that she set, the monitor would lose trust in the saver. The monitor will feel that if in the future he or his friends gives her some job or tasks or responsibilities, the saver may not fulfill them."—Subject 2

"When paired with an important person, they will save more to build the monitor's confidence in them. That way the person builds trust with me [sic]... If the person does not fulfill savings, the monitor will be disappointed and think 'I used to place trust in that person but now I can't'. They would speak less to the saver and feel 'cheated to trust' [sic]. They may tell others... But if someone is too irresponsible then monitor or no monitor, the saver will not save."—Subject 3

"People will only reach their goals if their monitors are family, friends, neighbors, or important people."—Subject 4

"I would like to choose the important person except if there are close friends. Then I may hesitate if I do not know him well."—Subject 5

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APPENDIX C: SELECTION INTO SAVER SAMPLE

TABLE C.1

DETERMINANTS OF PARTICIPATION IN SAVINGS PROGRAM: POTENTIAL SAVERS[a]

Variables	(1) Univariate Regressions	(2) Multivariate Regression
Age	0.001	−0.002
	(0.001)	(0.002)
	[−0.002, 0.003]	[−0.005, 0.001]
Female	0.157	0.124
	(0.024)	(0.027)
	[0.118, 0.197]	[0.079, 0.169]
Married	0.061	−0.021
	(0.027)	(0.035)
	[0.016, 0.107]	[−0.080, 0.037]
Widowed	0.026	−0.033
	(0.049)	(0.064)
	[−0.056, 0.108]	[−0.140, 0.074]
Number of Children	0.029	0.007
	(0.011)	(0.013)
	[0.012, 0.047]	[−0.015, 0.030]
Eigenvector Centrality	0.240	0.317
	(0.293)	(0.289)
	[−0.249, 0.730]	[−0.167, 0.800]
Saving Goal	−0.000	−0.000
	(0.000)	(0.000)
	[−0.000, −0.000]	[−0.000, −0.000]
Log Saving Goal	−0.088	
	(0.018)	
	[−0.119, −0.058]	
Had Non-Zero Savings in Prior 6 Months	0.066	0.055
	(0.027)	(0.030)
	[0.022, 0.110]	[0.005, 0.106]
Saves at Bimonthly Frequency or Higher	0.114	0.043
	(0.022)	(0.027)
	[0.078, 0.150]	[−0.002, 0.089]
Already Has a Bank Account	−0.035	−0.026
	(0.025)	(0.024)
	[−0.078, 0.007]	[−0.066, 0.013]
Prefers a Bank to a Post Office Account	0.002	0.010
	(0.025)	(0.024)
	[−0.040, 0.045]	[−0.031, 0.051]
Daily Wage Laborer	0.069	0.053
	(0.023)	(0.023)
	[0.030, 0.109]	[0.015, 0.092]
Saving Purpose: Children	0.015	0.022
	(0.027)	(0.035)
	[−0.029, 0.060]	[−0.036, 0.080]
Saving Purpose: Household Expenses	0.021	0.040
	(0.024)	(0.037)
	[−0.020, 0.061]	[−0.021, 0.101]

(*Continues*)

TABLE C.I—*Continued*

Variables	(1) Univariate Regressions	(2) Multivariate Regression
Saving Purpose: Emergency Fund	−0.007	0.018
	(0.027)	(0.036)
	[−0.052, 0.038]	[−0.042, 0.077]
Overall Fraction Participating in Village Meeting	57.10%	57.10%
Observations	2,288	2,288

[a]Table presents differences in characteristics of individuals who participated in the village meeting, thus becoming savers in the experiment, with individuals who were given the opportunity to attend, but who did not attend. Variables in the table come from the baseline survey administered with all potential savers. Each row in the table corresponds to a different univariate regression. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

TABLE C.II

DETERMINANTS OF PARTICIPATION IN SAVINGS PROGRAM: FULL VILLAGE[a]

	Selection Into Saver Sample	
	(1) Mean of Non-Participant HHs	(2) Diff. Non-Participants vs. Savers
HH Size	1.902	0.082
	(0.054)	(0.038)
Max Education in HH	7.784	0.158
	(0.253)	(0.170)
Any HH Member Speaks English	0.097	−0.021
	(0.008)	(0.008)
HH has BPL Card	0.777	0.076
	(0.015)	(0.014)
HH has TV	0.825	0.039
	(0.013)	(0.018)
HH Participates in SHG or RoSCA	0.392	0.096
	(0.025)	(0.020)
HH has Any Formal Account	0.739	0.044
	(0.016)	(0.015)
Land Owner	0.298	−0.017
	(0.019)	(0.015)
Agricultural Laborer	0.317	0.062
	(0.013)	(0.017)
Dairy and Animal Husbandry	0.088	0.006
	(0.008)	(0.009)
Non-Agricultural Laborer	0.101	0.001
	(0.014)	(0.011)
Small Business Owner	0.098	−0.003
	(0.008)	(0.011)
Government Worker	0.028	−0.009
	(0.003)	(0.004)

[a]Table presents differences in characteristics of households who participated in the village meeting, thus becoming savers in the experiment, with the full set of non-participant households in the village (who did not attend). Variables in the table come from the census survey conducted alongside the network elicitation by Banerjee, Chandrasekhar, Duflo, and Jackson (2013). Each row in the table corresponds to a different univariate regression. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

APPENDIX D: REACHED GOAL OUTCOMES

TABLE D.I

GOAL ATTAINMENT NETWORK POSITION OF RANDOM MONITOR[a]

Variables	(1) Reached Goal	(2) Reached Goal	(3) Reached Goal	(4) Reached Goal
Monitor Centrality	0.036		0.030	
	(0.016)		(0.016)	
	[0.009, 0.063]		[0.002, 0.058]	
Saver-Monitor Proximity		0.164	0.134	
		(0.070)	(0.072)	
		[0.045, 0.283]	[0.012, 0.256]	
Model-Based Regressor (q_{ij})				0.053
				(0.021)
				[0.018, 0.088]
Observations	526	526	526	526
Fixed Effects	Village	Village	Village	Village
Controls	Saver and Monitor	Saver and Monitor	Saver and Monitor	Saver and Monitor
Depvar Mean	0.141	0.141	0.141	0.141

[a]Table shows impacts on savings goal attainment by monitor network position. Reached Goal is a dummy for whether the saver (weakly) exceeded her savings goal. Sample constrained to savers who received a monitor in the 30 random assignment villages. The variable "Model-Based Regressor" is defined as q_{ij} in the framework. Saver and Monitor controls include savings goal and saver centrality, along with the following variables for each monitor and saver: age, marital status, number of children, preference for bank or post office account (saver only), whether the individual has a bank or post office account at baseline, caste, elite status, number of rooms in the home, and type of electrical connection. Saver and Monitor controls additionally include the geographical distance between their homes. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

APPENDIX E: SUPPLEMENTAL MULTIGRAPH ANALYSIS

TABLE E.I

REACHED GOAL BY NETWORK POSITION OF RANDOM MONITOR: MULTIGRAPH ANALYSIS[a]

