NBER Workshop on Development Economics and Networks
National Bureau of Economic Research
Cambridge, MA

August 14, 2026

Dear Professors Breza, Viviano, and Chandrasekhar,

I am writing to apply to the NBER Workshop on Development Economics and Networks for Early-Career Researchers, to be held on December 5, 2026.

I am currently a postdoctoral researcher at INSEAD and received my PhD in Economics from Ludwig-Maximilians-Universität Munich in 2025. My research lies at the intersection of organizational and development economics. I use field experiments with firms and financial institutions to study how organizations can improve knowledge sharing, leadership, and the adoption of new technologies.

I would like to present my job market paper, *Making Help Visible: Experimental Evidence from a Recognition Program in the Workplace*. In collaboration with a large commercial bank in Uganda, we collected peer support networks and used these data to design a field intervention recognizing employees who provide support to their colleagues. The experiment examines how making helping behavior visible and recognized affects knowledge sharing, mentoring, and employee productivity.

This project has led me to a broader research agenda in which network data are not only a measurement tool, but increasingly an input into the design and evaluation of organizational interventions. In ongoing work with large financial institutions, I am collecting workplace help and technology-advice networks to study the adoption of generative AI. I am also developing related research on leadership and information flows within organizations.

The workshop would be especially valuable for strengthening the network component of this research agenda and for helping me incorporate insights from the frontier of empirical network research into the design of future field experiments.

My application includes my curriculum vitae, research statement, and working paper. If shortlisted, Professor Englmaier (florian.englmaier@lrz.uni-muenchen.de) would be available to provide a recommendation.

Thank you very much for considering my application. I would be delighted to participate in the workshop and present my research.

Sincerely,
Silvia Fernández-Castro
Postdoctoral Researcher
INSEAD and University of Munich

SILVIA CASTRO

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Research Fields

Knowledge Sharing; Generative AI and the Future of Work; Organization Design; Field Experiments

Research Statement

I study why firms consistently fail to make use of the knowledge they already have, and what managers can do about it. I use field experiments with large organizations to generate causal evidence on these questions.

Employment

Postdoctoral Researcher, INSEAD 2025–Present

Education

Ph.D., Economics *(Summa Cum Laude)*, LMU Munich 2025
Visiting Scholar, Ross School of Business, University of Michigan 2023
M.Sc., Quantitative Economics, LMU Munich 2019
B.A./LL.B., Economics and Law, Universidad Carlos III 2015

Publications and Papers Under Review

Making Help Visible: Experimental Evidence from a Recognition Program in the Workplace *(S. Castro, H. Ho, and M. Mickeler)*, *Revise & Resubmit, Organization Science* **[Job Market Paper]**

Fostering Psychological Safety in Teams: Evidence from an RCT *(S. Castro, F. Englmaier, and M. Guadalupe)*, *Revise & Resubmit (2nd Round), Management Science*

Permission to Speak: Evidence from a Workplace Menstrual Awareness Campaign Involving Men *(S. Castro and E. Griniute)*, *Revise & Resubmit, Organization Science*

Employee Judgement and the Allocation of Capital: Gender, Beliefs and Team Formation *(V. Bartoš, S. Castro, K. Czura, and T. Opitz)*, *Working Paper, No. 10719, CESifo Munich*

Breaking the Silence: Group Discussions and the Adoption of Menstrual Health Technologies in the Workplace *(S. Castro and C. Mang)*, *Journal of Development Economics, 169, 2024*

Work in Progress

Leadership that Listens: Understanding Supportive Leadership in Organizations *(S. Castro, D. Grothe, S. Haeckl, H. Ho, and M. Mickeler)*, *Working paper available upon request*

Generative AI and the Social Fabric of Organizations *(S. Castro, S. Friess, H. Ho, and M. Mickeler)*, *Data collection ongoing*

Generative AI and Technology Adoption in Organizations *(S. Castro, S. Friess, H. Ho, and M. Mickeler)*, *Data collection ongoing*

Grants and Financial Support for my Research (approx. €940,000 in total)

Major Grants:

Siemens Stiftung, Individually Awarded Research Grant	PI	€110,000	2026
Drip by Drip, Organizational Barriers for MHM	CI	€65,000	2026
Schmidt Sciences, Field Experiments on the Workforce Effects of AI	PI	$199,864	2025
German Federal Ministry of Education and Research, LMUexcellent	CI	€50,000	2026
Dutch Research Council, Open Competition SSH Grant	CI	€50,000	2025
Joachim Herz Stiftung, Transfer Grant	PI	€80,000	2024
Oxfam, Adopting Innovations in Menstrual Health	PI	£150,000	2023
Elrha, Menstrual Health Zero Waste Solutions	PI	£67,374	2019

Other Grants:

AI-HUB@LMU, Prize for the Most Innovative AI Research Project	PI	€5,000	2026
OpenAI, Research Support	PI	$5,400	2026
Deutsche Postcode Lottery, Science Communication Support	CI	€30,000	2026
German Research Foundation, CRC "Who is Watching?"	PI	€16,500	2026
Hans Riegel Stiftung, Connex Grant	CI	€6,500	2026
Schmidt Sciences, AI in the Workplace Development Award	PI	$10,000	2025
Elrha, Adopting Innovations in Menstrual Health	PI	£16,043	2025
Oxfam, WIF Fund	PI	£3,000	2025
SurveyCTO, Data Collection Research Grant	PI	$2,640	2025
German Research Foundation, CRC Research Grant	PI	€8,000	2025
ESSEC, Africa Research Grant	CI	€24,000	2024
German Research Foundation CRC 266, "Smart Ideas"	CI	€10,581	2024
Hans Riegel Stiftung, Connex Grant	PI	€6,460	2024
Joachim Herz Stiftung, Add-on Fellowship	PI	€12,500	2022

Service to the Profession

Refereeing in Scientific Journals: Strategic Management Journal, Management Science, Organization Science, Journal of Development Economics

Co-organizer:

IGL-CFXS, Masterclass Series on Field Experiments in Strategy	2025 – *Present*
LMU Munich, ORG Brown Bag Seminar	2023 – *Present*
INSEAD, Science Communication Skills Workshop	2026
LMU Munich, Predictive People Analytics	2023–2025
LMU Munich, Science Communication Skills Workshop Series	2022–2025
Conference on Field Experiments in Strategy, Ph.D. mentor	2024

Teaching Experience

Business Cases:

Breaking Down Power Distance - The EAGLE Initiative, *INSEAD Publishing* 2026†

MBA Level:

INSEAD, Guest Lecturer, Managing Cultural Change in Organizations 2026

Ph.D. Level:

ESSEC, Lecturer, Field Experiments in Strategy 2026

IGL–CFXS, Co-director, Masterclass Series on Field Experiments in Strategy 2025–Present

Undergraduate and Master's Level:

Cornell University, Guest Lecture, Leadership and People Management 2025

LMU Munich, Lecturer, Field Experiments in Economics and Organizations 2025

LMU Munich, Instructor, Mathematical Methods 2020–2025

LMU Munich, Instructor, Microeconomic Theory 2023–2024

LMU Munich, Instructor, Seminar, *Management Practices and the Role of Managers* 2025

LMU Munich, Instructor, Seminar, *Diversity and Discrimination in Organizations* 2024

LMU Munich, Instructor, Seminar, *(Un)intended Effects of Incentives* 2023

LMU Munich, Instructor, Seminar, *Opportunities & Challenges of the Digital Revolution* 2022

LMU Munich & York University, Instructor, *Virtual Journal Club* 2020 - 2022

Research Presentations

Invited Seminar Talks:

University of Salzburg 2026

Université Libre de Bruxelles 2026

Luxembourg Institute of Socio-Economic Research 2026

University of Vigo 2026

University of Barcelona 2025

INSEAD 2025

Erasmus University Rotterdam 2025

European Commission 2024

Selected Conferences:

NBER Summer Institute Personnel Economics 2026

Annual Meeting of the Academy of Management 2024, 2026

Annual Meeting of the Society for Institutional and Organizational Economics 2022, 2026

Meeting of the Committee for Organizational Economics, VfS 2022, 2023, 2024, 2026†

Asian Conference on Organizational Economics 2026

Conference on Field Experiments in Strategy 2022, 2024, 2025

Colloquium on Personnel Economics 2023, 2025

CEPR Annual Paris Symposium 2024, 2025

Workshop on Incentives, Management and Organization & Entrepreneurship 2025

The Lausanne Management and Economics Workshop *(HEC Lausanne)* 2025

International Conference on Working Environment Economics 2024, 2025

Annual Conference of the Verein für Socialpolitik	2023, 2025
Strategy, Entrepreneurship, and Innovation Consortium (SEI) *(ESSEC)*	2024
Conference on Research with and within Organizations *(ZEW, Mannheim)*	2024
Workshop on Field Experiments in Economics and Business *(DICE, Düsseldorf)*	2023
Field Days – Experiments outside the Laboratory	2023
Advances in Field Experiments	2022

References

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Scheduled †
Last updated: August 2026

Research Interests and Motivation for Attending

Silvia Fernández-Castro

My research lies at the intersection of organizational and development economics. I use field experiments with firms and financial institutions to study how organizations can improve the transmission and use of knowledge: who employees learn from, when they share what they know, how managers obtain information from their teams, and how new technologies diffuse through organizations. Increasingly, social and organizational networks have become central to both how I measure these processes and how I design interventions.

My job market paper, *Making Help Visible: Experimental Evidence from a Recognition Program in the Workplace*, grew directly out of this interest. In collaboration with a large commercial bank in Uganda, we collected peer support networks among more than 1,000 bankers, asking employees from whom they regularly received help and which colleagues were particularly supportive. We combined these peer nominations with supervisor assessments to identify supportive employees and designed a branch-level randomized intervention that publicly recognized employees for helping their colleagues. The intervention increases employees' willingness to share expertise and mentor junior colleagues. The effects arise when helping is visible to peers or management, rather than when it remains private, and junior employees—those most dependent on colleagues' knowledge—subsequently become more productive. We replicate the main result in a second bank.

This project made me particularly interested in moving from using network data primarily as a measurement and intervention-design tool toward treating network structure, diffusion, and interference as central objects of causal analysis. Several of my current projects are moving in this direction. In ongoing work with large financial institutions, I am studying the introduction of generative AI while collecting both workplace help networks and technology-advice networks. A central question is how informal relationships shape technology adoption: who employees turn to when they encounter difficulties with a new technology, whether technologically knowledgeable employees become new sources of advice, and how organizations can use these networks to design interventions that facilitate adoption. In related work on leadership, I am interested in how managerial practices affect which employees' information reaches supervisors and how information flows through organizational hierarchies.

The workshop would therefore come at an especially valuable point in the development of my research agenda. I have substantial experience designing and implementing large-scale field experiments inside organizations, but I would like to develop greater methodological depth in empirical network research. I am particularly interested in experimental design under network interference, distinguishing diffusion and spillovers from correlated behavior, using network position to target interventions, and studying how networks themselves respond endogenously to organizational change.

More broadly, I hope to develop a research program combining network data and field experimentation to understand how knowledge, managerial practices, and technologies diffuse inside organizations in developing economies. The opportunity to present work in progress, receive feedback from researchers at the frontier of empirical network research, and learn from other early-career researchers working on related questions would be extremely valuable for shaping the next generation of these projects.

Making Help Visible: *Experimental Evidence from a Recognition Program in the Workplace*

Silvia Castro*†, Hoa Ho‡, Maren Mickeler§¶

June 26, 2026

Abstract

Organizations rely on employees helping one another. Yet this help is hard to observe and difficult to reward, so it often goes unrecognized. We study what this means for organizations, through a field experiment in the credit division of Uganda's second-largest bank. In randomly selected branches, the most supportive employees receive a public award for helping colleagues. This recognition increases knowledge sharing and mentoring. Junior officers, who benefit most from this support, become more productive, and the gains persist for a year. We show that the key driver is visibility: helping rises only when others can see it. A replication in a second bank confirms the main findings.

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¶We would like to thank Solomy Luyombo, Sebastian Mulindwa, Fred Akena, and Nelson Luvule for hosting this project. We thank Martina Sanin and Robert Canwat for their excellent research assistance and project management and Oriana Bandiera, Karen Bernhardt-Walther, Kristina Czura, Florian Englmaier, Guido Friebel, Svenja Friess, Maria Guadalupe, Rembrand Koning, Tobias Kretschmer, Anna Rohlfing-Bastian, Nathalie Romerfor their feedback. Support from the Deutsche Forschungsgemeinschaft through CRC TRR 190 (Project-ID 280092119) and TRR 266 (Project-ID 403041268) is gratefully acknowledged. In addition, this project has received financial support from ESSEC, the Joachim Herz Foundation, and the Hans Riegel Foundation. This experiment was pre-registered as AEARCTR-0012191 and received ethics approval from the Ethics Review Board of ESSEC, of Makerere University (CoBAMS-REC-2024-40), and of the Ugandan National Council for Science and Technology (SS3282ES).

1 Introduction

Organizations depend on employees helping each other. Much of the expertise within firms is tacit —difficult to codify and often acquired only through experience. As a result, employees often depend on colleagues for informal guidance, troubleshooting, and feedback. When experienced employees share job-specific knowledge with their peers, they reduce inefficiencies, increase productivity, and accelerate learning (Hamilton et al., 2003; Sandvik et al., 2020; Battiston et al., 2021).

Yet, encouraging peer-to-peer assistance 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; Chan et al., 2014), even when less quantifiable actions are valuable to the organization. This creates a familiar organizational tension: behaviors that are valuable for collective performance—such as helping colleagues—are often weakly rewarded relative to easily measurable individual productivity. How can organizations encourage employees to provide peer support when these behaviors cannot be easily contracted on?

