Reporting Peers' Wrongdoing: Evidence on the Effect of Incentives on Morally Controversial Behavior

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JEEA Teaching Material

Motivation – Reporting Peers' Wrongdoing

- Principals sometimes solicit information from the agents' peers
  - Positive information helps agents access government benefits, jobs, and loans
  - Negative information about their wrongdoing harms agents
    - Examples: denunciations, crime-reporting, and whistleblowing
- **Viability of peer reporting as tool against public employees absence**
  - **Are public servants willing to inform the government on their colleagues?**

Motivation – Incentives for Morally Controversial Behaviors

- Reporting peers' wrongdoing is morally controversial
  - Prosocial – it protects the victims by preventing future misconduct
  - Antisocial – it harms the reported peers
- Financial incentives for reporting (SEC, IRS, Crime Stoppers)
  - Financial incentives sometimes backfire
    - Morally unacceptable to be paid for harming others
- **Efficacy of financial incentives for increasing peer reporting**
  - **Can moral concerns reverse the effect of financial incentives?**

This paper

- Field experiment with employees from Ministry of Education in Afghanistan
  - Participants asked to report absent colleagues
  - **Randomize financial incentives – no reward vs. monetary reward**
  - Randomize consequentiality of reports – no punishment vs. possible punishment
- Attitudinal survey and focus group discussion
- Audit visits and administrative data

- Goals:
  1. Measure willingness of public employees to report on their colleague attendance
  2. **Measure effect of financial incentive on morally controversial behavior**
  3. Explore mechanisms and understand motives for reporting
  4. Verify accuracy of reports

Preview of Results

1. Are employees willing to report their colleagues?
   - Without rewards, 15% of employees report absence when reports are consequential

2. Do monetary rewards increase reporting?
3. Do moral concerns reverse the effect of monetary rewards?
   - Incentives backfire when the decision is morally controversial:
     With rewards, only 10% of employees report absence when reports are consequential
   - Incentives increase reporting when the reports are inconsequential

- **Employees share the government's goal of reducing absence**
- **Employees are morally averse to being paid for harming their peers**

Related Literature

- Morality and financial incentives
  - Prosocial behavior (Frey and Oberholzer-Gee, 1997; Gneezy and Rustichini, 2000; Bénabou and Tirole, 2006; Ariely, Bracha and Meier, 2009; Lacetera, Macis and Slonim, 2012; Deserranno, 2019)
  - Antisocial behavior (Falk and Szech, 2013, 2017; Falk, 2017)
  - **Morally controversial behavior**
  - **New mechanism: moral aversion to being paid for harming others**

- Absence in the public sector (Banerjee and Duflo, 2006; Chaudhury et al., 2006; Duflo, Hanna and Ryan, 2012; Muralidharan et al., 2017)
  Technologies for monitoring service delivery (Bhatti, Kusek and Verheijen, 2014; Callen et al., 2018; Cilliers et al., 2018; Muralidharan et al., 2018)
  - **New personnel policy tool based on peer reporting**

- Whistleblowing and financial incentives
  - Correlational (Dyck, Morse and Zingales, 2010)
  - Lab experiments and vignettes (Butler, Serra and Spagnolo, 2019; Wallmeier, 2019; Farrar, Hausserman and Rennie, 2019)
  - **First field experiment**

Outline

1. Setting
2. Experimental Design
3. Results
4. Conclusion

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Setting – Kandahar, Nangarhar, and Parwan

Setting – School in Kandahar

Setting – School in Nangarhar

Setting – School in Parwan

Setting – Teachers' Absence in Afghanistan

- 28% of employees in the payroll not at school during unannounced visits to about 400 schools in three provinces (Blumenstock et al., 2019)
  - Average: 18% of teachers absent
  - Comparable to absence in India (Kremer et al., 2010) and other developing countries (Chaudhury et al., 2006; Bold et al., 2017), higher than US ($\sim$5%)
  - No absentee in 43% of schools

Setting – Focus Group with Teachers about Absence

- Why are employees absent?
  - Legitimate reasons (sickness, official leaves, insecurity)
  - Illegitimate reasons (second job, housework, laziness)
- Absenteeism should be punished (salary cut, transfers to remote locations)
- Absenteeism unpunished because of lack of monitoring and personal connections
- Why is absence a problem?
  - Students miss classes – social cost
  - Students disrupt other teachers' classes – private cost

Setting – Ideal for Studying Morally Controversial Behavior

- Tension between competing moral norms in decision to report colleagues' absence
  1. Daily interaction between colleagues heighten antisocial aspect of harming peers
  2. Prosocial aspect of reducing absence is salient among educators

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Experimental Design – Overview

- Sample of 2,040 MoE employees from 151 schools are asked to report on their colleagues' attendance
  - Over the phone
  - Identity remains confidential
- Randomize scripts used during phone calls, 2×2 design:
  - Monetary rewards
    - No monetary reward
    - Monetary reward
  - Consequentiality of the reports
    - No punishment: report not forwarded to MoE
    - Possible punishment: report might be forwarded to MoE
- Individual-level randomization, school-level stratification

Experimental Design – Timeline

- May 2018: First audit unannounced visit
- **August–September 2018: Experiment**
- November 2018: Second audit unannounced visit
- April 2019: Third audit unannounced visit

Experimental Design – Sample

- Sample of 151 schools:
  - ≥ 6 employees present during May 2018 audit
  - ≥ 7 employees absent during May 2018 audit
- Initial sample of 3,242 employees:
  - Present during May 2018 audit
  - Phone number available
- Final sample of 2,040 (62%) employees willing to participate ▸ Non-participants

Balance of Covariates – Participants

	Full sample	No Punishment		Possible Punishment		*p*-value
		No reward	Monetary reward	No reward	Monetary reward	
	(1)	(2)	(3)	(4)	(5)	(6)
Female	0.200	0.212	0.224	0.192	0.190	0.546
	(0.400)	[0.022]	[0.023]	[0.015]	[0.015]	
Age	40.6	40.4	40.4	41.2	40.1	0.476
	(13.6)	[0.7]	[0.7]	[0.5]	[0.5]	
Years of education	13.7	13.9	13.8	13.7	13.6	0.670
	(4.4)	[0.2]	[0.2]	[0.2]	[0.2]	
Ethnic group						
Pashtun	0.763	0.733	0.782	0.775	0.756	0.384
	(0.426)	[0.024]	[0.022]	[0.016]	[0.017]	
Tajik	0.200	0.223	0.180	0.188	0.212	0.353
	(0.400)	[0.022]	[0.021]	[0.015]	[0.016]	
Other	0.038	0.046	0.041	0.037	0.034	0.799
	(0.192)	[0.011]	[0.011]	[0.007]	[0.007]	
Salary (AFN)	7870	7856	7932	7871	7845	0.944
	(2051)	[107]	[120]	[76]	[80]	
Position						
Principal	0.033	0.029	0.047	0.030	0.031	0.569
	(0.178)	[0.009]	[0.012]	[0.007]	[0.007]	
Admin staff	0.069	0.067	0.056	0.065	0.080	0.522
	(0.253)	[0.013]	[0.013]	[0.009]	[0.010]	
Head teacher	0.063	0.087	0.068	0.064	0.047	0.106
	(0.243)	[0.015]	[0.014]	[0.009]	[0.008]	
Teacher	0.712	0.707	0.711	0.715	0.711	0.995
	(0.453)	[0.025]	[0.025]	[0.017]	[0.017]	
Other staff	0.124	0.110	0.118	0.127	0.131	0.767
	(0.330)	[0.017]	[0.018]	[0.013]	[0.013]	
Absence	0.276	0.257	0.281	0.271	0.289	0.285
	(0.261)	[0.014]	[0.014]	[0.010]	[0.010]	
Observations	2040	345	339	677	679	

Experimental Design – Reportable Colleagues

- List of 10 reportable colleagues:
  - 7 employees absent during May 2018 audit
  - 3 employees present during May 2018 audit
- Random order
- Same colleagues for all participants from same school
- Participants unaware of composition

Experimental Design – Treatments

Goals are to:

1. Estimate the effect of monetary rewards on reporting

		Financial incentives	
		No reward	Monetary rewards

Experimental Design – Treatments

Goals are to:

1. Estimate the effect of monetary rewards on reporting
2. Test whether moral concerns reverse the effect of incentives

		Financial incentives	
		No reward	Monetary rewards
Expected consequentiality	No punishment	(1)	(2)
	Possible punishment	(3)	(4)

Experimental Design – Treatments

Goals are to:

1. Estimate the effect of monetary rewards on reporting
2. Test whether moral concerns reverse the effect of incentives
3. Identify motives for reporting

		Financial incentives	
		No reward	Monetary rewards
Expected consequentiality	No punishment	(1)	(2)
	Possible punishment	(3)	(4)

Empirical Strategy – Main Specification

- $Y_i = \beta_0 + \beta_1 Reward_i + \beta_2 Punishment_i + \beta_3 Reward_i \times Punishment_i + \varepsilon_i$
  - Robust standard errors
- $Y_{ij} = \beta_0 + \beta_1 Reward_i + \beta_2 Punishment_i + \beta_3 Reward_i \times Punishment_i + \varepsilon_{ij}$
  - Standard errors clustered at participant level

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    a. Main Results
    b. Accuracy
    c. Mechanisms
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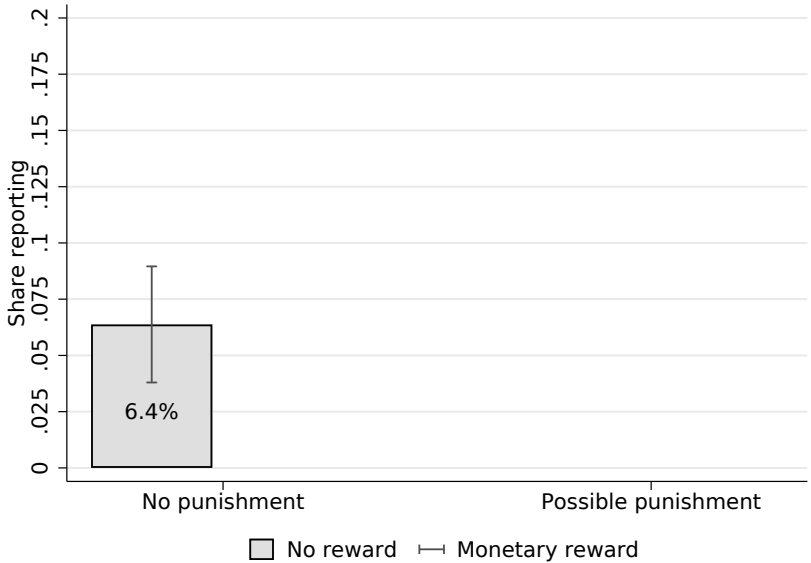
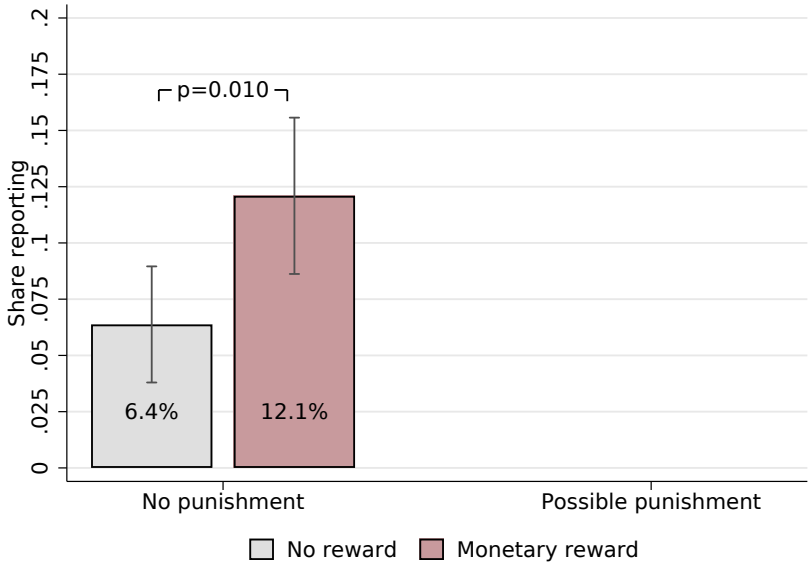
Treatment Effects: Reporting Recent Absence



Treatment Effects: Reporting Recent Absence



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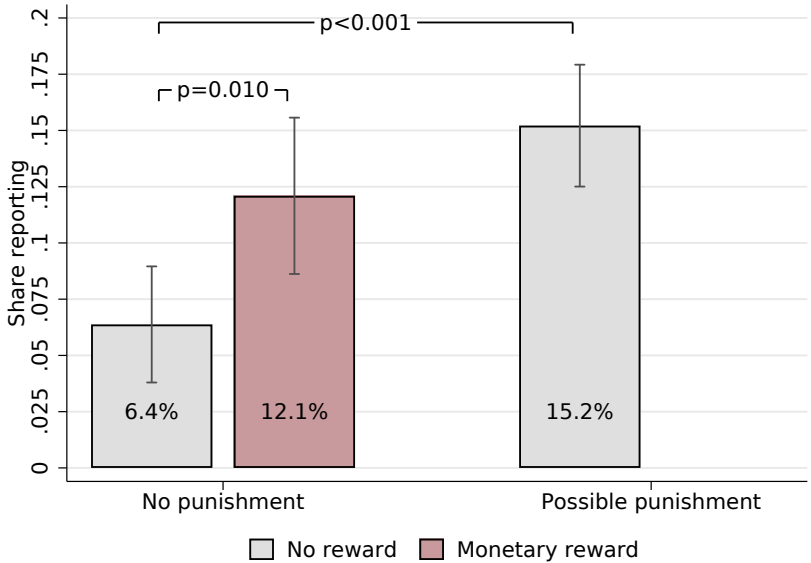

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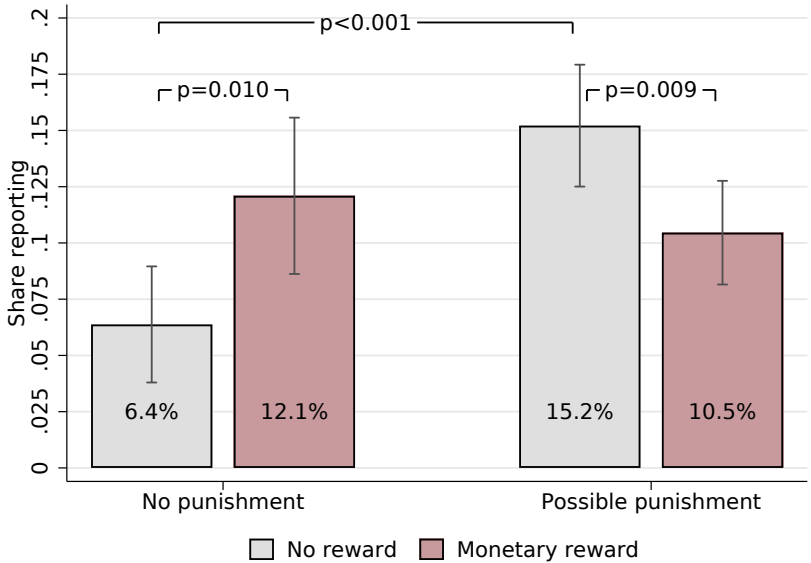

Treatment Effects: Reporting Recent Absence

	Dependent Variable		
	Dummy: respondent reported ≥ 1 absent colleague	Dummy: respondent reported specific colleague as absent	Dummy: respondent reported specific colleague as present
	(1)	(2)	(3)
Monetary reward	0.057***	0.008	-0.007
	[0.022]	[0.005]	[0.019]
Possible punishment	0.088***	0.013***	-0.022
	[0.019]	[0.005]	[0.016]
Monetary reward	-0.105***	-0.021***	0.048**
$\times$ Possible punishment	[0.029]	[0.006]	[0.023]
Constant	0.064***	0.013***	0.799***
	[0.013]	[0.003]	[0.013]
Observations	2,040	20,400	20,400
R^2	0.009	0.002	0.002

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Heterogeneity: Accuracy of Reports

- Reports are unverifiable
- Reports can be compared to other sources:
  1. Absence measured during unannounced visits
  2. Administrative data on monthly absence
  3. Reports from multiple employees about the same colleague
- Are employees absent according to other sources more likely to be reported?
- Do monetary incentives affect the accuracy of the reports?

Heterogeneity: Accuracy of Reports

	Dependent Variable					
	Dummy: respondent reported specific colleague as absent			Dummy: respondent reported specific colleague as present		
	(1)	(2)	(3)	(4)	(5)	(6)
Absence Index	0.014**	0.004	0.435**	-0.128***	-0.052***	-0.480*
	[0.006]	[0.005]	[0.193]	[0.020]	[0.019]	[0.252]
Absence Index						
× Monetary reward	0.005	0.008	0.113	-0.010	-0.012	0.133
	[0.008]	[0.009]	[0.279]	[0.031]	[0.026]	[0.329]
× Possible punishment	-0.006	0.005	-0.109	-0.032	-0.018	0.276
	[0.008]	[0.007]	[0.212]	[0.026]	[0.023]	[0.289]
× Monetary reward	-0.005	-0.007	-0.203	0.009	0.007	-0.051
× Possible punishment	[0.011]	[0.011]	[0.301]	[0.038]	[0.032]	[0.378]
Monetary reward	0.006	0.006	0.005	-0.001	-0.004	-0.008
	[0.005]	[0.005]	[0.005]	[0.026]	[0.021]	[0.020]
Possible punishment	0.017***	0.012***	0.015***	-0.002	-0.017	-0.026
	[0.005]	[0.005]	[0.004]	[0.022]	[0.018]	[0.017]
Monetary reward	-0.017**	-0.018***	-0.016***	0.043	0.047*	0.047*
× Possible punishment	[0.007]	[0.006]	[0.006]	[0.031]	[0.025]	[0.024]
Constant	0.005*	0.012***	0.005*	0.878***	0.816***	0.807***
	[0.003]	[0.003]	[0.003]	[0.018]	[0.015]	[0.014]
Absence Index Measure	Unannounced Visits	Administrative Records	Other Respondents	Unannounced Visits	Administrative Records	Other Respondents
Observations	20,400	20,400	20,288	20,400	20,400	20,288
R^2	0.003	0.003	0.017	0.018	0.008	0.003

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Survey Evidence: Attitudes towards Reporting

"Imagine a teacher is asked by someone from the Ministry of Education in Kabul to confidentially report the colleagues who are sometimes absent from school, in order to punish absenteeism. If the teacher knows that someone is sometimes absent, what is the right thing for the teacher to do?"

- 58% – Reporting absence
  - Important for future of students, school, country
  - Reduce absenteeism and corruption
  - Personal responsibility

- 42% – Not reporting
  - No authority
  - Tolerance of absence
  - Sympathy towards colleagues ▸ Heterogeneity: Ethnicity

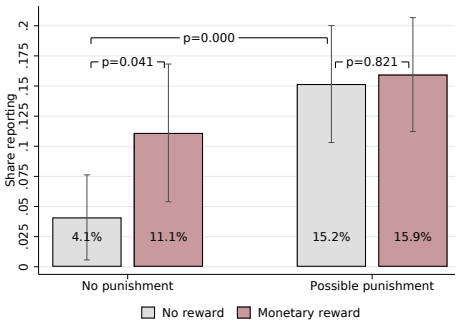
Survey Evidence: Attitudes towards Incentivized Reporting

"Now imagine that the teacher is also offered by the Ministry of Education 100 AFG for each colleague that he/she reports as absent. In this case, what is the right thing for the teacher to do?"

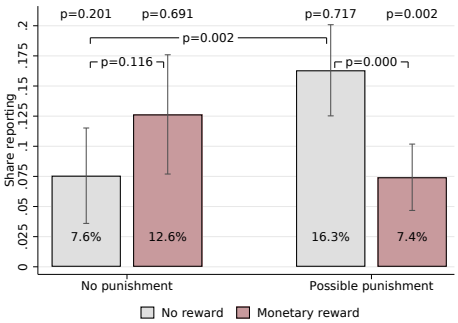
- 31% – Reporting absence
  - Important for future of students, school, country
  - Reduce absenteeism and corruption
  - Personal responsibility
- 69% – Not reporting
  - Morally unacceptable
  - Would report only without reward
  - No authority

Heterogeneity: Local Attitudes towards Incentivized Reporting

Majority of Colleagues Supports Incentivized Reporting



Majority of Colleagues Opposes Incentivized Reporting



Ruling out Alternative Explanations

Ruling out Alternative Explanations: Size of the Incentives

Do incentives backfire because...

... they are either too small or too large?

- No: incentives increase reporting in the no-punishment condition

Ruling out Alternative Explanations: Deontological Aversion to Rewards

Do incentives backfire because...

... of an aversion to being paid for reporting, independent of consequentiality?

- No: incentives increase reporting in the no-punishment condition

Ruling out Alternative Explanations: Signals for the Riskiness of Reporting

Do incentives backfire because...

they signal that reporting is risky?

1. Participants asked about riskiness of reporting
   - 75% fear retaliation
   - Fear unaffected by treatment status
2. Heterogeneity by fear of retaliation
   - Incentives backfire in both subsample

- No, but fear of retaliation decreases reporting

Heterogeneity: Perceived Riskiness of Reporting

	Dependent Variable			
	Dummy: respondent believed reporting was risky	Dummy: respondent reported ≥ 1 absent colleague		
		Perceived Riskiness		Difference
		Not risky	Risky	(risky - not risky)
	(1)	(2)	(3)	(4)
		Panel A. No Punishment		
No reward	0.733	0.098	0.051	-0.046
	[0.024]	[0.031]	[0.014]	[0.034]
Monetary reward	0.782	0.203	0.098	-0.105**
	[0.022]	[0.047]	[0.018]	[0.050]
Difference	0.048	0.105*	0.047**	-0.058
(monetary reward - no reward)	[0.033]	[0.056]	[0.023]	[0.056]
		Panel B. Possible Punishment		
No reward	0.744	0.220	0.129	-0.091***
	[0.017]	[0.032]	[0.015]	[0.035]
Monetary reward	0.758	0.171	0.083	-0.087***
	[0.016]	[0.029]	[0.012]	[0.032]
Difference	0.014	-0.049	-0.045**	0.003
(monetary reward - no reward)	[0.023]	[0.043]	[0.019]	[0.043]
		Panel C. Differences (possible punishment - no punishment)		
No reward	0.011	0.122***	0.078***	-0.044
	[0.029]	[0.044]	[0.020]	[0.044]
Monetary reward	-0.023	-0.032	-0.015	0.017
	[0.028]	[0.055]	[0.022]	[0.055]
Difference	-0.034	-0.154**	-0.092***	0.062
(monetary reward - no reward)	[0.040]	[0.071]	[0.030]	[0.077]
Observations	2,040	503	1,537	2,040
R^2	0.001	0.013	0.009	0.022

Back

Ruling out Alternative Explanations: Signals for Consequentiality

Do incentives backfire because...

... they signal that the government is committed to punishing absence?

- No: expected consequentiality increases reporting

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Policy Implications and Considerations

- Policy implications:
  - Monetary incentives should be used with caution when the incentivized behavior is morally controversial
  - Important to guarantee protection against retaliation
  - Legitimacy to government's efforts to contrast absenteeism

- Policy considerations:
  - General equilibrium effects should be taken into account and collusion should be discouraged
  - Possibility of reporting might be detrimental for the relationships between colleagues

Avenues for future research

- Analyzing how financial incentives operate in other settings where decisions are morally controversial is a useful direction for future research:
  - Moral considerations and size of financial incentives
  - Social-image concerns
  - Incentives for truth-telling

- Alternatives to financial incentives:
  - Material non-monetary incentives
  - Awards and recognition (private?)
  - Persuasion and moral appeals