Variables	(1) Reached Goal	(2) Reached Goal	(3) Reached Goal	(4) Reached Goal
Monitor Centrality	0.072		0.068	
	(0.027)		(0.026)	
	[0.026, 0.119]		[0.023, 0.112]	
Monitor Centrality: Financial Network	−0.052		−0.056	
	(0.036)		(0.036)	
	[−0.114, 0.010]		[−0.118, 0.006]	
Monitor Centrality: Advice Network	0.003		0.004	
	(0.029)		(0.029)	
	[−0.047, 0.052]		[−0.045, 0.052]	
Saver-Monitor Proximity		0.187	0.167	
		(0.114)	(0.115)	
		[−0.007, 0.381]	[−0.029, 0.362]	
Saver-Monitor Proximity: Financial Network		−0.054	0.004	
		(0.126)	(0.140)	
		[−0.269, 0.160]	[−0.234, 0.242]	
Saver-Monitor Proximity: Advice Network		0.032	−0.014	
		(0.178)	(0.184)	
		[−0.271, 0.335]	[−0.327, 0.299]	
Model-Based Regressor: Full Network (q_{ij})				0.070
				(0.030)
				[0.019, 0.121]
Model-Based Regressor: Financial Network				−0.003
				(0.033)
				[−0.058, 0.053]
Model-Based Regressor: Advice Network				−0.021
				(0.035)
				[−0.081, 0.038]
Observations	526	526	526	526
Fixed Effects	Village	Village	Village	Village
Controls	Saver and Monitor	Saver and Monitor	Saver and Monitor	Saver and Monitor
Depvar Mean	0.141	0.141	0.141	0.141

[a]Table shows impacts of goal attainment by monitor network position, using different definitions of link-types. Reached Goal is a dummy for whether the saver (weakly) exceeded her savings goal. Sample constrained to savers who received a monitor in the 30 random assignment villages. The variable "Model-Based Regressor" is defined as q_{ij} in the framework. Saver and Monitor controls include savings goal and saver centrality, along with the following variables for each monitor and saver: age, marital status, number of children, preference for bank or post office account (saver only), whether the individual has a bank or post office account at baseline, caste, elite status, number of rooms in the home, and type of electrical connection. Saver and Monitor controls additionally include the geographical distance between their homes. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

TABLE E.II

RANDOM MONITOR ANALYSIS: DIRECT FINANCIAL RELATIONSHIPS[a]

Variables	(1) Log Total Savings	(2) Log Total Savings
Saver and Monitor Direct Friends: Any Relationship	0.524	0.490
	(0.216)	(0.256)
	[0.157, 0.891]	[0.056, 0.925]
Saver and Monitor Direct Friends: Borrowing or Lending Relationship		0.119
		(0.443)
		[−0.634, 0.871]
Observations	426	426
Number of Village	30	30
Fixed Effects	Village	Village
Controls	Saver and Monitor	Saver and Monitor

[a]Total savings is the amount saved across all savings vehicles—the target account and any other account, both formal and informal including money held "under the mattress"—by the saver. We define a link as having a financial component if the nodes report borrowing or lending small amounts of money or material goods to one another. In our sample, 27% of direct links have a financial component. Sample constrained to individuals who answered our questionnaire. Controls include savings goal, saver centrality, and the following variables for each monitor and saver: age, marital status, number of children, preference for bank or post office account (saver only), whether the individual has a bank or post office account at baseline, caste, elite status, number of rooms in the home, and type of electrical connection. We also control for the geographical distance between the homes of the saver and monitor. All regressions include village fixed effects. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

APPENDIX F: ROBUSTNESS TESTS

F.1. *Lee Bounds*

TABLE F.I

PREDICTORS OF ATTRITION[a]

Variables	(1) Endline Participation
Female	0.112
	(0.032)
	[0.058, 0.166]
Constant	0.784
	(0.026)
	[0.738, 0.829]
Observations	682

[a]Table shows that females are more likely to participate in the endline survey than males. Sample restricted to random assignment villages. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

TABLE F.II

MAIN ANALYSIS WITH LEE BOUNDS[a]

Variables	(1) Raw Regression	(2) Lower and Upper Bounds
Panel A: Savers in villages with random monitor assignment		
Treatment: Monitor With Random Assignment Estimate	0.370	[0.237, 0.496]
Confidence Interval: [5%, 95%]	[0.073, 0.668]	[−0.036, 0.774]
Confidence Interval: [10%, 90%]	[0.123, 0.618]	[0.022, 0.774]
Panel B: Savers with randomly assigned monitor		
Treatment Variable: High Model-Based Regressor (25th percentile) Estimate	0.451	[0.306, 0.782]
Confidence Interval: [5%, 95%]	[0.009, 0.894]	[−0.086, 1.107]
Confidence Interval: [10%, 90%]	[0.083, 0.819]	[0.015, 1.050]

[a] Panels A and B show the main results (Tables II and III, respectively) with Lee bounds for endline survey attrition. The sample is restricted to the 30 random assignment villages. Because gender predicts attrition, a dummy for female is used to tighten the bounds. The Lee bounds methodology requires a binary treatment variable. Thus, in Panel B, we consider receiving a monitor in top 25% of realizations of the model-based regressor as the treatment indicator. Confidence intervals for the bounds calculated using 500 bootstrap iterations on the upper and lower bounds, with clustering at the village level.

F.2. *Altonji-Type Tests*

TABLE F.III

TOTAL SAVINGS BY NETWORK POSITION OF RANDOM MONITOR: NO CONTROLS[a]

Variables	(1) Log Total Savings	(2) Log Total Savings	(3) Log Total Savings	(4) Log Total Savings
Monitor Centrality	0.186		0.128	
	(0.066)		(0.068)	
	[0.073, 0.298]		[0.013, 0.244]	
Saver-Monitor Proximity		1.257	1.079	
		(0.330)	(0.326)	
		[0.696, 1.818]	[0.525, 1.633]	
Model-Based Regressor (q_{ij})				0.253
				(0.090)
				[0.100, 0.407]
Observations	426	426	426	426
Fixed Effects	None	None	None	None
Controls	None	None	None	None

[a] Table shows impacts on log total savings by monitor network position. Total savings is the amount saved across all savings vehicles. Sample constrained to savers who received a monitor in the 30 random assignment villages, who answered our questionnaire. The variable “Model-Based Regressor” is defined as q_{ij} in the framework. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

TABLE F.IV

TOTAL SAVINGS BY NETWORK POSITION OF RANDOM MONITOR: SAVER AND MONITOR CONTROLS, NO VILLAGE FIXED EFFECTS[a]

Variables	(1) Log Total Savings	(2) Log Total Savings	(3) Log Total Savings	(4) Log Total Savings
Monitor Centrality	0.197		0.151	
	(0.071)		(0.071)	
	[0.077, 0.318]		[0.030, 0.271]	
Saver-Monitor Proximity		1.111	0.917	
		(0.330)	(0.305)	
		[0.551, 1.671]	[0.398, 1.435]	
Model-Based Regressor (q_{ij})				0.248
				(0.109)
				[0.062, 0.434]
Observations	426	426	426	426
Fixed Effects	None	None	None	None
Controls	Saver and Monitor	Saver and Monitor	Saver and Monitor	Saver and Monitor

[a]Table shows impacts on log total savings by monitor network position. Total savings is the amount saved across all savings vehicles. Sample constrained to savers who received a monitor in the 30 random assignment villages, who answered our questionnaire. The variable "Model-Based Regressor" is defined as q_{ij} in the framework. Saver and Monitor controls include savings goal and saver centrality, along with the following variables for each monitor and saver: age, marital status, number of children, preference for bank or post office account (saver only), whether the individual has a bank or post office account at baseline, caste, elite status, number of rooms in the home, and type of electrical connection. Saver and Monitor controls additionally include the geographical distance between their homes. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