In this paper, we examine if making supportive behavior visible and rewarded within the firm can increase peer-to-peer help. We examine this question through a field experiment in the credit division of a large commercial bank in Uganda. Working with the bank's leadership, we develop a scalable system to identify supportive employees using peer nominations and supervisor ratings. We then introduce an intervention that makes peer support observable and rewarded within the organization. Concretely, in randomly chosen branches, the employees with the highest supportiveness scores receive a *Most Supportive Employee* certificate, publicly awarded during a branch-wide meeting and signed by the bank's CEO and Chief Human Resources Officer. Importantly, the intervention does not alter the bank's formal compensation system, which remains tied to individual lending performance. Instead, the award makes helping behavior observable and publicly recognized within the organization.

The partner organization provides an ideal field setting for our research question. Their credit division employs more than 1,000 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 projects. Compensation includes a fixed base salary and a sizable variable incentive tied to individual performance. The organization actively encourages peer assistance as part of its work culture but such helping behaviors fall outside the formal incentive scheme of the organization.

For researchers and managers, measuring daily helping behaviors is challenging because

interactions are informal, occur face-to-face at branches, and vary across tasks. To capture these behaviors in a systematic and organization-relevant way, we worked with the bank's leadership to design two behavioral measures of support. The first is *expertise contributions*—employees' decisions to provide expert feedback in two structured calls for input. The second is *peer mentoring*—the decision to volunteer for a junior mentoring program. These metrics are collected two and six months after the intervention, immediately following a workplace survey. After completing the survey, employees see an on-screen prompt inviting them to take on one of these supportive tasks, with a brief description of what it entails, and can decide whether to participate. Together, these measures capture a broad willingness to contribute to the organization's collective good. Importantly, these measures capture the supply of discretionary help—employees' choices to provide support—rather than learning outcomes or peer spillovers conditional on help being given.

We find that making helping behavior observable and rewarded substantially increases workplace helping. Two and six months after the first award, employees in treated branches are 21 and 25 percent more likely (p-value < 0.05), respectively, to volunteer for knowledge-sharing tasks that benefit the organization, and 12 percent more likely to sign up as junior mentors (p-value < 0.05). These changes translate into economic gains for the firm. Junior employees in treated branches experience substantial and persistent increases in loan disbursement numbers, while the performance of award recipients and other top performers remains stable. Thus, the intervention increases output for the workers most dependent on peer support without reducing the productivity of those providing help. Several institutional features of our setting make such crowd-out of help unlikely. Helping typically takes the form of brief, high-leverage interactions—advice, troubleshooting, and feedback—rather than time-intensive production, and the organization has a high senior-to-junior ratio, so the marginal cost of providing support is low. In addition, the knowledge being shared is largely tacit and non-rival: once articulated, it can raise peers' productivity without reducing the helper's own output.

To understand why increasing the observability of helping changes behavior, we embed an additional experiment in the first expertise contribution task. When employees are invited to contribute, we randomly vary whether they are told that their decision to participate will remain private, be known to their peers in the branch, or be known to top management. This manipulation allows us to isolate the motivational channels through which recognition operates. We find no effect of the recognition when contributions are private, but sizable increases when helping is visible to peers and when it is visible to management. Combined with survey evidence that treated employees—especially award recipients—feel more obliged to respond to help requests, these results indicate that making helping observable operates primarily through peer reputation and career concerns rather than by shifting intrinsic motivation.

To assess the robustness and external validity of our findings, we conduct a pre-registered[1] replication in a second bank. This institution, an international corporate bank with headquarters in the United States and 30 branches in Uganda, differed from our original partner in size, culture, and geographic scope. We implement the same supportiveness-based award and use the same helping metrics. In this second setting, we again find a sizable increase in willingness to help in treated branches, although the smaller sample limits our ability to study mechanisms and heterogeneity in detail. The similarity of baseline helping levels and treatment effects across the two banks suggests that the intervention can be effective in a broader class of knowledge-intensive organizations and where cooperation is valuable but difficult to contract on.

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 (Autor et al., 2003). 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.

Our paper contributes to the literature on peer effects in organizations. Early work in management documented that employees frequently help one another at work and conceptualized such behaviors as organizational citizenship behaviors (Organ, 1988; Podsakoff et al., 2000). This literature established that helping is a common feature of organizational life, but relied largely on survey evidence and correlations. A separate strand of research in economics documents productivity spillovers among coworkers, showing that workers' output responds to the performance of nearby peers (Mas & Moretti, 2009; Chan et al., 2014). More recent work highlights knowledge diffusion as an important mechanism behind these spillovers, showing that when knowledge flows more easily across workers, productivity increases (Sandvik et al., 2020; Zhang et al., 2025; Brahm et al., 2025). However, despite growing evidence that workers benefit from peer knowledge, we know much less about what determines whether employees supply help in the first place. Recent research begins to document barriers to the demand for help and advice at work, showing that employees may avoid seeking assistance due to reputational concerns (Mickeler et al., 2023; Heursen et al., 2024). Our contribution complements this work by focusing on the supply side: we study how organizations can increase employees' willingness to provide help. By experimentally making helping behavior observable and rewarded, we show that firms can increase peer-to-peer helping and unlock productivity gains that would otherwise remain unrealized.

Our paper also contributes to the literature on awards and symbolic recognition in organizations. Prior work shows that symbolic rewards and public recognition can influence em-

[1] AsPredicted #153,656

ployee behavior, sometimes increasing effort and performance but also generating unintended consequences such as gaming or demotivation among non-recipients (Kosfeld & Neckermann, 2011; Bradler et al., 2016; Gubler et al., 2016; Liao et al., 2023). However, most empirical studies focus on measurable individual output rather than discretionary cooperative behaviors that are difficult to observe and contract on. A related survey experiment finds that hypothetical recognition increases stated willingness to share valuable information (Neckermann & Frey, 2013), but lacks causal evidence from real workplace behavior or insight into the mechanisms through which awards operate. We contribute by providing causal evidence from a large-scale field experiment showing that recognition can increase peer-to-peer helping within organizations.

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

The study was conducted in collaboration with one of the largest commercial banks in East Africa. This bank has its headquarters in Kampala, Uganda. In 2023, the organization employed over 3,000 staff and 7,000 agents 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 bank's core business is divided across two major divisions: banking and credit. Our study involved their credit division, which comprises over 1,000 bankers engaged in knowledge-intensive, non-routine lending tasks.

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

At the top of the hierarchy are the *branch managers*. 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 reporting to Head Office. Their incentives are tied to the overall performance of the branch.

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

At the lowest level of the hierarchy are the *bankers*, who make up our study sample. They are the main field staff responsible for all client-facing work. Their tasks include appraising loan applications, presenting loans to the approval committee, monitoring the contractual use of funds, and ensuring repayment throughout the loan period. Approximately 60% of a banker's salary depends on variable performance and is tied to the number of loans disbursed in the current month within certain parameters of non performing ratio and volume of the portfolio. Incentives are purely individual, with no team-based component. 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 loan 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.[2] We include all bankers in the 78 branches in our sample. These branches employ an average of 13 bankers each. As of November 2023, the bankers have been on average for 5 years at the organization and at the particular branch for 2.4 years, 39% are female. Table 1 presents summary statistics of our sample in Column (1).

2.2 Evaluation Design

For this study, we collaborated with the bank's Human Resources department to collect primary data. Before the study began, employees were informed about the research collaboration under the broad theme of *personnel and productivity*. The department routinely gathers employee feedback through surveys, conducted either internally or externally, depending on the topic and area. In the case of our research collaboration, employees were informed that survey responses would be collected externally by researchers via Qualtrics and that bank management would not have access to individual-level responses; only aggregated results would be shared unless explicitly stated otherwise.

We conducted three survey waves, one timed before and two after the intervention. The Chief Human Resources Officer (CHRO) distributed all surveys via email to employees. Employees could complete them on work computers or personal phones. Each survey took an average of 10 minutes to complete, and participants received 10,000 UGX (approximately USD 2.50) in phone credit as compensation. Figure 1 summarizes the timeline and the data collected at each stage.

The baseline survey followed a standard workplace climate design used in human resources, with the addition of the *peer supportiveness ratings*. Following baseline data collec-

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

Table 1: Sample Descriptive Statistics and Balance

	(1)	(2)	(3)	(4)
		Means		Difference
Variable	Full sample	Award Branches	Control Branches	Treat - Control
Share of Women	0.39	0.38	0.41	-0.04
	(0.49)	(0.49)	(0.49)	(0.03)
Tenure in Branch	2.40	2.38	2.44	-0.16
	(2.46)	(2.32)	(2.60)	(0.16)
Tenure in Firm	5.14	5.02	5.33	-0.37
	(3.57)	(3.69)	(3.45)	(0.23)
Survey metrics at baseline (0-100)				
Engagement	75.37	76.49	74.06	2.56*
	(22.66)	(22.81)	(22.66)	(1.43)
Turnover Intentions	25.70	24.99	26.47	-1.55
	(28.01)	(28.95)	(27.23)	(1.77)
Trust in Leadership	68.01	68.90	66.88	2.58
	(25.49)	(26.01)	(25.00)	(1.61)
Feeling Recognized	68.01	68.83	66.93	2.33
	(23.80)	(23.38)	(24.29)	(1.51)
Receive Assistance from Peers	74.12	74.60	73.38	0.78
	(23.31)	(23.43)	(23.36)	(1.48)
Productivity Metrics				
Portfolio Case Load	286.95	283.50	291.36	-10.37
	(306.45)	(296.65)	(315.54)	(19.37)
Number of Disbursements	21.28	22.25	20.57	1.67*
	(14.25)	(14.85)	(13.66)	(0.90)
Non Performing Ratio	0.03	0.03	0.02	0.00
	(0.06)	(0.06)	(0.05)	(0.00)
Observations	1,033	482	551	1,033

Notes. Summary statistics at baseline for the full sample of employees that participated in the workplace climate survey. Columns (1)-(3) report the means and standard deviations (in parentheses). Column (4) reports the difference in means by regressing the variable on treatment assignment and computing the difference along with the associated standard error. The variable *Share of Women* is the ratio of female to male employees. The variables *Tenure in Branch* and *Tenure in Organization* are measured in years. The survey metrics correspond to responses to the baseline survey, ranging from 0 to 100, with 100 representing the highest level of agreement. The *Portfolio Case Load* represents the number of loans handled by bankers as of November 2023. The *Number of Disbursements* refers to the number of loans disbursed in November 2023, and the *Non-Performing Ratio* indicates the share of the portfolio that is in late repayment as of November 2023. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

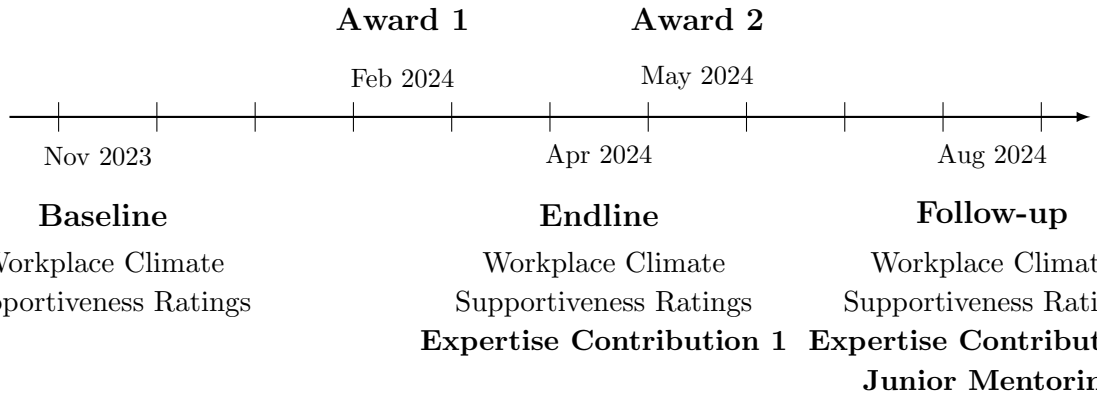


Figure 1: Timeline

tion, we randomly assigned 39 bank branches to the treatment group and 39 to the control group. Given the limited number of branches, we employed a matched-pair cluster randomization approach. Branches were paired based on key characteristics using an optimal greedy algorithm (King et al., 2007; Bruhn & McKenzie, 2009), which minimizes the Mahalanobis distance across pre-selected covariates. Matching relied on administrative and baseline survey data, including branch productivity, branch size, the share of business bankers, gender composition, and employees' perceptions of workplace recognition and peer support. Once pairs of similar branches were formed, one branch in each pair was randomly assigned to the treatment group and the other to the control group. Table 1 shows that we achieved balance in observables. Column (2) shows average values for the treatment group, Column (3) for the control, and Column (4) tests the differences between both groups.

Between December 2023 and January 2024, branch management in the treatment group was briefed about the awards and given the names of the selected recipients to verify their appropriateness. No manager raised objections, and they were instructed to keep the names confidential until the award ceremony. The certificates were sent from headquarters to the treatment branches at the end of January, and employees received their awards in February 2024. This first round, which constitutes our main intervention, was unannounced; employees were unaware beforehand that an award would be given.

In April 2024, the endline survey took place, followed by a second round of awards in May and a follow-up survey in August 2024. At the end of both the endline and follow-up surveys, employees were presented with *volunteering options* within the organization. These helping tasks, typically completed separately from personnel surveys, were timed concurrently with the workplace climate survey to allow matching responses to individual participants. Detailed descriptions of these tasks, which serve as primary outcome variables, along with other measures, are provided in Section 2.5. Each survey wave achieved a participation rate of 95%.

We pre-registered the first award as our main intervention and the helping task in the

endline survey as our primary outcome. At the time of pre-registration, we were uncertain whether a second round of awards would be feasible. While the first round of awards was unannounced and thus unexpected by employees, the second was not. Hence, we do not expect conceptually the results from the second round to perfectly replicate first round outcomes. Nevertheless, examining the effects of a second award provides empirically valuable insights into mid-term impacts and helps assess whether the surprise element drove any observed effects or if they persist over time.

