Online Appendix to Accompany "Motivating bureaucrats with behavioral insights when state capacity is weak: Evidence from large-scale field experiments in Peru"

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Effects on infrastructure quality

Here, we discuss whether the follow-up experiment intervention had an impact on infrastructure quality. Given the nature of the intervention, one may expect that the intervention caused an increase in the quantity and quality of the infrastructure and furniture. An alternative view would suggest that the SMS campaign could have negatively affected the quality of the infrastructure and furniture by inducing substitution toward spending on items that are faster to implement.

To address these issues, we exploit information about principals' and teachers' perceptions regarding infrastructure and furniture quality, using the infrastructure module included in the SEMAFORO survey. In this module, teachers and principals are required to evaluate whether they consider the quality of the infrastructure (including walls, ceilings, floors, etc.) as well as the quality of the classroom furniture (including desk, chairs, boards, etc.) to be either good, regular, or bad.[1] We use data for the 2016 version of the survey.[2]

In Table S13, we explore the effect of the SMS campaign on infrastructure quality as reported by the teachers. We created a dummy variable equal to 1 if the surveyed teacher considered the quality of a specific item of infrastructure to be bad. Responses were normalized to the 0-100 scale to facilitate interpretation. The items of infrastructure under analysis are walls, ceilings, floors, windows, doors and bathroom sinks.

There is limited evidence that the SMS campaign affected the quality of any infrastructure item, with a marginally significant increase in reported bathroom sink quality. This result is robust to controlling for pre-treatment characteristics. The limited evidence of impacts on quality is not surprising, given the nature of the intervention. Maintenance funds are somewhat modest, while significant changes in infrastructure quality are expensive. In addition, the proportion of teachers who report that a particular infrastructure item is of bad quality is typically less than 10%, with the exception of sinks.

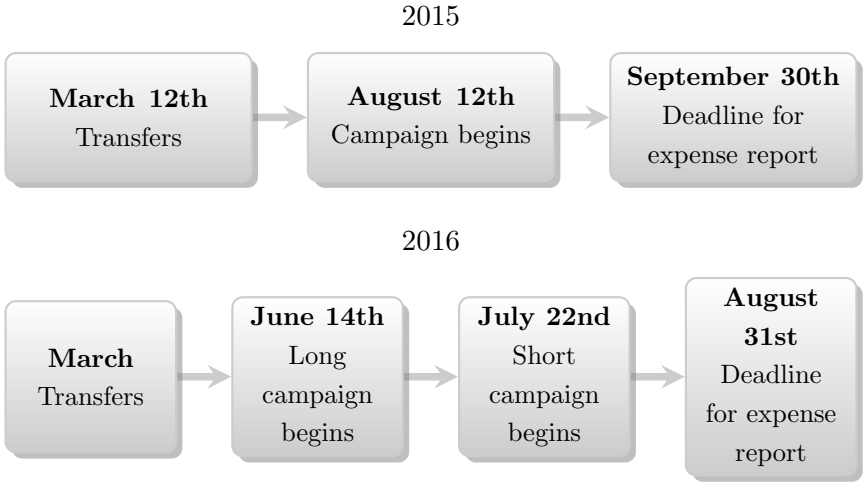
We also explore the effect of the SMS campaign on the quality of furniture in Table S14. The fraction of teachers that report that the quality of furniture is bad is quite low for all furniture items under consideration. These include teacher and student desks and chairs, boards and cupboards. We find no evidence of impacts of the SMS campaign for any of these items. Finally, we analyze the role of the SMS campaign in affecting the stock of infrastructure Table S15, finding no evidence of effects on the existence of bathrooms or number of toilets. Results are robust to controlling for pre-treatment characteristics.

[1] All teachers in all grades and sections were required to provide an answer to this question. This implies that for large schools several responses are available because they typically offer multiple grades in primary and secondary levels. Given that most schools in the country offer primary and offer only one section per grade, we restrict the analysis to teachers in charge of the first section in first grade to ensure comparability.

[2] The SEMAFORO survey was also carried out in 2015, but the survey instruments were heavily revised in 2016. To avoid comparability issues, we restrict the analysis to 2016.

Supplementary figures and tables

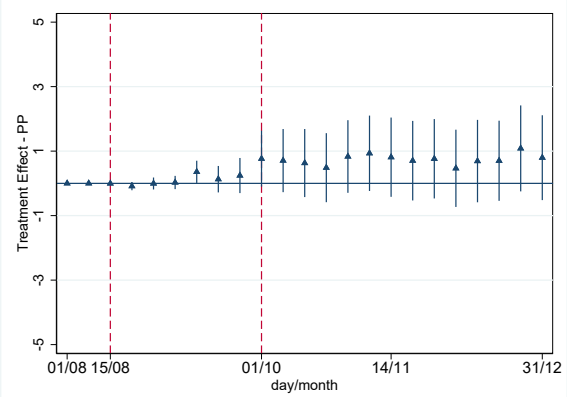
Figure S1: Comparison of Intervention Cycles for Main and Follow-Up Experiments



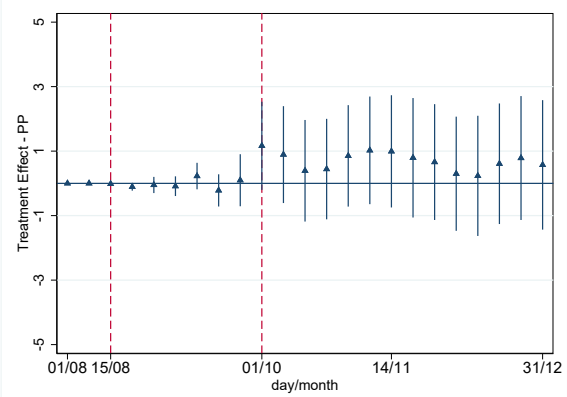
Note: Authors' elaboration. Each square represents a relevant date in the intervention cycle.