TABLE F.V

TOTAL SAVINGS BY NETWORK POSITION OF RANDOM MONITOR: NO GEOGRAPHY CONTROLS[a]

Variables	(1) Log Total Savings	(2) Log Total Savings	(3) Log Total Savings	(4) Log Total Savings
Monitor Centrality	0.182		0.140	
	(0.073)		(0.071)	
	[0.059, 0.306]		[0.019, 0.262]	
Saver-Monitor Proximity		1.008	0.835	
		(0.353)	(0.333)	
		[0.408, 1.608]	[0.269, 1.401]	
Model-Based Regressor (q_{ij})				0.213
				(0.121)
				[0.008, 0.419]
Observations	426	426	426	426
Fixed Effects	Village	Village	Village	Village
Controls	Saver and Monitor	Saver and Monitor	Saver and Monitor	Saver and Monitor

[a]Table shows impacts on log total savings by monitor network position. Total savings is the amount saved across all savings vehicles. Sample constrained to savers who received a monitor in the 30 random assignment villages, who answered our questionnaire. The variable "Model-Based Regressor" is defined as q_{ij} in the framework. Saver and Monitor controls include savings goal and saver centrality, along with the following variables for each monitor and saver: age, marital status, number of children, preference for bank or post office account (saver only), whether the individual has a bank or post office account at baseline, caste, elite status, number of rooms in the home, and type of electrical connection. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

TABLE F.VI

TOTAL SAVINGS BY NETWORK POSITION OF RANDOM MONITOR: MULTIGRAPH ANALYSIS, NO CONTROLS[a]

Variables	(1) Log Total Savings	(2) Log Total Savings	(3) Log Total Savings	(4) Log Total Savings
Monitor Centrality	0.182		0.133	
	(0.084)		(0.088)	
	[0.039, 0.325]		[−0.017, 0.282]	
Monitor Centrality: Financial Network	0.110		0.095	
	(0.141)		(0.126)	
	[−0.130, 0.350]		[−0.119, 0.310]	
Monitor Centrality: Advice Network	−0.120		−0.116	
	(0.138)		(0.129)	
	[−0.356, 0.115]		[−0.335, 0.103]	
Saver-Monitor Proximity		1.129	1.035	
		(0.585)	(0.575)	
		[0.135, 2.123]	[0.058, 2.011]	
Saver-Monitor Proximity: Financial Network		0.138	0.055	
		(0.852)	(0.838)	
		[−1.310, 1.586]	[−1.369, 1.480]	
Saver-Monitor Proximity: Advice Network		0.065	0.009	
		(0.654)	(0.664)	
		[−1.047, 1.177]	[−1.120, 1.138]	
Model-Based Regressor: Full Network (q_{ij})				0.249
				(0.145)
				[0.003, 0.495]
Model-Based Regressor: Financial Network				0.016
				(0.177)
				[−0.284, 0.316]
Model-Based Regressor: Advice Network				−0.010
				(0.155)
				[−0.273, 0.253]
Observations	426	426	426	426
Fixed Effects	None	None	None	None
Controls	None	None	None	None
Depvar Mean	8.029	8.029	8.029	8.029

[a]Table shows impacts on log total savings by monitor network position, using different definitions of link-types. Total savings is the amount saved across all savings vehicles. Sample constrained to savers who received a monitor in the 30 random assignment villages, who answered our questionnaire. The variable "Model-Based Regressor" is defined as q_{ij} in the framework. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

APPENDIX G: HOW DID THE SAVERS SAVE?

TABLE G.I

HOW DID THE SAVERS SAVE?[a]

Variables	(1) Log Expenditure	(2) Expenditure (1 Percent Win.)	(3) Expenditure (5 Percent Win.)	(4) Festivals	(5) Pan	(6) Tea	(7) Meals Away	(8) Eggs and Meat	(9) Other Food	(10) Transport
Panel A: Expenditures during month 6 of savings period										
Monitor Treatment: Random Assignment	−0.096	−902.142	−534.686	−242.480	16.113	29.507	27.734	−80.847	−199.577	−146.518
	(0.061)	(801.768)	(287.128)	(128.766)	(26.676)	(16.763)	(39.170)	(55.307)	(125.927)	(74.398)
	[−0.198, 0.007]	[−2,241.971, 437.687]	[−1,014.504, −54.868]	[−457.660, −27.301]	[−28.465, 60.691]	[1.494, 57.520]	[−37.723, 93.190]	[−173.270, 11.576]	[−410.013, 10.859]	[−270.844, −22.191]
Observations	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138
Fixed Effects	Village	Village	Village	Village	Village	Village	Village	Village	Village	Village
Controls	Saver	Saver	Saver	Saver	Saver	Saver	Saver	Saver	Saver	Saver
Non-monitored Mean	8.560	7,062	6,051	748	199.9	246.7	258.6	528.8	1,399	571.2

Variables	(1) Increased Labor Supply	(2) Business Profits	(3) Cut Unnecessary Expenditures	(4) Money From Spouse Family or Friends	(5) Reduced Transfers to Others	(6) Took a Loan
Panel B: Retrospective assessment from follow-up survey						
Monitor Treatment: Random Assignment	0.072	0.025	0.081	−0.026	0.015	−0.022
	(0.034)	(0.016)	(0.043)	(0.035)	(0.012)	(0.018)
	[0.016, 0.128]	[−0.001, 0.052]	[0.010, 0.153]	[−0.084, 0.032]	[−0.005, 0.034]	[−0.052, 0.009]
Observations	1,046	1,046	1,046	1,046	1,046	1,046
Fixed Effects	Village	Village	Village	Village	Village	Village
Controls	Saver	Saver	Saver	Saver	Saver	Saver
Non-monitored Mean	0.271	0.0475	0.215	0.210	0.0158	0.0285

[a]Panel A measures the effect of receiving a randomly assigned monitor on selected measures of expenditures in the sixth month of the savings period measured at the end of the monitoring intervention. Panel B reports survey responses from the 15 month follow-survey. Sample constrained to all savers in the sample who answered our questionnaire. Controls include the following saver characteristics: savings goal, saver centrality, age, marital status, number of children, preference for bank or post office account, whether the individual has a bank or post office account at baseline, caste, elite status, forecasted expenditure at baseline, number of rooms in the home, type of electrical connection, and an indicator for endogenous monitor. All regressions include village fixed effects. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

TABLE G.II

TREATMENT EFFECTS IN TARGET AND NON-TARGET SAVINGS VEHICLES[a]

Variables	(1) Savings in Target A/c	(2) Savings in Target A/c	(3) Savings in Non-Target A/c	(4) Savings in Non-Target A/c	(5) Log Savings in Target A/c	(6) Log Savings in Target A/c	(7) Log Savings in Non-Target A/c	(8) Log Savings in Non-Target A/c
Monitor Treatment: Random Assignment	386.790	383.139	2,428.790	2,321.409	0.939	0.962	0.233	0.199
	(157.993)	(160.880)	(2,240.577)	(2,233.626)	(0.334)	(0.329)	(0.168)	(0.160)
	[118.341, 655.240]	[109.784, 656.494]	[−1,378.235, 6,235.814]	[−1,473.805, 6,116.623]	[0.372, 1.506]	[0.403, 1.521]	[−0.053, 0.518]	[−0.074, 0.471]
Observations	545	545	545	545	545	545	545	545
Fixed Effects	None		None		None		None	
Controls	None	Double-Post LASSO	None	Double-Post LASSO	None	Double-Post LASSO	None	Double-Post LASSO
Non-monitored Mean	360.7	360.7	8,530	8,530	1.733	1.733	7.584	7.584

[a]Table shows effects of receiving a random monitor on savings both in the target account and in non-target accounts. Sample restricted to only those individuals responding to the savings questions in the endline survey. Odd columns include no controls, while even columns perform double-post LASSO using village fixed effects and the full set of saver controls. In columns (5) and (6), the outcome is log(target account savings + 1). Non-target account savings includes both formal and informal sources. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

APPENDIX H: MONITOR SPILLOVERS

H.1. *Measuring Monitor Spillovers*

Here, we use our experimental variation in monitor assignment in the random villages to look for spillovers from monitored to non-monitored savers. Non-monitored savers in both random and endogenous selection villages may be affected if their friends receive monitors and may experience larger spillovers if those monitors are especially effective.[43] The random variation in both the assignment of savers to treatment groups and of monitors to savers in the random selection villages allows us to measure such causal spillover effects.

