Cooperation in the Workplace: *Experimental Evidence from Ugandan Bankers*

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Abstract

Organizations rely on peer-to-peer knowledge exchange among employees, yet incentivizing cooperative behaviors is a challenge. This study evaluates a human resources intervention designed to encourage peer support in the largest bank in Uganda. Using a cluster randomized controlled trial, we introduced a public recognition incentive—awarding employees identified as the most supportive by their peers and supervisors. Results show that the intervention increases employees' willingness to help by 21% in expertise-sharing and 12% in mentoring. The incentive's effectiveness stemms from its role in enhancing professional reputation and career prospects. A replication exercise in a second bank confirms the findings and the external validity of the results.

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1 Introduction

Organizations rely on the collaborative efforts of employees. Much of the expertise within firms is tacit—difficult to codify and often acquired only through experience. This tacit knowledge is transferred among employees through peer-to-peer exchange (Battiston et al., 2021). When experienced employees share job-specific knowledge with their peers, they reduce inefficiencies, enhance productivity, and accelerate learning (Hamilton et al., 2003; Sandvik et al., 2020; Battiston et al., 2021).

Yet, fostering cooperative behaviors is challenging. In many organizations, meaningful support to peers is difficult for management to observe, measure, or integrate into standard contracts. Consequently, firms incentivize easily quantifiable individual productivity, leading employees to focus their efforts on these tasks (Holmstrom & Milgrom, 1991; Auriol et al., 2002), even when less quantifiable tasks are valuable to the organization. This misalignment creates a tension between individual and organizational goals. Addressing this tension requires firms to simultaneously measure and incentivize individual performance and cooperative behaviors, particularly in firms where team-based incentives are not feasible.

In this paper, we evaluate a human resources intervention that incentivized peer support in the largest bank in Uganda. We developed a novel tool to assess the *cooperativeness* of bankers within the organization. Based on this assessment, we introduced an incentive in the form of public recognition. Awarded employees received a certificate acknowledging their *outstanding support to peers* during a branch-wide meeting. This incentive was identified as the most suitable option from both research and managerial perspectives after extensive discussions with the firm's top leadership. On the one hand, certificates were considered a valued signal of cooperation, an important skill in the organization and industry. On the other hand, monetary bonuses were dismissed due to their non-negligible cost and and uncertainty about unintended consequences.[1]

We evaluate this intervention using a pre-registered cluster randomized controlled trial. The study design includes one treatment arm and one control arm. In the treatment arm, branches participated in the recognition incentive program, while branches in the control arm continued with business as usual. Using peer assessments across more than 200 divisions in 78 bank branches, we determined the *level of cooperativeness* for each banker in the organization. The metric relied on peer voting: each employee identified individuals in their network from whom they frequently received help and selected the single most supportive person. To prevent gamification of the metric, supervisors also evaluated their direct reports cooperation, accounting for one-third of the final score. In the treatment branches, employees

[1]Economic research has shown that monetary incentives can have adverse effects, particularly when used to promote altruistic or prosocial tasks (Alfitian et al., 2023; Ashraf et al., 2020; Wagner et al., 2020). Social recognition and awards are well-established as powerful motivators in professional settings (Ashraf et al., 2014; Gallus et al., 2019).

ranked in the top 20% of cooperativeness were publicly awarded. Since the recognition was public, all employees in these branches, whether awarded or not, are considered treated.

The choice of an experimental design was grounded in the lack of controlled experiments in organizations assessing the effectiveness of such incentives. Observational approaches analyzing preexisting incentives for cooperative behaviors face challenges such as omitted variable bias and selection bias. Employees who help others may naturally possess stronger altruistic tendencies or incur lower marginal costs of helping, making it difficult to establish causality. Our RCT addresses these challenges by exogenously varying the provision of incentives to selected employees in randomly assigned branches.

The organization involved in this project employs 3,000 staff across various sections of commercial and corporate finance. Our study focuses on the credit division, which comprises over 1,200 bankers engaged in knowledge-intensive, non-routine lending tasks. Their roles encompass both independent and collaborative activities, with employees frequently needing help from their peers for analyzing complex credit proposals, recovering disbursements from non-compliant borrowers, formulating loan cases for committee adjudication, and appraising large loans. Compensation includes a fixed base salary and a sizable variable component tied to individual performance.

Our study seeks to assess the impact of the intervention on cooperation among employees. However, observing or measuring daily cooperative behaviors in the workplace is challenging for researchers. These interactions occur in person at the branches and take different forms depending on the specific task at hand. To address this, we will use two metrics that capture employees' real choices to help at specific points in time: (1) an *expertise contribution*—the decision to provide advice for an internal manual designed to support low performers, and (2) volunteering as *peer mentor*—the decision to join the junior-mentoring program. These metrics capture a general willingness to contribute to a public good that benefits the entire organization. While they do not measure the frequency of help, they are less likely to be biased by any strategic reciprocity in voting. In addition, we also will also evaluate the impact through workplace surveys.[2]

Lastly, we will use the *expertise contribution* measure to disentangle the mechanisms driving the intervention's effects. When human resources invited employees to contribute advice for the strategy manual for low performers, the visibility of their participation was manipulated along three dimensions. One subset of employees was informed that *top management* might learn about their participation. Another group was told that their *peers in the branch* could become aware of their decision. The final group was informed that their participation would remain *private*, allowing us to isolate the direct effect of the intervention, independent

[2]We will also evaluate the impact through social network mapping, and personnel records. Note that results from personnel records will only be available 12 months after the intervention.

of any visibility or reputational incentives[3].

First, we find that the incentive has a substantial effect on the willingness of employees to help peers. In the treated branches, employees are 21% more likely to participate in the *expertise contribution* (p-value < 0.01) and 12% more likely to volunteer as *peer mentors* (p-value < 0.05). We also observe that peer ratings are a good predictor of the primary outcome: employees with higher peer ratings are more likely to sign up to contribute. This strengthens our confidence in both the reliability of the voting and the validity of the proxy outcomes for helping behavior. We find no differential effect of the intervention between awarded and non-awarded employees. The incentive encourages helping behaviors equally, even among those who were not directly awarded but work in a branch where such behaviors are recognized. We also observe that the award does not negatively impact the quality of contributions. Analyzing both the effort invested in contributions and their quality, we find that effort provision in the treated branches is slightly higher than in the control branches, while the average quality of contributions remains consistent.