Figure S2: Oversight Report - Main Experiment

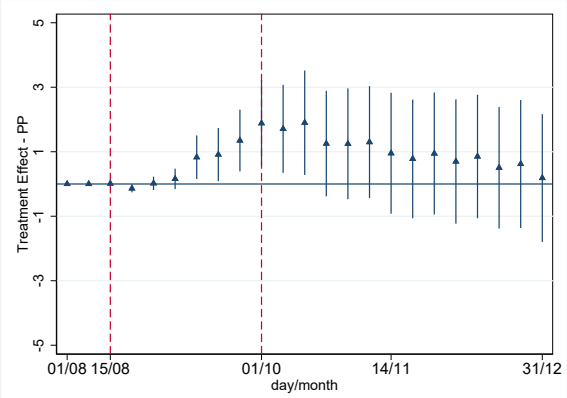
(a) SMS



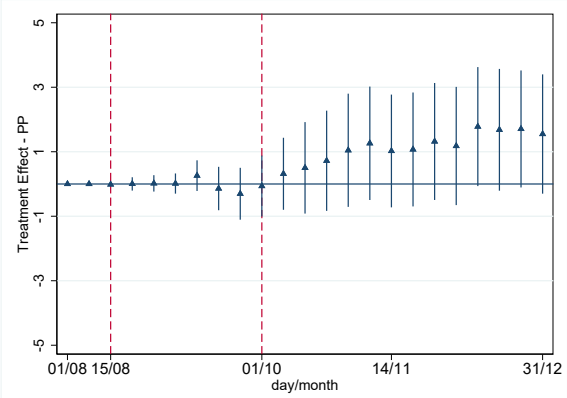
(b) Reminder/Warning



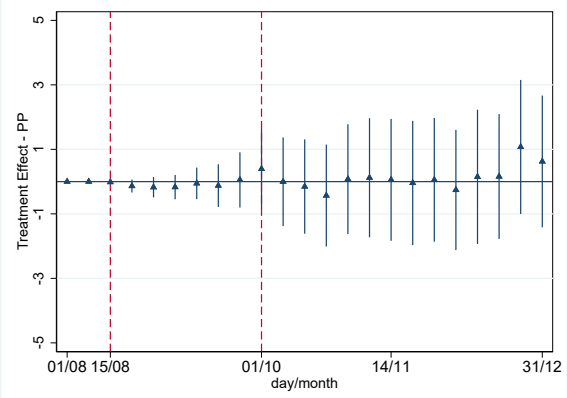
(c) Salience of Monitoring



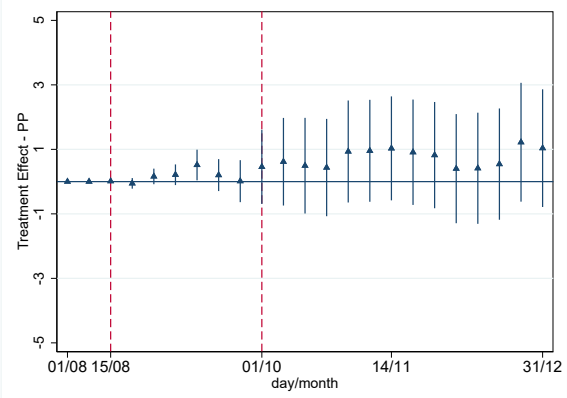
(d) Social Norm



(e) Soft-shaming



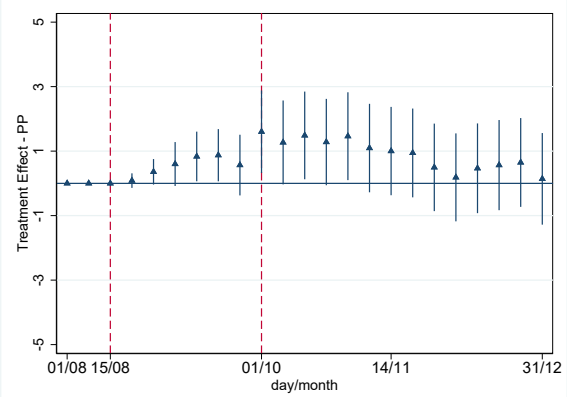
(f) Salience of Auditing



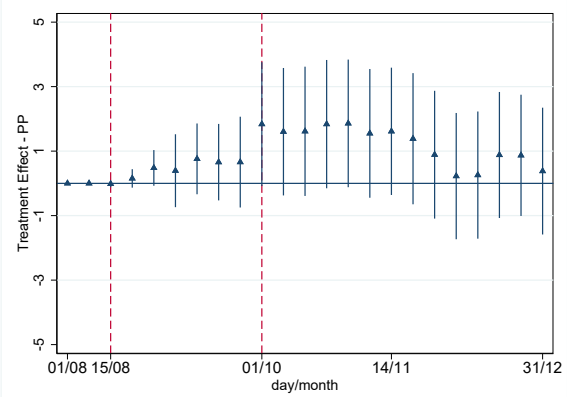
Note: Horizontal axis gives date at which the outcome was measured. Vertical axis is the treatment effect in percentage points, estimated by pooling data from all outcome periods, estimating Equation 1 with period dummy variables and one treatment dummy per period. Vertical bars represent 95% confidence intervals, where standard errors are clustered at the UGEL level. Dashed vertical lines indicate dates that SMS campaign began and ended.

Figure S3: Approved Expense Report - Main Experiment

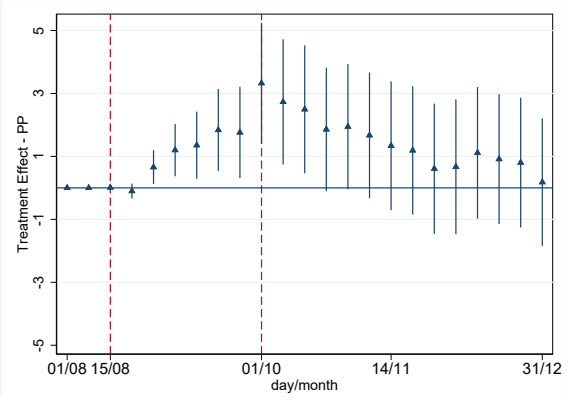
(a) SMS



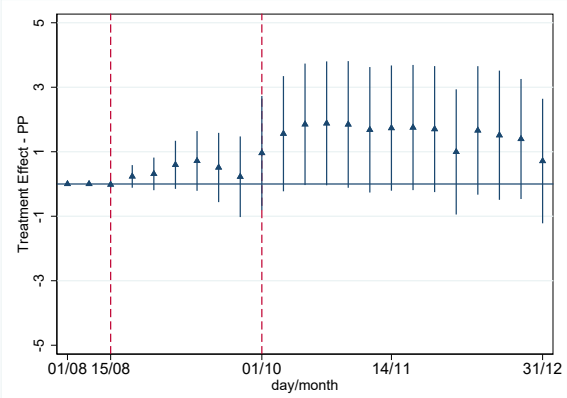
(b) Reminder/Warning



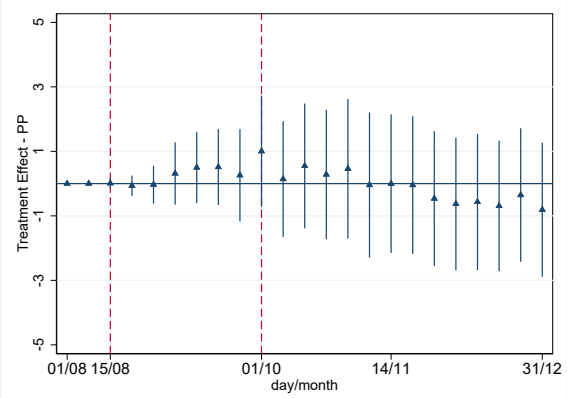
(c) Salience of Monitoring



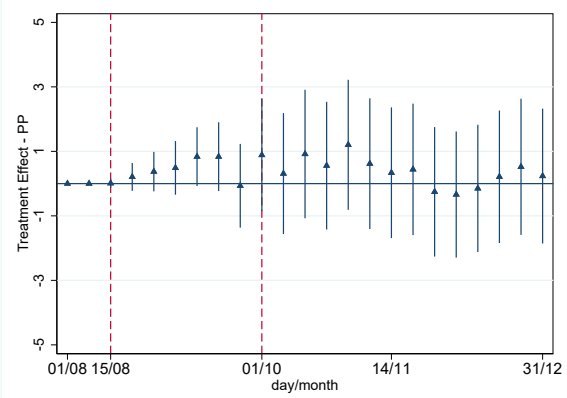
(d) Social Norm



(e) Soft-shaming



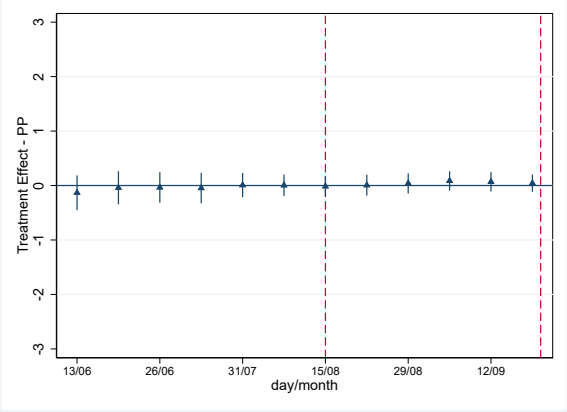
(f) Salience of Auditing



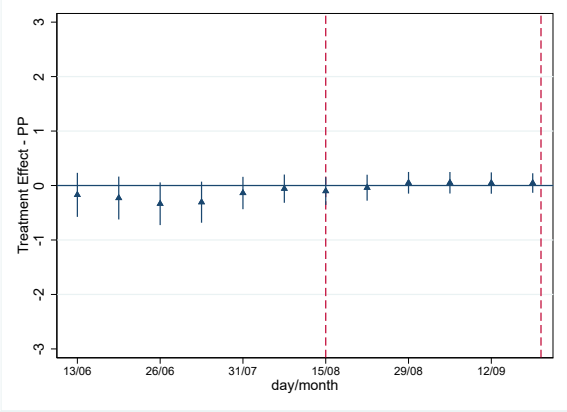
Note: Horizontal axis gives date at which the outcome was measured. Vertical axis is the treatment effect in percentage points, estimated by pooling data from all outcome periods, estimating Equation 1 with period dummy variables and one treatment dummy per period. Vertical bars represent 95% confidence intervals, where standard errors are clustered at the UGEL level. Dashed vertical lines indicate dates that SMS campaign began and ended.