We use the following regression specification to explore spillovers onto non-monitored savers in the villages with random monitor selection:

$$\begin{aligned} y_{ir} = \alpha_r &+ \beta_1 \sum_j A_{ij,r}\mathrm{SM}_j \\ &+ \gamma \sum_j A_{ij,r} \mathit{AttSaver}_j \\ &+ \delta' X_{ir} + \varepsilon_{ir}. \end{aligned} \tag{H.1}$$

This estimating equation allows the savings of non-monitored individuals to depend on having more friends randomly assigned to receive a monitor (SM), and β_1 is the coefficient of interest. All of this is conditional on the number of friends participating as savers and monitors in the experiment and a third-degree polynomial for the number of each individual's friends. The standard set of controls is included in X.[44]

We can also augment Equation (H.1) to analyze any impacts of the centrality of friends' monitors on savings:

$$\begin{aligned} y_{ir} = \alpha_r + \beta_1 \sum_j A_{ij,r}\mathrm{SM}_j + \beta_2 \sum_j A_{ij,r}\mathrm{SM}_j\mathrm{MC}_j \\ + \gamma \sum_j A_{ij,r} \mathit{AttSaver}_j \\ + \delta' X_{ir} + \varepsilon_{ir}, \end{aligned} \tag{H.2}$$

where $\mathrm{SM} * \mathrm{MC}$ measures the sum of the centralities of the monitor's of individual i's friends.

Table H.I presents the results estimating equations (H.1) and (H.2). We find in column (1) that individuals save 0.34 log points more (p-value 0.08) when a friend is assigned a monitor. In column (2), it appears that this effect is stronger when those monitors are more central, but the effects are not statistically significant. We take the results

[43] This could happen for a variety of reasons, for instance, "keeping up with the Joneses," increased motivation to save, receiving reminders from the friend's monitor, overhearing/participating in more conversations about savings in general, etc. Our model in Section A abstracts from this to focus on the signaling story, just like it abstracts from the direct value of savings itself.

[44] Recall that the standard controls include savings goal, gender, age, marital status, widow status, caste, elite status, material measures of wealth, whether the saver had a pre-existing bank or PO account, preference for bank or PO account during the savings period, and village fixed effects. We also control for the eigenvector centrality of the saver.

TABLE H.I

SPILLOVERS FROM MONITORED SAVERS: NON-MONITORED SAMPLE[a]

Variables	(1) Log Total Savings	(2) Log Total Savings
Number of Friends Assigned a Monitor	0.342	0.187
	(0.189)	(0.216)
	[0.020, 0.664]	[−0.179, 0.554]
Sum of Centralities of Friends' Monitors		0.123
		(0.127)
		[−0.092, 0.338]
Observations	123	123
Fixed Effects	Village	Village

[a]Table looks for spillovers onto non-monitored savers through friends being assigned a monitor. Total savings is the amount saved across all savings vehicles—the target account and any other account—by the saver. Sample is restricted to the non-monitored savers in the 30 villages who responded to our questionnaire. Controls include the following saver characteristics: saver centrality, log savings goal, age, marital status, number of children, preference for bank or post office account, whether the individual has a bank or post office account at baseline, caste, elite status, number of rooms in the home, and type of electrical connection. All regressions include village fixed effects. Regressions also include the following 1% winsorized network controls: third-order polynomials in saver degree, number of saver friends, and number of potential and attending monitor friends. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

in Table H.I as suggestive evidence of spillovers from the monitoring treatments. These spillovers likely bundle many different channels of influence including (but not limited to) "keeping up with the Joneses," increased motivation to save, receiving reminders from the friend's monitor, and overhearing more conversations about savings.[45] Anecdotal evidence suggests that conversations between savers and monitors tend to take place in public and are likely to be overheard by the saver's friends. We do not attempt to decompose these multiple possible effects. We should also note that the average complier for this spillover analysis will be different than the full sample.

H.2. *Treatment Effect Robustness in the Presence of Spillovers*

More generally, all agents—un-monitored and monitored—may face spillover effects from the monitoring treatments. While a saver's own treatment assignment is orthogonal to the treatment assignments of her friends, one might still worry that the peer effects could contaminate our main results presented in the body of the paper. We present a robustness exercise in Appendix Table H.II where we run our main specifications from Tables 2 and 3, but include the treatment status of the saver's friends along with the centralities of the friends' monitors.

In Panel A, we show that we can closely replicate the treatment effects of receiving a randomly assigned monitor even when we allow for peer effects. Similarly, the results in Panel B considering the network heterogeneity of the monitor look similar to those in Table 3. Again, given the orthogonality of treatment across individuals, this result is not surprising.

[45]This multitude of channels is also the reason why we do not try to estimate and instrument a more structured model of spillovers in the spirit of Bramoulle, Djebbari, and Fortin (2009).

TABLE H.II

MONITOR TREATMENT EFFECTS: ROBUSTNESS TO INCLUSION OF PEER SPILLOVERS[a]

Variables	(1) Log Total Savings	(2) Log Total Savings
Panel A: Effects of random monitors		
Monitor Treatment: Random Assignment	0.343	0.275
	(0.150)	(0.164)
	[0.087, 0.599]	[−0.004, 0.554]
Observations	549	549
Fixed Effects	None	Village
Non-network Controls	None	Saver
Non-monitored Mean	7.670	7.670

Variables	(1) Log Total Savings	(2) Log Total Savings	(3) Log Total Savings	(4) Log Total Savings
Panel B: Effects of monitors by network heterogeneity				
Monitor Centrality	0.169		0.134	
	(0.072)		(0.070)	
	[0.047, 0.291]		[0.015, 0.254]	
Saver-Monitor Proximity		0.903	0.736	
		(0.359)	(0.337)	
		[0.293, 1.514]	[0.163, 1.310]	
Model-Based Regressor (q_{ij})				0.190
				(0.111)
				[0.001, 0.380]
Observations	426	426	426	426
Fixed Effects	Village	Village	Village	Village
Non-network Controls	Saver and Monitor	Saver and Monitor	Saver and Monitor	Saver and Monitor