Second, we also find that the program successfully improves perceived workplace quality and the atmosphere within the bank branches. Motivation and engagement increase by 0.22 standard deviations and turnover intentions decrease by 0.33 standard deviations. There is a large and statistically significant improvement in perceived assistance and collegiality in treated branches (0.37 standard deviations), as well as feelings of recognition from top leadership (0.35 standard deviations) and peers (0.31 standard deviations). Importantly, we find positive effects on mental health (0.41 standard deviations), pointing towards a significant link between such initiatives and employee well-being.

Our findings show that the positive effects of the incentive likely stem from its ability to enhance social reputation and increase the career value of cooperation in the eyes of management. Visibility to peers and management is not a driver of cooperation in the absence of the incentive but becomes a significant factor once recognition is introduced. In the control branches, there are no statistically significant differences in the *expertise contribution* measure across conditions of no visibility, peer visibility, and management visibility. In contrast, in the treated branches, *expertise contributions* increases by 20% (p-value < 0.05) under peer visibility and by 34% (p-value < 0.01) under management visibility. In contrast, there is no direct effect of the award on helping behavior without visibility (p-value $= 0.43$). Thus, the incentive works not because of the intrinsic value of the award or the praise received, nor because of the potential to signal one's prosociality to peers or management, but rather due to the professional reputation or career prospects it generates.

Our article offers two main contributions. First, we show that it *is* possible to incentivize

[3]For details on ethics and considerations regarding deceit, please refer to Section 3 on design, which includes the exact wording and a thorough explanation of all measures taken to balance fairness and avoid deceit.

peer support, sharing of tacit knowledge and cooperation in the absence of team incentives. Through a randomized controlled trial, we show that public recognition for being a team player enhances helping behaviors, workplace climate, and employee well-being. Second, we introduce a simple, effective, and scalable toolkit for organizations to measure cooperation and implement incentives accordingly. The study also includes innovative proxies for real helping behaviors—such as internal volunteering sign-ups and contributions to knowledge-sharing tasks—that researchers previously lacked access to. These metrics are particularly valuable because they are based on real decisions made within the organization, rather than artificial or self-reported scenarios, making them both incentivized and directly relevant to workplace dynamics.

Our findings have broad applicability. Work settings characterized by complex, interdependent tasks are prevalent not only in corporate environments but also in the public sector and academia. Our partner organization, a large financial sector firm, shares structural features with commercial banks worldwide, including standardized hiring processes, performance-based incentives, and industry-standard practices for managing productivity and collaboration. These shared characteristics make our results relevant to similar organizations in financial and other knowledge-intensive industries.

Replication is essential for the credibility of the sciences and particularly affects field experiments, where results are often context-dependent and tied to a group of researchers carefully designing and implementing the interventions. To address these concerns, we conducted a pre-registered replication study in a different bank to test the robustness of our findings. This institution, an international corporate bank with head quarters in the United States and 30 branches in Uganda, differed from our original partner in size, culture, and geographic scope. Using the same *Most Supportive Employee* award procedure and outcome metrics, we observed a 13% increase (p-value = 0.08) in willingness to help in treated branches, consistent with the main study. Baseline levels of helping behavior and treatment effects were strikingly similar, reinforcing confidence in the internal and external validity of our main results and suggesting the intervention's effectiveness across organizations. Due to the smaller size of the second collaborating partner (30 branches and a total of 200 bankers), we could only pre-register the replication of the main average effects of treatment versus control; heterogeneity analysis and mechanisms were not possible due to insufficient power. While these findings support the intervention's scalability, further studies in diverse industries and contexts are necessary to fully generalize these results.

Our paper relates closely to two strands of the literature. First, we contribute to the literature on knowledge flows within organizations. Prior theoretical and empirical research demonstrates that efficient information exchange and communication between peers are essential for productivity (Sandvik et al., 2020; Battiston et al., 2021; Guillouet et al., 2024). The literature has highlighted the role of hierarchy as a barrier to employee voice and coop-

eration in organizations (Auriol et al., 2002; Castro et al., 2022). It has examined barriers from the demand side—why employees may hesitate to seek help—and found that concerns about reputational damage are particularly powerful, creating frictions that discourage help-seeking (Mickeler et al., 2023; Heursen et al., 2023). Our study complements this research by focusing on the supply side—the willingness of employees to *give* their knowledge.

Second, our work contributes to the literature on awards as influential social signals (Gallus & Frey, 2017; Gallus et al., 2023). Research has extensively discussed the power of different incentives to change behavior, as well as their unintended effects (Gneezy et al., 2011). We contribute not only by focusing on awards and recognition as a particular type of incentive but also by identifying the specific channels through which they operate in the workplace. Additionally, we contribute to this literature by examining the effect of the incentives on cooperative behavior over time. While previous field experiments have studied cooperation and incentives in one-shot public goods games, our study extends this analysis to a longitudinal workplace setting (Deversi et al., 2020).

In Section 2, we detail the experimental design and empirical strategy. In Section 3, we present the results, and Section 4 discusses internal and external validity. Finally, Section 5 concludes.

2 Experimental Design

2.1 Setting and Sample

Our field experiment was conducted with one of the largest commercial banks in East Africa. This firm has its headquarters in Kampala, Uganda. In 2023, the organization employed over 3,000 individuals across various sectors of commercial banking and served over 2.5 million customers, with assets of 6.3 trillion UGX (about 1.6 billion USD).

The organization operates across the country through branches. Each branch is structured into three hierarchical levels: management, supervisors, and bankers. In the credit section, the bank employs approximately 80 branch managers, 60 assistant managers, 200 supervisors, and 1,000 bankers.

At the top of the hierarchy is the *branch management* team, composed of one or two managers depending on branch size. They are responsible for the strategic direction, performance oversight, and reporting of the branch. Their role includes managing all levels of staff, providing leadership to supervisory personnel, and ensuring operational efficiency. Additionally, they oversee key client relationships, with their incentives tied to the overall performance of the branch.