Figure S4: Withdrew Something - Main Experiment

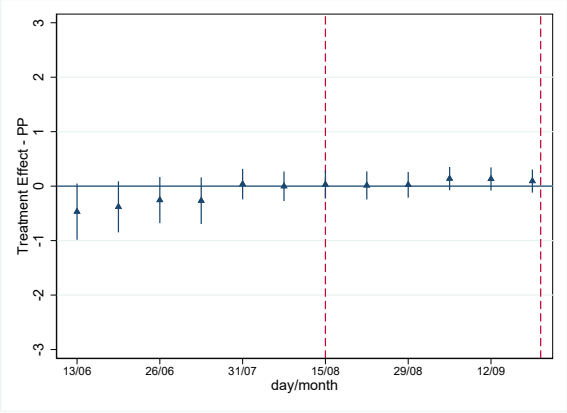
(a) SMS



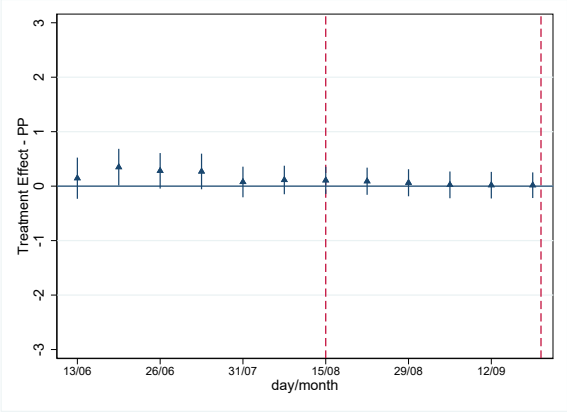
(b) Reminder/Warning



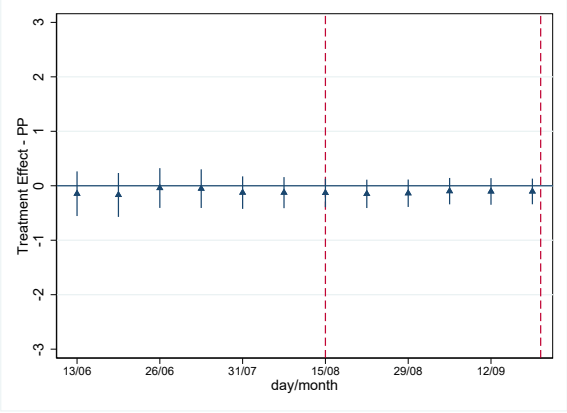
(c) Salience of Monitoring



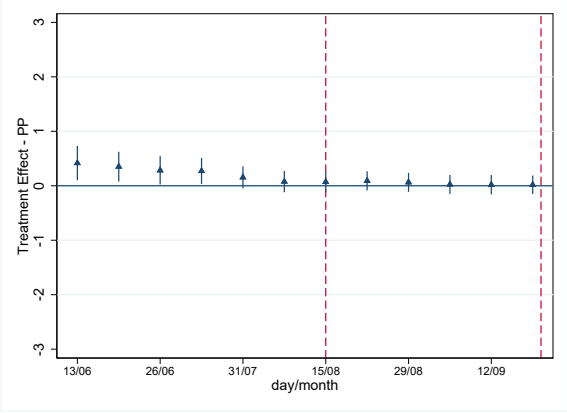
(d) Social Norm



(e) Soft-shaming



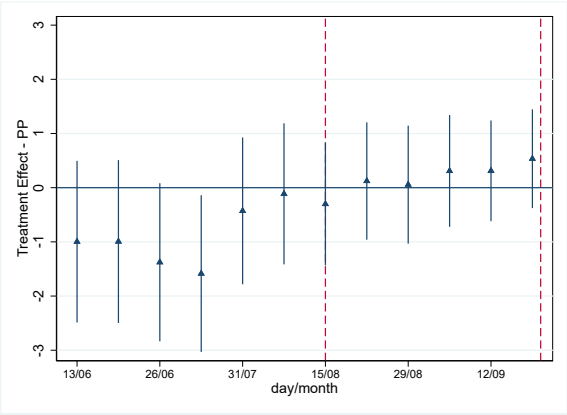
(f) Salience of Auditing



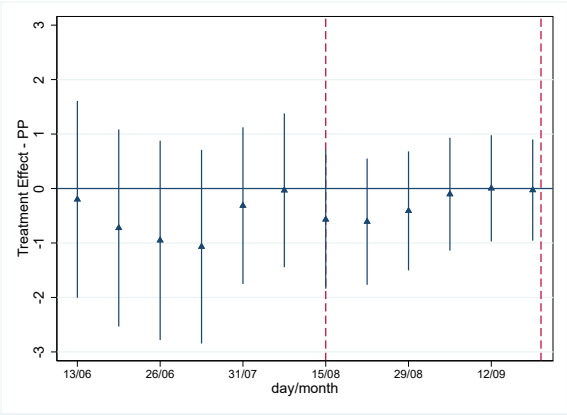
Note: Horizontal axis gives date at which the outcome was measured. Vertical axis is the treatment effect in percentage points, estimated by pooling data from all outcome periods, estimating Equation 1 with period dummy variables and one treatment dummy per period. Vertical bars represent 95% confidence intervals, where standard errors are clustered at the UGEL level. Dashed vertical lines indicate dates that SMS campaign began and ended.