2.3 Intervention: Most Supportive Employee Award

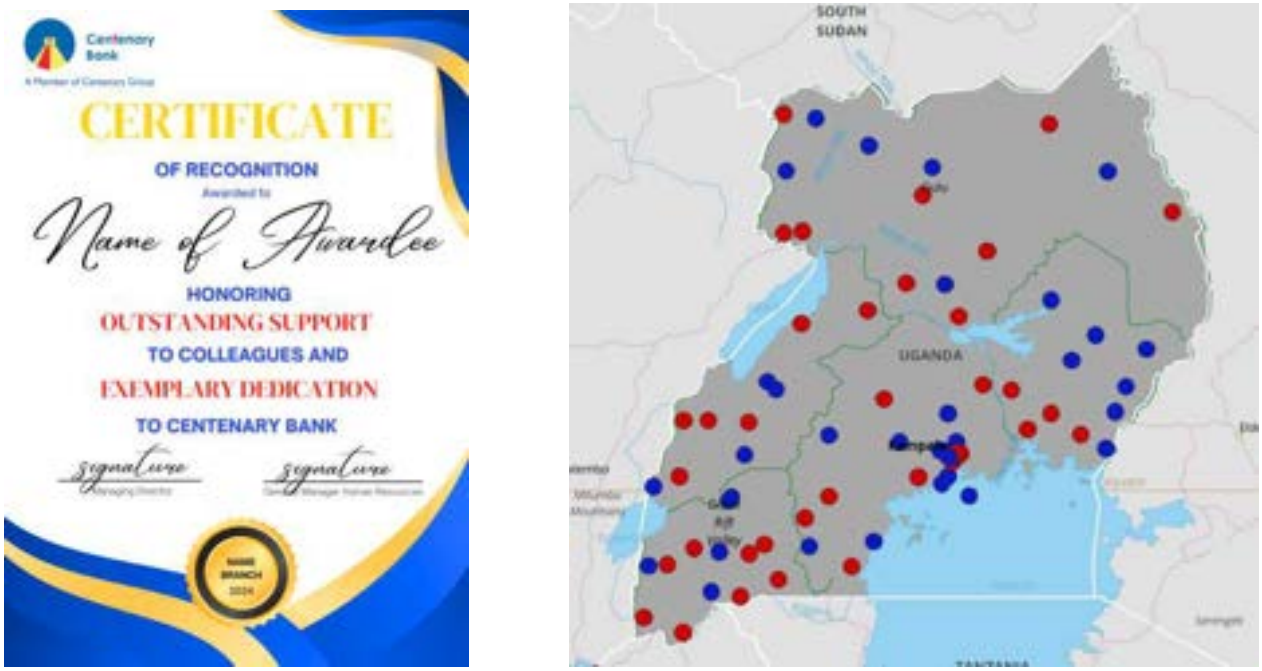
In our setting, helping others is an inherent part of the job and integrated in day-to-day work. Employees frequently seek help from peers for tasks such as analyzing complex credit proposals, recovering disbursements from non-compliant borrowers, formulating loan cases for committee adjudication, or conducting in-person appraisals of large loans. The organization actively encourages supportive behaviors towards peers as part of its workplace culture. However, despite this cultural emphasis on support, workplace helping falls outside the firm's incentive scheme. Incentives are tied to individual performance through variable pay structures, and a *Most Productive Employee of the Month* monetary reward.[3] As a result, while helping others is seen as important and valuable, it is neither formally tracked nor explicitly incentivized or recognized by the firm.

Our intervention changes this by introducing a direct and formalized incentive for supportive behaviors. To identify potential awardees, we first measured employees' supportiveness relying on both peer and supervisor ratings. For peer ratings, we used two survey questions inside the HR workplace climate survey. First, we recorded employees' support networks by asking: *From which credit officers do you receive frequent help?* Employees could select multiple colleagues from the full list of bankers in their respective branches. If they selected more than one peer, they were then asked a follow-up question to identify which one stood out as the most supportive. For each employee in the organization we thus know how many times a peer has marked him/her as helpful and as most supportive. To prevent gamification of the metric, supervisors also rated each employee under their direct supervision. They were asked to rank on a scale from 0 (very rarely) to 100 (very frequently) how often their subordinates engaged in supportive activities towards their peers that went *above and beyond*.

We then aggregated the above information, and calculated a supportiveness score for each employee. To do so, we normalized peer ratings by dividing the absolute number of times an employee was mentioned as helpful and as most supportive each by the total number of colleagues in the branch minus one, as voting for oneself was not allowed. We normalized

[3]This reward includes a small monetary bonus of approximately 60,000 UGX (after tax), equivalent to around USD 16.00 at the time of the study, along with public recognition through the display of the employee's name and photo in the branch.

supervisor ratings to range from 0 to 1 by dividing each rating by 100. We then computed a weighted score, giving equal weighting to each rating (i.e., two peer ratings with a weight of two-thirds and a supervisor rating with a weight of one-third). This resulted in a final supportiveness score for each banker in the organization.



(a) (b)

Figure 2: (a) Template of Certificate. (b) Map of Intervention. Treated Branches in Red.

In treatment branches, employees who ranked in the top 20% of their branch, based on the scoring criteria described above, were selected as awardees.[4] The 20% threshold was determined in consultation with senior management to balance making the award scarce enough to be meaningful and attainable enough to motivate employees. Additionally, by fixing the proportion of winners at 20%, we ensured consistent intervention intensity across branches, regardless of their size.

Figure 2, part (a), shows a template of the certificate that the employees received. The certificates were hand-signed by the Chief Executive Officer of the bank and the Chief Human Resources Officer and framed. They explicitly mention *outstanding support* and *exemplary dedication* to peers and the firm. Part (b) of Figure 2 shows in red the geographic locations of the branches where the intervention took place. The awards were presented by branch managers during the February and May monthly meetings, which were attended by all branch employees. During the event, the managers emphasized the importance of workplace helping and support and acknowledged how the award recipients had personally contributed to

[4]In branches with less than five employees, we selected the employee with the highest score to ensure all treated branches have at least one awarded employee. Only three branches have less than five bankers.

fostering a supportive culture.

2.4 Conceptual Framework and Hypotheses

We model employees' decisions to supply help as an equilibrium choice in an environment where helping is valuable to the organization but discretionary, costly, and imperfectly observable. Employees choose whether to provide support to colleagues by trading off intrinsic motivations and effort costs against reputational and career-related payoffs that depend on who observes their behavior. The key design feature of our intervention is that it changes the observability of helping, thereby altering the private returns to supplying support without modifying formal compensation or output-based incentives.

In this section, we develop a simple conceptual framework that formalizes this equilibrium decision problem and derives testable hypotheses. The framework focuses on how intrinsic predispositions, peer reputation, and career concerns enter the employee's utility from helping, and how making helping behavior observable reshapes these incentives. For a detailed theoretical framework, see Appredix 6.2.

Intrinsic Predisposition and the Cost of Helping An employee's decision to help[5] depends on intrinsic factors such as altruism, internalized norms, or personal identity, as well as the cost of providing help (e.g., time or effort). Let α_i represent an individual's intrinsic predisposition to help, e.g., the utility an individual gets from providing help to others. Additionally, let c denote the cost of helping. In our setting, this cost primarily reflects a fixed or front-loaded cognitive effort—often incurred during existing work interactions such as loan discussions or committee preparation—rather than a continuous diversion of time from own production, so increases in helping need not mechanically trade off with individual output. In the absence of external incentives, the utility derived from helping ($h=1$) can be expressed as:

$$u(h = 1) = \alpha_i - c \tag{1}$$

The presence of the award could increase α_i if recognition affects employees' self-image or the internalized value of helping.

> *Hypothesis 1 (Intrinsic Motivation Mechanism): Employees are more likely to support others because the intervention increases their intrinsic motivation to help.*

[5]We use the terms help, support, and assistance towards peers interchangeably. We refer to actions that assist others in improving their productivity, even though these actions do not directly contribute to the productivity of the individual providing the help.

To test this hypothesis, we need to compare helping decisions in treatment and control groups when the decision is observable only to the individual, in the absence of external incentives.

$$P(h = 1|\text{Award, Anonymous}) > P(h = 1|\text{No Award, Anonymous}) \tag{2}$$

would confirm *Hypothesis 1*, where $P(h = 1)$ denotes the probability that an individual chooses to help under a given condition.

Besides intrinsic motivations, employees' utility from helping may include additional payoff components arising from peer reputation and career concerns.

Peer Reputation Individuals care about how they are perceived by others, which can affect peer assistance and support. In workplace interactions, employees may feel social pressure to conform to cooperative norms or seek to signal positive traits, such as being helpful, to their peers. Let R_p represent the social or reputational benefits of being seen as helpful and adhering to these norms. The utility function can then be expressed as:

$$u(h = 1, \text{Peer Visibility}) = \alpha_i + R_p - c, \tag{3}$$

where $R_p > 0$ if peer visibility increases the value of helping due to social expectations or reputational benefits. Introducing a public award may influence R_p by amplifying peer reputation concerns, making social expectations more explicit, or increasing the desirability of being seen as helpful.

> *Hypothesis 2 (Peer Reputation Mechanism): Employees are more likely to support others because the intervention increases the reputational value of helping among peers.*

If the award heightens peer reputation concerns, we expect the effect of peer visibility on helping behavior to be stronger in award branches than in non-award branches. We test this by comparing helping behavior under peer visibility:

$$P(h = 1|\text{Award, Peer Visibility}) > P(h = 1|\text{No Award, Peer Visibility}) \tag{4}$$

To isolate the peer reputation mechanism, we compare the effect of the award under peer visibility (Equation 4) to its effect under anonymity (Equation 2). If the award affects intrinsic motivation, the incremental effect of peer visibility will be the difference between the two.

Career Concerns Employees may also consider the career implications of their helping behavior. If management values peer assistance and support, employees might help to align

with managerial expectations or to signal attributes that are beneficial for career advancement. Let R_m denote the career concerns effect, which captures the utility derived from being observed as helpful by senior management. The utility function becomes:

$$u(h = 1, \text{Mgmt Visibility}) = \alpha_i + R_m - c, \tag{5}$$

where $R_m > 0$ if management visibility increases the career-related benefits of helping. Introducing a public award may heighten career concerns by signaling that management explicitly values and rewards supportive behaviors. Employees may thus view helping as a strategic action to improve their career prospects.

> *Hypothesis 3 (Career Concerns Mechanism): Employees are more likely to support others because the intervention increases the career value of helping.*

If the award increases career-related incentives for helping, we expect the effect of management visibility on helping behavior to be stronger in award branches than in non-award branches. If this is the case, then:

$$P(h = 1|\text{Award, Mgmt Visibility}) > P(h = 1|\text{No Award, Mgmt Visibility}) \tag{6}$$

Similarly, to isolate the career concerns mechanism, we compare the effect of the award under management visibility (Equation 6) to its effect under anonymity (Equation 2). If the award affects intrinsic motivation, the incremental effect of management visibility will be the difference between the two.

If the decision to help is observed simultaneously by both management and peers, we will not be able to disentangle these two external mechanisms. To do so, we will have to compare helping choices in treatment and control branches where decisions are only visible to peers or only visible to managers.

2.5 Outcome Variables

Our primary conceptual outcome is workplace helping. In particular, the supply side of helping behaviors. The ideal measure would be to observe real-time interactions where various opportunities to help arise and track employees' choices. However, this is challenging for researchers, as we cannot continuously observe all employees, and we need a standardized measure that allows for individual comparisons. Therefore, in consultation with the firm's leadership, we identified three key measures of helping that are both valuable to the organization and systematically measurable: two knowledge-sharing options that we will call *expert contribution I* and *II* and one enrollment option to become a *junior mentor*. In order to be able to systematically measure the decisions to help, these metrics were timed to concur with

the endline and follow-up surveys so that they could pop up at the end of the surveys and be recorded. The metrics provide us with revealed measures of supportive behavior at the workplace. In addition, we will examine self-reported survey measures that directly capture employees' perceptions of help and support within the organization.

Revealed Choices: Expertise Contributions and Mentoring

When employees complete the workplace climate surveys, an option appears on their screen informing them about a call for volunteers for a specific task. Employees read a brief description of the task and they can decide to sign up or decline. There is one call for volunteers at the endline survey and two at the follow-up survey.

Expertise Contribution I. This is our primary pre-registered outcome, collected two months after the intervention. Employees are informed that the organization is compiling a repository of productivity-enhancing strategies to support bankers across the organization, particularly low performers. Human Resources will compile the contributions and share them by the end of 2024. Employees can briefly read that the task would entail providing successful strategies from professional experience, including general advice they find particularly useful, as well as specific guidance when struggling with borrower repayment. They are informed that this task will take approximately 10 minutes of their time.

Our primary outcome will be the *extensive margin*—whether employees select "yes" or "no" to contribute. If the respondent selects "yes" , then it opens a detailed description of specific current issues that low performers face and the employee has an open box to introduce their approach to solving them. If an employee selects "no" the answer is recorded in our system and the form closes.

We have access to the individual contributions made and we will use them to examine the *intensive margin*, analyzing both the effort and quality of contributions. To assess *effort*, we will examine the time spent on the contribution and its length (measured in number of characters). To assess quality, we rely on expert evaluations conducted blind to treatment. We engaged two independent evaluators with relevant expertise in banking: one is a senior manager from the bank's head office with over 15 years of experience, and the other is a banking consultant with knowledge of commercial banking in Uganda but external to the bank. These experts assessed each contribution across three dimensions: (1) *helpfulness*—how beneficial the advice would be for other officers in the bank, (2) *innovativeness*—whether the contribution presents unique or creative insights, and (3) *actionability*—whether the advice provides clear and implementable steps. Both evaluator scores will be averaged over each contribution to generate a final quality assessment, that is, the mean average of both evaluations.

