



Gender Gaps in Leadership: The Case of Savings Groups in Uganda

How can gender gaps in leadership positions be measured and explained?
Are there gender differences in the perceptions of which leaders are influential? – A Literature Review and Investigation of Village Savings and Loans Associations (VSLAs) in Uganda

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Abstract

Village saving and loans associations (VSLAs) play critical roles in many countries, including Uganda, towards financial inclusion overall. VSLAs are critical in working towards two key components to financial inclusion: financial literacy and access to financial services. More than half of the adult population in Uganda either saves or borrows through this community-based service platform, and they are by far Uganda's leading source of credit. VSLAs are successful in creating income-generating activities and the benefits are evident. However, little is known about its leadership. In Uganda, women dominate in the number of members in the VSLAs but are yet underrepresented in its leadership positions.

As this thesis is written to investigate gender gaps in the leadership of VSLAs in Uganda, it builds upon the findings made from the report by the multi-disciplinary research team assessing Women's Leadership in VSLAs in Uganda. Two main contributions are made from this thesis, where the first entails a thorough investigation of how gender gaps in VSLA leadership can be measured and explained. The second entails an examination of whether there are gender differences in the perception of leaders considered influential. The latter is studied to find evidence for structural barriers such as VSLA gender composition restricting women from being influential leaders.

With these main contributions in mind, this thesis structures the content into two parts: Part A and Part B. Part A provides a thorough introduction to the theory and literature and presents the theoretical frameworks that describe the theories behind the research problem. It dives into two theories explaining gender gaps in leadership through the theory of discrimination and variations in observable characteristics. The theories of discrimination explain the notion of taste-based- and statistical-discrimination. The other theory, attributing the gender gap to differences in psychological attributes, preferences and attitudes.

The overall findings are pronounced and presented in Part B. The findings from the analyses made from this thesis happen to be very much consistent with the existing literature. Much of the gender gap in leadership is explained by observable characteristics, in particular by the fact that women have lower levels of education than men in the sample. The findings from the second investigation show that the fraction of listed influential females increases more than proportionate to the fraction of females in the VSLAs, where most men do not consider women in equal positions influential.

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List of Abbreviations

- IPV – Intimate Partner Violence
- MFIs – Micro-Finance Institutions
- SG – Savings Groups
- SDG – Sustainable Development Goals
- SSA – Sub-Saharan Africa
- STEM – Science, Technology, Engineering and Mathematics
- VSLAs – Village Savings and Loans Associations
- WEF – World Economic Forum

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Introduction

Women represent half of the world's total talent pool yet are generally underrepresented in leadership positions (WEF, 2020, 2021). Underrepresentation is a problem when appropriate deployment and full development of women are fundamental for thriving economies and societies to arise. Empowering women and girls are at the core of UN Sustainable Development Goals (SDGs), but the COVID-19 pandemic has halted the progress toward gender parity across several industries and economies (Krishnan, et al., 2020; WEF, 2021). The pandemic amplified many pre-existing gaps between men and women, where temporary preventative measures like lockdowns augmented the average distance to complete gender parity by about 0.6%. Besides, aggregating women's pressure to provide care at home, women were predominantly affected because they occupied jobs in the most affected sectors.

A tool measuring overall gender parity is the Global Gender Gap Index. It is developed by the World Economic Forum (WEF) every year and captures gender gaps across four dimensions: health, education, politics, and economics. The gap within the first-mentioned is nearly closed, where women's restricted access to healthcare and the issue of "missing women" owed to uneven sex ratios at birth drive the remaining gap (WEF, 2021). Many of the pre-mentioned factors measured within the health subindex do not apply to sub-Saharan Africa (SSA). Uganda ranks with 38 other countries as the first (1) in the world on its health and survival subindex, with 98% of the gender gap in this dimension closed (WEF, 2021). Across all dimensions, Uganda ranks the lowest in educational attainment (131). Low literacy rates and low enrolment in secondary and higher education relative to other countries are the main contributors to this.

While the educational gender gap in Uganda is noteworthy, politics is still the most significant gap to close globally (WEF, 2021). Over 80 countries have never had a woman as the head of the state, only 26% women fill parliamentary seats, and 23% are ministers worldwide. Uganda is doing a little better than the global average. Women fill 33% of parliamentary seats, cover 43% of all cabinet positions and hold 46% of all positions in local governments (Tripp, 2021). Ugandan women have had a substantial influence on pro-women legislation in comparison to many neighboring countries (Delvin & Elgie, 2008; Muriaas & Wang, 2012). They rank as 46 on the political empowerment subindex, where many factors contribute to this placing. As early as the late 90s, Uganda led to having more women in politics than many developed democracies (Goetz, 1998). This reaching was not explicitly owed to affirmative actions but as a critical response by the government to accommodate the interests of many political activists.

Affirmative actions such as quotas or reservations of seats for women in political settings have increased the chance for many women to succeed in attaining leadership positions (Bhavnani, 2009). Other studies find that they also effectively decrease the earnings differentials between men and women (Fisher et al., 2021). Women in leadership are shown to be important not only because they lead differently but because they bring diversity to decisions made (Spar, 2013). However, despite women's capabilities to be top performers, they are still not attaining senior leadership positions at the same rate as their male counterparts (Baker, 2014). Women who seek leadership positions face barriers that increase their likelihood of giving up when not adequately supported by their surroundings. Norms formed by gender identities like 'only men make good leaders' enable men to more likely benefit from a 'glass escalator' while women typically confront a 'glass ceiling' (Ryan & Haslam, 2005). In Uganda, due to female disadvantage, men still benefit from a wage premium over women across all wage distributions (Sebagala, 2007; Ngoa & Wirba, 2021). Wage differentials lead to inequalities between men and women, contributing to poverty.

Duflo (2012) finds that women in most parts of the developing world remain in a relatively disadvantageous position in many ways. Women are less likely to work, earn less than men for similar work, and are more likely to find themselves in poverty while working. With salaries and labor force participation, leadership is a component measured within the subindex of economics (WEF, 2021). Uganda performs the poorest on its leadership component (ranked 74 overall) within this dimension, where the subindex entails components essential to achieving financial inclusion. This makes another SDG central: poverty eradication (UN, n.d.).

Women lag within two key components to financial inclusion: financial literacy and access to financial services. Village saving and loans associations (VSLAs) play critical roles in many countries, including Uganda, towards financial inclusion overall. More than half of the adult population in Uganda either save or borrow through this community-based service platform, and they are by far Ugandans main source of credit (Franco, et al., 2021; FSDU, 2018). VSLAs are successful in a wide array of measures, including income-generating activities, food consumption and solidarity (Gash, 2017). The benefits deriving from VSLAs are well-established, but little is known about its leadership (Franco, et al., 2021). In Uganda, women are underrepresented in VSLA leadership positions in proportion to their membership share (Franco, et al., 2021). This thesis builds upon the findings in the report made by the multi-disciplinary research team assessing Women's Leadership in VSLAs in Uganda.

The ultimate goal of this thesis is to generate descriptive evidence on women's leadership in VSLAs to enhance an understanding of what might drive the differences between men and women. There are two main contributions made, where the first entails a thorough investigation of how gender gaps in VSLA leadership can be measured and explained. The second entails an examination of whether there are gender differences in the perception of leaders considered influential. The latter is studied to find evidence for potential structural barriers such as VSLA gender composition restricting women from being influential leaders.

With these main contributions in mind, the research questions this thesis aims at answering are:

How can gender gaps in leadership positions be measured and explained? Are there gender differences in the perceptions of which leaders are influential?

This thesis structures the content into two parts: Part A and Part B. Part A provides a thorough introduction to the theory and literature. It presents the theoretical frameworks that describe the theories behind the research problem and deliver a conceptual and analytical approach in explaining the gender gap and how it applies to leadership. The literature review critically evaluates existing works and explores written works about the topic in question. It will present relevant works on gender gaps and provide evidence of gender gaps within all the four dimensions of the Global Gender Gap Index. With an emphasis on the labor market and studies from a developing country context, this review will primarily discuss the implications of the gender gap in leadership and evaluate some policies attempting to close this gap.

The second part, Part B, presents a comprehensive analysis of gender gaps in leadership. First, it provides some background information introducing the context of this research, how the VSLAs work in practice, and their role in Uganda. It then unpacks the methodology used in the analysis and explains the data collection and handling procedures. The analysis presents the results, whereas the following discussion briefly connects the findings with existing literature. Lastly, the conclusion is inferred at the end and summarizes the key findings from this analysis.

Part A – Theory & Literature

This part first entails a review of theoretical frameworks on gender gap and explain how it is applicable to leadership. Secondly, it presents relevant literature on gender gaps followed by a discussion on studies evaluating policies aimed at closing this gap. With a particular emphasis on labor market applications, the literature also provides evidence from a developing country context. Most of the studies on the existing theories and literature assess these principles in the setting of a more developed country where the implications and decisions are typically made by economic agents such as employers on the demand side of labor. However, much of the same intuition applies to the supply side provided by laborers too.

Theoretical Framework

Gender gap can be defined as the difference between men and women reflected in social, political, intellectual, or economic attainments and attitudes (Harris, 2017). Jointly together with leadership, it brings to attention an important concern. Leadership is the action of leading a group of people, where following a leader is voluntary rather than a coerced and forced activity (Hermalin, 1998; Jamie, 2019).

A broad consensus exists on the magnitude of the implications that follow from the gender gap between men and women nowadays. Not only in leadership, but also areas reflecting differences in economic-, educational-, political-, and health- outcomes. Limiting the attention to economic outcomes, two polar hypotheses proximate their causes (Laing, 2011). The first hypothesis states that differences in economic outcomes result from discrimination as intergroup differences are wholly or partly a consequence of actions taken by employers, co-workers, consumers and the government (Laing, 2011). The alternative hypothesis states the opposite and suggests that the observed variation in economic outcomes reflects differences in productivity, voluntary choices, and preferences, rather than discrimination. There are two main explanations for discrimination. The first is the neoclassical theory known as taste-based discrimination centered around the idea that some decision-makers or economic agents base their judgment on the taste (or distaste) of a particular group of people (Borjas, 2019). The second is statistical discrimination, suggesting that discriminatory behavior derives from the incomplete information. More recent theories focus on the supply side, and attribute the gender gap to differences in preferences and psychological attitudes (Bertrand, 2011).

Taste-Based Discrimination

Generally, discrimination can be defined as the unjust or prejudicial treatment of a person or a group, especially on the grounds of race, gender, age or sexual orientation (APA, 2019; OED, n.d.). It is a matter of feeling and frequently against (or can also entail being in favor of) favorable treatment of a person or group to compensate for disadvantage or lack of privilege. In the labor market, economists define discrimination as a situation in which equally materially productive individuals are treated unequally based on an observable characteristic (Laing, 2011). That individuals are equally materially productive means that they can produce the same amount and quality of output using the same inputs which is distinct from equal dollar productivity. These individuals, who are in essence workers, are treated unequally and discriminated against by arriving at systematically different outcomes due to the actions of external agents such as managers, co-workers and consumers.

A worker might encounter discrimination at two stages during the duration of his or her work-life (Laing, 2011). The first occurs before the worker enters the market and is known as pre-market discrimination. Such discrimination can arrive at the basis of for example low parent health and education, impoverished neighborhoods, and unequal schooling systems. The second affects the worker after entry to the labor market and is known as market discrimination. Examples of market discrimination include earnings differentials and other segregated treatments within the occupational workspace.

Becker developed the first economic model of taste-based discrimination, showing that prejudice can be interpreted as a distaste (Laing, 2011). He hinted that if someone has a “taste for discrimination, the individual must act as if he or she is willing to forfeit income to avoid certain transactions (Becker G. S., 1971). Under the assumption of perfectly competitive markets, and homogenous and equally materially productive workers, Becker found that minority workers could adversely be affected by discrimination through the prejudice of employers, co-workers, and consumers. The taste for discrimination stemming from employers, co-workers, and consumers can be studied more in detail by looking at how they in combination with the market forces generate discrimination.

Employer-, co-worker- and consumer discrimination jointly are what make up the market discrimination. The variables of attention in the study of employer discrimination include the distribution of employers’ tastes, the form of production functions, the degree of market

competition, and the relative number of employed individuals N (Becker G. S., 1971).¹ Becker suggests that in light of discrimination, managers and owners of a firm may choose to sacrifice profits based on their subjective tastes and preferences for a particular group of people. Provided that males and females are perfect substitutes, a firm's production function can be written as:

$$q = f(E_m + E_f) \quad (1)$$

where q = firm's output, E_m = the total endowment of hired male workers, E_f = and the total endowment of hired female workers (Borjas, 2019). Since the firm's output depends on the number of workers hired regardless of gender, the marginal product of labor MP_L is the same for both males and females. With both genders equally productive, any differences in the economic status that cannot be attributed to skill differentials must arise from the discriminatory behavior of the employer.

Figure 1 illustrates the profit-maximization condition and employment decision of a firm that does not discriminate (Borjas, 2019). If the equilibrium wage of females (w_f) is less than the wage paid to males (w_m), a firm that does not discriminate will only hire women up to the point where their wage equals the value of marginal product of labor (VMP_E) or the total endowment of female workers hired.

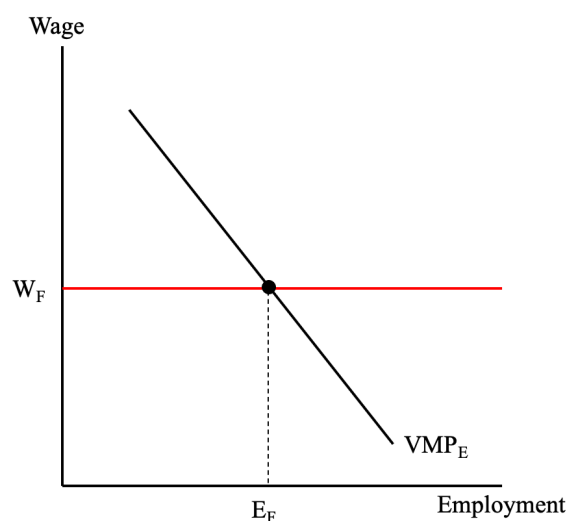


Figure 1 –Employment Decision of a Firm That Does Not Discriminate

¹ The empirics shows here will serve as a basis for both co-workers and consumer discrimination.

An employer that discriminates will act as if the wage of females is not w_f , but instead $w_f(1 + \delta)$, where δ is the discrimination coefficient. The hiring decision is now therefore not based on the comparison of wages between male and females (i.e., w_m and w_f), but instead between w_m and $w_f(1 + \delta)$. As a result, an employer that discriminates against women will only hire women whenever $w_f(1 + \delta) < w_m$, and men whenever $w_f(1 + \delta) > w_m$. Figure 2 illustrates the employment decision of a prejudiced firm and shows how all-male (high discrimination coefficient) and all-female (low discrimination coefficient) make their hiring decision.

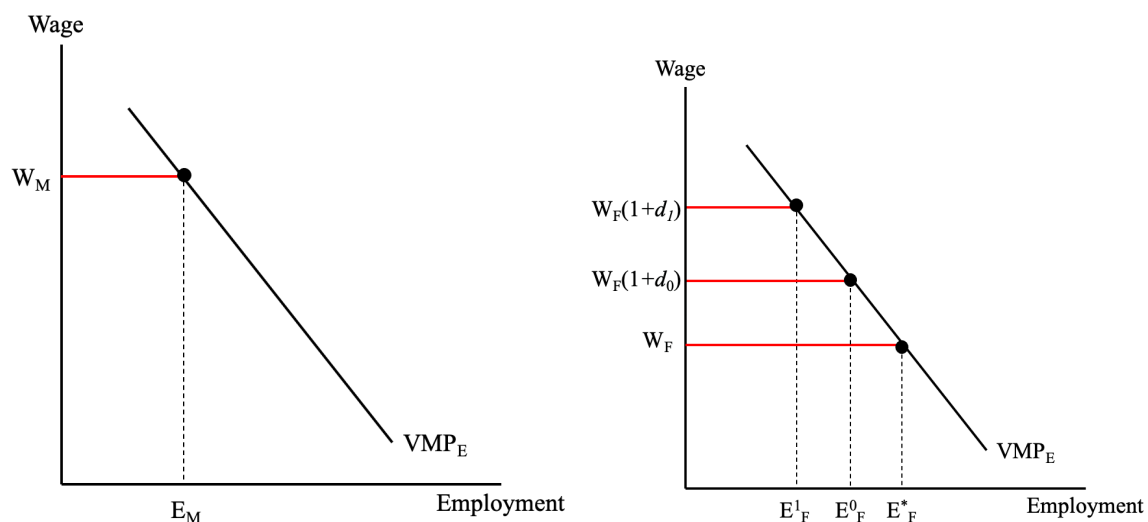


Figure 2 – Employment Decision of a Prejudiced Firm

An all-male firm will hire men to the point where $w_m = VMP_E$, whereas an all-female firm will hire women to the point where the utility-adjusted wage for females $w_f = VMP_E$. Hence, a firm that discriminates will hire fewer workers than a firm that does not discriminate. Becker's model provides important insights and shows that discrimination does not pay off. A prejudiced employer will pay a wage above the market equilibrium and hire too few workers resulting in lower output and profits in comparison to the firm that does not discriminate.

In terms of earnings, an employer's profits can be expressed as:

$$\pi = p * q - w_m * E_m - w_f * E_f \quad (2)$$

where π = firm's profit and p = price of a product. If we let U = employer's utility, the maximization problem of the typical utility function is given by $U(\pi, w_f, E_f)$. The function is positively dependent on profits (π), and negatively on discriminatory preferences on the total payments made to females (w_f, E_f). As a result, the employer utility is given by:

$$U = U(\pi, w_f, E_f) = \pi - \delta_e(w_f, E_f) \quad (3)$$

δ_e is the coefficient measuring employer discrimination and converts the taste for discrimination into monetary terms. An unprejudiced employer who only cares about profits maximizes profits when $\delta_e = 0$. Thus, making prejudiced employers eventually disappear in competitive markets. Figure 3 shows that a firm that hires just women will have too few workers, whereas a firm that only hires men, hires too few at a very high wage.

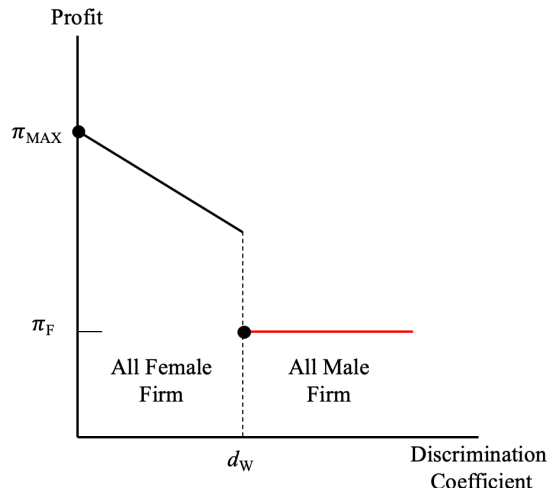


Figure 3 – Profits and Discrimination

In the actual market, the propitiate wage gap between males and females can be shown as $w = \frac{w_m - w_f}{w_f}$. Figure 4 shows that the equilibrium wage ratio occurs below a ratio equal to one, the intersection of the demand curve (D) and the inelastic labor supply curve (S) of the total N .²

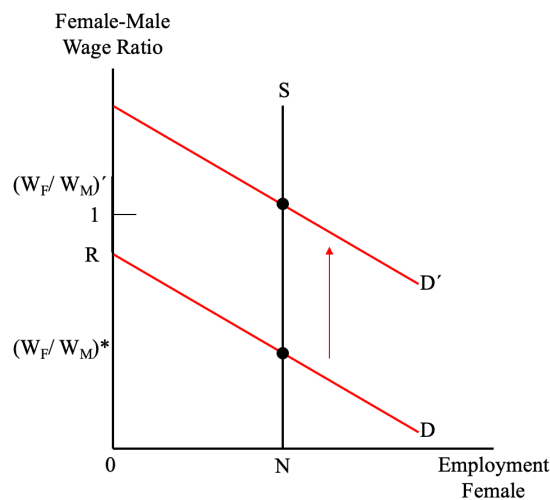


Figure 4 – Determination of Female/Male Wage Ratio in the Labor Market

² The wage ratio (w) might in some cases be greater than one by nepotistic firms that are in favor of hiring women.

Whenever w is high, no employers hire women. As this ratio falls below a certain threshold R , more firms are compensated for their disutility and the demand for female workers rises. Women end up being matched with unprejudiced employers, as the model suggests that women must reward prejudiced employers. Employers who prefer hiring women will hire them even though the wage ratio is greater than one shifting the demand curve (D) up to (D').

Regarding taste-based discrimination acted by co-workers, consumers, and the government, much of the same intuition applied to the employers applies to these economic agents as well. Under the assumption that men and women are perfect substitutes in a perfectly competitive market, a profit-maximizing firm would refrain from having a mixed-labor force and choose to hire whoever is cheaper in a completely segregated workforce. A male co-worker with a distaste for working with women will act as if their wage is $w_m(1 + \delta)$ and will only lose since a firm will not pay a compensation wage for the experienced disutility.

A separated workforce owed to co-worker discrimination (also known as employee discrimination) does not generate wage differentials between equally skilled workers like the way employer discrimination does. Nor does it affect a firm's profit, as the employer would never benefit from a mixed-labor force. However, due to frictions in the hiring process, technological restrictions, and population ratios, this type of discrimination is unlikely to persist. On the contrary, consumer discrimination might have a severe impact on the firm's profits and workers' wages as the customers act as if the price of goods sold cost $p(1 + \delta)$ instead of just p when serviced by a minority or prejudiced workers like for example women. This sort of prejudice can persist in the long run where different products command different prices. This is for example observed in the housing market. In the labor market, a firm may try to solve this by separating prejudiced workers from jobs in contact with customers.

Statistical Discrimination

Aigner and Cain (1977) consider economic discrimination to exist when workers do not receive pay commensurate with their productivity. In short, equal productivity is not rewarded with equal pay. Statistical discrimination is a social phenomenon and a situation in which inferences about a worker's group affiliation is made to obtain useful information about the worker (Laing, 2011). This theory implies that prejudice arises due to incomplete information as employers use easily observable characteristics and their limited information on knowledge, skills, and productivity to infer productivity (Aigner & Cain, 1977). Thus, permitting biased beliefs about the capabilities of individuals of certain groups to become self-fulfilling.

A simple model of statistical discrimination using test scores T to assess the impact on wages shows that despite male and female applicants having individual scores, they are not offered a wage equal to their MP_L (Borjas, 2019). The opposite would be true if the T 's are perfectly correlated with individuals' productivity. However, since realistically, this is not the case, an employer takes into consideration the average productivity of the group the individual belongs to by taking into consideration the weighted average of expected productivity. If \check{T} represents the average productivity of the group an individual belongs to, the predicted wage (w) becomes:

$$w = \alpha T + (1 - \alpha)\check{T} \quad (4)$$

where α can take any value between the extreme cases 1 and 0 and measures the correlation between the individual test score and true productivity. The wage will not only depend on individual test scores but the mean of the whole group. Figure 5 shows that if female applicants on average score lower than their male counterparts, a male with T^* points in test score, earns more than a female with the same score when offered the job.

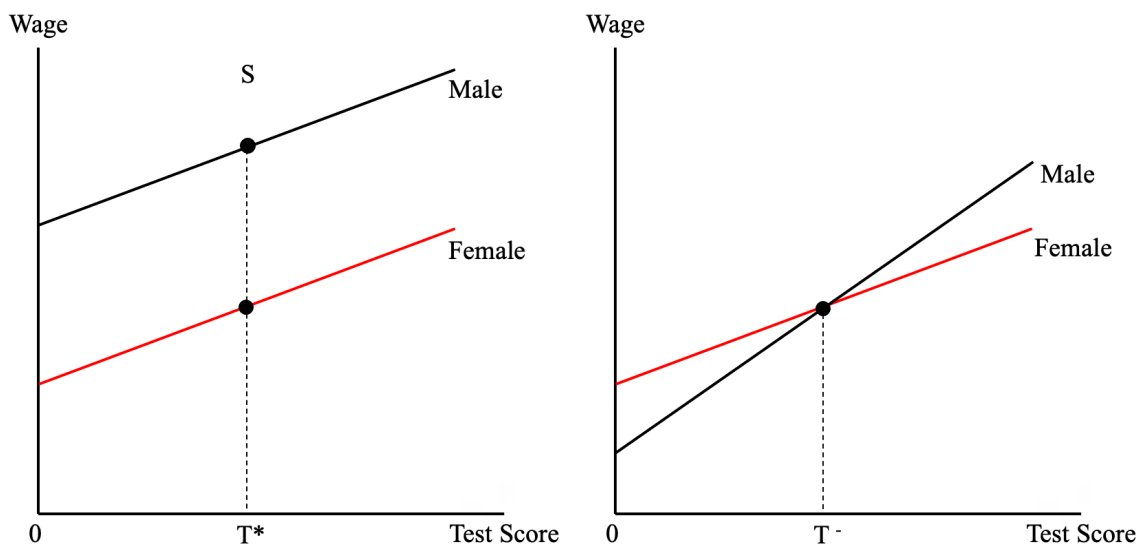


Figure 5 – Impact of Statistical Discrimination on Wages

If both males and females have the same average test score T^- , a prejudiced employer in the belief that males are more knowledgeable will be biased in which would benefit the males. Males with high scores will tend to be offered a higher wage than females with the same test scores, and the opposite is also true for low-scoring males who will tend to earn less than low-scoring females. In the latter case, females benefit from statistical discrimination.

Owing to imperfect information either through signaling or a trait, an individual's true ability can never certainly be known (Laing, 2011). Negative prior views are central to statistical discrimination, and in general, a situation in which decision-makers make inferences about the affiliations to a certain group to acquire useful information about an individual (Borjas, 2019; Laing, 2011). Instead of being viewed as an individual, individuals are treated based on knowledge of the average characteristics of the group they are a member of.

Psychological Attributes, Preferences & Attitudes

Psychological attributes such as preferences and attitudes have received increased attention in describing the differences between men and women (Bertrand, 2011). In particular, Bertrand finds through a review that these gender differences result in different outcomes in risk aversion, competitive behavior, social preferences, and attitudes towards negotiation. A relationship between social and gender identity norms is understood to exist and suggested to drive psychological attributes that influence women's labor market decisions.

With these discoveries in mind, there are some empirical implications for labor market outcomes that derive from these gender differences. Regarding risk attitudes and attitudes towards competition, women are in general found to be more risk-averse and less competitive in nature than men (Bertrand, 2011). Most of the experimental findings assessing these differences find systematic differences in preferences between the genders, and a large part concerning competitive behaviors are often accompanied by differences in areas where men dominate such as overconfidence.

In negotiations, women are found to be less argumentative and have lower bargaining power (Bertrand, 2011). They have social preferences that reflect the importance of being useful and self-sacrificing in society rather than being inconsiderate. Thus, they display less greed and hold a greater number of altruistic values that are consistent with the understanding that many women refrain from self-promoting strategies. Other personality traits like productive traits are similarly relevant to the labor market. And these include both cognitive and non-cognitive skills, and traits such as agreeableness, conscientiousness, extraversion, neuroticism and openness. These traits are suggested to be nurtured by both the environmental and the biological aspects of nature.

The gender identity theory lays theoretical foundations supporting that social- and gender norms are contributory to the differences between men and women in labor market outcomes (Bertrand, 2011). Norms formed by gender identities are suggested to drive psychological attributes and influence women's and employers' labor market decisions. Nonetheless, apart from the prevailing gender gap, women are empirically found to have improved overall well-being owed to deep societal changes to their meaning in society.

Literature Review

This review starts by discussing the gender gap related to economic participation, as observed in salaries, labor force partaking and the attainment of leadership positions. The emphasis on the latter is considerably larger than the rest, and empirical evidence that documents that this gender gap exists is provided at first. This is followed by studies that have attempted to close these gaps through the introduction of affirmative action. Finally, insights from gender gaps observed in other areas such as politics, health and education is provided.

Gender Gap in Economic Participation: Salaries, Labor Force & Leadership

A selection of literature studies gender gaps and in the efforts toward parity within economic participation and opportunities, there are still disparities at all levels in this arena not only based on sex, but also on race, ethnicities, and disabilities (Neumark, 2018). Discrepancies in labor market outcomes owed to race have received a lot of attention and research. Especially after Gary Becker explained the phenomenon of taste-based discrimination and the disadvantages black workers in the US faced for decades in his publication: *The Economics of Discrimination* in 1957 (Neumark, 2018). However, given the setting of this empirical analysis in Uganda, this literature review will pay particular attention to research applicable on gender gaps in SSA.

Empirical Evidence

Related to disparities affecting women's salaries, labor force participation, and the attainment of leadership opportunities, Duflo (2012) finds that women are less likely to work, earn less than men for similar work, and are more likely to find themselves in poverty while working. Gould and Schieder (2017) argue that understanding where our economy fails to ensure equal opportunities for women at every step throughout their education, training, and career choices is just as important to adjust for the factors driving the earning differentials between the genders. Factors such as gender differences in occupations, industries, gender roles, and division of labor at home, contribute to the slow progress in closing the gap (Blau & Kahn, 2017). Especially, the gap observed at the top of the wage distribution. In SSA, and Uganda in particular, due to female disadvantage, men still benefit from a wage premium over women across all wage distributions (Sebagala, 2007; Ngoa & Wirba, 2021).

While the gender wage gap is important, Moore (2021) sheds light on the requirement for a more holistic approach to evaluating the disparity between the genders. There is more to gender differences within and outside the labor market that does not entail salaries, as the problem persists in labor force participation and acquisition of leadership positions overall. Despite women's capabilities of being top performers, they are still not attaining senior leadership positions at the same rate as their male counterparts (Baker, 2014).

Women in child-bearing ages are naturally disadvantaged and stigmatized by the risk of being "regularly sick" due to their monthly cycles and the potential of realized fertility (Chrisler & Johnston-Robledo, 2010; Becker et al., 2019). Married women in the same age brackets run into the possibility of discrimination not only owed to the risk of pregnancy, but also being frequently home to take care of sick children. Some studies suggest that the gap in labor force participation and attainment of leadership positions is besides these disadvantages attributed to the underrepresentation of qualified women due to barriers that society has decided (Grove & Montgomery, 2000). Norms formed by gender identities like 'only men make good leaders', enable men to more likely benefit from a 'glass escalator', while women typically confront a 'glass ceiling' (Ryan & Haslam, 2005). Women who seek leadership positions face barriers that increase their likelihood to give up when not adequately supported by their surroundings.

With the lack of support being determinantal for females' success in leadership in mind, Bear et al. (2017) find that women are less likely than men to receive feedback that promotes leadership advancement and objectively receive feedback that is of lower quality. According to Spar (2013), women in leadership are required not only because they bring diversity to the decisions made, but because they lead differently. Researchers investigating the extent discrimination depends on gender show women's success in attaining senior leadership positions is highly dependent on whether women were involved in the recruitment or evaluation process (Bagues & Esteve-Volart, 2010; Bagues & Zinovyeva, 2011; Pola & Scoppa, 2015).

The variety of choices made is contingent on the nature of the decisions. In negotiations, Babcook et al. (2017) find evidence that women more than men accept voluntary tasks with low promotability. They suggest that such an attitude and behavior for settlement, is a contributory factor in driving the gender differences behind women's slow progress in organizations. Similar findings are found in negotiating over real estate and labor market outcomes such as salaries (Recalde & Vesterlund, 2017; Andersen et al., 2021). Within conflict management, for instance, no statistical differences are found in the ways men and women manage conflict (Manyak & Katono, 2010). This has also been shown to be the case in SSA.

In terms of interpreting signals, female executives are better equipped at reading signs of productivity from female workers than men (Flabbi et al., 2019). Thus, positively impact firm performance as the gender distribution equalizes. Predicted by the principal-agent framework, Paltseva (2019) lays forward evidence on how the gender of the agents can affect motives, behavior and outcomes. In the short run, women-led firms tend to hire more women in leadership positions where they benefit from higher wages in comparison to firms led by men (Bell, 2005; Cardoso & Winter-Ebmer, 2007). In the long run, evidence shows that women have an important contribution to make in both politics and other aspects of society (Gouws & Kotzé, 2007). In SSA, few studies reveal that female-headed households improve agricultural productivity, adherence, and perception to the extent that female leaders are considered influential (Saenz & Thompson, 2017; Ayalew et al., 2021).

Affirmative Actions

With considerable evidence of discrimination between the genders, some scholars have investigated whether it is possible to do something about it. In many low-income and middle-income countries, affirmative actions have proven to be effective in decreasing the earnings differentials between men and women (Fisher et al., 2021). Although the decrease cannot be attributed to these initiatives alone, women have increased their productive characteristics over time. Gender-specific programs focusing on aspiration, training and leadership are essential to eradicate the lack of confidence women have in themselves when seeking leadership positions (Kagoda & Sperandio, 2010). The ‘Role Model Effect’ is found to be successful in reducing negative biases toward women and aspired young women to pursue opportunities that aid their future careers (Beaman et al., 2012; Beaman et al., 2014). Also, quotas or reservations of seats for women in political settings have shown to have a long-term effect on the likelihood of the success of future females in leadership positions in India (Bhavnani, 2009).

On the contrary, in SSA, quotas and reservations have not shown to be as effective in reducing biases or making women hold key decision-making positions (Clayton, 2018; Hannah, et al., 2020). Hannah, et al. (2020) finds that gender-based inequities persist because men can allocate more time to these activities and that the gap is rather explained by other factors such as education, years served in decision-making committees and the individuals’ perceptions of which genders are represented as effective. In Uganda, quotas have mainly been used by the government to strategically maintain a dominant position (Muriaas & Wang, 2012). This, by accommodating political events, interest groups and activists fighting for gender equality.

Gender Gap in Politics

Gender gap in political empowerment remains still the largest gap to close worldwide (WEF, 2021). Women are underrepresented in political positions and a wide range of literature documents that women have an important role in the aspects of political empowerment. They invest more in infrastructure, prioritize relevant policies, and contribute to changes benefitting women and the overall society (Duflo, 2004; Gorrlieb et al., 2016). Other scholars find that women are also less likely to engage in corruption when in leadership positions, that they affect the provision of public goods, and that their representation in state legislature improves the general health and well-being of children (Bhalotra & Clots-Figueras, 2014; Brollo & Troiano, 2016; Paltseva, 2019). Gouws and Kotzé (2007) argue that some of the obstacles that hinder women in attaining leadership roles include value and attitude differentials from men preventing them from making the changes that they can.

Apart from differences in attitudes, women in Uganda have had a great influence on pro-women legislation in comparison to many of their neighboring countries (Delvin & Elgie, 2008; Muriaas & Wang, 2012). As early as the late 90s, they were leading in having more women in politics than many developed democracies (Goetz, 1998). This achievement was not explicitly owed to affirmative action intervention but as a key response by the Ugandan government to accommodate the interests of many political activists. Although the effect of quotas and reservation of seats is rather controversial in SSA, Tripp (2021) shows that women hold 46% of all positions in the local government, fill 33% of the seats in parliament and cover 43% of all cabinet positions. At all times, one woman per 146 districts in Uganda is reserved and occupies one seat of the 529 available in the parliament (Twongyeirwe & Tusasirwe, 2021).

Gender Gap in Health

The gender gap in health and survival has substantially decreased over the years, but women's restricted access to healthcare, sufficient research on women's health and the issue of "missing women" is still a problem (WEF, 2020, 2021). Although WEF (2021) points out that factors such as "missing women" are not particularly strong in Uganda and many other SSA countries, Sen (1990) disputes that if this was not the case, the expected proportion of girls and women in SSA would not be lower than boys or men if they died and was born at the same rate (Duflo, 2012). Hadley et al. (2008) show that there are other applicable discriminatory challenges in SSA that might cause this disparity such as intra-household adolescent food insecurity stemming from gender biases and preferences for buffering sons.

In SSA, daughters' general health and measures of overall well-being are significantly correlated to a household's degree of son-preference (Hadley et al. 2008; WEF, 2021). Other differences affecting health, and Uganda in particular, include the observed imbalance of HIV/AIDS prevalence among young women versus men in the same age bracket (Patra & Singh, 2015). Suggesting contraction because of attitudes and preferences reflecting risky and cross-generational sex practices given the lack of adequate education.

Gender Gap in Education

Within educational attainment, the gender gaps range from male and female students choosing different academic subjects, to female students underperforming their male counterparts in high-stakes tests, even though women obtain better grades in school exams. Lavy (2008) put forward evidence that gender bias in the test results of students is sensitive to the gender of the teacher conducting the evaluation. This, despite women outperforming their male counterparts in pass rates (even in STEM subjects) where underrepresentation and underpayment of women still prevail (Stoet & Geary, 2015). Similar trends are also observed in SSA where progress is owed to the initiatives set by governments that promote encouragement of young women to pursue challenging educational subjects (Adepoju, 2019).

In the context of educational attainments in Uganda, Sperandio (2000) argues that schools can play an important role in the leadership development of adolescent girls in areas where girls are struggling to gain parity with boys. Committing to promoting gender equality by ensuring leadership opportunities are evenly apportioned to both genders, and encouragement of female teachers to appreciate the learning environment they provide might be as empowering as being a role model. Just as important is the uplifting of female teachers in senior leadership positions in education, as underrepresentation is characterized by females' lack of confidence, despite men and women being perceived to be equally effective by their evaluators (Herbst, 2020).

Part B – Gender Gaps in VSLA Leadership

This part involves first some background information that explains the context of this research, the VSLA Model and how VSLAs work in Uganda. It will then introduce the research question and unpack the methodology for how the analysis will be conducted and the procedures for retrieving and handling data. The results are presented in the analysis, and a brief discussion will follow before some concluding remarks are inferred at the end.

Background

This section introduces the context of research, explains the VSLA Model, and describes the role of VSLAs in Uganda. While the intention of the subsection on the context of research is to provide details on the setting of this particular study, the subsection on the VSLA Model aims to clarify how the VSLA framework and methodology work in practice. The last part will present how the model works in Uganda.

Context of Research

This research aims to understand whether there are gender gaps in savings groups and, if there are, how these can be explained. It looks at VSLAs in Uganda and investigates whether there are gender differences in the perceptions of which leaders are influential as a proxy for their effectiveness. The research builds on the findings from the baseline study intended for use by the multi-disciplinary research team investigating women's leadership in VSLAs in Uganda (Franco, et al., 2021). Their study aims to understand how men and women are selected as leaders in the VSLA management committees and what roles they play in financial performance and members' satisfaction with the decisions made by the committees. They seek to identify potential avenues of improving female leadership, measure their effectiveness, and assess other spillover effects on their communities, members and family.

The baseline study was carried out in Uganda, where a sample was randomly drawn from a population of over 20,000 VSLAs. Members that were the most knowledgeable on the function of the VSLAs provided information on its name, location, committee composition, the objective for its establishment, rules and procedures, and overall financial performance from conducted activities. The members of these groups supplemented information concerning their characteristics, household socio-economic statuses, financial inclusion and labor market participation, VSLA participation, network, and personal views and opinions. Each interview took about 60 minutes, and participation was voluntary and confidential.

The VSLA Model

A Village Savings and Loans Association (VSLA) is a group of people who regularly meet to save funds that later enable them to take out small loans from those savings whenever needed (VSL, 2022a; VSL, 2022b). It is a type of informal financial service provider that is unregulated and grouped with rotating savings and credit associations (ROSCAs), community-based money lenders and burial societies (FSDU, 2018). They are intended to serve the poorest people who do not fill the requirements to obtain formal financial services from a regular bank or other financial institutions (VSL, 2022b). The purpose is to allow easy access to funds from a facility targeting to aid the most unfortunate in meeting basic financial needs.

Self-managed and self-capitalized financial services such as savings, credit and insurance services are accessible to all participating members (VSL, 2022a; VSL, 2022b). VSLAs usually run in a cycle of a year, after which accumulated profits from savings and loans are distributed back to the members. Although many groups in the start-up phase are supported by various agencies such as NGOs, the majority become self-sustained at a later stage.

Many VSLAs are self-sufficient and become profitable after running for a few years. They are democratic in nature and a more structured version of the many informal Savings Groups (SG) found in the developing world (VSL, 2022b). The methodology emphasizes accountable governance, straightforward procedures and simple accounting principles that everyone can quickly grasp and trust. They are often found in urban slums and remote rural areas comprising 10 to 25 self-selected individuals. To avoid dominance from a single individual, most decisions are rarely taken by one person. This, to ensure that the activities performed by the group are protected, secure and transparent.

The group's activities are managed by a designated management committee of five or six members (VSL, 2022b). The committee has clearly defined, and distributed responsibilities approved by the members during annually held elections. The typical roles within the committee are a president and secretary at the senior-leadership level, a treasurer/box keeper, record keeper, money counter, and a general committee member on the junior-leadership level. Regular meetings in which each member saves through the purchase of shares usually occur at weekly intervals and are counted by the money counter. Purchase of shares ranges in amounts from 1 to 5 at a price pre-determined by the group and remains fixed throughout the duration of the cycle. Prices are only modified at the beginning of each cycle.

The members are not required to save in equal amounts at each meeting, thus, making the system simple yet powerful. By depositing small amounts of savings in frequent instances, the members can build easy access to financial funds that contribute to improving their households' security (VSL, 2022b). The savings are accumulated into a loan fund, from which the members can borrow small amounts up to three times the value of their savings. The loans are usually granted for a period of a maximum of three months, which are payable in flexible installments at an interest rate or monthly service charge pre-determined by the group. Few groups also decide to have a social fund to insure expenses in the event of an emergency (CARE, 2014; VSL, 2022b). Each member contributes to this fund at their regular meetings along with the purchase of shares for savings.

To ensure accurate records, each member has a passbook locked into their cash box maintained by either the record-keeper or box-keeper/treasurer between each meeting (VSL, 2022b). These passbooks keep information on all purchased shares and any obtained loans. Towards the end of each annual cycle, the outstanding loans are paid back in full, and the total balance of money is paid back to members in proportion to their savings. It includes profits and income from the accrued interest rates and fees. Upon the group's wish to start a new cycle, any member who likes can reinvest their annual share-out back to the group. This makes them start the cycle with a balance making them instantly eligible for a larger loan than in the previous cycle. Some groups have further developed and federated into larger groups allowing any excess capital to be lent to a member for up to six months. These federations do not provide any share back as a regular VSLA but pay dividends in proportion to the amount deposited instead.

While Micro-Finance Institutions (MFIs) and VSLAs share many similarities, they are both different in the way credits are offered (VSL, 2022a). They are both similar in that they offer easy access to financial services to the poorest in low- and middle-income countries. However, they differ in the benefits of repayment systems. While loans acquired from VSLAs improve a household's cash-flow management with the opportunity to accumulate savings, MFIs offer credit at rigid repayment demands at substantial costs. Typical clients of MFIs are owners of small established businesses in urban areas, whereas VSLAs offer services to individuals regardless of the type of occupation. Thus, providing advantages such as flexible repayment systems that effectively help the poorest households to stay out of debt.

With benefits primarily targeted toward the deprived, the VSLA model has spread to over 70 countries and has more than 20 million active participants worldwide (VSL, 2022a). Moira Eknes was first to initiate this in Niger in 1991 through CARE's Mata Masa Dubara (Women on the Move) Project. With the intent of making the groups independent, self-managed and self-financed, spontaneous replication is seen to have taken place without a project intervention. In SSA, particularly Kenya and Uganda, more than two groups are on average formed by themselves per founded group in the absence of any formal training.

In terms of worldwide performance, many VSLAs operate independently as quickly as after 12-15 months (CARE, 2014; VSL, 2022a). About 89% continue to operate longer than five years and double their capitalization and loan sizes on average (VSL, 2022a). With an estimate of 2.5 billion unbanked adults worldwide, VSLAs are discovered to be the best way to secure these people. A low-cost model building upon traditional informal models has come to stay. Moreover, with more than 70% female members, the VSLAs empower not only the poor but also women. In this way, VSLAs contribute to achieving the 2030 Agenda of Sustainable Development Goal by working toward gender equality and eradicating poverty.

VSLAs in Uganda

A FinScope Uganda survey from 2018 shows that informal financial services are used by more than half of the adult population above the age of 16 in Uganda (FSDU, 2018). Roughly 50% of these save funds through VSLAs or other SGs, and about the same amount also uses these groups to borrow money. On average, VSLA members borrow 40 000 Ugandan shillings (UGX), and 50 000 UGX from friends and family. While most adults are confident about borrowing money from friends and family, less than 3% are able to borrow from regular banks and other financial institutions.

VSLAs are the primary source of credit for Ugandan women in rural areas (Franco, et al., 2021). With a lump sum payable at the end of the cycle, many improve their overall quality of life (CARE, 2014). Out of the 6.8 million adults belonging to a VSLA/SG, the main motivation is to save enough money to turn to when in financial need. Women-only groups have been successful in various measures, including activities generating income, consumption of food and solidarity (Gash, 2017).

Methodology

With a combination of both comparison and regression strategies, this section will explain the methods involved in investigating the research question that asks:

How can gender gaps in leadership positions be measured and explained? Are there gender differences in the perceptions of which leaders are influential?

The research question can be broken down into two questions and will be answered using two main methodological approaches. The first question investigating gender gaps in leadership positions will be assessed by first investigating whether there is a gender gap in VSLA leadership and then looking at whether there are differences in the means of the observed characteristics between males and females in leadership. The second approach assesses both research questions through the application of an empirical model. It is applied to the first question as a linear probability model to find whether observable characteristics can explain the differences between males' and females' attainment of leadership positions. The second question applies an empirical model in the form of a multiple regression model with a continuous dependent variable and an interaction term. The latter is vital in investigating whether gender explains a leader's probability of being considered influential.

Differences-in-Means

The differences in the means of the baseline observed characteristics between males and females in the VSLAs are used to see whether there are significant divergences in members' profiles that might influence their likelihood of attaining a leadership position. These characteristics include socio-demographic information, attitudes towards gender norms, conformism and aspirations, and opinions and preferences about leadership. The presence of significant divergences is examined by using a t-test for the difference between two means (Stock & Watson, 2015). This test considers two hypotheses where the null suggests that these two populations differ by a certain amount d_0 pre-determined to be 0, where the alternative states the opposite. If $\mu_{Male,i}$ denote the mean of a male characteristic i and $\mu_{Female,i}$ the mean of a female characteristic i , then hypotheses with a two-sided alternative become:

$$H_0: \mu_{Male,i} = \mu_{Female,i} \text{ or } \mu_{Male,i} - \mu_{Female,i} = 0 \quad (5)$$

$$H_1: \mu_{Male,i} \neq \mu_{Female,i} \text{ or } \mu_{Male,i} - \mu_{Female,i} \neq 0, \quad (6)$$

where the means in equations (5) and (6) are treated as independent random variables. Since their true population mean is unknown, they are estimated from a sample of male and female characteristics (Stock & Watson, 2015). With a large enough sample, an approximation to the normal distribution can be made to compute the p-values of for the test of the null hypothesis using the sample variance for both male ($s_{Male,i}^2$) and female ($s_{Female,i}^2$).

Econometric Models & Estimation Methods

This subsection introduces the two main specifications for the econometric models used to investigate the gender gap in VSLAs. The first investigates gender differences in leadership, and the second gender differences in the perception of who is considered influential.

Gender Differences in Leadership

To first find the correlation between observable characteristics and the gender leadership gap, the following linear probability model estimate:

$$Leader_{ij} = \beta_0 + \beta_1 Female_i + \phi X_{ij} + \varepsilon_{ij}, \quad (7)$$

where the dependent variable $Leader_{ij}$ is a dummy, taking the value 1 if member i has successfully become a leader in VSLA j . The leadership variable is interchangeable with the dummy variables $Senior Leader_{ij}$ and $Junior Leader_{ij}$ whenever applicable, for the different rankings of leaders at either the senior- or junior-level. The model depends on the independent variables measuring the relationship of the gender of the leader $Female_i$, with a vector of observed characteristics X_{ij} such as member profiles, attitudes towards gender norms, conformism and aspirations, and the opinions and preferences about leadership.

To investigate whether a member is successful in attaining a leadership role is associated with gender and observable characteristics, the constant (β_0) in equation (7) measures the probability of being a leader if male. Since the dependent variable is a dummy, the model's constant or benchmark becomes identical to the mean sample size of male leaders. This results in the mean sample size of females being measured by coefficient β_1 , where $\beta_0 + \beta_1$ measures the probability of being a leader while female, holding everything else constant.

The coefficients ϕ to the variable holding a vector of observed characteristics X_{ij} is expected to have an impact by reducing the difference between male and female in leadership positions and measured by the decrease in coefficient β_1 . Suppose the difference between male and female leadership representation is associated with observable characteristics. In that case, the mean difference between males and females is expected to decrease as independent variables of observable characteristics are added to the model. This decrease is not expected if observable characteristics do not explain the difference, but rather something else (such as discrimination or supply-side factors).

In the analysis of the impact of gender and observable characteristics on the attainment of leadership positions, two hypotheses that derive from equation (7). The null hypothesis states that the gender gap between male and female members in leadership is not explained by observable characteristics and implies that any difference is owed to chance or unobserved factors such as discrimination. The alternative hypothesis states the opposite and implies that gender differences are attributable to observable characteristics.

Gender Differences in the Perception of Influential Leaders

The association of the gender of the individual member making the perception by listing who is influential is uncovered through the estimation of the following model:

$$\begin{aligned} \text{Fraction of Influential Females}_{ij} = & \beta_0 + \beta_1 \text{Female}_i + \beta_2 \text{Female Fraction in VSLA}_j \\ & + \beta_3 \text{Female}_i * \text{Female Fraction in VSLA}_j \\ & + \varepsilon_{ij}, \end{aligned} \quad (8)$$

where the dependent variable *Fraction of Influential Females_{ij}* is the fraction of the number of females considered influential among the total number of listed influential individuals by a certain member i in VSLA j . This dependent variable is substitutable with the fraction of influential leaders at either the senior- or junior-level. It makes it interchangeable with the variables *Fraction of Influential Female Senior Leaders_{ij}*, or the fraction of influential female junior leaders *Fraction of Influential Female Junior Leaders_{ij}*. The first independent variable to the model measures the influence of the evaluator by controlling for the gender of the member in the perception of who is influential *Female_i*. The second variable measures the association of the group gender composition by quantifying the fraction of females *Female Fraction in VSLA_j*. The third, an interaction term *Female_i * Female Fraction in VSLA_j* expands the understanding on how they jointly affect the outcome.

$Female_i$ measures whether female respondents are more likely to list a larger fraction of influential female members, and $Female\ Fraction\ in\ VSLA_j$ measures how females in groups with larger shares of females list influential females. The model follows the same methodology as Pola & Scoppa (2015), who brings evidence from Italian academia. They study how gender discrimination in leadership can arise from the evaluators' gender and look at how this relates to the gender composition of the committees making these evaluations. An interaction term is added to their model to investigate whether the probability of the success of the candidates seeking to attain leadership positions is affected by the gender composition of the election committee. In equation (8) an interaction term is added to examine whether the gender composition of the VSLAs affects the evaluation of who is influential. Without it, β_0 would have represented the fraction of influential females if listed by male members, β_1 the difference in the fraction of female members listed as influential between female and male respondents, and β_2 the correlation between the female fraction in the VSLA and the fraction of listed influential females holding everything else constant.

The interaction variable drastically changes the interpretation of the coefficients. It indicates that the effect of one predictor variable on the response variable is different at different values of the other predictor variable (Grace-Martin, 2014). That is the association of the fraction of females in VSLAs on the fraction of listed influential females for different genders. This indicates that the association of the fraction of females in VSLAs is not limited to β_2 in equation (8), but also β_3 and the gender of the member in the perception of who is influential. The unique effect of female composition in VSLAs is represented by everything that is multiplied with its variable in the model: $\beta_2 + \beta_3 * Female_i$, while β_2 represents the correlation of female composition in VSLA on listed influential individuals only when the evaluation is made by a male member.

The interpretation of β_1 measures the effect of being a female when there are no females in the VSLAs, but since this is unlikely to be true, the interpretation of β_1 becomes virtually meaningless by itself. The effect of being a female at different female fractions in VSLAs is measured by $\beta_1 + \beta_3 * Female\ Fraction\ in\ VSLA_j$, but this is difficult to understand since it would be different for every infinite value of the female fraction in the VSLAs. So to get an intuitive sense of the model, few values must be plugged into the equation to see how the fraction of listed influential females changes with the fraction of females in the VSLAs.

If the fraction of listed influential females in VSLAs is proportional to the fraction of females in the VSLAs, female representation is expected to positively affect the number of listed influential females. This means that the number of listed influential women increases with the number of females in the VSLAs. If gender plays no role in the number of listed influential females, then the null hypothesis states that there is no difference in the number of listed influential females between men and women. The alternative states the opposite and implies that there is a difference in the number of listed influential females between men and women.

All equations are regressed using the OLS estimator assuming that all the Gauss-Markov assumptions hold (Wooldridge, 2018). But, since the models look at individuals within the same group of VSLAs, the variance of the error term might depend on the independent variables in equations (7) and (8). This will make the statistical inference deduced from the results of the regressions to be biased if not adjusted for. The models are clustered at the VSLA level using the heteroskedasticity-robust standard errors to correct these potential pitfalls. They are clustered at the group level since they potentially are correlated within the VSLAs.

The Data

This section will explain how data for this thesis was retrieved and prepared for analysis. It will first discuss the procedures in which data was collected, provided by the organizations supporting the larger research project in Uganda that investigates women's leadership in VSLAs and some sample statistics. Then it will dive into some data diagnostics that clarifies how the variables found in the descriptive statistics is created for further analysis.

Data Collection

The data used in this analysis is provided and supported by the organizations AVSI, BRAC Uganda, CARE Uganda, PROFIRA and Village Enterprise (Franco, et al., 2021). They constructed a sampling frame using a multi-stage cluster sampling method to draw a representative sample of 650 VSLAs in Uganda randomly. The sample was stratified from a total population of roughly 23,000 VSLAs, where surveys were conducted at both the group- and membership levels. Representatives from the VSLAs provided information on committee composition, rules, procedures and financial performances, whereas members complemented data on gender, leadership status, personal backgrounds, characteristics and preferences.

The participation of all candidates in this study is confidential. This means all information retrieved from this study is only used in a way that cannot reveal or identify who the participants are. The data is collected with a responsible institution in Uganda. All responses are anonymous, and all ethical clearances for this research were obtained from MUREC (Mildmay Uganda) and UNCST (Uganda National Council of Science and Technology). Used data and transcripts will be deleted after the submission of this thesis.

Table 1 – Sample Survey Data: VSLA Group-Level

Group Level	Frequency	Proportion	Ratio: Region_i to Central
Central Region	63	(12%)	1.0
Eastern Region	128	(24%)	2.0
Northern Region	217	(41%)	3.4
Western Region	119	(23%)	1.9
Total	527	(100%)	

Table 1 – Sample Survey Data: VSLA Group-Level

Table 1 provides information about the total sample size at the group level. It shows an aggregate of 527 VSLA had successfully conducted interviews and reveals a higher share of VSLAs in the Northern Region in comparison to the rest. The *Region_i* to Central ratio shows how many VSLAs are in the regions *i* (Eastern, Northern or Western) to the more developed and financially inclusive central Uganda. A map showing the geographical distribution of the sample also shows that a significant number of VSLAs are present in the north of Uganda (see Annex 1). Figure 6 visualizes the VSLA distribution in the format of a pie chart and shows that a larger proportion and a total of 41% of the sample distribution is located in the north. In contrast, the Western- and Eastern regions have nearly equivalent proportions (23% and 24% respectively) of VSLAs each.

Figure 6 – Sample Survey Data: VSLA Level

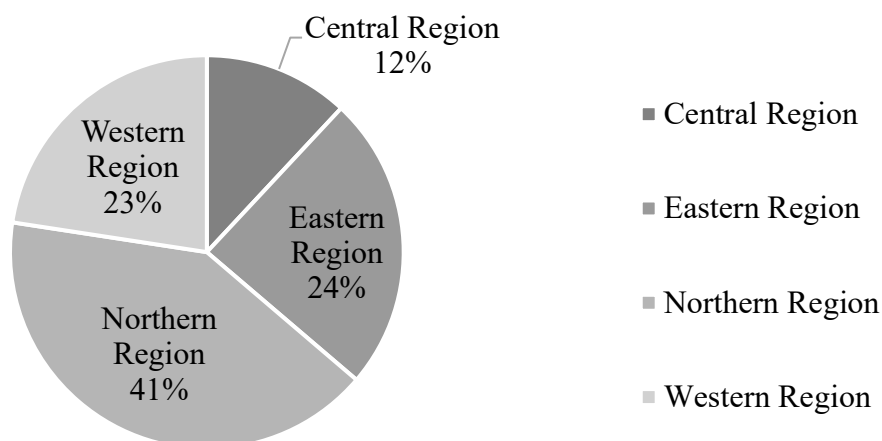


Figure 6 – Sample Survey Data: VSLA Level

Table 2 – Sample Survey Data: VSLA Membership-Level

Membership Level	Frequency	Proportion	Total
Member	Male	575 (13%)	2,196
	Female	1,621 (38%)	
Leader	Male	731 (17%)	2,117
	Female	1,386 (32%)	
Total	4,313	(100%)	4,313

Table 2 – Sample Survey Data: VSLA Membership-Level.

Table 2 provides information about the sample size at the membership level and shows that females account for about 70% of the members and dominate in the absolute number of total members (i.e., members plus leaders). However, in proportion to their total share of members, females are underrepresented in leadership positions. Females have fewer leaders for every female to its total member share than the males. Males account for 30% of the member share and have more leaders than members in absolute numbers.

Data Handling

The final dataset used in this analysis is merged from two different independent datasets. Since each VSLA was given an ID and individuals surveyed at both the group- (VSLA) and membership-level specified the VSLA they belonged to, these two datasets were merged in STATA using this ID (see Annex 1 & Annex 2 for survey details). For the purpose of this assessment, members of non-mixed gender VSLAs are excluded to avoid disturbances in the inferences drawn from the analyses. There are about 42 VSLAs of females only, where the removal of these leaves the mixed-gender sample size with a reduction in groups to 485 VSLAs and the membership sample size down to 3 990 members.

Table 3 – Sample Survey Data: VSLA Membership Share by Gender & Roles

Membership Role		Frequency	Proportion	Total
President	Male	186	(5%)	386
	Female	200	(5%)	
Secretary	Male	226	(4%)	386
	Female	160	(6%)	
Treasurer/Box Keeper	Male	79	(9%)	430
	Female	351	(2%)	
Record Keeper	Male	11	(1%)	61
	Female	50	(~0%)	
Money Counter	Male	55	(1%)	344
	Female	289	(7%)	
Committee Member	Male	74	(2%)	190
	Female	116	(3%)	
General Member/Other	Male	674	(17%)	2,193
	Female	1519	(38%)	
Total		3,990	(100%)	3,990

Table 3 – Sample Survey Data: VSLA Membership Share by Gender & Roles

Table 3 shows the sample statistics of the membership share of different roles between the genders. Figure 7 distributes the membership representation of roles between the genders to their total membership share. It shows that males have a larger share of presidents and secretaries than females in their total share of members. This, despite females in absolute numbers having a greater number of presidents than males. Females have a larger share in roles like treasurers/box keepers, record keepers, money counters and general membership overall.

Figure 7 – VSLA Membership Share by Gender & Roles



Figure 7 – VSLA Membership Share by Gender & Roles

In this analysis, presidents and secretaries are considered senior leaders, treasurers/box keepers, record keepers, money counters, committee members, junior leaders, and the rest general members. Table 4 stratifies these roles after being merged and shows their sample statistics. Males have a larger share of senior leadership positions in absolute numbers and in proportion to their population. The same is true for females in junior leadership positions.

Table 4 – Sample Survey Data: VSLA Membership Share by Gender & Status

Membership Status	Frequency	Proportion	Total
Senior Leader	Male	412 (10%)	772
	Female	360 (9%)	
Junior Leader	Male	219 (6%)	1,025
	Female	806 (20%)	
Member	Male	674 (17%)	2,193
	Female	1,519 (38%)	
Total	3,990	(100%)	3,990

Table 4 – Sample Survey Data: VSLA Membership Share by Gender & Status

Figure 8 shows the membership share and representation of members, and senior and junior leaders to the genders' total membership share for that specific role. Males have a larger share of senior leaders than females, and consistent with Figure 7, which shows how men dominate in the president and secretary roles. On the other hand, females are more represented in junior leadership positions and members overall.

Figure 8 – Membership Share by Gender & Status

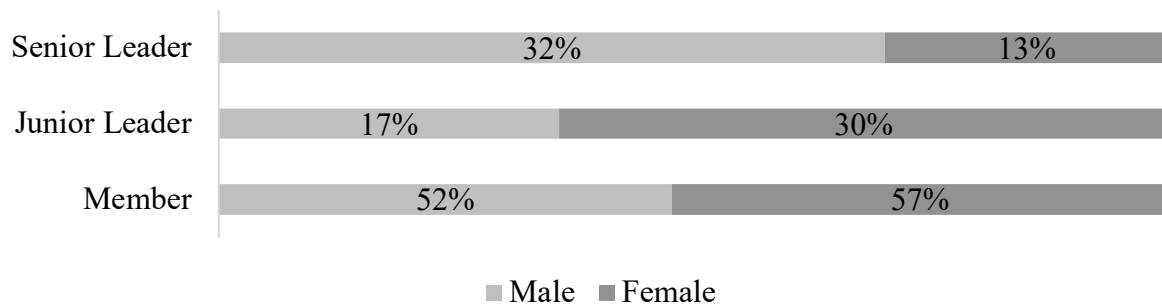


Figure 8 – Membership Share by Gender & Status

Variables

The variables used in this analysis were created in a variety of ways (see Appendix 1). Most of them are binary and come as categorical variables in the raw dataset. Although many variables appeared ready, a few required significant cleaning and transformations. The variables Member, Leader and Female were based on members' survey responses about roles and gender. Every member responding to the survey had to specify their roles if they were a leader. The variables Senior Leader and Junior Leader were created according to which roles the members specified that they had, where presidents and secretaries were merged into senior leaders, treasurers/box keepers, record keepers, money counters, and committee members into junior leaders. The rest, including missing values, were merged into general members.

Member Profiles

Member Profile – Demographics & Education contain variables related to socio-demographic and socio-economic statuses (see Appendix 1). All members were asked for information about their age, marital status, role in the households and level of education. Descriptive statistics of the members' observed characteristics are found in Panel A – Demographics & Education (see Appendix 2). The members' ages range from 18 to 100. The binary variable Married includes members cohabiting because they are considered to live under similar conditions. Head of House is a dummy that accounts for all members who are the head of the household (see Appendix 1).

Variables measuring the level of education are stratified into three binary variables where the variable No Education includes all missing values and those answered to have none. The variables Prim. Education accounts for members with a primary leaving examination certificate, and Sec. Education or More members with a secondary education equivalent to Ugandan Certificate of Education or higher.

In terms of living conditions, every member was asked about how their dwellings were constructed, what sort of energy source they use for cooking, the type of toilet they use at home and whether every member of the household owned at least one pair of shoes. Member Profile – Living Conditions contain the variables that measure these answers. The binary variables Wall and Roof measure whether the members live in high-quality dwellings. They consider dwellings made with walls of cement, wood or tin, and roofs made of iron sheets, concrete, tiles or asbestos.

The variable Cooking in Member Profile – Living Conditions measures whether the members have access to energy-intensive heating tools such as charcoal, paraffin stove, gas or biogas. Furthermore, Toilet accounts for whether the member has toilets of higher quality, such as flushing toilets or covered pit latrines with a slab. Panel B – Living Conditions show the variables' descriptive statistics and reveal that women on average, tend to have better living conditions than men (see Appendix 2).

Descriptive statistics on work and income-related information are shown in Panel C – Work & Average Labor Income in UGX (see Appendix 2). The variable measuring the income level for members having a job is top coded at the 95th percentile due to outliers that could potentially skew the data. This variable was created by summing the earnings obtained from all labor market activities during the past year. Panel D – Member Tenure in Months shows how long the members have been a member or a leader across all member profiles in months and is also cleaned for extreme outliers. Outliers to both variables were converted into missing values.

Information and descriptive statistics related to the members' thoughts on gender norms, conformism, locus of control and aspirations show that men and women share similar attitudes towards these topics (see Appendix 3). All variables in Panel A – Empowerment & Gender Norms and Panel B – Conformism & Locus of Control are indices. The variables in Panel C – Aspirations to Self-Set Goals are binary and measure the members' action, attempt and belief toward the achievement of self-set goals.

Member Attitudes

There are three indices related to member attitudes on empowerment and gender norms, two indices related to conformism and locus of control, and three binary variables on the aspirations towards self-set goals (see Appendix 1). All indices are made from a range of questions converted into dummy variables before being averaged across the categories that they concern. Those who refused to answer or answered that they did not know were converted into missing values before the indices were made. The three indices within the broader category of member attitudes on empowerment and gender norms measure how an individual usually makes self-governing decisions, agrees to intimate partner violence (IPV) and reflects on traditional gender norms.

The first index on decision making is made from five questions, where the first four asks who usually makes choices in different aspects of life. These are related to personal health, major household purchases, daily purchases for household needs, and visits to relatives and friends.³ Only respondents who answered that these decisions were made by themselves, and yes to the last question related to a wife's rights of making purchases with her own earned money was taken into consideration when making the dummy variables. The average of these is what makes this index, where an increasing value mirrors a greater power of self-governance.

An increasing value in the index on IPV accord reports the level of tolerance or consent with domestic violence. The index measures the extent an individual agrees to violence from a partner or a spouse and is made from five questions asking whether it is okay for a husband to hit his wife across five different scenarios.⁴ These are when she goes out, neglects her children, burns food, and argues or refuses to have sex him. Only respondents answering yes to these questions were accounted for when creating the variables for this index.

The index measuring attitudes toward gender norms is made similarly to the previous indices. However, the respondents had a greater range of answers to choose from. They could answer if they strongly agree, agree, disagree or strongly disagree to a list of 14 statements.⁵

³ See Annex 2, Section 7: Gender Attitude A) Decision Making and Attitude towards IPV.

⁴ See Annex 2, Section 7: Gender Attitude A) Decision Making and Attitude towards IPV.

⁵ See Annex 2, Section 7: Gender Attitude B) Gender Norms. Concern all statements 1-15, except 13.

For example, the first statement states that: *men should participate in taking care of children and household chores rather than leaving it all to the women*. A member with an attitude that disfavors traditional gender norms will agree or strongly agree to this statement. On the contrary, a member who favors traditional gender norms will disagree or strongly disagree with this statement. Only respondents who agree or strongly agree (disagree or strongly disagree) to statements showing that traditional gender norms correspond (oppose) with what is stated were recorded when creating the dummy variables. So, for instance, a member in favor of traditional gender norms must disagree or strongly disagree with the second statement that states: *when women get rights, they are taking the rights from men*.

Within member attitudes on conformism and locus of control, two indices measure the extent an individual tends to comply with the behaviors of society and experience control over their own lives. The first index on conformism measures the degree an individual is a conformist, where a higher value reflects a greater tendency to adopt the attitudes mirroring the people one is surrounded with (Collins, 2022; OED, 2022b). It is based on nine descriptions of a person in which a respondent can answer how much this person is like oneself.⁶ The choices range from “very much like me”, “somewhat like me”, “little like me”, to “not like me at all”. And, only respondents who were in tune with- and answered “very much like me” to the descriptions of a person who follow rules, is at his/her best-behavior, polite, satisfied, and confirm with religion and tradition at all times were accounted for when making the dummy variables for the first six portrayals. For the last descriptions, only respondents who could not relate and answered “not like me at all” were accounted for when making the remaining three variables. These descriptions described a person valuing making their own plans/deciding what to do, finding the importance of being interested and open to understanding all sorts of things, and believing one should be independent and rely on him-/herself.

The index on locus of control measures the degree a member believes happenings in their life are owed to external factors and is built upon ten statements.⁷ It refers to the magnitude an individual believes the events in his/her life are controlled by internal forces like him-/herself, or by external forces like God, fate, and other people (Neill, n.d.). The option of answers to these statements ranges on a scale from 1-7, where 1 = Disagree completely and 7 = Agree completely. Only answers within the range 1-3 (disagree) or 5-7 (agree) were recorded when making the dummy variables, where option 4 = Neutral was disregarded.

⁶ See Annex 2, Section 8: Behavioral Characteristics A) Conformism.

⁷ See Annex 2, Section 8: Behavioral Characteristics B) Locus of Control.

For example, the variable recording the answers to the first statement concerning whether “the course of life depends on me” was made from accounting for the respondents who disagreed as it reflects an individual who believes that they are not in control of their life. Similar assessments were made to the second statement stating whether an individual believes that their achievements correspond to what is deserved in comparison to other people. Only those members who agreed and believed that they were not in control of their life were accounted for in the creation of this variable. The same was done for the remaining eight statements.

Regarding member attitudes toward aspirations on self-set goals, three binary variables measure the effort towards achieving these goals.⁸ The variable Action measures the determination towards achieving self-set goals and a dummy equal to 1 if a member has done something to achieve this goal. These range from doing research to sourcing capital or seeking advice. Attempt accounts for the members’ trial towards achieving the same goal or something similar in the past, and Belief for the trust that the goal can be accomplished within the next five years. Only respondents who answered yes to all these questions were accounted for when making the variables.

Member Opinions

Apart from observable characteristics and attitudes, all members were also asked about their opinions on leadership and VSLA preferences on finances. There are eight variables related to members’ opinions on these matters, where the first variable on views is binary and measures whether the members agree with the statement that men are natural leaders.⁹ Descriptive statistics on the members’ opinions show that the members share similar views on males and females being equal in leadership (see Appendix 4). However, they diverge in terms of their preferences on financial matters. The first four of the remaining seven variables are continuous variables, where all of them are top coded at the 95th percentile (see Appendix 1).

The three last dummy variables on member opinions measure whether the members’ preferences for loans correspond to the current rules of the VSLA. Respondents refusing to answer or did not know were converted to missing values. Loan = Rule is a binary variable measuring all respondents with a preference for an amount of loan equal to the current rule. Loan > Rule measures the respondents with a preference of a loan higher than the rule, whereas Loan < Rule measures the respondents with a preference of a loan less than the rule.

⁸ See Annex 2, Section 8: Behavioral Characteristics C) Aspiration.

⁹ See Annex 2, Section 4: VSLA Participation B) Participation in VSLA Decision Making. Question 12 – 21.

Influential Females

In terms of influential females, there are four continuous variables reported as fractions (see Appendix 1). The first variable shows the fraction of females in the VSLAs and was created by first creating a variable that counts all the members to a specific VSLA, then a second counting all the female members who belong to that VSLA. The variable with the quantity of all the females was then divided by the total number of members per VSLA to make the fraction. Most of the groups have around 70% females. However, the fraction of females in mixed gender VSLAs ranges from 17 to 97% in groups (see Appendix 5).

The variable measuring the fraction of influential females was created by first creating a variable counting the number of influential people listed by every respondent, followed by a computation of the fraction of those listed that are female.¹⁰ The variable measuring the fraction of influential female senior leaders and junior leaders were created in a similar fashion. The fraction of influential female senior leaders was computed by quantifying how many of those listed influential senior leaders were female, and the same was done when computing the fraction of influential female junior leaders.

¹⁰ See Annex 2, Section 4: VSLA Participation B) Participation in VSLA Decision Making. Question 5 – 8.

Analysis

This section objectively reports all relevant findings related to how men differ from women in both leadership and membership. It aims to analyze and show how this can be explained by observable characteristics and individuals' perception of who is influential. The results from the estimated differences in the means of these characteristics between men and women are first presented in tables created in STATA specifying the instances when the differences are statistically significant. Then, this will follow with the provision of estimated regressions aiming to explain how these observable characteristics and the members' perceptions influence these differences. The analysis is based on the sample of mixed-gender VSLAs only.

How do the leaders and members differ?

Tables 5, 6 and 7 summarize some observable characteristics of the members' profiles, attitudes and opinions on how their VSLAs are managed. They are based on data retrieved from respondents at the membership level and provide results of the estimated differences-in-means of these characteristics. The estimates are assigned across three categories. These are the senior leaders, junior leaders, and the general members only. Each of these categories has three columns where the means applicable to males are presented in the first column, females in the second, and their respective differences in the third. The last column also reports the statistical significance along with the differences-in-means estimates.

Panel A – Demographics & Education in Table 5 shows that most members are around 40 years of age, and that the females are slightly older than the males on average. A greater fraction of males across all categories is either cohabiting or married, with gender differences particularly noticeable among the senior leaders. More than 90 percent of the males are the head of their households, and nearly 97 percent of the male senior leaders hold this role at home. While only 31 percent of the female senior leaders are in the same position, these differences are significant across all membership statuses.

The level of education increases with the seniority of membership roles in VSLAs. Far more men are educated in comparison to women, and a large share of men have completed primary school. Much more men than women have also completed primary school, where the educational gender gap is the highest among the junior leaders and general members. About 41 percent of the females at the senior leadership level have no education at all, whereas only 23 percent of the males can say the same.

Table 5 – Differences in Means: Member Profiles

Panel A – Demographics & Education									
<i>Variables</i>	Senior Leader			Junior Leader			Member		
	<i>Male</i>	<i>Female</i>	<i>Diff</i>	<i>Male</i>	<i>Female</i>	<i>Diff</i>	<i>Male</i>	<i>Female</i>	<i>Diff</i>
Age	39.99	41.39	1.40	41.38	41.90	0.52	39.08	40.94	1.86***
Married	0.94	0.73	-0.22***	0.95	0.77	-0.17***	0.85	0.71	-0.14***
House of House	0.97	0.31	-0.67***	0.95	0.24	-0.71***	0.90	0.28	-0.62***
No Education	0.23	0.41	0.18***	0.37	0.70	0.33***	0.46	0.73	0.28***
Primary Education	0.40	0.38	-0.02	0.42	0.23	-0.19***	0.35	0.20	-0.15***
Secondary Education or more	0.38	0.22	-0.16***	0.21	0.07	-0.15***	0.20	0.07	-0.13***
Panel B – Living Conditions									
Wall	0.42	0.54	0.12***	0.42	0.46	0.05	0.40	0.43	0.03
Roof	0.43	0.65	0.22***	0.44	0.55	0.10***	0.49	0.51	0.02
Cooking	0.04	0.06	0.02	0.04	0.06	0.02	0.06	0.05	-0.01
Toilet	0.55	0.54	-0.01	0.52	0.53	0.01	0.52	0.48	-0.03
Shoes	0.83	0.87	0.04	0.82	0.79	-0.03	0.84	0.77	-0.07***
Panel C – Work & Average Labor Income in UGX									
In Work	0.94	0.91	-0.03	0.92	0.91	-0.01	0.91	0.87	-0.03**
Income (in 000')	1,785	1,282	-503***	1,703	1,229	-474***	1,472	1,028	-443***
Panel D – Member Tenure in Months									
Member	49.98	47.15	-2.83	42.95	46.90	3.95	41.54	45.22	3.68**
Leader	45.96	40.96	-4.99*	33.33	35.10	1.77	-	-	-

*Note: Significance at: * p < 0.10, ** p < 0.05, *** p < 0.01 level.*

Table 5 – Differences in Means: Member Profiles

With regard to household socio-economic status, the women tend to have it much better than the men. Panel B – Living Conditions assesses whether there are differences in the circumstances of their households as a proxy for socio-economic statuses and shows that fewer men than women are living in dwellings that are of better quality.¹¹ There are no significant differences regarding the quality of houses among the members, but the differences increase for junior leaders and is the highest for senior leaders. The cooking facilities and sanitary conditions are somewhat similar for both men and women. However, more men than women report that every member in their households owns a pair of shoes. While the latter is true for most women, the case is reversed for senior leaders.

When it comes to labor market participation, Panel C – Work & Average Labor Income in UGX shows that about 90 percent of the members work. The differences between the males and females are negligible, however, among these, the men tend to earn far more than the women. These earnings differentials are significant across all categories, but the highest for senior leaders. The male senior leaders earn roughly 503,000 UGX more per year than the female senior leaders, where the differences are the least between the members.

The majority of the members have been in the VSLAs for more than three years. Panel D – Member Tenure in Months shows that in most categories women have on average been members for a longer period than men. Among the senior leaders, the difference is barely three months, however, in terms of the tenure as a leader, these divergences are greater. Here the men report to have on average been a leader for five months longer than the females.

Table 6 provides information about the members' attitudes. Panel A – Empowerment & Gender Norms contain some indices that measure the extent to which the members are empowered in making their own decisions. For example, the index on decision making shows that the difference between males and females is small among senior leaders, but significant among the junior leaders and general members. And, the index on IPV accord on the other hand shows that more women than men are more inclined to accept this. These differences are significant across all categories. For instance, 16 percent of the female senior leaders think it is okay for their husbands to hit them for disobedience, whereas only 11 percent of the males think the same. The differences on IPV accord are the highest among the junior leaders, and as high as 11 percent.

¹¹ Recall, that these are dwellings with walls made of brick, cement, concrete, tin or wood, rather than mud and poles, and roofs made out of concrete, iron sheets tiles or asbestos, rather than thatch.

Table 6 – Differences in Means: Member Attitudes

Panel A – Empowerment & Gender Norms: Indices									
<i>Variables</i>	Senior Leader			Junior Leader			Member		
	<i>Male</i>	<i>Female</i>	<i>Diff</i>	<i>Male</i>	<i>Female</i>	<i>Diff</i>	<i>Male</i>	<i>Female</i>	<i>Diff</i>
Decision Making	0.47	0.47	-0.01	0.46	0.42	-0.04*	0.50	0.46	-0.04**
IPV Accord	0.11	0.16	0.05**	0.08	0.19	0.11***	0.10	0.18	0.08***
Gender Norms	0.45	0.45	0.00	0.45	0.45	0.00	0.46	0.45	-0.01
Panel B – Conformism & Locus of Control: Indices									
Conformism	0.50	0.54	0.04***	0.52	0.50	-0.01	0.49	0.49	-0.00
Locus of Control	0.40	0.39	-0.01	0.39	0.37	-0.02	0.39	0.37	-0.02***
Panel C – Aspiration to Self-Set Goals: Indices									
Action	0.86	0.88	0.02	0.87	0.80	-0.07**	0.84	0.78	-0.06***
Attempt	0.42	0.51	0.09**	0.39	0.42	0.03	0.42	0.38	-0.04
Belief	0.93	0.95	0.02	0.94	0.92	-0.02	0.92	0.89	-0.03**

*Note: Significance at: * p < 0.10, ** p < 0.05, *** p < 0.01 level.*

Table 6 – Differences in Means: Member Attitudes

Panel B – Conformism & Locus of Control reflect the behavioral characteristics of the members and shows that the greatest significant divergences between the genders on conformism are among the senior leaders. Approximately 4 percent more women than men are conformist and more likely to behave according to society's norms and rules set and expected. While this is the case for conformism, the reverse is true for the degree the members believe in controlling their lives. Here, more men than women report that they have a more internal locus of control where outcomes in life are determined by the choices they make.

In terms of aspirations, Panel C – Aspiration to Self-Set Goals shows that over 80 percent of the members have taken action to achieve a self-set goal. These goals range from building a house to starting a business, and the males have overall seemingly higher aspirations than the females. Fewer female junior leaders and members have taken an active stance in achieving a self-set goal. However, the opposite is the case for the senior leaders. Here, the females have higher aspirations than the men, where the difference is the highest among those who have attempted to achieve their self-set goals.

Table 7 – Differences in Means: Member Opinions

Panel A – Views on Leadership									
<i>Variables</i>	Senior Leader			Junior Leader			Member		
	<i>Male</i>	<i>Female</i>	<i>Diff</i>	<i>Male</i>	<i>Female</i>	<i>Diff</i>	<i>Male</i>	<i>Female</i>	<i>Diff</i>
Agree: Men are naturally leaders	0.29	0.23	-0.05*	0.46	0.42	-0.04*	0.50	0.46	-0.04**
Panel B – VSLA Preferences on Financial Matters									
Share Size	2,823	3,063	240	2,766	2,775	9	3,087	2,822	-265**
Saving	14,976	14,443	-533	14,881	14,192	-689	15,025	13,774	-1,251*
Social Fund	977	798	-179***	968	867	-102	912	917	5
Interest Rate	9.27	8.92	-0.35	9.38	9.07	-0.31	8.98	8.97	-0.00
Loan = Rule	0.87	0.87	0.00	0.80	0.85	0.05*	0.83	0.82	-0.01
Loan > Rule	0.10	0.10	0.00	0.17	0.11	-0.05**	0.14	0.13	-0.01
Loan < Rule	0.03	0.03	-0.00	0.04	0.04	0.00	0.03	0.05	0.02**

*Note: Significance at: * p < 0.10, ** p < 0.05, *** p < 0.01 level.*

Table 7 – Differences in Means: Member Opinions

Table 7 shows the differences in the means of the members’ opinions. Panel A – Views on Leadership reveals that more males than females agree that men are naturally born to be leaders, where the results are significant across all categories. Although this is the case, these attitudes seem to reduce with the increase in seniority. For example, 50 percent of the male members hold this point of view, whereas only 29 percent of the male senior leaders think the same. The differences with the females are small, even though the amount sharing this viewpoint is as high as 46 percent among the members and 42 percent among the junior leaders.

From Panel B – VSLA Preferences on Financial Matters, the differences in the preferences for share size are the highest among males. This is statistically significant among the members and accompanied by the males’ higher reported preference for maximum saving. For the general members, the preference for maximum saving is 15,025 UGX and higher than the preference for the male junior and senior leaders, 14,881 and 14,976 UGX respectively. This is also reflected in the males’ preference for social funds, which is higher than reported by the females.

On the interest rates for loans, the majority agree on the rules in the groups. A little gender gap is reflected in the results, where only significant differences are shown among the junior leaders and general members. 5 percent more women than males think their current preferences for loan uptake are reflected in the current rules. The exact opposite is true for the males regarding the preference for a loan uptake higher than the current rule. Among the general members, the males wished that the current loan uptake was less than the current rule.

Results: Observable Characteristics & Gender Differences in Leadership

The estimates from equation (7) are shown in Table 8 on the next page. Since, the women were underrepresented in senior leadership rather than the junior leadership positions, the remainder of this analysis will focus solely on this group of leaders. The correlation of observable characteristics on the difference between the genders in leadership positions is uncovered through the estimation of seven different regressions.¹² By the incremental addition of variables, Table 8 reports their marginal explanatory powers on how the difference between the males and females in senior leadership positions reduces when baseline characteristics are controlled for (i.e., how the dummy variable for female changes). In the first specification (column 1), the dependent variable *Senior Leader_{ij}* is regressed on the independent variable *Female_{ij}*. It shows the probability of being a leader among all members and that 31.6 percent of men are more likely to be senior leaders. Only 13.4 percent of the females are in the same position. The women are 18.2 percent less likely to be senior leaders (significant at the 1% level) and suffer from an overall reduction in representation of about 58 percent.¹³

In column 2, the variable age is added to the model. Here, age has no association with females' underrepresentation in senior leadership positions as their difference in representation from the males remains the same, holding other factors constant. In column 3, the variable married is added to the model. It shows that being married or living in cohabitation increases the likelihood of being a senior leader by about 2.68 percent (significant at the 10% level), fixing for other factors. The difference between men and women drops by around 0.40 percent when controlling for these factors (significant at the 1% level).

¹² All regressions consider the possibility for heteroskedasticity. They report robust standard errors that allow for correlation and are clustered at the VSLA level.

¹³ Reduction in representation is computed as 18.2 percent divided by the males' representation at 31.6 percent.

Table 8 – Estimates from Regression on Gender & Observable Characteristics							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<i>Senior Leader</i>	<i>Senior Leader</i>	<i>Senior Leader</i>	<i>Senior Leader</i>	<i>Senior Leader</i>	<i>Senior Leader</i>	<i>Senior Leader</i>
Female	-0.182*** (0.0141)	-0.182*** (0.0141)	-0.178*** (0.0143)	-0.113*** (0.0194)	-0.0448** (0.0194)	-0.0448** (0.0194)	-0.0440** (0.0196)
Age		0.000177 (0.000368)	0.000276 (0.000369)	-0.000393 (0.000389)	0.00123*** (0.000375)	0.00123*** (0.000375)	0.000939** (0.000386)
Married			0.0268* (0.0138)	0.0665*** (0.0160)	0.0774*** (0.0158)	0.0774*** (0.0158)	0.0637*** (0.0169)
Head of House				0.0864*** (0.0178)	0.0882*** (0.0172)	0.0882*** (0.0172)	0.0868*** (0.0181)
Education							
No Education					-0.279*** (0.0205)		-0.142*** (0.0143)
Primary Education					-0.135*** (0.0220)	0.144*** (0.0138)	
Secondary Education or More						0.279*** (0.0205)	0.132*** (0.0221)
							All
Constant	0.316*** (0.0107)	0.309*** (0.0181)	0.281*** (0.0232)	0.191*** (0.0290)	0.269*** (0.0312)	-0.0106 (0.0299)	0.0195 (0.0489)
R^2	0.047	0.047	0.047	0.052	0.110	0.110	0.120
Observations	3990	3990	3990	3990	3990	3990	3990

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8 – Estimates from Regression on Gender & Observable Characteristics

In column 4, being a senior leader is highly correlated with functioning as the head of the household at home. The chances of being the household head increase by about 8.64 percent when a senior leader, holding other factors constant (significant at the 1% level). Similarly, the effect of being married increases by about 3.68 percentage points (i.e., the incremental increase from regression in columns 3 to 4, where the coefficient is significant at the 1% level), where its significance increases when jointly regressed with the variable considering members' role at home. The differences between men and women in senior leadership positions drop to 11.3 percent, holding other factors fixed (both are significant at the 1% level).

The level of education is vital in explaining much of the remaining gap. When controlling for no education and primary education in column 5, the difference in the females' attainment in senior leadership positions from men reduces by about 13,72 percentage points to 4.48 percent overall (significant at the 5% level). No education shows that the likelihood of being a senior leader is reduced by 27.9 percent. Only primary education reduces the chance with about 13.5 percent fixing for other factors (both variables are significant at the 1% level).

In column 6, the dummy accounting for no education in column 5 is substituted with secondary education or more. This was done to avoid multicollinearity as all the variables accounting for education could not be regressed simultaneously. Here the gender gap in senior leadership positions remains the same as in the regression portrayed in column 5, however, the constant becomes suddenly negative (insignificant at all standard levels). Secondary education or more seems to offset no education completely as the likelihood of being a senior leader increases by 27.9 percent when a member has a diploma equivalent to a Ugandan Certificate of Education or higher. Additionally, the variable accounting for age suddenly becomes statistically significant at the 1% level when regressed jointly with the variables accounting for education, although its meaning in essence is minor.

When regressing all the variables related to the members' profiles, attitudes and opinions on senior leadership in column 7, the difference in female representation from the men reduces with an additional 0.08 percentage points (significant at the 5% level).¹⁴ Variables accounting for marriage, role at home and marriage and the level of education are all significant at the 1% level. Age is significant at the 5% level. The regressions overall show that most of the gender gap in senior leadership is explained by observable characteristics.

Results: Gender Differences in the Perception of Influential Leaders

Table 9 shows the differences in the means of the fraction of listed influential females. The fractions are divided into showing the results for the fraction of listed influential females in general, the fraction of listed influential female senior leaders, and at last the fraction of listed influential junior leaders.

¹⁴ To ensure an equal number of observations across all regressions, new variables for income, and preferences for saving, social funds, and whether preference in loans is equivalent to current rule were created by converting missing values, including 'I do not know' answers to 0. An additional dummy controlling for missing values for income was also created. See Appendix 1 for a full list of variables, and Appendix 6 for inclusive regression.

Table 9 – Differences in Means: Influential Females

<i>Variables</i>	Senior Leader			Junior Leader			Member		
	<i>Male</i>	<i>Female</i>	<i>Diff</i>	<i>Male</i>	<i>Female</i>	<i>Diff</i>	<i>Male</i>	<i>Female</i>	<i>Diff</i>
Fraction of Influential Females	0.37 (0.28)	0.75 (0.28)	0.38*** (0.00)	0.33 (0.32)	0.64 (0.32)	0.31*** (0.00)	0.37 (0.47)	0.62 (0.37)	0.25*** (0.00)
Fraction of Influential Female Senior Leaders	0.19 (0.34)	0.71 (0.40)	0.52*** (0.00)	0.35 (0.43)	0.48 (0.44)	0.13*** (0.00)	0.33 (0.41)	0.50 (0.45)	0.16*** (0.00)
Fraction of Influential Female Junior Leaders	0.66 (0.45)	0.78 (0.38)	0.12*** (0.00)	0.40 (0.47)	0.81 (0.37)	0.40*** (0.00)	0.55 (0.47)	0.78 (0.39)	0.23*** (0.00)

*Note: Significance at: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$ level.*

Table 9 – Differences in Means: Influential Females

The perceptions of which leaders are influential differ not only between the genders, but also across the membership categories. Men list fewer women as influential compared to women, which is reflected across all categories and fraction variables. The difference in the fraction of listed influential females to the total number of listed influential in general is the least among junior leaders, and the same for both general members and the senior leaders. The fraction of listed influential females among the men is 37 percent for both senior leaders and general members, and 33 percent for the junior leaders.

The differentials for the fraction of listed influential females are the highest among senior leaders. For the women, the fraction increases with seniority in membership categories, and ranges from 62 percent for general members to 75 percent for senior leaders. The fraction of listed influential female senior leaders is the highest among the senior leaders themselves. Men are less likely to list women as influential, even when they are senior leaders. Only 19 percent of the male senior leaders consider other female senior leaders as influential.¹⁵ Comparable findings are true for the fraction of listed influential female junior leaders as well. Here, the differences are the highest among the junior leaders themselves, suggesting that both male senior- and junior leaders consider other female senior- and junior leaders less influential than the women. It seems like most men do not consider women in equal positions influential at all. All reported differences in Table 9 are significant at all standard levels.

¹⁵ Note, there are few VSLAs with no female senior leaders. These differences might be driven by this fact.

Figure 9 visualizes the gender gap in the listed influential females. It shows that the fraction of listed influential females increases with the fraction of females in the VSLAs and confirms that men, in comparison to their female counterparts, list fewer women as influential. The means of the fraction of listed influential females are computed across 18 bins constructed based on female share in VSLAs. The means across most bins are significantly different from each other, where the gender differences in perceptions seem to be larger for VSLAs with a female share of 60-80 percent.

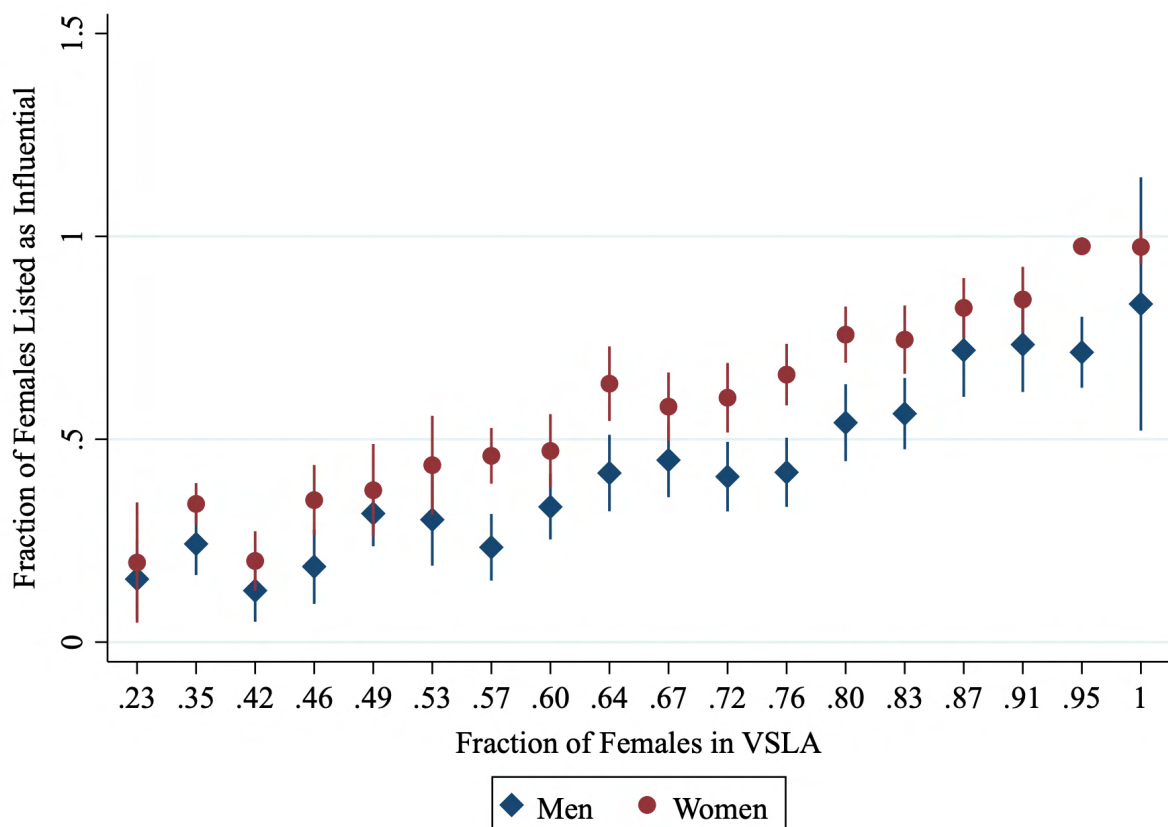


Figure 9 – Fraction of Influential Females to the Fraction of Females in VSLA

Table 10 shows the estimates from equation (8) regressing the gender differences on the perceptions of who is influential. Four regressions investigate whether the differences are based on the VSLA gender composition and the gender of the evaluators themselves. The first three regressions use the fraction of influential females as the dependent variable (columns 1 to 3), whereas the fourth in column 4 uses the fraction of influential female senior leaders. This is done to investigate whether the findings between columns 3 and 4 are heterogeneous from what is revealed by the estimates of the main specification in column 3.

Table 10 – Estimates from Regression on the Gender Differences of Influential Females

	(1) <i>Fraction of Influential Females</i>	(2) <i>Fraction of Influential Females</i>	(3) <i>Fraction of Influential Females</i>	(4) <i>Fraction of Influential Female Senior Leaders</i>
Female	0.284*** (0.0154)		-0.0733 (0.0493)	-0.302*** (0.0739)
Fraction of Females in VSLA		1.191*** (0.0586)	0.792*** (0.0734)	0.854*** (0.140)
Female * Fraction of Females in VSLA			0.374*** (0.0743)	0.604*** (0.118)
Constant	0.361*** (0.0148)	-0.265*** (0.0423)	-0.123*** (0.0471)	-0.228** (0.0891)
R^2	0.146	0.303	0.357	0.253
Observations	2964	2964	2964	2626

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 10 – Estimates from Regression on the Gender Differences of Influential Females

The gender effect of the individual member making the perception of who is influential is first uncovered in column 1. In this specification, the difference in the listed influential females between the men and women is estimated by regressing the fraction of listed influential females on the dummy variable accounting for whether the individual member is a female. The model shows that 36.1 percent of males list females as influential in proportion to their total number of individuals listed as influential. This contrasts the females' 64.5 percent, where the additional effect from being a female is 28.4 percent (both significant at 1% level).

The correlation of the VSLA female composition on the fraction of listed influential females is estimated in column 2 and shows the perception of influential females if listed by a male. This specification suggests that the fraction of listed influential females overall increases more than proportionate to the fraction of females in the VSLAs. It associates a percentage increase in the female fraction in the VSLAs with an increase in the fraction of listed influential females with about 1.19 percentage points, holding other factors constant. The constant predicts a negative fraction of influential females because the OLS estimator attempts to predict a fraction of influential females when there are no women. And, since there are no VSLAs with no women, the constant becomes negative.

In column 3, the main model is specified by adding an interaction term between female and female share in addition to the other regressors in columns 1 and 2. The interaction variable *Female * Fraction of Females in VSLA* measures the correlation between the fraction of females in the VSLAs on the fraction of listed influential females if listed by a female. It indicates that the effect of being a woman on the fraction of females in VSLAs is not limited to the fraction of females in the VSLAs. The unique effect of female composition in VSLAs on the fraction of listed influential females is represented by everything that is multiplied with this variable in the model. It emerges that the presence of females in the VSLAs increases the fraction of listed influential females and that the effect is higher for women than for men.

The unique effect of female composition in VSLA that increases by a percentage point are associated with an increase of about 1.17 percentage points holding everything else constant.¹⁶ For example, if the fraction of females in a VSLA is equivalent to the mean at 68.5 percent (see Appendix 5), when plugged into the overall model in column 3, it will return a predicted fraction of listed influential females of 60.24 percent. However, if the fraction of females in VSLA increased by a percentage point to 69.5 percent, the predicted fraction of influential females would be 61.41 percent. This is equivalent to an increase of 1.17 percentage points, and equal to the computed unique effect of female composition in VSLAs when listed by a female. When listed by a male, the unique effect of a percentage point increase in the female composition in VSLA would be equivalent to roughly 0.79 percentage points. The difference in these two effects between men and women reflects the gender gap in the perception of whether females are considered influential. All estimates in this regression are statistically significant at all standard levels except for the dummy variable controlling for gender.

In column 4, the main model is specified among listed influential female senior leaders only. All coefficients are significant at minimum the 5% level. The model indicates that the unique effect of a percentage increase in the female composition in VSLAs is associated with an increase in the fraction of influential females of about 1.46 percentage points when listed by a female. The effect of a percentage increase in the female VSLA composition if listed by a male is associated with a 0.854 percentage point increase and suggests that a female is more likely to be listed as influential when she is a senior leader. In comparison to the estimates in column 3, the effect of females is seemingly increasing more than the effect of the males. Hence, consistent with the findings from Table 9 showing that men are less likely to list women as influential even though they are senior leaders.

¹⁶ Computed as: $\beta_2 + \beta_3 * Female_{i=1}$.

It is noteworthy to mention that the interaction can be perceived as rather mechanical, because the more women there are in the VSLAs, the more likely it is that women are listed. However, if this was the only case, the coefficient measuring the correlation of fraction of females in VSLAs would remain the same for both the estimates in columns 2 and 3, signifying that there is no difference between the genders in the perception of who is influential. The results from the interaction variable suggest that everyone does not only list more women just because there are more women, but because there are differences in the sensitivity to recognizing the efforts of other women in the group. This means that the correlation of the fraction of females in VSLAs with the fraction of listed influential females is different between men and women.

Discussion

Women in leadership are required not only because they bring diversity to the decisions made, but because they lead differently (Spar, 2013). Despite women's capabilities of being top performers, they are still not attaining senior leadership positions at the same rate as their male counterparts (Baker, 2014), where two opposing hypotheses proximate these differences. The first ascribes the differences between the genders to unobserved factors such as discrimination or supply-side barriers, and the second to the variation in observable characteristics between men and women. Theoretical frameworks ascribing gender gap to discrimination are by economists found hard to distinguish, but there are a few distinct characteristics that separate them (Moser, 2012). The first is taste-based discrimination and implies that prejudice can be interpreted as a distaste for a particular group of people (often minorities). The second is statistical discrimination and points discrimination to incomplete information as easily observable characteristics for a particular group of people is used to infer assumptions. Others and more recent theories attribute the gender gap between men and women to differences in psychological attributes, preferences and attitudes (Bertrand, 2011).

Gender Differences in Leadership

The gender gap in the VSLA leadership is found in this analysis to be pronounced and correlated with observable characteristics. With this, the initial gender gap among the senior leaders is reduced by about 14 percentage points (from 18.2 percent to 4.40 percent). Roughly 32 percent of the males are more likely to be senior leaders, whereas only 13 percent of the females are in the same position. Being married or living in cohabitation increases the likelihood of being a senior leader by 3 percent. The majority of the male senior leaders are not only leaders in the VSLAs, but also in their homes as the household head. This is also highly correlated with the likelihood of being a senior leader, and likewise, the education levels.

Women tend to be less educated than men, and not surprising given Uganda's low rank on the Gender Gap Index within this dimension (WEF, 2021). Some of the gender gap is explained by observable characteristics but does not go completely away. This might indicate that the remaining difference is due to discrimination, supply-side factors or other omitted variables. Sperandio (2000) argues that schools can play an important role in the leadership development of adolescent girls, where the overall findings are in harmony with this literature.

Several other variables contribute to explaining the gender difference in senior leadership. In particular, these are within member profiles, member attitudes and member opinions. The information on members' profiles reveals that female members of the VSLAs tend to live in better housing conditions than men. However, far more men reported that every household member owns a pair of shoes. This image is reversed among senior leaders, suggesting that the female leaders are a relatively selected group and differ from the other women in the group.

Duflo (2012) finds that women are less likely to work, earn less than men for similar work, and are more likely to find themselves in poverty while working. This is also the case among the women in the VSLAs, despite the gender differences in terms of labor market participation are negligible. The amount of VSLA members in work are somewhat similar for both men and women, although the men earn almost half a million Ugandan shillings more than the women.

Women in higher-ranked positions are more independent and more likely to make their own decisions. The implications that follow from this is somewhat contradictory to the findings on IPV. Surprisingly, more women than men are seemingly more inclined to accept IPV. Approximately 4 percent more female senior leaders than males are conformist and more likely to behave according to society's norms and rules, reflecting why women might typically tend to face barriers in the attempt to advance to senior-level positions. Norms formed by gender identities like 'only men make good leaders', enable men to more likely benefit from a 'glass escalator', and women to typically confront a 'glass ceiling' (Ryan & Haslam, 2005). Most participants in the sample believe that men and women should have equal chances of being elected as VSLA leaders, with a sizable minority thinking that men make better leaders. Around 30% of the male senior leaders hold this view, where the number of men who share this point of view increases for both junior leaders and members. The latter is also the case for women.

On the preferences related to the financial matters in the VSLAs, the male members tend to have a somewhat higher preference for share size and savings. Among the senior leaders, this preference is reversed. This might mirror the fact that the females are less well off than male members, making them more willing to save when the wealth-gap reduces when in leadership positions. The males' preference for social funds is also higher than reported by the females, and somewhat interesting given that existing literature shows that women are more sensitive to catering to societal and child-related needs (Bhalotra & Clots-Figueras, 2014; Brollo & Troiano, 2016; Paltseva, 2019).

Gender Differences in the Perception of Influential Leaders

When it comes to the perception of who in the VSLAs are considered influential, men tend to list fewer females as influential than women. Most men do not consider women in equal positions influential, where this finding is consistent both among the senior leaders and the junior leaders themselves. The gender effect of the individual in the perception of who is influential is significant, where the effect for senior leaders is heterogeneous and higher than that for the general members.

The results comply with researchers investigating the extent of discrimination depends on gender and the gender composition of the committee involved in an evaluation process for picking individuals for leadership positions (Bagues & Esteve-Volart, 2010; Bagues & Zinovyeva, 2011; Pola & Scoppa, 2015). Pola & Scoppa (2015) bring evidence from academia and show that gender discrimination in leadership can arise from the evaluators' gender and look at how this is related to the gender composition of the committees making these evaluations. An interaction term is added to their model to investigate whether the probability of the success of the candidates seeking to attain leadership positions is affected by the gender composition of the election committee. This same intuition is transferable to the findings of individual members listing which members are considered influential. The overall findings show that the fraction of listed influential females increases more than proportionate to the fraction of females in the VSLAs. Flabbi et al. (2019) show that females are better equipped to read signs of productivity from female workers than men, consistent with the findings of women being more likely to list women as influential than men.

Limitations

There are numerous potential pitfalls that one can encounter when conducting empirical research. One potential weakness is the data and survey data errors due to respondents answering according to social norms. More in-depth analysis could have been made by assigning some qualitative data to shed light on some of the findings. Another weakness is the possibility to run into omitted variable bias, misspecification of variables and the possibility of reverse causality. In the assessment of gender differences among influential leaders, the data revealed that few VSLAs have no women in senior leadership (i.e., men as presidents and secretaries). This might have implied that most of the presented results could have been driven by men since they are more likely to be listed as influential when leaders in the first place.

Opportunities for Further Research

An interesting agenda related to this project involves seeing the variation of VSLA performance among VSLAs with different gender structures in their leadership and investigate if the remaining gender gap is owed to discrimination, and if so, what type. It would also be interesting to see how other characteristics related to a members' network, engagement in VSLAs, as well as other supply-side factors (i.e., not factors determined by employers, co-workers, government etc.). Other interesting analyses can build on how VLSA performance depends on leadership, and the role of NGOs.

This study also calls for a greater understanding of why gender attitudes differ between the genders. For instance, the root causes for why women are more likely to accept IPV and exhibit conformist behavior. Additionally, this study gives room for further research in finding explanations and associations with what could drive the differential between men and women differ in the ways they find other women influential.

Conclusion

In this analysis, gender gaps in leadership, and in particular among savings groups in Uganda is investigated. This thesis delivers descriptive evidence on women's leadership in VSLAs to enhance an understanding of what might drive the differences between men and women. It attempts to first measure gender gaps in VSLA leadership and an explanation for what drives this gap. This by deliberately looking at observable characteristics, where much of the gender differences are explained by observable characteristics related to member profiles, attitudes and opinions. Secondly, it investigates gender differences in the perception of leaders considered influential and finds evidence for potential structural barriers such as gender composition in VSLAs restricting women from being considered as effective leaders.

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Appendices

Appendix 1 – List of Variables

Category	Type	Variable Name	Explanation
General	Binary	Female	Equal to 1 if female
	Binary	Member	" if member
	Binary	Leader	" if leader
	Binary	Senior Leader	" if senior leader
	Binary	Junior Leader	" if junior leader etc.
Member Profiles Demographics & Education	Continuous	Age	
	Binary	Married	Married or cohabiting
	Binary	Head of House	Head of the household
	Binary	No Education	
	Binary	Prim. Education	Prim. = primary
	Binary	Sec. Education or More	Sec. = secondary
Member Profiles Living Conditions	Binary	Wall	Quality dwelling
	Binary	Roof	Quality dwelling
	Binary	Cooking	Quality cooking source
	Binary	Toilet	Quality toilet/latrines
	Binary	Shoes	All members in family own a pair of shoes
Member Profiles Work & Income	Binary	In Work	
	Continuous	Income	
Member Profiles Tenure	Continuous	Member	Tenure as member
	Continuous	Leader	Tenure as leader
Member Attitudes Empowerment & Gender Norms	Continuous	Index: Decision Making	
	Continuous	Index: IPV Accord	
	Continuous	Index: Gender Norms	
Member Attitudes Conformism & Locus of Control	Continuous	Index: Conformism	
	Continuous	Index: Locus of Control	
Member Attitudes Aspirations towards Self-Set Goals	Binary	Action	Action towards achieving a self-set goal
	Binary	Attempt	Attempt "
	Binary	Belief	Belief "
Member Opinions Leadership	Binary	Agree to: Men are naturally leaders	
Member Opinions Preferences on Financial	Continuous	Share Size	Preferred
	Continuous	Saving	Preferred
	Continuous	Social Fund	Preferred
	Continuous	Interest Rate	Preferred
	Binary	Loan = Rule	Preference = Current Rule
	Binary	Loan > Rule	Preference > Current Rule
	Binary	Loan < Rule	Preference < Current Rule

	Continuous	Fraction of Females	Fraction of Females to VSLA
Influential Females Fraction of Females	Continuous	Fraction of Influential Females	Fraction of Influential Females to Listed
	Continuous	Fraction of Influential Female Senior Leader	Fraction of Influential Female Senior Leaders to Listed
	Continuous	Fraction of Influential Female Junior Leader	Fraction of Influential Female Junior Leaders to Listed

Appendix 2 – Descriptive Statistics: Member Profiles

Panel A – Demographics & Education										
Senior Leader			Male				Female			
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>
Age	412	39.99	12.417	20	88	360	41.394	12.018	19	74
Married	412	.942	.235	0	1	360	.725	.447	0	1
Head of House.	412	.971	.168	0	1	360	.306	.461	0	1
No Education	412	.226	.419	0	1	360	.406	.492	0	1
Prim.	412	.398	.490	0	1	360	.375	.485	0	1
Education										
Sec. Education or more	412	.376	.485	0	1	360	.219	.414	0	1
Junior Leader			Male				Female			
Age	219	41.379	13.005	18	79	806	41.898	12.803	18	81
Married	219	.945	.228	0	1	806	.772	.420	0	1
Head of House.	219	.950	.219	0	1	806	.237	.425	0	1
No Education	219	.365	.483	0	1	806	.697	.460	0	1
Prim.	219	.420	.495	0	1	806	.233	.423	0	1
Education										
Sec. Education or more	219	.215	.411	0	1	806	.069	.254	0	1
Member			Male				Female			
Age	674	39.076	15.594	18	91	1519	40.939	14.65	18	100
Married	674	.852	.356	0	1	1519	.712	.453	0	1
Head of House.	674	.902	.297	0	1	1519	.280	.449	0	1
No Education	674	.455	.498	0	1	1519	.735	.442	0	1
Prim.	674	.346	.476	0	1	1519	.197	.398	0	1
Education										
Sec. Education or more	674	.199	.399	0	1	1519	.068	.253	0	1
Panel B – Living Conditions										
Senior Leader			Male				Female			
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>
Wall	412	.417	.494	0	1	360	.539	.499	0	1
Roof	412	.430	.496	0	1	360	.653	.477	0	1
Cooking	412	.036	.188	0	1	360	.056	.229	0	1
Toilet	412	.553	.498	0	1	360	.544	.499	0	1
Shoes	412	.830	.376	0	1	360	.867	.34	0	1
Junior Leader			Male				Female			
Wall	219	.416	.494	0	1	806	.463	.499	0	1
Roof	219	.443	.498	0	1	806	.546	.498	0	1
Cooking	219	.037	.188	0	1	806	.057	.232	0	1
Toilet	219	.521	.501	0	1	806	.526	.500	0	1
Shoes	219	.817	.387	0	1	806	.792	.406	0	1

Members	Male					Female				
Wall	674	.401	.490	0	1	1519	.434	.496	0	1
Roof	674	.487	.500	0	1	1519	.510	.500	0	1
Cooking	674	.062	.242	0	1	1519	.054	.226	0	1
Toilet	674	.516	.500	0	1	1519	.483	.500	0	1
Shoes	674	.844	.363	0	1	1519	.774	.419	0	1

Panel C – Work & Average Labor Income in UGX

Senior Leader		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
In Work	412	.939	.239	0	1	360	.911	.285	0	1	
Income (in 000')	350	1,785	1,416	45	5,800	311	12,818	11,877	0	56,000	

Junior Leader		Male					Female				
In Work	219	.922	.268	0	1	806	.912	.284	0	1	
Income (in 000')	184	1,703	1,395	0	5,600	714	12,290	11,268	0	58,000	

Member	Male					Female				
In Work	674	.905	.293	0	1	1,519	.872	.334	0	1
Income (in 000')	554	14,716	12,452	0	58,000	1,294	10,284	10,192	0	57,500

Panel D – Member Tenure in Months

Senior Leader		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
Member	412	49.981	44.802	0	480	360	47.147	41.481	0	324	
Leader	412	45.956	42.776	0	480	360	40.964	39.043	0	324	

Junior Leader		Male					Female				
Member	219	42.954	34.953	0	204	806	46.903	45.758	0	480	
Leader	219	33.329	28.427	0	156	806	35.099	38.279	0	480	

Member	Male					Female				
Member	674	41.536	31.08	0	276	1519	45.217	42.679	0	480
Leader	--	--	--	--	--	--	--	--	--	--

Appendix 3 – Descriptive Statistics: Member Attitudes

Panel A – Empowerment & Gender Norms: Indices

Senior Leader		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
Decision Making	412	.475	.326	0	1	360	.466	.365	0	1	
IPV Accord	412	.115	.229	0	1	360	.161	.268	0	1	
Gender Norms	412	.449	.131	.071	.929	360	.449	.129	.071	.786	

Junior Leader		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
Decision Making	219	.464	.336	0	1	806	.421	.350	0	1	
IPV Accord	219	.082	.177	0	.800	806	.189	.292	0	1	
Gender Norms	219	.452	.128	.143	.857	806	.455	.123	.071	.786	

Member		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
Decision Making	674	.501	.351	0	1	1519	.461	.358	0	1	
IPV Accord	674	.100	.211	0	1	1519	.178	.282	0	1	
Gender Norms	674	.459	.122	.143	.857	1519	.453	.126	.071	.786	

Panel B – Conformism & Locus of Control: Indices

Senior Leader		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
Conformism	412	.500	.178	0	.889	360	.537	.171	0	1	
Locus of Control	412	.401	.150	.100	.900	360	.387	.139	.100	.900	

Junior Leader		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
Conformism	219	.516	.184	0	.889	806	.504	.185	0	.889	
Locus of Control	219	.386	.144	.100	.900	806	.371	.142	0	.900	

Member		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
Conformism	674	.495	.189	0	1	1519	.491	.183	0	1	
Locus of Control	674	.386	.147	0	1	1519	.369	.132	.100	.900	

Panel C – Aspirations to Self-Set Goals

Senior Leader		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
Action	412	.862	.346	0	1	360	.878	.328	0	1	
Attempt	412	.422	.495	0	1	360	.508	.501	0	1	
Belief	412	.927	.260	0	1	360	.947	.224	0	1	

Junior Leader		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
Action	219	.868	.340	0	1	806	.799	.401	0	1	
Attempt	219	.388	.488	0	1	806	.416	.493	0	1	
Belief	219	.941	.237	0	1	806	.919	.272	0	1	

Member		Male					Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	
Action	674	.838	.368	0	1	1519	.779	.415	0	1	
Attempt	674	.418	.494	0	1	1519	.382	.486	0	1	
Belief	674	.924	.265	0	1	1519	.894	.308	0	1	

Appendix 4 – Descriptive Statistics: Member Opinions

Panel A – Views on Leadership

Senior Leader		Male				Female				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>max</i>
Agree: Men are naturally leaders	412	.286	.453	0	1	360	.233	.424	0	1

Junior Leader		Male				Female				
Agree: Men are naturally leaders	219	.247	.432	0	1	806	.323	.468	0	1

Member		Male				Female				
Agree: Men are naturally leaders	673	.27	.445	0	1	1518	.316	.465	0	1

Panel B – VSLA Preferences on Financial Matters

Senior Leader		Male				
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>max</i>	
Share Size	405	2822.709	2103.785	0	10000	
Saving	412	14975.556	17759.784	999	200000	
Social Fund	392	977.296	989.003	0	5000	
Interest Rate	412	9.272	3.929	2	40	
Loan = Rule	409	.87	.336	0	1	
Loan > Rule	409	.098	.297	0	1	
Loan < Rule	409	.032	.176	0	1	

Senior Leader		Female				
Share Size	352	3062.5	2190.776	0	10000	
Saving	360	14443.008	8880.92	0	50000	
Social Fund	349	797.994	673.703	0	5000	
Interest Rate	360	8.922	4.916	1	75	
Loan = Rule	357	.874	.332	0	1	
Loan > Rule	357	.098	.298	0	1	
Loan < Rule	357	.028	.165	0	1	

Junior Leader		Male				
Share Size	216	2766.199	2096.43	0	10000	
Saving	218	14880.546	19537.663	1000	200000	
Social Fund	213	968.31	1014.119	0	5000	
Interest Rate	219	9.384	5.183	0	50	
Loan = Rule	217	.797	.403	0	1	
Loan > Rule	217	.166	.373	0	1	
Loan < Rule	217	.037	.189	0	1	

Junior Leader		Female				
Share Size	793	2775.03	1979.922	0	10000	
Saving	803	14191.665	13832.932	0	200000	
Social Fund	777	866.538	888.783	0	5000	
Interest Rate	806	9.074	3.625	0	30	

Loan = Rule	799	.851	.356	0	1
Loan > Rule	799	.111	.315	0	1
Loan < Rule	799	.038	.19	0	1

Member	Male				
Share Size	656	3087.21	2255.142	0	10000
Saving	673	15025.073	16886.079	0	200000
Social Fund	642	912.461	922.64	0	5000
Interest Rate	674	8.976	3.632	2	30
Loan = Rule	657	.834	.372	0	1
Loan > Rule	657	.137	.344	0	1
Loan < Rule	657	.029	.168	0	1

Member	Female				
Share Size	1503	2821.832	2087.231	0	10000
Saving	1519	13774.036	13187.381	0	300000
Social Fund	1470	917.279	949.573	0	5000
Interest Rate	1519	8.975	4.555	0	100
Loan = Rule	1501	.824	.381	0	1
Loan > Rule	1501	.127	.333	0	1
Loan < Rule	1501	.049	.215	0	1

Appendix 5 – Descriptive Statistics: Influential Females

Panel A – Fraction of Females

General					
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fraction of Females	3990	.685	.155	.172	.971

Panel B – Fraction of Influential Females

General					
<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fraction of Influential Females	2964	.549	.350	0	1
Fraction of Influential Female Senior Leaders	2626	.446	.447	0	1
Fraction of Influential Female Junior Leaders	2057	.713	.427	0	1

Senior Leader	Male					Female				
	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fraction of Influential Females	320	.366	.278	0	1	278	.751	.277	0	1
Fraction of Influential Female Senior Leaders	279	.194	.342	0	1	244	.712	.403	0	1
Fraction of Influential Female Junior Leaders	231	.658	.448	0	1	232	.781	.38	0	1

Junior Leader	Male					Female				
	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Fraction of Influential Females	173	.329	.318	0	1	620	.638	.318	0	1
Fraction of Influential Female Senior Leaders	152	.352	.434	0	1	544	.482	.445	0	1
Fraction of Influential Female Junior Leaders	134	.402	.466	0	1	428	.805	.369	0	1

Member		Male				Female				
Fraction of Influential Females	500	.368	.313	0	1	1073	.62	.35	0	1
Fraction of Influential Female Senior Leaders	449	.334	.414	0	1	958	.498	.451	0	1
Fraction of Influential Female Junior Leaders	301	.548	.466	0	1	731	.78	.394	0	1

Appendix 6 – Comprehensive Regression

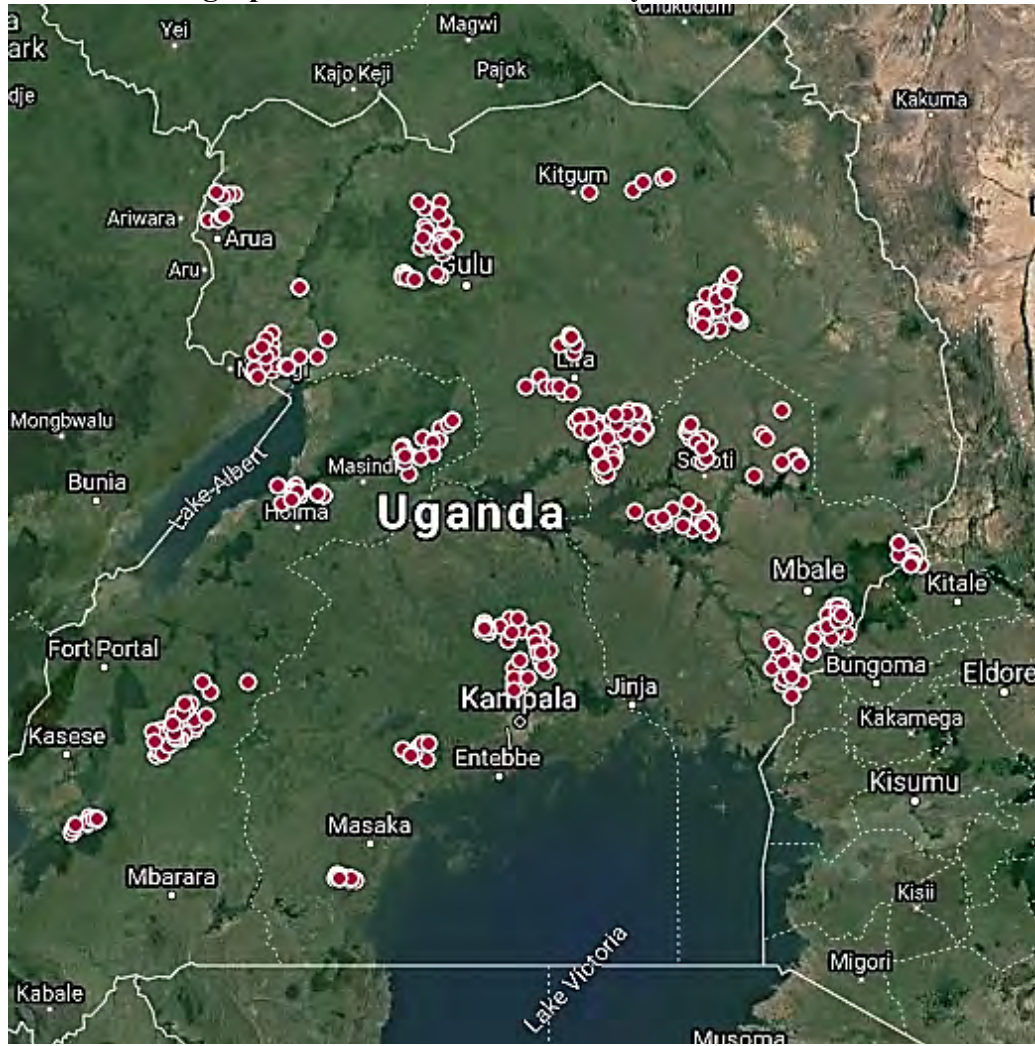
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	-0.182** (0.0141)	-0.182*** (0.0141)	-0.178*** (0.0143)	-0.113*** (0.0194)	-0.0448** (0.0194)	-0.0448** (0.0194)	-0.0440** (0.0196)	-0.0461** (0.0204)
Age		0.000177 (0.000368)	0.000276 (0.000369)	-0.000393 (0.000389)	0.00123** (0.000375)	0.00123** (0.000375)	0.000939** (0.000386)	0.000888** (0.000400)
Married			0.0268* (0.0138)	0.0665** (0.0160)	0.0774** (0.0158)	0.0774** (0.0158)	0.0637*** (0.0169)	0.0626*** (0.0175)
Head of Household				0.0864** (0.0178)	0.0882** (0.0172)	0.0882** (0.0172)	0.0868*** (0.0181)	0.0856*** (0.0188)
No Education					-0.279*** (0.0205)		-0.142*** (0.0143)	-0.138*** (0.0150)
Primary Education					-0.135*** (0.0220)	0.144*** (0.0138)		
Secondary Education or More						0.279*** (0.0205)	0.132*** (0.0221)	0.131*** (0.0228)
Wall							-0.00175 (0.0119)	-0.00384 (0.0123)
Cooking							-0.0603** (0.0237)	-0.0596** (0.0251)
Toilet							0.0107 (0.0106)	0.0103 (0.0108)
Household Members own A Pair of Shoes							0.00216 (0.0126)	0.00179 (0.0130)
New Income							7.67e-09* (4.64e-09)	
Dummy Income							-0.0168 (0.0189)	-0.0167 (0.0195)
Months as Member							0.000910*** (0.000302)	0.00100*** (0.000304)

Months as Leader	-0.000655** (0.000314)	-0.000730** (0.000308)
Index on Decision Making	-0.0109 (0.0197)	-0.00994 (0.0204)
Index on IPV	0.0157 (0.0220)	0.0190 (0.0229)
Index Gender Norms	0.0266 (0.0459)	0.0316 (0.0473)
Index on Conformi sm	0.0520* (0.0294)	0.0538* (0.0303)
Index on Locus of Control	-0.0241 (0.0437)	-0.0314 (0.0457)
Action	0.0350** (0.0138)	0.0404*** (0.0141)
Attempt	0.0229* (0.0125)	0.0230* (0.0127)
Belief	0.0106 (0.0184)	0.00532 (0.0186)
Preferred Max Saving (Top- Coded)	- 0.00000056 4** (0.0000002 55)	
Preferred Social Fund (Top- Coded)	- 0.00000312 (0.0000048 2)	
Preferred Interest Rate	0.00173 (0.00135)	0.000982 (0.00129)
Preferred Maximum Loan = Current Rule	0.0367 (0.0223)	

Preferred Maximum Loan > Current Rule							0.00830	
							(0.0266)	
Income							8.33e-09*	(4.80e-09)
Preferred Max Saving (Top- Coded)							-	0.00000042 1
								(0.0000003 94)
Preferred Social Fund (Top- Coded)							-	0.00000346
								(0.0000061 6)
Preferred Maximum Loan = Current Rule								0.0232
								(0.0263)
Preferred Maximum Loan > Current Rule								-0.00189
								(0.0300)
Constant	0.316* **	0.309***	0.281***	0.191***	0.269***	-0.0106	0.0195	0.0391
	(0.010 7)	(0.0181)	(0.0232)	(0.0290)	(0.0312)	(0.0299)	(0.0489)	(0.0531)
<i>R</i> ²	0.047	0.047	0.047	0.052	0.110	0.110	0.120	0.117
Observat.	3990	3990	3990	3990	3990	3990	3990	3791

Annexure

Annex 1 – Geographical Distribution of Surveyed Locations



Source: (Franco, et al., 2021)

Annex 2 – Survey: Membership Level Form

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Respondent ID:

Survey of VSLA Participants Informed Consent

Title of the study: Leadership in Village Saving and Loans Associations (VSLAs)

Introduction:

BRAC Uganda in collaboration with Makerere University, CARE International, AVSI and Village Enterprise is conducting a baseline study on leadership in VSLAs in this community.

Purpose of Research:

This study seeks to understand how men and women are selected as leaders in VSLA management committees, what roles do they play in financial performance of the groups and members satisfaction with the committee's decisions.

Your Part in the Study:

Participation in this study is voluntary. If you agree to participate in this interview, it will take about 60 minutes. I will ask you to sign a confirmation that you have been informed about the rights as a participant and participate voluntarily. In addition, we may visit you in the future for additional surveys to understand how your views change and why. If you do not want to talk to us when we return or do not want to participate in the research, you do not have to.

Procedures:

If you accept to participate you will be asked questions on your profile and households characteristics as well as your work, VSLAs participation, use of financial, and personal views on issues such as gender and self-confidence.

Confidentiality:

Your participation in this study is confidential. This means, the information that is retrieved from this study will only be used in ways that will not reveal who you are. Your responses will be completely anonymous, and the data will be used by research staffs only. Your name will not appear anywhere in the final write up of this study.

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. We expect to return to the communities that participate in the study and share some of the research findings. You will receive a bar soap as a small gift to appreciate your time and willingness for participating in the interview.

Potential Risks and Discomforts:

You may refuse to answer questions that make you feel uncomfortable, and you may choose to end the interview and your participation in the study at any time.

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Would you like to participate? If yes, please sign here:

I _____ have voluntarily consented to participate in the BRAC study.

Telephone number _____

Signed/Thumbprint _____ Date _____

Person Obtaining Consent: Name: _____ Signature: _____ Date: _____
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<p><u>For illiterate Volunteers:</u> I attest that the information contained in this written consent form has been read and explained to the participant. To the best of my knowledge, the information provided was complete and accurate. The participant appears to understand the study purpose, risks, benefits and what will be done as described in this written summary and willingly agrees to participate in the interview.</p> <p><u>For those placing thumbprints only:</u> I attest that the participant who states that her name is _____ has placed her thumbprint on this consent form on her own free will on this day.</p> <p>Name of the witness: _____</p> <p>Signature of the witness: _____</p> <p>Date: _____</p>

For any questions and concerns concerning your rights in the study, please contact the IRB Chairperson:

INTERVIEW DETAILS

SL	Question	Codes	Answer
1	Interview date:	□□/□□/□□	
2	Location details: a. District: b. County: c. Sub-county: d. Community name/Village:		
3	VSLA/Group Name:	Codes to be added after sampling	
4	VSLA member ID:	Use sampling sheet	
5	Enumerator ID:		
6	Enumerator Name:	Codes to be added during training	
7	Were you able to speak to the respondent?	1=Yes; → Section 1 0=No	
8	(if no) Why ?	Enter full text	
9	Start time of interview	(in hh:mm format)	

SECTION 1: RESPONDENT CHARACTERISTICS

SL	Question	Codes	Answer
1	How old are you?	Enter age in completed years?	
2	Gender of the respondent	0=Female 1=Male	
3	What is your marital status?	1=Single 2=Married 3=Cohabiting 4=Divorced 5= Separated 97=Refused 99=Don't know	
4a	Which languages do you speak?	1=English 2=Luganda 3=Lusoga 4=Runyankore	
4b	Which of these languages you generally speak at home?	5=Luo 6=Karamojong -98=Other, specify	
5	Are you the head of your household?	1=Yes; → Q7 0=No	
6	[If not] what is the relationship of the household head to you?	1=Spouse/partner 2= Mother 3= Father 4= Grandmother 5=Grandfather	
7	Who do you live with? (Enter all that apply)	6= Sister(s) 7= Brother(s) 8=Son(s) 9=Daughter(s) 10=Aunt(s) 11=Uncle(s) -98= Other specify	
9	What is your tribe?	See code list	

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<i>Thank you very much for answering those questions. I will ask you some questions about your education.</i>			
9	Have you ever gone to school?	1=Yes; 0=No → Q13	
10	How old were you when you stopped attending school?	Enter age 97=Refused 99=Don't know	
11	What is the highest level of schooling you attended before you stopped going, <u>not</u> including vocational school or training? <i>Enumerator, ask for highest level <u>attended</u>; it does not have to be completed. If the respondent attends/was attending vocational school or training, ask for highest level attended before starting it.</i>	<i>Use education codes</i>	
12	What is your highest qualification, not including Certificate in a Vocational course? With "qualifications" we mean a certificate you were given from any examination board, for example the "Primary leaving certificate"/"Pass slip" <i>Enumerator, if the respondent says that the certificate in vocational course is their highest qualification, ask for qualification obtained before starting the training.</i>	<i>Use Qualification codes</i>	
13	How many children do you have?	Daughter	Enter number. Enter '0' if none
		Son	
14	(If have any child) How old is the (youngest) child?	In completed years	
15	(If have any child) Is any of them living with you?	1=Yes 0=No	

SECTION 2. HOUSEHOLD SOCIO-ECONOMIC STATUS

<i>Now I will ask you some questions about your household conditions.</i>			
SL	Question	Codes	Answer
1	How many members are in your household?	Enter number of members including the respondent who generally live and eat together. Do not include visitors	
2	How many of the household members are aged between 6 and 12 years?	Enter number (‘0’ if none)	
3	(if any 6-12 years old child) Are all these 6-12 years old children currently attending school/educational institution?	1=Yes 0=No	
4	Can the (oldest) female head/spouse read and write with understanding in any language?	1=Yes 0=No 99=No female head/spouse	
5	What type of material is mainly used for construction of the wall of the dwelling?	1=Unburnt bricks with mud, mud and poles, or other	

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		2=Unburnt bricks with cement, wood, tin/iron sheets, concrete/stones, burnt stabilized bricks, or cement blocks	
6	What type of material is mainly used for construction of the roof of the dwelling?	1=Thatch 2=Iron sheets, concrete, tiles, asbestos, or other	
7	What source of energy does the household mainly use for cooking?	1=Firewood, cow dung, or grass (reeds) 2=Charcoal, paraffin stove, gas, biogas, electricity or other	
8	What type of toilet facility does the household mainly use?	1=VIP latrine, or flush toilet 2=Covered pit latrine with slab 3=Uncovered pit latrine (with or without slab), Ecosan (compost toilet), or pit latrine without slab 4=No facility /bush/polythene bags/bucket/etc., or other	
9	Does every member of the household have at least one pair of shoes?	1=Yes 0=No -97=Refuse to answer	
10	Does your household own (or rent/ sharecrop/mortgage in or out) 50 or more decimals of cultivatable agricultural land (Exclude uncultivable land and dwelling-house/homestead land)?		

<i>Now I would like to ask you some questions about some assets that your own in your household.</i>			
11	Do you/your household own any of these? 1=Yes; 0=No → go to next item	(if yes) What is the value (approximate if sold now in UGX)	(if yes) Do you own any of [item] yourself ? 1=Yes, solely; 2=Yes, jointly; 3=Yes, solely & jointly; 4=No
A	Fans		
B	Radio		
C	Television		
D	Motorcycle/Bicycles/scooters/motor cars, etc.		
E	Refrigerator		
F	Video/DVD player		
G	Mobile telephone		
H	Cultivable land		
I	House or building		
J	Tools for agriculture		
K	Livestock (Cattle)		

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L	Goat/pig/other small animals		
M	Chicken/poultry		
N	Non-farm business equipment		

SECTION 3: LABOUR MARKET PARTICIPATION

Now I will ask you some questions about the earning activities that you have been done in the last 12 months.					
1	Have you been involved in <u>ANY earning activity</u> in the <u>last 12 months</u> (for pay/business/farming or helping family in business/farm even if for a short period of time)?	1=Yes 0=No →Q10			
2	Which earning activities have you been involved in the past 12 months? (Select as many applies)	See code list			
3	(If more than 4 activities selected) Could you identify 4 activities that are most important to you?	See code list			
		Activity 1	Activity 2	Activity 3	Activity 4
4	How <u>many days</u> have you done this work in the <u>last month</u> ?				
5	How much did you earn from this activity in the last month (cash and in-kind in UGX)?				
6	How <u>many days</u> have you done this work in the <u>last 12 months</u> ?				
7	How much did you earn from this activity in the last one year (in Shilling)? (For agriculture or livestock, include total production that were sold and/or consumed)				
8	Have you been involved in <u>ANY of these earning activities</u> in the last <u>one week</u> ?	1=Yes →Q10 0=No			
9	Why have you NOT been working during the past week? Probe and select all that apply	1= No work available at all 2= No work relevant to my experience/education 3= No work with suitable pay 4= No work in a suitable firm 5= No work at a suitable location 6= I did not want to work 7= Health problems -98=Other (specify) -97=Refused to answer			
10	Have you tried to get (more) employment/work in the last week?	1=Yes 0=No			
11	Who <u>mainly decides</u> whether you should do earning activities or not?	1= Myself 2= My Spouse 3= My parents 4= Other			
12	(If earned income in the last 12 months) What do you do with the money you earn?	1= Keep all for myself 2= Keep most for myself			

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		3= Give most to household 4= Give all to household 5= Other	
13	(If spend on household) How much does your contribution cover of your total household expenses?	1= Little (less than 20%) 2= Somewhat (20-50%) 3=Major (51-80%) 4=Almost all (80%)	
14	Are you happy with your current work situation?	1=Yes 0=No	

SECTION 4: VSLA PARTICIPATION

A) Engagement with the VSLA			
<i>Now I would like to ask you some questions about your roles in the [VSLA Name] group.</i>			
1	Currently, do you participate in or are you a member of [VSLA Name] group?	1=Yes; 0=No → Section 5	
2	What is your role in this group?	1=Leader/Committee member 2=Group Member -98=Other specify	
3	(If leader) What is your role?	1=President 2=Secretary 3=Treasurer 4=Box keeper 5=Record keeper 6=Money counter 7=Committee member -98= Other, specify	
4	(If leader) How long have you been a leader in this [VSLA Name] group?	In completed months	
5	How long have you been a member in this [VSLA Name] group?	In completed months	
6	How often do the members of [VSLA Name] meet physically as a group?	1=Daily 2=Weekly 3=Bi-weekly (twice a month) 4=Monthly 5=Occasionally (less than monthly)	
7	How often do you participate in the group meetings?	1=Never 2=A few of the meetings 3=Most of the meeting 4=All the meetings	
8	How many savings shares do you usually buy per [meeting frequency]?	Number of shares -97=Refuse to answer	
9	Have you ever taken a loan from the [VSLA name] group?		
10	(if took loan) When was the last time you took a loan?	Number of months ago	
11	Has it ever happened that you wanted a loan but did not get from the group?	1=Yes 0=No -97=Refuse to answer	

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12	(if yes) When was the last time this happened?	Number of months ago	
13	Has it ever happened that you receive a smaller loan than you wanted from the group?	1=Yes 0=No -97=Refuse to answer	
14	(if yes) When was the last time this happened?	Number of months ago	

B) Participation in VSLA decision making			
Now I would ask you some questions about your opinions on different decisions at this [VSLA Name].			
1	Are you aware about how different decisions such as meeting frequency, share size, interest rate are taken in this group?	1=Yes, well aware 2=Yes, somewhat aware 3=No, not aware	
2	Which of the following decisions you know about? (Prompt for each response option)	1=Selecting name for the group 2=Duration of savings cycle 3=How many members to have in the group 4=How many members to have in the committee 5=How often committee to be formed 6=How often group meeting should happen 7=How much to keep in "social fund" (insurance) 8=What is the share size 9=Maximum number of shares one can buy 10=Maximum amount one can get as loan 11=Maximum duration of the loans 12=What should the interest rates for loans be 13=Who should get money from the social fund 14=Who should get a loan 15=How to share out at the end of cycle 16=Minimum amount one can get as a loan 17=Who should not get a loan -98=Other, specify 0=None	
3	Are you unhappy or concerned about any of these decisions?	1=Yes 0=No	
4	Which ones?	Filtered for codes selected in Q2	
5	Are there people who are very influential in managing the group? You can also include yourself.	1=Yes 0=No -99=Don't know -97=Refuse to answer	
6	(if yes) We would like to know who are most influential or important in managing the group. You can identify up to 3 people		
		Person 1	Person 2
7	What is the role of this person in the group? 1=President; 2=Secretary 3=Treasurer; 4=Box keeper 5=Record keeper; 6=Money counter 7=Committee member; 21=Myself 22=No one else -98= Other, specify		Person 3

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8	Is this person a male or female? 0=Female; 1=Male			
8a	What is this person's education level?	Use Education codes	Use Education codes	Use Education codes
9	Is there any decision for which the committee is primarily responsible in this group?	1=Yes 0=No -99=Don't know -97=Refuse to answer		
10	(if yes) Which ones?	Code list of Q2		
11	(for leaders) Do you feel your opinion is influential in these decisions?	1=Yes, always 2=Yes, sometime 3=Rarely or never -97=Refuse to answer		
Now I will ask you about your opinion on a few decisions or rules for the [VSLA name] group. We understand in groups not all decisions can be made to satisfy everyone's preference. We want to know how some of the decisions made in this group differ from your preference.				
12	What is the current <u>share size</u> ?	UGX -99=Don't know -97=Refuse to answer		
13	What is your preferred <u>share size</u> ?	UGX -99=Don't know -97=Refuse to answer		
14	What is the current <u>maximum saving amount</u> one can make per meeting?	UGX -99=Don't know -97=Refuse to answer		
15	What is your preferred <u>maximum saving amount</u> ?	UGX -99=Don't know -97=Refuse to answer		
16	How much is currently kept for <u>social fund</u> ?	UGX -99=Don't know -97=Refuse to answer		
17	What is your preferred amount for <u>social fund</u> ?	UGX -99=Don't know -97=Refuse to answer		
18	What is the current <u>interest rate</u> (or service charge) for loans?	Percent -99=Don't know -97=Refuse to answer		Added timing period
19	What is your preferred <u>interest rate</u> for loans?	Percent -99=Don't know -97=Refuse to answer		Added timing period
20	What is the current <u>maximum loan amount</u> that one can take?	1=Equal to one's savings 2=Twice the amount of one's savings 3=Three times the amount of savings 4=Four times the account of savings -98=Other, specify -99=Don't know -97=Refuse to answer		
21	What is your preferred <u>maximum loan amount</u> ?	1=The same as current rule 2=More than current rule 3=Less than current rule		

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		-99=Don't know -97=Refuse to answer	
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C) Perception on leadership practices:
Now I will read for you these statements and you will rate yourself in terms of how frequently you engage in that behaviour or activity on a scale of 1-5. Where 1=Rarely or never, 2=Once in a while, 3=Sometimes, 4=Often and 5= Frequently or always. On a scale of 1-5, how would you say...?

1. Decision making / Conflict management			
For leaders			
1	I go beyond my self-interest for the good of the group	1=Rarely or never, 2=Once in a while, 3=Sometimes, 4=Often 5= Frequently or always -99=Don't know -96=Not applicable	
2	I make decisions without consultations from the group members		
3	I maintain the final decision authority		
4	When there is disagreement in the group, we discuss issues among all members and make decisions together		
For members			
1	Group leaders go beyond their self-interest for the good of the group	1=Rarely or never, 2=Once in a while, 3=Sometimes, 4=Often 5= Frequently or always -99=Don't know -96=Not applicable	
2	Group leaders make decisions without consultation of group members		
3	Group leaders maintain the final decision authority		
4	When there is disagreement in the group, we discuss issues among all members and make decisions together		
2. Member participation/Inclusion			
For leaders			
1	I listen to what group members have to say	1=Rarely or never, 2=Once in a while, 3=Sometimes, 4=Often 5= Frequently or always -99=Don't know -96=Not applicable	
2	In general, I do not know what group members are thinking		
3	Group members usually do not express their opinions when making group-decisions		
4	Every group member's voice is heard when it comes to making group decisions		
5	Group members are not very involved in group decisions in general		
For members			
1	Group leaders listen to what I have to say	1=Rarely or never, 2=Once in a while, 3=Sometimes, 4=Often 5= Frequently or always -99=Don't know -96=Not applicable	
2	In general, group leaders do not know what group members are thinking		
3	I usually do not express my opinions when making group decisions		
4	Every group member's voice is heard when it comes to making group decisions		

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5	I am not very involved in group decisions in general		
3. Trust			
For leaders			
1	Group members do not trust the way I manage their money	1=Rarely or never, 2=Once in a while, 3=Sometimes, 4=Often 5= Frequently or always -99=Don't know -96=Not applicable	
2	I am knowledgeable about financial matters		
3	Any member who requests a loan from the VSLA to cover an emergency can have access to it		
4	I create an environment of mutual trust in the group I lead		
For members			
1	I do not trust the way group leaders are managing members' money	1=Rarely or never, 2=Once in a while, 3=Sometimes, 4=Often 5= Frequently or always -99=Don't know -96=Not applicable	
2	Group leaders are knowledgeable about financial matters		
3	If I request a loan from the VSLA to cover an emergency, I am sure I would have access to it		
4	Group leaders create an environment of mutual trust in the group		
4. Good leadership traits/characteristics			
1	Could you tell me 3 characteristics that you think a good VSLA leader must have?	1. 2. 3.	
2	Please rank then from the most important (1) to the least important (3).	Ranking	
For each pair of statements, do you agree/ Disagree with statement A or B?			
	Statement A	Statement B	
3	Responsible young people can be good leaders	Only older people are mature enough to be leaders	1=Very strongly agree with A, 2=Somewhat agree with A, 3=Somewhat agree with B, 4=Very strongly agree with B -99=Don't know -97=Refuse to answer
4	If I disagree with something the VSLA leaders are doing or saying, I keep quiet	If I disagree with something the VSLA leaders are doing or saying, I express my opinion to them	
5	Women should have the same chance of being VSLA leaders as men	Men make better VSLA leaders than women, and should be elected	
6	Responsible female members can be good VSLA leaders	Only male leaders are qualified enough to be VSLA leaders	
7	VSLA leaders should be women because they better understand the needs of the majority-female members	VSLA leaders should be men because they are more educated and knowledgeable in financial matters than women	

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D) Opinion on leaders		
Now I would ask you a few questions about the people who are in the leadership committee.		
1	How happy are you with the overall performance of the committee?	1=Not satisfied at all 2=Somewhat satisfied 3=Fully satisfied -97=Refuse to answer -99=Don't know
2	What are the characteristics of leadership that the current committee members <u>have</u> ? (Probe. Do not prompt)	1=Well respected 2=Organized 3=Being on time 4=Trustworthy 5=Treating everyone equally
3	What are the characteristics of leadership that the current committee members <u>lack</u> ? (Probe. Do not prompt)	6=Ability to listen to others 7=Good arithmetic skills -98=Other, specify -99=Don't know -97=Refuse to answer
4	Would you prefer to see the same people to continue as leaders in the next cycle?	1=Yes 0=No -99=Don't know -97=Refuse to answer
5	(if no) what changes would you like to make?	1=Replace any particular leader 2=Replace the whole committee -99=Don't know -97=Refuse to answer
6	(if no) why?	1=To give others a chance 2=They are taking wrong decisions 3=They do not treat us equally -98=Other, specify -99=Don't know -97=Refuse to answer
7	Would you like to see anyone from the group who is currently not in the committee to be included in the committee in the next cycle?	1=Yes 0=No -99=Don't know -97=Refuse to answer
8	What is your opinion of electing only women in the committee? Would you say [read the 3 answer choices]	1=I will be happy 2=It doesn't matter to me 3=It is not a good idea -99=Don't know -97=Refuse to answer
9	(If 1 in Q8) why? (If 3 in Q8) why?	Write in full
10	What is your opinion on electing a woman as the group president?	1=I will be happy 2=It doesn't matter to me 3=It is not a good idea -99=Don't know -97=Refuse to answer
11	(If 1 in Q10) why? (If 3 in Q10) why?	Write in full

SECTION 5: SOCIAL NETWORK

Now I will ask you about your participation in other group activities besides this [VSLA name] group.			
1	Do you participate in or are you a member of any social, political, or religious organizations?	1=Yes 0=No -97=Refuse to answer	
2	Which groups?	1=Women's self-help group 2=NGO 3=Religious group 4=Political party 5=Village development committee 6=Unit committee 7=Other village committee (education, sanitation, parents group etc.) 8=Cooperative/Other savings groups 9=Business or farmer association 10=Other	
3	What is your level of participation in the group activities?	1=Very active 2=Somewhat active 3=Not active	
4	Do you have a leadership role in this group?	1=Yes 0=No -97=Refuse to answer	
5	(if no) Why you don't participate in leadership?	1=I don't have enough time 2=I don't think they are worthwhile 3=I don't feel welcome/included 4=Other (specify)	
6	[If they say "I don't feel welcome/included"] Why don't you feel welcome/included? (Probe for as many responses possible. Do not prompt.)	1=Poverty 2=Occupation 3=Lack of education 4=Gender 5=Marital status 6=Age 7=Religion 8=Political affiliation 9=Ethnicity/language 10=Other (specify)	
7	Now I am going to ask you about your relationship with others in the [VSLA name] group. Please tell us what best describes your relationship with each of them. If you only know them through the VSLA and have no other relationship, you can say that too.		
A	VSLA member names	VSLA member ID	1=Group member/No other relation 2=Household member 3=Other relative 4=Friend 5=Neighbour 6=Co-worker 7=Business partner 8=Other, specify
B			
C			
D			
E			
F			
G			

SECTION 6: FINANCIAL INCLUSION

Thank you for giving your answers so far. Now I will ask you some questions about your savings and loan situation.		
1	Do you, either by yourself or together with someone else, currently have any savings account at a bank or another type of formal financial institution including mobile money account?	1=Yes, by myself; → Q3 2=Yes, with others; → Q3 0=No; -99=Don't know; -97=Refused
2	Reason why you don't have an account? Probe more and Select all that apply → Q5	1=Because financial institutions are too far away 2=Because financial services are too expensive 3=Because you don't have the necessary documentation (identity card, wage slip, etc.) 4=Because you don't trust financial institutions 5=Because of religious reasons 6=Because you don't have enough money 7=Because someone else in the family already has an account 8=Because you have no need for formal financial services 9= Because you are illiterate 10=Because you are disabled -98=Other specify -99=Don't know -97=Refused to answer
3	In the past 12 months, did you ever use a MOBILE PHONE or the Internet to make a payment, to buy something, or to send money from your account at a bank or another type of financial institution or mobile money account?	1=Yes 0=No -99=Don't know -97=Refuse to answer
4	In the past 12 months, have you checked your account balance using a mobile phone or the Internet?	
5	In the past 12 months, have you, personally, saved or set aside any money to start, operate, or grow a business or farm?	
6	In the past 12 months, have you, personally, saved or set aside any money for old age?	
7	In the past 12 months, have you or any member of your household received any loan from any individual or institution? (Excluding from [VSLA name])	1=Yes 0=No
8	(if yes) How many times?	Enter number
9	Do you have loans that you are still paying back(Including the VSLA group loan)?	1=Yes 0=No →Q12
10	How many outstanding loans do you currently have?	Enter number -97=Refuse to answer -99=Don't know

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11. Details of outstanding loans								
Loan ID	Who took	Source (Code A)	Date loan received		Total principal (in UGX)	Interest rate		Amount outstanding now
			Year	Month		7a	7b	
1	2	3			6			8
							code	
							Code	
							code	
Code A: Loan source								
1=Nationalised commercial bank 2=Private commercial bank 3=VSLA/Cooperative 4=Local microcredit institution 5=Neighbour			6=Relatives 7=Money lender 8=Landlord (sharecropped) 9=Employer 10=Friends			11=Group/SACCO 13=Chama 17=Mobile money agent 18= Youth Fund		
Code 7B: Interest								
1=Daily 4=Yearly			2=Weekly			3=Monthly		

12. How much cash savings do you have in the following places? If no savings enter '0'

	[VSLA Name] group	Other credit & Savings Group	Bank/Other financial institutions	SACCO	At home	Mobile money	Other
	1	2	3	4	5	6	7
Amount (in UGX)							

SECTION 7: GENDER ATTITUDE

A) Decision Making and Attitude towards IPV		
Now I would like to ask you a few questions about different decisions that are made in your household and general perception on partner relationships.		
1	Who usually makes decisions about health care for yourself?	1=Respondent him/herself 2=Husband/wife 3=Respondent and spouse jointly 4=Someone else
2	Who usually makes decisions about making major household purchases?	
3	Who usually makes decisions about making purchases for daily household needs?	
4	Who usually makes decisions about visits to your family or relatives?	
5	Do any children in your household contribute to decision making about how money should be spent?	1=Yes 0=No -97=Refuse to answer -99=Don't know
6	(if married or cohabiting) In the last one month, did you and your spouse argue about managing money?	
7	If a wife has earned some money, does she have the right to buy clothing for herself or her children without asking for permission from her husband?	
I will now ask you about what people may experience in their relationships. Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations. Is it okay to hit his wife		
8	... if she goes out without telling him?	1=Yes 0=No -97=Refuse to answer -99=Don't know
9	... if she neglects the children?	
10	... if she argues with him?	
11	... if she refuses to have sex with him?	
12	... if she burns the food?	
13	... if she gets her daughter circumcised but he doesn't want?	
B) Gender Norms		
Now I will read a list of statements on gender norms and you will respond as required. <i>Do you strongly Agree, Agree, Disagree or Strongly Disagree with the following statement?</i>		
1	Men should participate in taking care of children and household chores rather than leaving it all to the women	1=Strongly agree 2=Agree 3=Disagree 4=Strongly Disagree -97=Refused -99=Don't know
2	When women get rights, they are taking rights away from men	
3	Gender equality, meaning that men and women are equal, has come far enough already	
4	A wife should obey her husband, even if she disagrees	
5	it is important for a man to show his wife/partner who is the boss	

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6	It is the job of men to be leaders, not women		
7	A woman should be able to choose her own friends, even if her husband disapproves		
8	A man should decide how to spend his free time on his own		
9	A woman should decide how to spend her free time on her own		
10	If a woman has power in the household, it means she is taking power away from her husband		
11	A husband and wife can share power		
12	Women's opinions are valuable and should always be considered when household decisions are made		
13	It is more important that a boy goes to school than a girl		
14	Women should be able to marry whomever they want, regardless of their parents' views		
15	The father (not the mother) is the one who should have the final say in the household		
C) Self-Efficacy and Empowerment			
	Now I would like to ask you some questions about your ability to do the following. you will respond as required to respond with Strongly Agree, Agree, Disagree or Strongly Disagree to the statement. Do you strongly agree, Agree, Disagree or Strongly disagree with this statement:		
1.	I will be able to achieve most of the goals that I have set for myself	1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree -97=Refused -99=Don't know	
2.	When facing difficult tasks, I am certain that I will accomplish them.		
3.	In general, I think that I can obtain outcomes that are important to me		
4.	I believe I can succeed at most any endeavor to which I set my mind.		
5.	I will be able to successfully overcome many challenges.		
6.	I am confident that I can perform effectively on many different tasks		
7.	Compared to other people, I can do most tasks very well.		
8.	Even when things are tough, I can perform quite well.		
D) Women's Economic Empowerment (WEAI)			
	Now I am going to read you some stories about different farmers and their situations regarding different agricultural activities. For each story, I will then ask you how much you are like or not like each of these people. We would like to know if you are completely different from them, similar to them, or somewhere in between. There are no right or wrong answers to these questions. Enumerator: Read aloud each story, subsequent questions, and response choice. Names should be a common name of man/women based on the sex of the respondent. The order of topics A–		

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	D should be randomized, and within each topic, the order of stories 1–4 should be randomized.	
A1	“PERSON’S NAME cannot grow other types of crops here for consumption and sale in market. Beans, sweet potato, and maize are the only crops that grow here.”	1=Completely the same 2=Somewhat the same 3=Somewhat different 4=Completely different
A2	“PERSON’S NAME is a farmer and grows beans, sweet potato, and maize because her spouse, or another person or group in her community, tells her she must grow these crops. She does what they tell her to do.”	
A3	“PERSON’S NAME grows the crops for agricultural production that her family or community expect. She wants them to approve of her as a good farmer.”	
A4	“PERSON’S NAME chooses the crops that she personally wants to grow for consumption and sale in market and thinks are best for herself and her family. She values growing these crops. If she changed her mind, she could act differently.”	
B1	“PERSON’S NAME cannot raise any livestock other than what she has. These are all that do well here.”	
B2	“PERSON’S NAME raises the types of livestock she does because her spouse, or another person or group in her community, tells her she must use these breeds. She does what they tell her to do.”	
B3	“PERSON’S NAME raises the kinds of livestock that her family or community expect. She wants them to approve of her as a good livestock raiser.”	
B4	“PERSON’S NAME chooses the types of livestock that she personally wants to raise and thinks are good for herself and her family. She values raising these types. If she changed her mind, she could act differently.”	
C1	“There is no alternative to how much or how little of her crops or livestock [PERSON’S NAME] can take to the market. She is taking the only possible amount.”	
C2	“PERSON’S NAME takes crops and livestock to the market because her spouse, or another person or group in her community, tells her she must sell them there. She does what they tell her to do.”	
C3	“[PERSON’S NAME] takes the crops and livestock to the market that her family or community expect. She wants them to approve of her.”	
C4	“[PERSON’S NAME] chooses to take the crops and livestock to market that she personally wants to sell there, and thinks are best for herself and her family. She values this approach to sales. If she changed her mind, she could act differently.”	
D1	“There is no alternative to how [PERSON’S NAME] uses her income. How she uses her income is determined by necessity.”	
D2	“[PERSON’S NAME] uses her income how her spouse, or another person or group in her community, tells her she must use it there. She does what they tell her to do.”	
D3	“[PERSON’S NAME] uses her income in the way that her family or community expects. She wants them to approve of her.”	
D4	“[PERSON’S NAME] chooses to use her income how she personally wants to, and thinks is best for herself and her family. She values using her income in this way. If she changed her mind, she could act differently.”	
D5	“[PERSON’S NAME] chooses to save how she personally wants to, and thinks is best for herself and her family. She values saving in this way. If she changed her mind, she could act differently.”	
D6	“[PERSON’S NAME] chooses to borrow how she personally wants to, and thinks is best for herself and her family. She values borrowing in this way. If she changed her mind,	

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	she could act differently.”	
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SECTION 8. BEHAVIORAL CHARACTERISTICS

A) Conformism

Here we briefly describe a person. Please listen to each description and think about how much each person is or is not like you. You can answer "very much like me", "somewhat like me", "little like me" or "not like me at all".

1	This person believes that people should follow rules at all times, even when no-one is watching. Think about how much this person is or is not like you.	1=Not like me at all 2=Little like me 3=Somewhat like me 4=Very much like me -97=Refuse to answer -99=Don't know	
2	It is important to this person to always behave well and avoid doing anything people say is wrong. Think about how much this person is or is not like you.		
3	It is important for this person to be polite to other people all the time and never annoy others.		
4	This person believes that people should be satisfied with what they have.		
5	Religious/spiritual belief is important to this person and tries hard to do what religion requires.		
6	This person thinks it is best to do things in traditional ways and keep up the customs he or she has learned.		
7	It is important to this person to make own plans and decide what to do.		
8	This person thinks it is important to be interested in things and try to understand all sorts of things.		
9	It is important to this person to be independent and rely on himself/herself.		

B) Locus of control

Now I will read a list of statements dealing with general feelings about yourself. Do you strongly agree, Agree, Disagree or strongly disagree with the following statement about yourself on a Likert scale 1-7 where 1=Disagree completely and 7=Agree completely.

1	How my life goes depends on me.	Scale of 1-7	
2	Compared to other people, I have not achieved what I deserve.		
3	What a person achieves in life is above all a question of fate or luck.		
4	If a person is socially or politically active, he/she can have an effect on social conditions.		
5	I frequently have the experience that other people have a controlling influence over my life.		
6	One has to work hard in order to succeed.		
7	If I run up against difficulties in life, I often doubt my own abilities.		
8	The opportunities that I have in life are determined by the social conditions.		
9	Inborn abilities are more important than any efforts one can make.		

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10	I have little control over the things that happen in my life.		
C) Aspiration			
1	Please state a goal (that, for instance, concerns your employment status, or education, or family life) that you would like to achieve in the next 5 years	Enter text	
2	So far, what have you done to achieve that goal (circle all that applies)?	0= Nothing 1= Done some research 2= Bought equipment and materials 3= Undergone some training 4= Sourced for capital 5= Asked family or friends for advice 88= Other (specify) -97=Refuse to answer	
3	(If you selected nothing) What is the <u>main reason</u> why you done nothing to achieve the goal? (one answer only)	1=Not enough money/material 2=Do not have enough time 3=No one to support or guide me 4=I have not been serious about it 5=No motivation 6=External factors beyond my control 7=Fear that I will not succeed 8=Other, specify -97=Refuse to answer	
4	Have you tried to achieve this goal or a similar goal in the past?	1=Yes 0=No -97=Refuse to answer	
5	If you tried but did not achieve any part of the goal, please select the main factor that you think has limited you from achieving it.	1=Not enough money/material 2=Do not have enough time 3=No one to support or guide me 4=I have not been serious about it 5=No motivation 6=External factors beyond my control 7=Fear that I will not succeed 8=Other, specify -97=Refuse to answer	
6	Do you think that you will be able to achieve your goal in the next 5 years?	1=Yes 0=No -97=Refuse to answer -99=Don't know	
7	Do you know anyone who has achieved a goal that is like yours? (select all that apply)	0=No 1=Father 2=Mother 3=Sibling 4=Other relative 5=Friend or neighbour 6=Some in my community 7=Teacher	

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		8-Someone in my VSLA group -97=Refuse to answer	
8	Is anyone listed above aware of your goal?	1=Yes 0=No -99=Don't know	
9	On a scale of 1 to 5, with 5 being the most supportive and 1 being least supportive, please choose how much support you have received with respect to your goal. If they are unaware of your goal, you can say that too. (Please select N/A if unaware)		
A	Father	Scale of 1 to 5 -96=NA	
B	Mother		
C	Spouse/partner		
D	Sibling		
E	Other relative		
F	Friend or neighbour		
G	Some in my community		
H	Teacher		
I	Other VSLA member		
J	VSLA leader		
K	Other, specify		

SECTION 9. GENERAL COLLECTIVE EFFICACY

Now I am going to tell you a few statements to describe your community and your relationship with community members. Please tell me how much you agree or disagree with each description. You can say, you "completely agree", "partially agree", "neither agree nor disagree", "partially disagree" or "completely disagree".

	A) Social response		
1	This is a close-knit community (i.e. the people in this community have close personal relationships with each other).	1=Completely agree 2=Partially agree 3=Neither agree nor disagree [neutral] 4=Partially disagree 5=Completely disagree	
2	When there is a problem in this community, people come together to discuss how it should be solved.		
3	People in this community can be trusted.		
4	If there is a problem that affects the entire community, for instance, crop disease, people in this community will help each other.		
5	If there is a big dispute between two persons, other people from the community will help in solving the problem.		
	B) Social network and personal agency		
6	My neighbours sometimes come to me to share their problems and get help.	1=Completely agree 2=Partially agree 3=Neither agree nor disagree [neutral] 4=Partially disagree 5=Completely disagree	
7	If you suddenly need some money, you can borrow from a person or group in your community.		
8	If you and your relatives suddenly had to go away for a day or two, you could count on your neighbours to take care of your children.		

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9	I have the ability to contribute to this community's development.		
10	I have the capacity to achieve my future aims.		
	C) Community organization and leadership		
11	The leaders of community-based groups respond to this community's concerns.	1=Completely agree 2=Partially agree 3=Neither agree nor disagree [neutral] 4=Partially disagree 5=Completely disagree	
12	The community-based associations or groups in this community are very active.		
13	People in this community get to choose the leaders of their own community-based associations		
14	There are people in this community who show strong leadership		
15	Formal administrative leaders, like the LC, provide support to this community		
	D) Associational participation		
16	I attend meetings of a community groups	1=Completely agree 2=Partially agree 3=Neither agree nor disagree [neutral] 4=Partially disagree 5=Completely disagree	
17	I participate in activities held by community members as a group		
18	I attend the meetings of any government or NGO-initiated community development groups		
	E) Social attachment		
19	People in this community accept me as a member of the community.	1=Completely agree 2=Partially agree 3=Neither agree nor disagree [neutral] 4=Partially disagree 5=Completely disagree	
20	Being a member of this community is part of who I am.		
21	I feel attached to this community and its people.		
22	People in this community share the same ideas on how community matters should be managed.		
23	Most people in this community have similar hopes about the future development of the community		
	F) Common vision		
24	Most people in this community have common values, for example, they value hard work.	1=Completely agree 2=Partially agree 3=Neither agree nor disagree [neutral] 4=Partially disagree 5=Completely disagree	
25	People in this community have the capacity to make positive changes by coming together.		
26	During crisis situations, government services are distributed equally by the community to all households in need.		

THANK YOU SO MUCH FOR YOUR TIME

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CONCLUSION

1	Did the respondent terminate the survey early?	1=Yes; 0=No	
2	Why did the respondent terminate the survey?	1=No longer interested in participating 2=Tired 3=Too busy/doesn't have time 4=Offended by a question 5=Suspicious of enumerator or survey intent 6=Doesn't feel like continuing survey -98=Other specify -99=Don't know	
3	End time of interview.(24-hour clock; hh:mm)	[] [] : [] []	
4	In what language was the interview conducted?	See language codes	
5	Were any other individuals present for the interview?	1=Yes; 0=No	
6	How confident are you with the overall quality and truthfulness of this respondent's responses?	1=Very confident 2=Somewhat confident 3=Not confident	→Q7
7	Why are you not confident?	Enter full text	
8	Where was this interview conducted?	1=Respondent's house 2=Any other place	
9	GPS Location	Interview location	

List of codes

Tribes

1=Acholi	16=Bakonzo	31=Chope	46=Lugbara
2=Alur	17=Banyabindi	32=Dodoth	47=madi
3=Baamba	18=Banyankore	33=Ethur	48=mening
4=Babukusu	19=Banyara	34=IK(Teuso)	49=mvuba
5=Babwisi	20=Banyarwanda	35=Iteso	50=Napore
6=Bafumbira	21=Banyole	36=Jie	51=Nubi
7=Baganda	22=Banyoro	37=Jonam	52=Nyangia
8=Bagisu	23=Baruli	38=Japadhola	53=pokot
9=Bagungu	24=Basamia	39=Kakwa	54=sabiny
10=Bagwe	25=Basoga	40=Karamojong	55=so(tepeth)
11=Bagwere	26=Basongora	41=Kebu(Okebu)	56=vonoma
12=Bahehe	27=Batagwenda	42=kuku	57= Kenyi
13=Bahororo	28=Batooro	43=kumam	58=Munyarwanda
14=Bakenyi	29=Batuku	44=langi	-98=Other specify
15=Bakiga	30=Batwa	45=lendu	

Education codes

0=None	1=Nursery	2=P1	3=P2	4=P3
5=P4	6=P5	7=P6	8=P7	9=S1
10=S2	11=S3	12=S4	13=S5	14=S6
15=College/Vocational degree		16=University	-97=Refused	-99=Don't know

Qualification codes

- 0=None
- 1=Primary leaving examination certificate (primary completed)
- 2=Uganda certificate of education (O-Level completed)
- 3= Uganda advanced certificate of education (A level completed)
- 4=College certificate of specialization
- 5= College diploma
- 6=Management institute diploma
- 7=Management institute post graduate diploma
- 8= Bachelor's degree (University level)
- 9=Post graduate diploma (University level)
- 10= Master's degree (University level)
- 11= Doctorate (University level)

Activity

- 1= Household Chores/housewife
- 2= Household Land cultivation
- 3= Labourer on someone else's Land (agriculture day labour)
- 4= Non-agriculture day labourer (e.g. construction)
- 5= Factory worker
- 6= Livestock husbandry
- 7= Poultry rearing
- 8= Vegetable/nursery farming for sale
- 9= Fisherman / Fish-farmer
- 10= Maid
- 11= Food Processing for Sale (e.g. baking bread, cooking fish etc.)
- 12= Stitching/Handicraft/tailoring for sale
- 13= Driver (Bus/Taxi/Motorbike)
- 14= Street Vendor
- 15= Homestead-based business
- 16= Owner of shop/restaurant/hotel
- 17= Worker in shop/hotel/restaurant
- 18= Small trade/business
- 19= Large scale business (industry/wholesale)
- 20= Skilled labour (carpenter, blacksmith, potter, weaver, mechanic/repairs, goldsmith)
- 21= Community health worker (midwife, SS, TBA)
- 22= Teacher
- 23= Professionals (doctor/engineer/advocate/nurse)
- 24= Manager/administrator in private company/NGO/UN
- 25= Manager/administrator in government
- 26= Clerk/employee in private company/NGO/UN
- 27= Clerk/employee in government
- 28= Politician
- 29= Priest
- 30= Renting out land
- 31= Renting out non-land assets (e.g. shop, tractor etc.)
- 88= Other, specify

Annex 3 – Survey: VSLA (Group) Level Form

Form for Collecting VSLA level information

Women's Leadership in VSLA

Enumerator: This information is to be collected in consultation with the partner organization and from respondents who is most knowledgeable about the group and have access to the records.

Section 1. Identification

1	Name of the Enumerator:	Enumerator ID:	
2	Name of the VSLA	Enter text	
3	What name is the VSLA commonly known by?	Enter text	
4	Name of partner/supporting organization (Multiple answers possible)	0=None 1=BRAC 2=Care 3=Village Enterprise 4=Other, specify	
5	Region	1=Central 2=Western 3=Eastern 4=Northern	
6	District	Coded	
7	County	Enter text	
8	Sub-county	Enter text	
9	Parish	Enter text	
10	LC/Ward	Enter text	
Name and contacts of the respondents who are providing the information.			
		Respondent 1	Respondent 2
			Respondent 3
11	Name		
12	Respondent Phone Number		
13	Relationship with the [VSLA name] 0=Member; 1=President 2=Secretary; 3=Treasurer 4=Box keeper; 5=Record keeper 6=Money counter; 7=Other, specify		

Section 2. Group and Committee composition

We will start by collecting information about the people who are currently members of this group.

Enumerator: Collect the names from a register if available.

1	Enumerator: Are the member names being collected from written record?	1=Yes 0=No	
2	How many members do you currently have in this [VSLA name]?	Enter number	

	Full Name	Sex 1=Male 0=Female	Role See codes	How long has [name] been with this VSLA (number of months)?
1				
2				
3				
4				
5				
6				
...				

Roles: 0=General member; 1=President; 2=Secretary; 3=Treasurer;
4=Box keeper; 5=Record keeper; 6=Money counter; 7=Other, specify

Section 3. Background and Objective

SL	Question	Codes	Answer
1	When was this [VSLA name] established?	Month/Year	
2	How was the group formed? Did the members organize themselves or was it established with support from an organization?	1=Members organized 2=Supported by an agency -98=Other, specify	
3	Does this group have any activity besides savings and loans?	1=Yes 0=No	
4	(If yes) what are these objectives? (multiple answers possible)	1=Farmers' training 2=Collective marketing 3=Gender training 4=Parents' training 5=General education -98=Other, specify	
5	Was the group established mainly for saving and loan activities OR for these other (social) work?	1=Savings and loan activities 2=Other activities	
6	Does this group have a written constitution?	1=Yes 0=No	
7	What is the current cycle number of this group?	Enter the current cycle. e.g. '1' if on their first cycle, '2' if second and so on	
8	When did this current cycle start?	Month/Year	

Section 4. Rules and Procedures

Now I am going to ask you about the different rules and procedures in your group.

SL	Question	Codes	Answer
1	What is the duration of the savings cycle?	Enter number of months or text with answer (e.g., every time accumulated savings reach a given value, etc.)	
2	How often does the group meet?	1=Once a week 2=Once every two weeks 3=Once a month -98=Other (specify)	
3	Is there a requirement of minimum number of members to be present in a group meeting OR minimum attendance?	1=Yes 0=No	
4	(if yes) please explain the rule.	Explain in text	
5	What is the share size?	Enter amount in UGX	
6	What is the maximum number of shares a member can buy in every meeting?	Enter number	
7	What is the <u>maximum</u> amount a member can get as loan?	1=Equal to the member's savings 2=Two times the amount the member has saved 3=Three times the amount the member has saved 4=Four or more times the amount the member has saved -98=Other (specify)	
8	What is the <u>minimum</u> amount a member can get as loan?	1= Equal to the member's savings 2= Two times the amount the member has saved 3=Not specified -98=Other (specify)	
9	What is the rate of interest that a member must pay when taking a loan?	Enter interest rate in % (values between 0-100) and duration (e.g. per month).	
10	What is the maximum duration of a loan?	Enter number of months or text with answer (e.g., end of savings cycle, etc.)	
11	Who takes the decision of approving a loan to a member?	1=The committee 2=Members collectively in meeting -98=Other, specify	
12	Does this group have any service fee?	1=Yes; 0=No	
13	(if yes) what is the service fee?	Enter service fee in % (values between 0-100)	
14	Is there a social fund managed in this group?	1=Yes 0=No	
15	(if yes) how much is kept in the social fund?	Explain in text such as fraction of savings or a min amount etc.	
16	Who takes decision on giving money to any member from the social fund?	1=The committee 2=Members collectively in meeting -98=Other, specify	

17	How often is the management committee formed?	1=Once a year 2=Once every two years 3=Every time the fund is distributed to members 4=When the supporting organization requires to do so 5=Don't know or new group -98=Other (specify)	
18	How are members of the management committee selected? Enumerator: try to understand the process by discussing with the respondent(s) before filling out any answer option.	1=Election using anonymous vote (e.g. deposit vote in box) 2=Election by non-anonymous (e.g. raising hands) votes 3=Discussion among group members to reach a consensus 4=Current members of the management committee select new leaders -98=Other (specify)	
19	Is there any limit on how many cycles a member can be in the committee?	1=Yes 0=No	
20	Can a member sell back shares to the group before cycle ending?	1=Yes 0=No	

Section 5: Activities and Financial performance

SL	Question	Codes	Answer
1	What is the total value of savings this cycle?	Enter amount in UGX	
2	What is the current value of loans outstanding?	Enter amount in UGX	
3	How many loans are outstanding?	Enter number	
4	Did you have any write-off in this cycle yet?	1=Yes 0=No	
5	(if yes) What is the value of the write-offs in this cycle?	Enter amount in UGX	
6	How much is the current bank balance of this group?	Enter amount in UGX If no bank account, enter '99'	
7	What is the value of loan fund in box now?	Enter amount in UGX	
8	What is the current social fund balance?	Enter amount in UGX Ask if Q14 (section 4) is Yes	
9	Does this group own any property or assets besides the cash?	1=Yes 0=No	
10	(if yes) What is the value of the assets?	Enter amount in UGX	
11	Does this group have any debt from outside the group (e.g. bank loan)?	1=Yes 0=No	
12	(if yes) What is the value of the debts?	Enter amount in UGX	
13	(For groups that completed at least one cycle) Did the group pay any dividend in the last completed cycle?	1=Yes 0=No	
14	(if yes) What was the dividend per share?	Enter amount in UGX	

CONCLUSION

	Question	Codes	Answer
1	How confident are you with the overall quality and truthfulness of this respondent's responses?	1=Very confident 2=Somewhat confident 3=Not confident	
2	(If Qn1=3) Why are you not confident?	Enter full text	
3	Where did the interview take place?	1=At the VSLA meeting spot 2=Respondent's residence -98=Other, specify	
4	GPS Location of the usual meeting spot	Interview location	

We have come to the End of our Interview. Thank you.