Figure S5: Withdrew 50% - Main Experiment

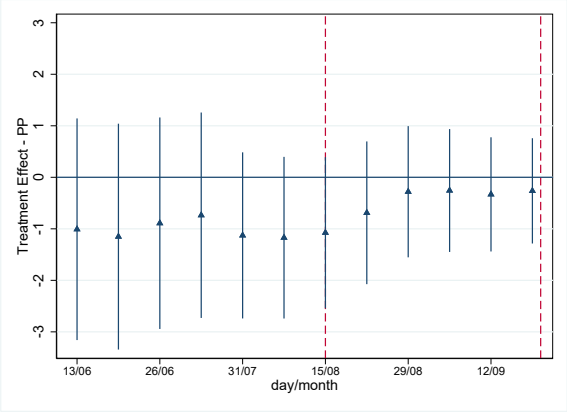
(a) SMS



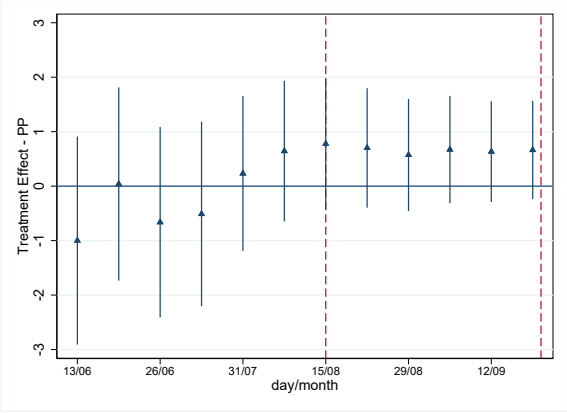
(b) Reminder/Warning



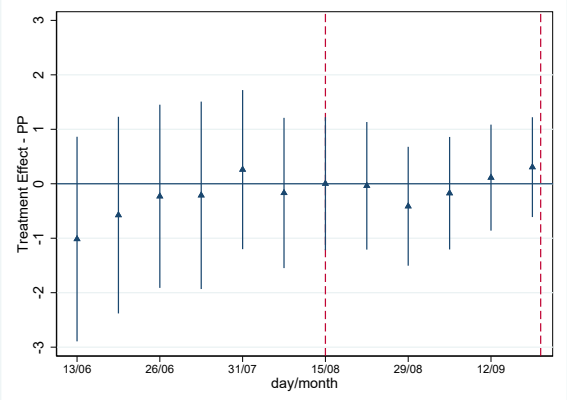
(c) Salience of Monitoring



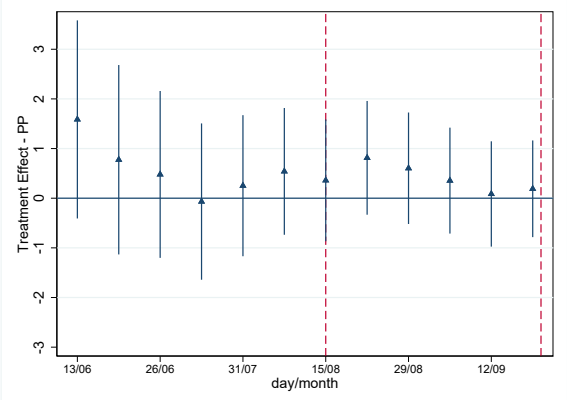
(d) Social Norm



(e) Soft-shaming



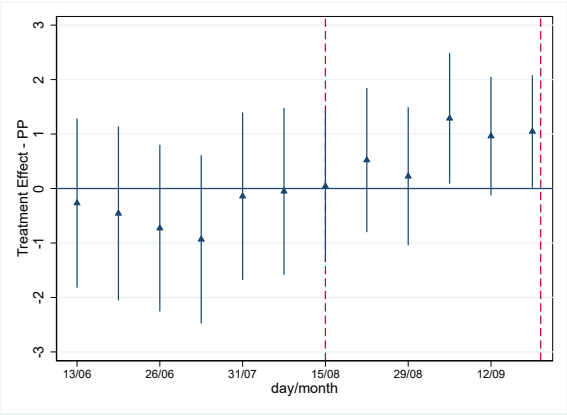
(f) Salience of Auditing



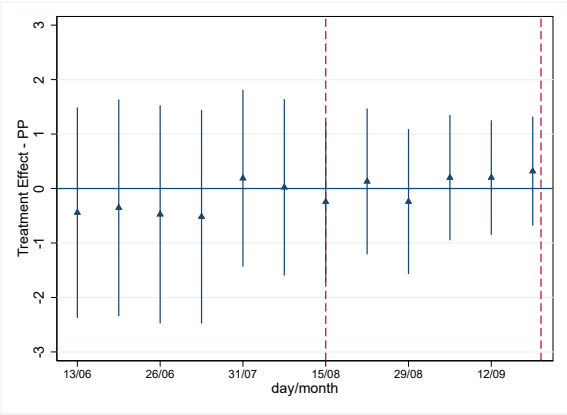
Note: Horizontal axis gives date at which the outcome was measured. Vertical axis is the treatment effect in percentage points, estimated by pooling data from all outcome periods, estimating Equation 1 with period dummy variables and one treatment dummy per period. Vertical bars represent 95% confidence intervals, where standard errors are clustered at the UGEL level. Dashed vertical lines indicate dates that SMS campaign began and ended.

Figure S6: Withdrew 95% - Main Experiment

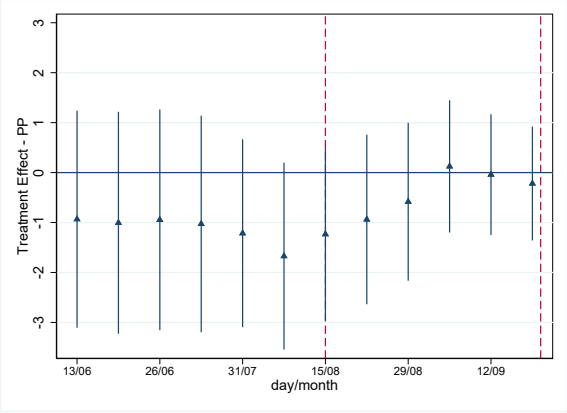
(a) SMS



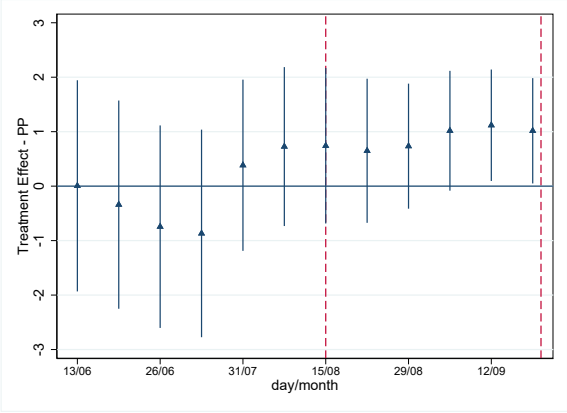
(b) Reminder/Warning



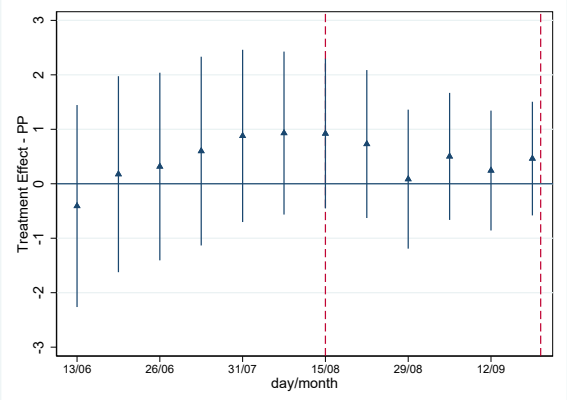
(c) Salience of Monitoring



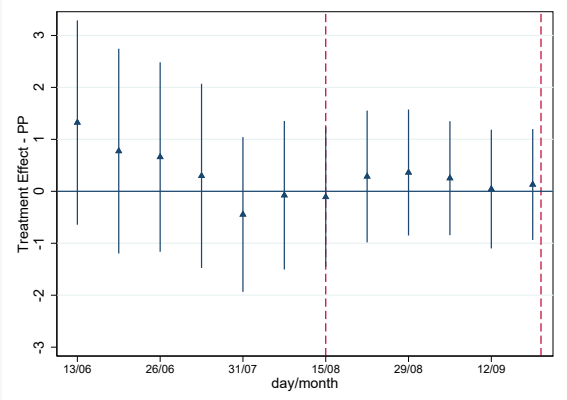
(d) Social Norm



(e) Soft-shaming



(f) Auditing Threat

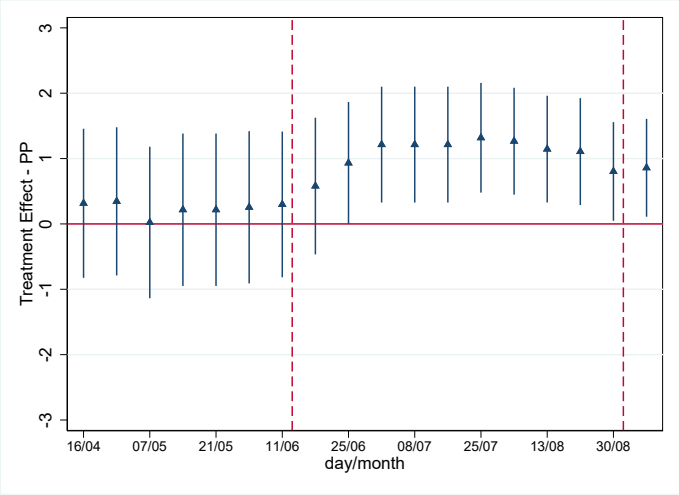


Note: Horizontal axis gives date at which the outcome was measured. Vertical axis is the treatment effect in percentage points, estimated by pooling data from all outcome periods, estimating Equation 1 with period dummy variables and one treatment dummy per period. Vertical bars represent 95% confidence intervals, where standard errors are clustered at the UGEL level. Dashed vertical lines indicate dates that SMS campaign began and ended.

Figure S7: SMS Content in Follow-Up Experiment in 2016

Note: Number is the sample size of civil servants assigned to the corresponding treatment. Maintenance activity portion of message corresponds to the point in the cycle when the message was sent, as in the main experiment (general activities, funds withdrawal, and expense report filing).