[a]Tables show robustness of main results to allowing for spillovers through monitored friends. Total savings is the amount saved across all savings vehicles—the target account and any other account, both formal and informal including money held "under the mattress"—by the saver. Panel A sample constrained to all savers in random monitor villages. Panel B sample constrained to savers who received a monitor in those villages. All included savers answered our questionnaire. Controls include log savings goal, saver centrality, and the following 1% winsorized network controls: third-order polynomials in saver degree, number of saver friends, and number of potential and attending monitor friends. The Panel A saver controls include age, marital status, number of children, preference for bank or post office account, whether the individual has a bank or post office account at baseline, caste, elite status, number of rooms in the home, and type of electrical connection. All specifications in Panel B contain the saver controls and controls for the same variables but for the monitors (where applicable). All regressions include village fixed effects. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

APPENDIX I: ENDOGENOUS MONITORS AND CHOICE

I.1. *Model Extension: Selection and Heterogeneity*

The core model presented in Section 3 and Appendix A was developed to study the random monitor assignment treatment and develop a vocabulary for how we should think about network position affecting the signaling game. Here we extend the model to incorporate both the choice of the monitor in the endogenous treatment and entry into our experiment. We simplify algebra by modeling both savers and monitors as only having high or low centrality (which is an aesthetic, but not substantive, choice) and there being just one third party k. In addition to illustrating the complexity of thinking about choice in our setting—that certain savers may prefer central monitors while others will not—the goal of the model is to help us think through which types of savers will pick which monitors, who might benefit most from the choice, and more generally, for which patterns to look in the data. We are setting aside a number of real-world issues that may affect the monitor choices of savers in the experiment: for example, there could be other unobserved dimensions of heterogeneity (how nice or forgiving a person is) that may make some potential monitors more attractive than others. We do not claim nor is it our aspiration to fully explain choice in our study.

The model works as follows. Potential savers are either H or L types, where the cost of saving $s_i = 1$ is c_{θ_i} and, as before, $c_H < c_L$. Potential savers also vary in their centrality; they can be of high or low centrality. In this way, a potential saver decides to join our experiment, knowing that she may be randomly assigned to have no monitor, have a random monitor (in a random treatment village), or have the opportunity to select a monitor via random serial dictatorship (in an endogenous treatment village). This reflects exactly how recruitment happened in our experiment. The potential subjects realize that having a more central monitor means information can spread more, reaping rewards or costs, depending on their actions.

In our equilibrium, H types always choose to participate: if they receive a high centrality monitor in the random treatment, they save the high amount ($s_i = 1$), and the low amount otherwise ($s_i = 0$). In the endogenous treatment, H types have an incentive to choose a high centrality monitor if one is available to maximize the dissemination of the signal.

On the other hand, L types face a more delicate decision and one that depends on whether the person is of high or low centrality herself. Participating in the experiment has benefits because, in the non-monitored treatment, subjects receive in-kind services and a bank account. However, there is the potential cost of receiving monitors and signaling that they are low types. In this case, a high centrality L type opts not to enter; because of her centrality, in the monitored treatments, she is likely to run into a third party in the future who has heard about her low savings amount (which she would be incentivized to do), averaged across random assignment treatment and endogenous treatment where she would pick a low centrality monitor. And therefore, it would not be worthwhile to participate. On the other hand, the low centrality L faces a similar cost, but one that is lower because of her lower centrality. Therefore, she is willing to participate and saves the low amount ($s_i = 0$) in the random monitor treatment regardless of the monitor. In the endogenous treatment, the low centrality L type picks a low centrality monitor and saves the low amount ($s_i = 0$), effectively minimizing the degree to which negative information about her is spread.

Equilibrium beliefs calculated by Bayes's rule support this equilibrium, and because our sample is small relative to the population, it is easy to see that if a third party never receives a report about a given person, then their posterior remains the prior (1/2) that the person is of high type.

I.1.1. *Population*

There are four types of potential savers, denoted by $\eta_i = (\theta_i, p_{ik})$. Let $\theta_i \in \{L, H\}$ denote the quality of the savers. As in the body of the paper, L types face higher costs ($c_L > c_H$) of saving $s_i = 1$ (i.e., overcoming their time inconsistency, devoting attention to saving). The type θ_i determines a productivity A_{θ_i}, which is the output that this person will produce if hired for a task/project in the future. Let $p_{ik} \in \{\bar{p}_{ik}, \underline{p}_{ik}\}$ denote the centrality of the savers. For simplicity, we assume this to be just binary. We assume these features are independent and uniform in the population, so (θ, p_{ik}) has a population share of $\frac{1}{4}$ for every type combination.

There are two types of potential monitors, denoted by $p_{jk} \in \{\bar{p}_{jk}, \underline{p}_{jk}\}$ for high or low centrality monitors. We assume again that $\frac{1}{2}$ the population of monitors are $\bar{p}_{jk}$.

I.1.2. *Timing*

In every village:

- Phase 1: the savings experiment
  - Each village has M people, of whom $N \ll M$ are given the opportunity to participate.
  - N potential savers decide whether or not to participate in the experiment, resulting in $n \leq N$ savers participating. Let $x \in \{0, 1\}$ denote the participation decision.
  - Those who enter are randomly assigned to treatments: BC, Random monitor, or Endogenous monitor, where the latter two are village assignments.
  - Monitor assignments are realized.
    * In random villages, $m = \alpha n$, for $\alpha \in (0, 1)$, savers are randomly assigned one-to-one to m monitors.
    * In endogenous villages, m savers pick their monitors via random serial dictatorship.
    * In both types of villages, $(1 - \alpha)n$ savers are assigned to the BC treatment.
  - Savers decide how much to save $s_i \in \{0, 1\}$.
    * It costs an agent of type η_i, $c(\theta_i, p_{ik}) = c_{\theta_i}$ to save $s_i = 1$ with $c_H < c_L$.
- Phase 2: future interactions in the village
  - The saver interacts with an individual k (with a probability p_{ik}). This individual has either heard or not heard (denote hearing by $r \in \{1, 0\}$) of the saver's choice of savings and this happens with a probability that depends on the position of the monitor and this third party individual. The probability that the saver meets this third party who has heard of her savings is given by

$$f(p_{ik}, p_{jk}) = p_{ik} p_{jk},$$

which depends on both saver centrality and monitor centrality.[46] We assume $\bar{p}_{jk}/\underline{p}_{jk} > \bar{p}_{ik}/\underline{p}_{ik}$, which means that having a more central monitor affects the spread more than being more central, which makes sense because words move faster than meetings. Note that, in our base model, we simplified this by having them be equal, but that was only because we chose the same parameter to model information flow and meetings.

  - This individual offers to pay the saver for a task where the output is the saver's productivity, but of course the saver's type θ is unobserved by this individual. This individual may have heard of the saver's choice of s, if the saver chose to participate and information was transmitted from the monitor to this person, and can make inferences accordingly.

---

[46]This is for simplicity. In the body of the paper, note $f(p_{ik}, p_{jk})$ is

$$\sum_k p_{ik} p_{jk}.$$

To sum up, relative to the main model, this model adds an entry decision and a monitor choice decision. Again, for algebraic transparency, we allow for only two levels of centrality.

I.1.3. *Payoffs and Participation Decision*

Payoffs are as follows:

• By not entering the experiment, the agent has some autarky payoff $v_{\text{aut}} < 0$. The negative value captures the absence of the basic account opening services, reminders, and small payment made in the account offered in our BC treatment, which will be normalized to 0.

• Individuals encountered in the future can offer agents projects with payoffs which depend on productivities and beliefs about type given what the individual observes.