To disentangle the mechanisms laid out in subsection 2.4, we introduced a small variation when eliciting employees' responses. It will allow us to decompose the average effect and

examine its underlying drivers.

We implemented individual-level randomization across treatment and control, varying one sentence in the survey that specified the visibility of the decision to help. Employees were informed about the visibility of their involvement based on the following conditions:

> *Anonymous*: Only the employee knows that they have contributed ("*Your contributions will be anonymous, and no names will be included in the repository*").
>
> *Peer Visibility*: Employees were informed that their names would be shared with colleagues in their branch ("*Your contributions will be anonymous, and no names will be included in the repository. However, we will 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"*).
>
> *Management Visibility*: In this condition, following the same structure as above, employees were told that their names would be shared with senior management (*"Your contributions will be anonymous, and no names will be included in the repository. However, we will 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 management"*). Figure 3 graphically depicts the cross-randomization.

<table>
<tr><th>Randomization level</th><th colspan="6">Treatment Conditions</th></tr>
<tr><td>Branch</td><td colspan="3">Control: No Award
$\frac{1}{2}$ Branches</td><td colspan="3">Treatment: Award
$\frac{1}{2}$ Branches</td></tr>
<tr><td>Employee</td><td>Anonymous
$\frac{1}{6}$ Employees</td><td>Peer Visibility
$\frac{1}{6}$ Employees</td><td>Mgmt. Visibility
$\frac{1}{6}$ Employees</td><td>Anonymous
$\frac{1}{6}$ Employees</td><td>Peer Visibility
$\frac{1}{6}$ Employees</td><td>Mgmt. Visibility
$\frac{1}{6}$ Employees</td></tr>
</table>

Figure 3: 2x3 Cross Randomization Design.

From an ethical perspective, while we aimed to examine mechanisms, we also wanted to avoid creating unfair advantages within the organization as a result of the study. For example, if the visibility of contributions were to provide a career benefit due to top management's awareness, employees in the *Anonymous* and *Peer Visibility* conditions would be at a disadvantage, as they would have contributed, but their names would not be known to management. A related and conflicting goal is to avoid deceiving respondents by not following through on promised behaviors. To address these concerns, we follow the strategy of Bursztyn et al. (2023). We inform respondents in the *Peer Visibility* and *Management Visibility*

conditions that the list of names will be shared only if we receive at least one contribution from each branch in the bank. In practice, since at least one branch is unlikely to participate in the survey,[6] we ensure that the likelihood of the list being shared is minimal. Due to this design, our outcomes should be interpreted as a behavioral choice that is conditional on respondents believing it sufficiently probable that all branches will be included and that at least one response will be received per branch.[7]

Expertise Contribution II. This metric also captures employees' willingness to share their expertise but is measured at a later stage—during the follow-up survey—under a distinct setup and focus. Specifically, employees were invited to volunteer for a consultation with an external expert to provide feedback on challenges in *customer relationship management*. The consultant aimed to gather insights from frontline bankers and propose recommendations to top leadership for improving systems and addressing inefficiencies. As the bank has expanded significantly in recent years, some bankers now manage portfolios of more than 300 customers. To adapt to this growth, the organization is continuously refining its processes. This consultation task serves as a measure of willingness to help by sharing knowledge, as it represents an additional responsibility beyond contractual obligations. Improved processes would not only benefit the organization but also directly support bankers, as their performance depends on the effective management of their portfolios. We observe only the *extensive margin*—whether employees select "yes" or "no" to sign up for the consultation; the actual meeting with the consultant is outside the scope of our research. Bankers were informed that the expected time commitment was 60 minutes.

Volunteering as a Junior Mentor. When a new employee joins a branch, an experienced banker is assigned as a second point of contact alongside the supervisor. The bank aims to pair new staff with experienced bankers during their initial months to provide guidance and support with integration into the workplace and community. Uganda has more than 32 languages and a diverse culture. Bankers must quickly adapt not only to a new job but also to new customs and, in some cases, a different language. Having a peer mentor during these first months can help facilitate this transition. At the end of the follow-up survey, the bankers saw a call for volunteers for this role. While junior mentors do not need to be volunteers—management can directly assign them—having a roster of volunteers who specify their availability and preferences is beneficial for the organization. Again, we observe the decision on the *extensive margin* - whether the respondent decided to sign up for the

[6] One branch is being set up during the study period, and its systems are not yet fully operational, making it unlikely to participate. However, the survey email is sent across the entire credit division, so they still received the survey.

[7] It is possible that some respondents may believe that the list is unlikely to be shared. However, for this to bias our estimated treatment effects, it would require not only that this belief differs systematically across treatment conditions but also that respondents who hold this belief are more or less likely to contribute in the visibility arms compared to the non-visibility condition.

next round of volunteers. Typical official pairings last three months. Whether voluntary or assigned by management, mentoring is not formally monitored and falls outside the contractual obligations of the banker. However, once assigned, it is expected that the mentor will fulfill this role. It falls within the tasks of the branch management to take care of the final matching of mentors to juniors.

These two measures of helping behavior at follow-up do not allow for an examination of mechanisms, as they inherently involve some degree of visibility—either to management or peers. This reflects the common dynamics in organizations, where volunteering tasks, whether promotable or not, are typically observed by at least some colleagues. However, the endline measure, *Expertise Contribution I*, provides a unique opportunity to disentangle mechanisms. Since this metric captures voluntary knowledge sharing and can be directly entered into the system under an anonymous option, it allows us to isolate the effects of the incentive independently of the visibility component, which might otherwise influence behavior, especially once we add the award for support.

Workplace Personnel Survey: Additional Measurement

The measures described in the previous section capture employees' decisions to offer help, and while it is logical to expect that an increase in help given would result in more help received, they do not provide a direct measure of whether bankers actually *received* more assistance. To assess whether the intervention led to more received assistance, we leverage self-reported metrics from the workplace climate survey as suggestive evidence. This survey covered various HR-related topics such as leadership quality, role clarity, and organizational transparency, which, while relevant, were not the primary focus of this study. However, it included a key question on peer assistance: *"In the last month, other bankers in my branch assisted me with challenges, even if it was not part of their job description"*. This measure allows us to test whether the intervention increased reported help received from colleagues over time, as the question was included in baseline, endline, and follow-up surveys.

Additionally, the workplace climate survey conducted six months post-intervention included measures to assess the mechanisms discussed in Section 2.4. One question captures peer pressure to provide help, evaluating whether the award influenced perceived expectations to assist others. Respondents rated their agreement with: *"I find it difficult to decline a request for help even when I have other tasks that should take priority"*. Comparing responses between treatment and control groups will provide evidence on whether the introduction of the award increased perceived pressure to help.

To assess whether employees viewed the intervention favorably—an important consideration for organizations introducing new programs—we included a set of perception measures in treated branches. One such measure captures beliefs about career benefits: *"Receiving*

the award is beneficial for career advancement". Since this question was asked only in treatment branches, we cannot compare it to a control group, but it provides insight into whether employees perceive the intervention as linked to career progression. Additional perception questions evaluate the broader organizational implications of the award.

Productivity: Loan Disbursements

The core task of credit officers is to process loan applications, and their variable pay is directly tied to the number of loans they disburse each month. Most employees fall into the category of *personal bankers*, who face a target of 20 loans per month. A smaller share are *salary loan bankers*, with a target of 40 loans per month, while a selected group of top performers are designated as *business bankers*. Business bankers handle large and complex credit proposals and face a lower target of 5 loans per month. In addition to meeting monthly targets, officers are required to keep their loan portfolios within performance and size thresholds. Once an officer reaches the relevant monthly target, they qualify for the full variable component of pay.

For our analysis, the bank provided administrative data on the number of loans disbursed per employee per month from January 2023 through March 2025. This dataset covers 27 months in total: 13 months before and 13 months after the intervention, with February 2024 marking the start of the intervention.

2.5.1 Robustness Checks: Spillovers

Since treated and control branches are located in close proximity in some regions, particularly in Kampala, and employees are occasionally transferred between branches, there is a possibility that those in control branches were exposed to information about the intervention through informal communication, inter-branch interactions, or staff transfers. To assess potential spillover effects, we included a question in the endline and follow-up survey asking employees whether they had observed initiatives in other branches that they would like to adopt in their own workplace. Specifically, respondents were asked: *"Are there initiatives in other branches that you would like to adopt in your own branch? If so, which ones?"*

We will analyze the open-ended responses individually, searching for references to the intervention, particularly mentions of *awards* or *recognition*. If employees in control branches report awareness of the award, we will conduct robustness checks by excluding pairs of branches where spillovers are detected to ensure that our estimates are not biased by cross-branch contamination.

3 Results

3.1 Empirical Specification

To test the null hypothesis that the intervention has no effect on helping, we estimate the average treatment effect using the following specification of an Ordinary Least Squares regression:

$$y_{ib} = \beta_0 + \beta_1 T_b + \varepsilon_{ib}, \tag{7}$$

where y_{ib} represents the helping decision of employee i in branch b, taking a value of 1 if the employee decides to help and 0 otherwise. The variable T_b is a dummy equal to 1 if branch b is in the treatment group and 0 otherwise. ε_{ib} is the error term. β_1 captures the causal effect of the intervention on helping, representing the difference between employees in treated and control branches. Standard errors are clustered at the branch level.

For the intensive margin, the regression above will compare only those who have decided to contribute, so the dependent variable y_{ib} will represent the quality of the contribution, conditional on having chosen to contribute. Since baseline values for most primary variables are not available, we rely on a simple treatment-versus-control comparison.

3.2 Treatment Effect on Workplace Helping

Sign-ups to Help Table 2 presents the treatment effects on the probability of signing up for helping tasks across different volunteer options. Column (1) reports the pre-registered primary outcome: *expertise contribution I*, measured two months after the intervention. In the control group, 42.8% of employees contributed. This rate increased by 8.9 percentage points (a 20.8% increase) in treated branches, indicating that the intervention significantly enhances employees' willingness to engage in supportive tasks (p-value < 0.05).

Columns (3) and (5) present results from helping measures collected six months after the intervention. The treatment effects remain consistent across these metrics. Sign-ups for the second expertise contribution are 24.8% higher (p-value < 0.01) in the treatment group compared to the control, while sign-ups for peer mentoring are 12.3% higher (p-value < 0.05). These findings suggest that the intervention induces a sustained increase in helping over time, corroborated by different measures across different periods.

Interestingly, the treatment effect is not driven exclusively by employees who received the award. Column (2) introduces an interaction term between treatment assignment and being selected as the "Most Supportive Employee". Employees identified as the most supportive in the control group serve as a counterfactual for those in the treatment group who received the award. Across Columns (2), (4), and (6), the coefficient on treatment assignment remains

Table 2: Effect of the Intervention on Volunteer Sign-Ups

	(1)	(2)	(3)	(4)	(5)	(6)
	Endline		*Follow-up*			
	Expertise	*Contribution I*	*Expertise*	*Contribution II*	*Volunteer*	*Mentor*
Award Branch	0.089**	0.096**	0.118***	0.118***	0.066**	0.066*
	(0.03)	(0.04)	(0.03)	(0.04)	(0.03)	(0.03)
Most Supportive R1		0.113**				
		(0.06)				
Award Branch × Most Supportive R1		-0.044				
		(0.07)				
Most Supportive R2				0.044		0.094
				(0.05)		(0.06)
Award Branch × Most Supportive R2				0.001		0.002
				(0.08)		(0.08)
Mean Dep. Var	.428		.475		.534	
Observations	908	908	908	908	908	908

Notes: The table presents linear probability model (OLS) estimates of the treatment effect on sign-ups for different helping tasks: willingness to provide expertise to the repository (Columns (1) and (2)), willingness to meet with a consultant to improve customer management processes (Columns (3) and (4)), and willingness to sign up as a junior mentor (Columns (5) and (6)). The dependent variable is binary, coded as 1 if the person chose to sign up and 0 otherwise. Columns (2), (4), and (6) include an interaction with being selected as the most supportive employee in the previous survey. If a person was selected and was in the award branch, they received the award. Standard errors are clustered at the branch level. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

large and significant, while the interaction term is consistently insignificant and close to zero. This indicates that receiving the award is not the driver of the treatment effect. Instead, the intervention also appears to motivate the broader employee base—those who participated in the voting process and observed the award—leading to increased willingness to help among non-recipients in the treatment group.

Additionally, Column (2) reveals that employees selected as the most supportive are more likely to sign up to contribute, with a large and significant coefficient (p-value < 0.05). This suggests that the voting score effectively identifies employees predisposed to helping. In additional analyses, we further test the correlations between supervisor ratings and peer ratings with the likelihood of contributing in the control group (see Appendix Table A4).[8] We observe that peer ratings are a strong predictor of singing up to the helping task. Employees with higher peer ratings at baseline showed a significantly stronger likelihood of signing up to contribute (p-value < 0.01). Specifically, a 10% increase in the number of peers selecting an individual as frequently providing support raised that individual's likelihood of volunteering

[8]We check only for the control group as their behavior was not affected by the intervention.

to share knowledge by 2%. In contrast, supervisor rankings showed no correlation with actual helping behavior in this task (p-value = 0.71).[9].

The results in Table 2 are based on the most restrictive sample: employees who participated in both, the endline and follow-up surveys and were not transferred between treatment and control branches [10] and without using any controls. The effects and coefficients remain unchanged when including pair-matched fixed effects (Table A1), incorporating the full sample (Table A2), and under alternative specifications such as logit estimation (Table A3). Furthermore, the results are robust to replication in a different organization (see Section 4).