Figure S8: Treatment Effect on Withdrawal of 99% of Bank Balance, by Week, Follow-Up Experiment

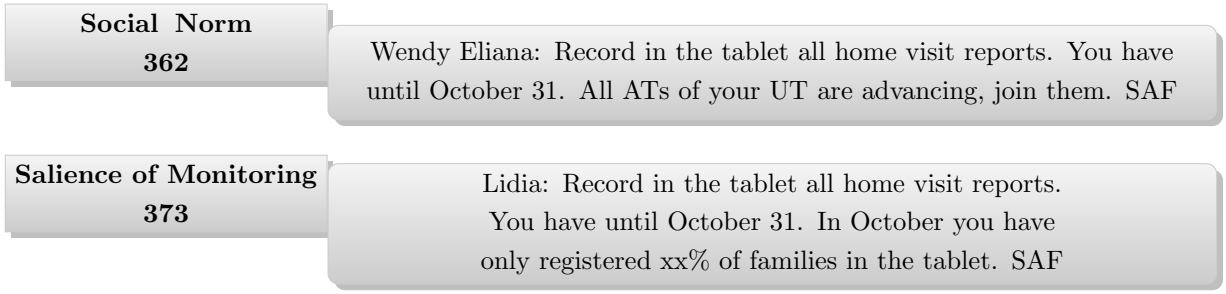


Note: Horizontal axis gives date at which the outcome was measured. Vertical axis is the treatment effect in percentage points, estimated by pooling data from all outcome periods, estimating Equation 1 with period dummy variables and one treatment dummy per period. Vertical bars represent 95% confidence intervals, where standard errors are clustered at the UGEL level. Dashed vertical lines indicate dates that SMS campaign began and ended.

Figure S9: Timing of the External Validity Experiment. CUNA MAS Intervention

Note: Authors' elaboration. Each square represents a relevant date in the intervention cycle.

Figure S10: SMS Content in External Validity Experiment



Note: Authors' elaboration. Each message includes the person's name and the deadline to comply with the activity. The rest of the content varies according to the behavioral principle to be emphasized. This example corresponds to the 2nd month of the campaign. All of the messages delivered are described in the Online Appendix (Table S4). Number is the sample size of civil servants (ATs) assigned to the corresponding treatment.

Table S1. SMS in the Main Experiment

	Treatment	SMS
Maintenance Activities	Reminder/Warning	YRMA: REMEMBER, perform maintenance activities according to the file registered in Wasichay. For more details, visit www.pronied.gob.pe.
	Salience of Monitoring	LUCILA: Perform maintenance activities according to the file registered in Wasichay. You have pending activities.
	Social Norm	BENJAMIN: Perform maintenance activities according to the file registered in Wasichay. The rest of schools in your UGEL are advancing. You are behind.
	Soft-shaming	ADRIAN: Perform maintenance activities according to the file registered in Wasichay. We will publish the names of schools and civil servants that do not comply.
	Salience of Auditing	KARINA: Perform maintenance activities according to the file registered in Wasichay.We will visit your school to supervise activities.
Withdrawal of Allocation Transfer	Reminder/Warning	YRMA: REMEMBER, withdraw the allocated transfer for maintenance. For more details consult the specialist of your UGEL.
	Salience of Monitoring	LUCILA: Withdraw the allocated transfer for maintenance.
	Social Norm	BENJAMIN: Withdraw the allocated transfer for maintenance. 89% of schools in your UGEL have already withdrawn the allocated amount. You are behind.
	Soft-shaming	ADRIAN: Withdraw the allocated transfer for maintenance. We will publish the names of schools and civil servants that do not comply.
	Salience of Auditing	KARINA: Withdraw the allocated transfer for maintenance. We will visit your school to supervise activities.
Declare Expenditure	Reminder/Warning	YRMA: ALERT! Declare maintenance expenses before September 30th. For more details consult the specialist of your UGEL.
	Salience of Monitoring	LUCILA: Declare maintenance expenses before September 30th. You have S/.2000 still undeclared in the Wasichay system.
	Social Norm	BENJAMIN: Declare maintenance expenses before September 30th. The rest of the schools in your UGEL are advancing. You are behind.
	Soft-shaming	ADRIAN: Declare maintenance expenses before September 30th. We will publish the names of schools and civil servants that do not.
	Salience of Auditing	KARINA: Declare maintenance expenses before September 30th. We will visit your school to supervise activities.
Declare all the Allocated Transfer	Reminder/Warning	YRMA: URGENT! Declare all the allocated transfer before September 30th. For more details consult the specialist of your UGEL.
	Salience of Monitoring	LUCILA: Declare all the allocated transfer before September 30th. You have S/.2000 without declaring in the Wasichay system.
	Social Norm	BENJAMIN: Declare all the allocated transfer before September 30th. The rest of schools in your UGEL are advancing. You are behind.
	Soft-shaming	ADRIAN: Declare all the allocated transfer before September 30th. We will publish the names of schools and civil servants that do not comply.
	Salience of Auditing	KARINA: Declare all the allocated transfer before September 30th. We will visit your school to supervise activities.

Note: The compliance percentages and bank balance amounts are examples. Actual messages corresponded to each civil servant's case.

Table S2. Full List of Variable Definitions

Variable	Definition
Panel A: Pre-treatment Outcomes	
Submitted to Maintenance Committee at Week 20	Percentage of schools that had formed a maintenance comittee at week 20 after the maintance funds had been assigned.
Submitted to Oversight Committee at Week 20	Percentage of schools that had formed an oversight committee at week 20 after the maintenance funds had been assigned.
Submitted Technical Form at Week 20	Percentage of schools that had submitted a technical form to their corresponding UGEL at week 20 after the maintenance funds had been assigned.
Submitted Commitment Act at Week 20	Percentage of schools that had submitted a commitment act at week 20 after the maintenance funds had been assigned.
Submitted Expense Report at Week 20	Percentage of schools that had submitted an expense report at week 20 after the maintenance funds had been assigned.
Submitted Oversight Report at Week 20	Percentage of schools that had submitted an oversight report at week 20 after the maintenance funds had been assigned.
With Approved Expense Report at Week 20	Percentage of schools that had their expenses report approved by their corresponding UGEL at week 20 after the maintenance funds had been assigned.
Bank Balance at 26/06/2016	Bank Balance at 26/06/2016.
Panel B: Outcomes	
Submitted Commitment Act at Week 30	Percentage of schools that had submitted a commitment act at week 30 after the maintenance funds had been assigned.
Submitted Expense Report at Week 30	Percentage of schools that had submitted an expense report at week 30 after the maintenance funds had been assigned.
Submitted Oversight Report at Week 30	Percentage of schools that had submitted an oversight report at week 30 after the maintenance funds had been assigned.
With Approved Expense Report at Week 30	Percentage of schools that had their expense report approved by their corresponding UGEL at week 30 after the maintenance funds had been assigned.
Proportion Withdrawn	Proportion of assigned funds withdrawn from National Bank account.
Withdrew Something	Percentage of maintenance civil servants who withdrew any positive amount from the assigned funds.
Withdrew 50%	Percentage of maintenance civil servants who withdrew at least 50% from the assigned funds.
Withdrew 80%	Percentage of maintenance civil servants who withdrew at least 80% from the assigned funds.
Withdrew 95%	Percentage of maintenance civil servants who withdrew at least 95% from the assigned funds.
Withdrew 99%	Percentage of maintenance civil servants who withdrew at least 99% from the assigned funds.