• The BC treatment generates payoff $\pi^{\text{BC}} = 0$. This is just a normalization, and note that, by entering the experiment, all treatments provide this payoff plus or minus the potential wage earnings in Phase 2.

Note that the payoff to an agent from interacting with an uninformed individual is equivalent to the payoff from not receiving a monitor, $\pi^{\text{BC}} = 0$. This comes from the fact that we assume that individuals did not discuss the participation choices of invited individuals, but only the savings progress of those who did participate. This is consistent with equilibrium beliefs provided our assumption above that $M \gg N$. It is easy to check that $\mathrm{P}(\theta = H | r = 0, x = 1, s) = \frac{1}{2} + O(\frac{N}{M})$, which can be made arbitrarily close to $\frac{1}{2}$. We also should note that, in practice, invitations to participate were made privately.

• A saver in the random treatment receives equilibrium expected payoff $\pi^R(\eta)$.

• A saver in the endogenous treatment receives equilibrium expected payoff $\pi^E(\eta)$.

An agent of type η chooses to enter if and only if

$$\frac{\alpha}{2}\pi^R(\theta, x) + \frac{\alpha}{2}\pi^E(\theta, x) > v_{\text{aut}}.$$

I.1.4. *An SPE*

It is useful to define

$$\psi^R := \frac{2\bar{p}_{ik}\underline{p}_{jk} + 2\underline{p}_{ik}\underline{p}_{jk}}{\bar{p}_{ik}\bar{p}_{jk} + \underline{p}_{ik}\bar{p}_{jk} + 3\bar{p}_{ik}\underline{p}_{jk} + 3\underline{p}_{ik}\underline{p}_{jk}}$$

and

$$\psi^E := \frac{\bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}}{\bar{p}_{ik}\bar{p}_{jk} + 5\underline{p}_{ik}\underline{p}_{jk}}.$$

These terms, which depend only on the probabilities of someone in the future meeting a saver of low or high centrality, will reflect equilibrium beliefs about a saver being a high type when the individual observes s_L savings in a village of treatment R or E.

We make the following high-level assumptions on parameters to obtain our equilibrium. Feasible parameters satisfy these conditions. We discuss interpretation of these conditions below as they arise.

ASSUMPTIONS:
(1) $A_H\psi + A_L(1-\psi) < 0$ for $\psi \in \{\psi^R, \psi^E\}$.
(2) $\frac{c_H}{(1-\psi)\underline{p}_{ik}\bar{p}_{jk}} < A_H - A_L < \min\{\frac{c_L}{(1-\psi)\bar{p}_{ik}\bar{p}_{jk}}, \frac{c_H}{(1-\psi)\bar{p}_{ik}\underline{p}_{jk}}\}$ for $\psi \in \{\psi^R, \psi^E\}$.
(3) $\frac{\underline{p}_{ik}\bar{p}_{jk}+\underline{p}_{ik}\underline{p}_{jk}}{2}(A_H\psi^R + A_L(1-\psi^R)) + \underline{p}_{ik}\underline{p}_{jk}(A_H\psi^E + A_L(1-\psi^E)) > \frac{2v_{\text{aut}}}{\alpha} > \frac{\bar{p}_{ik}\bar{p}_{jk}+\bar{p}_{ik}\underline{p}_{jk}}{2}(A_H\psi^R + A_L(1-\psi^R)) + \bar{p}_{ik}\underline{p}_{jk}(A_H\psi^E + A_L(1-\psi^E))$.
(4) $5p_{ik}\bar{p}_{jk}A_H + 3p_{ik}\underline{p}_{jk}(A_H\psi^R + A_L(1-\psi^R)) > \frac{8}{\alpha}v_{\text{aut}} + 5c_H$ for any p_{ik}.

PROPOSITION I.1: *Under the above assumptions, there is an SPE in which*
(1) $(H, \bar{p}_{ik})$ *and* $(H, \underline{p}_{ik})$ *always enter and*
- *in random villages,*
– *save* $s_i = 1$ *with* $\bar{p}_{jk}$ *centrality monitors,*
– *save* $s_i = 0$ *with* $\underline{p}_{jk}$ *centrality monitors*
- *and in endogenous choice villages,*
– *pick* $\bar{p}_{jk}$ *monitor if available and save* s_H,
– *pick* $\underline{p}_{jk}$ *monitor when an* $\bar{p}_{jk}$ *centrality monitor is not available and save* s_L.
(2) (L, h) *never enter,*
(3) (L, l) *always enter and*
- *in random villages, save* $s_i = 0$ *with any monitor,*
- *in endogenous choice villages, pick* $\underline{p}_{jk}$ *monitors and save* $s_i = 0$.
(4) *Any type who enters and is assigned to the BC treatment saves* $s_i = 0$.

Below, we compute the beliefs that support this equilibrium and check that it is indeed an SPE. This setup has the following predictions that are consistent with the data:
- Savings should be higher with monitoring in random villages because those in the BC treatment choose $s_i = 0$.
- Savings should be higher with more central monitors in random villages.
- In endogenous villages, having an earlier choice should matter for $\bar{p}_{ik}$ savers but less so for $\underline{p}_{ik}$ savers:
– For $\bar{p}_{ik}$ savers, if available $\bar{p}_{jk}$ monitors are selected.
– For $\underline{p}_{ik}$ savers, because the distribution includes $(L, \underline{p}_{ik})$ types, there will be $\underline{p}_{jk}$ monitor choices both early and late.

I.1.5. *Random Assignment of Monitors*

We want to compute the belief that the third party has that the saver is of type θ given they have received a report and therefore the saver has participated and has saved an amount s:

$$\mathrm{P}(\theta|s, r=1, x=1) = \frac{\mathrm{P}(s, r=1|\theta, x=1)\mathrm{P}(\theta|x=1)}{\mathrm{P}(s, r=1|H, x=1)\mathrm{P}(H|x=1) + \mathrm{P}(s, r=1|L, x=1)\mathrm{P}(L|x=1)}.$$

In our equilibrium, observe that the following hold:
- Conditional on $\theta = H$:
– $\mathrm{P}(s_i = 1, r = 1|H, x = 1) = \frac{\alpha}{4}[\bar{p}_{ik}\bar{p}_{jk} + \underline{p}_{ik}\bar{p}_{jk}]$,
– $\mathrm{P}(s_i = 0, r = 1|H, x = 1) = \frac{\alpha}{4}[\bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}]$.

- Conditional on $\theta = L$:
- – $\mathrm{P}(s_i = 1, r = 1 | L, x = 1) = 0$,
- – $\mathrm{P}(s_i = 0, r = 1 | L, x = 1) = \frac{\alpha}{4}[\bar{p}_{ik}\bar{p}_{jk} + \underline{p}_{ik}\bar{p}_{jk} + \bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}]$.
- Type composition given participation:
- – $\mathrm{P}(H | x = 1) = \frac{2}{3}$,
- – $\mathrm{P}(L | x = 1) = \frac{1}{3}$.

In this case, we can compute

- $\mathrm{P}(\theta = H | s_i = 1, r = 1, x = 1) = \frac{\frac{\alpha}{4}[\bar{p}_{ik}\bar{p}_{jk} + \underline{p}_{ik}\bar{p}_{jk}] \times \frac{2}{3}}{\frac{\alpha}{4}[\bar{p}_{ik}\bar{p}_{jk} + \underline{p}_{ik}\bar{p}_{jk}] \times \frac{2}{3}} = 1$,
- $\mathrm{P}(\theta = H | s_i = 0, r = 1, x = 1) = \frac{2\bar{p}_{ik}\underline{p}_{jk} + 2\underline{p}_{ik}\underline{p}_{jk}}{\bar{p}_{ik}\bar{p}_{jk} + \underline{p}_{ik}\bar{p}_{jk} + 3\bar{p}_{ik}\underline{p}_{jk} + 3\underline{p}_{ik}\underline{p}_{jk}}$, as

$$
\begin{aligned}
&\mathrm{P}(\theta = H | s_i = 0, r = 1, x = 1) \\
&= \frac{\frac{\alpha}{4}[\bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}] \times \frac{2}{3}}{\frac{\alpha}{4}[\bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}] \times \frac{2}{3} + \frac{\alpha}{4}[\bar{p}_{ik}\bar{p}_{jk} + \underline{p}_{ik}\bar{p}_{jk} + \bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}] \times \frac{1}{3}} \\
&= \frac{2\bar{p}_{ik}\underline{p}_{jk} + 2\underline{p}_{ik}\underline{p}_{jk}}{\bar{p}_{ik}\bar{p}_{jk} + \underline{p}_{ik}\bar{p}_{jk} + 3\bar{p}_{ik}\underline{p}_{jk} + 3\underline{p}_{ik}\underline{p}_{jk}}.
\end{aligned}
$$

The wages are

$$y^R(1) = A_H$$

and

$$y^R(0) = A_H \psi^R + A_L (1 - \psi^R).$$

To check the incentive constraint,

$$p_{ik}\bar{p}_{jk} y^R(1) - c_H > p_{ik}\bar{p}_{jk} y^R(0) > p_{ik}\bar{p}_{jk} y^R(1) - c_L \quad \text{for } p_{ik} \in \{\bar{p}_{ik}, \underline{p}_{ik}\},$$

or equivalently,

$$y^R(1) - \frac{c_H}{p_{ik}\bar{p}_{jk}} > y^R(0) > y^R(1) - \frac{c_L}{p_{ik}\bar{p}_{jk}} \quad \text{for } p_{ik} \in \{\bar{p}_{ik}, \underline{p}_{ik}\},$$

and this must be true for the worst case on either side of the bound

$$y^R(1) - \frac{c_H}{\underline{p}_{ik}\bar{p}_{jk}} > y^R(0) > y^R(1) - \frac{c_L}{\bar{p}_{ik}\bar{p}_{jk}}.$$

This bound holds by Assumption (2). In this case, both low and high centrality of H quality will save $s_i = 1$ with a high centrality monitor, irrespective of the saver centrality, and save $s_i = 0$ with a low centrality monitor, irrespective of saver centrality.

I.1.6. *Endogenous Assignment of Monitors*

Endogenous choice of monitor happens through random serial dictatorship. m participating agents are randomly ordered and then select a monitor in sequence, and the chosen monitor is removed from the pool.

Again, we want to compute the belief that the third party has that the saver is of type θ given they have received a report and therefore the saver has participated and has saved an amount s:

$$\mathrm{P}(\theta|s, r=1, x=1) = \frac{\mathrm{P}(s, r=1|\theta, x=1)\mathrm{P}(\theta|x=1)}{\mathrm{P}(s, r=1|H, x=1)\mathrm{P}(H|x=1) + \mathrm{P}(s, r=1|L, x=1)\mathrm{P}(L|x=1)}.$$

In our equilibrium, observe that the following hold:

- Conditional on $\theta = H$:
- $\mathrm{P}(s_i = 1, r=1|H, x=1) = \alpha\frac{3}{8}[\bar{p}_{ik}\bar{p}_{jk} + \underline{p}_{ik}\bar{p}_{jk}]$,
- $\mathrm{P}(s_i = 0, r=1|H, x=1) = \frac{\alpha}{8}[\bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}]$.
- Conditional on $\theta = L$:
- $\mathrm{P}(s_i = 1, r=1|L, x=1) = 0$,
- $\mathrm{P}(s_i = 0, r=1|L, x=1) = \alpha\underline{p}_{ik}\underline{p}_{jk}$.
- Type composition given participation:
  - $\mathrm{P}(H|x=1) = \frac{2}{3}$,
  - $\mathrm{P}(L|x=1) = \frac{1}{3}$.

In this case, we can compute

- $\mathrm{P}(\theta = H|s_i = 1, r=1, x=1) = 1$,
- $\mathrm{P}(\theta = H|s_i = 0, r=1, x=1) = \frac{\bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}}{\bar{p}_{ik}\bar{p}_{jk} + 5\underline{p}_{ik}\underline{p}_{jk}}$, as

$$\begin{aligned}
\mathrm{P}(\theta = H|s_L, r=1, p=1) &= \frac{\frac{1}{8}[\bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}] \times \frac{2}{3}}{\frac{1}{8}[\bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}] \times \frac{2}{3} + \underline{p}_{ik}\underline{p}_{jk} \times \frac{1}{3}} \\
&= \frac{\bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}}{\bar{p}_{ik}\bar{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk} + 4\underline{p}_{ik}\underline{p}_{jk}} \\
&= \frac{\bar{p}_{ik}\underline{p}_{jk} + \underline{p}_{ik}\underline{p}_{jk}}{\bar{p}_{ik}\bar{p}_{jk} + 5\underline{p}_{ik}\underline{p}_{jk}}.
\end{aligned}$$

The wages are

$$y^E(1) = A_H$$

and

$$y^E(0) = A_H\psi^E + A_L(1-\psi^E).$$

Consider an L quality agent. Note that as long as $y^E(0) < 0$, which happens in equilibrium by Assumption (1), if the agent is planning to save the low amount, then it is trivially better to do so under a low centrality monitor since $0 > p_{ik}\underline{p}_{jk}y^E(0) > p_{ik}\bar{p}_{jk}y^E(0)$. If the agent is planning to save the high amount, then so long as $y^E(1) > 0$, it is trivially better to do so with a high centrality monitor.

The L type will prefer the low monitor and save s_L provided it exceeds the maximal possible benefit under a high monitor/high savings combination

$$0 > p_{ik}\underline{p}_{jk}y^E(0) > p_{ik}\bar{p}_{jk}y^E(1) - c_L,$$

which is implied by

$$\frac{c_L}{p_{ik}\bar{p}_{jk}} > y^E(1) - y^E(0),$$

which in turn is implied by Assumption (2).

Similarly, one can check that by Assumption (1), the incentive constraint is met for the H type as well.

I.1.7. *Entry Decision*

Let us compute the expected payoff to entering:

$$\frac{\alpha}{2}\pi^R(\eta) + \frac{\alpha}{2}\pi^E(\eta)$$

and consider the case of low quality agents. Under the maintained assumptions, even when L quality agents enter, they will not signal by investing s_H, since it is too costly. In our equilibrium entry, L quality agents will always be able to choose their preferred monitor type, because L types comprise $\frac{1}{3}$ of the saver pool but $\underline{p}_{jk}$ monitors are $\frac{1}{2}$ the pool and H types prefer $\bar{p}_{jk}$ monitors . Under this and Assumption (3), L quality agents do not enter if they are of $\bar{p}_{ik}$ centrality, whereas $\underline{p}_{ik}$ centrality agents do enter.

So now consider m agents which are composed of only $\{(H, \underline{p}_{ik}), (H, \bar{p}_{ik}), (L, \underline{p}_{ik})\}$ agents, each with equal proportions. There are m monitors which are $\frac{1}{2}$ $\bar{p}_{jk}$ centrality and $\frac{1}{2}$ $\underline{p}_{jk}$ centrality. Under random serial dictatorship, an H quality agent who goes in the first $\frac{3}{4}$ of the H order will have the payoff

$$\pi^E(H, p_{ik}) = p_{ik}\bar{p}_{jk}y^E(1) - c_H > 0,$$

whereas the H quality agent allocated in the last $\frac{1}{4}$ of the H order gets

$$\pi^E(H, p_{ik}) = p_{ik}\underline{p}_{jk}y^E(0) < 0.$$

Then the expected utility of entering (scaled by $\frac{2}{\alpha}$)

$$\begin{aligned}
&\frac{p_{ik}\bar{p}_{jk} + p_{ik}\underline{p}_{jk}}{2}y^R(0) + \frac{1}{2}\big(p_{ik}\bar{p}_{jk}\big(y^R(1) - y^R(0)\big) - c_H\big)\\
&\quad + \frac{3}{4}\big[p_{ik}\bar{p}_{jk}y^E(1) - c_H\big] + \frac{1}{4}p_{ik}\underline{p}_{jk}y^E(0)\\
&= \frac{5}{4}p_{ik}\bar{p}_{jk}A_H + p_{ik}\underline{p}_{jk}\left(A_H\frac{2\psi^R + \psi^E}{4} + A_L\frac{3 - 2\psi^R - \psi^E}{4}\right) - \frac{5}{4}c_H
\end{aligned}$$

and therefore entry occurs as long as

$$\frac{5}{4}p_{ik}\bar{p}_{jk}A_H + p_{ik}\underline{p}_{jk}\left(A_H\frac{2\psi^R+\psi^E}{4} + A_L\frac{3-2\psi^R-\psi^E}{4}\right) > \frac{2}{\alpha}v_{\text{aut}} + \frac{5}{4}c_H$$

and a sufficient condition is just Assumption (4),

$$5p_{ik}\bar{p}_{jk}A_H + 3p_{ik}\underline{p}_{jk}\left(A_H\psi^R + A_L\left(1-\psi^R\right)\right) > \frac{8}{\alpha}v_{\text{aut}} + 5c_H.$$

I.2. *Endogenous Monitor Choice: Empirical Evidence*

We now turn to the data. Figure I.1 shows the CDFs of chosen monitors in endogenous choice villages, broken by whether the saver is of high or low centrality, where high means above the median centrality value in the village as a whole.[47] As anticipated above, over

FIGURE I.1.—Centrality distribution of chosen monitors. Notes: Figures plot cdfs of the chosen monitor characteristics in endogenous choice villages, separately by high and low centrality savers. We define high centrality as above the median value (in the village, not in the sample). The top figure plots monitor centrality, while the bottom figure plots saver-monitor proximity.

[47]Because we attracted slightly more central individuals into our experiment, there are more highs than lows.

TABLE I.I

MONITOR CHOICE ORDER IN ENDOGENOUS ALLOCATION VILLAGES[a]

Variables	(1) High Centrality Saver Log Total Savings	(2) High Centrality Saver Monitor Centrality	(3) Low Centrality Saver Log Total Savings	(4) Low Centrality Saver Monitor Centrality
Choice Order: 6–10	−0.543	−0.366	0.777	−0.001
	(0.259)	(0.222)	(0.301)	(0.220)
	[−0.982, −0.104]	[−0.743, 0.011]	[0.266, 1.288]	[−0.374, 0.372]
Choice Order: 11–15	−0.769	−0.383	0.082	0.004
	(0.319)	(0.202)	(0.331)	(0.224)
	[−1.311, −0.226]	[−0.726, −0.039]	[−0.480, 0.644]	[−0.377, 0.384]
Choice Order: >15	−0.726	−0.303	0.000	−0.247
	(0.262)	(0.252)	(0.356)	(0.361)
	[−1.171, −0.281]	[−0.731, 0.125]	[−0.604, 0.605]	[−0.860, 0.366]
Observations	210	210	172	172

[a] Table shows impacts of monitor selection choice order on log total savings and monitor centrality by saver centrality. We define high centrality as above the median value. Total savings is the amount saved across all savings vehicles. Sample constrained to savers who received a monitor in the 30 endogenous random assignment villages and who answered our questionnaire. Regressions control for log savings goal and saver centrality and also include village fixed effects. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

the distribution, high centrality savers pick more central monitors and more proximate monitors. A Kolmogorov–Smirnov test shows that the centrality CDFs are statistically distinguishable, ($p = 0.06$) whereas the proximity distributions are not ($p = 0.28$).

Next, in Table I.I, we look at how the choice order affects the centrality of the monitor. We find that picking earlier leads to a choice of more central monitors that we can detect if the saver is of high centrality, but there is no such relationship when we look at low centrality savers. This, too, is consistent with our stylized model that explores choice.

APPENDIX J: THE EFFECTS OF THE "BC" BUNDLE ON SAVINGS

Here we measure whether the basic bundle of services given to all participating savers by itself affected savings. Recall that all interested savers received the following services: goal elicitation, account opening facilitation, initial required deposit (Rs. 100) into the account, biweekly visits from an enumerator. While all of our previous analysis restricts the sample to savers who selected into the program, we now draw upon additional data for this exercise. Namely, as shown in Figure 2, we randomized households into participation as potential savers. Moreover, we surveyed a random subsample of the pure control group—households that were never approached for participation—along with a random subsample of non-takers—households that were approached to participate in the program but who did not attend the village meeting. Using our sampling rates, we construct an intent to treat estimate of the benefits of the "BC" bundle on log savings. We omit all monitored savers.

Table J.I presents the results of this exercise. In column (1), we pool across Endogenous and Random assignment villages and find a modest positive, but statistically insignificant, effect of the treatment on log total savings. In column (2), we allow the treatment effect to vary by the village-allocation method. We find in column (2) that the effect is larger in Endogenous villages, but again neither coefficient is statistically significant.

These results are consistent with the findings of Table 8, but reflect a severe lack of power. In Table 8, recall that we are only focusing on savers opting into the village meet-

TABLE J.I

EFFECTS OF THE "BUSINESS CORRESPONDENT" BUNDLE[a]

Variables	(1) Log Total Savings	(2) Log Total Savings
Business Correspondent (BC) Bundle, No Monitor	0.073	0.055
	(0.090)	(0.128)
	[−0.078, 0.224]	[−0.158, 0.268]
BC Bundle: Endogenous Assignment Village		0.039
		(0.180)
		[−0.262, 0.340]
Observations	1,835	1,835
Fixed Effects	Village	Village
Non-BC Mean	7.519	7.519

[a]Table measures the effects of receiving the baseline bundle of services for non-monitored potential savers compared to the pure control. To do this, we use the random sample of dropouts who we surveyed and reweight the observations to reconstitute the full potential savers. The control group is composed of individuals with whom we never interacted during the intervention and whom we randomly sampled at endline. Total savings is the amount saved across all savings vehicles—the target account and any other account, both formal and informal including money held "under the mattress"—by the saver. Given that we do not have any baseline data for the control group, we include no controls other than the village fixed effects. Standard errors (clustered at the village level) are reported in parentheses. 90% confidence intervals are reported in brackets.

ing. Here, in Table J.I, this effect is diluted by the mass of individuals that did not opt in and were never treated with the "BC" bundle.

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