At the next level are the *supervisors*. They are promoted from the ranks of bankers after at least six years of experience as top performers. They supervise a team of 5-6 bankers, and their core responsibilities include approving loan appraisals, and coordinating their team's work. Their incentives depend on the performance of the bankers that they supervise. Supervisors rotate every 6-12 months.

At the lowest level of the hierarchy are the *bankers*, the main field staff responsible for all client-facing work. Their principal tasks include appraising loan applications, presenting loans to the approval committee, monitoring the use of funds, and ensuring repayment throughout the loan period. Approximately 60% of a banker's salary depends on performance metrics, specifically the number of loans disbursed in the current month within the parameters of net performing ratio and volume of the portfolio. There are two main categories of bankers: *business bankers*, who handle large business loans and have a target of at least four disbursements per month, and *personal bankers*, whose loan targets vary between 20 to 40 loans per month depending on the subcategory. As part of its employee incentive structure, the bank offers a small financial reward each month to the most productive employee in each branch.

Of the 80 branches that the bank has across the country, 78 participated in our study.[4] We include all bankers in these 78 branches in our sample. Branches have on average 13 bankers. As of November of 2023, the bankers have been on average for around 5 years at

[4]Two branches were excluded: one is located within a university campus, presenting unique operational characteristics, and the other was established after the study commenced.

the organization and at the particular branch for 2.38 years, 39% are female. Table 1 presents summary statistics of our sample.

2.2 Experimental Timeline

We collect data from all employees in our sample branches in three surveys, which are referred to as baseline, midline, and endline surveys.Figure 1 presents a timeline and an overview of our surveys and treatments.

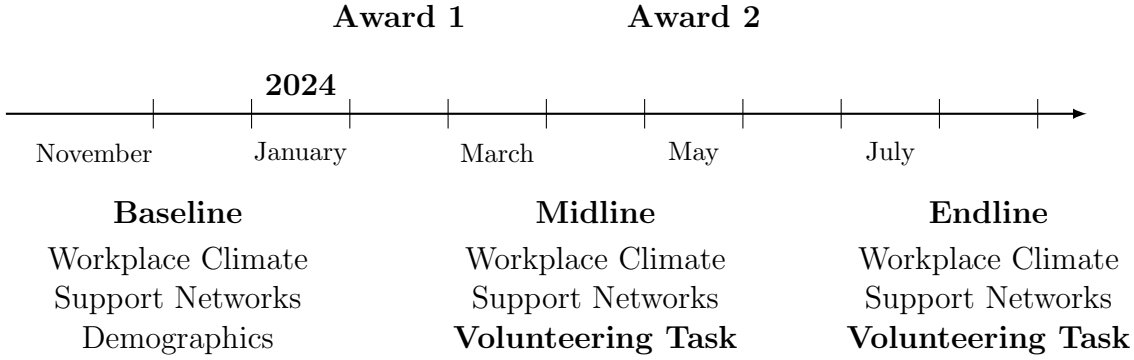


Figure 1: Timeline

The baseline survey was conducted between in the month of November 2023. In this survey, we ask all employees about their perceptions of workplace climate at their branch, including work engagement, turnover intentions, work-life balance, promotion, and work advancement clarity. In addition, we ask about the prevalence of pro-social behavior among bankers (e.g., assisting others when they face challenges, attending events that are not mandatory but promote organization's image, and considering how their actions might affect others). Furthermore, we ask business administrators to evaluate their direct subordinates' engagement in pro-social behavior from a scale of 0 (very rarely) to 100 (very frequently). These questions provide us a baseline level of pro-social behavior at the branches.

In the second part of the baseline survey, we solicit each banker's support network. First, we ask if the bankers receive professional or personal support from the other bankers at their branch. If the answer is yes, we ask the bankers to indicate the names of all their colleagues that frequently support them. Second, if more of one colleague has been selected as supportive, we ask each banker to indicate the one most supportive among the rest. We will use this question together with the supervisor evaluation to create a scoring to rank the supportiveness of each employee. Lastly, we ask the bankers to evaluate their management team and supervisors and to assess the extent to which the management team fosters cooperation, cultivates trust, and recognizes workplace behavior. At the end of the survey, we collect demographics information of all employees: age, risk attitude, languages, and tenure.

Table 1: Sample Descriptive Statistics and Balance

Variable	(1) Full Sample	(2) Treatment	(3) Control	(4) Difference
Demographics				
Share of women	0.40	0.41	0.37	-0.04
	(0.49)	(0.49)	(0.48)	(0.03)
Years in the current branch	2.40	2.49	2.30	-0.19
	(2.49)	(2.73)	(2.17)	(0.16)
Years in the firm	5.14	5.34	4.91	-0.44
	(3.56)	(3.47)	(3.66)	(0.38)
Survey metrics at baseline (0-100)				
Clarity in Role	71.86	71.14	72.68	1.54
	(23.32)	(23.82)	(22.73)	(1.70)
Employee Engagement	75.72	74.45	77.17	2.72
	(22.46)	(22.31)	(22.56)	(2.00)
Turnover intentions	25.48	26.09	24.79	-1.31
	(27.88)	(26.92)	(28.95)	(1.97)
Meritocratic values	61.50	59.42	63.88	4.47*
	(27.94)	(28.71)	(26.87)	(2.38)
Feelings of recognition	68.22	67.18	69.41	2.23
	(23.56)	(23.97)	(23.05)	(2.03)
Trust in management team	68.10	66.65	69.76	3.11
	(25.27)	(24.85)	(25.67)	(1.87)
Evaluation of supervisor	71.05	69.42	72.96	3.55
	(27.66)	(27.70)	(27.52)	(2.22)
Evaluation of manager	69.17	69.12	69.23	0.11
	(28.98)	(29.25)	(28.70)	(2.97)
Other bankers frequently help me	74.10	73.68	74.58	0.90
	(23.32)	(22.98)	(23.72)	(1.67)
Other bankers frequently help the firm	58.85	58.04	59.77	1.73
	(28.01)	(28.10)	(27.90)	(2.14)
I frequently help other bankers	84.98	83.95	86.15	2.20*
	(17.12)	(17.22)	(16.94)	(1.14)
I frequently help the firm	71.32	70.73	72.00	1.26
	(24.45)	(24.34)	(24.58)	(1.71)
Observations	969	516	453	