Table S2. Full List of Variable Definitions (Continued)

Variable	Definition
Panel C: Maintenance CS Characteristics	
Sex	Dummy that takes the value of 1 if the chosen maintenance civil servant is male and 0 otherwise.
Age	Age of the chosen maintenance civil servant.
Appointed Maintenance CS	Dummy that takes the value of 1 if the maintenance civil servant was appointed and 0 otherwise.
Hired Maintenance CS	Dummy that takes the value of 1 if the maintenance civil servant was hired and 0 otherwise.
Allocation Transfer	Total amount of money that was allocated to the maintenance civil servant.
Panel D: School Characteristics	
Classrooms	Total number of classrooms in the school.
Students	Total number of students in the school.
Bathroom Connected to Public Drainage System	Dummy that takes the value of 1 if the school's bathrooms were connected to the public drainage system and 0 otherwise.
Bathroom Connected to Septic Tank	Dummy that takes the value of 1 if the school's bathrooms were connected to a septic tank and 0 otherwise.
Bathroom Connected to a Black Well	Dummy that takes the value of 1 if the school's bathrooms were connected to a black well and 0 otherwise.
Bathroom Connected to River, Ditch or Canal	Dummy that takes the value of 1 if the school's bathrooms were connected to a river, ditch or canal and 0 otherwise.
No Bathroom	Dummy that takes the value of 1 if the school didn't have bathrooms and 0 otherwise.
Total Land Area	Total school area in squared meters.
Fully fenced	Dummy that takes the value of 1 if the school was fully fenced and 0 otherwise.
Partially Fenced	Dummy that takes the value of 1 if the school had a partial fence and 0 otherwise.
Unfenced	Dummy that takes the value of 1 if the school was unfenced and 0 otherwise.
Number Educ-Admin Spaces	Total number of educative/administrative spaces (classrooms, computer rooms, laboratories, workshops, libraries, teacher's rooms and gyms).
Number of Buildings	Total number of independent buildings or pavilions in the school where an independent building or pavilion is defined to be an edification with one or more classrooms with common walls and/or roofs distributed among one or more floors.
Average Leaks in Pavilions	Average number of leaks, fissures and cracks in the classrooms.
Average Leaks	Average number of leaks in the classrooms.

Table S2. Full List of Variable Definitions (Continued)

Variable	Definition
Panel E: District Characteristics	
Altitude	Altitude of the district measured in meters above the sea level.
Area	Dummy that takes the value of 1 if the district is located in a rural area and 0 otherwise.
Electricity	Dummy that takes the value of 1 if the district has access to electricity.
Public Drinking Water Network	Dummy that takes the value of 1 if the district has a drinking water network.
Public Drainage Network	Dummy that takes the value of 1 if the district has a drainage network.
Internet Cafe	Dummy that takes the value of 1 if the district has access to internet.
Bank Branch	Dummy that takes the value of 1 if there is a banking institution in the district.
Panel F: Treatments	
SMS	Dummy that takes the value of 1 if the maintenance civil servant received any kind of SMS message.
Reminder/Warning	Dummy that takes the value of 1 if the maintenance civil servant received an SMS message of the Reminder/Warning type.
Social Norm	Dummy that takes the value of 1 if the maintenance civil servant received an SMS message of the Social Norm type.
Salience of Monitoring	Dummy that takes the value of 1 if the maintenance civil servant received an SMS message of the Monitoring type.
Soft-shaming	Dummy that takes the value of 1 if the maintenance civil servant received an SMS message of the Shaming type.
Salience of Auditing	Dummy that takes the value of 1 if the maintenance civil servant received an SMS message of the Auditing Threat type.

Table S3. Lee (2009) Bounds-Withdrawal of Maintenance Funds in the Main Experiment

	(1)	(2)	(3)	(4)	(5)
Variable	**Withdraw Something**	**Withdraw 50%**	**Withdraw 80%**	**Withdraw 95%**	**Withdraw 99%**
SMS	0.623	0.043	0.534	1.048**	1.458**
	(0.445)	(0.081)	(0.463)	(0.523)	(0.572)
Lower	0.619	0.043	0.531	1.037**	1.463***
	(0.388)	(0.083)	(0.400)	(0.460)	(0.478)
Upper	0.667*	0.091	0.579	1.085**	1.512***
	(0.389)	(0.091)	(0.402)	(0.461)	(0.479)
Control mean	92.24	99.69	92.55	89.78	88.74
Controls	No	No	No	No	No
Observations	21,012	21,012	21,012	21,012	21,012

Note: Bounds are for outcomes indicated in each column and give Lee bounds under extreme assumptions about excess attrition in the National Bank data. Robust standard errors clustered at the UGEL level in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table S4. Heterogeneous Effects - Expense Report in the Main Experiment

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SMS	3.855***	4.815***	4.358***	3.286***	2.980***	2.730***	4.235***	4.947***	4.429***	4.082***	3.909***	3.155***
	(0.710)	(1.098)	(0.971)	(1.176)	(0.974)	(0.938)	(0.668)	(0.983)	(0.902)	(1.150)	(0.969)	(0.830)
School size > median X SMS		-1.704						-1.275				
		(1.286)						(1.205)				
Assigned budget > median X SMS			-1.254						-0.486			
			(1.367)						(1.297)			
Assigned budget per student > median X SMS				0.821						0.216		
				(1.310)						(1.309)		
Rurality X SMS					1.427						0.530	
					(1.232)						(1.239)	
Male X SMS						2.452*						2.359*
						(1.363)						(1.231)
Controls	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Observations	24,257	24,257	24,257	24,257	24,257	24,257	24,257	24,257	24,257	24,257	24,257	24,257

Note: Treatment effects and means are reported in percentage points. "SMS" pools all treatment arms. Rows below are from specifications that estimate interactions between treatment and pre-treatment covariates, controlling for the uninteracted covariate. Columns 7 to 12 include controls for personal characteristics (age, gender, type of contract), school characteristics (number of classrooms, number of buildings, land area, number of students, bathroom characteristics, distance to UGEL) and municipality characteristics (altitude, access to electricity, access to drinking water network, access to internet, availability of a bank branch), including dummies for missing observations. Table S2 contains the outcome, treatment and control variables' full definitions. Robust standard errors clustered at the UGEL level in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table S5. Heterogeneous Effect - Withdrew 99% in the Main Experiment

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SMS	1.458**	1.368*	1.167*	1.443*	1.137	1.249*	1.565***	1.372**	1.133**	1.798**	1.509	1.393**
	(0.572)	(0.711)	(0.620)	(0.857)	(1.038)	(0.664)	(0.519)	(0.637)	(0.553)	(0.800)	(1.011)	(0.609)
School size > median X SMS		0.170						0.385				
		(1.018)						(0.987)				
Assigned budget > median X SMS			0.660						1.095			
			(1.083)						(1.063)			
Assigned budget per student > median X SMS				0.018						-0.457		
				(1.036)						(1.014)		
Rurality X SMS					0.501						0.091	
					(1.248)						(1.227)	
Male X SMS						0.463						0.380
						(0.983)						(0.953)
Controls	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Observations	21,012	21,012	21,012	21,012	21,012	21,012	21,012	21,012	21,012	21,012	21,012	21,012

Note: Treatment effects and means are reported in percentage points. "SMS" pools all treatment arms. Rows below are from specifications that estimate interactions between treatment and pre-treatment covariates, controlling for the uninteracted covariate. Columns 7 to 12 include controls for personal characteristics (age, gender, type of contract), school characteristics (number of classrooms, number of buildings, land area, number of students, bathroom characteristics, distance to UGEL) and municipality characteristics (altitude, access to electricity, access to drinking water network, access to internet, availability of a bank branch), including dummies for missing observations. Table S2 contains the outcome, treatment and control variables' full definitions. Robust standard errors clustered at the UGEL level in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table S6. Descriptive Statistics for Follow-Up Experiment 2016

