Promoting Women's Leadership: Experimental Evidence from Grassroots Organizations in Uganda*

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March 2026

PRELIMINARY AND INCOMPLETE - NOT FOR CIRCULATION

Abstract

While women remain underrepresented in executive and political leadership globally, far less is known about their leadership roles in grassroots organizations. We report findings from a large-scale randomized control trial in Uganda aimed at increasing female leadership in village savings and loans associations (VSLAs), an important source of credit in rural Sub-Saharan Africa. We find that encouraging savings groups to choose a woman as their next leader caused a sustained improvement in the representation of female leaders in VSLAs. The change in leadership had a significant effect on financial decision making of the group, as witnessed by a marked increase in loans, which we partly ascribe to the gender of the new leadership and partly to the change in leadership as such. The intervention did not have any detrimental effects on financial outcomes, member satisfaction with the leader, or the leaders' mental health.

Keywords: Female leadership, gender equality, VSLAs, financial decisions, Uganda

JEL Codes: C93, G21, J16, L31, O12

*This research has been implemented in collaboration with several agencies including Care Uganda, Village Enterprise, AVSI, Microfinance Support Centre Ltd. (MSC) and BRAC Uganda with funding from the funded by the Bill & Melinda Gates Foundation. We are thankful to Rita Larok and Johnpaul Nyeko from AVSI, Celeste Brubaker and Carrie Vergel de Dios from Village Enterprise, Melch Natukunda from Care Uganda, James Muhwezi from MSC and James Khakshi and Sikoti Doreen form BRAC Uganda. Elijah Kipchumba and Kennedy Johnston provided assistance with the data analysis, and Alexander Hagen with the text analysis. We are also grateful to all the field research assistants who put a lot of effort in the data collection. The team expresses special thanks to Sybil Chidiac and Radu Ban for their intellectual supports in the study design, implementation and interpretation of survey findings. Ethical clearances for this research were obtained from MUREC (REC REF 0611-2020) and UNCST (Ref: SS685ES). The study is registered in the AEA RCT Registry with ID: AEARCTR-0013128.

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1 Introduction

Women in all parts of the world remain underrepresented in leadership roles across political, economic, and social spheres (World Economic Forum, 2024). This disparity is particularly pronounced in developing countries, where traditional gender norms are deeply entrenched (e.g., Jayachandran, 2015). Increased female leadership is therefore high on the international policy agenda, as reflected in the Sustainable Development Goals, and in particular SDG 5.5, which aims to "ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life." The existing literature on gender and leadership has largely focused on women's representation in formal institutions and high-profile organizations, such as corporate boards, legislatures and city councils (Chattopadhyay and Duflo, 2004; Beaman et al., 2009, 2012; Matsa and Miller, 2013; Bertrand et al., 2019). Less is known about women's leadership in grassroots organizations, which recruit leaders from a different base than the elite institutions do, and where the dynamics of decision making and outcomes of interest are also likely to differ.

We address this gap in the literature by carrying out a randomized controlled trial promoting female leadership in Village Savings and Loan Associations (VSLAs) in Uganda. These community-based organizations have experienced rapid growth in Sub-Saharan Africa in recent decades and are one of the primary sources of credit in rural areas, particularly for women (FSDU, 2024; Bjorvatn and Tungodden, 2023; Karlan et al., 2017).

Our study involves 535 VSLAs with more than 19,000 members, covering all regions of the country. Our key intervention consists of encouraging randomly assigned male-led groups to choose a woman as their leader for the next savings and loans cycle. We measure the impacts of this intervention, which we refer to as *New Female*, by comparing individual-level and group-level outcomes against those of a control group that received no encouragement of leadership change. In addition, we implement a *New Male* treatment in which groups were encouraged to choose a new male leader. This design allows us to disentangle the effects of a leadership change from the effects of the gender of the new leader. Finally, we randomly assign half of the New Female groups to a mentorship intervention: if the newly selected leader is a woman, she is offered mentorship by female role models (female chairperson of other groups, not included in the study) via phone, with the offer made only after the leadership selection.

We tracked the groups over a period of two savings and loans cycles (roughly two years), to test whether our intervention successfully promoted female leadership over time. In addition, during

the second post-intervention cycle, we collected administrative data on loans covering the entire post-intervention period, and conducted a member-level survey to evaluate whether and how the (intended) change in leadership impacted financial decisions, and whether it had any negative effects on financial outcomes, member satisfaction, or the leaders' mental health. We also conducted a series of focus group discussions and in-depth interviews to get a deeper understanding on the functioning of the VSLAs, as well as the members' attitudes towards female leadership.

We document three primary findings. First, our New Female encouragement intervention had a large and sustained impact on female leadership. In the first savings and loan cycle following the treatment, groups that were encouraged to choose a woman as their next leader were 8.8 percentage points (pp) more likely to have a female leader. This corresponds to a 124% increase from the control group average of 7.1%. Importantly, the impact of our intervention was sustained over time, with female leadership up 12.6 pp over a control mean of 10.2% in the subsequent cycle, keeping the percentage increase stable at 123%. This highlights the potential for a light-touch intervention to cause lasting improvements in the gender balance of leadership in grassroots organizations.

Second, we find that the New Female treatment changed financial decisions in the VSLAs, with an increase in loan disbursements to group members of around 40%. There is suggestive evidence that also the New Male treatment increased loans to members, although smaller in size than the New Female treatment and less precisely estimated. Our interpretation is that the treatment effect on loans is driven partly by the change to female leadership and partly by the encouragement to change leadership more broadly. We suggest that the change in financial decisions were brought about by a change in leadership style. This is based on text analyses of focus groups and interviews, showing that women leaders are more approachable and inclusive, and on member survey data showing that the new leaders were more popular than the incumbents, based on leadership nominations elicited at baseline.

Third, we do not find systematic evidence of a negative impact of the New Female leadership treatment on financial outcomes (loan write-offs), on member satisfaction with the leader, or on the leaders' mental health. Members give similar overall ratings of the leader skills and performance across treatment and control groups. The New Female treatment actually reduced drop-outs, particularly by women (by 18%), which could be interpreted as increased member satisfaction with their groups. We also find no additional effects from the mentorship component offered to a subset of newly selected female leaders.

Our findings can be interpreted in light of competing explanations for women's underrepresen-

tation in leadership. In this setting, mentorship and role-model exposure were not necessary for women to perform effectively as leaders. Rather, the main constraint appears to have been access to leadership positions in the first place: once given the opportunity, female leaders performed as effectively as male leaders. Moreover, the limited evidence of diminished support for the newly elected female leaders among male members suggests that a social backlash is not a primary barrier to female leadership in this context.

Our findings further indicate that changes in leadership in grassroots organizations can occur with the help of external encouragement. Change in leadership was more likely to take place in organizations founded by NGOs and when there is disagreement among members regarding the group's financial management. One possible interpretation is that the encouragement prompted groups to discuss and reconsider their leadership arrangements, thereby facilitating leadership turnover. Consistent with this interpretation, our data on leader popularity show that when leadership changed, the new leaders tended to have greater support among group members. This suggests that the intervention may have enabled groups to select leaders who were more broadly supported, which may in turn help explain the observed changes in financial decisions.

We contribute to the literature on promoting women's representation in leadership roles and on the broader impacts of increased representation on organizations, citizens, and communities. Much of the existing evidence comes from politics and corporate boards in high-income countries. In politics, randomized reservation of village council seats for women in India has been shown to shift policy priorities toward women's preferences (Chattopadhyay and Duflo, 2004), raise female political participation (Beaman et al., 2009), and improve girls' aspirations and education (Beaman et al., 2012). Studies of close elections between male and female candidates, however, yield mixed results, ranging from gains in health and economic activity (Brollo and Troiano, 2016; Bruce et al., 2022) to null findings (Bagues and Campa, 2021; Ferreira and Gyourko, 2014). In the corporate domain, much of the evidence comes from Norway's early-2000s gender quota, which required publicly listed companies to have at least 40% female board representation (Bertrand et al., 2019). Early studies documented declines in stock prices (Ahern and Dittmar, 2012) and short-term profits (Matsa and Miller, 2013), with the latter partly attributed to fewer workforce layoffs under female leadership. Subsequent work, however, finds no adverse effects on firm performance in Norway (Eckbo et al., 2022) or in Italy, which implemented a similar policy (Ferrari et al., 2022). Beyond performance, gender-diverse boards have been linked to more active executive monitoring (Adams and Ferreira, 2009), improved employee working conditions (Devicienti et al., 2019), and increased promotion

rates of other women within the organizations (Matsa and Miller, 2011; Kunze and Miller, 2017).

Our study extends this literature by examining women's leadership in a markedly different setting, namely financial associations in low-income, rural communities. Unlike political offices or corporate boards in high-income countries, leadership positions in these organizations are informal, unpaid, and embedded within small, community-based financial groups. These groups play a crucial role in promoting financial inclusion and economic resilience, especially for women. Yet, little is known on whether promoting women's representation in such grassroots leadership roles can influence the functioning of the organizations, resource allocation, and women's access to credit. By experimentally encouraging the selection of female leaders, we provide causal evidence on the feasibility and impacts of increasing women's leadership in a context where formal barriers to participation are minimal but social norms and implicit biases may limit women's access to leadership roles. Our findings indicate that a simple, low-cost encouragement intervention can strengthen women's role in community decision-making and improve both women's and men's access to credit, without negative impacts on financial viability. This suggests that there are fully qualified women available to assume a leadership role in these grassroots organizations.

Methodologically, we make the important point of distinguishing between the change to female leadership from the change in leadership as such. We do so by adding a treatment arm where the groups are encouraged to change to a new male leader. Our findings suggest that at least part of the strong treatment effect on group lending from female leadership can be ascribed to an encouragement to change leadership, irrespective of gender.

The focus on women's performance as leaders and on members' attitudes toward them, also links our study to a large literature on attitudes toward female leaders. Previous work has shown that women in positions of power are judged more negatively than men across a variety of settings (e.g., Abel, 2024; Ayalew et al., 2021; Eckel et al., 2024; Greenberg et al., 2024). There is also evidence that women are more sensitive to public scrutiny (Alan et al., 2020) and that the threat of backlash can deter women, more than men, from aspiring to leadership roles (Chakraborty and Serra, 2024).[1] We contribute to this literature by providing evidence from a low-income, small-scale organizational setting that a simple, low-cost encouragement intervention can meaningfully increase women's representation in leadership. In contrast to much of the backlash literature, our survey data show no evidence of negative reactions to female leaders, nor signs of internalized pressure or judgment, as women in leadership positions report similar levels of self-satisfaction and mental

[1] For a recent review of the literature on behavioral barriers to female leadership, see Eckel et al. (2021).

health as their counterparts.

The remainder of the paper is organized as follows. We start by providing context to our analysis, with a brief description of how VSLAs are organized, then present our interventions, the sample and the timeline of our study. In Section 3 we discuss data and estimation strategy, also discussing attrition and balance. Section 4 presents the results, starting with the impact on female leadership, then moving on to financial decisions and outcomes and discussing mechanisms, and close the results section with a discussion of leader well-being. Section 5 provides concluding remarks.

2 Context and interventions

VSLAs consist of around 30 members who meet weekly and deposit savings into a common fund, which serves as a source of loans for members. The groups are led by a management committee, most commonly consisting of three individuals: Chairperson, Secretary, and Treasurer. The leadership is appointed for the duration of a savings cycle, typically one year, and selected through a consultative process, sometimes ending with voting if there are multiple candidates. The responsibilities of the management committee include making decisions on the value of saving shares, the approval of loan disbursements to individual members, the frequency of group meetings and the implementation of non-financial activities. At the end of the yearly cycle, accumulated savings and interest earnings are distributed proportionally to members' shares. In addition to their financial role, many of these grassroots organizations also engage in non-financial activities such as vocational training, conflict resolution, and community infrastructure projects.

We collaborated with multiple local partners to identify eligible groups, the main requirement being that the group had a male leader, and ensuring coverage across all regions of Uganda. This process yielded a final sample of 535 VSLAs with more than 19,000 members located in the Northern, Central, Western, and Eastern regions, as shown in Figure 1.[2]

We designed a light-touch intervention consisting of an encouragement to change Chairperson for the next financial cycle. The message was delivered to the group during a regular meeting by a local research assistant (sometimes accompanied by a member from the supporting NGO), and framed as an opportunity for others to bring fresh perspectives to group management and to

[2]The VSLA recruitment was carried out in collaboration with several agencies, including AVSI Foundation, BRAC Uganda, Care International Uganda, Village Enterprise (VE) Uganda, and Microfinance Support Centre Ltd (MSC). We first identified 325 VSLAs through our partner organizations that met these criteria, and we then supplemented the sample this with an independent selection of an additional 210 VSLAs by our research team. In the empirical analysis, we control for whether the VSLA was recruited through a partner NGO or independently by the research team.

develop leadership skills (see Appendix B). A reminder was given to the groups, using the same procedure, right before the beginning of a new savings cycle, when members could decide to elect a new Chairperson. The encouragement involved no financial incentives, and was thus designed to be non-invasive, simple, and low-cost, making it easy to scale up.

In our key treatment arm, we specifically encouraged the groups to select a female Chairperson for the next cycle. To isolate the gender dimension of such a leadership change, we also included a treatment arm where the encouragement was to select a new *male* Chairperson to lead the VSLA in the upcoming cycle, using exactly the same procedure as in the encouragement to choose a female leader. Comparing the New Female treatment to the New Male treatment allows us to identify the additional effect of choosing a *female* leader (or more precisely: the encouragement to do so).

We randomly assigned the 535 VSLAs to one of three groups: New Female (258 groups), New Male (127 groups), and Control (127 groups, where no encouragement was given). Figure 1 presents a map of Uganda and a visualization of the location of the VSLAs assigned to each treatment arm.

We also originally designed a sub-treatment within the New Female arm, which involved providing phone-based mentoring to women newly appointed as Chairperson. This mentoring component was not pre-announced and was unknown to VSLAs at the time of leader selection. Mentors, serving as role models, were female Chairpersons from other VSLAs outside the study sample.[3] Since the New Female and New Female plus Role Model treatments were identical up to the appointment of the Chairperson (i.e., the same encouragement scripts were used),[4] and given that we do not find significant differences between the two, for expositional reasons we combine the two treatments in our main analysis. However, we report the disaggregated results in the Appendix and refer to them when drawing broader insights from our findings.

Our baseline survey was conducted between March and April 2022. We recorded the cycle month at the time of the baseline survey, and the end date of the cycle, as the financial year differs across groups. The endline data collection took place during the groups' second post-intervention cycle, and was implemented between March and April 2024, around two years after the baseline. During the endline visit, we also collected administrative data about financial outcomes from first (and

[3]The program facilitated this mentorship by providing airtime for periodic phone calls, allowing the new Chairperson to seek advice and guidance from her mentor. While the communication between mentor and new female Chairperson was not forced (or enforced) by the research team, the intervention involved sharing the names and contacts or mentor and mentee, facilitating an initial meeting via phone, and encouragement to have conversations at least twice after being connected.

[4]Information about the mentorship program was withheld until after selection of the new VSLA leaders. This approach ensured that the mentorship was offered only after the new female Chairperson had been chosen, preventing any influence on the selection process.

completed) post-intervention cycle. We shall refer to the first post-intervention cycle as Cycle 1 and the second post-intervention cycle as Cycle 2.

3 Data and estimation strategy

3.1 Data

We collected data from three different sources: (i) Member-level administrative records, including gender and loans received in the two post-intervention cycles; (ii) Administrative records on group-level financial metrics, such as total loans, funds in the cash box, and loan write-offs; and (iii) Survey-level data from both baseline and endline on a sub-sample (about 30 percent) of the members.[5]

Our pre-registered primary outcomes are: (i) the gender of the Chairperson in Cycle 1 and Cycle 2; (ii) measures of members' loans and savings, as well as VSLA-level measures of loan write-offs and member-dropouts, and (iii) survey-based measures of members' assessments of the Chairperson as well as the Chairpersons' self-assessments. Our pre-registered secondary outcomes of interest are gender attitudes and Chairpersons' mental health and leadership ambition.

3.2 Attrition and balance

Out of the 535 VSLAs recruited at baseline, 23 had dissolved two years later when we conducted our endline study, leaving us with 512 active groups. Among these, we were unable to conduct the member survey in 33 groups Overall, we managed to re-interview about 82 percent of our initial survey respondents, and added 66 new Chairpersons among the respondents.[6]

Appendix table A1 reports results from our attrition analysis. We first examine whether treatment assignment predicts VSLA dissolution and find no evidence that it does. We then extend the analysis to include VSLAs that either dissolved or were unavailable for the survey and again find no evidence of differential attrition by treatment status. Finally, we analyze attrition among surveyed respondents, controlling for individual characteristics measured at baseline. Respondents drawn from the sample of committee members or potential leaders were less likely to attrit than general members, while no other demographic characteristics significantly predict attrition. Importantly,

[5] Our survey data are drawn from a sample of between 8 and 10 members per group, including the Chairperson, initially surveyed at baseline, for a total of 4,810 members. Among the respondents, 535 were the sitting Chairpersons and the rest were potential leaders (1,059), as identified by the Chairperson, other committee members (1,087) and other general members (2,131).

[6] We also added 398 replacements to the survey sample. However, since we do not have baseline data for them, we exclude them from our primary empirical analysis.

we do not observe differential attrition across treatment arms. Given these results, our main sample consists of the 512 VSLAs that were still active at endline, while the member-level financial data refer to all 19,455 active members in Cycle 2.

Table 1 displays the average characteristics of group members based on survey data, and shows evidence of balance across treatment groups. The average respondent is just over 40 years old, nearly 60% of the survey respondents are women, over 70% are married, with an average of just over 5 children. While the majority of the surveyed members have completed primary education (about 70%), only a small minority (less than 10%) have completed secondary schooling. 94% are economically active, with farming being the main source of income (68%), followed by small-scale business ownership (23%). Average yearly earnings stands at around 3.3 million UGX (amounting to around 2.500 USD, PPP). We observe that the sample is balanced on almost all background variables.

We report VLSA characteristics and balance tests across treatment arms at the group level (N=512) in Appendix Table A2. We see that the VSLAs in the control group have an average of 34 members, 59% of whom are women. The leadership committee consists of 3.4 people on average, 37% of whom are women (by design, none of them are Chairpersons, since we only sampled male-led VSLAs). 60% of the groups were recruited via a partner organization, and about 20% are supported by an NGO. Geographically, there is an equal split of groups between the East and the West, and we see somewhat more groups in the North than in the South. The average group had been active for 4.5 years (cycles), and in the seventh month of the cycle at the time of the baseline, and finally, 46% of the groups were involved in some kind of non-financial activity.

We observe that the groups are well balanced across treatment arms on most of these background variables, leading us to conclude that the randomization was successful.

3.3 Estimation Strategy

We estimate treatment effects both at the VSLA level and at the member level. The most important VSLA-level outcomes include the gender of the leadership and group-level financial variables, such as loan write-offs and savings in the lock box. We estimate the intention to treat (ITT) effects of the encouragement interventions on our VSLA-level outcomes, by estimating equation 1 below:

$$Y_{is,t} = \alpha + \beta_1 \text{New Female}_{is} + \beta_2 \text{New Male}_{is} + \delta_1 Y_{is,t_0} + \mu_s + \epsilon_{ist} \tag{1}$$

where $Y_{is,t}$ is the outcome of VSLA i in stratum s at endline time t, with t being equal to 1 for Cycle 1 outcomes and equal to 2 for Cycle 2 outcomes. New Female$_{is}$ and New Male$_{is}$ are the treatment indicators. For VSLA-level outcomes that were also measured at baseline, we estimate an ANCOVA model by including the Cycle 0 value of the outcomes, Y_{is,t_0}, in the specification. We also control for the strata employed in the randomization, μ_s, which are geographical dummies and indicators for NGO-specific support of the VSLA. We report heteroskedasticity robust standard errors.

At the member level, the primary outcomes of interest are loans to members based on administrative records and survey-based measures of attitudes and mindset. We evaluate the intention to treat (ITT) impacts of the encouragement interventions on member-level outcomes by estimating the following equation:

$$Y_{jis,t} = \alpha + \beta_1 \text{New Female}_{is} + \beta_2 \text{New Male}_{is} + \delta_1 Y_{jis,t_0} + \delta_2 X'_{jis,0} + \mu_s + \epsilon_{ist} \tag{2}$$

where $Y_{jis,t}$ is the outcome of member j of VSLA i in stratum s at endline time t. In addition to VSLA-level strata, when available, we control for a vector of baseline individual-level covariates: gender, age, education, a measure of household assets, earnings in the last 12 months, the primary source of economic activity, and marital status. Finally, we control for the individual's leadership role in the VSLA, i.e., whether they are a Chairperson, a Vice-Chairperson, a Secretary or a Treasurer. We cluster standard errors at the VSLA level, i.e., the level of randomization.

Since we have multiple primary outcomes of interest and two treatment indicators, we correct for multiple hypothesis testing by employing the Romano and Wolf (2005)'s step-down procedure for each set of outcomes , i.e., all financial outcomes referring to a given cycle.

When assessing the differential impacts of the treatments by members' gender, our preferred empirical strategy (primarily for easy of interpretation) is to estimate the regression equation separately for male and female members. However, we also pool the data and interact each treatment indicator with the female dummy. This allows us to test whether whether the treatment effects differ for male and female members. We report this analysis in Appendix A.

Finally, in Appendix A we also replicate our analysis by separating the New Female and the *New Female & Role Model* interventions (described in Section 2), to closely follow our original design and empirical strategy. As a result, we estimate the equivalent of equation (1) and equation (2) with the addition of the New Female & Role Model treatment indicator.

One limitation of our data is that information on Cycle 1 outcomes was collected at endline, which took place during Cycle 2. As a result, it is not always possible to determine whether individuals who were members at baseline but not observed in Cycle 2 left the group during Cycle 1 or only in Cycle 2. In our main analysis, individuals recorded with zero loans in Cycle 1 are treated as having remained members during that cycle and receiving no loans. However, it is possible that some or all of these zero values reflect individuals who had already dropped out.

As a robustness check, we replicate our analysis of loan outcomes restricting the sample to individuals who are observed as members both at baseline and in Cycle 2. The results of this exercise are reported in Appendix Table A12. The estimates are very similar to those from our main specification, suggesting that our results are not driven by how we treat attrited members.

4 Results

We start by examining whether our intervention succeeded in causing an increase in female leadership of the grassroots financial organizations, both in the short term (Cycle 1) and in the long term (Cycle 2). Then, in Section 4.2, we present and discuss our findings on financial outcomes, most notably the amount of loans. We then present the treatment impacts on member satisfaction with the Chairperson (Section 4.3.1) and leader well-being (Section 4.3.2). We conclude by discussing the results obtained for the add-on role model condition, which we implemented in about half of the groups assigned to the New Female treatment (Section 4.4).

4.1 Female leadership

4.1.1 Findings

Figure 2 shows the evolution of new leadership in the various treatment arms over time. Note that by construction there were no female leaders at baseline. We see that, in the Control group, absent any external encouragement, fewer than 20% of groups changed leadership in Cycle 1, with this share rising to about 25% in Cycle 2. About 10% of Control VSLAs transitioned to a female leader. We observe a similar increase in female leadership in the New Male treatment, but a markedly larger increase in groups appointing a new male leader.

In the New Female treatment, the share of groups appointing a new leader is very similar to the one observed in the New Male arm, but now with a large increase in female leadership (while the share of groups switching to a new male leader remains roughly equal to that in the control group).

Female leadership in this arm reaches around 15% in the short term (Cycle 1). As this treatment encouraged groups to consider new leadership only in the upcoming cycle (Cycle 1), the long-term results (Cycle 2) are particularly noteworthy: the share of female-led groups rose further to about 23%, even without additional encouragement.[7]

Table 2 confirms the patterns observed in Figure 2, using regression analysis and including controls. The New Female treatment increased the likelihood of female leadership by 8.8 percentage points (pp) relative to the control group, equivalent to a 124% increase over the control mean of 7.1%. Importantly, the impact of our intervention was sustained over time, with female leadership up 12.6 pp over a control mean of 10.2% in the subsequent cycle, keeping the percentage increase stable at 123%. The New Male treatment also increases leadership turnover, although the effects are smaller and estimated less precisely. We observe a 5 percentage point increase in the likelihood of selecting a new male chairperson in Cycle 1. In Cycle 2, the effect grows to a statistically significant 8.8 percentage point increase, corresponding to nearly a 60% increase relative to the control mean.

Do the new leaders differ systematically in experience, skills, or other relevant characteristics from the incumbents? Figure A3 in the Appendix shows that while characteristics such as education, marital status, and assets predict leadership, they do so similarly across treatment arms. Accordingly, our interventions did not affect the *type* of leaders. But clearly, leaders can differ on other dimensions than observable background variables, including leadership *style*. We will return to this question in Section 4.2 when discussing changes in financial decisions.

4.1.2 Mechanisms

It may be somewhat surprising that a simple encouragement, without any financial incentives, had such marked effects on leadership change. One possibility is that the message conveyed by the treatment was later reinforced by NGOs that regularly engage with the groups. Another possibility is that the encouragement provided members who were already inclined to change leadership with an opportunity to advocate for change within their groups.

Exploratory analysis provides suggestive evidence in favor of both channels. First, Table 3 shows that the leadership changes observed in both the New Female and New Male treatments in Cycle 1 are driven entirely by groups that were recruited with the help of a partner NGO (which is the case for around 60% of our sample (see Table A2). This suggests that groups that have a

[7] At the same time, the share of women among members and among individuals in other leadership roles - Vice-Chairperson, Secretary and Treasurer - remained not significantly different across treatment arms, as shown in Figures A1 and A2 in the Appendix.

working relationship with an NGO are more accustomed to and hence receptive to external guidance, including an encouragement to change leadership.

Second, using data from our member survey, Table 4 shows that the likelihood to change leadership, particularly to a woman in the New Female treatment, is higher in groups where the majority of members report disagreement with one or more financial rules, such as the interest rate, the share size, or the maximum loan size.

In sum, therefore, the encouragement to change leadership seems to have been particularly effective in groups that were used to taking advice from their NGO partners and groups where there was a larger level of dissatisfaction with the existing rules, plausibly making the members more enthusiastic about a new leadership to change the functioning of the groups. This leads us to the next question: Did the change in leadership actually lead to changes in financial decisions and outcomes?

4.2 Financial Outcomes

4.2.1 Findings

Table 5 reports results on member loans, first for the entire post-intervention period (Combined Cycles 1 & 2) and second for the completed first cycle, for all members and by gender.[8] Starting with the combined cycles, we observe that the New Female intervention caused an increase in the value of loans to members of around 115 thousand UGX (25 USD) compared to a control group average of 270 thousand UGX, i.e., a rise of more than 40%.[9]

Both female and male members accessed these higher loans, with loans to female members increasing by 30% relative to the average of women in the control group, and loans to male members increasing by 50% relative to the average for men in the control group. The pattern is very much the same if we narrow the focus to the completed first cycle, as shown in columns 4-6: There is a significant increase in loans to members, both female and male.

We also note that the estimated coefficients for the New Male intervention are positive and quantitatively meaningful, although smaller in size that those of the New Female intervention and not precisely estimated. In general, we cannot exclude that the two treatments had the same effect

[8] Loan maturity ranges from one month to the full duration of the cycle (typically a year) and with interest rates determined by the groups. In our sample, most groups operated with a maturity of three months and a monthly interest rate of 10 percent.

[9] To put some perspectives on these numbers, we observe from Table 3 that the average control group earnings are 3.3 million UGX, which translates into a daily income of roughly 10 thousand UGX. Thus, the 115 thousand UGX in extra loans corresponds to around twelve days of earnings for an average member.

on loans, the exception being for female members when looking at both periods, that is, column 2. Thus, while encouraging a change to female leadership has had a marked effect on financial decisions, our evidence also suggests that this is partly due to the encouragement to change in leadership as such, irrespective of gender.[10] Table A4 in the Appendix provides additional support of this interpretation: we find that the increase in loans in the New Female arm is equally strong for groups that changed to a female leader as those that continued with a male leader.

A more in-depth examination of loan outcomes in Cycle 2, including the likelihood of obtaining at least one loan, the number of loans received, and the average size of each loan, reported in Tables A5 to A6 in Appendix, suggests that the main effect operates through the intensive rather than the extensive margin. While there is suggestive evidence that new leaders increased the probability that a member received any loan, this effect is not statistically significant. Instead, we find a significant increase in the average amount borrowed by members, indicating that the overall rise in lending is primarily driven by larger loans rather than by more members receiving loans.

Did the increase in loan size come at the expense of loan quality? Our data indicate that this is not the case. We do not see any difference across treatment arms in loan write offs, as shown in Table A7 in the Appendix. This suggests that newly selected leaders were not simply lending more aggressively, but were able to increase loan size while preserving repayment performance, consistent with effective management of the group's lending process.

4.2.2 Mechanisms

What can explain the change in financial decisions and outcomes caused by the change in leadership? We know from the discussion of the mechanism underlying leadership change (Section 4.1.2), that the treatment was more likely to have an impact in groups that were dissatisfied with the financial rules. In particular, our baseline survey shows that on average about 18% of the members disagree with the maximum loan amount stipulated by the rules of the group. Similarly, about 16% of the members reported at baseline that they had been denied loan, and 32% that they had received a smaller loan than requested.

As discussed above, the new leaders in the treated groups are not different from the incumbents in terms of their *type*, based on observables like education or wealth. But it could still be that the interventions led to a more deliberate selection process producing leaders with a different *style*,

[10] We report the analysis on loans on the pooled sample, with interactions between the treatment indicator and the female member dummy in Table A3 in the Appendix.

for instance in how sensitive they are to members' preferences and demands. We provide support for this hypothesis using various sources of data: baseline nominations of leaders as a measure of popular support; member dropouts from group register data as a proxy for group cohesion; and qualitative evidence from focus group discussions.

Our first source of data for the exploratory analysis of mechanisms comes from the baseline survey. We asked members at baseline to nominate two fellow members, one male and one female, as potential candidates for the next chairperson. Being nominated as leader can be seen as a measure of popular support. Figure 3 shows the number of nominations that the Chairpersons in Cycle 1 and 2 received. The figure suggests that chairpersons in the New Male and New Female arms tend to receive more nominations than those in the control group, with the difference in popularity being particularly pronounced among newly appointed leaders. Further analysis, displayed in Table A8, indicates that new chairpersons receive one more nomination than incumbent leaders in Control groups, and nearly two additional nominations in the treatment groups. This pattern is consistent with the idea that the encouragement to change leadership facilitated the selection of leaders with broader support among group members. More popular leaders may enjoy greater legitimacy and trust within the group and may also be better socially connected to other members. As a result, they may have better information about members' financial needs and be better positioned to identify reliable borrowers and facilitate loan disbursements. In the context of VSLAs, where lending decisions often involve group approval and may generate disagreement among members, leaders with broader support may therefore be better able to implement lending decisions.

These features of the new leadership may also have encouraged members to contribute more funds to the group. Consistent with this interpretation, we find suggestive evidence that the encouragement to select a female leader increased member savings, as shown in Figure 4.[11] The increase in funds mobilized within the group may in turn help explain the higher volume of loans observed in the New Female treatment arm.

Second, we use data on member dropouts from register data as a proxy for membership dissatisfaction and poor group cohesion. As shown in Table 6, the New Female treatment reduced the rate of member drop-outs by 4 percentage points, corresponding to an 18 percent decline, with the impact being driven by female members. Although the point estimates on dropouts for the New Male treatment are also negative, they are less precisely estimated and not statistically significant

[11] Regression results, reported in Table A7, suggest that the treatments increased both savings and the cash held in the lock box for liquidity purposes in Cycle 2. Although these effects are imprecisely estimated, they are positive and economically meaningful

at conventional levels. These findings align with the mechanisms discussed above: more popular leaders may foster a stronger sense of belonging and confidence in the group, reducing members' likelihood of exit. Greater group cohesion, in turn, may facilitate financial transactions among the members.

Finally, we conducted and recorded a series of focus group discussions and in-depth interviews in the local languages, which we transcribed and translated using AI tools.[12] The text analysis suggests that the effects of female leadership may operate through improving the social and organizational conditions under which funds are circulated. Three mechanisms stand out. First, female leaders are repeatedly described as more trustworthy, respectful, committed, and supportive, which may strengthen members' confidence in the leadership and in one another. Second, respondents report better group dynamics under female leadership, including more collaboration, stronger participation in joint activities, and a greater sense of belonging. Third, female leadership is associated with more inclusive decision-making, which may make members more willing to remain in the group and more comfortable requesting and approving loans. Taken together, these mechanisms are consistent with a setting in which female leadership improves trust, cohesion, and the functioning of credit allocation.

4.3 Member satisfaction and leadership well-being

4.3.1 Member Satisfaction

There is a risk that encouraging groups to appoint a woman as Chairperson may result in a leadership arrangement that some members find difficult to accept. Such dissatisfaction could stem from disapproval of the selection process or from the characteristics and decision-making style of the new leader.

When discussing mechanisms behind the increased loans in the previous section, we provided evidence pointing to a greater appreciation of the leadership style of the new leaders, in particular the qualities of female leadership. However, we also asked the members direct questions about their happiness with the current Chairperson, on different qualities: i) honesty and trustworthiness, ii) availability to members, iii) ability to prevent or resolve conflicts, iv) fairness in decision-making regarding loans, v) ability to represent the group outside of the VSLA, vi) how respected the person is among members; vii) to what extent the person listens to members' concerns; and viii) overall leadership performance. The individual answers are aggregated into a weighted average using the

[12]To transcribe the audio, we used OpenAI's Whisper, an open-source speech-to-text model, and OpenAI's GPT-4o-mini language model for translation.

method first introduced by Anderson (2008), whereby the weights assigned to each component of the index are inversely related to the degree of correlation between the underlying variables. In addition, we also asked survey respondents whether they would want the current Chairperson to keep their role in the next cycle.

Table 7 reports the estimated treatment effects on our measures of members' satisfaction in Cycle 2, both for the full sample and separately for male and female members. Evidently, the potential concern that the intervention would lead to a reduction in member satisfaction, in particular in groups with new female leaders, is not supported by our data: members in the New Female groups do not rate their leader less favorably than those in the New Male or control groups. The exception being that men in the New Female treatment are less likely to want the chairperson to serve another cycle. This pattern may reflect gender bias, specifically taste-based discrimination, given that members' assessments of the leader's specific skills and performance show no corresponding treatment differentials.

While this evidence does not point to the treatments causing *increased* satisfaction with the group leaders, as suggested by the evidence put forward in Section 4.2.2, it should be pointed out that the level of satisfaction based on such survey questions is already very high. We see in Table 7 that 88% of the control group members want their current Chairperson to continue, and ratings of baseline chairpersons along all dimensions in the Member Satisfaction Index are very high on average (i.e., larger than 4 on a scale from 1 to 5, with higher values indicating higher levels of satisfaction). Accordingly, there is not much room for additional satisfaction based on these measures, implying that a ceiling effect could influence the results.

4.3.2 Leadership well-being

One potential concern of our intervention is that it could cause increased stress among the new leaders, perhaps particularly so for the newly elected female leaders in a male-dominated society. We measure the leaders' satisfaction by asking them the following three questions (in the Cycle 2 follow-up survey): (i) Are you happy about your role as Chairperson in the last and current cycle?; (ii) To what extent do you think that the other VSLA member are happy or unhappy with you as the Chairperson?; (iii) How happy or unhappy are your family members with your decision to take up the Chairperson role?. We also ask the Chairperson a direct question on whether they would like to continue as Chairperson in the future.

We measure mental health using the Edinburgh Postnatal Depression Scale (EPDS), which

aggregates responses to 10 questions assessing respondents' well-being. However, we exclude the tenth item, which captures suicidal ideation, due to ethical considerations and its limited relevance to our sample and the objectives of the study. A higher score indicates a higher risk of depression. In the empirical analysis, we employ an indicator for whether the index is above the threshold commonly used for high risk of depression.

Our measure of leadership aspirations is based on the Chairpersons' answers to the following six statements: (i) I hope to have more leadership position in my community; (ii) I plan to rise to top leadership positions in my community; (iii) I want to have responsibility of how things happen in my community; (iv) Being a leader of my community is not important to me (with answer rescaled); (v) I do not enjoy the responsibilities of being a leader (with answer rescaled); (vi) It is important to me that people recognize me as a community leader. We aggregate the 8 answers into a standardized index using the Anderson (2008)'s methodology.

Table 8 shows suggestive evidence that the treatment increase leaders' satisfaction: the point estimates for both the New Female and the New Male interventions are positive in column 1, although not statistically significant (Romano-Wold p-values of 0.194 and 0.164 respectively). Column 2 shows the treatment impacts on the chairperson desire to keep their role in the future. We observe that around 80% of the leaders wish to continue, with no differences across treatments. We also see no differences in leaders' mental health and leadership ambition. In the latter analysis, while we do not find any significant impact of either the New Female or the New Male treatment on leadership aspirations, we do observe a significant difference between the two treatments: New Female chairpersons report higher leadership aspirations than their New Male counterparts (p-value=0.042).

Overall, we conclude that the leadership treatments have not caused any additional stress; if anything, they have increased leaders' satisfaction but also not changed their aspirations for leadership in other domains.[13]

4.4 Role Model Effects

As an extension of the main intervention, we implemented a sub-treatment within the New Female arm designed to test whether additional support from female role models could help newly appointed female leaders perform their role. The motivation for this component was the possibility that newly appointed female leaders might face specific challenges due to their limited leadership experience

[13]We had pre-registered the analysis of treatment impacts on gender attitudes (secondary outcomes). We do not find any significant effects of the treatment on members' gender attitudes and perceived gender norms in their community. We report these results in Table A3 in Appendix.

and prevailing gender norms within the groups. If so, exposure to role models and mentorship could help them navigate leadership responsibilities, for instance by providing guidance on how to manage conflict and gain the respect of members, particularly male members.

For completeness, we report the full set of results separately for the New Female and New Female & Role Model treatments in Appendix Tables A11 to A16. Overall, we do not find evidence that the role-model component generated additional impacts. Across all main outcomes, the estimates for the New Female treatment with the role-model add-on are not statistically different from those for the New Female treatment alone. In other words, the additional mentorship did not further affect leadership dynamics or group financial behavior. This interpretation is consistent with our findings on leaders' satisfaction and mental health, which show no evidence of increased distress among leaders in the New Female arm. Together, these results suggest that the main constraint on female leadership in these groups is not confidence or experience, but limited opportunities to assume leadership roles, which our treatments helped alleviate.

5 Concluding Remarks

We report findings from a large-scale randomized control trial in Uganda aimed at increasing women's leadership in village savings and loans associations, based on an encouragement intervention. We document three primary findings. First, encouraging female leadership caused a large and sustained impact on the share of female leaders in the savings groups, pointing to the potential of a light-touch intervention causing lasting improvements in the gender balance of leadership in grassroots organizations.

Second, the interventions had an impact on financial decisions in the organizations, causing a significant increase in loans to group members. Our research design allows us to disentangle the gender dimension of new leadership from a change in leadership as such, with the evidence suggesting that both of these mechanisms matter. Our data suggest that our encouragement of a leadership change has led to an increase in the popularity of the leadership, and qualitative evidence from focus group discussions and in-depth interviews indicates that female leaders are more inclusive and contribute to stronger group cohesion. Perhaps as a result of this, there is suggestive evidence of the New Female intervention being successful in increasing group savings, which could explain the higher loans.

Third, we do not find systematic evidence of negative impacts of our intervention on financial

outcomes or on member satisfaction with the leader, or on the leaders' mental health. On the contrary, the treatment caused a reduction in member dropouts, which is consistent with increased member satisfaction and stronger group cohesion.

Finally, we do not find evidence that connecting new female chairpersons via phone with an established female chairperson of a different group for advice and mentoring generated additional gains. Together, these results suggest that the main constraint on female leadership in these groups is not confidence or experience, but limited opportunities to assume leadership roles, which our treatments helped alleviate. This interpretation is also consistent with our findings on leaders' satisfaction and mental health, which show no evidence of increased distress among leaders in the New Female arm.

Our research underscores the potential of VSLAs to serve as a platform for enhancing women's leadership, which in turn contributes to more equitable access to loans for female members. A straightforward yet impactful intervention — encouraging the selection of a female chairperson at the start of a new loan cycle — can be easily integrated into the practices of agencies that support the formation of new VSLAs. Beyond its specific policy implications, our study highlights the broader potential for promoting women's leadership in community-based groups and the benefits that such leadership can bring.

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Figures and Tables

Figure 1: Distribution of Treatment Groups across Uganda

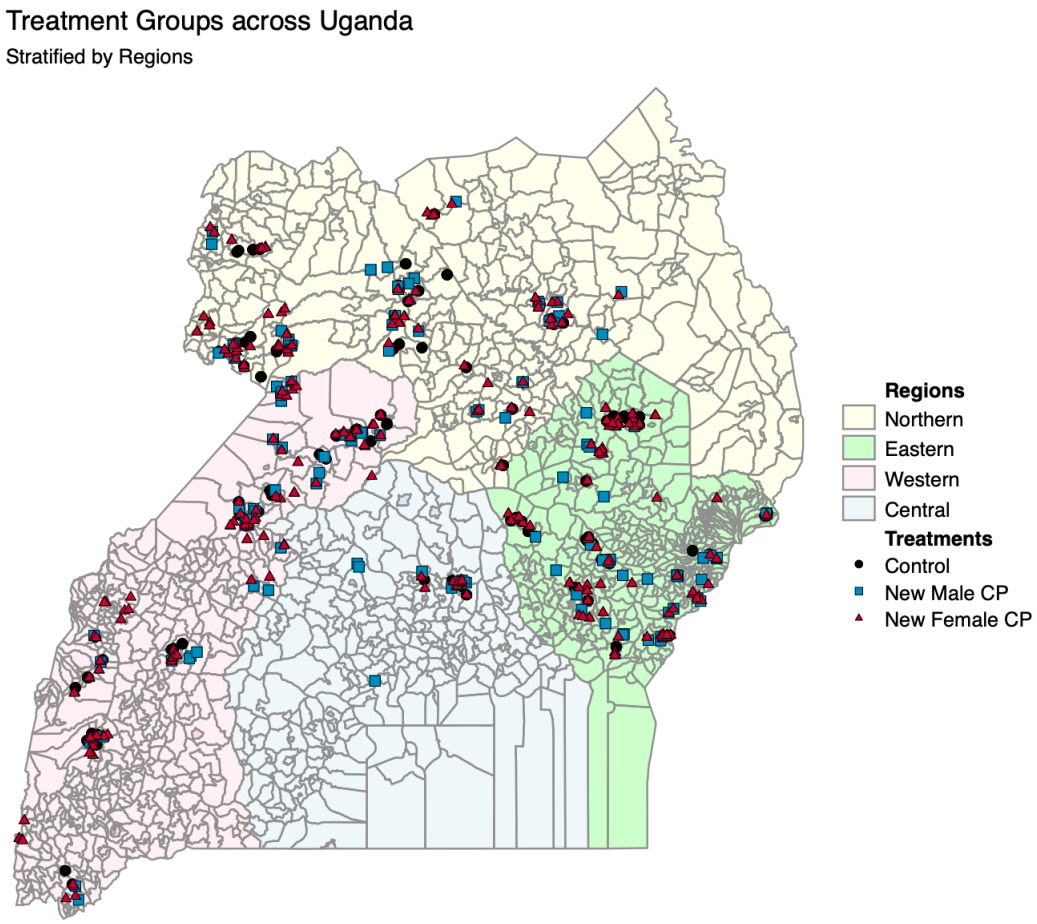
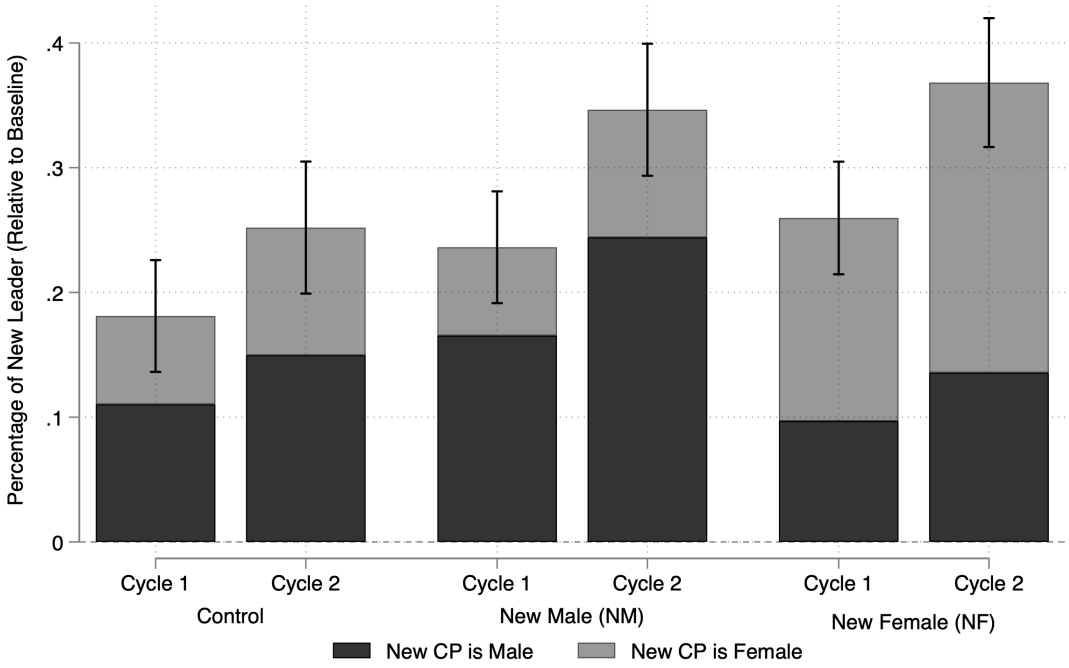
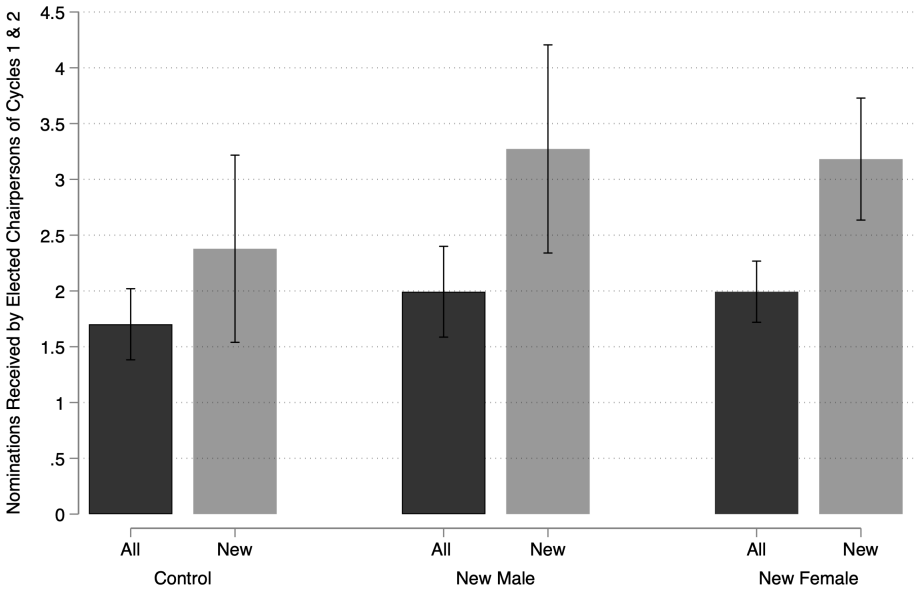


Figure 2: VSLAs with New Chairpersons in Cycle 1 and Cycle 2, by treatment



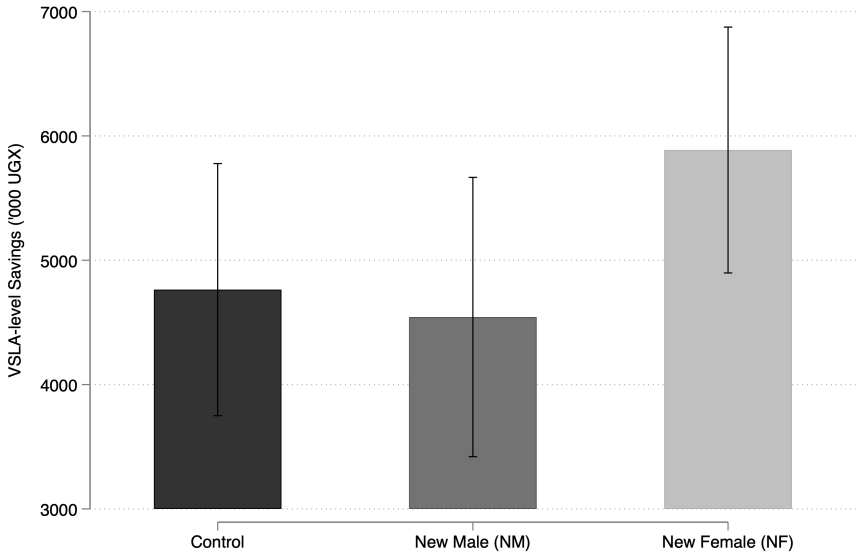
Note: The figure shows the share of groups in each treatment arm that changed leadership in the cycle following the intervention (Cycle 1) and in the subsequent cycle (Cycle 2), relative to the baseline cycle. Conditional on leadership change, each bar decomposes the change into new male and new female leadership. Each bar displays the 95% confidence interval.

Figure 3: Popularity of All and New Leaders



Note: As part of the baseline member survey, members were asked to nominate one male and one female group member as possible candidate for the chairperson role. The figure reports the number of nominations received by members who became chairpersons in cycle 1 or cycle 2, by treatment. The lighter bars restrict the analysis to new chairpersons. We report means and 95% confidence intervals.

Figure 4: Group-level Savings



Note: The figure reports average group-level savings in Cycle 2 and 95% confidence intervals. Data on savings in Cycle 1 are not available.

Table 1: Individual Characteristics at Baseline (Survey Data)

	Control	New Male	New Female	H_0 : C=NM	H_0 : C=NF	H_0 : NM=NF	H_0 : C=NM=NF
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Age	40.47	40.92	40.95	0.438	0.357	0.963	0.630
	(12.66)	(13.30)	(13.57)				
Female	0.52	0.51	0.52	0.572	0.954	0.478	0.763
	(0.50)	(0.50)	(0.50)				
Married	0.74	0.71	0.72	0.085	0.162	0.562	0.203
	(0.44)	(0.45)	(0.45)				
N. of Children	5.33	5.33	5.18	0.957	0.275	0.250	0.392
	(3.33)	(3.35)	(3.30)				
Primary Education	0.62	0.63	0.62	0.930	0.964	0.884	0.989
	(0.48)	(0.48)	(0.48)				
Secondary Education	0.07	0.09	0.10	0.126	0.015	0.462	0.051
	(0.26)	(0.28)	(0.30)				
Any Earning Activity	0.94	0.93	0.92	0.506	0.112	0.397	0.262
	(0.24)	(0.25)	(0.27)				
Farming	0.68	0.68	0.65	0.921	0.207	0.169	0.269
	(0.47)	(0.47)	(0.48)				
Small Trade/Business	0.23	0.17	0.20	0.002	0.041	0.118	0.007
	(0.42)	(0.38)	(0.40)				
Earnings	3,309.82	2,926.01	4,001.92	0.636	0.502	0.234	0.462
	(23,569.99)	(8,948.48)	(27,378.97)				
Asset Measure	6.85	6.87	6.94	0.821	0.254	0.366	0.441
	(2.02)	(1.90)	(2.03)				
Number of Members	971	968	1911				

Note: This table displays averages of key demographic and socio-economic variables for VSLA members at the time of the baseline survey, by treatment arm. The variables were obtained from the Member-participant Survey. Monetary values are in thousand UGX, and winsorised at the 99th percentile. Standard deviations are in parentheses. Age: age of the survey respondents; Female: binary indicator for female gender; Married: binary indicator for whether the respondent was married; N. of Children: number of children the respondent has; Primary Education: binary indicator for whether the respondent has completed primary education or more; Secondary education: binary indicator of whether the survey respondent had completed secondary education or more; Any Earning Activity: binary indicator for whether the survey respondent had been engaged in any earning activity (for pay/business/farming or for helping family in business/farm); Farming and Small-trade Business: binary indicators for whether the survey respondent was engaged in own or other's farm land cultivation, and engagement in small-trade earning activity, respectively; Earnings: respondent's total earnings from all activities in the last year, including production on farm for self-consumption. Asset Measure: the count of all assets (for categories of household appliances, vehicles, livestock, non-farm business equipment, house and cultivable land) owned by the household of the survey respondent.

Table 2: Impacts on New Male and Female Leadership

	CP is Female Cycle 1	CP is Female Cycle 2	CP is New Male Cycle 1	CP is New Male Cycle 2
	(1)	(2)	(3)	(4)
New Female (NF)	0.088***	0.126***	-0.018	-0.019
	(0.032)	(0.037)	(0.034)	(0.038)
New Male (NM)	-0.005	-0.012	0.052	0.088*
	(0.032)	(0.038)	(0.042)	(0.049)
Control Mean	0.071	0.102	0.110	0.150
Observations	512	512	512	512
NM=NF (F p-val)	0.004	0.000	0.065	0.014

Note: We estimate linear probability models at the VSLA level. Each column is a separate regression. The dependent variable in columns 1 and 2 is a 0-1 indicator, equal to 1 if the group's Chairperson is a woman in Cycle 1 and Cycle 2, respectively. Similarly, the dependent variable in columns 3 and 4 is a 0-1 indicator, equal to 1 if the group's Chairperson is a new man, relative to the Male Chairperson in Cycle 0. New Female and New Male are the treatment indicators. The regressions include randomization strata fixed effects. Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 3: Impacts on New Leadership by NGO Involvement

	Female CP Cycle 1	Female CP Cycle 2	New Male CP Cycle 1	New Male CP Cycle 2
	(1)	(2)	(3)	(4)
New Female (NF)	-0.020	0.067	0.030	0.059
	(0.053)	(0.061)	(0.056)	(0.062)
New Male (NM)	-0.060	-0.004	0.017	0.054
	(0.054)	(0.064)	(0.063)	(0.073)
VSLA recruited by Partner Organisation	-0.057	-0.026	-0.008	0.033
	(0.050)	(0.056)	(0.058)	(0.067)
NF x Recruited by Partner	0.182***	0.099	-0.082	-0.132*
	(0.066)	(0.077)	(0.069)	(0.079)
NM x Recruited by Partner	0.093	-0.014	0.060	0.060
	(0.066)	(0.079)	(0.085)	(0.099)
Control Mean	0.115	0.135	0.115	0.135
Observations	512	512	512	512
NM=NF (F p-val)	0.342	0.231	0.815	0.940
NM + NM x Partner	0.400	0.689	0.177	0.089
NF + NF x Partner	0.000	0.000	0.216	0.140

Note: We estimate linear probability models at the VSLA level. Each column is a separate regression. The dependent variable in columns 1 and 2 is a 0-1 indicator, equal to 1 if the group's Chairperson is a woman in Cycle 1 and Cycle 2, respectively. Similarly, the dependent variable in columns 3 and 4 is a 0-1 indicator, equal to 1 if the group's Chairperson is a new man, relative to the Male Chairperson in Cycle 0. New Female and New Male are the treatment indicators. The regressions include randomization strata fixed effects. Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Impacts on New Leadership by Member Disagreement with Group's Rules

	Female CP Cycle 1	Female CP Cycle 2	New Male CP Cycle 1	New Male CP Cycle 2
	(1)	(2)	(3)	(4)
New Female	0.018	0.007	-0.012	0.029
	(0.050)	(0.061)	(0.042)	(0.050)
New Male	-0.050	-0.039	0.034	0.127*
	(0.049)	(0.064)	(0.053)	(0.066)
Majority Disagree in VSLA	-0.080	-0.136**	0.055	0.094
	(0.049)	(0.055)	(0.054)	(0.063)
NF x Majority Disagree	0.131**	0.221***	-0.013	-0.090
	(0.066)	(0.076)	(0.065)	(0.076)
NM x Majority Disagree	0.084	0.049	0.035	-0.073
	(0.065)	(0.076)	(0.086)	(0.100)
Control Mean	0.100	0.167	0.083	0.100
Observations	512	512	512	512
NM=NF (F p-val)	0.128	0.423	0.325	0.112
NM+ NM x Majority Disagree	0.424	0.795	0.301	0.464
NF+ NF x Majority Disagree	0.000	0.000	0.622	0.284

Note: We estimate linear probability models at the VSLA level. Each column is a separate regression. The dependent variable in columns 1 and 2 is a 0-1 indicator, equal to 1 if the group's Chairperson is a woman in Cycle 1 and Cycle 2, respectively. Similarly, the dependent variable in columns 3 and 4 is a 0-1 indicator, equal to 1 if the group's Chairperson is a new man, relative to the Male Chairperson in Cycle 0. "Majority Disagree" is a 0/1 binary variable indicating if the majority of surveyed members within a group disagree with any of the financial rules used in the group for savings and loans, i.e., share size, interest rate, maximum loan amount. All regressions also include randomization strata fixed effects. Robust standard errors are reported in parenthesis. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Impacts on Loans

	Combined Cycles 1 & 2 Loans ('000 UGX)			Cycles 1 Loans ('000 UGX)		
	All Members	Female Members	Male Members	All Members	Female Members	Male Members
	(1)	(2)	(3)	(4)	(5)	(6)
New Female	114.98***	93.52***	146.72***	80.44***	59.06**	110.32***
	(36.902)	(31.953)	(46.293)	(29.465)	(26.339)	(36.977)
	[0.009]	[0.011]	[0.009]	[0.017]	[0.044]	[0.015]
New Male	44.72	25.30	74.65	55.15	29.66	93.29
	(46.127)	(35.058)	(64.653)	(43.159)	(31.895)	(62.063)
	[0.246]	[0.331]	[0.208]	[0.151]	[0.223]	[0.129]
Control Mean	268.675	249.663	294.563	243.716	232.061	259.446
Obs.	19,455	11,302	8,152	16,518	9,555	6,963
Baseline Control	No	No	No	No	No	No
Cycle Month Control	Yes	Yes	Yes	No	No	No
NM=NF (F p-val)	0.162	0.088	0.287	0.583	0.419	0.787

Note: OLS at the member level. Each column is a separate regression. New Female and New Male are the treatment indicators. Loan data are obtained from administrative data for all group members. Outcome values are winsorised at the 99th percentile. Columns 1-3 show impacts on member-level loan outcomes from the post-intervention period, i.e., Cycle 1 and 2 combined. Columns 1-3 use all available loan observations from the two cycles, including loans to members who dropped out or joined at some point post-intervention. Columns 4-6 show impacts on loans in the completed Cycle 1. Results are expressed in thousand UGX. The regressions include randomization strata fixed effects. VSLA-level clustered standard errors are shown in parentheses and Romano-Wolf corrected p-values for groups of hypothesis (Columns 1-3 and columns 4-6) are reported in brackets. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Impacts on Member Dropouts

	Member Dropped Out		
	All	Women	Men
	(1)	(2)	(3)
New Female	-0.04**	-0.04**	-0.04
	(0.021)	(0.020)	(0.028)
	[0.057]	[0.044]	[0.149]
New Male	-0.03	-0.04	-0.01
	(0.023)	(0.023)	(0.030)
	[0.186]	[0.124]	[0.604]
Control Mean	0.230	0.223	0.240
Observations	16,519	9,555	6,964
NM=NF (F p-val)	0.397	0.796	0.160

Note: Linear probability model at the group member level. Each column is a separate regression. New Female and New Male are the treatment indicators. The outcome variable is a 0-1 indicator, which is equal to 1 if an individual who was a member at baseline is no longer a member in Cycle 2, at the time of the endline data collection. The total number of observations (16,499) refers to the number of members at baseline. Results are presented for the whole sample and by gender of the VSLA member. The regressions include randomization strata fixed effects. Standard errors clustered at VSLA level are shown in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Impacts on Members' Satisfaction with Chairperson

	All Members		Female Members		Male Members	
	Member Satisfaction With CP Index	Wants CP to continue	Member Satisfaction With CP Index	Wants CP to continue	Member Satisfaction With CP Index	Wants CP to continue
	(1)	(2)	(3)	(4)	(5)	(6)
New Female	-0.02	-0.04**	0.00	-0.03	-0.02	-0.06**
	(0.049)	(0.021)	(0.058)	(0.023)	(0.059)	(0.027)
	[0.969]	[0.040]	[0.990]	[0.333]	[0.969]	[0.031]
New Male	-0.01	-0.02	-0.03	-0.02	0.02	-0.02
	(0.057)	(0.022)	(0.068)	(0.028)	(0.064)	(0.030)
	[0.969]	[0.845]	[0.963]	[0.897]	[0.969]	[0.897]
Control Mean	0.008	0.881	-0.008	0.888	0.027	0.870
Observations	3,238	3,210	1,906	1,891	1,332	1,319
Baseline Control	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Control	Yes	Yes	Yes	Yes	Yes	Yes
NM=NF (F p-val)	0.898	0.249	0.659	0.579	0.483	0.171

Note: OLS. The sample is restricted to non-Chairpersons. Each column is a separate regression. New Female and New Male are the treatment indicators. Columns 1, 3 & 5 show results for a standardized index that aggregates answers to 8 survey questions using the Anderson method (Anderson, 2008). The estimates are expressed in standard deviations from the control mean. The outcome variable in columns 2, 4 & 6 is a 0-1 indicator, equal to 1 if the respondent answered "Yes" to the question: "Would you prefer to see the same person continue as the Chairperson in the next cycle?." Demographic controls include gender, age, married, any leadership role, total earnings in the last 12 months from all activities, whether involved in any earning activity in last 1 year, engaged in farming, engaged in small-trade business and total assets. The regressions include randomization strata fixed effects. VSLA-level clustered standard errors are shown in parentheses. Multiple hypotheses corrected p-values using Romano-Wolf's procedure are reported in brackets (correcting for all outcomes and sub-samples together) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

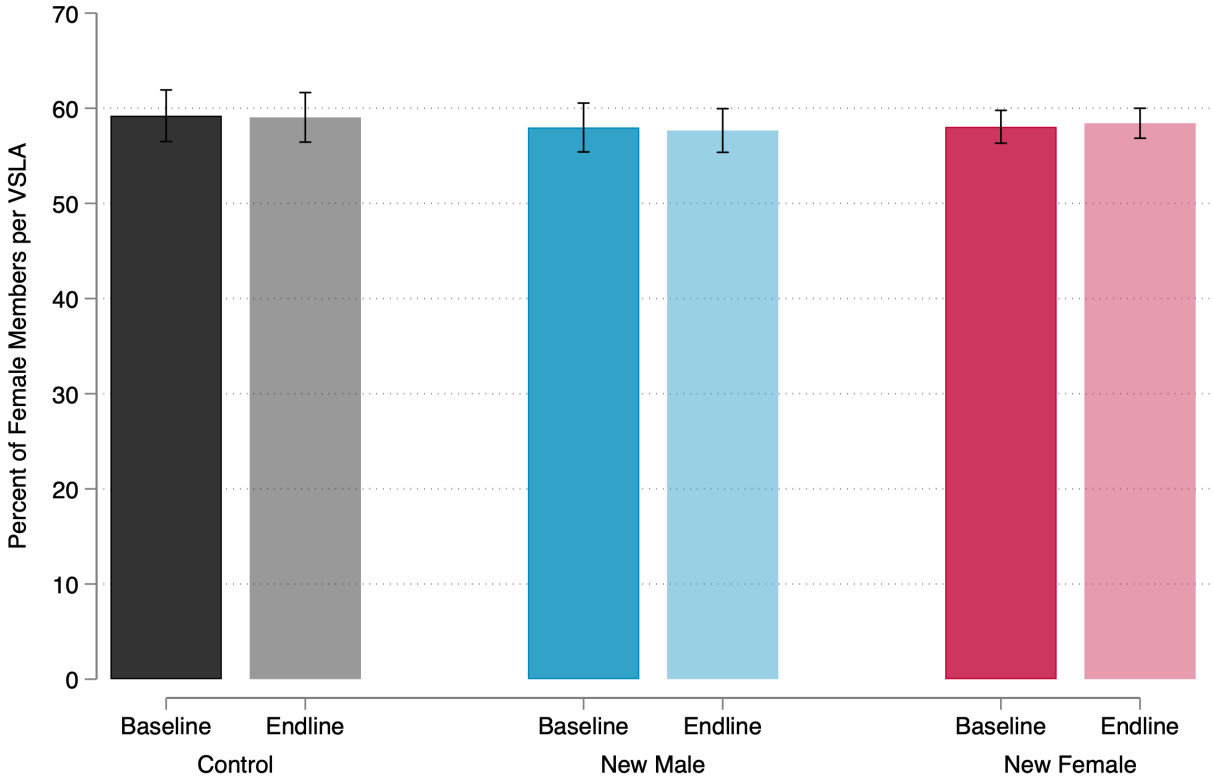
Table 8: Impacts on Chairperson's Aspirations, Satisfaction and Mental Health

	Satisfaction Index	Wants to continue as CP	High risk of depression	Aspiration Index
	(1)	(2)	(3)	(4)
New Female	0.15	0.00	-0.04	0.06
	(0.098)	(0.046)	(0.051)	(0.070)
	[0.194]	[0.948]	[0.707]	[0.707]
New Male	0.17	-0.02	0.04	-0.09
	(0.106)	(0.053)	(0.060)	(0.085)
	[0.164]	[0.732]	[0.707]	[0.553]
Control Mean	0.028	0.798	0.278	-0.006
Observations	464	462	464	461
Demographic Control	Yes	Yes	Yes	Yes
NM=NF (F p-val)	0.807	0.561	0.104	0.049

Note: Sample restricted to Chairpersons. In column 1, the outcome variable is a standardized index based on three questions capturing Chairpersons' satisfaction with their own performance. In column 2, it is an indicator for whether the Chairperson would prefer to continue in the role or step down in the future. In column 3, the dependent variable is a binary indicator for high risk of depression, based on nine questions from the Edinburgh Postnatal Depression Scale (EPDS-9); the indicator equals 1 if the aggregated score exceeds 12 and 0 otherwise. In column 4, the outcome variable is a standardized index of leadership applications. Estimates in columns 1 and 4 are expressed in standard deviations from the control mean. Demographic controls include gender, age, married, total earnings in the last 12 months from all activities, whether involved in any earning activity in last year, engaged in farming, engaged in small-trade business and total assets. The regressions include randomization strata fixed effects. VSLA-level clustered standard errors are shown in parentheses. Romano-Wolf corrected p-values are reported in brackets. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

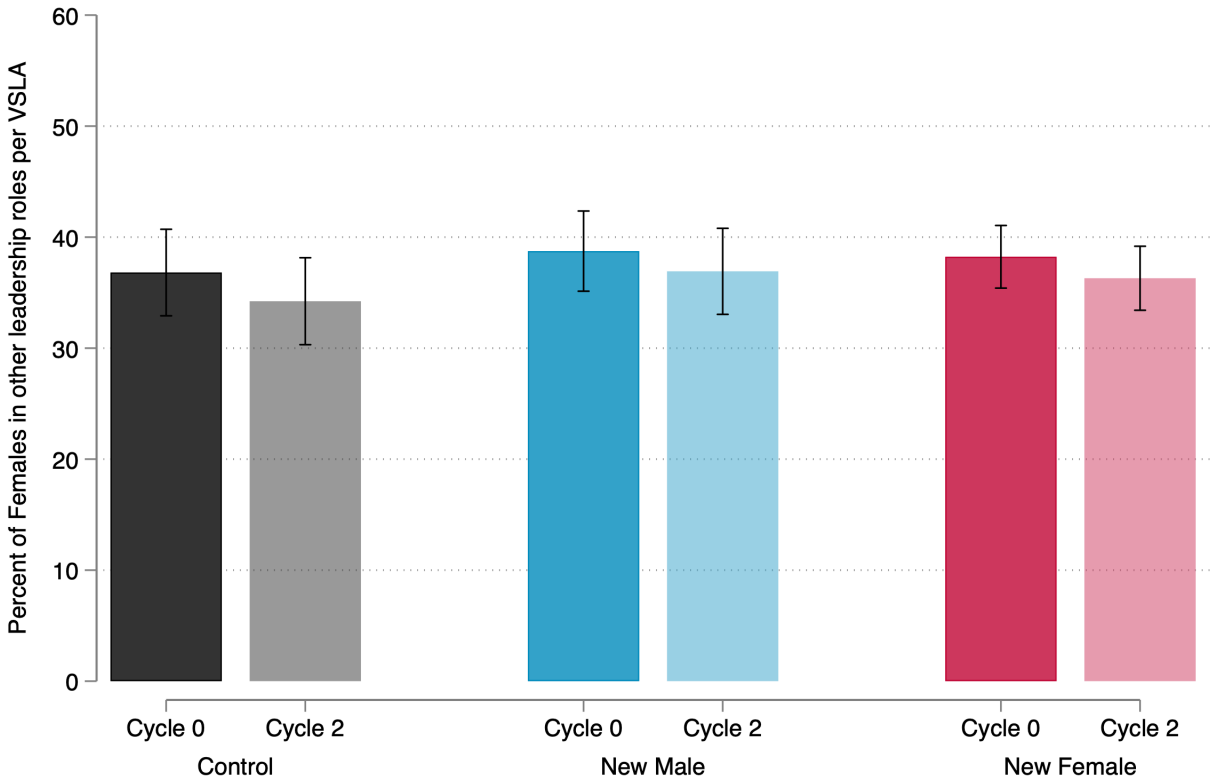
Appendix A: Figures and Tables

Figure A1: Female Members at Baseline and Endline



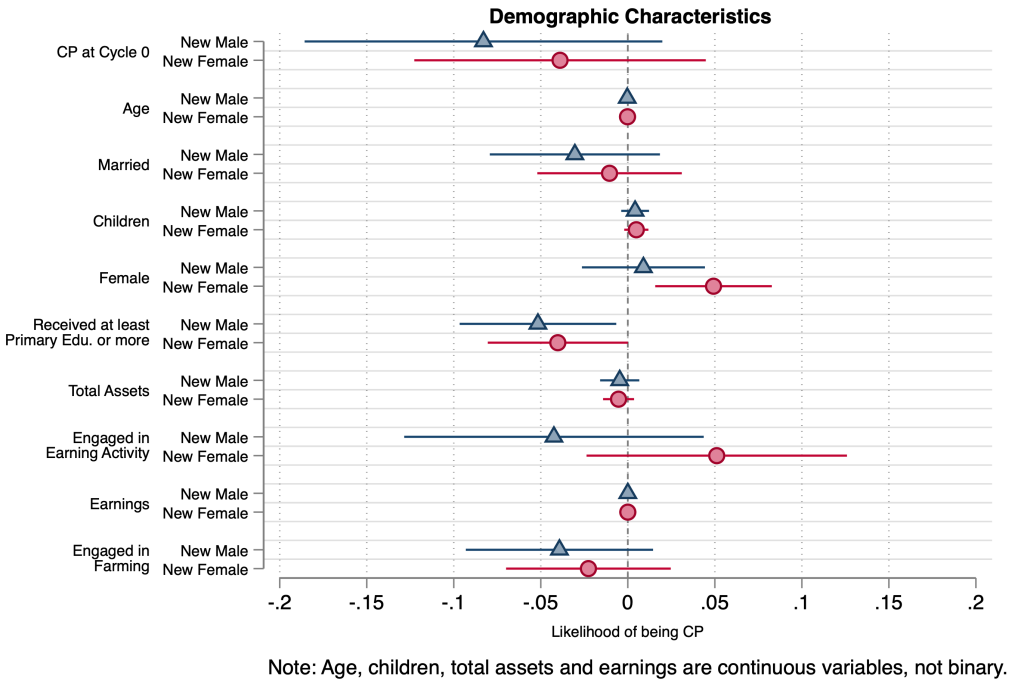
Note: The figure displays the percent of all members in a VSLA that are female at baseline and endline by treatment group. The 95% confidence interval is shown.

Figure A2: Women in Other Leadership Roles at Baseline and Endline



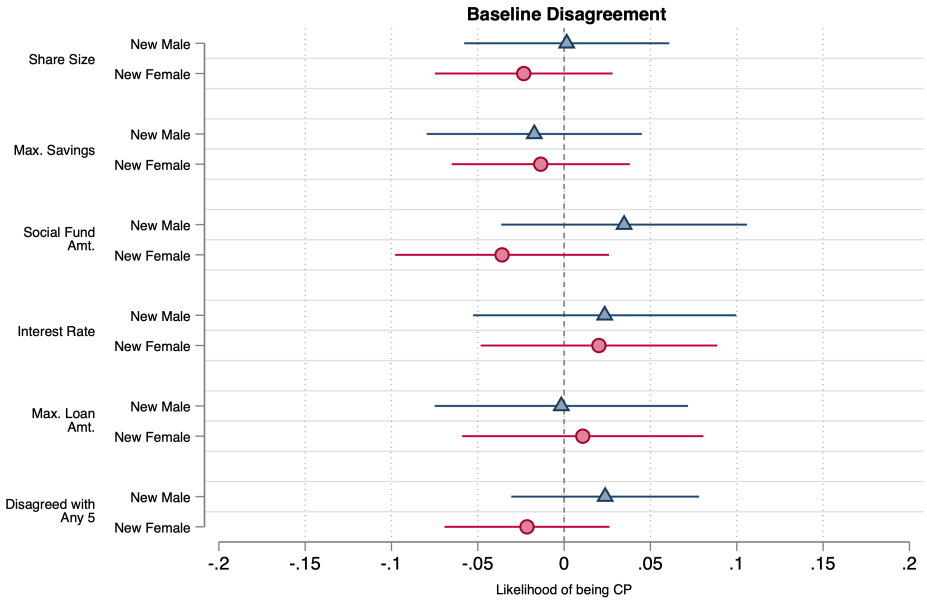
Note: This figure displays the percent of all leadership members in non-chairperson roles (specifically Vice-Chairperson, Secretary and Treasurer) in a VSLA that are female at baseline and endline by treatment group. The 95% confidence interval is shown.

Figure A3: Differential Selection of CP based on Observables



Note: The figure reports results generated by regression analyses where the outcome variable is a 0-1 indicator for whether a surveyed group member is the chairperson. We report coefficients and 95% confidence intervals obtained for the interactions between each individual characteristic and the New Male and New Female treatment dummies. "CP at Cycle 0" indicates whether the member was a Chairperson at Cycle 0. "Earnings" represents a member's earnings from all economic activities in thousands in the last 1 year. "Total asset" is a count of all assets owned by the household.

Figure A4: Differential Selection of CP Based on Disagreement with Group Financial Rules



Note: Group members were asked whether they disagreed with any of the VSLA financial rules listed in the vertical axis of the figure. The figure reports results generated by regression analyses where the outcome variable is a 0-1 indicator for whether a surveyed member is the chairperson and the explanatory outcome of interest is, for each regression, whether the respondent disagrees with the corresponding financial rule. We report coefficients and 95% confidence intervals obtained for the interactions between disagreement with a financial rule and the New Male and New Female treatment dummies. Dissatisfaction for financial policies are based off baseline, therefore excludes new respondents.

Table A1: Likelihood of Attrition

	Attrited VSLA in Admin Records	Attrited VSLA in Survey	Attrited Members in Survey
	(1)	(2)	(3)
New Female	0.009	0.015	0.019
	(0.021)	(0.030)	(0.028)
New Male	-0.010	-0.050	-0.007
	(0.023)	(0.032)	(0.031)
Female			0.009
			(0.013)
Chairperson at Baseline			-0.027**
			(0.013)
Control Mean	0.038	0.098	0.178
Observations	535	535	4,803

In column 1 attrition is defined for VSLAs in admin records, specifically 23 VSLAs fell defunct by endline period. While column 2 reports attrition rate computed for VSLAs surveyed at baseline, since there are fewer VSLAs surveyed than present in endline admin records (precisely we weren't able to survey members from 33 VSLAs in addition to the 23 defunct VSLAs at endline). In col 3, attrition is defined for individuals surveyed at baseline. Of the 23 VSLAs identified as defunct at endline, 13 were still surveyed, but enumerators marked them as nonoperational and recorded statistics based on baseline or cycle 1. For consistency in cycle classification, we also categorize these 13 VSLAs as defunct. Likelihood of attrition is analyzed against a range of characteristics, specifically for demographics: gender, whether member was chairperson at baseline, age, whether member was married and number of children. For occupational characteristics in the last 1 year: whether member was engaged in farming and small trade-business. For financial characteristics: total earnings from all economic activities in thousands in last 1 year and total asset count. The regressions include randomization strata fixed effects. Standard errors (SE) in parenthesis. SE in columns 1 & 2 are heteroskedasticity-robust while in column 3, they're clustered at VSLA level.

Table A2: Group Characteristics at Baseline (Administrative Records)

	Control (1)	New Male (2)	New Female (3)	H_0 : C=NM (4)	H_0 : C=NF (5)	H_0 : NM=NF (6)	H_0 : C=NM=NF (7)
Panel A: Financial Outcomes at Baseline							
Current Savings	5,808.41	5,139.07	6,142.45	0.427	0.705	0.265	0.501
	(6,412.43)	(6,973.80)	(8,858.02)				
Loans Outstanding	3,898.88	3,290.47	4,603.56	0.287	0.339	0.066	0.138
	(5,008.60)	(4,018.92)	(7,504.98)				
Writeoff Value	28.34	18.61	21.90	0.491	0.588	0.765	0.760
	(123.26)	(100.01)	(101.99)				
Cash in Box	1,406.17	957.32	1,101.04	0.086	0.189	0.488	0.196
	(2,393.02)	(1,702.26)	(2,005.74)				
Panel B: VSLA Characteristics at Baseline							
Total Members	33.88	30.44	32.36	0.087	0.365	0.108	0.150
	(20.81)	(8.82)	(11.96)				
Female Members(%)	0.59	0.58	0.58	0.518	0.469	0.956	0.734
	(0.16)	(0.15)	(0.14)				
N. of Members in Leadership	3.43	3.41	3.43	0.852	0.902	0.747	0.946
	(0.61)	(0.73)	(0.69)				
Female Leaders(%)	0.37	0.39	0.38	0.477	0.560	0.844	0.767
	(0.22)	(0.21)	(0.23)				
Recruited via Partner	0.59	0.58	0.60	0.899	0.905	0.790	0.965
	(0.49)	(0.50)	(0.49)				
Supported by NGO	0.30	0.22	0.29	0.154	0.926	0.124	0.256
	(0.46)	(0.42)	(0.46)				
Central	0.12	0.13	0.11	0.849	0.869	0.697	0.927
	(0.32)	(0.33)	(0.32)				
Eastern	0.24	0.30	0.23	0.259	0.937	0.159	0.336
	(0.43)	(0.46)	(0.42)				
Northern	0.41	0.31	0.36	0.090	0.315	0.336	0.236
	(0.49)	(0.46)	(0.48)				
Western	0.24	0.27	0.30	0.565	0.201	0.533	0.429
	(0.43)	(0.44)	(0.46)				
N. Cycles Active	4.52	5.04	5.26	0.271	0.099	0.622	0.241
	(3.68)	(3.82)	(4.35)				
Month of Cycle Being Surveyed	7.38	7.08	7.10	0.482	0.442	0.950	0.702
	(3.48)	(3.29)	(3.24)				
Non-Financial Activity	0.46	0.43	0.50	0.615	0.514	0.217	0.452
	(0.50)	(0.50)	(0.50)				
Number of VSLAs	127	127	258				
Number of Members	4303	3866	8350				
Number of Villages	117	120	228				

Note: This table displays baseline VSLA level averages by treatment group. Monetary values are in thousand UGX and gathered from administrative records at the time of the baseline survey, and winsorised at the 99th percentile. Standard deviations are in parentheses. Current Savings: the total value of savings; Loans Outstanding: current value of loans outstanding; Writeoff Value: value of loan defaults; Cash in Box: cash maintained in lock box for liquidity purposes. Total Members: total number of members in a given VSLA, including leadership boards; Female members (%): percentage of VSLA members that are females; N. of Members in Leadership: total number of members in leadership boards, including Chairperson, Treasurer, Vice-Chairman and Secretary; Female Leaders (%): the percentage of all members in leadership board (including Chairperson) that are women; Recruited via Partner: binary variable indicating if a VSLA has been recruited via Partner Organization; Central, Eastern, Northern and Western are dummies for geographic location of the VSLAs; N.Cycles Active: the number of cycles a VSLA has been active; Month of Cycle Being Surveyed: the month within the 12-month cycle when a VSLA was surveyed; Non-Financial Activity: whether the VSLA engaged in training or social activities for the community.

Table A3: Impacts on Loans by Member Gender

	Combined Loans Cycle 1 & 2 ('000 UGX)	Cycle 1 Loans ('000 UGX)
	(1)	(2)
New Female	147.34***	110.76***
	(46.567)	(37.292)
	[0.011]	[0.017]
New Male	77.67	95.87
	(64.829)	(62.168)
	[0.155]	[0.155]
Female	-39.20**	-26.37
	(17.562)	(16.956)
	[0.057]	[0.155]
New Female x Female	-55.18**	-52.28**
	(24.918)	(22.797)
	[0.057]	[0.057]
New Male x Female	-55.90	-68.66*
	(38.528)	(38.173)
	[0.155]	[0.103]
Control Mean	294.563	259.446
Observations	19,454	16,518
Baseline Control	No	No
Cycle Month Control	Yes	No
NM=NF (F p-val)	0.304	0.813
NF + NF x Female	0.004	0.027
NM + NM x Female	0.535	0.395

Note: OLS at the member level. Each column is a separate regression. New Female and New Male are the treatment indicators. Female refers to the gender of the individual member receiving a loan. Loan data are obtained from administrative data for all group members. Outcome values are winsorised at the 99th percentile. Columns 1-3 show impacts on member-level loan outcomes from the post-intervention period, i.e., Cycle 1 and 2 combined. Columns 1-3 use all available loan observations from Cycles 1-2, including loans to members who dropped out or joined at some point post-intervention. Columns 4-6 show impacts on loans in the completed Cycle 1. Individuals who were members at baseline but not in Cycle 2, at the time of the endline data collection, are assumed to have left after Cycle 1, and new members to have joined after Cycle 1 completion. This means that if an individual was a member at baseline but is not a member in cycle 2 and appear to have loans equal to 0 in cycle 1, we interpret their zero loans as no loans issued to them, thus including those zeroes in the analysis. Results are expressed in thousands of UGX. The regressions include randomization strata fixed effects. Standard errors, clustered at VSLA level, are shown in parenthesis. Multiple hypothesis corrected p-values using Romano-Wolf procedure (2005) are reported in square brackets. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4: Impacts on Loans in New Female Treatment by Gender of Chairperson

	Combined Cycles 1 & 2 Loans ('000 UGX)			Cycles 1 Loans ('000 UGX)		
	All Members	Female Members	Male Members	All Members	Female Members	Male Members
	(1)	(2)	(3)	(4)	(5)	(6)
If Female CP in Either Cycles	47.56	69.85	19.81	27.17	45.21	5.38
	(75.802)	(69.043)	(88.904)	(58.631)	(57.242)	(65.401)
Control Mean	372.918	327.781	434.737	319.037	282.358	368.540
Obs.	9,872	5,736	4,136	8,350	4,814	3,536
Baseline Control	No	No	No	No	No	No
Cycle Month Control	Yes	Yes	Yes	No	No	No

Note: Sample is restricted to VSLA members in the New Female treatment arm. Each column is a separate regression using outcome values winsorised at 99th percentile. The binary indicator for 'female CP in either cycles' identifies VSLAs with a female Chairperson in cycles 1 or 2 or both. Columns 1 - 3 consider member-level combined loan outcomes from Cycle 1 and 2. Columns 4 to 6 consider member-level loan outcomes from completed cycle 1. In columns 4-6, members who dropped out are assumed to have exited after cycle 1 completion, and new members to have joined after cycle 1 completion. Results are expressed in thousands of UGX. The regressions include randomization strata fixed effects. VSLA-level clustered standard errors are shown in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A5: Impacts on Likelihood of Getting At Least One Loan (Extensive Margin)

	Combined Cycles 1 & 2 Loan Indicator			Cycle 1 Loan Indicator		
	All	Female	Male	All	Female	Male
	(1)	(2)	(3)	(4)	(5)	(6)
New Female	0.06	0.05	0.07	0.05	0.04	0.07
	(0.038)	(0.034)	(0.047)	(0.036)	(0.029)	(0.048)
New Male	0.03	0.03	0.04	0.04	0.03	0.07
	(0.039)	(0.037)	(0.047)	(0.037)	(0.032)	(0.048)
Control Mean	0.676	0.692	0.653	0.714	0.740	0.678
Obs.	19,455	11,302	8,152	16,518	9,555	6,963
Baseline Control	No	No	No	No	No	No
Cycle Month Control	Yes	Yes	Yes	No	No	No
NM=NF (F p-val)	0.687	0.634	0.832	0.186	0.270	0.177

Note: Each column is a separate regression where the dependent variable is an indicator equal to 1 if the member received at least one loan in the corresponding cycle/s. The regressions include randomization strata fixed effects. VSLA-level clustered standard errors are shown in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A6: Impacts on Number and Average Size of Loans (Intensive Margin)

	Number of Loans Cycle 1			Avg. Loans Cycle 1 ('000 UGX)		
	All	Female	Male	All	Female	Male
	(1)	(2)	(3)	(4)	(5)	(6)
New Female	-0.01	-0.04	0.02	64.46***	49.42**	85.19***
	(0.084)	(0.077)	(0.101)	(21.495)	(19.629)	(26.791)
New Male	0.04	0.03	0.06	47.00	25.36	78.81
	(0.103)	(0.113)	(0.115)	(37.511)	(27.076)	(54.316)
Control Mean	1.120	1.153	1.076	178.382	171.016	188.324
Observations	16,518	9,555	6,963	16,518	9,555	6,963
Baseline Control	No	No	No	No	No	No
Cycle Month Control	No	No	No	No	No	No
NM=NF (F p-val)	0.465	0.480	0.587	0.654	0.423	0.906

Note: Each column is a separate regression using outcome values winsorised at 99th percentile. Average size of loans at member-level is computed by dividing winsorised amount of loans with winsorised number of loans. The regressions include randomization strata fixed effects. VSLA-level clustered standard errors are shown in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A7: Treatment Impacts on Other VSLA Financial Indicators

	Cycle 1 ('000 UGX)	Cycle 2 ('000 UGX)	
	Write-off	Savings	Cash in Box
	(1)	(2)	(3)
New Female	-30.74	877.63	251.66
	(44.574)	(626.025)	(226.046)
	[0.914]	[0.637]	[0.774]
New Male	6.87	-46.97	190.42
	(57.979)	(714.903)	(260.972)
	[0.994]	[0.994]	[0.914]
Control Mean	146.960	4,763.673	1,018.226
Obs.	512	512	512
Baseline Control	Yes	Yes	Yes
Cycle Month Control	No	Yes	Yes
NM=NF (F p-val)	0.444	0.153	0.806

Note: OLS at the VSLA level. Each column is a separate regression. New Female and New Male are the treatment indicators. In column 1, the dependent variable is the total amount of loan write-offs for cycle 1. This outcome is only available for Cycle 1, the completed cycle. Columns 2 to 3 show VSLA-level outcomes for cycle 2: savings and cash maintained in lock box for liquidity purposes (Cash in Box), as recorded at the time of the data collection, during Cycle 2. These data are not available for Cycle 1. The regressions include randomization strata fixed effects. The analysis of Cycle 2 outcomes controls for the month of data collection. Robust standard errors are shown in parentheses.

Table A8: Impacts on Selection of Popular Leaders

	Number of Nominations Received		
	(1)	(2)	(3)
New Female (NF)	0.309	0.209	-0.016
	(0.207)	(0.198)	(0.208)
New Male (NM)	0.263	0.203	-0.053
	(0.250)	(0.238)	(0.243)
New CP		1.652***	0.979**
		(0.237)	(0.457)
NF x New CP			0.833
			(0.554)
NM x New CP			0.946
			(0.695)
Control Mean	1.701	1.701	1.701
Obs.	584	584	584
NM=NF	0.850	0.981	0.874
NM+ NM x New CP			0.157
NF+ NF x New CP			0.103

Note: Sample is restricted to Chairpersons elected in cycles 1 and 2. Each column is a separate regression. Outcome is number of nominations received by chairpersons elected in cycles 1 or 2. New CP indicates new Chairpersons from cycles 1 or 2 relative to baseline. The regressions include randomization strata fixed effects. Standard errors clustered at VSLA-level are shown in parenthesis. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A9: Impacts on New Member Enrollments

	New Members Joining		
	All	Women	Men
	(1)	(2)	(3)
New Female	-0.00	0.00	-0.00
	(0.017)	(0.022)	(0.017)
	[0.920]	[0.971]	[0.953]
New Male	-0.01	-0.02	0.00
	(0.020)	(0.025)	(0.020)
	[0.586]	[0.370]	[0.953]
Control Mean	0.153	0.158	0.145
Observations	19,456	11,302	8,153
NM=NF (F p-val)	0.512	0.224	0.740

Note: Linear probability models. Each column is a separate regression. New Female and New Male are the treatment indicators. The dependent variable is an indicator for whether an individual who is a member at endline (Cycle 2) was not a member at baseline, meaning that he or she joined the group in the post-intervention period. The regressions include randomization strata fixed effects. Standard errors clustered at VSLA level are shown in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A10: Member Satisfaction with Leadership at Baseline

	Control (1)	NM (2)	NF (3)	H_0 : C=NM (4)	H_0 : C=NF (5)	H_0 : NM=NF (6)
Ability to represent group[1]	4.22	4.23	4.29	0.860	0.113	0.155
	(1.04)	(0.95)	(0.92)			
Ability to prevent/resolve conflict[2]	4.45	4.47	4.45	0.709	0.950	0.624
	(0.82)	(0.80)	(0.82)			
Fairness in decisions and allocations[3]	4.47	4.48	4.45	0.806	0.622	0.424
	(0.87)	(0.80)	(0.82)			
Listens to Group concerns[4]	4.58	4.54	4.53	0.329	0.161	0.758
	(0.73)	(0.73)	(0.76)			
Honesty and Trustworthiness[5]	4.67	4.64	4.62	0.261	0.081	0.615
	(0.70)	(0.65)	(0.70)			
Timely availability for Meetings[6]	4.51	4.47	4.47	0.380	0.261	0.915
	(0.85)	(0.84)	(0.83)			
Respect in Group[7]	4.61	4.60	4.57	0.738	0.177	0.320
	(0.69)	(0.67)	(0.72)			
Overall Leadership Performance[8]	4.62	4.60	4.62	0.565	0.961	0.542
	(0.65)	(0.64)	(0.66)			
Concerned About Decisions Taken[9]	2.81	2.80	2.79	0.719	0.426	0.704
	(0.55)	(0.57)	(0.58)			
Wants CP to Continue [10]	0.87	0.85	0.86	0.245	0.567	0.442
	(0.34)	(0.36)	(0.35)			
Happy About Decisions [11]	0.94	0.97	0.96	0.003	0.084	0.082
	(0.23)	(0.17)	(0.20)			
N. Surveyed Members	853	852	1692			

Note: For the satisfaction measures in rows 1 to 8, ratings are defined over a 1 to 5 scale, such that a higher score represents more satisfaction. For the survey measure in row 9, answers are defined over a 1 to 3 scale, where a higher score reflects least concerns. “Wants CP to continue” is a dummy variable equal to 1 if the respondent prefers the Chairperson (CP) to continue and 0 if they are unsure or want the CP to step down. "Happy about Decisions” is a dummy variable equal to 1 when member is happy with decisions that they are aware of.

Table A11: Impacts on Gender Attitudes and Norms

	All CPs and Members		Female CPs and Members		Male CPs and Members	
	Gender Attitude Index	Gender Norm Index	Gender Attitude Index	Gender Norm Index	Gender Attitude Index	Gender Norm Index
	(1)	(2)	(3)	(4)	(5)	(6)
New Female	-0.05	-0.02	-0.07	-0.05	-0.04	0.03
	(0.041)	(0.036)	(0.047)	(0.046)	(0.047)	(0.041)
	[0.369]	[0.852]	[0.293]	[0.497]	[0.727]	[0.838]
New Male	-0.03	-0.02	0.00	-0.06	-0.07	0.01
	(0.045)	(0.041)	(0.051)	(0.048)	(0.054)	(0.049)
	[0.802]	[0.838]	[0.930]	[0.469]	[0.469]	[0.915]
Control Mean	-0.004	-0.008	-0.001	-0.009	-0.008	-0.007
Observations	3,783	3,783	1,976	1,976	1,807	1,807
Baseline Control	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Control	Yes	Yes	Yes	Yes	Yes	Yes
NM=NF (F p-val)	0.533	0.839	0.090	0.889	0.587	0.805

Note: OLS employing survey data. The sample includes both members and leaders. Each column is a separate regression. New Female and New Male are the treatment indicators. Columns 1, 4 and 7 show results for a standardised index using the Anderson Method formed from combining the answer to two questions on (i) whether men make better VSLA leaders than women and should be elected chairperson, or women should have the same chance of being VSLA chairperson as men, and (ii) opinion on electing a woman as the group Chairperson. Columns 2, 5 and 8 show results for a standardized index using the Anderson Method formed from 5 questions on gender norms. Columns 3, 6 and 9 show results for a standardised index formed from five questions on gender attitudes. Demographic controls include gender, age, highest education completed, married, any leadership role, total earnings in the last 12 months from all activities, whether involved in any earning activity in last 1 year, engaged in farming, engaged in small-trade business and total assets. Baseline control is the baseline value of the outcome used as control. The regressions include randomization strata fixed effects. VSLA-level clustered standard errors are shown in parentheses. Multiple hypotheses corrected p-values using the Romano-Wolf (2005) procedure are also reported (testing all sub-samples together) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A12: Member-level Loans in Cycles 1 and 2, Not Attrited Baseline Members Only

	Combined Cycles 1 & 2 Loans ('000 UGX)			Cycles 1 Loans ('000 UGX)		
	All	Women	Men	All	Women	Men
	(1)	(2)	(3)	(4)	(5)	(6)
New Female	121.11***	97.04***	157.23***	91.13***	68.68**	124.42***
	(41.319)	(35.683)	(53.901)	(34.025)	(30.332)	(42.886)
	[0.010]	[0.014]	[0.010]	[0.021]	[0.051]	[0.015]
New Male	67.17	35.70	120.99	70.32	40.66	118.73
	(59.102)	(42.787)	(87.468)	(51.684)	(37.490)	(76.345)
	[0.189]	[0.265]	[0.148]	[0.141]	[0.163]	[0.141]
Control Mean	335.115	308.967	371.205	279.610	261.261	304.939
Obs.	13,149	7,698	5,451	13,149	7,698	5,451
Baseline Control	No	No	No	No	No	No
Cycle Month Control	Yes	Yes	Yes	No	No	No
NM=NF (F p-val)	0.386	0.199	0.682	0.705	0.509	0.941

Note: The sample is restricted to baseline members who are still members at endline. It excludes new members who joined in cycle 1 or cycle 2 (N=16,499). Outcome values are at the member level and are winsorised at the 99th percentile. Controls include geographical areas and an indicator for the VLSA recruitment being done through a partner or by the research team. We also control for the specific month in a 12-month cycle the VSLA was operating at when surveyed. Standard errors, clustered at VSLA level, are shown in parenthesis. Multiple hypothesis corrected p-values using Romano-Wolf procedure (2005) are reported in square brackets, pooling hypotheses by cycle (columns 1-3 and columns 4-6). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A13: Impacts on New Male and New Female Leadership - All Treatments

	CP is Female Cycle 1	CP is Female Cycle 2	CP is New Male Cycle 1	CP is New Male Cycle 2
	(1)	(2)	(3)	(4)
New Female (NF)	0.101**	0.125***	-0.024	-0.017
	(0.041)	(0.046)	(0.038)	(0.044)
New Female&Role Model (NFRM)	0.074*	0.126***	-0.012	-0.021
	(0.039)	(0.045)	(0.039)	(0.044)
New Male (NM)	-0.005	-0.012	0.052	0.088*
	(0.032)	(0.038)	(0.043)	(0.049)
Control Mean	0.071	0.102	0.110	0.150
Observations	512	512	512	512
NM=NF (F p-val)	0.009	0.003	0.074	0.032
NF=NFRM	0.556	0.987	0.759	0.913
NM=NFRM	0.038	0.002	0.129	0.024

Note: Each column is a separate regression. The New Female&Role Model treatment is similar to NF, but with added benefits of consistent access to a female role model with previous leadership experience. Columns 1 indicates if the chairperson in Cycle 1 is a woman, and Column 2 if the chairperson in Cycle 2 is a woman. Column 3 indicates if the chairperson in Cycle 1 is a new man relative to cycle 0, and column 4 if the chairperson is a new man. New Female and New Male are the treatment indicators. The regressions include randomization strata fixed effects. Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A14: Impacts on Loans - All Treatments

	Combined Cycles 1 & 2 Loans ('000 UGX)			Cycles 1 Loans ('000 UGX)		
	All Members	Female Members	Male Members	All Members	Female Members	Male Members
	(1)	(2)	(3)	(4)	(5)	(6)
New Female (NF)	115.92**	99.07**	141.73**	82.61**	59.88*	115.13**
	(47.729)	(42.702)	(58.213)	(39.804)	(36.314)	(48.508)
	[0.047]	[0.051]	[0.047]	[0.076]	[0.134]	[0.053]
New Female&Role Model (NFRM)	114.03**	87.84**	151.75***	78.32**	58.26*	105.65**
	(47.349)	(40.810)	(58.692)	(36.083)	(32.826)	(43.944)
	[0.047]	[0.054]	[0.038]	[0.068]	[0.127]	[0.048]
New Male (NM)	44.72	25.29	74.64	55.14	29.66	93.26
	(46.126)	(35.054)	(64.663)	(43.158)	(31.896)	(62.062)
	[0.247]	[0.330]	[0.211]	[0.151]	[0.222]	[0.134]
Control Mean	268.675	249.663	294.563	243.716	232.061	259.446
Obs.	19,455	11,302	8,152	16,518	9,555	6,963
Baseline Control	No	No	No	No	No	No
Cycle Month Control	Yes	Yes	Yes	No	No	No
NM=NF (F p-val)	0.214	0.125	0.368	0.604	0.492	0.756
NF=NFRM	0.975	0.835	0.888	0.929	0.971	0.865
NM=NFRM	0.245	0.195	0.326	0.648	0.491	0.854

Note: Each column is a separate regression using outcome values winsorised at 99th percentile. The New Female&Role Model treatment is similar to NF, but with added benefits of consistent access to a female role model with previous leadership experience. Columns 1 - 3 consider member-level combined loan outcomes from Cycle 1 and 2. Columns 4 to 6 consider member-level loan outcomes from completed cycle 1. In columns 4-6, members who dropped out are assumed to have exited after cycle 1 completion, and new members to have joined after cycle 1 completion. Results are expressed in thousands of UGX. The regressions include randomization strata fixed effects. VSLA-level clustered standard errors are shown in parentheses and Romano-Wolf corrected p-values correcting for columns 1-3 and columns 4-6 are reported in curly brackets. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A15: Impacts on Member Dropouts - All Treatments

	Member Dropped Out		
	All	Women	Men
	(1)	(2)	(3)
New Female (NF)	-0.04*	-0.04*	-0.04
	(0.023)	(0.023)	(0.031)
	[0.048]	[0.048]	[0.048]
New Female&Role Model (NFRM)	-0.04*	-0.04*	-0.04
	(0.024)	(0.023)	(0.031)
	[0.048]	[0.048]	[0.048]
New Male (NM)	-0.03	-0.04	-0.01
	(0.023)	(0.023)	(0.030)
	[0.111]	[0.111]	[0.111]
Control Mean	0.230	0.223	0.240
Observations	16,519	9,555	6,964
NM=NF (F p-val)	0.477	0.879	0.212
NF=NFRM	0.955	0.882	0.965
NM=NFRM	0.459	0.770	0.249

Note: Each column is a separate regression. The New Female&Role Model treatment is similar to NF, but with added benefits of consistent access to a female role model with previous leadership experience. Columns 1-3 consider a dummy variable indicating whether an individual VSLA member dropped out. In the Cycle 2 survey, we inquired about the membership status of each member listed at baseline (16,499) and coded as dropouts those who were no longer members. Results are presented for the whole sample and by sex of the VSLA member. The regressions include randomization strata fixed effects. Standard errors clustered at VSLA level are shown in parentheses.

Table A16: Impacts on Members' Satisfaction with Chairperson - All Treatments

	All Members		Female Members		Male Members	
	Member Satisfaction With CP Index	Wants CP to continue	Member Satisfaction With CP Index	Wants CP to continue	Member Satisfaction With CP Index	Wants CP to continue
	(1)	(2)	(3)	(4)	(5)	(6)
New Female (NF)	-0.03	-0.03	-0.04	-0.03	0.01	-0.04
	(0.060)	(0.025)	(0.070)	(0.028)	(0.071)	(0.032)
	[0.956]	[0.444]	[0.937]	[0.746]	[0.993]	[0.442]
New Female&Role Model (NFRM)	-0.00	-0.05**	0.05	-0.04	-0.05	-0.07**
	(0.057)	(0.026)	(0.066)	(0.028)	(0.071)	(0.034)
	[0.993]	[0.090]	[0.937]	[0.500]	[0.937]	[0.050]
New Male (NM)	-0.01	-0.02	-0.03	-0.02	0.02	-0.02
	(0.057)	(0.023)	(0.068)	(0.028)	(0.064)	(0.030)
	[0.990]	[0.925]	[0.966]	[0.937]	[0.977]	[0.937]
Control Mean	0.008	0.881	-0.008	0.888	0.027	0.870
Observations	3,238	3,210	1,906	1,891	1,332	1,319
Baseline Control	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Control	Yes	Yes	Yes	Yes	Yes	Yes
NM=NF (F p-val)	0.752	0.508	0.809	0.720	0.843	0.454
NF=NFRM	0.670	0.557	0.192	0.811	0.474	0.429
NM=NFRM	0.912	0.205	0.285	0.543	0.328	0.126

Note: Sample restricted to non-chairpersons, split by gender. Each column is a separate regression. Columns 1, 3 & 5 show results for a standardized index using the Anderson method formed from 8 questions on members' satisfaction with the Chairperson. Columns 2, 4 & 6 show results for a dummy question on "Would you prefer to see the same person continue as the Chairperson in the next cycle?," with a higher score corresponding to higher satisfaction. Demographic controls include gender, age, education, married, any leadership role, total earnings in the last 12 months from all activities, whether involved in any earning activity in last 1 year, engaged in farming, engaged in small-trade business and total assets. The regressions include randomization strata fixed effects. VSLA-level clustered standard errors are shown in parentheses. Multiple hypotheses corrected p-values using Romano-Wolf procedure (2005) are reported in curly brackets (testing all sub-samples together)

Appendix B: Intervention Script

[The bolded text is highlighted for easier identification of the treatment, but it was not originally bolded in the script]

BRAC Uganda in collaboration with Makerere University, Microfinance Support Center (MSC), AVSI and Village Enterprise (VE) is conducting a study on leadership in VSLAs in this community. We are here to implement an idea of selecting a new chairperson for the next cycle year/share out period in your VSLA group.

Purpose of Research implementation: This study seeks to understand how the chairpersons of VSLAs perform their leadership duties to the VSLA and how new members can develop their leadership skills. We want to understand what types of leadership skills that a new person can acquire by become a leader and what skill they need to be given training on. The research is also about understanding how VSLA members help new leaders and how new leaders can help VSLAs to improve performance. As per the information that we have, you currently have [Mr. name...] as the chairperson for your VSLA. **In order for someone else from your group to be able to bring in their views and develop their leadership skills, we are requesting if you would consider (s)electing a different *[man/woman]* to be the chairperson for the next cycle.**

No Benefits: You will neither receive nor be declined of any benefits because of your participation in the survey. As researchers, we cannot provide any benefits, services, or assistance, but we hope that our study will be useful for governments and service providers to improve their policies and programmes for supporting VSLAs. Some of the newly selected leaders may receive some training or coaching supports, but this is not guaranteed. We expect to return to the communities that participate in the study and share some of the research findings.