Notes. Summary statistics at baseline. Column (1)-(3) reports the standard deviation in parentheses. Column (4) reports the differences between the treatment and control group showing the coefficient of a simple regression of the variable on a treatment group dummy with robust standard errors. The variable *gender* is a ratio of female to male. The variables *tenure in branch, tenure in organization* are in years. The survey metrics are the answers to the baseline levels of the survey, answers range from 0 to 100, with being 100 the highest level of agreement. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

In April 2024 and August 2024, we conducted the midline and endline surveys, respectively. These surveys included metrics on workplace climate as in the baseline, as well as additional measures to assess employees' helping behavior through real-effort volunteer tasks. Detailed descriptions of these tasks can be found in Section 2.4 and will be our main outcome variables.

The survey data were collected via Qualtrics. The selected branches and all their employees received an email from the General Manager of Human Resources informing them about the surveys and encouraging their participation. Participation was voluntary, and participants could complete the survey on their work computers or on their phones. To ensure employee privacy, it was explicitly stated that individual-level responses would not be disclosed to managers, with only aggregated results being communicated to the headquarter. The bank regularly conducts surveys among its staff, hence this survey was not perceived as something new. Participants received 10,000 UGX (approximately 2.5 USD) in phone credit for participating in the surveys, which lasted on average 15-25 minutes.

As we have a limited number of branches, we apply the matched-pair cluster randomization (MPCR) to improve covariate balance and increase the efficiency and power of our causal effect estimation. Branches were assigned to a pair match following MPCR, with the defining clusters being the branches where our units of interest (i.e. the employees) work. In particular, we implement an "optimal greedy algorithm" first described in King et al. (2007) and implemented by Bruhn & McKenzie (2009).[5] To match pairs, we used information obtained from both the administrative data, as well as the baseline survey data on workplace climate. More specifically, we match branch-pairs based on the following branch covariates: branch productivity (variance in repayment percentage, dispersion volume), branch size, the share of business bankers, gender composition, employee perception on how much their workplace behavior is recognized by management, and employee perception on how much colleagues help each other. We test whether employees' characteristics and perceptions are balanced across treatment arms. Table 1 shows that there are no significant differences in employee characteristics and workplace perceptions between those who are assigned to the treatment and those who are in the control (Column 3).

2.3 Treatment Intervention: Most Supportive Employee Award

We examine the effects of unannounced, public recognition of employee supportive behavior on their willingness to spend time sharing their own experience and knowledge as a proxy

[5]The algorithm forms pairs in such a way as to minimize the Mahalanobis distance between the values of all pre-selected covariates within pairs. Subsequently, one unit in each pair is randomly assigned to treatment and the other to control.

for prosocial behavior at the workplace.[6] In our setting, prosocial behavior at workplace falls outside of the incentive scheme of firms as these discretionary behaviors are often formally non-contractible. Due to their specific nature and the compensation system in place, such supportive behaviors commonly go unseen and remain in the realm of *non-promotable tasks*.

Our intervention introduces a symbolic managerial recognition on employee supportive behavior - a certificate of recognition awarded by management. We randomize branches and select them into two groups: *Award* (Treated), and *No Award* (Control). In the treated branch "Award" we roll out an award program "Most Supportive Employee" that aims to symbolically recognize the most supportive employees in the branch. In the control branch "No award," the employees will continue working as usual and do not get informed about the award program.

Our pre-registered intervention takes place in the first two weeks of February 2024 in the treatment branches. The certificates publicly recognize the most supportive employees in a branch. The certificates are signed by the Managing Director of the bank and the General Manager of Human Resources. To ensure the public nature of recognition, these certificates are handed to employees by their respective branch managers in an award ceremony, in which all employees of the branch are present and the branch managers highlight the values of supportive behavior in their branch and how the winners of these awards have personally contribute to the supportive culture. All together, the certificates send a signal from the management of the organization, underscoring the values and importance of employee prosocial behaviors.

We award the top 20% of the employees in the credit team in our treatment branches. By keeping a constant proportion of winners across branches, we seek to ensure heterogeneous intensity of the intervention across branches of different size. To select the winners of the awards, we combine both peers' and supervisors' ratings on each employee's prosocial behaviors at the workplace.

We ask supervisors to rate on a scale from 0 (very rarely) to 100 (very frequently) how often each employee under their direct supervision engage in prosocial activities at work. For the peer rating we rely on two survey questions. First, we access information on employees' support network by asking the following question: "From which credit officers (in your team) do you receive frequent personal or professional help?". Employees can select from a list of colleagues in their credit team (multiple selection is allowed). Second, we use information on employees' most supportive colleague. From the list of names selected in the support network, we ask employees to select a single colleague who they think is most supportive and always ready to help in the branch.

[6]Following the terminology of Bénabou & Tirole (2003, p. 504), unannounced, public recognition corresponds to "discretionary" or "ex post" rewards, as opposed to "promised" or "ex ante" contingent incentives (e.g., innovation prizes).

After obtaining both supervisor and peer ratings, we calculate an overall supportive score for each employee. We first normalize supervisor ratings between 0 and 1 by dividing them by 100. We then normalize both peer ratings for each employee by dividing the absolute number of times an employee has been mentioned helpful (support network question) and the absolute number of times and employee has been mentioned most supportive (most supportive question), respectively, to the total number of colleagues in the credit team in each branch. The peer ratings represent the percentage of colleagues in a branch who rate that an employee is supportive. We equally weigh supervisors' and peers' ratings for the overall supportive score.

2.4 Outcome Variables

This paper seeks to understand drivers of helping behavior in the workplace. We proxy this by incorporating into the survey volunteering tasks that are common and necessary for the organization at the time of this research project. These outcome variables are elicited in the midline and endline surveys, allowing us to assess the effectiveness of the award program in influencing employees' willingness to help their peers.

Willingness to Invest Time Sharing Knowledge with Peers

To capture willingness to help in the midline survey, we offer the option to employees' willingness to invest their valuable time in sharing knowledge with their colleagues. Specifically, we present employees with a choice: after answering all questions in the main part of our midline survey they can opt either to conclude their participation or to continue to contribute additional information that could benefit others. Opting to continue and provide further insights can be interpreted as a positive inclination towards contributing to the collective knowledge. The prosociality of their time investment is made salient by highlighting that the shared knowledge will help other bankers in overcoming their challenges. Employees are invited to participate in a collaborative booklet and are told that "*your suggestions will be included in a collaborative booklet titled Personal Strategies for Shared Success, made up of valuable contributions of officers across the bank and shared at the end of the year with every [officer].*" Employees are also informed that their participation will be anonymous that their names will not be shared in the booklet. We designate the decision to contribute, either "yes" or "no," as our initial primary outcome– willingness to share. The exact phrasing in the survey reads as follows:

> *Congratulations, you've successfully completed the main part of the survey!*
>
> *You now have two options:*

*1. You can **finish** the survey*

*2. You **continue** to an additional, **entirely voluntary** section.*

*In this additional section, we will ask you to share your personal experiences, tactics, or tips **which might help other bankers** in (firm name) in overcoming challenges that they are facing every day.*

***Your suggestions will be included in a collaborative booklet** titled Personal Strategies for Shared Success, made up of **valuable contributions** of officers across the bank and shared at the end of the year with every banker.*

Please note: Your contributions will be anonymous and no names will be included in the booklet. This means you can freely share personal strategies.

*Overall, this additional part will take about **5-10 minutes** to finish.*

Would you like to contribute?

If an employee agrees to share, they are shown two questions which aim at eliciting employees' actual contributions and their time investment in the public good. The first question shows a specific vignette, which represents a case study. The vignette describes a general scenario which is commonly faced by bankers in their early careers across the bank. They read about a junior female banker who recently joined a newly created branch and is facing personal challengues and struggling to manage her time and meet the performance targets at work. Her clients recently stopped repaying their installments despite the fact that their business appears successful. Given the vignette, employees are asked in an open-text format to provide personal practical tips and strategies on how to overcome the challenges described in the case study. The second question is a open question, which asks employees to share their approaches to cope with challenging days or specific, actionable tips and personal tactics that could benefit other bankers throughout the bank, at any stage of their careers.

To analyze employees' contributions, we measure the quantity of contributions. In particular, we calculate the number of tips given, the length of the tips (number of characters) and the time spent working on them (as per the Qualtrics time stamp). If an employee did not submit any suggestions, we code the quantity as zero for all above dimensions.

Willingness to Sign-up for Volunteer Program

The bank seeks to pair new staff in their first months with more experienced bankers. Additionally, they require feedback from employees to build and improve their processes. We used both this tasks that are important for the organization and prosocial in nature to study the impact of the award on willingness to help. We integrated a call for volunteers for both tasks into the endline survey. Similarly to the midline survey, employees could opt into two volunteer programs: the first was a call for mentors for junior staff, and the second was a call to

sit with an external consultant to improve customer relationship processes and management. Both tasks help their peers and the organization.

2.4.1 Mechanisms

Our intervention features multiple layers and dimensions of recognition. In the horizontal dimension, colleagues significantly influence the award process by not only voting for awardees but also participating in the award ceremonies. At the branch level, the vertical dimension involves supervisors in the voting process, with branch management overseeing and executing the award ceremonies. In the top management layer, the firm's highest leaders officially endorse and sign the awards, taking responsibility for their organization.

To determine which of these recognition layers and dimensions stimulates an increased willingness among employees to help, we introduced variations in the intended audience of employees' shared contributions in the midline survey. We specifically focus on horizontal recognition by peers and vertical recognition by top management, comparing these to a no-recognition condition where all forms of external, public recognition of employees' contributions are absent. All employees read the text as outlined in the previous subsection. We refer to this condition as *No Recognition*; if employees contribute under this condition, it will help others but remains completely anonymous. In the no-recognition subgroup, employees are informed that their contributions will remain fully anonymous, ensuring that contributions cannot be traced back to individuals and that neither management nor peers can recognize individual contributors.

One third of randomly selected employees read one additional sentence that introduces a horizontal, peer-recognition dimension. In this subgroup, we inform employees that a list of contributors (names only, not the tips) will be shared among the other officers in their branch.

> Your contributions will be anonymous and no names will be included in the booklet. This means you can freely share personal strategies. *However, we'll circulate a list of contributor names to the bankers in the branch* ***so that the efforts of those who shared can be recognized by their direct peers****, while the content remains anonymous*

In the head office-recognition subgroup (vertical dimension), we notify employees that a list of contributors' names will be shared with head office management as follows:

> Your contributions will be anonymous and no names will be included in the booklet. This means you can freely share personal strategies. *However, we'll share a list of contributor names with Head Office (HR and Microfinance teams)*

so that the efforts of those who shared can be recognized by head office management*, while the content remains anonymous*

This exogenous variation in the survey enables us to explore potential differences in employees' willingness to share, based on the visibility of their behavior to different audiences, and assists us in understanding the various mechanisms at play.

3 Results: The Effect of Recognizing Prosocial Behavior at the Workplace

3.1 Impact of the Award on Willingness to Help Peers

Our primary outcome evaluates the impact of a symbolic award on employees' willingness to contribute to the public good. This willingness is measured by their readiness to invest additional time sharing personal experiences and information that could benefit their colleagues, or signing up to the call for volunteers.

Results presented in Column (1) of Table 2 indicate that 42% of employees in the control group were willing to spend additional time helping others in the baseline. This willingness increased by 9 percentage points (a 20% increase) among employees in branches where the award was implemented. Interestingly, the effect observed in the treatment group is not driven exclusively by those who received awards. Columns (3) and (5) show similar impacts at endline, employees in treated branches are 6.3 and 11.8 percentage points more likely to volunteer for being a junior mentor, and to meet with an external consultant to give feedback on how to improve customer service.