Variables	Mean	Std. Dev.	N
Pre-treatment Outcomes			
Submitted to Maintenance Committee at Week 15	0.883	0.321	31,947
Submitted to Oversight Committee at Week 15	0.882	0.322	31,947
Submitted Technical Form at Week 15	0.767	0.422	31,947
Submitted Commitment Act at week 15	0.742	0.438	31,947
Submitted Expense Report at Week 15	0.108	0.310	31,947
Submitted Oversight Report at Week 15	0.006	0.075	31,947
With Approved Expense Report at Week 15	0.013	0.114	31,947
Bank Balance at 14/05/2016	2,690.601	3,929.215	29,923
Bank Balance at 11/06/2016	1,553.681	3,182.365	31,733
Outcomes			
Submitted Commitment Act at week 43	0.923	0.266	31,947
Submitted Expense Report at Week 43	0.895	0.306	31,947
Submitted Oversight Report at Week 43	0.260	0.439	31,947
With Approved Expense Report at Week 43	0.536	0.499	31,947
Proportion Withdrawn	0.934	0.233	31,938
Withdrew Something	0.965	0.184	31,938
Withdrew 50%	0.938	0.242	31,938
Withdrew 95%	0.910	0.287	31,938
Withdrew 99%	0.906	0.292	31,938
Maintenance CS Characteristics			
Sex (% Men)	0.463	0.499	30,296
Age	43.971	12.512	31,947
Allocation transfer	6,980.892	3,769.534	31,947
School Characteristics			
Classrooms	4.885	5.465	31,947
Students	85.172	575.136	31,945
Bathroom connected to Public Drainage System	0.341	0.474	31,947
Bathroom connected to Septic Tank	0.241	0.428	31,947
Bathroom connected to a Black Well	0.271	0.444	31,947
Bathroom connected to River, Ditch or Canal	0.029	0.169	31,947
No bathroom	0.068	0.252	31,947
Total land Area	6,525.701	55,689.016	31,947
Fully fenced	0.295	0.456	31,947
Partially fenced	0.242	0.428	31,947
Not fenced	0.412	0.492	31,947
Number educ-admin spaces	7.108	8.419	31,947
Number of buldings	2.030	2.138	31,947
Average leaks in pavillions	1.100	1.447	31,947
Average leaks	1.020	1.334	31,947
District Characteristics			
Altitude	2,044.217	1,463.912	31,947
Areal (%Rural)	0.348	0.476	31,947
Electricity	0.810	0.393	30,344
Public Drinking Water Network	0.646	0.478	30,343
Public Drainage Network	0.366	0.482	30,336
Internet Cafe	0.208	0.406	30,340
Bank Branch	0.098	0.298	30,342

Note: Author's elaboration based on MINEDU's administrative records. The table reports the means, standard deviations, minimum and maximum values, and the sample size. Sample includes all maintenance civil servants who had not submitted their expense report at the beginning of the SMS campaign.

Table S7. Effect of SMS campaign on withdrawal of maintenance funds, follow-up experiment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Variables	**Proportion Withdrawn**	**Withdraw Something**	**Withdraw 50%**	**Withdraw 95%**	**Withdraw 99%**	**Proportion Withdrawn**	**Withdraw Something**	**Withdraw 50%**	**Withdraw 95%**	**Withdraw 99%**
SMS	0.377	0.320	0.400	0.697	0.859*	0.414	0.353	0.436	0.736*	0.901**
	(0.345)	(0.287)	(0.357)	(0.444)	(0.453)	(0.341)	(0.283)	(0.353)	(0.441)	(0.449)
	[0.160]	[0.160]	[0.160]	[0.155]	[0.133]	[0.143]	[0.143]	[0.143]	[0.141]	[0.121]
Control mean	93.08	96.24	93.42	90.38	89.89	93.08	96.24	93.42	90.38	89.89
Controls	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Observations	31,938	31,938	31,938	31,938	31,938	31,938	31,938	31,938	31,938	31,938

Note: Treatment effects and means are reported in percentage points. Columns 6 to 10 include controls for personal characteristics (age, gender, type of contract), school characteristics (number of classrooms, number of buildings, land area, number of students, bathroom characteristics, distance to UGEL) and municipality characteristics (altitude, access to electricity, access to drinking water network, access to internet, availability of a bank branch), including dummies for missing observations. Table S1 in the Online Appendix contains the outcome, treatment and control variables' full definitions. Robust standard errors clustered at the UGEL level in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively. FDR sharpened q-values corresponding to hypothesis tests for treatment effects for all WASICHAY and withdrawal outcomes are in brackets.

Table S8. Attrition between main and follow-up experiments

	(1)	(2)
Variables	**Attrition**	**Attrition**
Treated 2015	-0.697	-0.681
	(0.659)	(0.640)
Control mean	27.57	27.57
Observations	24,257	24,257
Controls	No	Yes

Note: Dependent variable is an indicator for attrition between 2015 (main) and 2016 (follow-up) experiments. Sample is the full experimental sample from 2015. Treatment effects and means are reported in percentage points. Column 2 includes controls for personal characteristics (age, gender, type of contract), school characteristics (number of classrooms, number of buildings, land area, number of students, bathroom characteristics, distance to UGEL) and municipality characteristics (altitude, access to electricity, access to drinking water network, access to internet, availability of a bank branch), including dummies for missing observations. Robust standard errors clustered at the UGEL level in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table S9. SMS in External Validity (CUNA MAS) Experiment

	Treatment	SMS
Planning Meeting Sep/Oct/Nov/Jun 12th	Social Norm	Wendy Eliana: At the planning meeting, record in the tablet the visit reports to date. All ATs in your UT are advancing, join them. SAF
	Salience of Monitoring	Lidia: At the planning meeting, record in the tablet the visit reports to date. In October you only registered xx% of families in the tablet. SAF
Reminder Deadline Sep/Oct/Nov/Jun 21st	Social Norm	Wendy Eliana: Record in the tablet all home visit reports. You have until October 31. All ATs in your UT are advancing, join them. SAF
	Salience of Monitoring	Lidia: Record in the tablet all home visit reports. You have until October 31. In October you only registered xx% of families in the tablet. SAF
Reminder Deadline Sep/Oct/Nov/Jun 26th	Social Norm	Wendy Eliana: Record in the tablet all home visit reports. You have until October 31. All ATs in your UT are advancing, join them. SAF
	Salience of Monitoring	Lidia: Record in the tablet all home visit reports. You have until October 31. In October you only registered xx% of families in the tablet. SAF

Note: Authors' elaboration.

Table S10. Descriptive Statistics for External Validity experiment

Variables	Mean	Std. Dev.	N
Panel A: Pre-treatment Outcomes			
Compliance - August	0.669	0.369	1,113
Panel B: Outcomes			
Compliance - September	0.663	0.367	1,090
Compliance - October	0.660	0.394	1,075
Compliance - November	0.697	0.361	1,075
Compliance - December	0.730	0.376	1,075
Compliance - January	0.759	0.326	1,058
Panel C: Civil Servant Characteristics			
Sex (% Men)	0.432	0.496	1,116
Experience at CUNA MAS (years)	0.583	0.493	1,116
Postgraduate	0.192	0.394	1,116
Graduate	0.635	0.482	1,116
Technician	0.051	0.220	1,116
Another level of study	0.069	0.254	1,116
Language - Aimara	0.010	0.099	1,116
Language - Spanish	0.665	0.472	1,116
Amazonian language	0.004	0.067	1,116
Language -Quechua	0.264	0.441	1,116
Identified - Province	0.279	0.449	1,116
Identified - Coast	0.036	0.186	1,116
Identified - Jungle	0.111	0.314	1,116
Identified -Sierra	0.518	0.500	1,116
Not Peruvian	0.004	0.060	1,116
Panel D: Living Conditions			
Stereo	0.675	0.469	1,116
Television	0.874	0.332	1,116
Computer	0.748	0.434	1,116
Washing machine	0.252	0.434	1,116
Bicycle	0.211	0.409	1,116
Panel E: CUNA MAS Program			
How many CS record the information?	7.1	2.6	1,057
Has SAF delivered you a tablet?	0.905	0.293	1,116
Functional tablet	0.877	0.328	1,116

Note: Author's elaboration based on CUNA MAS's administrative records and a survey designed for this study. The table reports the means, standard deviations, minimum and maximum values, and the sample size.