Effort and Quality of Contributions We examine whether the observed increase in contributions affects the effort and quality of the knowledge shared. A potential concern is that while more employees opt to contribute, the additional contributions might be of lower quality if the new contributors possess less expertise. Table 3 presents the results. Columns (1) and (2) examine effort, measured by the length of contributions (in characters) and the time spent composing them (in seconds). The estimates indicate no significant difference in contribution length between treatment and control groups. However, treated contributors spent 25% more time composing their responses, corresponding to an increase of 145.7 seconds (2.4 minutes). This effect is not statistically significant (p-value = 0.13). Note that due to a coding error, contribution times were recorded only from the second day of data collection, leading to a reduced sample size in Column (2).

Columns (3)–(5) assess contribution quality based on expert evaluations blind to treatment. The quality measures range from 0 to 6, with higher scores indicating better quality. The coefficients across all quality dimensions ($helpfulness$, $actionability$, and $innovativeness$) are positive, though not always statistically significant. Notably, the intervention significantly increased the innovativeness of contributions (Column 5), with treated contributors scoring 5.4% higher than their control counterparts.

Overall, these findings suggest that the increased participation in knowledge sharing does not come at the expense of quality. If anything, contributions in the treatment group tend to be more innovative, implying that expanding participation can enhance the variety and originality of shared knowledge without diluting its value. However, we do not have intensive margin measures at follow-up to examine whether these effects persist over time.

Self-Reported Help We now examine whether employees report receiving more help as a result of the intervention. Figure 4 presents the estimated impact on self-reported perceptions

[9]We observe similar trends in the subsequent survey wave. Supervisor ratings remain a poor predictor of signing up to volunteer as a mentor (p-value = 0.62). Peer ratings continue to perform better, with coefficients of similar magnitude to those at baseline, though they are not significant (p-value = 0.15)

[10]Employees are typically transferred after three years in a branch; approximately 6% of the sample was transferred during the study period.

Table 3: Intervention Impact on Effort and Quality of Contributions

	(1)	(2)	(3)	(4)	(5)
	Effort		*Expert Evaluation of Quality*		
	Length	*Time*	*Helpful*	*Actionable*	*Innovative*
Award Branch	22.314	145.726	0.149*	0.100	0.087**
	(45.89)	(99.51)	(0.08)	(0.07)	(0.04)
Mean Dep. Var	413	586	2.62	2.31	1.61
Observations	407	277	407	407	407

Notes: The table presents OLS estimates of the effect of treatment assignment on different intensive margin measures. Columns (1) and (2) show the effect of treatment on response length (measured in characters) and response time (measured in seconds). Column (2) has a reduced number of observations as the timer only started counting on the second day of data collection. Columns (3)–(5) present results for quality measures, evaluated by expert evaluators blind to treatment. Quality scores range from 0 to 6, with 6 indicating the highest quality. All expert-evaluated scores are averaged across evaluators. Standard errors are clustered at the branch level. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

of receiving assistance from peers. Compared to the control group, employees in treated branches reported a 0.14 standard deviation statistically significant increase (p-value < 0.10) in agreement with having received help from colleagues in the previous month at endline (coefficient from Award Branch # Endline). This effect further increases to 0.17 standard deviations (p-value < 0.05) six months after the intervention (coefficient from Award Branch # Follow-up). These results suggest that the intervention not only encouraged employees to offer assistance but also translated into an increase in the self-reported reception of peer support over time.

These results complement the primary findings and provide suggestive evidence that the intervention is associated with an increase in reported peer assistance. While the self-reported nature of the measure introduces potential reporting biases, the consistency of the effects over time suggests a sustained perception of greater support among employees in treated branches. Although there are several reasons why employees might indicate that they "provide more help" after the introduction of the award, self-reports of having *received* more help are likely subject to less bias. This is because individuals have fewer incentives to overstate the support they receive from colleagues, as doing so does not enhance their self-image. If anything, research suggests that individuals have reputational incentives to avoid being seen as someone who needs help (Heursen et al., 2024). This finding aligns with the observed increase in help offered and reinforces the idea that recognition-based incentives may shape workplace helping.

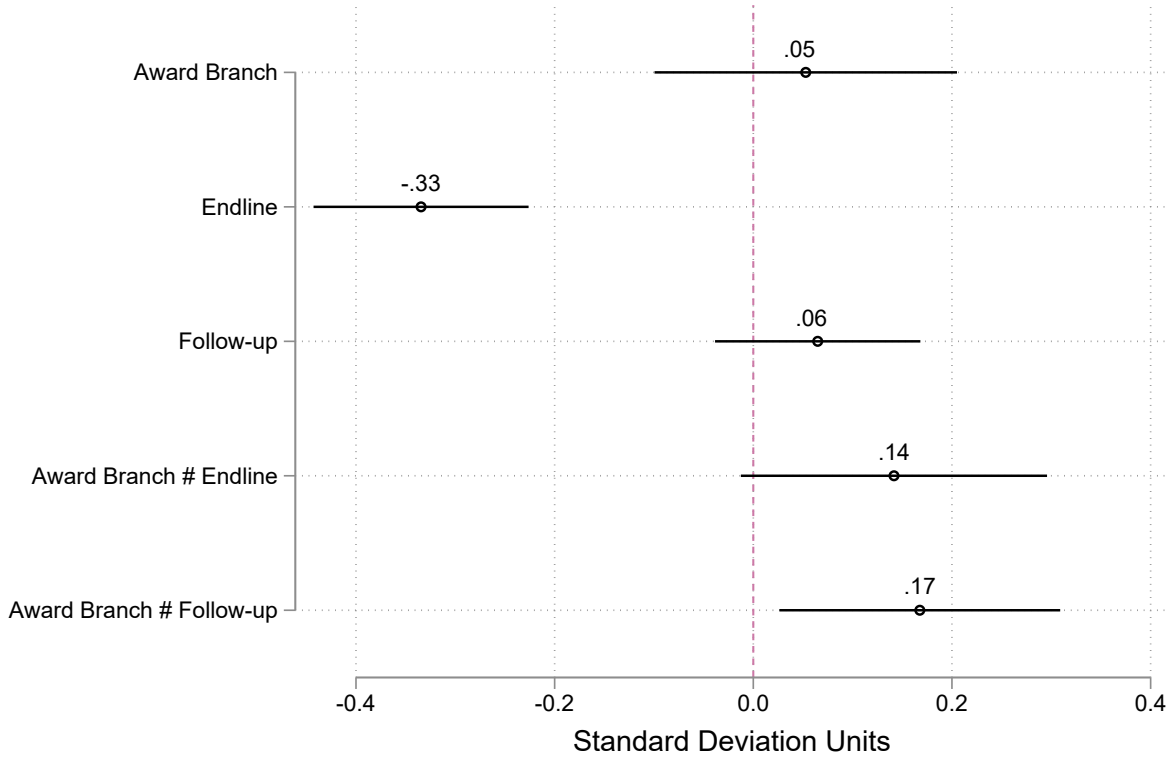


Figure 4: Impact of the Intervention on Perceived Frequency of Peer Help

Notes: This figure presents coefficient estimates from a linear regression analyzing the impact of being in a treated branch compared to a control branch on self-reported perceptions of receiving peer assistance over time. Employees rated their level of agreement on a scale from 0 to 100 with the statement: *"In the last month, other bankers in my branch assisted me with challenges, even if it was not part of their job description."* The dependent variable has been standardized (demeaned and divided by its standard deviation), so coefficients are interpreted in standard deviation units. Confidence intervals are at the 95% level. Standard errors are clustered at the branch level.

3.3 Mechanisms: What Drives Employees to Help More?

Having established that the intervention increased helping on average, we now examine the underlying mechanisms driving this effect. Does the intervention affect the equilibrium incentives to supply help by altering intrinsic payoffs, peer reputational returns, or career-related benefits? Figure 5 disaggregates helping decisions in *Expertise Contribution I* by visibility condition.

As set out in section 2.4, our first hypothesis is that the award could alter *individual motivation* to help. To test this, we compare the percentage of employees who choose to help in the treatment branches to those in the control branches when their decision remains private. As shown in the leftmost bars of Figure 5, there is no statistically significant difference between the treatment and control groups under anonymity (p-value $= 0.82$). Around 43% of employees contribute in the control group, compared to 44% in the treatment group. Therefore, we

reject the hypothesis that $P(h = 1|\text{Award, Anonymous}) > P(h = 1|\text{No Award, Anonymous})$ and conclude that the intervention does not affect intrinsic motivation or purely altruistic behavior. Absent observability or external incentives, recognition alone does not increase the equilibrium supply of help.

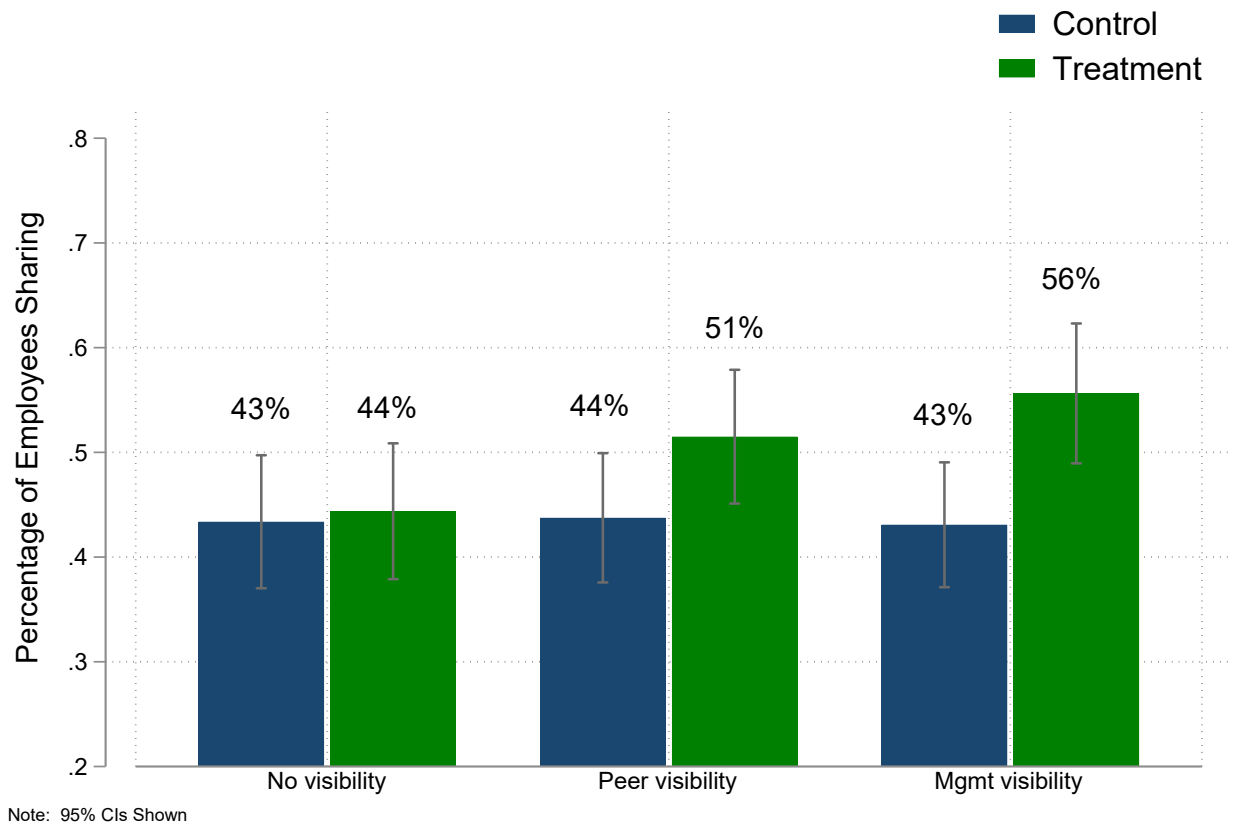


Figure 5: Sign-ups to Expertise Contribution I under Visibility Conditions

Notes: This figure presents the percentage of employees who signed up to contribute to the *Expertise Contribution I* task, disaggregated by visibility condition. The leftmost bars represent the condition where contributions were only known to the individual. The two bars in the middle correspond to conditions where contributions might be known to peers, while the two bars on the right correspond to conditions where contributions were visible to management. The green bars indicate treatment branches where an award was introduced, while the control branches are shown in blue.

Second, we examine whether the intervention influences *peer reputation.* If this mechanism is at play, contributions under peer visibility should differ between treatment and control groups. As shown in the two bars in the center of Figure 5, contributions in treated branches increase by 15% (p-value < 0.05) under peer visibility, a statistically significant difference. This confirms our second hypothesis that peer reputation drives helping behaviors ($P(h = 1|\text{Award, Peer Visibility}) > P(h = 1|\text{No Award, Peer Visibility})$). While we cannot isolate which specific dimension of professional reputation is affected, the evidence indicates that peer visibility increases the perceived reputational returns to helping. When helping is observable to coworkers, employees face higher social payoffs from contributing and a higher perceived

cost of declining to help. Consistent with this interpretation, survey responses indicate that employees in treated branches report a greater difficulty declining help requests, suggesting that peer observability raises the marginal utility of helping relative to non-participation.

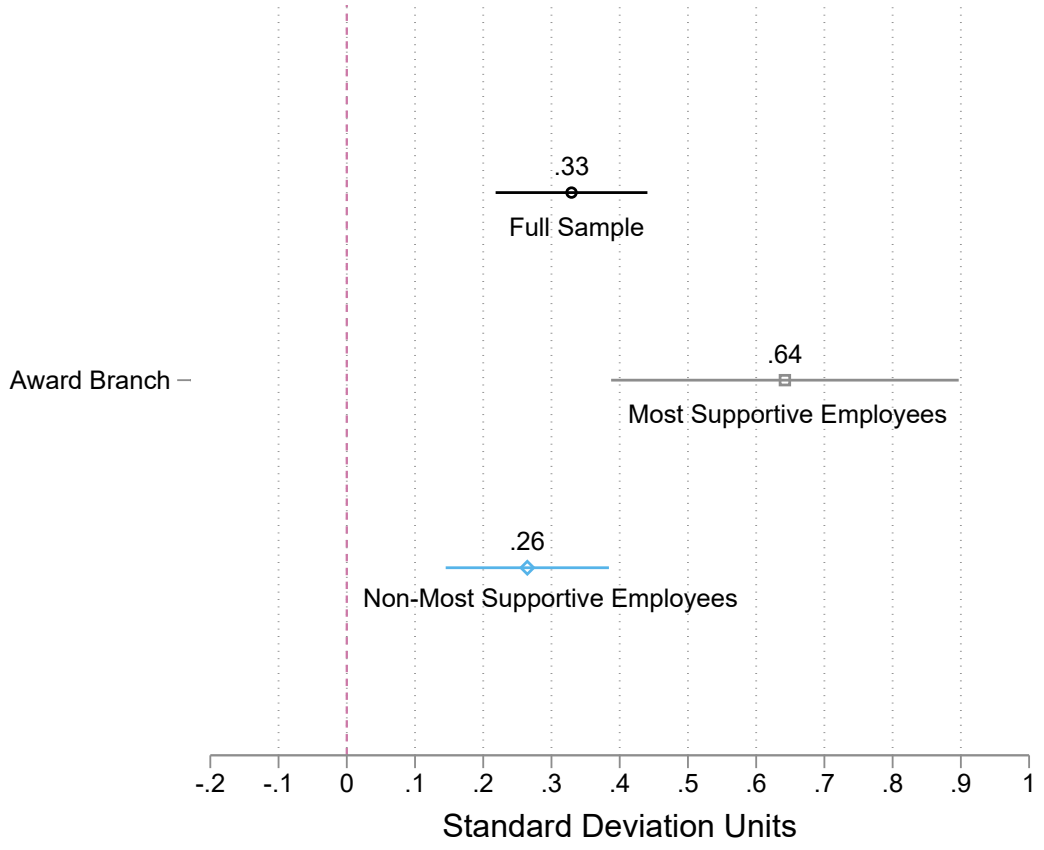


Figure 6: Impact of the Intervention on Perceived Difficulty of Declining Help

Notes: This figure presents coefficient estimates from linear regressions analyzing the impact of the intervention on employees' self-reported difficulty in declining help requests. The dependent variable is based on responses to the statement: *"I find it difficult to decline a request for help even when I have other tasks that should take priority."* The analysis compares treated branches to control branches, with results reported for the full sample as well as separately for *Most Supportive Employees* (top 20% in supportiveness) and *Non-Most Supportive Employees* (remaining 80%). The dependent variable has been standardized (demeaned and divided by its standard deviation), so coefficients are interpreted in standard deviation units. Confidence intervals are at the 95% level, and standard errors are clustered at the branch level.

Figure 6 presents the comparison between treatment and control groups regarding the statement: *"I find it difficult to decline a request for help even when I have other tasks that should take priority"*. Six months after the intervention, employees in the treatment group reported a 0.33 standard deviation increase in difficulty declining help requests compared to the control group. This effect is even stronger for award recipients, who report a 0.64 standard deviation increase relative to their counterfactuals—employees in the control group identified

as the most supportive.[11] We interpret this pattern as evidence that peer observability increases the perceived social and reputational cost of declining help, rather than as a change in intrinsic preferences.

Lastly, an alternative explanation is that overall helping did not increase, but rather that employees strategically participated in this particular task to signal their helpfulness and improve their chances of winning the award in the next round. Under this scenario, the observed increase in contributions would not reflect a genuine increase in the supply of helping behavior within the organization but rather a temporary response driven by award incentives. However, strategic voting is unlikely to account for this effect, as the call for contributors occurred after the voting for the next round of awards had already taken place, and the names of those who contributed were scheduled to be shared nine months later. While we cannot completely rule out this channel, we consider it the least plausible explanation.

Overall, these results suggest that the intervention changes equilibrium incentives to supply help by increasing the reputational and career-related payoffs associated with observable helping. However, this is not the only way the intervention could alter employee behavior. Anecdotal evidence from post-study qualitative interviews with awardees suggests that the award increases the attractiveness and awareness of being seen as a supportive colleague. Helping behaviors in professional settings often consist of minor yet meaningful gestures—answering a colleague's question, sharing advice, or offering quick support—that accumulate over time. Without formal recognition, these acts may lack visibility, leading employees to underestimate their significance or doubt whether peers notice and value them. The award may serve as a signal that such contributions are observed and appreciated, reinforcing the perception of who consistently engages in supportive behavior. Qualitative interviews conducted after the intervention are consistent with this interpretation: award recipients report greater awareness that supportive behaviors are visible and socially recognized within the branch. This suggests that the intervention increases the salience and perceived returns of helping, rather than changing the underlying nature of the tasks themselves.

The third and final hypothesis is that the intervention affects behavior by influencing *career concerns*. By introducing the award, management sends a clear and direct signal that helping others is valued. This may motivate employees to align their behavior with organizational expectations, either to enhance their career prospects or simply because they have become more aware that such behavior is rewarded. When comparing the two rightmost bars in Figure 5, we observe a 30% increase in helping under management visibility (p-value < 0.01). This finding supports the hypothesis that career concerns play a role in the observed behavioral change and therefore confirms the third hypothesis that $P(h = 1|\text{Award, Mgmt Visibility}) > P(h = 1|\text{No Award, Mgmt Visibility})$. Figure 7 further

[11] The wider confidence intervals for this group reflect the smaller sample size, as it comprises only the top 20% of supportive employees.

examines whether employees perceive career-related benefits from receiving the certificate. Two and six months after the intervention, employees in treated branches were asked about their perceptions of the award. Figure 7 presents results at two months (Appendix Figure A1 shows similar results at six months). On a scale from 0 to 100, where 100 represents the highest level of agreement, the average agreement level was 82 for the statement that winning the award has positive career implications. If employees believe that a behavior is valued by management, they may optimally adjust their behavior in response to these career incentives.

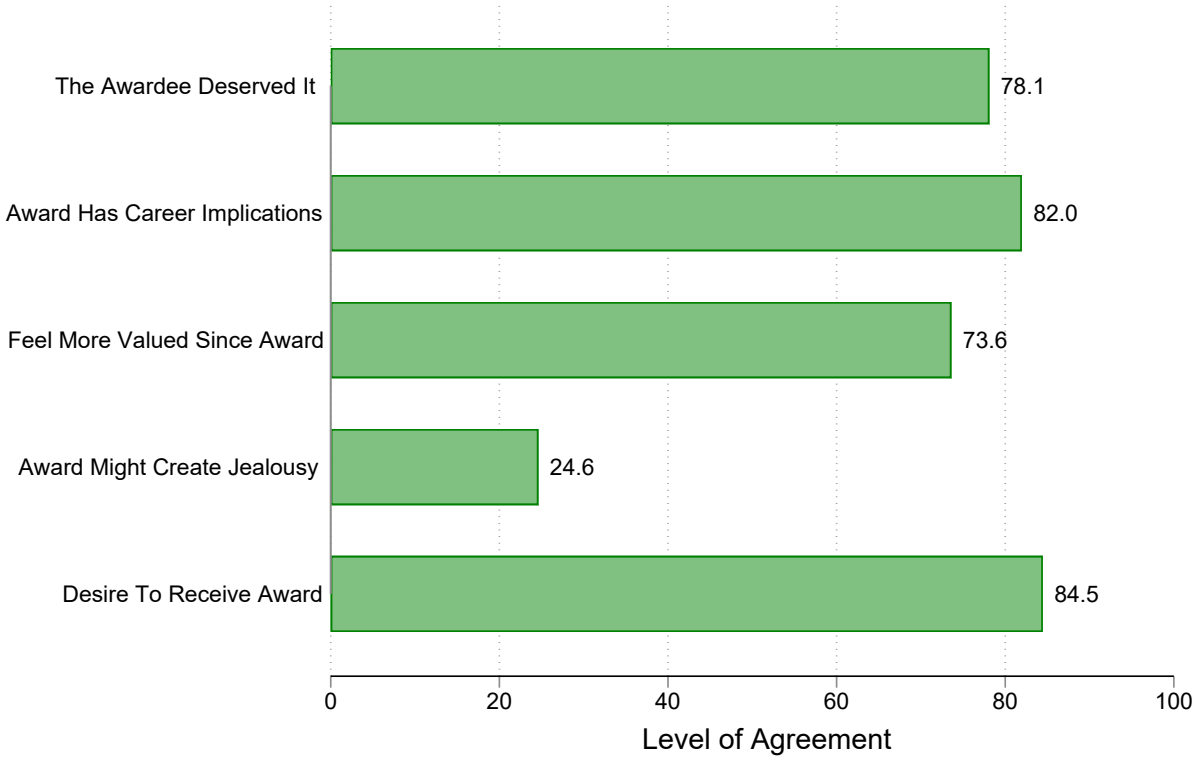


Figure 7: Perceptions of the Intervention

Notes: This figure presents employees' perceptions of the award two months after the intervention. Employees rated their agreement with various statements on a scale from 0 to 100, where 100 represents the highest level of agreement.

3.4 Employee Perceptions of the Intervention

To assess the award's value from the organization's perspective, it is worthwhile to consider employees' direct opinions about it. Understanding how the award is perceived can provide insight into whether it serves as a meaningful incentive, fosters positive workplace dynamics, or creates unintended negative consequences, such as resentment or competition.

To evaluate this, Figure 7 presents the level of agreement with several statements about the award, where employees rated their agreement on a scale from 0 (completely disagree) to 100 (completely agree). Employees in treatment branches overwhelmingly report positive perceptions of the award. Specifically, employees express an average agreement level of 84.5 with the statement that they would like to receive the award at some point, suggesting that the incentive is seen as highly desirable. Additionally, employees report an average agreement level of 73.6 with the statement that the award makes them feel more valued in their role, reinforcing the idea that public recognition enhances employees' sense of appreciation and organizational belonging. The award is also perceived as having professional value: employees report an agreement level of 82 when asked whether the award has career implications. This suggests that employees believe the recognition carries weight beyond symbolic acknowledgment and may influence professional development or advancement opportunities. Furthermore, employees reported an average agreement level of 78.1 with the statement that the awardee truly deserved the recognition, suggesting that the selection process was perceived as fair and legitimate.

A potential concern with workplace awards is that they might generate competition, resentment, or jealousy among employees. However, the average level of agreement with the statement that the award creates jealousy within the branch is only 24.6 out of 100. This suggests the award does not lead to negative interpersonal dynamics or workplace conflict. Instead, the responses imply that employees see the award as a constructive and meritocratic mechanism rather than a divisive or exclusionary one.

Taken together, these findings suggest that the award is broadly well-received and is viewed as both a desirable and meaningful form of recognition. Employees believe that it increases their sense of being valued at work, has professional relevance, and is awarded fairly, while concerns about jealousy or resentment appear to be minor.

3.5 Productivity

We next examine whether the intervention affected employee productivity. To do so, we implement an event-study design using the organization's primary performance metric: the number of monthly loan disbursements per employee. This metric is the central measure of output used internally to evaluate individual performance, and it is directly tied to employees' variable pay. Formally, we estimate the following difference-in-differences specification with fixed effects:

$$\text{Disbursements}_{it} = \sum_{k=-13, k\neq 0}^{13} \beta_k \cdot \text{EventTime}_{k,it} + \gamma_i + \delta_t + \varepsilon_{it}, \tag{8}$$

where $\text{EventTime}_{k,it}$ is an indicator for month k relative to the intervention (with $k = 0$

omitted for identification), γ_i denotes employee fixed effects, and δ_t captures calendar-month fixed effects. Standard errors are clustered at the branch level.

We estimate this event-study specification separately for two subsamples: (i) junior credit officers, who are relatively inexperienced and rely heavily on peer guidance, and (ii) employees identified as "Most Supportive" in the baseline survey. In the treatment group, these employees received the award in February 2024. In all cases, the month of the intervention ($k = 0$) is excluded as the reference category. Figure 8 plots the coefficients along with 95% confidence intervals.

A central concern in incentive-based interventions is that increased helping may reflect effort reallocation rather than net gains, crowding out productive activity elsewhere in the firm. In our setting, however, the features that limit such substitution are institutional characteristics of the organization rather than outcomes of the intervention: helping primarily consists of brief advisory interactions embedded in existing workflows, and the senior–junior ratio implies a low marginal cost of providing support. Consistent with this, we find no decline in output or quality among award recipients or top performers with high opportunity costs of time. Instead, the gains from increased helping are concentrated among junior officers, who rely most on peers' tacit knowledge. Taken together, these patterns are inconsistent with partial-equilibrium effort substitution and instead point to a general-equilibrium response in which helping complements individual performance through improved knowledge diffusion.

Effects on junior officers. The top panel of Figure 8 shows that junior officers in treatment branches experienced a sustained increase in productivity relative to their counterparts in control branches. The estimated coefficients are positive and statistically significant for several months after the introduction of the award, and the gains remain detectable nearly a year later. A natural interpretation is that the award increased the help juniors received from their peers, which in turn boosted their productivity. This could be because senior employees became more willing to provide guidance or because juniors found it easier to identify and approach supportive colleagues. In either case, the award improved the productivity of workers with less firm-specific knowledge and experience.

Effects on award recipients. A potential concern is that the additional time awardees invested in helping others could reduce their own productivity. To test this, the bottom panel of Figure 8 compares loan disbursements between treatment and control branches for employees recognized as "Most Supportive." The estimates show no statistically significant differences between the two groups. In other words, being formally recognized did not reduce awardees' individual output. This finding indicates that the productivity gains among juniors were not offset by declines in the performance of those providing support. Additional analysis of other employee categories, including top performers and the remaining bankers in the

organization, also shows no effect of the intervention on the number of loan disbursements (see Figure A2 in the Appendix).

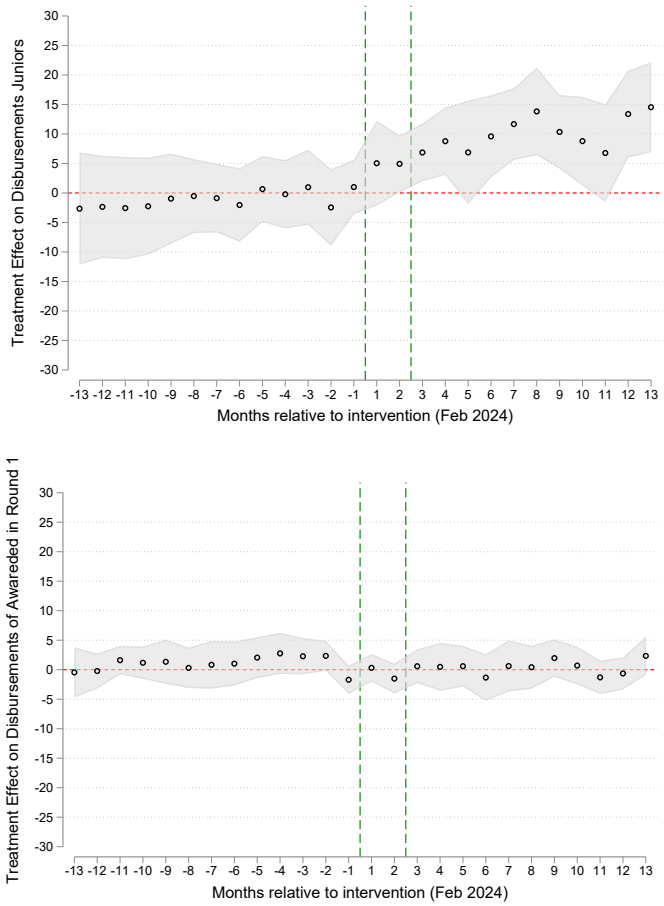


Figure 8: Event-Study Estimates of Treatment Effects on Monthly Loan Disbursements

Notes: The figures above present results from an event study regression estimating dynamic treatment effects of the intervention on monthly loan disbursements. The Y-axis shows the difference in the number of loans disbursed between treatment and control branches, while the X-axis indicates months relative to the intervention date. The green vertical lines represent the timing of the two awards. The top panel displays estimates for junior credit officers, and the bottom panel restricts the sample to employees who received the "Most Supportive" award in round 1. The specification for junior officers includes employee and calendar-month fixed effects. The specification for awardees includes employee, designation, and calendar-month fixed effects. In both cases, standard errors are clustered at the branch level. The sample covers the period from January 2023 to March 2025, and 95% confidence intervals are shown.

Interpretation and Implications. Taken together, these results show that the recognition intervention improved the productivity of employees, who did not directly receive the incentive. Junior officers face the same monthly disbursement target as more experienced staff in their category—20 loans per month—but their actual performance in 2023 ranged between 9 and 17 loans on average, depending on the month. The estimated effects are therefore economically large: in some cases, coefficients imply nearly a doubling of junior

officers' average monthly disbursements, such as eight months after the intervention began. At the organizational level, however, the aggregate impact is more modest. Juniors represent only about 4–8% of the workforce (roughly 40 employees), so even an additional 5–8 loans per junior per month translates into about 200–300 extra loans monthly. Relative to the roughly 20,000 loans disbursed each month across the bank, this corresponds to an increase of around 1%. Thus, while the intervention generated substantial individual gains, its effect on total organizational output is limited.

4 External Validity and Replication

To assess the robustness of our findings, it is important to consider potential limitations arising from both our study's internal and external validity.

From an internal validity perspective, a concern when designing the study was potential spillovers between branches. Given the proximity of some treated and control branches, particularly in Kampala, and occasional staff transfers, employees in control branches may have been indirectly exposed to the intervention through informal communication or inter-branch interactions.

To assess potential spillover effects, we included a question in the endline and follow-up surveys asking employees whether they had observed initiatives in other branches that they would like to adopt in their own workplace. Analyzing over 200 open-ended responses from control branches, we found no direct references to the intervention. This is likely due to the broader organizational context in which the study took place. At the time of the intervention, the company was undergoing significant growth and cultural transformation, with multiple concurrent initiatives aimed at reducing hierarchical distance and improving communication. Consequently, the award was perceived as one of many human resource initiatives rather than a distinct program, making it less likely to be singled out and mentioned to other branches. The most frequently cited initiatives employees wished to adopt were unrelated to the intervention. Employees often referenced activities available in a previous branch but no longer present after transfer, such as team-building activities and management strategies like group recoveries. Given that the intervention lasted from February to August, the extent of inter-branch interactions and spillovers appears insufficient to compromise our results. Overall, these findings suggest that the stable unit treatment value assumption was preserved, and spillover effects are unlikely to threaten internal validity.

Our findings also speak to the general-equilibrium effects of incentivizing supportive behavior inside firms. In our setting, increased helping complements individual production rather than crowding it out, consistent with the non-rival nature of tacit knowledge and the low marginal cost of providing support in an organization with a high senior-to-junior ratio. More broadly, such complementarity is most likely to arise in knowledge-intensive environ-

ments where expertise is unevenly distributed and advisory interactions can be embedded in existing workflows. In contrast, in settings with tighter capacity constraints, a larger share of junior employees, or more time-intensive forms of assistance, similar incentives could plausibly induce effort reallocation. Identifying how organizational structure mediates these general-equilibrium responses is an important direction for future research.

From the point of view of external validity, an active debate has arisen around the credibility and replicability of empirical findings in various scientific fields (Camerer et al., 2018; Baker, 2016). In organizational economics and management, field experiments are typically conducted in partnership with specific organizations (Levitt & List, 2009; Chatterji et al., 2016). 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 generalizability, we conducted a replication study[12] 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 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

[12]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.

their knowledge with their colleagues.[13] Employees were informed that both their peers and the 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. To preserve confidentiality, all communication was handled by the company's marketing and communications team, rather than through the human resources department.

Table 4 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 signing up to contribute 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 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.[14]

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 13% in employees' willingness to help.

[13]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. Still, 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.

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

Table 4: Willingness to Share - Replication

	(1) Willingness to Share	(2) 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

Note: Linear probability model (OLS) estimates the effect of the treatment on the willingness to provide productivity tips. Column (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: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

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 and Implications for Organizations

This paper studies how organizations can incentivize helping behavior that is valuable but difficult to contract on. We provide causal evidence from a field experiment in a large financial institution showing that making peer support observable and socially rewarded increases the supply of workplace helping. Employees become more willing to share tacit expertise and mentor colleagues, and these changes translate into sizable productivity gains for junior workers without reducing the performance of more experienced staff. Together, the results show that support inside firms can be governed through incentive design even when helping is informal, discretionary, and hard to measure.

Our findings highlight the central role of observability in sustaining helping behavior

inside organizations. Recognition affects behavior only when helping is visible to peers or to management, and not when it remains private, indicating that the intervention operates through reputational and career concerns rather than intrinsic motivation. In this setting, helping complements individual production rather than crowding it out: advisory interactions are brief and embedded in daily work, and the tacit knowledge being shared is largely non-rival, allowing expertise to diffuse without reducing helpers' own output. As a result, incentives that increase the social and career returns to helping can improve organizational performance by facilitating knowledge diffusion.

The results also speak to the mixed evidence on symbolic recognition inside firms. Prior work shows that awards can increase effort but may also generate gaming (Kosfeld & Neckermann, 2011; Gubler et al., 2016; Bradler et al., 2016), short-lived performance gains, or relational backlash among non-recipients. In contrast, the recognition program we study produces sustained increases in helping without evidence of performance crowd-out or declines in the quality of contributions. One interpretation is that recognition is particularly effective when it targets citizenship behaviors that are repeatedly required in everyday work and when the design of the award mitigates social-comparison frictions. In our setting, the award recognized a citizenship contribution, was based on transparent criteria, and selected multiple employees within each branch rather than a single winner.

More broadly, our results suggest that organizations may be leaving productivity gains unrealized when helping behavior remains invisible. When tacit expertise is unevenly distributed across workers, increasing the observability of peer support can unlock productivity improvements for employees who depend most on colleagues' knowledge. In environments where assistance is time-intensive or where capacity constraints are tighter, similar incentives may induce different behavioral responses. Understanding how incentive design interacts with task structure and organizational composition remains an important direction for future research.

6 Appendix

6.1 Tables and Figures

Table A1: Sign-Ups for Supportive Tasks

	(1)	(2)	(3)	(4)	(5)	(6)
	Endline			*Follow-up*		
	Expertise	*Contribution I*	*Expertise*	*Contribution II*	*Volunteer*	*Mentor*
Award Branch	0.086***	0.089***	0.112***	0.112***	0.068**	0.067**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Most Supportive R1		0.101*				
		(0.05)				
Award Branch × Most Supportive R1		-0.026				
		(0.07)				
Most Supportive R2				0.041		0.088
				(0.05)		(0.06)
Award Branch × Most Supportive R2				0.002		0.006
				(0.08)		(0.08)
Mean Dep. Var	.418		.475		.534	
Branch FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	908	908	908	908	908	908

Notes: The table presents linear probability model (OLS) estimates of the treatment effect on sign-ups for different helping tasks: willingness to provide expertise to the repository (Columns (1) and (2)), willingness to meet with a consultant to improve customer management processes (Columns (3) and (4)), and willingness to sign up as a junior mentor (Columns (5) and (6)). The dependent variable is binary, coded as 1 if the person chose to sign up and 0 otherwise. Columns (2), (4), and (6) include an interaction with being selected as the most supportive employee in the previous survey. If a person was selected and was in the award branch, they received the award. All models include pair-matched fixed effects. Standard errors are clustered at the branch level. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A2: Sign-Ups for Supportive Tasks

	(1)	(2)	(3)	(4)	(5)	(6)
	Endline			*Follow-up*		
	Expertise	*Contribution I*	*Expertise*	*Contribution II*	*Volunteer*	*Mentor*
Award Branch	0.072**	0.073**	0.124***	0.123***	0.069**	0.061**
	(0.03)	(0.04)	(0.03)	(0.04)	(0.03)	(0.03)
Most Supportive R1		0.068				
		(0.05)				
Award Branch × Most Supportive R1		-0.012				
		(0.07)				
Most Supportive R2				0.043		0.083
				(0.05)		(0.06)
Award Branch × Most Supportive R2				0.005		0.012
				(0.08)		(0.08)
Mean Dep. Var	.4355		.470		.531	
Observations	1016	1016	1004	1004	1004	1004

Notes: The table presents linear probability model (OLS) estimates of the treatment effect on sign-ups for different helping tasks: willingness to provide expertise to the repository (Columns (1) and (2)), willingness to meet with a consultant to improve customer management processes (Columns (3) and (4)), and willingness to sign up as a junior mentor (Columns (5) and (6)). The dependent variable is binary, coded as 1 if the person chose to sign up and 0 otherwise. Columns (2), (4), and (6) include an interaction with being selected as the most supportive employee in the previous survey. If a person was selected and was in the award branch, they received the award. The table includes participants that have been transferred. Standard errors are clustered at the branch level. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A3: Sign-Ups for Helping Tasks

	(1)	(2)	(3)	(4)	(5)	(6)
	Endline			*Follow-up*		
	Expertise	*Contribution I*	*Expertise*	*Contribution II*	*Volunteer*	*Mentor*
Award Branch	0.359***	0.391***	0.476***	0.474***	0.268**	0.265*
	(0.14)	(0.15)	(0.14)	(0.15)	(0.13)	(0.14)
Most Supportive R1		0.460**				
		(0.22)				
Award Branch × Most Supportive R1		-0.182				
		(0.30)				
Most Supportive R2				0.175		0.384
				(0.21)		(0.25)
Award Branch × Most Supportive R2				0.012		0.032
				(0.33)		(0.35)
Observations	908	908	908	908	908	908

Notes: Logit estimates of the treatment effect on sign-ups for different helping tasks: willingness to provide expertise to the repository (Columns (1) and (2)), willingness to meet with a consultant to improve customer management processes (Columns (3) and (4)), and willingness to sign up as a junior mentor (Columns (5) and (6)). The dependent variable is binary, coded as 1 if the person chose to sign up and 0 otherwise. Columns (2), (4), and (6) include an interaction with being selected as the most supportive employee in the previous survey. If a person was selected and was in the award branch, they received the award. Standard errors are clustered at the branch level. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A4: Correlation of Survey Helpfulness Rankings with Helping Measurement

	(1)	(2)	(3)
		Signing up to Share Knowlege	
Supervisor rating	0.000		
	(0.00)		
Peer rating		0.002**	
		(0.00)	
In top 20% Most Supportive			0.095*
			(0.06)
Mean Dep Var	0.426		
Observations	471	471	471

The linear probability model (OLS) estimates the predictive power of various rankings on the willingness to provide productivity tips. The dependent variable takes the value of 1 if the employee signed up to share knowledge and 0 if they chose not to. Column (1) shows the predictive power of the supervisor ranking, which ranges from 0 (employee very rarely helps) to 100 (employee helps very frequently). Column (2) presents the linear relationship with peer ratings, which range from 0 (if no one chose the person as supportive) to 100 (if everyone in the branch chose the person as frequently helping). Column (3) uses a binary variable equal to 1 if the person is in the top 20% most supportive employees in the branch (and would therefore have received the award if in the treatment group), and 0 otherwise. Results are shown only for the control group. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

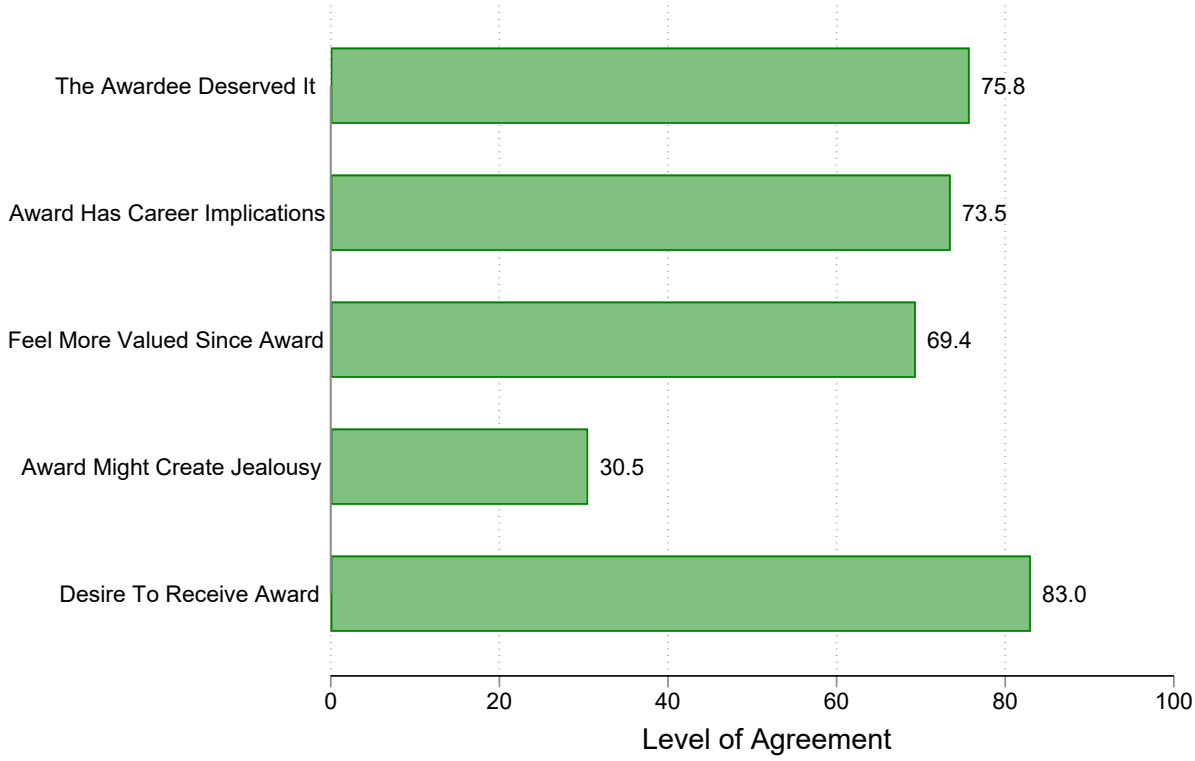


Figure A1: Perceptions of the Intervention at Six Month

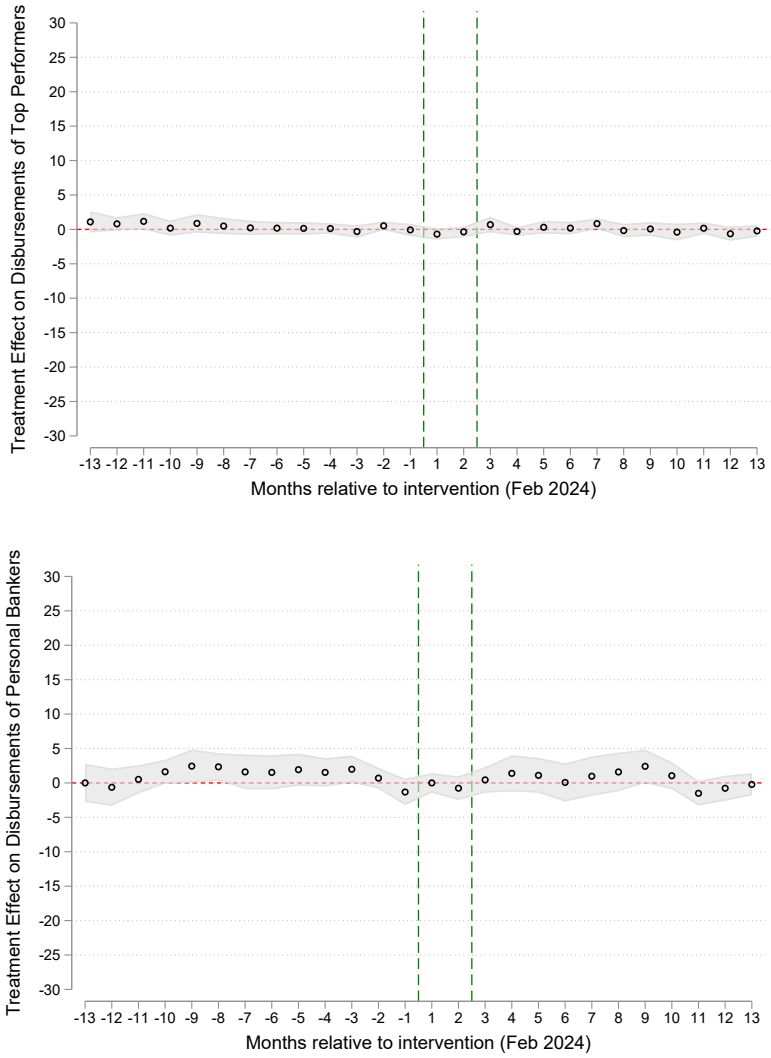


Figure A2: Event-Study Estimates of Treatment Effects on Monthly Loan Disbursements

Notes: The figures present results from an event-study regression estimating dynamic treatment effects of the intervention on monthly loan disbursements. The Y-axis shows the difference in the number of loans disbursed between treatment and control branches, while the X-axis indicates months relative to the intervention date. The green vertical lines represent the timing of the two award rounds. The top panel displays estimates for *business bankers*, who are the firm's top performers and handle large, complex loans. The bottom panel shows results for the remaining staff—namely, all bankers who are neither business bankers nor junior bankers, such as *personal bankers* or *salary loan bankers*. The specification for business bankers includes employee and calendar-month fixed effects. The specification for the remaining staff includes employee, designation, and calendar-month fixed effects. In both cases, standard errors are clustered at the branch level. The sample covers the period from January 2023 to March 2025, and 95% confidence intervals are shown.

6.2 A Stylized Model of Assistance In Firms

Model Setup and Implications

In this section, we provide a highly stylized conceptual framework to explore how a public recognition incentive–awarding employees identified as the most supportive by their peers and supervisors–affects the helping decision of employees. Our framework is based on the canonical model of social signaling in Bénabou & Tirole (2006). The contribution of our simplified model is to finely differentiate the mechanism channels of the awards by varying the visibility of employees' helping actions.

Utility of Helping. In a given branch of N members, an employee $i \in \{1, \ldots, N\}$ ("she") decides how much helping effort $e_i \in \{0, 1\}$ to exert. Examples of such behavior are supporting colleagues with their complex loan applications, giving them a ride to their clients, or supporting peers with their personal problems. These helping behaviors are costly to the employee i herself, for example, because they are time-consuming and require substantial efforts. Choosing e_i entails a utility cost $C(e_i) = ce_i$, where $c > 0$ is the cost of $e_i = 1$.

Employee i's payoff for helping consists of two components: intrinsic motivation v_i and image payoff $R_i(e_i)$. Thus, employee i's utility can be written as:

$$v_i e_i + R_i(e_i) - ce_i \tag{9}$$

The first component v_i reflects employee i's intrinsic motivation to help others. This can be interpreted as her altruistic predisposition, internalized norms to be team-oriented, or personal satisfaction from supporting her colleagues. Different employees in a branch may differ in their intrinsic motivation v_i, which is private information of their type. For simplicity, we assume that v_i is uniformly distributed over a finite support $[\underline{v}, \bar{v}]$.

The second component represents her image payoff, denoted by $R_i(e_i) = \sum_{j \neq i} R_{ij}(e_i)$, which captures the payoff from an image of how her helping effort e_i is perceived by others. Specifically, R_{ij} represents the reputational benefit or social recognition of helping behavior that employee i receives in the eyes of member $j \in \{p, m\}$, who can be her $p$eers or the $m$anagement team. This image payoff can reflect various forms of social rewards, such as reputations among peers or promotion prospects. It may also reflect how likely other colleagues will support or collaborate with her in the future, making it a strategic incentive for helping behavior. Thus, R_{ij} can incorporate both pure image concern of altruistic reputation and career concerns of promotability and future reciprocity.

In particular, $R_{ij}(e_i) = \mu_{ij}\mathbb{E}[v_i|e_i]$, where μ_{ij} captures the degree employee i cares about being perceived as altruistic by other member j. We assume that each employee i likes to be perceived as altruistic by each of the other members j in the branch, i.e., $\mu_{ij} \geq 0$.

Social Signaling of Awards. The introduction of awards influence employee i's utility

through two primary channels. First, the presence of awards may boost intrinsic motivation (v_i) by enhancing morale or reinforcing a self-image associated with helping behavior. Second, public recognition can affect the social image component (μ_{ij}), increasing the perceived value of being seen as helpful. This effect may arise from heightened peer reputation concerns, making social expectations more explicit, or increasing the desirability of being seen as helpful. Additionally, public awards may intensify career-related incentives by signaling that management explicitly values and rewards helping behavior. As a result, employees may increasingly view helping as a strategic choice to advance their career prospects.

We assume that $\mu_{ij} = 0$ without awards. This may occur, for instance, when employees are unaware that their helping behaviors can affect their reputations and career prospects, especially in the absence of recognition incentives. In this case, employee i receives an utility of $v_i e_i - c e_i$, regardless of whether helping effort e_i is observable. Consequently, under no award and across visibility treatments, employee i chooses to help $e_i^* = 1$ if and only if $v_i \geq c$. We suppose that $c \in (\underline{v}, \bar{v})$, thus in the control group, some employees decide to help.

In contrast, the awards might shape reputations among peers and influence social expectations around helping behaviors. Moreover, the awards are signed by top organizational management and presented by branch management, thus they serve as a visible signal of the importance the organization places on assistance. This signaling effect may reinforce employees' perceptions of managerial priorities and workplace norms, further shaping their willingness to help. In other words, the awards influence the extent that employee i cares about being perceived as altruistic by the others. Thus, under the award scheme, we suppose that $\mu_{ij} > 0$.

Anonymity: If e_i is unobservable, then $R_{ij}(e_i)$ does not depend on e_i. Consequently, employee i chooses to help $e_i^* = 1$ if and only if $v_i \geq c$. Intuitively, as helping effort is unobservable, employee i cannot influence the belief of the others about how supportive she is. Thus, if the awards increase intrinsic motivation to help, it increases the probability that employee i chooses to help.

Visibility: In workplace settings, employees' utility from helping is influenced by two important external factors: *peer reputations* and *career concerns*. First, employees may feel social pressure to conform to assistance norms or seek to signal positive traits, such as being helpful, to their peers. Second, employees may also consider the career implications of their helping behavior. If management values assistance, employees might help to align with managerial expectations or to signal attributes that are beneficial for career advancement. To disentangle these channels, we vary whether helping effort is observable by peers or the management team.

Suppose now helping effort e_i is observable. For simplicitiy, we consider $N = 2$ and focus on a perfect Bayesian equilibrium with a unique cutoff value $v^* \in (\underline{v}, \bar{v})$. Consider the following strategy profile: Employee i chooses to help $e_i = 1$ if and only if $v_i \geq v^*$. Employee

i chooses $e_i = 1$ if

$$v_i + \mu_{ij}\mathbb{E}[v_i|v_i \geq v^*] - c \geq \mu_{ij}\mathbb{E}[v_i|v_i < v^*]. \tag{10}$$

This holds if and only if $v_i + \mu_{ij}\Delta(v^*) \geq c$, where $\Delta(v^*) = \mathbb{E}[v_i|v_i \geq v^*] - \mathbb{E}[v_i|v_i < v^*]$. This implies that employee i chooses to help when the combined benefits of intrinsic motivation and the image gains perceived by others j outweigh the cost of helping. The cutoff value v^* is determined by $v^* + \mu_{ij}\Delta(v^*) = c$. Thus, solving for the cutoff value, we have:

$$v^* = \frac{c}{\mu_{ij}+1} - \frac{\mu_{ij}}{\mu_{ij}+1}\frac{\overline{v}-\underline{v}}{2}. \tag{11}$$

Note that $v^* < c$, which implies complementarities between the awards and the visibility of helping effort. Under visibility treatments, the awards increase the likelihood that employee i chooses to help.

Hypothesis Development and Empirical Tests

We examine three hypotheses derived from our model:

Hypothesis 1. *(Intrinsic Motivation Mechanism): Employees are more likely to support others because the intervention increases their intrinsic motivation to help.*

To test this hypothesis, we need to compare helping decisions in treatment and control branches when the decision is observable only to the individual.

$$P(e_i = 1|\text{Award, Anonymous}) > P(e_i = 1|\text{No Award, Anonymous}) \tag{12}$$

Hypothesis 2. *(Peer Reputation Mechanism): Employees are more likely to support others because the intervention increases the reputational value of helping among peers.*

$$P(e_i = 1|\text{Award, Peer Visibility}) > P(e_i = 1|\text{No Award, Peer Visibility}) \tag{13}$$

To isolate the peer reputation mechanism, we compare the effect of the award under peer visibility (Equation 13) to its effect under anonymity (Equation 12). If the award affects intrinsic motivation, the incremental effect of peer visibility will be the difference between the two.

Hypothesis 3. *(Career Concerns Mechanism): Employees are more likely to support others because the intervention increases the career value of helping.*

$$P(e_i = 1|\text{Award, Mgmt Visibility}) > P(e_i = 1|\text{No Award, Mgmt Visibility}) \tag{14}$$

To isolate the career concerns mechanism, we compare the effect of the award under management visibility (Equation 14) to its effect under anonymity (Equation 12). If the

award affects intrinsic motivation, the incremental effect of management visibility will be the difference between the two.

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