In the even-numbered columns, we added an interaction term with employees who were selected as the top 20% in both the first and second rounds of the award. The goal is to determine whether the increase in sign-ups is driven by the awardees. "Most Supportive" employees in the award branches are those who actually received the award, while the "Most Supportive" in the control group are those who would have received it otherwise. We observe that those selected as "Most Supportive" are indeed more likely to help, which increases our confidence that both our helpfulness and volunteering metrics are effectively capturing the intended behaviors. However, receiving the award does not further increase this helping behavior. Instead, it appears to motivate the rest of the employees who voted and observed the award, as they are now sharing at higher rates than those in the control group.

Table 2: Willingness to Help- Extensive Margin

	(1)	(2)	(3)	(4)	(5)	(6)
	Midline		*Endline*			
	Share Knowledge		*Junior Mentor*		*Share Knowledge*	
Award Branch	0.090***	0.099***	0.063**	0.060**	0.118***	0.110***
	(0.03)	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
Most Supportive R1		0.100*				
		(0.05)				
Award Branch × Most Supportive R1		-0.048				
		(0.07)				
Most Supportive R2				0.092		0.051
				(0.07)		(0.06)
Award Branch × Most Supportive R2				-0.000		-0.007
				(0.09)		(0.09)
Mean Dep.Var	0.43		0.56		0.42	
Observations	953	953	945	945	945	945

Linear probability model (OLS) estimates the effect of the treatment on various volunteer activities: willingness to provide productivity tips (Columns (1) and (2)), willingness to mentor junior staff (Columns (3) and (4)), and willingness to meet with a consultant to improve customer management processes (Column (5)). Regressions control for demographics, including tenure at the branch and firm, as well as gender. All models include pair-matched fixed effects. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

3.2 Understanding the Drivers: Recognition's Impact on Contributions

Our results show that recognizing prosocial behavior has the potential to increase helping behaviors. What remains to be assessed is the driving factor behind this increased willingness. Several changes could explain the improved supportive behaviors. One possible mechanism is the enhanced institutional signal that helping and supporting others is desired behavior and part of the culture in this organization. This cultural shift might lead employees to alter their behavior even if they are not personally recognized. In Figure 2, we observe in the first two columns that there is no difference in the share of contributors between the control and treatment groups when employees are asked to provide with anonymous contributions without any recognition. Therefore, the awards do not seem to change the behavior of employees per se. In columns (1) and (2) of Table 3, we present regression results that include controls and pair-matched fixed effects. We observe that, if anything, the helping coefficient is negative for the awarded branches. Interesting is also to note that those who have received the award are not more likely to contribute.

A second potential channel is that employees now recognize that helping others is visible to their peers, who observe and value supportive behaviors and ultimately decide the award winners. Consequently, employees in awarded branches might be more inclined to help to signal to their peers that they are supportive colleagues. In the middle columns of Figure 2, we observe an increase in the share of contributors from 44% in the control group to 51% in the treatment group when peers will see the names of those who helped in the collaborative booklet. Additionally, columns (3) and (4) of Table 3 show that the share of people who contribute rises by 10 percentage points (a 22% increase) in the treated branches once added controls and pair match fixed effects. Notably, this effect is primarily driven by the most helpful employees who have been awarded in the treated branches. Therefore, willingness to contribute increases significantly among those who have been already recognized. When these supportive employees know that their peers will be aware of their contributions, they are more willing to contribute, likely aiming to reaffirm their supportive reputation. We can conclude that peer recognition significantly influences those who have been awarded and can have a lasting effect. The coefficient remains positive even for those not awarded.

A third mechanism is the effect of top management recognition. At baseline and in the control branches, supportive behaviors are largely considered non-promotable tasks. Employees typically receive rewards and promotions primarily for high productivity. However, with the introduction of the award, this previously non-promotable task gains visibility with the organization's top management. We observe in the last two columns of Figure 2 that recognition by top management (Head Office) is the largest driver of willingness to contribute. Compared to the non-recognition arms in the control and treatment groups (around

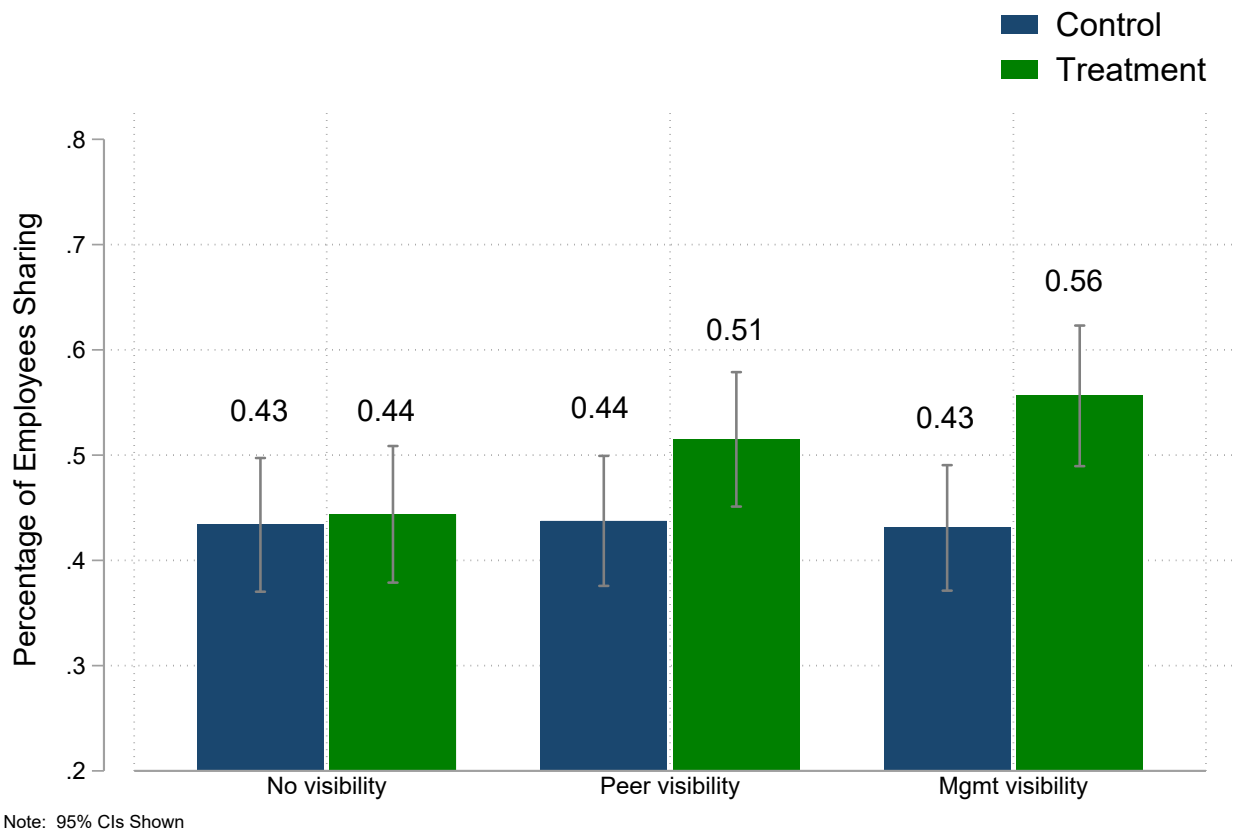


Figure 2: Mechanisms

Table 3: Willigness to Share - Mechanisms

	(1)	(2)	(3)	(4)	(5)	(6)
	No Recognition		Peers		Head Office	
Award Branch	-.07	-.08	.10**	.05	.14***	.16***
	(.05)	(.05)	(.05)	(.06)	(.05)	(.06)
Most Supportive		.04		-.13		.14
		(.09)		(.10)		(.13)
Award Branch × Most Supportive		.03		.23*		-.15
		(.14)		(.13)		(.16)
Mean dep. var	.437		.437		.431	
Observations	326	326	343	343	339	339

Notes. Linear probability model (OLS) of the effect of treatment on willingness to spend time helping others (yes/no). The regressions incorporate demographic controls, including tenure at the branch and the firm, as well as gender. Baseline survey controls include measures of trust in management and clarity of organizational roles. All regressions include pair-matched fixed effects. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

44% share) or to Head Office recognition in the control (43% share), the potential for Head Office recognition increases the share of people deciding to contribute to 56%, representing an increase of about 30% when compared to the share in the same mechanism arm for the non-awarded branches. For the control branches, being recognized by the Head Office does not have a different effect from an anonymous contribution. With the leadership's introduction of a symbolic award emphasizing the value of collaboration, employees are motivated to contribute if they know that their contribution will be seen.

In Table 3, within columns (5) and (6), we see that this effect is statistically significant at the 1% level and, interestingly, is not driven by those already awarded. Employees who have not been awarded, (and that were not selected as more supportive employees in the baseline by their peers) are the ones more likely to contribute. This mechanism highlights the importance of bringing visibility to non-promotable tasks

3.3 General Reception of the "Most Supportive Award"

To derive a general understanding of how employees perceive the introduction of the "Most Supportive Award", Table 4 provides descriptive evidence on how different groups of employees (Awarded vs. Non-Awarded) in the treatment branches feel about the award. Employees feel more recognized and valued, particularly those awarded, with a level of agreement of 82.6 out of 100. They also agree that winning the award has positive implications for their careers, with an agreement score of 81.7 out of 100 points. Concerns about the award fostering toxic jealousy are relatively low overall (25.60 out of 100), with no significant difference between awarded and non-awarded employees, indicating a well-received implementation of the award

system. The desire to be recognized with the award again is high, particularly among past recipients (90.51%), suggesting that the award is coveted and valued within the workforce. Lastly, the perception that the award recipients were deserving stands at 76.13% across all respondents, and significantly higher among those who received the award (91.37%), which underscores the credibility of the selection process.

Table 4: Perceptions about the Award

	(1) All	(2) Awarded	(3) Non Awarded	(4) Difference
Feel morevalued with the introduction of the award	71.12	82.66	68.34	14.31***
	(25.45)	(20.77)	(25.71)	(2.51)
Winning the award has positive career implications	81.70	88.28	80.12	8.16***
	(20.52)	(17.15)	(20.97)	(2.07)
Award might create toxic jealousy among colleagues	25.60	23.05	26.21	-3.16
	(27.39)	(29.02)	(26.99)	(3.30)
Desire to be recognized with the award again	83.43	90.51	81.73	8.78***
	(20.34)	(14.07)	(21.24)	(1.81)
Believe the award recipient was deserving	76.13	91.37	72.47	18.90***
	(26.29)	(14.05)	(27.23)	(2.01)

Notes. OLS regression on perception of award. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

These findings collectively suggest that the introduction of the award has effectively enhanced feelings of recognition and value among employees, contributed positively to their career outlook, and been executed in a manner that is perceived as fair and meritorious. The minimal concern regarding jealousy and the perception that the winners were deserving point to the intervention being well-liked and well-implemented.

4 External Validity and Replication

An active debate has arisen around the credibility and replicability of empirical findings in various scientific fields, including psychology, management, and the biological sciences. Concerns that numerous published results may constitute false positives have led some scholars to describe the situation as a "credibility crisis" for modern science. Replication allows researchers to help in mitigating these issues. When multiple studies consistently corroborate an original finding—even under different contexts or with new samples—the claim that the result holds in a broader set of conditions is substantially strengthened.

In organizational economics and management, field experiments are typically conducted in partnership with specific organizations. As a result, questions often arise about the degree to which their findings can be generalized—or "externally validated"—to other contexts. Even well-powered field experiments with robust designs can face challenges when tested elsewhere, as organizational culture, size, geographic location, and workforce characteristics could all shape outcomes differently. Replication, therefore, is essential not only for academic rigor but also to help decision-makers in firms determine whether a given research result is replicable in their specific setting.

In light of the concerns about credibility and generalizability, we conducted a replication study[7] in a second financial institution to determine whether our main results would hold under different conditions. We deliberately chose an organization in the same industry—a bank employing knowledge workers—but with distinct characteristics from our original partner. Specifically, this second entity is an international corporate group headquartered in the United States rather than a local bank, operating at roughly one-tenth the size (30 branches) of the initial institution. Although employees' daily tasks—assessing borrowers and managing funding—are broadly similar, these tasks are allocated differently among staff, and while incentives remain largely individualized, peer support continues to play a significant role. Consequently, this smaller corporate environment provides a meaningful test of whether the results observed at the larger, more centrally managed bank can be replicated in an alternative institutional setting.

The replication followed the same "Most Supportive Employee" award procedure as in our main study. Specifically, among the 30 branches, half were randomly assigned to receive the award treatment using pair-matching randomization, while the others remained in the control group. Because each branch had only around five employees, one individual per branch was recognized as the top supporter in both rounds of awards, which took place during the first two quarters of 2024—mirroring the timeline in our primary study. As in

[7]The pre-registration for this study can be found in AsPredicted #153656. The study was pre-registered separately from the main study to ensure they were treated as two distinct studies. The replication, as detailed in the pre-registration, was limited to only one treatment condition—awarded versus non-awarded branches—due to power constraints

the main experiment, employees answered a general workplace climate survey and identified their "most supportive peers." After the second round of awards, they were asked to share their knowledge with their colleagues [8] Employees were informed that both their peers and head office would be aware of their contributions. However, due to logistical constraints in this smaller organization, the key questions related to our mechanisms were only asked at the second round. Of the 215 officers invited, 204 completed the survey, ensuring a high participation rate. To preserve confidentiality, all communication was handled by the company's marketing and communications team, rather than through the human resources department.

Table 5 presents the primary results of the replication study. Despite the smaller scale of the replication, the findings are consistent with those from the main study, reinforcing the robustness of our original results. Specifically, we observe a 5.7 percentage point increase in employees' willingness to invest additional time in helping colleagues in treated branches compared to the control group. This effect is statistically significant at the 5% level. Standard errors are clustered at the branch level, and pair-matched fixed effects are included to address the small cluster size.

Interestingly, the baseline level of willingness to help in the control group, measured as the proportion of respondents selecting "help others" for this survey question, was 43%. This pre-existing level mirrors the control group result in the original, larger-scale study, suggesting a striking consistency across organizational contexts. The magnitude of the treatment effect in the replication is also comparable to that documented in the main study.

In Column (2), we observe that individuals previously selected as "Most Supportive" exhibit higher levels of helping behavior, although the coefficient is statistically insignificant. The positive and substantial magnitude of the coefficient suggests that also here the nomination metric effectively captures a propensity for helping behavior. Furthermore, the treatment effect remains significant and increases in magnitude when an interaction term for receiving an award is included, consistent with the main study. The interaction term is slightly negative, indicating that the observed changes in the awarded branches are not driven by the recipients of the award. Instead, the results suggest that the introduction of the award within the branch fosters a broader behavioral shift among employees, underscoring the treatment's overall positive effect.[9]

[8] Note that we administered the knowledge-sharing question after the second round of awards—rather than the first, as in the other organization, due to differences in survey timing across the two organizations, which were dictated by internal departmental schedules. In the smaller organization, the survey was conducted two weeks earlier, but the final phrasing of this key outcome metric had not yet been approved by top management in the original organization. At that time, researchers only had a draft version of the phrasing. Since the core goal of the replication was to re-run the exact same metrics with minor contextual variations, we decided to include the knowledge-sharing question after the two award runs.

[9] Due to the smaller sample size of 200 employees, the study lacks sufficient power to fully replicate and examine any underlying mechanisms.

Table 5: Willingness to Share - Replication

	(1)	(2)
	Willingness to Share Knowledge	
Award Branch	.057**	.111***
	(.03)	(.04)
Most Supportive		.215
		(.19)
Award Branch × Most Supportive		-.474*
		(.24)
Mean Dep. Var	.433	.405
Observations	204	204

Linear probability model (OLS) estimates the effect of the treatment on the willingness to provide productivity tips. Columns (1) includes the main average effect and Column (2) adds the interaction with being selected in the previous round as most supportive. Regressions control for demographics, including tenure at the branch and firm, as well as gender. Both models include pair-matched fixed effects. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

These replication findings offer two important lessons. First, for organizations, the results suggest that interventions introducing publicly recognized awards for supportive behaviors can reliably produce an effect size of approximately 6% in employees' willingness to help. This enables organizations to assess whether this effect size justifies the intervention's costs. The consistency of the results, even in an institution with a different culture and size, underscores the robustness of the intervention's impact and its relevance for companies in knowledge-intensive sectors.

Second, for academics, the replication strengthens confidence in the main effect of the intervention. Replication serves as a powerful tool to reduce the risk of false positives, providing greater reliability in results. However, further testing in organizations from different industries or countries is needed to understand how the intervention might perform in varying contexts. Naturally, research findings are always context-specific and depend on the unique characteristics of the setting.

5 Conclusion

The findings from our study demonstrate the significant role of public managerial recognition in promoting prosocial behavior within organizations. By highlighting the impact of non-monetary rewards, particularly in the form of a "Certificate of Recognition for Outstanding Support," our research contributes to a deeper understanding of how these mechanisms can be strategically employed to enhance organizational culture. This approach not only rewards

individuals who exhibit supportive behaviors but also encourages a broader cultural shift towards increased prosociality. The increase in both willingness and actual time spent helping peers following the introduction of symbolic awards underscores the potential of recognition systems to foster more collaborative and supportive workplace environments.

Moreover, our results indicate that the visibility of recognition plays a crucial role in motivating employees. The variation in response between anonymous contributions and those acknowledged by peers or management suggests that public recognition can serve as a powerful incentive for employee engagement in prosocial activities. This effect is particularly pronounced when top management acknowledges these efforts, highlighting the importance of support from the highest levels of organizational leadership. Such findings underscore the need for firms to consider more holistic approaches to employee recognition that encompass both peer and top-level endorsement.

In conclusion, this study offers valuable insights for organizations looking to foster a supportive and collaborative culture. By moving beyond traditional monetary incentives and exploring the dynamics of public recognition, firms can better harness the intrinsic motivation of their employees. Future research should continue to explore the nuances of how different forms of recognition affect employee behavior across various contexts. Additionally, organizations should consider tailoring their recognition strategies to align with their specific cultural and operational goals, ensuring that they not only promote prosocial behavior but also enhance overall organizational effectiveness and employee satisfaction.

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