Table S11. Randomization Balance Analysis for External Validity Experiment

	(1)	(2)	(3)	(4)
Variable	**Control**	**Social Norm**	**Salience of Monitoring**	**Joint Hypothesis**
Panel A: Pre-treatment Outcomes				
Compliance - August	0.683	0.664	0.657	0.739
	(0.024)	(0.024)	(0.025)	
Panel B: Civil Servant Characteristics				
Sex (% Men)	0.410	0.433	0.453	0.688
	(0.035)	(0.035)	(0.035)	
Experience at CUNA MAS (years)	0.595	0.576	0.579	0.916
	(0.035)	(0.035)	(0.034)	
Postgraduate	0.195	0.219	0.163	0.318
	(0.028)	(0.029)	(0.025)	
Graduate	0.608	0.652	0.648	0.598
	(0.034)	(0.033)	(0.033)	
Technician	0.062	0.028	0.061	0.100
	(0.016)	(0.011)	(0.016)	
Another level of study	0.065	0.076	0.067	0.902
	(0.017)	(0.019)	(0.018)	
Language - Aimara	0.010	0.008	0.011	0.968
	(0.008)	(0.006)	(0.008)	
Language - Spanish	0.639	0.697	0.661	0.467
	(0.034)	(0.033)	(0.034)	
Amazonian language	0.005	0.003	0.005	0.841
	(0.004)	(0.003)	(0.005)	
Language -Quechua	0.270	0.261	0.261	0.974
	(0.031)	(0.032)	(0.031)	
Identified - Province	0.252	0.287	0.299	0.541
	(0.030)	(0.032)	(0.032)	
Identified - Coast	0.026	0.039	0.043	0.562
	(0.010)	(0.014)	(0.014)	
Identified - Jungle	0.094	0.129	0.112	0.480
	(0.019)	(0.023)	(0.021)	
Identified -Sierra	0.553	0.514	0.485	0.387
	(0.035)	(0.035)	(0.035)	
Not Peruvian	0.005	0.006	0.000	0.367
	(0.005)	(0.006)	(0.000)	
Panel C: Living Conditions				
Stereo	0.691	0.646	0.685	0.574
	(0.032)	(0.033)	(0.033)	
Television	0.857	0.893	0.872	0.527
	(0.024)	(0.021)	(0.024)	
Computer	0.706	0.764	0.776	0.237
	(0.032)	(0.030)	(0.030)	
Washing machine	0.255	0.264	0.237	0.811
	(0.031)	(0.030)	(0.029)	
Bicycle	0.216	0.222	0.197	0.814
	(0.030)	(0.029)	(0.027)	
Panel D: CUNA MAS Program				
How many CS record the information?	7.316	7.000	7.011	0.390
	(0.183)	(0.182)	(0.193)	
Has SAF delivered you a tablet?	0.875	0.930	0.912	0.196
	(0.024)	(0.019)	(0.020)	
Functional tablet	0.834	0.919	0.883	0.034
	(0.026)	(0.020)	(0.022)	
Observations	385	356	375	

Note: Authors' elaboration. For each treatment arm, means and standard errors are reported for each pre-treatment variable. Final column is the p-value for the test of equality of means across all groups.

Table S12. SMS effects on Number of Visits Field Monitor Must Report

	(1)	(2)	(3)	(4)
Variables	**Visits**	**Visits**	**Visits**	**Visits**
SMS	-0.516	-1.053	-0.220	-0.263
	(1.611)	(1.384)	(0.272)	(0.266)
Social Norm	-1.107	-1.457	-0.385	-0.464
	(1.855)	(1.612)	(0.293)	(0.287)
Salience of Monitoring	0.039	-0.677	-0.066	-0.076
	(1.877)	(1.579)	(0.323)	(0.316)
Control mean	56.22	56.22	56.22	56.40
p-value for Social Norm = salience of Monitoring	0.543	0.624	0.274	0.174
Observations	5,373	5,373	5,368	3,220
Controls	No	Yes	Yes	Yes
Baseline	No	No	Yes	Yes
October and December	Yes	Yes	Yes	No

Note: Dependent variable is the number of home visits for which the field monitor must submit an online report. "SMS" pools both treatment arms. Rows below are from specifications that estimate separate effects for each treatment arm. Columns 3 and 4 include controls for gender, length of tenure on the job, and fixed effects for the regional office (Territorial Unit) overseeing the civil servant. Standard errors clustered at the civil servant level in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively. p-values are for equality of treatment effects between social norm and salience of monitoring treatments.

Table S13. Effects of SMS Campaign on Infrastructure Quality, Follow-Up Experiment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Variables	**Walls in Bad Condition**	**Ceilings in Bad Condition**	**Floors in Bad Condition**	**Windows in Bad Condition**	**Doors in Bad Condition**	**Bathroom Sinks in Bad Condition**	**Walls in Bad Condition**	**Ceilings in Bad Condition**	**Floors in Bad Condition**	**Windows in Bad Condition**	**Doors in Bad Condition**	**Bathroom Sinks in Bad Condition**
SMS	0.102	-0.278	0.193	-0.686	-1.134	-2.902*	0.047	-0.320	0.171	-0.693	-1.145	-3.076**
	(0.572)	(0.690)	(0.874)	(0.535)	(0.933)	(1.565)	(0.565)	(0.682)	(0.873)	(0.545)	(0.912)	(1.524)
Control mean	4.132	4.620	8.086	4.703	9.587	58.98	4.132	4.620	8.086	4.703	9.587	58.98
Controls	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,351	7,359	7,359	7,359	7,359	6,650	7,343	7,351	7,351	7,351	7,351	6,650

Note: Dependent variables are dummies equal to 1 if the surveyed teacher considered that the quality of that item of infrastructure was bad. Columns 7 to 12 include controls for personal characteristics (age, gender, type of contract), school characteristics (number of classrooms, number of buildings, land area, number of students, bathroom characteristics, distance to UGEL) and municipality characteristics (altitude, access to electricity, access to drinking water network, access to internet, availability of a bank branch), including dummies for missing observations. Table S1 in the Online Appendix contains the outcome, treatment and control variables' full definitions. Robust standard errors clustered at the UGEL level in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table S14. Effects of SMS Campaign on Furniture Quality, Follow-Up Experiment

Variables	(1) Teaching Desk in Bad Condition	(2) Teaching Chair in Bad Condition	(3) Student Chair in Bad Condition	(4) Student Desk in Bad Condition	(5) Board in Bad Condition	(6) Cupboard in Bad Condition	(7) Teaching Desk in Bad Condition	(8) Teaching Chair in Bad Condition	(9) Student Chair in Bad Condition	(10) Student Desk in Bad Condition	(11) Board in Bad Condition	(12) Cupboard in Bad Condition
SMS	-0.740	-0.545	0.097	-0.352	0.656	-0.083	-0.890	-0.494	0.077	-0.359	0.617	0.075
	(0.821)	(0.622)	(0.472)	(0.540)	(0.843)	(1.296)	(0.829)	(0.630)	(0.467)	(0.543)	(0.846)	(1.301)
Control Mean	4.771	3.740	2.838	3.565	8.209	7.401	4.771	3.740	2.838	3.565	8.209	7.401
Controls	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,058	6,132	7,285	7,214	7,312	3,777	6,050	6,124	7,277	7,206	7,304	3,771

Note: Treatment effects and means are reported in percentage points. All specifications include stratum fixed effects. Columns 7 to 12 include controls for personal characteristics (age, gender, type of contract), school characteristics (number of classrooms, number of buildings, land area, number of students, bathroom characteristics, distance to UGEL) and municipality characteristics (altitude, access to electricity, access to drinking water network, access to internet, availability of a bank branch), including dummies for missing observations. Table S1 in the Online Appendix contains the outcome, treatment and control variables' full definitions. Robust standard errors clustered at the UGEL level in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.

Table S15. Effects of SMS Campaign on Infrastructure Stock, Follow-Up Experiment

	(1)	(2)	(3)	(4)
Variables	**Have Hygienic Service**	**Toilets Number**	**Have Hygienic Service**	**Toilets Number**
SMS	-0.131	0.185	-0.105	-0.007
	(0.298)	(0.378)	(0.298)	(0.302)
Control mean	99.19	7.425	99.19	7.425
Controls	No	No	Yes	Yes
Observations	7,485	7,485	7,485	7,485

Note: Treatment effects and means in columns 1 and 3 are reported in percentage points. All specifications include stratum fixed effects. Columns 3 and 4 include controls for personal characteristics (age, gender, type of contract), school characteristics (number of classrooms, number of buildings, land area, number of students, bathroom characteristics, distance to UGEL) and municipality characteristics (altitude, access to electricity, access to drinking water network, access to internet, availability of a bank branch), including dummies for missing observations. Table S1 in the Online Appendix contains the outcome, treatment and control variables' full definitions. Robust standard errors clustered at the UGEL level in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively.