Measuring Agency Through Psychological Constructs in Lower-Income Settings

Clare Clingain, Aletheia Donald and Maria Hernandez-de-Benito*

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Abstract

Psychological constructs related to agency—such as the ability to set goals or feel in control—are increasingly recognized as determinants of economic outcomes and well-being. Yet validated measures are scarce outside Western, Educated, Industrial, Rich, and Democratic (WEIRD) contexts. This paper introduces four scales measuring goal-setting capacity, locus of control, generalized livelihoods self-efficacy, and agricultural self-efficacy, tested through nationally representative and specialized surveys in Kenya, Malawi, Tanzania, Uganda, Benin, and Côte d'Ivoire. All scales demonstrate strong psychometric properties, though locus of control shows weaker internal reliability. Five-point Likert scales outperform 3-point alternatives. All constructs are associated with subjective well-being and socioeconomic outcomes, with generalized livelihoods self-efficacy showing the strongest associations. Associations with socioeconomic outcomes are more consistent and larger in magnitude for women, particularly for labor supply and intra-household decision-making. We recommend these scales for impact evaluations and descriptive surveys related to well-being, economic livelihoods and empowerment.

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*Clingain: International Rescue Committee, 122 E 42nd St, New York, NY 10168 (clare.clingain@rescue.org); Donald: World Bank, Africa Gender Innovation Lab, 1818 H St NW, Washington, DC 20433 (adonald@worldbank.org); Hernandez-de-Benito: CUNEF Universidad, Calle Almansa 101, 28040 Madrid, Spain (m.hernandezdebenito@cunef.edu). This paper greatly benefited from comments by Emily Beam, Lori Beaman, Andrew Dabalen, Clara Delavallade, Dean Karlan and seminar participants at the IPA & GPRL Researcher Gathering and MAGNET Seminar Series. This project is a product of the World Bank Africa Gender Innovation Lab and the MAGNET initiative. We gratefully acknowledge financial support from the World Bank's Umbrella Facility for Gender Equality, in partnership with the Bill and Melinda Gates Foundation (INV-005620). Maria Hernandez-de-Benito acknowledges financial support from the Spanish Ministry of Science and Innovation Grant PID2021-124237NB-I00.

1 Introduction

Non-cognitive skills and psychological well-being are increasingly recognized as key factors that shape economic outcomes and are, in turn, shaped by these outcomes (Heckman et al. 2006; Algan et al. 2022; Angelucci and Bennett 2024). Poverty imposes a cognitive load, which can diminish people's decision-making abilities and have psychological consequences that may preclude individuals from pursuing income-generating activities (Mani et al., 2013; Peng et al., 2013; Haushofer and Fehr, 2014; Wuepper and Lybbert, 2017; Bartoš et al., 2021; Ridley et al., 2020). At the same time, interventions aimed at improving mental health and psychosocial skills have been shown to positively impact both economic decisions and well-being (Baranov et al., 2020; Bossuroy et al., 2022; Ghosal et al., 2022; Bernard et al., 2023).

Within the broad domain of non-cognitive skills, three psychological constructs capture an individual's intrinsic agency—the ability to define goals in accordance with one's own values, perceive a sense of control over one's life, and act upon one's own decisions (Kabeer 1999; Donald et al. 2020). Goal setting reflects an individual's capacity to define clear objectives and act towards achieving them. Self-efficacy reflects the belief in one's capabilities to execute the actions needed to achieve those goals. Locus of control captures whether individuals believe that their actions and decisions—rather than external forces—determine their life outcomes.

These constructs are increasingly targeted in or used to evaluate policy interventions in development settings (Sedlmayr et al. 2020; McKelway 2024), and all three have documented links to depression, anxiety, and life satisfaction (Muris 2002; Gaudiano 2008; Law and Jacob 2013; Jacob et al. 2022). Moreover, as women's agency is generally lower than men's across countries, accurately measuring these constructs is also key for understanding women's empowerment—a development goal in its own right and a contributor to economic development (Duflo 2012; Hanmer and Klugman 2016; Annan et al. 2021).

However, measuring these psychological constructs in lower-income settings remains challenging. While some cross-cultural validation of standard scales has extended beyond WEIRD contexts, these efforts have generally not been systematic, have rarely used representative samples, and have sometimes yielded mixed psychometric properties (Laajaj and Macours 2019; Danon et al. 2024; Hennein et al. 2022). Moreover, important

construct-level gaps remain: no validated tools exist for measuring self-efficacy in the economic sphere as relevant to the diverse livelihood strategies that characterize lower-income settings, and no short-form goal-setting scale exists for use outside industrial and organizational psychology contexts.

In this paper, we first present psychometric evidence validating four newly designed scales to measure self-efficacy (both generalized efficacy related to livelihoods and domain-specific to agriculture), locus of control, and goal-setting capacity. In the second part of the paper, we document associations between our validated agency scales and measures of subjective well-being, as well as their association with socioeconomic outcomes related to economic achievement and empowerment in the household. We designed the scales to be conceptually relevant in non-WEIRD populations and rigorously tested them across nine different surveys in six countries in Sub-Saharan Africa, ensuring their applicability and robustness across multiple contexts.

Our findings provide robust support for the psychometric properties of the four scales, both in terms of validity and reliability, for respondents in two large-scale representative surveys (Malawi and Tanzania) as well as more targeted surveys conducted among urban and rural entrepreneurs in Uganda and Kenya, refugees and host community farmers in Uganda, and young female adults in Kenya. The one exception is locus of control, where internal reliability was weak whether implemented in a large-scale representative survey in Malawi, with entrepreneurs in Uganda, with factory workers in Côte d'Ivoire or with adolescent girls in Benin, consistent with prior findings—suggesting that cultural context may influence interpretations of the construct (e.g., Laajaj and Macours, 2019; Ross, 2019).

In terms of associations with other measures of well-being, goal-setting capacity and agricultural self-efficacy are both linked to higher life satisfaction and time-use satisfaction, with effect sizes ranging from 0.03 to 0.18 SDs. These relationships are stronger for women across outcomes. Our measure of generalized livelihoods self-efficacy shows the strongest associations with current and expected life satisfaction across Kenya and Tanzania, with effect sizes ranging from 0.14 to 0.19 SDs—though these associations are, if anything, stronger for men. Internal locus of control is positively associated with life satisfaction in Malawi and Uganda, and has a negative association with depression scores among women in Uganda (0.15 SDs), and a positive one with reported happiness among factory workers in Côte d'Ivoire (0.11 SDs).

Importantly, we also show that, as expected from theory and prior evidence (Campos et al., 2017; Orkin et al., 2023), individuals with higher individual agency are more likely to participate in the labor force and earn higher incomes. Goal-setting positively relates to labor supply, with a one SD increase associated with a 2-5 percentage point higher labor force participation (LFP) and a 1.9-2.3 increase in weekly working hours—both more important for women. We find no relationship of goal-setting capacity with business ownership, but we do find a significantly positive relationship with weekly earnings for men, as well as a 0.13 SD reduction in food insecurity (driven by a 0.19 SD reduction among men). We find very similar results for agricultural self-efficacy, though here the relationship with labor supply is not just stronger for women, it only holds for women. Livelihoods self-efficacy shows the strongest associations overall, with significant increases in LFP, working hours, earnings, and reductions in food insecurity, as well as higher business ownership and profits. Internal locus of control also correlates negatively with food insecurity (with an effect size of 0.18 SD) but has mixed associations with labor outcomes, including lower labor supply among salaried workers in Côte d'Ivoire.

Finally, all constructs are linked to enhanced intra-household decision-making. For goal-setting capacity, agricultural self-efficacy, and generalized livelihoods self-efficacy, magnitudes are at least twice as large for women as for men across all contexts where we collect the data for both genders. Locus of control is also positively associated with women's intra-household decision-making, though we lack a male comparison for this construct. In the one survey in Kenya where we could measure women's experience of intimate partner violence (IPV) alongside generalized livelihoods self-efficacy, we find that a one SD increase in livelihoods self-efficacy is associated with a 3-percentage point reduction in the likelihood of lifetime IPV exposure. This lower risk of violence holds for both emotional and physical IPV.

Taken together, our findings indicate that our four newly developed scales are suitable tools for measuring perceived individual agency in lower-income contexts, with applicability in both nationally representative surveys, or more targeted surveys spanning farmers, entrepreneurs, refugees and factory workers. Generally, we find that women exhibit lower levels of individual agency across most contexts and subpopulations contained in our data. But individual agency appears to matter more for women's outcomes in terms of life satisfaction, happiness, labor supply, and intra-household decision-making—with the exception

of generalized self-efficacy and locus of control mattering more for male life satisfaction, and all individual agency constructs mattering more for male food security. Moreover, agency—and in particular, internal locus of control—emerges as more empirically important for respondents working in entrepreneurship or other activities relying strongly on self-starting behaviors rather than salaried workers.

Given our findings, we recommend these new validated tools for use in a wide range of surveys, including endline surveys evaluating the impact of different types of policy interventions, such as those aimed at improving psychological well-being, enhancing livelihoods and resilience, or shifting intra-household dynamics. Additionally, they are suitable as baseline measures of key psychosocial skills to study heterogeneous treatment effects in impact evaluations.

Our paper contributes to several strands of the literature. First, we expand the evidence base on measuring psychological constructs in development settings by introducing four new validated scales. Standard noncognitive measures can suffer from large measurement error when used in non-WEIRD contexts (Laajaj and Macours 2019; Danon et al. 2024), and most validation efforts in lower-income settings have focused on diagnostic tools for psychological disorders (Ali et al. 2016) rather than on agency-related constructs. For self-efficacy and locus of control, some cross-cultural validation exists, but dedicated psychometric studies in low-income countries have relied on small or specialized samples and yielded mixed results, and when commonly used scale items have been rigorously tested in household surveys in developing countries, noncognitive measures have shown poor reliability and validity (Laajaj and Macours 2019). At the construct level, important gaps remain: no scale previously existed for measuring self-efficacy related to livelihoods or specific to smallholder agriculture, existing goal-setting scales are lengthy and designed for formal workplace settings in high-income countries (Latham and Locke 1979; Lee et al. 1991), and the one existing short-form multidimensional locus of control scale (Sapp and Harrod 1993) was validated only with U.S. university students. Our four scales address both sets of gaps—measurement and construct—while providing rigorous psychometric evidence across multiple representative and targeted surveys in six Sub-Saharan African countries.

The second main contribution of our paper is to provide new insights on how the link between psychological constructs and socioeconomic outcomes varies across demographic

and socioeconomic groups in lower-income countries. We provide novel evidence on this link for both women and men across six countries in West and East Africa, from farmers to factory workers. Despite the importance of this question, existing research using cross-country data from lower-income settings is relatively thin. One exception is Das et al. (2009), who find an association between poor mental health and lower labor force participation (especially for women) using data from 5 countries, but little observed relation between mental health and consumption poverty or education. More recent evidence comes from the literature on socio-emotional skills. For example, Ajayi et al. (2022) analyze data from 17 African countries on ten socio-emotional skills. They find that intrapersonal skills (positive self-concept, emotional regulation, self-control, perseverance, personal initiative problem-solving and decision-making) are associated with higher income for both men and women, while interpersonal skills (empathy, expressiveness, interpersonal relatedness, and teamwork) only matter for women's earnings.

Finally, our paper contributes to the literature on women's agency. Improving women's agency is increasingly recognized as crucial for advancing gender equality and the empowerment of women (Hanmer and Klugman, 2016; Kabeer, 2016; National Academies of Sciences, Engineering, and Medicine, 2024), goals enshrined as crucial development objectives in the Sustainable Development Goals. Although advancements have been made, effective methods for evaluating many aspects of women's empowerment are still underexplored. For example, tools for measuring women's agency are often validated only in specific contexts, such as high-income groups, and lack consistent survey implementation standards. This limitation makes it challenging to accurately measure agency across the diverse countries and contexts where such data is critically needed (Donald et al., 2020; Ibrahim and Alkire, 2007). Moreover, widely used measures——particularly those designed for integration into large-scale national surveys——fail to fully reflect the complex and multi-dimensional nature of women's agency (Bhan et al., 2022; Laszlo et al., 2020). Our work thus expands the existing toolkit on conceptually precise measures of agency that can be embedded and tracked in nationally-representative surveys, while generating evidence on how many of these constructs are particularly relevant for women's socioeconomic outcomes.

Our paper proceeds as follows. We first review the motivation for and theoretical structure of the measures (Section 2), present our methodology (Section 3) and results on

the scales' reliability and validity (Section 4). Section 5 shows the relationship between each of our scales and measures of subjective well-being, economic achievement and intra-household outcomes. Section 6 discusses the results and concludes.

2 Psychological Agency Constructs

Agency is the capacity to set one's own goals and act towards achieving them (Kabeer, 1999). It includes the ability to initiate changes in one's environment or outcomes, through direct decision-making or indirectly by breaking from routine behaviors, with its expression varying by context (Sen 1985; Donald et al. 2020).

Within this framework, an individual's ability to set goals is a vital component of agency. Therefore, we first focus on measuring goal-setting capacity. Next, we turn to a second key component of agency, which is the degree to which individuals believe their own actions can contribute to achieving their goals. To do so, we employ new measures for the well-defined psychological constructs of self-efficacy and locus of control. In the remainder of this section, we review the existing measurement methods for each of these psychological constructs, identify the relevant research gaps, and introduce four newly designed scales to address the identified gaps.

2.1 Goal-Setting Capacity

The concept of goal-setting capacity was initially explored in Locke (1968)'s psychological theory of motivation, which proposes that clear, specific, and challenging goals are essential for motivating individuals and enhancing performance. The first tool to measure goal-setting capacity was a 53-item scale developed by Latham and Locke (1979), designed to assess employees' goal-setting strategies and identify key goal attributes that may be hindering their performance. The validation of this scale and of subsequent adaptations took place in the field of industrial and organizational psychology in WEIRD contexts, using standardized questionnaires and scales to enhance performance-specific tasks (Earley et al. 1987; Lee et al. 1991; Stout 1999; Locke and Latham 2006). In clinical psychology, goal-setting is also increasingly used within therapeutic treatments for anxiety and depression (Gaudiano 2008; Law and Jacob 2013; Jacob et al. 2022).

Although, to the best of our knowledge, the standardized goal-setting questionnaires and scales stemming from industrial psychology have not been used in research in Sub-Saharan Africa, recent attention to the importance of goal-setting capacity in development

settings has increased due to its importance in explaining socioeconomic outcomes. For example in Tanzania, Shah et al. (2023) find that a goal setting activity aimed to improve women's sexual and reproductive health outcomes reduced intimate partner violence (IPV) by helping women exit violent relationships, while Abel et al. (2019) find that setting goals related to job search increased employment by 26% among youth in South Africa.

Goal-Setting Capacity Scale (GSC) To fill this measurement gap, we designed and tested a new goal-setting capacity scale (hereafter, GSC). The GSC, presented in column (1) of Table 1, is thus a new instrument for an existing construct. Specifically, this 8-item measure is designed to capture three sub-constructs: goal creation and action (GA), goal clarity (GC), and goal importance to self (GI), which emerged as important in past work on goal-setting capacity (Latham and Locke, 1979; Lee et al., 1991).

In contrast to existing scales, the GSC does not include sub-constructs such as supervisor support in creating goals and use of goal setting in performance appraisal, due to their lack of applicability outside of formal employment settings. Rather, the three sub-constructs (GA, GC, GI) aim to capture goal-setting capacity in its simplest, most general form to ensure relevance for a broad range of socioeconomic activities.

2.2 Self-Efficacy

The construct of self-efficacy, the belief in one's capabilities to act effectively toward a goal (Bandura 1977), is recognized across disciplines as an important factor influencing economic decisions, psychological well-being, and health behaviors (Zimmerman 2000; Benight and Bandura 2004). Self-efficacy has been linked to the emotional stability factor within the Big Five personality framework (Kautz et al. 2014), though it is conceptually distinct in that it is responsive to experience and context.

Self-efficacy has been shown to positively correlate with educational and employment aspirations and outcomes also in non-WEIRD contexts (Roy et al. 2018; Ansong et al. 2019; McKelway 2022). Furthermore, experimental evidence has shown that psychosocial interventions improving self-efficacy have led to positive impacts on female labor supply in India (McKelway 2024), preventive health behaviors in Kenya (John and Orkin 2022), and human capital investments in Ghana (Frohnweiler 2024).

In the literature, there are two main conceptualizations of self-efficacy, which result in two main measurement approaches. In the first one, originally envisaged by Albert Ban-

Table 1: The New GSC, AGSE, GLSE and S-LOC Scales

Goal-Setting Capacity (GSC)	Agricultural Self-Efficacy (AGSE)	Generalized Livelihoods Self-Efficacy (GLSE)	Locus of Control (S-LOC)
1. I set short-term goals for myself (GA)	1. Identify the best crops to plant on a field (S)	1. I am able to work outside the home if I want to (CD)	1. To a large extent, my life is controlled by accidental events (CH)
2. I set long-term goals for myself (GA)	2. Locate the market or selling spot where you will be able to get the highest price for each crop (S)	2. I am free to pursue the types of work that interest me (CD)	2. My life is determined by my own actions (IN)
3. I set specific, clear goals for myself (GC)	3. Determine what type of inputs (such as improved seeds or fertilizer) you will use on your crops (P)	3. I am able to adjust my daily work schedule whenever I need to (CD)	3. I feel like what happens in my life is mostly determined by the other members of my household (PO)
4. I make plans to help me achieve my goals (GA)	4. Decide when you should harvest each crop to obtain the best quality (P)	4. I am able to decide how household resources are used to pursue economic activities (CD)	4. I can pretty much figure out what's going to happen in my life (IN)
5. I feel proud when I achieve my goals (GI)	5. Interact with other farmers to gather information and develop professional contacts (M)	5. I am able to make decisions to improve my own economic well-being (CD)	5. I often have no chance to protect myself and my livelihood from bad luck (CH)
6. I am able to prioritize multiple goals (GC)	6. Obtain transport to bring your crops to the market (M)	6. I have the skills I need to engage in income-generating activities (RS)	6. My life is mainly controlled by my family outside the home (PO)
7. Setting goals for myself is good for my success (GI)	7. Manage household members to help out on your plots (IP)	7. I have the social support I need to engage in income-generating activities (RS)	7. I am generally able to protect what is important to me (IN)
8. Setting goals for myself is good for my household's success (GI)	8. Supervise other workers to work on your plots (IP)	8. I have the financial support I need to engage in income-generating activities (RS)	8. When I get what I want, it's usually because I'm lucky (CH)
	9. Save enough to be able to buy fertilizer and labor at the right time (IF)	9. I am able to find the information I need to make good decisions for my income-generating activities (RS)	9. I have very little chance of protecting my personal interests when they come into conflict with those of other community members (PO)
	10. Obtain a formal or informal loan to buy the farming materials you need (IF)	10. I have the confidence I need to succeed in my income-generating activities (RS)	

Notes: The agricultural self-efficacy scale asks respondents "How much confidence do you have in your ability to ...?". All other scales ask respondents for their level of agreement with the scale items.

dura, self-efficacy is a context-specific judgment of one's ability (Bandura 1977). Therefore, measuring self-efficacy involves asking the respondent about their confidence in completing specific actions. The second main conceptualization of self-efficacy in the literature is as a generalized belief about one's overall competence, regardless of the specific domain.

Agricultural Self-Efficacy Scale (AGSE) In lower-income countries, scales for measuring the first conceptualization of self-efficacy have mostly focused on domain-specific tools within health and entrepreneurship (Asante and Doku 2010; McKenzie and Puerto 2015). However, no self-efficacy scale previously existed for smallholder agricultural activities, despite the centrality of agriculture to livelihoods in lower-income settings (World Bank Development Indicators, 2022).

To fill this gap, we designed and tested a 10-item agricultural self-efficacy scale (AGSE) focused on constraints relevant to farmers in low-income settings, see column (2) of Table 1. Hence, the AGSE applies Bandura's established domain-specific measurement framework to a new, previously ignored, domain. Following McGee et al. (2009)'s systematic review of the dimensions of entrepreneurial self-efficacy, the new scale was designed to capture the four phases of an economic activity: searching (S), planning (P), marshaling (M), and implementing, which was divided into two categories, implementing related to people (IP) and implementing related to finance (IF).

Generalized Livelihoods Self-Efficacy Scale (GLSE) Existing instruments designed to measure self-efficacy as a generalized belief assess an individual's overall confidence in their ability to succeed in various tasks and situations, without specifying what these tasks or situations are. The most widely used instrument for this conceptualization is the 10-item GSES (Schwarzer and Jerusalem 1995), which has been validated across 25 countries (Scholz et al. 2002; Luszczynska et al. 2005; Crandall et al. 2016). Cross-cultural adaptations have also been completed in Sub-Saharan Africa, including a Swahili version with Tanzanian youth (Johnson et al. 2019) and one among community health workers in Uganda (Hennein et al. 2022). However, these dedicated validation studies in low-income settings have relied on small or specialized samples and yielded results that raise questions about cross-cultural transferability (e.g., Hennein et al. (2022) found an unexpected three-factor structure in their study).

Moreover, despite the central importance of self-efficacy for poverty mitigation and economic achievement—particularly relevant outcomes in low-income settings—there is currently no generalized self-efficacy scale related to individuals' safeguarding and expansion of their livelihoods. The GLSE fills this gap. The resulting 10-item instrument, shown in column (3) of Table 1, was designed to capture two main domains: respondents'

confidence regarding their resources and skills (RS) as well as their overall control and decision-making over economic decisions (CD). The RS sub-construct captures whether respondents have the skills, social support, financial support, and information needed for income-generating activities. The CD sub-construct captures whether respondents are able to work outside the home, can adjust their work schedule, and can control how household resources are used in pursuit of economic activities.

2.3 Locus of Control

The construct of locus of control, defined as the extent to which individuals believe that events are caused by their own behavior versus external factors, originates from Rotter's social learning theory in clinical psychology (Rotter, 1966, 1982). Rotter defined internal locus of control as believing one's behavior and personality traits determine life outcomes, while external locus is the belief that outcomes are controlled by external factors such as luck, fate, or powerful others. The theory proposes that a higher internal locus fosters adaptive behaviors, whereas a stronger external locus may lead to more passive responses to challenges—though this relationship is complex and may vary across cultural contexts. Similarly to self-efficacy, it is associated with the emotional stability trait within the Big Five personality framework (Kautz et al. 2014).

In terms of measurement, Rotter's original 23-item scale, later revised to an 11-item version by Valecha (1972), is widely used due to its high internal validity. For example, in economics, Heckman (2006) and Heckman and Kautz (2012) used the scale to assess its predictive ability for a range of long-term success outcomes in children who participated in early childhood programs or formal schooling, and Caliendo et al. (2022) demonstrate that higher internal locus of control leads to increased take-up of general work-related training.

From a conceptual perspective, Reid and Ware (1973) argued that Rotter's original framework was too narrow, instead proposing a multidimensional view of locus of control. In response, Levenson (1981) developed the Internality, Powerful Others, and Chance (IPC) scale to differentiate among external locus dimensions. Separately, Furnham (1986) developed a 40-item Economic Locus of Control Scale measuring beliefs about wealth and poverty in the economic sphere, but this instrument was designed for and validated in high-income country populations. Cross-cultural applications of the general locus of

control (LOC) scales have yielded mixed results: Riordan (1981) administered both the Rotter and Levenson scales to South African students across four ethnic groups and found factor structures unique to each group, raising questions about cross-cultural equivalence. In SSA specifically, Abbas (2016) validated the IPC among Nigerian professionals, Dercon et al. (2014) applied it to low-literacy populations in Ethiopia, showing adequate internal consistency, and Rossier et al. (2002) tested the IPC in Burkina Faso, finding that the intended three-factor structure could not be replicated though a two-factor solution was replicable with lower reliabilities. More broadly, Laajaj and Macours (2019) rigorously tested commonly used noncognitive scale items—including locus of control—among 900 farmers in Western Kenya and found poor reliability and validity, underscoring the need for instruments specifically designed for these contexts. However, all of these efforts either relied on the long-form 24-item IPC scale or were not designed as stand-alone validated instruments for the multi-topic household surveys common in development research. To our knowledge, the one existing short-form multidimensional LOC scale (Sapp and Harrod, 1993) was validated only with U.S. university students.

Short-form Locus of Control Scale (S-LOC) Our new 9-item short-form locus of control scale (S-LOC), presented in column (4) of Table 1, was designed to capture three main subconstructs: internal locus of control (IN), reflecting the belief that outcomes are determined by one's own actions and efforts; chance external locus (CH), capturing the belief that events are driven by luck or randomness; and powerful others locus (PO), representing the belief that other people significantly influence the respondent's life outcomes. The S-LOC is a modified adaptation of existing instruments and makes two key contributions. First, it builds on the Sapp and Harrod (1993) scale by disentangling the concept of "powerful others"—recognizing that external locus of control may vary depending on whether household members or community members are perceived as the "powerful others" influencing the respondent's actions. Second, it validates this modified multidimensional short-form locus of control scale in low-income, low-literacy settings.

3 Data

3.1 Scale Development and Validation

We designed and assessed the validity and reliability of the four new scales as part of the Measures for Advancing Gender Equality (MAGNET) research initiative, which aims to

broaden and deepen the measurement of agency.[1] All four scales were designed to be well-suited for surveys conducted by national statistical offices, other nationally representative individual- or household-level surveys, and targeted thematic or impact evaluation studies in low- and middle-income countries.

To yield a broad range of insights and validate the scales for multiple population groups, we tested each of the newly developed measurement tools in at least three contexts (either regions of a country or across countries) for a total of nine different surveys in six different countries. All scales were pre-piloted to address any local adaptation, translation issues or general lack of understanding before each data collection. As detailed below, we also conducted in-depth cognitive interviews with respondents (Willis et al., 1999). The scales' response options are all Likert scales and, as part of the validation process, we randomized whether the respondent was administered a three-point or a five-point response scale.[2] In most cases, the order of the scale items was also randomized.

Table A1 maps each scale to the surveys in which it was implemented. In brief, the surveys span a wide range of populations. Two are nationally representative household surveys led by the World Bank's LSMS program: one in Tanzania (2022) and one in Malawi (2022–2023). Two are drawn from Kenya: a baseline survey of young women enrolled in a vocational training program (IDRC, 2021) and an endline survey of a large youth employment program covering both women and men (KYEOP, 2023). In Uganda, we draw on an endline survey of refugee and host-community farmers (IRC, 2022) and a baseline survey of female market vendors in Kampala. The Côte d'Ivoire sample consists of workers at a cashew processing factory near Abidjan, while the Benin data come from a survey of adolescent girls and their mothers conducted as part of the SWEDD project. Finally, one survey in Malawi was conducted by IFPRI as part of the pro-WEAI. This

[1] The MAGNET initiative is a collaboration between the World Bank's Africa Gender Innovation Lab (GIL) and Living Standards Measurement Study (LSMS teams), the International Food Policy Research Institute (IFPRI), the International Rescue Committee (IRC), and researchers at the University of Oxford, Tufts University, CUNEF Universidad, Brookings, Makerere University, and the Indian Institute Of Management–Bangalore. See https://magnet.ifpri.info for more information.

[2] In the goal-setting, locus of control and generalized livelihoods efficacy scales, the response scale options following "Please indicate the degree to which you agree with each of the following statements" were either "1. Disagree; 2. Neither agree nor disagree; 3. Agree" or "1. Completely disagree; 2. Mostly disagree; 3. Neither agree nor disagree; 4. Mostly agree; 5. Completely agree". For the agricultural self-efficacy scale, the response scale following "How much confidence do you have in your ability to...?", was either "1. No confidence at all; 2. Some confidence; 3. Complete confidence" or "1. No confidence at all; 2. Slight confidence; 3. Some confidence; 4. A great deal of confidence; 5. Complete confidence".

diversity of contexts allows us to test whether the scales' properties hold across different populations. Appendix A provides a summary of each of the data collections.

3.2 Outcomes of Interest

Agency and Well-being

Psychological agency constructs For each construct, we compute "naive" scores by taking the mean across scale items. In the bottom part of Table 2, we present the mean and standard deviation for each scale by survey for both the three-point and five-point Likert response scales. In Appendix Figures A1-A4, we plot the distribution of each scale using survey data. In our regression analysis, we will show that the results are robust to other standard index aggregation methods, such as principal component analysis. Starting from Figure 1, we present all scales in standardized form (i.e., in standard deviation units) for ease of interpretation.

Subjective well-being measures: Across surveys, we capture additional dimensions of individuals' psychological well-being using validated measurement tools. The most frequent is the Cantril ladder life satisfaction question (OECD, 2013; Helliwell et al., 2024), implemented in two versions: current self-placement on the ladder and expected placement in five years. This scale has been shown to correlate with other emotional well-being measures as well as suicide rates (Bray and Gunnell, 2006; Levin and Currie, 2014). The Kampala survey includes the PHQ-4 scale for depression and anxiety (Christodoulaki et al., 2022), while the Côte d'Ivoire survey uses the O-HL happiness scale from the World Values Survey (Inglehart et al., 2022). The Malawi LSMS and Kampala surveys also assess respondents' time use satisfaction. See Appendix A.2 for the specific data variables.

Socioeconomic Outcomes

Economic achievement: We also construct comparable economic outcomes across surveys, namely: an indicator equal to one if the respondent worked for pay in the past week, the number of hours worked per week (set to zero if the respondent is not working), and a measure of weekly earnings (set to zero if the respondent earns no income), converted into international PPP-adjusted dollars.[3] Whenever available, we also create an indicator variable equal to one if the respondent owns or runs a business, as well as a measure of

[3]Source: International Comparison Program, World Bank — World Development Indicators database, World Bank — Eurostat-OECD PPP Programme.

business profits (PPP-adjusted). Weekly earnings and business profits are winsorized at the 5% level on both tails. In two of the surveys, we also have available the validated 8-item Food Insecurity Experience Scale (FIES), an experience-based metric of food insecurity severity (Cafiero et al. 2018), which we aggregate with principal component analysis and standardize afterwards.

Empowerment: To capture empowerment, we build indices of an individual's participation in intra-household decision-making, a common metric of intra-household bargaining power (Banerjee et al. 2015; Ambler 2016; Lavy et al. 2022). In each survey that includes a decision-making module, we create a variable equal to one for each decision domain where the respondent answers that they participate in the household decision. We then aggregate the number of decisions in which they participate. Given that the number and description of household decisions don't always coincide across surveys, we create a decision-making index by standardizing the measure within each survey so that the interpretation is in standard deviation units. In one of the surveys, we also have data on women's experiences of intimate partner violence (IPV), and we create a dummy variable equal to one if the woman reports having ever experienced it, as well as separate dummies for emotional and physical IPV.

3.3 Summary Statistics

Table 2 provides summary statistics of sample respondents for each data collection round. Appendix Tables A2 and A3 show summary statistics for female and male respondents separately.

We observe substantial variation in respondent characteristics across surveys and contexts, as expected given the differing sampling strategies employed across surveys (Appendix A). For instance, the average age of respondents varies widely, from 28 years in Kenya's IDRC survey to 43 years in Benin's mother survey (and 15 years in Benin's adolescent sample). Educational attainment also differs significantly across contexts: while all respondents in the IDRC survey have attended school, this proportion is only 18% in Uganda's Kampala survey. Similarly, the proportion of respondents with completed secondary education varies considerably.

Economic activity indicators also show marked differences. The proportion of respondents working for pay is highest in the Kampala survey (92%), compared to only 22%

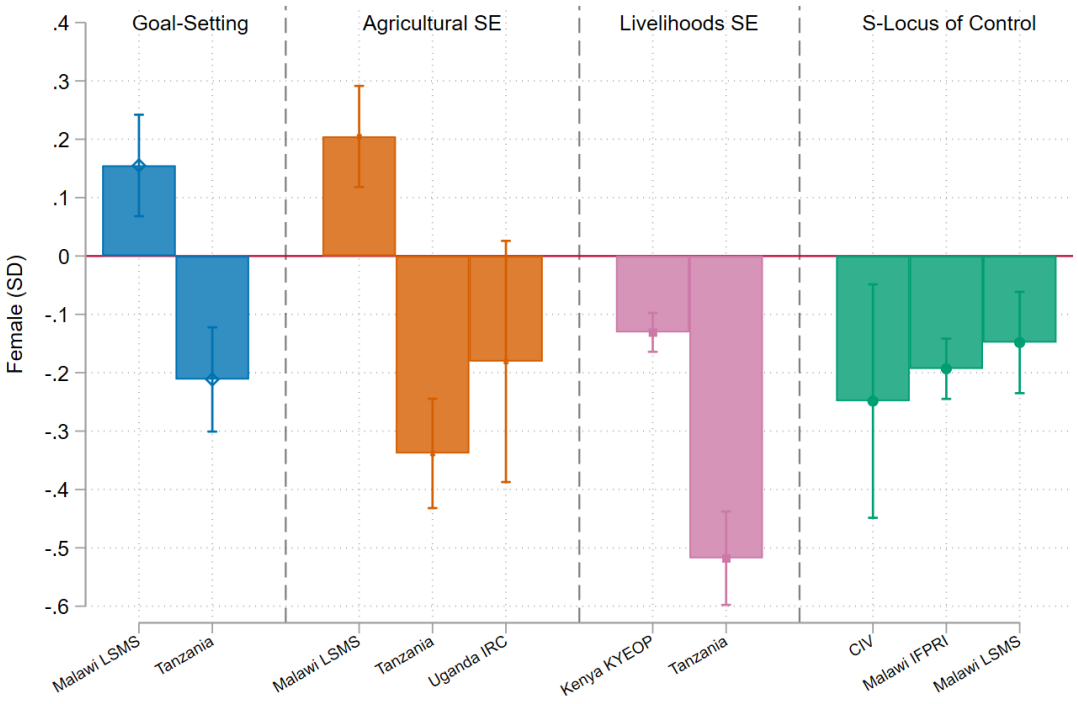
Table 2: Summary Statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Kenya		Malawi			Uganda			Benin	
	IDRC	KYEOP	LSMS	IFPRI	Tanzania	IRC	Kampala	Cote d'Ivoire	Mothers	Girls
Sociodemographics										
Female	1.00	0.60	0.50	0.62	0.72	0.56	1.00	0.84	1.00	1.00
	[0.00]	[0.49]	[0.50]	[0.49]	[0.45]	[0.50]	[0.00]	[0.37]	[0.00]	[0.00]
Age	23.83	24.73	32.12	29.78	42.47	37.63	34.16	32.82	43.50	15.63
	[4.39]	[2.94]	[12.01]	[10.82]	[15.79]	[11.25]	[9.82]	[7.00]	[11.57]	[3.39]
Married	0.28	0.53	0.75	0.89	0.70	0.84	0.53	0.42	0.79	0.09
	[0.45]	[0.50]	[0.43]	[0.31]	[0.46]	[0.37]	[0.50]	[0.49]	[0.41]	[0.29]
Household size	4.31	3.87	4.99	4.30	3.19	9.38	4.84	5.35		
	[2.02]	[2.31]	[1.84]	[1.90]	[1.86]	[4.50]	[1.91]	[3.66]		
Ever school	1.00	1.00	0.42		0.80	0.65	0.18	0.77	0.25	0.75
	[0.06]	[0.05]	[0.49]		[0.40]	[0.48]	[0.38]	[0.42]	[0.43]	[0.43]
Secondary	0.72	0.37	0.25		0.18	0.13	0.05	0.67	0.12	0.52
	[0.45]	[0.48]	[0.43]		[0.38]	[0.34]	[0.21]	[0.47]	[0.32]	[0.50]
Working for pay	0.30	0.85	0.57		0.35		0.92	0.22		
	[0.46]	[0.36]	[0.50]		[0.48]		[0.26]	[0.41]		
Weekly hours for pay	12.03	35.45	27.13		25.89			8.38		
	[21.19]	[25.19]	[25.49]		[25.11]			[18.63]		
Weekly earnings (w. 5%)	9.30	69.57	13.73		72.96		65.52	22.34		
	[17.77]	[67.24]	[26.83]		[80.33]		[53.46]	[44.82]		
Business owner	0.08	0.51	0.24				0.86			
	[0.27]	[0.50]	[0.43]				[0.35]			
Refugee						0.50				
						[0.50]				
Psych. Construct Scales										
Goal-Setting: GSC 3p	2.89		2.81		2.74					
	[0.22]		[0.21]		[0.41]					
GSC 5p	4.63		4.41		4.27					
	[0.50]		[0.52]		[0.80]					
Agricultural SE: AGSE 3p			2.45		2.25	2.26				
			[0.44]		[0.59]	[0.39]				
AGSE 5p			3.81		3.19					
			[0.86]		[1.20]					
Livelihoods SE: GLSE 3p	2.57	2.71			2.46					
	[0.29]	[0.27]			[0.54]					
GLSE 5p	4.03	4.23			3.78					
	[0.56]	[0.48]			[0.97]					
Locus of Control: S-LOC 3p			2.08	2.04			2.16	2.23		
			[0.30]	[0.32]			[0.28]	[0.34]		
S-LOC 5p			3.18	3.05			3.26	3.33	2.85	2.88
			[0.57]	[0.60]			[0.48]	[0.51]	[0.36]	[0.44]
Sample size	1,664	9,418	1,431	4,339	1,416	263	956	757	5,675	12,230

Notes: This Table presents summary statistics of all respondents included in the analytical sample. Each column presents sample mean and standard deviation (in brackets) in each of the surveys.

in our Côte d'Ivoire data. Weekly earnings (in international PPP-adjusted dollars) vary widely, from an average of 22.34 in Côte d'Ivoire to 72.96 in the Tanzania survey. Likewise, the proportion of respondents who report being entrepreneurs ranges from 8% up to 86% in the Kampala survey (focused on female market vendors).

Figure 1: Psychological Construct Scales: Gender Gap



Notes: This figure displays the estimated gender gap in standard deviations, along with the 90% confidence interval (CI), for each of the survey implementations of each of the psychological construct scales.

Consistent with prior research measuring psychological traits (Lynn and Martin 1997; Costa Jr et al. 2001; Schmitt et al. 2008; Ajayi et al. 2022), we observe significant gender differences in each of the scales across contexts. In Figure 1, we present the mean gender gap in standard deviations in each of the constructs, controlling for age, marital status, and education, for each of the surveys that include both female and male respondents.[4] The gender difference is statistically significant across all surveys, with measures consistently lower for women, except in the Malawi LSMS survey, where women, on average, report

[4]The gender gap is estimated using the following regression, conducted separately for each survey: Psych. Construct$_i = \alpha + \gamma \text{Female}_i + \theta X_i + \epsilon_i$,, where Psych. Construct$_i$ represents the standardized naive score of each of the four scales for respondent i; Female$_i$ is a dummy variable indicating female gender; and X_i includes controls for age, marital status, and education.

higher goal-setting capacity and agricultural self-efficacy compared to men.

4 Measurement Properties

Following the psychometrics literature (Furr, 2021), as well as recent applications in economics (Laajaj and Macours 2019; Danon et al. 2024), we present results on the validity and reliability of our four new scales. We examine content and face validity (through expert review and respondent understanding), construct and structural validity (through pairwise correlations and confirmatory and exploratory factor analysis), and internal reliability.

Table B1 provides a detailed overview of each step in our validation process, organized by the two main dimensions of measurement quality: validity (whether the scale measures what it is intended to measure) and reliability (whether it does so consistently). For each dimension, we describe the specific tests conducted and note three standard tests that were not applicable to our context. First, because these scales were intended to fill measurement gaps, no "gold standard" scales exist for comparison, precluding criterion validity. Second, we did not assess test-retest reliability. Although test-retest is a standard measure of reliability for stable traits, the constructs measured by our scales are responsive to experience and intervention: self-efficacy changes through mastery experiences and targeted psychosocial programs (Bandura 1977; McKelway 2024), locus of control shifts in response to early-life circumstances and shocks (Shoji 2020), and goal-setting capacity is directly targeted by development interventions (Abel et al. 2019; Shah et al. 2023). Low test-retest correlations would therefore be ambiguous—they could reflect measurement error or genuine change in the construct. Third, because our scales are self-reported, inter-rater reliability does not apply: there is no independent observer making a judgment about the respondent's answer, as the respondent is the sole reporter of their own beliefs and perceptions.

Key methodology and summary results are presented in the main text of the paper; detailed analysis is presented in Appendix B.

4.1 Assessing Measurement Quality

4.1.1 Content and Face Validity

Content validity refers to the extent to which a measurement reflects the intended construct, while face validity refers to the extent to which the scales are subjectively

viewed as covering the concept they purport to measure (DeVellis 2017; Jose et al. 2017). There are no specific statistical methods for evaluating them, but they are supported by theoretical frameworks and can be assessed by experts in the subject matter. Each of the four agency scales was developed after a thorough review of the empirical and theoretical literature, with input provided through a series of consultations with subject matter and technical experts organized by the MAGNET initiative. Face validity was additionally assessed through survey firm review prior to cognitive testing and pre-piloting. In some of the surveys, we also conducted more in-depth cognitive interviewing led by expert qualitative researchers that led to the refinement of the scale content. The cognitive interview process focused on how respondents understood and interpreted the questions and their response options. Respondents explained what they thought each question was intended to capture. In some cases, this led to revision of terminology in order to minimize misinterpretation and ensure more consistent understanding across participants.

Respondent understanding of the scales is consistently high, with at least 70% of respondents finding the questions fully clear and simple to answer, except for tools implemented in the Tanzania LSMS survey, where this share is slightly lower but still above 65%. Across implementation rounds, the percentage answering "Very unclear and difficult to answer" is very small, never exceeding 10 percentage points (Tables B2, B3, B4).[5]

4.1.2 Construct and Structural Validity

Construct validity assesses how well the measure captures the construct of interest through statistical associations with other measures it is supposed to be correlated with. We assess construct validity by calculating pairwise correlations of each of our measures with respondent characteristics which we expect correlation with, based on theory or prior empirical evidence. The results are summarized in Appendix B.2.

Construct validity can be further assessed through factor analysis, which we will refer to as structural validity. We assess structural validity by first conducting confirmatory factor analysis—a form of structural equation modeling (SEM)—to test whether the theorized factor structures from the design phase were accurate. We use four statistics to assess goodness of fit for each of the models, with the following established cut-offs: a non-

[5] After each scale's implementation, respondents were asked: "How clear did you find the phrasing of the preceding question?" (1=Very unclear and difficult to answer, 2=Slightly unclear and slightly difficult to answer, 3=Clear and simple to answer).

significant chi-square test, a Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI) above 0.90, and a Root Mean Squared Error of Approximation (RMSEA) below 0.05 for good fit and below 0.08 for acceptable fit (Hu and Bentler 1999). Appendix B.3 contains tables of the standardized factor loadings for each scale.[6]

Additionally, we utilize exploratory factor analysis (EFA) as a data-driven approach to identify the smallest number of hypothetical latent variables that could explain the covariation of a set of observed variables (Watkins 2018). All EFA models were estimated using principal-factor methods and used promax rotations to allow for correlations between factors. Loadings less than 0.30 were suppressed. Kaiser-Meyer-Olkin tests were run prior to commencing EFA to ensure that the data were suitable for factor analysis. All KMO tests returned values above the acceptable 0.50 cut-off (Dziuban and Shirkey 1974), with a majority above 0.80. EFA are shown in cases where the CFA results show room for improvement, with the EFA providing an alternative grouping of items for a given scale.

4.1.3 Internal Reliability

Finally, to assess the internal reliability of each scale, i.e., the degree to which their items are jointly measuring the same construct (Henson 2001; Jose et al. 2017), we calculate the Cronbach's alpha (Cronbach 1951). The coefficient α measures the degree of correlation among the items of a scale. The underlying assumption is that if items are highly correlated, we may theoretically conclude that the construct of interest is being measured with some degree of consistency.[7]

The cut-off for Cronbach's alpha should be driven by a scale's use case, or "the importance of a decision" to be made based on an individual's score on the scale (Cho and Kim 2015). Artificially increasing alpha can be detrimental to both reliability and validity such that very high alphas may signal potential overlap and redundancy across items. The measures of this paper are intended to explain links between psychological agency constructs, decision-making, and economic activities in non-WEIRD contexts. As such, a more exploratory-level alpha was deemed more appropriate. Scales with Cronbach's

[6] While we initially intended to conduct multi-group analysis to compare differences in CFA model fit for the scales for which we had data collected with both men and women, the starkly unequal sample sizes by gender (with most data sets having majority women respondents) resulted in models not converging. Therefore, the main heterogeneity results by gender are presented through regression models.

[7] Let a measurement tool X consist of K different items, where σ_i^2 is the variance of item i and σ_X^2 is the variance of X, the Cronbach's alpha formula is as follows: $\alpha = \frac{K}{K-1}(1 - \frac{\sum_{i=1}^{K} \sigma_i^2}{\sigma_X^2})$.

alpha above 0.6 were considered to have acceptable internal consistency (Nunally 1967).[8] Results are shown in Appendix B.4.

4.2 Results Summary and Implications

In Table 3, we summarize the evidence of reliability and validity for each scale across the various tests. Although both randomly-assigned 3- and 5-point versions of the scales demonstrated evidence of reliability and validity, the 5-point scales tended to have stronger psychometric properties, while not resulting in lower respondent understanding (Tables B2-B4). With the exception of locus of control, none of the 5-point scales had Cronbach's alphas below the reliability cutoff. For future implementation, we recommend using 5-point Likert response scales.

Table 3: Summary of Psychometric Properties

Scale	Content/Face Validity	Construct Validity	Structural Validity	Internal Reliability
GSC	Very Strong	Very Strong	Strong	Strong
GLSE	Very Strong	Very Strong	Fair	Strong
AGSE	Very Strong	Very Strong	Strong	Very Strong
LOC	Very Strong	Very Strong	Strong	Weak

Notes: "Very Strong" is defined as the scale meeting half or more of criteria in all contexts where the scale was tested; "Strong" is defined as the scale meeting half or more of criteria in at least two contexts;"Fair" is defined as the scale meeting at least half or more of criteria in at least one context; "Weak" is defined as the scale not meeting half or more criteria in any contexts.

Goal setting capacity (GSC) The results provide strong support for the validity and reliability of the new goal-setting capacity scale (GSC) across multiple contexts in Sub-Saharan Africa. With the exception of the Malawi survey, all alphas fall within an acceptable range for internal consistency. Although the hypothesized three-factor model meets several criteria for goodness of fit, additional exploratory analysis suggests that a two-factor model that collapses goal creation/action and goal clarity may be more appropriate and better represent the latent construct of goal-setting capacity. No items stand out as needing to be removed or replaced based on confirmatory factor analysis.

Agricultural Self-Efficacy (AGSE) The scale demonstrates strong evidence of reliability and mixed evidence of structural validity. Cronbach's alphas fall within the acceptable range across all surveys. Although CFA and EFA do not indicate any single item as problematic, such that it should be removed or revised, both suggest that the

[8] If we chose a stricter threshold, such as 0.8, all scales, except for S-LOC, would score above it in at least one of the survey implementations (3-point or 5-point, for women or men).

grouping of items into theoretical sub-factors may need to be reconsidered. Although the current five-factor structure may be a plausible model based on meeting several goodness of fit criteria across multiple pilots, a more appropriate model may be to split the items thematically by activity (e.g., planting/harvesting, labor, and market engagement) rather than by underlying behavior (searching, planning, marshaling, and implementing).

Generalized Livelihoods Self-Efficacy (GLSE) The generalized livelihoods self-efficacy scale demonstrates strong evidence of validity and strong evidence of reliability. Cronbach's alphas are within acceptable range for Tanzania and for the 5-point versions tested in Kenya, but are just under the 0.60 cutoff for the 3-point versions. This again shows that the 5-point version has better psychometric properties. Both CFA and EFA suggest that at least two distinct, but related sub-factors exist as originally theorized: (1) control and decisionmaking and (2) resources and skills. Since EFA suggested item 10 ("I have the confidence I need to succeed in my income-generating activities") should load on its own factor, we tested CFA models without item 10[9] for Tanzania and Kenya KYEOP and find that the goodness of fit statistics improve. Future use of this scale should consider dropping item 10 or constructing an additional factor that more fully captures self-confidence.

Locus of Control (S-LOC) The locus of control scale displays relatively poor evidence of reliability (0.12-0.53) and strong evidence of construct and structural validity. Cronbach's alphas varied widely and show some improvement when the internal LOC items are either not included or aren't reverse coded. Cronbach's alpha assumes a unidimensional scale of all items included in its calculation, thus rendering poor scores for scales that may be made up of two distinct and opposing components, as is likely the case with the internal and external subscales of LOC. Despite these low values, the strong evidence of structural and construct validity supports using the S-LOC in its current form for research applications where the goal is to assess associations between locus of control and socioeconomic outcomes rather than to make individual-level diagnostic decisions (Cho and Kim 2015). Although both one- and two-factor models for external LOC (i.e., considering external locus of control as one construct or splitting it into powerful others and chance') demonstrated plausible fit across contexts, variation in which model fits better

[9]Note that item 10 was not included in the scale for the Kenya IDRC survey, so all results for Kenya IDRC are without item 10.

suggests that cultural differences in how respondents conceptualize external LOC may exist. This does not affect the scale content—all 9 items should be retained—but it does affect how the scale should be analyzed. Researchers should run both one- and two-factor models and select the better-fitting structure: calculating a single external LOC' composite if a one-factor model fits better, or separate powerful others' and 'chance' composites if a two-factor model is preferred. Future implementations should also consider whether external versus internal locus of control should be viewed more favorably in a given context, as higher external locus of control—particularly believing that a powerful other is in control—could be beneficial for well-being in some settings as opposed to internalizing the causality of events.

4.2.1 Robustness Checks

As part of the validation strategy, we implemented item-order randomization whenever feasible. To test for the presence of order bias, we assess the predictive power of the first item asked on the overall scale value. We examine the R^2 from a regression where the scale index is regressed on a set of indicator variables representing which scale item was presented first. A high R^2 would indicate significant order bias, with the first item explaining a substantial portion of the variation in responses. Conversely, a low R^2 would suggest minimal or negligible order bias. Across scale implementations, we find that the R^2 values are consistently very small, never exceeding 0.05 (Table B24).

We also show that the measurement properties of the locus of control scale, which includes reverse-coded items, are not affected by correcting for acquiescence bias (Tables B25-B26).[10] In Section 5, we also show how associations with measures of subjective well-being and socioeconomic outcomes remain robust to dropping individuals who always agree with the statements posed by the scale across constructs.

Lastly, the placement of the agency modules within the broader questionnaire varied across surveys, with some surveys placing them early and others toward the end. While we cannot formally test for respondent fatigue, the consistency of psychometric properties

[10] We compute the acquiescence score and apply the corresponding bias correction using the following procedure: 1. Reverse the items that are reverse-coded; 2. Compute the average response for the reverse-coded items and the average response for the non-reverse-coded items; 3. Calculate the difference between the average of the non-reverse-coded items and the average of the reverse-coded items, then divide this difference by two; 4. Add the acquiescence score derived in step 3 to each reverse-coded item and subtract the acquiescence score from each non-reverse-coded item.

across surveys with different module placements suggests that the scales are reasonably robust to variation in survey context.

5 Agency, Well-being and Socioeconomic Outcomes

The measurement properties presented in Section 4 provide evidence of reliability and structural validity for our scales. In this section, we pursue two additional goals. First, we examine associations between our agency scales and indicators of subjective well-being. A large literature documents positive associations between self-efficacy, internal locus of control, and subjective well-being in high-income settings (Judge and Bono, 2001; Judge et al., 2005); examining whether these associations hold in our samples provides further evidence of construct validity.

Second, having high-quality measures of these psychological agency constructs, validated in lower-income settings, also allows us to contribute to the evidence base on the relationship between individual agency and socioeconomic development outcomes. We focus on labor supply, earnings, entrepreneurial activity, and food insecurity as economic outcomes of particular interest, and intra-household decisionmaking and IPV as broader social welfare outcomes, particularly for women.

5.1 Empirical Strategy

To study the relationship between our psychological agency measures and individual outcomes, we pool observations across survey settings and estimate the following equation for each of the constructs:

$$y_{is} = \alpha + \beta \text{Psych. construct}_{is} + \theta X_{is} + \epsilon_{is}, \tag{1}$$

where y_{is} represents the outcome for individual i in survey setting s. Psych. construct$_{is}$ is the standardized index of GSC, GLSE, AGSE or S-LOC. X_{is} is a vector of sociodemographic controls including sex, age, marital status, and education. The coefficient of interest, β, captures the average conditional association between the psychological construct and the outcome, pooling across all survey settings. Standard errors are clustered at the survey setting level.

We then estimate a fully interacted specification that introduces survey fixed effects and allows the association between the psychological construct and socioeconomic outcomes

to vary across settings:

$$y_{is} = \alpha + \beta_s \text{Psych. construct}_{is} \times SurveySetting_s + \theta X_{is} + SurveySetting_s + \epsilon_{is}, \quad (2)$$

where $SurveySetting_s$ denotes survey fixed effects that absorb setting-level differences in outcomes, and the interaction allows the relationship between the psychological construct and the outcome to differ across survey contexts. The survey-specific coefficients β_s thus capture the within-setting association, net of any level differences across surveys. This specification allows us to examine whether the relationship between agency and outcomes is consistent across contexts or varies systematically. In these regressions, we estimate the model separately for all respondents, female respondents, and male respondents.

Equation (2) requires a given outcome to be available across more than one survey setting for a given scale; when an outcome is observed in a single survey only, equations (1) and (2) are equivalent.

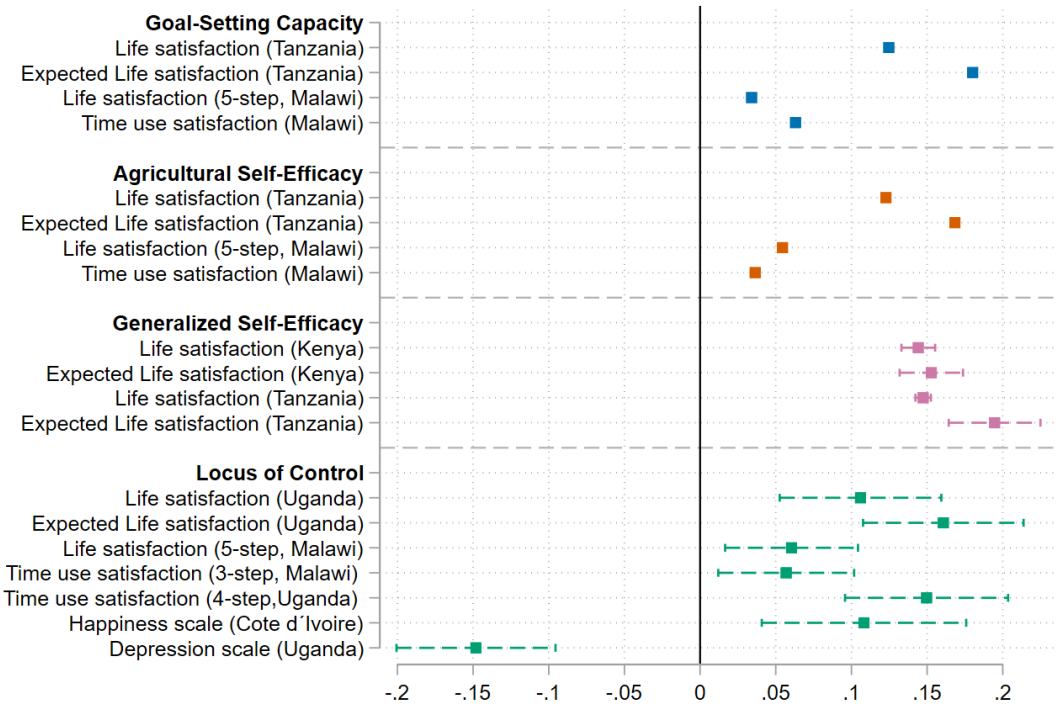
We present results using the standardized naive index for each construct, pooling the three-point and five-point response scales together by converting the latter to a three-point version. In Appendix C, we also report results using each scale type separately, and we show that the relationships are robust to using a principal component analysis-based index as well as to excluding highly acquiescent respondents, those who always reply with the highest possible level of agreement in each scale item.

5.2 Agency and Subjective Well-being

Across the board, psychological agency constructs show a consistent positive association with measures of subjective well-being. In Figure 2, we show the estimated $\hat{\beta}$ from estimating equation (2). In Appendix Tables C1–C4, we present the full regression results, including results split by gender. With the exception of the GLSE specification, we do not report results for equation (1) because as the subjective well-being outcomes of interest are not measured comparably across survey settings—for instance, life satisfaction was captured using a 1–10 Cantril ladder in some surveys but a 1–5 scale in others.

We find that a one standard deviation (SD) increase in an individual's goal-setting capacity is linked to meaningful improvements in life satisfaction. This effect is particularly

Figure 2: Agency and Subjective Well-being: Regression Results



Notes: This figure displays the $\hat{\beta}$ from estimating equation (2), along with the 90% confidence interval (CI), for each of the other available well-being outcomes on each of the psychological construct scales, with both types of variables standardized.

pronounced in the Tanzania survey, where it corresponds to a 0.12 SD increase in current life satisfaction and a 0.18 SD increase in expected life satisfaction. In Malawi, while the relationship remains positive, the effects are more modest: a 0.03 SD increase in current life satisfaction (p-value = 0.19) and a 0.06 SD increase in time use satisfaction. Importantly, the relationship between goal-setting and subjective well-being is stronger for women than for men across most outcomes (Table C1).

A similar trend is observed with agricultural self-efficacy. In Tanzania, a one SD increase in the AGSE index is associated with a 0.12 SD improvement in current life satisfaction and a 0.17 SD increase in expected life satisfaction (Table C2). Notably, the association is stronger for women, particularly in terms of their well-being expectations, where the effect is 0.20 SD compared to 0.09 SD for men. In Malawi, the effect is also particularly notable for women, where a one SD increase in female agricultural self-efficacy is linked to a 0.12 SD improvement in life satisfaction and a 0.08 SD increase in time use satisfaction,

while the result is null for male respondents.

The generalized livelihood self-efficacy (GLSE) scale also demonstrates strong and consistent relationships with life satisfaction across contexts. In Kenya and Tanzania, a one SD increase in GLSE is associated with a 0.14 and 0.15 SD improvement in current life satisfaction. Additionally, it leads to a 0.15 SD and 0.19 SD increase in expected life satisfaction in Kenya and Tanzania, respectively (Table C3).

Finally, the short-form locus of control scale (S-LOC) also exhibits a robust and statistically significant relationship with subjective well-being. In Uganda, a one SD increase in S-LOC is linked to a 0.11 SD improvement in current life satisfaction, a 0.16 SD increase in expected life satisfaction, and a 0.15 SD reduction in depression scores. In Malawi, the same increase corresponds to a 0.05 SD rise in life satisfaction, while in Côte d'Ivoire, it is associated with a 0.11 SD improvement in the happiness scale. Furthermore, S-LOC shows a consistent positive relationship with time use satisfaction across tested contexts (Table C4).

In Appendix Tables C9-C12, we show that the results are very similar when using the principal component analysis-based index, as opposed to the naive index, and Tables C13-C20 present the results splitting the sample by the 3- and 5-point response scales.

5.3 Agency and Economic Achievement

In Table 4, we present results for comparable economic outcomes across surveys: working for pay, weekly hours worked, weekly earnings, business ownership and food insecurity. Each panel (A–D) of the Table corresponds to regression outcomes where Psych. construct$_{is}$ is replaced by one of the four agency indices. For each outcome, column (1) reports the estimated $\hat{\beta}$ from equation (1) pooling across all survey settings, while columns (2)–(4) report the survey-specific estimated $\hat{\beta}_s$ from equation (2) for all, female, and male respondents, respectively. See Appendix Tables C23-C25, for results using the principal component analysis-based index, and splitting by the 3- vs 5-point response scales.

Pooling across survey settings (column 1), goal-setting capacity and both self-efficacy measures show positive and statistically significant associations with labor supply and earnings, while the relationship with locus of control is more mixed. The survey-specific results in columns (2)–(4) reveal substantial heterogeneity across contexts.

As anticipated based on both theoretical and empirical prior evidence, goal-setting and

Table 4: Agency and Economic Achievement: Combined Regression Analysis

	Extensive margin				**Intensive margin**				**Weekly earnings** (USD)				**Has business?**				**Food insecurity**			
	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M
A. GSC																				
Pooled	0.04*				1.50				0.80				0.01				–0.01			
	(0.01)				(0.77)				(1.09)				(0.01)				(0.07)			
Kenya IDRC		0.04***	0.04***			1.86***	1.94***			0.70	1.01			0.01	0.01					
		(0.00)	(0.00)			(0.11)	(0.08)			(0.53)	(0.49)			(0.00)	(0.00)					
Malawi LSMS		0.02*	0.03	0.01		0.30	1.70**	–0.79		–0.20	–0.79	–0.45*		0.00	0.01	–0.01		0.05	0.11	0.00
		(0.00)	(0.01)	(0.01)		(0.29)	(0.34)	(0.42)		(0.18)	(0.41)	(0.06)		(0.00)	(0.00)	(0.01)		(0.01)	(0.02)	(0.01)
Tanzania		0.05**	0.07**	0.01*		2.29**	2.27**	3.02*		8.12**	3.80	14.19**						–0.13**	–0.09	–0.19***
		(0.01)	(0.01)	(0.00)		(0.27)	(0.31)	(0.27)		(1.40)	(1.34)	(0.86)						(0.01)	(0.02)	(0.00)
Observations	4,509	4,509	3,404	1,105	4,509	4,509	3,404	1,105	3,477	3,477	2,605	872	3,093	3,093	2,380	713	2,028	2,028	1,123	905
B. AGSE																				
Pooled	0.01				1.34				1.57				–0.00				–0.06			
	(0.01)				(0.88)				(2.19)				(0.00)				(0.02)			
Malawi LSMS		0.00	0.01	–0.01		0.96	2.13*	0.07		–0.15	–0.03	–0.46*		–0.00	–0.01	–0.00		–0.03	–0.02	–0.05
		(0.01)	(0.01)	(0.02)		(0.64)	(0.31)	(0.99)		(0.74)	(1.99)	(0.05)		(0.01)	(0.02)	(0.01)		(0.02)	(0.01)	(0.02)
Tanzania		0.02	0.04*	–0.02		1.73	2.25**	0.98		6.31	6.77	3.72***						–0.13**	–0.10	–0.14**
		(0.01)	(0.00)	(0.02)		(0.34)	(0.16)	(0.83)		(1.07)	(2.00)	(0.01)						(0.00)	(0.02)	(0.01)
Observations	2,847	2,847	1,742	1,105	2,847	2,847	1,742	1,105	1,815	1,815	943	872	1,431	1,431	718	713	2,028	2,028	1,123	905
C. GLSE																				
Pooled	0.05***				2.28***				8.20*				0.08				–0.17			
	(0.00)				(0.22)				(2.30)				(0.02)				(0.00)			
Kenya IDRC		0.05***	0.05***			1.94***	1.88***			0.62	0.60			0.02*	0.02					
		(0.00)	(0.00)			(0.09)	(0.10)			(0.24)	(0.30)			(0.00)	(0.00)					
Kenya KYEOP		0.05***	0.06***	0.02**		2.28***	2.81***	0.97***		10.00***	9.12***	11.92***		0.09***	0.09***	0.11***				
		(0.00)	(0.00)	(0.00)		(0.07)	(0.05)	(0.01)		(0.16)	(0.29)	(0.10)		(0.00)	(0.00)	(0.01)				
Tanzania		0.09***	0.11***	0.04		3.73***	4.03***	4.28*		12.80***	8.11**	21.83**						–0.17***	–0.14***	–0.32***
		(0.00)	(0.00)	(0.01)		(0.10)	(0.16)	(0.35)		(0.71)	(0.82)	(0.87)						(0.04)	(0.05)	(0.10)
Observations	12,388	12,388	8,276	4,112	10,456	10,456	7,004	3,452	9,198	9,198	6,055	3,143	10,972	10,972	7,252	3,720	603	603	410	193
D. S-LOC																				
Pooled	0.03				–0.36				2.93				0.02*				–0.18			
	(0.02)				(0.54)				(1.36)				(0.00)				(0.00)			
Uganda (Kampala)		0.03***	0.04***							0.61	0.83**			–0.00	–0.00					
		(0.00)	(0.00)							(0.27)	(0.18)			(0.00)	(0.00)					
CIV		–0.03***	–0.03***	–0.03**		–1.88*	–1.09**	–2.74**		–3.74***	–2.99***	–3.23**								
		(0.00)	(0.00)	(0.00)		(0.15)	(0.06)	(0.05)		(0.29)	(0.11)	(0.13)								
Malawi LSMS		0.00	0.01***	–0.00		0.12	0.21**	–0.04		3.03**	1.62***	3.67***		0.01**	–0.00	0.02		–0.18***	–0.13***	–0.23***
		(0.00)	(0.00)	(0.00)		(0.23)	(0.02)	(0.01)		(0.32)	(0.11)	(0.00)		(0.00)	(0.00)	(0.02)		(0.02)	(0.04)	(0.03)
Observations	2,954	2,954	2,156	798	2,002	2,002	1,204	798	2,913	2,913	2,115	798	2,387	2,387	1,674	713	1,425	1,425	713	712

Notes: This table presents OLS regressions where the dependent variables are measures of economic achievement. The coefficient displayed corresponds to each of the psychological construct scales. Within each panel, the first row (Pooled) reports the coefficient from a pooled regression with demographic controls (gender, age, education, marital status) but no survey fixed effects. Subsequent rows report the survey-specific coefficients from fully interacted specifications with demographic controls and survey fixed effects. For the Pooled row, column (1) shows the pooled regression with controls for all respondents. For survey-specific rows, columns (1)–(3) show results for all respondents, female respondents, and male respondents respectively. Extensive margin is an indicator variable equal to one if working for pay. Intensive margin is a measure of weekly working hours, equal to zero if the respondent is not working. Weekly earnings are expressed in international USD dollars. Business ownership is an indicator variable equal to one if the respondent owns or runs a business. Food insecurity is a standardized index based on the FIES scale. Standard errors are clustered at the survey level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

both self-efficacy measures exhibit a positive and statistically significant relationship with respondents' labor force participation and income-generating capacity. Specifically, for women, a one standard deviation (SD) increase in the goal-setting index is associated with a 3 to 7 percentage point increase in the probability of working, as well as an additional 2 hours of work per week across all surveyed contexts (Kenya, Malawi, and Tanzania). Goal-setting is also positively associated with male weekly earnings in Tanzania, though it is negatively associated with earnings in Malawi. However, the negative coefficient in Malawi is very small in magnitude compared to the positive effects observed elsewhere.

Agricultural self-efficacy shows a strong association with female labor supply in Tanzania, where a one SD increase is linked to a 4 percentage point increase in the probability of working and 2.25 additional hours worked per week. For men, it is also associated with higher earnings. In Malawi, agricultural self-efficacy is also strongly associated with increased working hours among women (2.13 hours).

The livelihood self-efficacy scale demonstrates significant predictive power across income-generating capacity outcomes for both genders in Kenya and Tanzania. A one SD increase in GLSE is associated with a 5 to 9 percentage point increase in the probability of working, 2 to 4 additional hours worked per week, and a 10–13 increase in weekly earnings. Notably, in the Kenya KYEOP survey, where half the sample consists of entrepreneurs, a one SD increase in livelihood self-efficacy is associated with a 9 percentage point higher probability of business ownership among women and an 11 percentage point increase among men. Consistent with its positive association with entrepreneurship, GLSE is also positively correlated with business profits in this sample (Table C21).

Finally, the relationship between locus of control and economic achievement outcomes appears to be more context-specific. In Malawi, locus of control is positively associated with earnings for both women and men, and with labor supply among women. In Kampala (Uganda), it is positively associated with the probability of working. However, in Côte d'Ivoire, it shows a negative relationship with these outcomes. These contrasting results may reflect contextual and cultural differences, as well as differences in sample characteristics. For instance, while the Côte d'Ivoire sample comprises factory workers, the Uganda sample consists of market vendors, and the Malawi sample is substantially more heterogeneous.

Importantly, across the scales, we find that greater individual agency is negatively associated with food insecurity. The pooled estimates confirm this pattern, with the strongest associations for GLSE and S-LOC. In Tanzania, a one SD increase in the GSC and AGSE indices is associated with a 0.13 SD decrease in the food insecurity index, while the GLSE is associated with a 0.17 SD decrease. In Malawi, while the GSC and AGSE indices do not have predictive power over food insecurity, locus of control exhibits a strong negative relationship with the index (-0.18 SD).

5.4 Agency, Empowerment and Women's Welfare

Figure 3: Agency and Empowerment: Intra-Household Decisionmaking and IPV (Married Sample)

Notes: This figure displays the $\hat{\beta}$ from estimating equation (2), along with the 90% confidence interval (CI), for the intra-household decisionmaking index on each of the psychological construct scales, with both types of variables standardized. In the case of GLSE, we also plot the coeffient on having ever experienced IPV.

Individual agency can also affect individuals' intra-household position through greater negotiation skills, positive selection into marriage, or through self-reinforcing mechanisms due to increasing earned income. These outcomes might be of particular importance to women, who tend to have lower social and economic standing in households (Doss, 2013),

and may have further welfare consequences, including on experiences of intimate partner violence.

For both women and men, we confirm that our new measures of individual psychological agency are positively associated with intra-household decisionmaking power. In Figure 3, we show the estimated $\hat{\beta}$ from estimating equation (2) for married female and male respondents separately (see Appendix Tables C26-C37 for full regression results).

Evidence from Kenya and Tanzania shows that a one standard deviation (SD) increase in the goal-setting and agricultural self-efficacy index is associated with a 0.10–0.17 SD increase in married individuals' intra-household decision-making index. As with economic outcomes, livelihoods self-efficacy is of particular importance, with estimates above 0.20 SD in both the Kenyan entrepreneur sample and the Tanzanian context. Quite significantly, across contexts, the relationship between agency and the measure of intra-household bargaining power is at least twice as large for married women as it is for men.

For locus of control, although the magnitudes are smaller, we also find that a one SD increase in S-LOC is associated with a 0.03 SD and 0.02 SD increase in the intra-household decision-making index for married women in Côte d'Ivoire and among female market vendors, respectively.

Finally, for the livelihoods self-efficacy measure, we can also observe that the association with experiences of IPV for women is negative in the Kenya youth entrepreneur sample: a one SD increase in GLSE is associated with a 3-percentage-point lower probability of reporting having ever experienced IPV. This association holds for both emotional and physical violence (Table C28).

6 Discussion and Conclusion

Psychological agency constructs are important for understanding individual agency and are consistently linked to socioeconomic well-being, yet existing measures remain under-tested in non-WEIRD contexts, with no widely available tools for broader or sector-specific measurement. We developed and tested four new scales to capture goal-setting capacity, agricultural self-efficacy, generalized livelihoods self-efficacy, and locus of control to fill these gaps. All scales were tested in at least three contexts across Sub-Saharan Africa.

From a measurement perspective, each scale demonstrated some strong evidence for reliability and validity across multiple settings. One potential concern is that self-reported

measures may be susceptible to social desirability bias and acquiescence, which has motivated calls for task-based alternatives for some non-cognitive skills. For agency constructs, however, self-reporting is conceptually appropriate: what these scales aim to capture are respondents' beliefs about their own capabilities and control, which are inherently subjective and not reducible to observable behaviors. Moreover, we find no evidence that response biases compromise our measures in practice: none of the scales are sensitive to item-order effects, and all display strong associations with key socioeconomic outcomes even after excluding highly acquiescent respondents who consistently agree with all scale items.

The psychometric analysis also yields insights into how respondents in lower-income settings understand these constructs. For goal-setting capacity, goal clarity does not emerge as a distinct concept from general goal creation and action; rather, the two most important dimensions are setting clear and actionable goals and believing in the importance of goal-setting. For self-efficacy, respondents think of self-confidence as a distinct resource for income-generation—differently than they do about information, financial and social support as well as skills, which all move together. Self-efficacy also varies more by activity (in the case of agriculture, by planting crops versus finding and supervising labor) than by type of behavior (e.g., searching for a resource versus using it). For locus of control, while in some contexts who or what is impinging on an individual's life matters a lot (i.e., events are driven by chance versus by powerful others in community), in other contexts individuals merely distinguish between whether they are in control or not, regardless of the reason. Further testing should include measures on religiosity, cultural norms, and experiences of discrimination to better understand why this varies across contexts.

These findings inform our implementation recommendations. All four scales should be administered using 5-point Likert response scales, which consistently outperform 3-point versions. For the GSC, we recommend retaining all 8 items; researchers should estimate both three-factor and two-factor models and select the better-fitting structure. For the AGSE, all 10 items should be retained, but researchers should consider grouping items thematically by agricultural activity rather than by the originally theorized behavioral concepts. For the GLSE, we recommend dropping item 10 ("I have the confidence I need to succeed in my income-generating activities") or treating self-confidence as a separate, but potentially unstable factor; the remaining 9 items capture two sub-factors

of control/decision-making and resources/skills. For the S-LOC, all 9 items should be retained, but researchers must estimate both one-factor and two-factor models for external locus of control prior to calculating their composite scores, as the more appropriate structure may vary by context.

Beyond their value as measurement tools, the scales provide substantive insights into how agency relates to well-being and economic outcomes. Our analysis confirms that psychological agency constructs are significantly associated with subjective well-being in lower-income settings. Goal-setting capacity and agricultural self-efficacy are significantly and positively associated with life satisfaction, with similar effect sizes across the two constructs, while internal locus of control and generalized self-efficacy appear to have an even stronger relationship. Interestingly, the relationship with *expected* life satisfaction is larger in magnitude than that with current life satisfaction for nearly all construct-context combinations. This pattern is consistent with agency constructs operating partly through an aspirational channel: individuals who set goals, believe in their own efficacy, or feel in control may hold more optimistic expectations about their future. Internal locus of control is also positively associated with happiness and negatively associated with depression. Interestingly, the relationship between goal-setting and subjective well-being measures is generally stronger for women; the same holds for agricultural self-efficacy. Conversely, the relationship between internal locus of control and subjective well-being measures is stronger for men, with the same holding for generalized self-efficacy.

Our findings also speak to the importance of internal agency for improving one's socioeconomic outcomes. Of the four constructs, generalized livelihoods self-efficacy has the strongest relationship to labor supply (both the likelihood of working and hours worked), followed by goal-setting capacity. Generalized livelihoods self-efficacy also has the strongest relationship to income, though internal locus of control also has a large and significant relationship with earnings (with the exception of formal factory workers in Côte d'Ivoire). Generalized livelihoods self-efficacy is also significantly and positively related to running a business—with a mixed relationship for locus of control and no relationship for goal-setting capacity and agricultural self-efficacy—and to the size of business profits. Internal locus of control and generalized self-efficacy are also both negatively related to food insecurity, with goal-setting capacity and agricultural self-efficacy having more mixed evidence across settings.

Our results show interesting gender difference in the relationship between agency and socioeconomic outcomes. Goal-setting capacity, generalized self-efficacy, and internal locus of control generally matter more for female labor supply than male labor supply, but are significantly more related to earnings and food security for men than for women. Meanwhile, the relationship between agricultural self-efficacy and economic achievement has no clear gendered pattern. Lastly, our findings contribute to our knowledge of the relationship between internal agency and other empowerment measures. The relationship between intra-household decisionmaking and goal-setting, agricultural self-efficacy and generalized self-efficacy is at least twice as large as it is for men in every data collection round (we did not collect locus of control and intra-household decisionmaking in a survey administered to both men and women).

Accurate measurement of psychological agency constructs is essential for conducting reliable research on their relationship to socioeconomic outcomes and well-being, and for rigorously assessing the impact of the growing number of development programs that explicitly target these constructs—from goal-setting exercises in South Africa (Abel et al., 2019) to self-efficacy components of livelihoods programs in East Africa (Campos et al., 2017). Notably, the associations between agency and socioeconomic outcomes are both more consistent and larger in magnitude for women—particularly for labor supply and intra-household decision-making—suggesting that targeting these psychological constructs through development programs may be a fruitful avenue for reducing gender gaps in lower-income countries. Future research should expand validated measurement tools to lower-income settings outside of Sub-Saharan Africa, so that we can better understand cross-country and cross-cultural variation, and build a cumulative evidence base on what works to improve agency, for whom, and through which channels.

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ONLINE APPENDIX

A Data and Additional Descriptive Statistics

A.1 Data Collection

Table A1 summarizes the list of surveys in which we embedded our tools, as well as whether the tool was administered to both women and men.

Table A1: Summary of Data Surveys

Survey	Women	Men	Goal-setting capacity	Agricultural SE	Generalized SE	Locus of Control
Benin	✓					✓
Côte d'Ivoire	✓					✓
Kenya (IDRC)	✓		✓		✓	
Kenya (KYEOP)	✓	✓			✓	
Malawi (IFPRI)	✓	✓				✓
Malawi (LSMS)	✓	✓	✓	✓		✓
Tanzania	✓	✓	✓	✓	✓	
Uganda (IRC)	✓			✓		
Uganda (Kampala)	✓					✓

A.1.1 Goal-setting Capacity Scale (GSC) Data

The GSC scale was piloted in three distinct contexts.

1. Kenya IDRC: It was first implemented in April-May 2021 as part of a baseline data collection for a gender-sensitive technical and vocational education training program run by CAP-Youth Empowerment Institute (CAPYEI) in Kenya. Women were recruited via public announcements, registered at training centers nationwide, and were subsequently visited in their homes by the survey team for the interview. The sample included 1,664 women across 18 counties, aged 15-48, with half of the sample from rural areas.

2. Tanzania LSMS: The scale was utilized again in April-July 2022 as part of a nationally representative household survey "Tanzania Methodological Survey Experiment on Household Consumption Measurement" conducted by the World Bank Living Standards Measurement Study (LSMS) program (Dang et al. 2023). The survey spanned 143 enumeration areas across Mainland Tanzania and Zanzibar, including both urban and rural areas. The order of the scale items was randomized, and the sample comprised 1,025 female and 392 male respondents.

3. Malawi LSMS: Lastly, the scale was implemented from July 2022 to March 2023 in Malawi as part of a methodological experiment on time use measurement, also led by the LSMS program (Kilic et al. 2024). The survey was implemented across 72 enumeration areas (EAs) that were selected across the nine most populous districts Southern and Central Malawi, with probability proportional to 2018 Population and Housing Census. The EA sample was split evenly across Southern and Central Malawi, and by urban/rural status. In each EA, listed household needed to have at least one adult man and one adult woman (working age 15-64). Before this third round of data collection, we engaged four local consultants to conduct cognitive interviews for all the MAGNET modules included in the questionnaire. A significant finding from this process was that most respondents interpreted "well-being" primarily in health terms, as one's ability to take care of one's own body or oneself. Therefore, to align more closely with the original intent of the questions, we revised these scale items, replacing "well-being" with "success." The order of the scale items was again randomized, and the sample included 718 female and 717 male respondents. In all three data collections, the response scales were randomized between a 3-point and a 5-point Likert scale.

A.1.2 Agricultural Self-Efficacy Scale (AGSE) Data

The AGSE was implemented in three distinct contexts.

1. Tanzania LSMS: The scale was first implemented in April-July 2022 in the same nationally representative Tanzania survey as the GSC scale (Dang et al. 2023).

2. Uganda IRC: In the spring of 2022, it was then implemented in an endline survey of refugee and host community farmers in Yumbe (Uganda) implemented by the International Rescue Committee (IRC) (Clingain and Rincón, 2022). The sample comprised 148 female and 115 male respondents; 38% of the women and 66% of the men were refugees of South Sudanese origin.

3. Malawi LSMS: Finally, in July 2022-March 2023, the scale was implemented for a third time in the same LSMS-Malawi survey as the GSC (Kilic et al. 2024). Cognitive interviewing indicated the questions were clear and easy to understand.

A.1.3 Generalized Livelihoods Self-Efficacy (GLSE) Data

The GLSE was implemented in three distinct contexts.

1. Kenya IDRC: A first version of the scale, without the 10th item, was piloted in the same IDRC-Kenya data collection as the GSC scale in 2021.

2. Tanzania LSMS: The full version (i.e., including item 10) was secondly implemented in the nationally representative LSMS-Tanzania survey as the GSC and AGSE scales in 2022.

3. Kenya KYEOP: Third, the 10-item scale version was embedded in the endline survey of an impact evaluation of a large youth employment project, implemented by the Government of Kenya with funding from the World Bank (KYEOP program), conducted from September to December 2023. It was administered to 9,308 young individuals (5,588 women and 3,720 men), aged 18 to 37, across 15 counties.

A.1.4 Locus of Control (S-LOC) Data

The S-LOC scale was implemented in five distinct contexts.

1. Benin SWEDD: It was first embedded in a baseline survey in Benin, administered as part of the Sahel Women's Empowerment and Demographic Dividend (SWEDD) project to both adolescent girls and their mothers.

2. Malawi IFPRI: Next, it was implemented in Malawi by IFPRI as part of the Women's Empowerment in Agriculure Index (pro-WEAI) with 2,675 women and 1,664 men.

3. Malawi LSMS: We also embedded the S-LOC in the same LSMS Malawi survey as the GSC and AGSE scales. Cognitive interviewing prior to the Malawi LSMS survey led to the rephrasing of the term 'personal interests' to 'myself and my livelihood' in scale item 5, and 'what is important to me' in scale item 7 (shown in Table 1).

4. Cote d'Ivoire OLAM: It was also embedded in a survey of factory workers employed in a cashew processing plant in the outskirts of Abidjan, Côte d'Ivoire's commercial capital (637 female and 120 male respondents). The only eligibility criteria these workers needed to meet was to be at least 18 years old and have a national identity document, with no specific skill requirements. Workers are paid a fixed wage for each

day of work, slightly above the national minimum wage (Donald and Grosset-Touba, 2025).

5. Kampala (Uganda): Lastly, we piloted the S-LOC in a baseline survey of a childcare RCT in Kampala, Uganda with 956 female market vendors. To be eligible, the women had to work in one of six markets in the Greater Kampala Metropolitan Area and have at least one young child.[11]

A.2 Description Data Variables

- **Current Life satisfaction (10-step, Tanzania and Kenya)**:
  - Current: *"Imagine for a minute that you are living the best life you can possibly imagine. Now imagine that your life is the worst it could possibly be. Imagine a ladder with 10 steps. Suppose we say that the top of the ladder (step 10) represents the best possible life for you and the bottom (step 1) represents the worst possible life for you. Which step on the ladder best represents where you personally stand at the present time?"*
  - Expected: *"Think about your life five years from today. Which step best represents where you personally believe you will be on the ladder five years from now?"*
- Life satisfaction (5-step, Malawi LSMS): *"All things considered, how satisfied are you with your life as a whole these days? Using this card on which 1 means you are "completely dissatisfied" and 5 means you are "completely satisfied" where would you put your satisfaction with your life as a whole?"*
- Time use satisfaction:
  - 3-step, asked at the end of recall time-use module in Malawi LSMS: *"How have you felt about the activities you were engaged in the last week?" 1. Happy 2. Neither happy nor unhappy 3. Unhappy.*
  - 4-step, Kampala survey: *"How happy are you with the amount of leisure time available to you?" 1. Very happy 2. Happy. 3. Not happy 4. Very unhappy.*

[11] For more information on this study, see https://www.socialscienceregistry.org/trials/11467

- Happiness scale, O-HL from the World Values Survey (Inglehart et al., 2022): *"Taking all things together, would you say you are.....?" 1. Very happy 2. Quite happy 3. Not very happy 4. Not at all happy*

- PHQ-4 scale for depression and anxiety (Christodoulaki et al., 2022): *"Over the last 2 weeks, how often have you been bothered by the following problems?" 1. Not at all 2. Several days 3. More than half the days 4. Nearly every day.*

  - *Feeling nervous, anxious or on edge*
  - *Not being able to stop or control worrying*
  - *Little interest or pleasure in doing things*
  - *Feeling down, depressed, or hopeless*

A.3 Additional Descriptive Statistics

Table A2: Summary Statistics: Female Respondents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Kenya		Malawi			Uganda			Benin	
	IDRC	KYEOP	LSMS	IFPRI	Tanzania	IRC	Kampala	Cote d'Ivoire	Mothers	Girls
Sociodemographics										
Age	23.83	24.77	32.07	28.36	41.68	38.17	34.16	33.25	43.50	15.63
	[4.39]	[2.98]	[11.47]	[9.93]	[15.56]	[11.62]	[9.82]	[7.00]	[11.57]	[3.39]
Married	0.28	0.52	0.79	0.88	0.68	0.82	0.53	0.46	0.79	0.09
	[0.45]	[0.50]	[0.41]	[0.32]	[0.46]	[0.38]	[0.50]	[0.50]	[0.41]	[0.29]
Household size	4.31	4.19	4.99	4.21	3.30	9.39	4.84	5.45		
	[2.02]	[2.29]	[1.84]	[1.88]	[1.89]	[4.32]	[1.91]	[3.75]		
Ever school	1.00	1.00	0.35		0.77	0.55	0.18	0.74	0.25	0.75
	[0.06]	[0.05]	[0.48]		[0.42]	[0.50]	[0.38]	[0.44]	[0.43]	[0.43]
Secondary	0.72	0.35	0.19		0.16	0.03	0.05	0.62	0.12	0.52
	[0.45]	[0.48]	[0.39]		[0.37]	[0.16]	[0.21]	[0.48]	[0.32]	[0.50]
Working for pay	0.30	0.79	0.46		0.33		0.92	0.22		
	[0.46]	[0.41]	[0.50]		[0.47]		[0.26]	[0.42]		
Weekly hours for pay	12.03	29.51	20.03		22.95			8.64		
	[21.19]	[25.80]	[22.52]		[23.82]			[18.81]		
Weekly earnings (w. 5%)	9.30	52.34	6.09		60.06		65.52	22.27		
	[17.77]	[61.94]	[16.96]		[73.51]		[53.46]	[44.47]		
Business owner	0.08	0.48	0.24				0.86			
	[0.27]	[0.50]	[0.42]				[0.35]			
Refugee						0.38				
						[0.49]				
Psych. Construct Scales										
Goal-Setting: GSC 3p	2.89		2.82		2.72					
	[0.22]		[0.20]		[0.41]					
GSC 5p	4.63		4.45		4.21					
	[0.50]		[0.48]		[0.84]					
Agricultural SE: AGSE 3p			2.49		2.20	2.23				
			[0.39]		[0.59]	[0.38]				
AGSE 5p			3.94		3.07					
			[0.77]		[1.20]					
Livelihoods SE: GLSE 3p	2.57	2.70			2.38					
	[0.29]	[0.29]			[0.56]					
GLSE 5p	4.03	4.21			3.65					
	[0.56]	[0.51]			[1.03]					
Locus of Control: S-LOC 3p			2.05	2.02			2.16	2.21		
			[0.31]	[0.31]			[0.28]	[0.34]		
S-LOC 5p			3.16	3.00			3.26	3.32	2.85	2.88
			[0.53]	[0.58]			[0.48]	[0.52]	[0.36]	[0.44]
Sample size	1,664	5,654	718	2,675	1,024	148	956	637	5,675	12,230

Notes: This table presents summary statistics of all female respondents included in the analytical sample. Each column presents sample mean and standard deviation (in brackets) in each of the surveys.

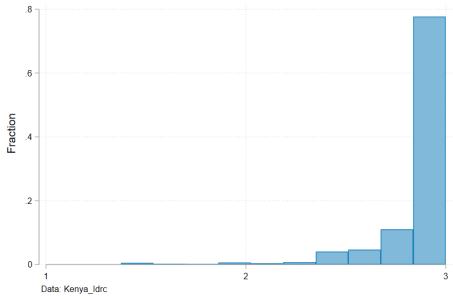
Table A3: Summary Statistics: Male Respondents

	(1)	(2)	(3)	(4)	(5)	(6)
		Malawi				
	Kenya KYEOP	LSMS	IFPRI	Tanzania	Uganda IRC	Cote d'Ivoire
Sociodemographics						
Age	24.67	32.16	32.05	44.53	36.93	30.49
	[2.87]	[12.53]	[11.75]	[16.21]	[10.76]	[6.60]
Married	0.53	0.71	0.90	0.73	0.86	0.25
	[0.50]	[0.45]	[0.30]	[0.44]	[0.35]	[0.43]
Household size	3.39	4.99	4.46	2.92	9.37	4.80
	[2.27]	[1.84]	[1.93]	[1.74]	[4.75]	[3.10]
Ever school	1.00	0.50		0.89	0.77	0.95
	[0.05]	[0.50]		[0.32]	[0.43]	[0.22]
Secondary	0.40	0.32		0.21	0.27	0.93
	[0.49]	[0.47]		[0.41]	[0.45]	[0.26]
Working for pay	0.94	0.68		0.41		0.20
	[0.23]	[0.47]		[0.49]		[0.40]
Weekly hours for pay	43.84	34.27		33.57		7.00
	[21.70]	[26.30]		[26.76]		[17.61]
Weekly earnings (w. 5%)	93.65	21.43		91.23		22.74
	[66.98]	[32.22]		[86.06]		[46.80]
Business owner	0.55	0.25				
	[0.50]	[0.43]				
Refugee					0.66	
					[0.48]	
Psych. Construct Scales						
Goal-Setting: GSC 3p		2.79		2.79		
		[0.23]		[0.40]		
GSC 5p		4.37		4.42		
		[0.56]		[0.64]		
Agricultural SE: AGSE 3p		2.41		2.38	2.30	
		[0.47]		[0.56]	[0.41]	
AGSE 5p		3.69		3.49		
		[0.93]		[1.14]		
Livelihoods SE: GLSE 3p	2.72			2.68		
	[0.25]			[0.38]		
GLSE 5p	4.28			4.11		
	[0.43]			[0.70]		
Locus of Control: S-LOC 3p		2.11	2.08			2.33
		[0.30]	[0.32]			[0.35]
S-LOC 5p		3.20	3.14			3.40
		[0.60]	[0.62]			[0.50]
Sample size	3,764	713	1,664	392	115	120

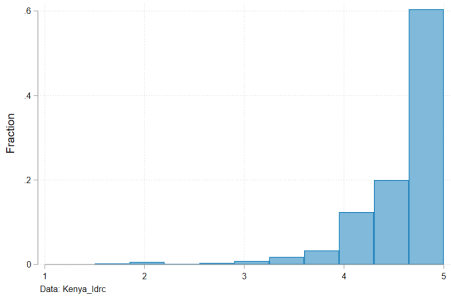
Notes: This table presents summary statistics of all male respondents included in the analytical sample. Each column presents sample mean and standard deviation (in brackets) in each of the surveys.

Figure A1: GSC Scale Distribution

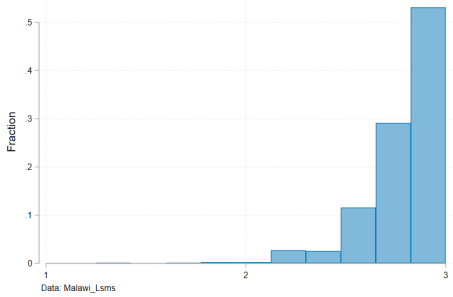
(a) GSC3p: Kenya IDRC



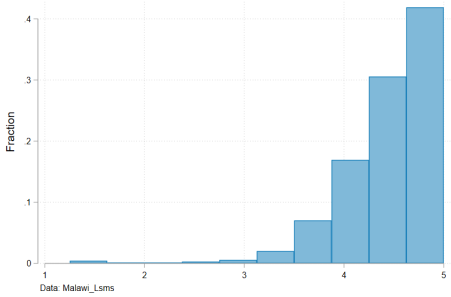
(b) GSC5p: Kenya IDRC



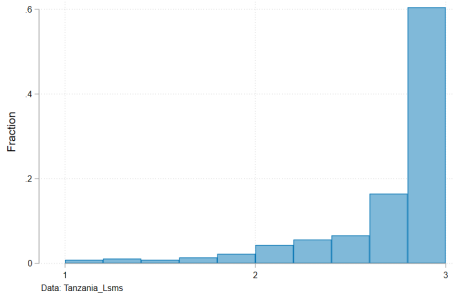
(c) GSC3p: Malawi LSMS



(d) GSC5p: Malawi LSMS



(e) GSC3p: Tanzania LSMS



(f) GSC5p: Tanzania LSMS

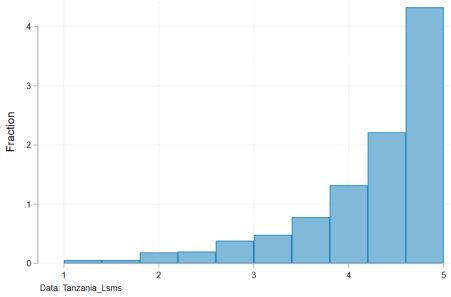
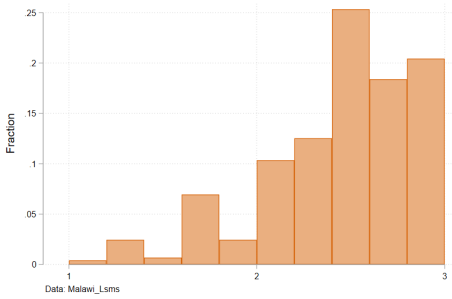
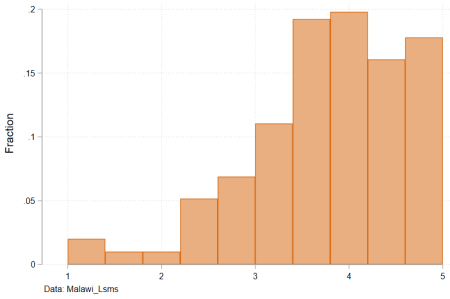


Figure A2: AGSE Scale Distribution

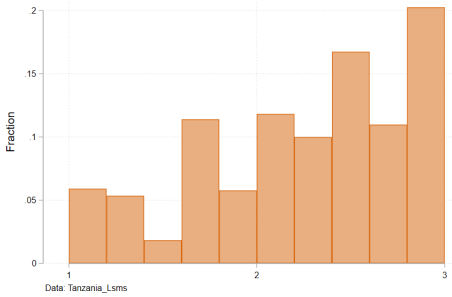
(a) AGSE 3p: Malawi LSMS



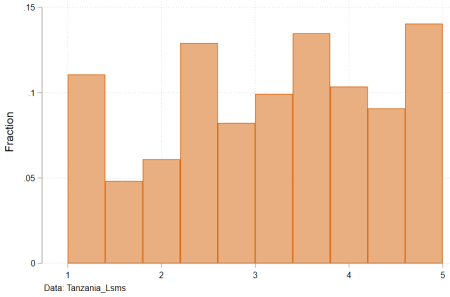
(b) AGSE 5p: Malawi LSMS



(c) AGSE 3p: Tanzania LSMS



(d) AGSE 5p: Tanzania LSMS



(e) AGSE 3p: Uganda IRC

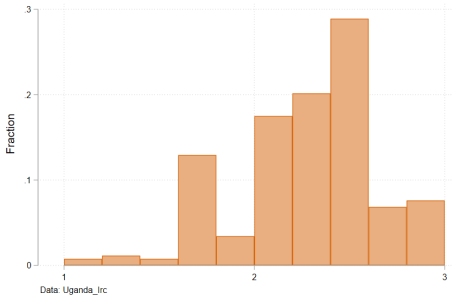
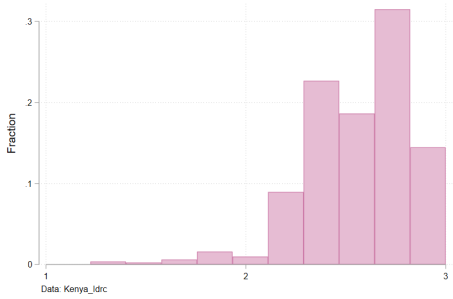
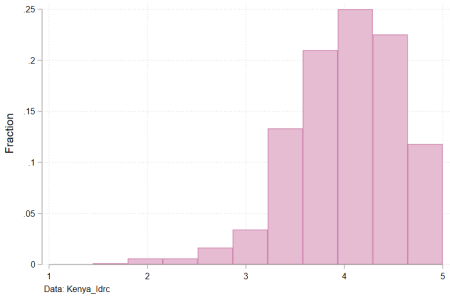


Figure A3: GLSE Scale Distribution

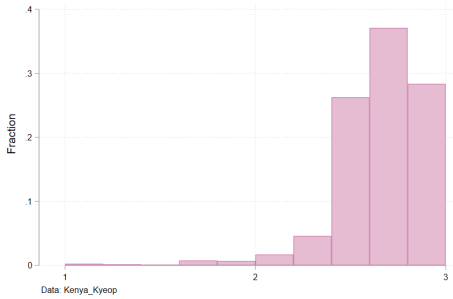
(a) GLSE 3p: Kenya IDRC



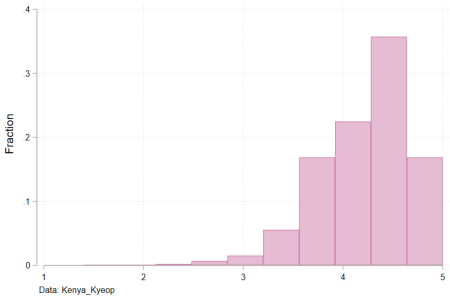
(b) GLSE 5p: Kenya IDRC



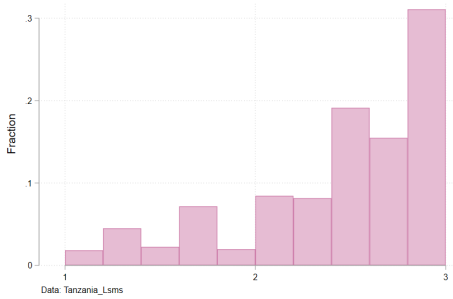
(c) GLSE 3p: Kenya KYEOP



(d) GLSE 5p: Kenya KYEOP



(e) GLSE 3p: Tanzania LSMS



(f) GLSE 5p: Tanzania LSMS

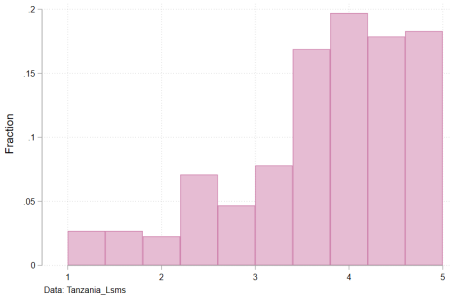
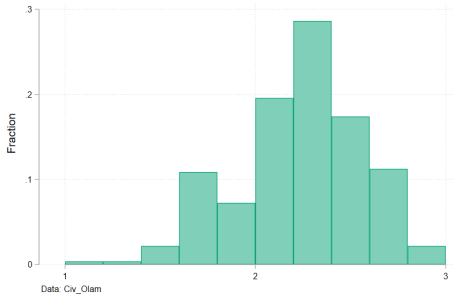
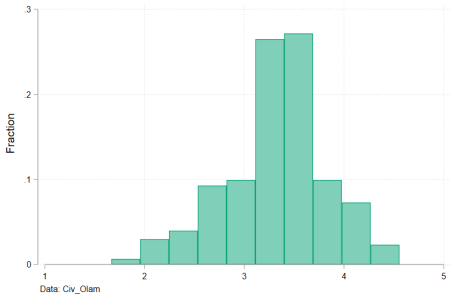


Figure A4: S-LOC Scale Distribution

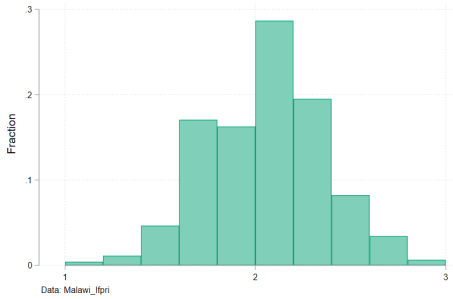
(a) S-LOC 3p: Côte d'Ivoire



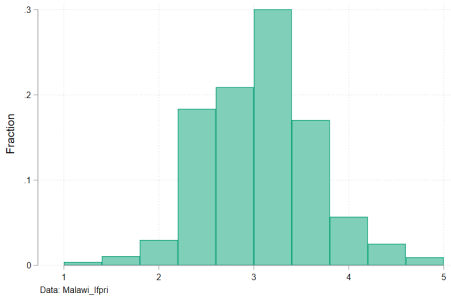
(b) S-LOC 5p: Côte d'Ivoire



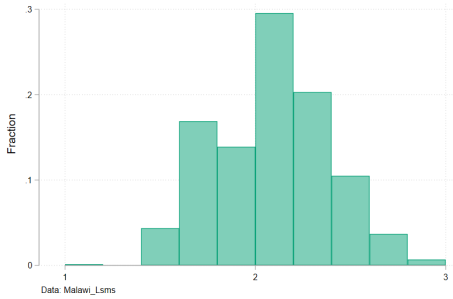
(c) S-LOC 3p: Malawi IFPRI



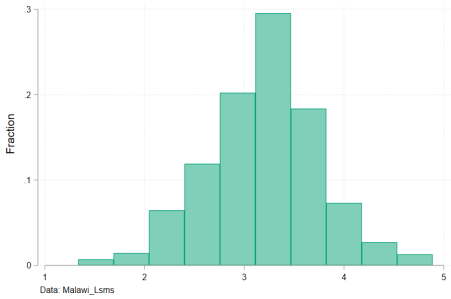
(d) S-LOC 5p: Malawi IFPRI



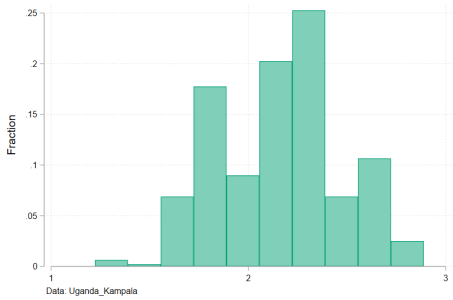
(e) S-LOC 3p: Malawi LSMS



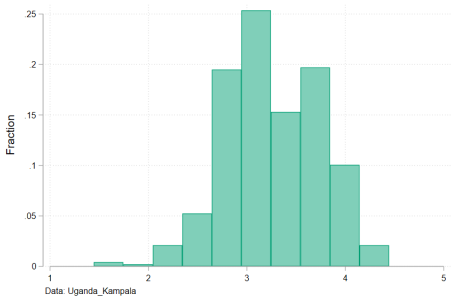
(f) S-LOC 5p: Malawi LSMS



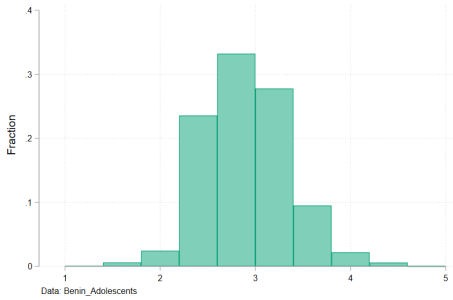
(g) S-LOC 3p: Kampala



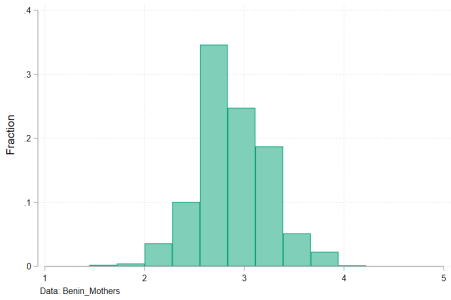
(h) S-LOC 5p: Kampala



(i) S-LOC 5p: Benin (Mothers)



(j) S-LOC 5p: Benin (Adolescents)



B Measurement Properties

Table B1: Evidence Generation Process for Reliability and Validity

Step	Description	Included	Notes
Validity			
Content/Face Validity	Assesses whether items appear to measure the intended construct through expert review and respondent understanding.	✓	Cognitive interviews conducted; respondent understanding assessed (e.g., ≥70% found questions "clear and simple").
Structural Validity	Tests whether the theorized factor structure fits the observed data.	✓	Both CFA and EFA conducted; fit indices reported for CFA (CFI, TLI, RMSEA).
Construct Validity	Assesses whether the measure relates to other variables as theoretically expected.	✓	Correlations examined with theoretically related variables (education, labor supply, well-being, decision-making, etc.). Two specific sub-tests were not feasible: convergent validity (no alternative measures of these specific constructs exist for comparison) and discriminant validity (not formally tested, though distinct factor structures and differential patterns of association across scales provide indirect evidence).
Criterion Validity	Assesses whether the measure correlates with an established gold-standard measure (concurrent) or predicts a concrete, objective outcome (predictive).	×	These scales measure self-reported beliefs and perceptions for which no objective behavioral criterion exists. The associations with socioeconomic outcomes documented in Section 5 provide indirect evidence of predictive validity.
Reliability			
Internal Consistency	Measures the degree to which items are correlated and jointly measure the same construct.	✓	Cronbach's alpha reported for all scales across contexts (e.g., α = 0.39–0.87 for GSC).
Test-Retest Reliability	Assesses stability of scores over time by re-administering the measure to the same respondents.	×	These constructs are responsive to experience and intervention (Bandura 1977; McKelway 2024; Shoji 2020; Abel et al. 2019). Low test-retest correlations would therefore be ambiguous—reflecting either measurement error or genuine change in the construct. Low test-retest correlations would therefore be ambiguous—reflecting either measurement error or genuine change in the construct.
Inter-Rater Reliability	Assesses consistency of scores across different raters or interviewers.	×	Not applicable: all scales are self-reported, with the respondent as the sole reporter of their own beliefs and perceptions.

B.1 Content and Face Validity

Table B2: Respondent Understanding: Very Unclear and Difficult to Answer

	(1)	(2)	(3)	(4)
	Women		Men	
	3-point	5-point	3-point	5-point
Goal-setting capacity				
Tanzania LSMS	0.04	0.04	0.03	0.02
Malawi LSMS	0.01	0.01	0.01	0.02
Agricultural self-efficacy				
Tanzania LSMS	0.04	0.03	0.02	0.02
Malawi LSMS	0.01	0.01	0.02	0.02
Generalized Livelihoods Efficacy				
Tanzania LSMS	0.04	0.04	0.01	0.04
Kenya KYEOP	0.01	0.01	0.00	0.01
Locus of control				
Cote d'Ivoire OLAM	0.09	0.09		
Malawi IFPRI	0.05	0.05	0.04	0.06
Malawi LSMS	0.01	0.01	0.01	0.02
Uganda Kampala market	0.06	0.08		

Notes: This table reports the percentage of respondent that answered Very Unclear and Difficult to Answer to the question How clear did you find the phrasing of the preceding question?.

Table B3: Respondent Understanding: Slightly Unclear and Slightly Difficult to Answer

	(1)	(2)	(3)	(4)
	Women		Men	
	3-point	5-point	3-point	5-point
Goal-setting capacity				
Tanzania LSMS	0.28	0.27	0.18	0.22
Malawi LSMS	0.06	0.09	0.06	0.07
Agricultural self-efficacy				
Tanzania LSMS	0.27	0.31	0.26	0.27
Malawi LSMS	0.10	0.12	0.10	0.10
Generalized Livelihoods Efficacy				
Tanzania LSMS	0.30	0.30	0.26	0.25
Kenya KYEOP	0.07	0.08	0.07	0.09
Locus of control				
Cote d'Ivoire OLAM	0.18	0.21		
Malawi IFPRI	0.24	0.23	0.25	0.22
Malawi LSMS	0.13	0.15	0.11	0.12
Uganda Kampala market	0.20	0.18		

Notes: This table reports the percentage of respondent that answered Slightly Unclear and Slightly Difficult to Answer to the question How clear did you find the phrasing of the preceding question?.

Table B4: Respondent Understanding: Clear and Simple to Answer

	(1)	(2)	(3)	(4)
	Women		Men	
	3-point	5-point	3-point	5-point
Goal-setting capacity				
Tanzania LSMS	0.69	0.69	0.79	0.77
Malawi LSMS	0.93	0.90	0.92	0.91
Agricultural self-efficacy				
Tanzania LSMS	0.69	0.66	0.72	0.71
Malawi LSMS	0.89	0.87	0.88	0.87
Generalized Livelihoods Efficacy				
Tanzania LSMS	0.67	0.67	0.73	0.71
Kenya KYEOP	0.91	0.91	0.92	0.90
Locus of control				
Cote d'Ivoire OLAM	0.73	0.70		
Malawi IFPRI	0.72	0.72	0.71	0.73
Malawi LSMS	0.86	0.84	0.88	0.86
Uganda Kampala market	0.74	0.74		

Notes: This table reports the percentage of respondent that answered Clear and Simple to Answer to the question How clear did you find the phrasing of the preceding question?.

B.2 Construct Validity: Pairwise Correlations

Table B5: GSC: Construct Validity

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Kenya IDRC			Malawi LSMS			Tanzania LSMS		
	3p	5p	Pooled	3p	5p	Pooled	3p	5p	Pooled
Female respondents									
Age	0.08**	–0.02	0.04	0.23***	0.14**	0.20***	–0.16***	–0.09**	–0.12***
Married	0.03	–0.05	0.00	0.07	0.08	0.06*	0.16***	0.06	0.11***
Household size	–0.02	0.03	–0.01	0.03	0.10*	0.06	0.13***	0.11***	0.11***
Ever school	0.16***	0.02	0.07***	0.00	0.03	–0.02	0.23***	0.19***	0.21***
Secondary	0.14***	0.10***	0.10***	–0.05	–0.00	–0.05	0.15***	0.17***	0.14***
Working for pay	0.11***	0.07**	0.10***	0.02	0.03	0.05	0.17***	0.12***	0.14***
Weekly hours for pay	0.12***	0.07**	0.10***	0.06	0.13**	0.10**	0.12***	0.04	0.09***
Weekly earnings (w. 5%)	0.09***	0.01	0.08***	–0.02	–0.04	–0.00	0.09	0.08	0.05
Business owner	0.04	0.05	0.04*	0.07	0.00	0.06			
Food insecurity				0.11**	0.13**	0.11***	–0.15***		–0.15***
Life satisfaction				0.06	0.06	0.04	0.22***	0.16***	0.19***
Expected life satisfaction							0.28***	0.26***	0.27***
Time use satisfaction				0.09	0.11**	0.09**			
Intra-household d-m	0.10***	0.05	0.09***				0.10**	0.09**	0.12***
Male respondents									
Age				0.19***	0.06	0.13***	–0.10	–0.11	–0.12**
Married				0.11**	0.10*	0.10***	0.05	0.10	0.07
Household size				–0.03	–0.11**	–0.06	0.02	0.14**	0.08
Ever school				–0.06	0.07	–0.02	0.11	–0.02	0.06
Secondary				–0.01	0.17***	0.06	0.10	0.01	0.09*
Working for pay				–0.01	0.06	0.02	0.08	0.01	0.06
Weekly hours for pay				–0.05	0.03	–0.01	0.11	0.11	0.13***
Weekly earnings (w. 5%)				–0.00	0.07	0.04	0.17	0.18*	0.17**
Business owner				–0.03	0.03	–0.00			
Food insecurity				0.06	–0.07	0.01	–0.19***		–0.19***
Life satisfaction				–0.04	0.02	0.02	0.10	0.08	0.11**
Expected life satisfaction							0.10	0.11	0.11**
Time use satisfaction				0.01	0.01	0.04			
Intra-household d-m							0.18**	0.12	0.12**

Notes: This table presents pairwise correlation coefficients of the GSC scale with each of the outcomes listed on the left column. The statistical associations are estimated separately by survey, respondent´s gender, and scale Likert response scale. * $p < 0.10$, ** $p < 0.05$,*** $p < 0.01$.

Table B6: AGSE: Construct Validity

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Malawi LSMS			Tanzania LSMS			Uganda IRC
	3p	5p	Pooled	3p	5p	Pooled	3p
Female respondents							
Age	0.21***	0.10*	0.14***	–0.08*	–0.08*	–0.07**	0.03
Married	0.12**	0.12**	0.11***	0.13***	0.12***	0.13***	–0.01
Household size	0.05	–0.04	–0.00	0.11***	0.08*	0.09***	0.08
Ever school	0.11**	0.08	0.09**	0.28***	0.22***	0.25***	0.08
Secondary	0.08	0.12**	0.09**	0.21***	0.10**	0.16***	0.06
Working for pay	0.08	–0.04	0.02	0.12***	0.05	0.09***	
Weekly hours for pay	0.11**	0.10*	0.10***	0.16***	0.03	0.10***	
Weekly earnings (w. 5%)	0.09*	0.08	0.10***	0.12	0.12	0.12*	
Business owner	0.07	–0.03	0.02				
Refugee							–0.45***
Food insecurity	–0.03	–0.04	–0.04	–0.16***		–0.16***	
Life satisfaction	0.11**	0.10*	0.10***	0.19***	0.16***	0.18***	
Expected life satisfaction				0.23***	0.25***	0.25***	
Time use satisfaction	0.05	0.10*	0.08**				
Intra-household d-m				0.14***	0.07	0.11***	
Male respondents							
Age	0.22***	0.21***	0.22***	–0.08	–0.12*	–0.10*	0.22**
Married	0.18***	0.26***	0.23***	0.08	0.22***	0.16***	0.11
Household size	–0.00	–0.01	–0.01	0.02	0.08	0.05	0.28***
Ever school	–0.03	0.08	0.03	0.08	0.10	0.10*	0.09
Secondary	0.01	0.14***	0.08**	0.06	–0.03	–0.00	0.05
Working for pay	–0.09*	0.08	–0.01	–0.03	–0.01	–0.01	
Weekly hours for pay	0.00	0.12**	0.07*	0.09	0.03	0.07	
Weekly earnings (w. 5%)	0.10*	0.05	0.09**	0.05	0.08	0.06	
Business owner	0.02	0.05	0.04				
Refugee							–0.53***
Food insecurity	0.03	–0.08	–0.03	–0.12		–0.12	
Life satisfaction	0.04	–0.06	–0.01	0.05	0.23***	0.14***	
Expected life satisfaction				0.04	0.18**	0.11**	
Time use satisfaction	0.05	–0.06	–0.01				
Intra-household d-m				0.11	0.13*	0.13**	

Notes: This table presents pairwise correlation coefficients of the GSC scale with each of the outcomes listed on the left column. The statistical associations are estimated separately by survey, respondent´s gender, and scale Likert response scale. * $p < 0.10$, ** $p < 0.05$,*** $p < 0.01$.

Table B7: GLSE: Construct Validity

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Kenya IDRC			Kenya KYEOP			Tanzania LSMS		
	3p	5p	Pooled	3p	5p	Pooled	3p	5p	Pooled
Female respondents									
Age	0.16***	0.14***	0.15***	0.03*	0.04**	0.05***	–0.06	–0.05	–0.05
Married	0.02	0.02	0.03	0.03	–0.00	0.02	–0.01	–0.08*	–0.05
Household size	–0.06	–0.09*	–0.07*	–0.07***	–0.08***	–0.07***	0.01	0.09**	0.05
Ever school	–0.00	0.07**	0.02	0.15***	0.11***	0.15***	0.28***	0.20***	0.23***
Secondary	0.08**	0.09***	0.07***	0.09***	0.08***	0.10***	0.24***	0.09**	0.16***
Working for pay	0.12***	0.11***	0.10***	0.16***	0.11***	0.15***	0.28***	0.22***	0.24***
Weekly hours for pay	0.11***	0.11***	0.10***	0.13***	0.12***	0.12***	0.20***	0.17***	0.18***
Weekly earnings (w. 5%)	0.11***	0.10***	0.10***	0.18***	0.17***	0.18***	0.14	0.09	0.11
Business owner	0.07**	0.10***	0.09***	0.21***	0.15***	0.20***			
Business profits(w. 5%)				0.22***	0.17***	0.20***			
Food insecurity							–0.18***		–0.18***
Life satisfaction				0.18***	0.14***	0.16***	0.22***	0.13***	0.18***
Expected life satisfaction				0.19***	0.16***	0.16***	0.21***	0.21***	0.21***
Intra-household d-m	0.11***	0.18***	0.14***	0.29***	0.30***	0.30***	0.23***	0.22***	0.22***
Intimate partner violence				–0.11***	–0.10***	–0.09***			
Male respondents									
Age				0.08***	0.00	0.05***	–0.24***	–0.14**	–0.20***
Married				0.04*	–0.01	0.03*	0.08	0.10	0.10*
Household size				0.00	–0.02	–0.00	0.00	0.06	0.04
Ever school				–0.01	–0.01	–0.01	0.13*	–0.02	0.06
Secondary				0.05**	0.06**	0.04**	0.14**	0.11	0.14***
Working for pay				0.05**	0.12***	0.07***	0.12*	0.07	0.10*
Weekly hours for pay				0.04*	0.11***	0.05**	0.17**	0.11	0.14***
Weekly earnings (w. 5%)				0.19***	0.17***	0.17***	0.18	0.23**	0.21***
Food insecurity							–0.22***		–0.22***
Life satisfaction				0.12***	0.16***	0.15***	0.11	0.23***	0.18***
Expected life satisfaction				0.12***	0.25***	0.15***	0.14**	0.22***	0.19***
Intra-household d-m				–0.15	0.68***	0.23	0.10	0.15**	0.14***

Notes: This table presents pairwise correlation coefficients of the GLSE scale with each of the outcomes listed on the left column. The statistical associations are estimated separately by survey, respondent´s gender, and scale Likert response scale. * $p < 0.10$, ** $p < 0.05$,*** $p < 0.01$.

Table B8: S-LOC: Construct Validity

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Benin: Adolescents	Mothers	CIV			Malawi IFPRI			Malawi LSMS			Kampala		
	5p	5p	3p	5p	Pooled	3p	5p	Pooled	3p	5p	Pooled	3p	5p	Pooled
Female respondents														
Age	0.06***	–0.03**	0.06	0.06	0.07	–0.03	0.00	–0.02	0.01	0.00	0.01	–0.13***	0.00	–0.05
Married	0.02*	–0.02	0.00	0.11*	0.07	0.06*	–0.03	0.01	0.06	0.13**	0.09**	0.22***	0.09*	0.14***
Household size			–0.07	–0.08	–0.08*	–0.04	–0.03	–0.03*	–0.03	–0.09*	–0.05	–0.04	–0.08*	–0.06*
Ever school	0.08***	0.01	0.09	0.25***	0.17***				0.04	0.10*	0.07*	–0.04	0.03	0.00
Secondary	0.07***	0.02	0.08	0.23***	0.16***				0.10**	0.13**	0.12***	0.08*	0.05	0.07**
Working for pay			–0.11*	0.04	–0.04				–0.03	0.07	0.03	0.12**	0.13***	0.13***
Weekly hours for pay			–0.10	0.04	–0.04				0.04	–0.03	0.02			
Weekly earnings (w. 5%)			–0.09	0.02	–0.05				0.08	0.14***	0.12***	–0.03	0.04	0.02
Business owner									–0.03	0.03	0.02	–0.02	0.01	0.01
Business profits(w. 5%)												0.00	0.07	0.03
Food insecurity									–0.13**	–0.19***	–0.15***			
Life satisfaction									0.07	–0.05	0.01	0.11**	0.17***	0.13***
Expected life satisfaction												0.23***	0.18***	0.19***
Time use satisfaction									–0.01	0.04	0.01	0.16***	0.18***	0.17***
Happiness scale			0.11*	0.12**	0.12***									
Depression scale												–0.17***	–0.18***	–0.17***
Intra-household d-m			0.07	0.05	0.08*							0.10**	–0.00	0.05
WEAI (empowerment)						0.08***	0.12***	0.09***						
Male respondents														
Age			0.12	–0.11	0.02	–0.01	0.10***	0.05**	0.09*	0.05	0.07*			
Married			0.08	0.05	0.02	0.17***	0.13***	0.15***	0.10*	0.06	0.07*			
Household size			0.06	0.02	0.02	–0.13***	–0.09***	–0.10***	–0.07	–0.02	–0.04			
Ever school									0.21***	0.21***	0.19***			
Secondary			0.05	0.02	0.01				0.25***	0.19***	0.19***			
Working for pay			0.07	–0.12	–0.07				0.06	–0.02	0.01			
Weekly hours for pay			–0.04	–0.21	–0.20*				0.08	0.02	0.04			
Weekly earnings (w. 5%)			0.11	–0.14	–0.07				0.21***	0.20***	0.19***			
Business owner									0.14***	0.02	0.07*			
Food insecurity									–0.26***	–0.25***	–0.26***			
Life satisfaction									0.05	0.07	0.07*			
Time use satisfaction									0.06	0.08	0.07*			
Happiness scale			–0.02	0.02	0.07									
Intra-household d-m			0.02	0.32**	0.22**									
WEAI (empowerment)						0.15***	0.23***	0.19***						

Notes: This table presents pairwise correlation coefficients of the S-LOC scale with each of the outcomes listed on the left column. The statistical associations are estimated separately by survey, respondent´s gender, and scale Likert response scale. * $p < 0.10$, ** $p < 0.05$,*** $p < 0.01$.

B.3 Structural Validity

B.3.1 Goal setting capacity (GSC)

The standardized factor loadings and covariance between sub-factors for the theorized three-factor GSC model (i.e., goal creation and action, goal clarity, and goal importance) can be found in Table B9. The items load on their respective factors strongly and consistently across items, and most of the goodness of fit statistics meet their respective cut-offs. Although None of the models have a non-significant chi-square test, CFI and TLI values are above 0.90 (with the exception of the Kenya 3-point model) and RMSEA is within the good fit range for the 5-point models in Tanzania and Malawi, and within the acceptable fit range for the 3-point model in Tanzania.

Table B9: Goal-Setting Capacity Scale: Confirmatory Factor Analysis Loadings

	(1)	(2)	(3)	(4)	(5)
	Tanzania		Kenya		Malawi
	3-point	5-point	3-point	5-point	5-point
Goal importance	0.76	0.75	0.55	0.74	0.64
Goal importance	0.71	0.80	0.60	0.82	0.71
Goal importance	0.58	0.56	0.34	0.50	0.65
Goal creation/action	0.59	0.56	0.46	0.58	0.14
Goal creation/action	0.68	0.69	0.41	0.60	0.41
Goal creation/action	0.81	0.73	0.63	0.70	0.65
Goal clarity	0.75	0.78	0.82	0.56	0.67
Goal clarity	0.76	0.76	0.73	0.83	0.59
Cov: GI-GC	0.76	0.80	0.76	0.75	0.83
Cov: GA-GI	0.78	0.85	0.97	0.75	0.98
Cov: GA-GC	0.97	1.04	0.93	1.09	0.90

Notes: The table presents the standardized loadings and covariance from the three-factor model.

The covariance between goal creation and action and goal clarity is consistently high across models, which may suggest that the two sub-factors aren't sufficiently distinct from one another. Exploratory factor analysis suggests that a two-factor model may be more appropriate. Overall, the models with the most simple structure are the 5-point scale in Kenya and 3- and 5-point scales in Tanzania for female respondents, in which the items for goal creation/action and goal clarity load on one factor and the goal importance items load on a second factor. For the most part, the loadings are similar across the three models.

Table B10: Goal-Setting Capacity Scale: CFA Goodness of Fit Statistics

	(1)	(2)	(3)	(4)	(5)
	Tanzania		Kenya		Malawi
	3-point	5-point	3-point	5-point	5-point
CFI	0.96	0.99	0.89	0.95	0.98
TLI	0.94	0.98	0.82	0.92	0.97
RMSEA	0.08	0.05	0.11	0.09	0.04
Chi-square p-value	0.00	0.00	0.00	0.00	0.01

Notes: Cut-offs for goodness of fit are a non-significant chi-square test, CFI and TLI above 0.90, and an RMSEA below 0.05 for good fit or below 0.08 for acceptable fit.

The lack of a simple structure in the EFA and the poor fit in the CFA for the 3-point scale in Kenya may be linked to limited variation relative to the 5-point response scale.

We reran the CFA with only two factors and found that the goodness of fit statistics are nearly identical to the three-factor model (see Table B12. In this case, we recommend going with the more parsimonious, two-factor model for future analysis of the GSC.

Table B11: Goal-Setting Capacity Scale: Confirmatory Factor Analysis Loadings (2 factors)

	(1)	(2)	(3)	(4)	(5)
	Tanzania		Kenya		Malawi
	3-point	5-point	3-point	5-point	5-point
Goal importance	0.76	0.75	0.55	0.74	0.64
Goal importance	0.71	0.80	0.60	0.82	0.71
Goal importance	0.58	0.56	0.31	0.52	0.60
Goal creation/action/clarity	0.79	0.74	0.54	0.74	0.60
Goal creation/action/clarity	0.59	0.56	0.48	0.58	0.13
Goal creation/action/clarity	0.67	0.70	0.41	0.59	0.42
Goal creation/action/clarity	0.76	0.78	0.76	0.84	0.60
Goal creation/action/clarity	0.75	0.78	0.82	0.56	0.67

Notes: The table presents the standardized loadings and covariance from the two-factor model.

B.3.2 Generalized Livelihoods Self-Efficacy (GLSE)

The standardized factor loadings and goodness of fit statistics for GLSE can be found in Tables B13 and B14. The two-factor confirmatory factor model that was tested varies slightly between contexts, as item 10 under the "resources and skills" sub-factor was not

Table B12: Goal-Setting Capacity Scale: CFA Goodness of Fit Statistics (2 factors)

	(1)	(2)	(3)	(4)	(5)
	Tanzania		Kenya		Malawi
	3-point	5-point	3-point	5-point	5-point
TLI	0.95	0.98	0.83	0.93	0.96
CFI	0.96	0.99	0.89	0.95	0.98
RMSEA	0.07	0.05	0.11	0.08	0.04
Chi-square p-value	0.00	0.00	0.00	0.00	0.00

Notes: Cut-offs for goodness of fit are a non-significant chi-square test, CFI and TLI above 0.90, and an RMSEA below 0.05 for good fit and 0.08 for acceptable fit.

asked in Kenya. Therefore, the null cells in the table should not be interpreted as poor loadings. The factor loadings for the Tanzania models tend to be higher than those in the Kenya models. Only one of the item loadings is relatively low (0.24) in both Kenya models. The covariance between the two sub-factors is middling, suggesting that the two sub-factors are related but likely distinct enough to be considered separate constructs.

Table B13: Generalized Livelihoods Self-Efficacy Scale: Confirmatory Factor Analysis Loadings

	(1)	(2)	(3)	(4)	(5)	(6)
	Tanzania		Kenya IDRC		Kenya KYEOP	
	3-point	5-point	3-point	5-point	3-point	5-point
Resources and skills	0.74	0.70	0.24	0.24	0.52	0.61
Resources and skills	0.72	0.64	0.46	0.42	0.47	0.57
Resources and skills	0.61	0.59	0.63	0.74	0.39	0.38
Resources and skills	0.62	0.67	.	.	0.57	0.56
Resources and skills	0.57	0.56	0.47	0.42	0.20	0.04
Control and decision-making	0.71	0.76	0.56	0.48	0.47	0.50
Control and decision-making	0.65	0.66	0.42	0.54	0.44	0.47
Control and decision-making	0.75	0.78	0.41	0.60	0.52	0.64
Control and decision-making	0.65	0.67	0.53	0.65	0.41	0.44
Control and decision-making	0.71	0.77	0.44	0.56	0.59	0.63
Cov: Control-Resources	0.61	0.55	0.40	0.38	0.68	0.69

Notes: The table presents the standardized loadings and covariance from the two-factor model

None of the models have non-significant chi-square tests. However, the chi-square test of exact fit is known to have excessive power in large samples—as sample size increases, even trivially small specification errors lead to rejection of the null hypothesis (Hu and Bentler 1999). Given our large sample sizes, we do not treat the chi-square test as a

Table B14: Generalized Livelihoods Self-Efficacy Scale: CFA Goodness of Fit Statistics

	(1)	(2)	(3)	(4)	(5)	(6)
	Tanzania		Kenya IDRC		Kenya KYEOP	
	3-point	5-point	3-point	5-point	3-point	5-point
CFI	0.96	0.94	0.83	0.78	0.88	0.91
TLI	0.94	0.92	0.76	0.70	0.84	0.89
RMSEA	0.07	0.08	0.07	0.11	0.06	0.06
Chi-square p-value	0.00	0.00	0.00	0.00	0.00	0.00

Notes: Cut-offs for goodness of fit are a non-significant chi-square test, CFI and TLI above 0.90, and an RMSEA below 0.05 for good fit or below 0.08 for acceptable fit.

primary indicator of fit and instead rely on the CFI, TLI, and RMSEA. The remaining fit statistics are above good fit cut-offs for both Tanzania models. For Kenya, only the RMSEA for the 3-point Kenya model is within acceptable fit.

Exploratory factor analysis was conducted to understand alternative latent structures to the theorized models. For both women and men in Tanzania, item 10 "I have the confidence I need to succeed in my income-generating activities" tends to load on a factor by itself while the other items loaded more or less as theorized. We reran the CFA without item 10 and found that the CFI, TLI and RMSEA all improved for both the 3-point (CFI = 0.975, TLI = 0.965, RMSEA = 0.055) and 5-point versions in Tanzania (CFI = 0.960, TLI = 0.944, RMSEA = 0.072). A similar improvement in fit was observed for the Kenya KYEOP data (3-point: CFI = 0.900, TLI = 0.862, RMSEA = 0.057; 5-point: CFI = 0.931, TLI = 0.904, RMSEA = 0.059). Given that the other items tend to load together in a manner consistent with the theorized fit in the CFA, the scale may benefit from removing this item.

B.3.3 Agricultural Self-Efficacy (AGSE)

For AGSE, the standardized loadings, covariances, and goodness of fit statistics from the five-factor confirmatory factor analysis can be found in Tables B16 and B15, respectively. For pilots in which both 3-point and 5-point versions were tested, item loadings tend to be similar across 3- and 5-point versions. Across the models, the Uganda IRC model varies the most and has several loadings that are relatively low and inconsistent with the other four pilots. This should be viewed in conjunction with the small sample size and the construct validity findings that highlighted a negative correlation between refugee status

and the scale, particularly since most of the sample were refugees. The covariance between sub-factors is consistently high across models, which indicates that some of the sub-factors may not be distinct enough from each other to be considered separate sub-factors. With the exception of TLI in the Uganda IRC model, all models have TLI and CFI values above the standard cut-offs. The RMSEA is within acceptable fit for the 5-point model in Tanzania and both Malawi models. None of the models have a non-significant chi-square test.

Table B15: Agricultural Self-Efficacy Scale: CFA Goodness of Fit Statistics

	(1)	(2)	(3)	(4)	(5)
	Tanzania		Malawi		Uganda IRC
	3-point	5-point	3-point	5-point	3-point
CFI	0.96	0.97	0.95	0.95	0.91
TLI	0.93	0.94	0.91	0.91	0.84
RMSEA	0.09	0.08	0.06	0.08	0.09
Chi-square p-value	0.00	0.00	0.00	0.00	0.00

Notes: Cut-offs for goodness of fit are a non-significant chi-square test, CFI and TLI above 0.90, and an RMSEA below 0.05 for good fit or below 0.08 for acceptable fit.

Due to the mixed goodness of fit statistics and high covariances between sub-factors, exploratory factor analysis was used to understand alternative model structures. The rotated factor loadings are shown in Tables B17 and B18. The models from Tanzania and Malawi all result in three factors for both men and women. The models in Uganda result in four factors. None of the five theorized factors consistently load together across the ten models; rather, factors tend to be combinations of one to three of the theorized factors. This suggests that a thematic grouping – "planting/harvesting," "labor," and "market engagement" – as opposed to the initially theorized action-based grouping may be more appropriate.

B.3.4 Locus of Control (LOC)

Finally, for LOC, we test two models using confirmatory factor analysis—a two-factor external LOC model with sub-factors for Chance and Powerful Others, and a one-factor external LOC model combining both of these sub-factors. The standardized factor loadings and goodness of fit statistics can be found in Tables B19 and B20 for the two-factor model,

Table B16: Agricultural Self-Efficacy Scale: Confirmatory Factor Analysis Loadings

	(1)	(2)	(3)	(4)	(5)
	Tanzania		Malawi		Uganda IRC
	3-point	5-point	3-point	5-point	3-point
Searching	0.73	0.75	0.55	0.62	0.61
Searching	0.70	0.74	0.48	0.55	0.75
Planning	0.75	0.77	0.61	0.67	0.42
Planning	0.70	0.71	0.66	0.73	0.46
Marshaling	0.71	0.75	0.56	0.62	0.33
Marshaling	0.73	0.73	0.59	0.62	0.35
Implementing (People)	0.70	0.79	0.47	0.60	0.72
Implementing (People)	0.79	0.82	0.65	0.73	0.89
Implementing (Finance)	0.79	0.77	0.71	0.70	0.78
Implementing (Finance)	0.67	0.69	0.50	0.55	0.63
Cov: Searching-Planning	1.07	1.09	1.15	1.01	1.25
Cov: Searching-Marshaling	1.01	1.02	1.15	1.00	1.14
Cov: Searching-Imp(People)	0.86	0.87	0.85	0.78	0.52
Cov: Searching-Imp(Finance)	0.90	0.93	0.88	0.91	0.52
Cov: Planning-Marshaling	0.92	0.98	0.80	0.86	1.84
Cov: Planning-Imp(People)	0.87	0.91	0.73	0.70	0.60
Cov: Planning-Imp(Finance)	0.89	0.94	0.74	0.75	0.85
Cov: Marshaling-Imp(People)	0.95	0.91	0.79	0.75	0.59
Cov: Marshaling-Imp(Finance)	0.97	0.98	1.07	1.13	1.18
Cov: Imp(People)-Imp(Finance)	0.87	0.90	0.67	0.68	0.21

Notes: The table presents the standardized loadings and covariance from the five-factor model

Table B17: Agricultural Self-Efficacy Scale: Exploratory Factor Analysis (Women)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
		Tanzania						Malawi						Uganda			
		3-point			5-point			3-point			5-point			3-point			
Magnet subconstruct	Scale item																
Searching	1	0.71			0.71			0.52			0.45			0.67			
Searching	2		0.37			0.56						0.34		0.45			
Planning	3	0.63			0.54				0.47			0.62			0.55		
Planning	4	0.48			0.54			0.39			0.55			0.36			
Marshaling	5					0.36		0.39			0.43				0.48		
Marshaling	6		0.50			0.59			0.31			0.37				0.38	
Implementing (People)	7			0.41			0.52		0.55			0.65					0.84
Implementing (People)	8			0.48			0.56	0.33					0.54				0.73
Implementing (Finance)	9		0.61				0.42			0.40			0.55			0.64	
Implementing (Finance)	10		0.54			0.56			0.68			0.64				0.64	

with the respective one-factor model tables in Appendix Table B21 and B22.[12] For the most part, all goodness of fit statistics meet their cut-off, though there are some variation between 3- and 5-point versions having non-significant chi-square tests.

[12]The one-factor, three-item model for internal LOC is not reported in tables as it is a just-identified model and therefore goodness of fit statistics were not estimated.

Table B18: Agricultural Self-Efficacy Scale: Exploratory Factor Analysis (Men)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
		Tanzania						Malawi						Uganda			
		3-point			5-point			3-point			5-point			3-point			
Magnet subconstruct	Scale item																
Searching	1	0.67			0.68			0.67			0.71			0.50			
Searching	2		0.55			0.64			0.32			0.46			0.65		
Planning	3	0.43			0.56				0.57			0.56			0.57		
Planning	4	0.43					0.34	0.55			0.54			0.50			
Marshaling	5		0.43		0.33			0.68			0.68					0.31	
Marshaling	6		0.43			0.67			0.34			0.38			0.50		
Implementing (People)	7			0.72			0.70		0.58			0.64					0.69
Implementing (People)	8			0.62			0.77			0.43			0.40				0.69
Implementing (Finance)	9		0.39				0.45			0.30			0.40			0.63	
Implementing (Finance)	10		0.66			0.60			0.51			0.57				0.61	

The two-factor confirmatory factor analysis reveal relatively high covariance between sub-factors, which suggests that the two related constructs may not be distinct enough to be considered separate factors. Moreover, in one of the Malawi models, Uganda models, and the Benin SWEDD Mothers models, the two-factor model has better goodness of fit statistics. Both models appear equally plausible in the Benin SWEDD adolescent models. For all remaining pilots, the one-factor model display better fit. Comparing the goodness of fit statistics between the one- and two-factor models indicates that how external locus is perceived—that is, whether respondents meaningfully distinguish which external entity is dictating their life's events (chance/fate or powerful others)—may vary across cultures and contexts.

Table B19: Locus of Control: 2-Factor Confirmatory Factor Analysis Loadings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Malawi LSMS		Malawi IFPRI		Uganda		SWEDD Adolescents 1	SWEDD Adolescents 2	SWEDD Mothers
	3-point	5-point	3-point	5-point	3-point	5-point	5-point	5-point	5-point
Chance	0.47	0.49	0.52	0.54	0.22	0.18	0.65	0.51	0.13
Chance	0.54	0.57	0.49	0.50	0.53	0.57	0.54	0.61	0.75
Powerful Others	0.29	0.44	0.34	0.38	0.36	0.32	0.74	0.71	0.77
Powerful Others	0.31	0.36	0.23	0.27	0.23	–0.02	0.75	0.68	0.68
Cov: Chance-Powerful Others	1.19	0.94	1.05	1.05	1.03	0.77	1.07	1.08	0.85

Notes: The table presents the standardized loadings and covariance from the two-factor model for external locus of control.

Table B20: Locus of Control: 2-Factor CFA Goodness of Fit Statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Malawi LSMS		Malawi IFPRI		Uganda		SWEDD Adolescents 1	SWEDD Adolescents 2	SWEDD Mothers
	3-point	5-point	3-point	5-point	3-point	5-point	5-point	5-point	5-point
CFI	0.97	0.98	0.79	0.79	0.94	0.82	0.95	0.92	0.92
TLI	0.94	0.96	0.61	0.60	0.89	0.67	0.91	0.85	0.86
RMSEA	0.03	0.02	0.08	0.09	0.02	0.05	0.05	0.06	0.06
Chi-square p-value	0.11	0.18	0.00	0.00	0.25	0.02	0.00	0.00	0.00

Notes: Cut-offs for goodness of fit are a non-significant chi-square test, CFI and TLI above 0.90, and an RMSEA below 0.05 for good fit or below 0.08 for acceptable fit.

Table B21: Locus of Control: 1-Factor Confirmatory Factor Analysis Loadings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Malawi LSMS		Malawi IFPRI		Uganda		SWEDD Adolescents 1	SWEDD Adolescents 2	SWEDD Mothers
	3-point	5-point	3-point	5-point	3-point	5-point	5-point	5-point	5-point
External	0.55	0.56	0.49	0.50	0.53	0.53	0.56	0.64	0.64
External	0.48	0.48	0.53	0.54	0.22	0.20	0.68	0.53	0.11
External	0.37	0.50	0.53	0.54	0.23	0.33	0.35	0.44	0.04
External	0.31	0.42	0.36	0.39	0.36	0.28	0.75	0.72	0.77
External	0.34	0.35	0.24	0.28	0.23	–0.05	0.76	0.70	0.68
External	0.47	0.40	0.46	0.59	0.21	0.28	0.62	0.66	0.37

Notes: The table presents the standardized loadings from the one-factor model for external locus of control.

Table B22: Locus of Control: 1-Factor CFA Goodness of Fit Statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Malawi LSMS		Malawi IFPRI		Uganda		SWEDD Adolescents 1	SWEDD Adolescents 2	SWEDD Mothers
	3-point	5-point	3-point	5-point	3-point	5-point	5-point	5-point	5-point
CFI	0.95	0.98	0.79	0.79	0.97	0.83	0.94	0.91	0.92
TLI	0.92	0.97	0.65	0.64	0.95	0.72	0.90	0.85	0.87
RMSEA	0.03	0.02	0.08	0.08	0.02	0.05	0.05	0.06	0.05
Chi-square p-value	0.06	0.22	0.00	0.00	0.33	0.03	0.00	0.00	0.00

Notes: Cut-offs for goodness of fit are a non-significant chi-square test, CFI and TLI above 0.90, and an RMSEA below 0.05 for good fit or below 0.08 for acceptable fit.

B.4 Internal Reliability

Table B23: Internal Consistency Reliability: Cronbach's Alpha

	(1)	(2)	(3)	(4)
	Women		Men	
	3-point	5-point	3-point	5-point
Goal-Setting Capacity (GSC)				
Kenya IDRC	0.70	0.81		
Malawi LSMS	0.39	0.67	0.51	0.72
Tanzania LSMS	0.84	0.87	0.85	0.79
Agricultural Self-Efficacy (AGSE)				
Malawi LSMS	0.75	0.79	0.84	0.87
Tanzania LSMS	0.91	0.92	0.91	0.91
Uganda IRC	0.75		0.83	
Generalized Livelihoods Self-Efficacy (GLSE)				
Kenya IDRC	0.58	0.62		
Kenya KYEOP	0.67	0.70	0.58	0.67
Tanzania LSMS	0.87	0.88	0.79	0.78
Locus of Control (S-LOC)				
Benin (mothers)		0.12		
Benin (adolescents)		0.36		
Cote d'Ivoire OLAM	0.46	0.46	0.50	0.53
Malawi IFPRI	0.28	0.31	0.34	0.42
Malawi LSMS	0.27	0.28	0.27	0.44
Uganda Kampala market	0.22	0.22		

Notes: This table reports the Cronbach's Alpha coefficient for each of the scale implementations.

Cronbach's alpha from each pilot for all scales are displayed in Table B23 The internal reliability of the GSC scale is high in both Kenya and Tanzania for both female and male respondents. In Kenya, where only women were interviewed, the alpha values are 0.70 (3-point scale) and 0.81 (5-point scale). In Tanzania, alpha values range from 0.84 to 0.87 for women and 0.79 to 0.85 for men. However, in Malawi, the internal reliability coefficients score are lower, with alpha values ranging from 0.39 to 0.67 for women and 0.51 to 0.72 for men. This discrepancy might be attributed to the lower educational levels in the Malawi sample, as seen in the descriptive statistics (Tables A2, A3), where only 32% of the female respondents had ever attended school, potentially affecting their understanding of the survey items. Alternatively, this may be due to limited variation in responses in the 3-point versions (e.g., a majority of responses falling into one category).

For AGSE, Cronbach's alpha is high for both female and male respondents across the

Tanzania, Malawi, and Uganda studies, ranging from 0.75 to 0.92 for women and from 0.83 to 0.91 for men.

Internal reliability of the GLSE scale is just below or above the 0.6 cutoff for both female and male respondents in the Kenya and Tanzania studies. Cronbach's alpha ranged from 0.58 to 0.88 for women and from 0.58 to 0.79 for men. The two values just below the cutoff were for 3-point versions of the scale.

Finally, for LOC, the internal LOC items (2,4, and 7) are reverse coded and all items corrected for acquiescence bias (as Laajaj and Macours 2019). All values are below the 0.80 acceptable threshold, ranging from 0.12 to 0.45. However, when the items are not reverse coded, the alphas improve to 0.37 to 0.81, suggesting that there may be an issue with response bias in addition to possible poor correlations between items. The poor Cronbach's alpha persists even when analyzing internal and external LOC separately. Since the factor analysis results reveal consistently strong model fit for the one- and two-factor external LOC, we are less concerned about the inconsistency in Cronbach's alpha.

B.5 Additional Measurement Properties Analysis

Table B24: First Item Order Effect: R-squared

	(1)	(2)	(3)	(4)
	Women		Men	
	3-point	5-point	3-point	5-point
Goal-Setting Capacity (GSC)				
Malawi LSMS	0.02	0.01	0.02	0.02
Tanzania LSMS	0.02	0.02	0.05	0.04
Agricultural Self-Efficacy (AGSE)				
Malawi LSMS	0.03	0.01	0.01	0.03
Tanzania LSMS	0.03	0.02	0.03	0.03
Generalized Livelihoods Self-Efficacy (GLSE)				
Kenya KYEOP	0.00	0.01	0.01	0.01
Tanzania LSMS	0.02	0.02	0.05	0.05
Locus of Control (S-LOC)				
Malawi LSMS	0.05	0.02	0.02	0.01
Uganda Kampala market	0.03	0.00		

Notes: This table reports the R-squared of regressing each of the scale implementations on a set of dummies for each of the scale items been asked first.

Table B25: S-LOC: Construct Validity (Acquiescence Bias Correction)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Benin: Adolescents	Mothers	CIV			Malawi IFPRI			Malawi LSMS			Kampala		
	5p	5p	3p	5p	Pooled	3p	5p	Pooled	3p	5p	Pooled	3p	5p	Pooled
Female respondents														
Age	0.06***	−0.03**	0.06	0.06	0.07	−0.03	0.00	−0.02	0.01	0.00	0.01	−0.13***	0.00	−0.05
Married	0.02*	−0.02	0.00	0.11*	0.07	0.06*	−0.03	0.01	0.06	0.13**	0.09**	0.22***	0.09*	0.14***
Household size			−0.07	−0.08	−0.08*	−0.04	−0.03	−0.03*	−0.03	−0.09*	−0.05	−0.04	−0.08*	−0.06*
Ever school	0.08***	0.01	0.09	0.25***	0.17***				0.04	0.10*	0.07*	−0.04	0.03	0.00
Secondary	0.07***	0.02	0.08	0.23***	0.16***				0.10**	0.13**	0.12***	0.08*	0.05	0.07**
Working for pay			−0.11*	0.04	−0.04				−0.03	0.07	0.03	0.12**	0.13***	0.13***
Weekly hours for pay			−0.10	0.04	−0.04				0.04	−0.03	0.02			
Weekly earnings (w. 5%)			−0.09	0.02	−0.05				0.08	0.14***	0.12***	−0.03	0.04	0.02
Business owner									−0.03	0.03	0.02	−0.02	0.01	0.01
Business profits(w. 5%)												0.00	0.07	0.03
Food insecurity									−0.13**	−0.19***	−0.15***			
Life satisfaction									0.07	−0.05	0.01	0.11**	0.17***	0.13***
Expected life satisfaction												0.23***	0.18***	0.19***
Time use satisfaction									−0.01	0.04	0.01	0.16***	0.18***	0.17***
Happiness scale			0.11*	0.12**	0.12***									
Depression scale												−0.17***	−0.18***	−0.17***
Intra-household d-m			0.07	0.05	0.08*							0.10**	−0.00	0.05
WEAI (empowerment)						0.08***	0.12***	0.09***						
Male respondents														
Age			0.12		0.02	−0.01	0.10***	0.05**	0.09*	0.05	0.07*			
Married			0.08		0.02	0.17***	0.13***	0.15***	0.10*	0.06	0.07*			
Household size			0.06		0.02	−0.13***	−0.09***	−0.10***	−0.07	−0.02	−0.04			
Ever school			0.09		0.05				0.21***	0.21***	0.19***			
Secondary			0.05	0.02	0.01				0.25***	0.19***	0.19***			
Working for pay			0.07	−0.12	−0.07				0.06	−0.02	0.01			
Weekly hours for pay			−0.04	−0.21	−0.20*				0.08	0.02	0.04			
Weekly earnings (w. 5%)			0.11	−0.14	−0.07				0.21***	0.20***	0.19***			
Business owner									0.14***	0.02	0.07*			
Food insecurity									−0.26***	−0.25***	−0.26***			
Life satisfaction									0.05	0.07	0.07*			
Time use satisfaction									0.06	0.08	0.07*			
Happiness scale			−0.02	0.02	0.07									
Intra-household d-m			0.02	0.32**	0.22**									
WEAI (empowerment)						0.15***	0.23***	0.19***						

Notes: This table presents pairwise correlation coefficients of the S-LOC scale with each of the outcomes listed on the left column. The statistical associations are estimated separately by survey, respondent´s gender, and scale Likert response scale. * $p < 0.10$, ** $p < 0.05$,*** $p < 0.01$.

Table B26: Internal Consistency Reliability: Cronbach's Alpha (Acquiescence Bias Correction)

	(1)	(2)	(3)	(4)
	Women		Men	
	3-point	5-point	3-point	5-point
Locus of Control (S-LOC)				
Benin (mothers)		0.12		
Benin (adolescents)		0.36		
Cote d'Ivoire OLAM	0.46	0.46	0.50	0.53
Malawi IFPRI	0.28	0.31	0.34	0.42
Malawi LSMS	0.27	0.28	0.27	0.44
Uganda Kampala market	0.22	0.22		

Notes: This table reports the Cronbach's Alpha coefficient for each of the scale implementations.

C Additional Regression Analysis

C.1 Mental Health Outcomes

C.1.1 Main Results

Table C1: Goal-Setting Capacity and Mental Health: Regression Analysis

	Life satisfaction											
	Current life						Expected life			Time use		
	10-step			5-step			10-step			3-step		
	(1) All (1)	(2) F (2)	(3) M (3)	(1) All (4)	(2) F (5)	(3) M (6)	(1) All (7)	(2) F (8)	(3) M (9)	(1) All (10)	(2) F (11)	(3) M (12)
Tanzania × **Goal-setting (GSC)**	0.12***	0.13***	0.09*				0.18***	0.21***	0.08			
	(0.02)	(0.03)	(0.05)				(0.02)	(0.03)	(0.05)			
Malawi LSMS × **Goal-setting (GSC)**				0.03	0.05	0.03				0.06**	0.10**	0.04
				(0.03)	(0.04)	(0.03)				(0.03)	(0.04)	(0.04)
Female	0.07			0.07			0.06			0.23***		
	(0.06)			(0.05)			(0.06)			(0.05)		
Age	-0.00	0.00	-0.00	-0.00	-0.00	0.01	-0.01***	-0.01***	-0.01***	0.00	-0.00	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.64***	0.67***	0.59***	-0.22***	-0.14	-0.26***	0.58***	0.57***	0.60***	-0.12**	0.05	-0.24***
	(0.08)	(0.10)	(0.12)	(0.06)	(0.09)	(0.09)	(0.07)	(0.09)	(0.11)	(0.06)	(0.09)	(0.08)
Married	0.29***	0.32***	0.22**	-0.10	0.05	-0.32***	0.17***	0.19***	0.11	-0.11*	0.02	-0.33***
	(0.06)	(0.07)	(0.10)	(0.06)	(0.09)	(0.11)	(0.06)	(0.07)	(0.11)	(0.07)	(0.09)	(0.12)
Outcome mean	-0.00	-0.00	-0.00	-0.00	0.05	-0.05	-0.00	0.00	-0.01	0.00	0.12	-0.12
Observations	1,416	1,024	392	1,424	713	711	1,416	1,024	392	1,424	713	711

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns report survey-specific coefficients from fully interacted specifications. Columns labeled All pool female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors are robust to heteroskedasticity. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C2: Agricultural Self-Efficacy and Mental Health: Regression Analysis

	Life satisfaction											
	Current life						Expected life			Time use		
	10-step			5-step			10-step			3-step		
	(1) All (1)	(2) F (2)	(3) M (3)	(1) All (4)	(2) F (5)	(3) M (6)	(1) All (7)	(2) F (8)	(3) M (9)	(1) All (10)	(2) F (11)	(3) M (12)
Tanzania × **Agricultural SE (AGSE)**	0.12***	0.12***	0.12***				0.17***	0.20***	0.09*			
	(0.03)	(0.03)	(0.05)				(0.03)	(0.03)	(0.05)			
Malawi LSMS × **Agricultural SE (AGSE)**				0.05**	0.12***	0.01				0.04	0.08**	0.01
				(0.03)	(0.04)	(0.04)				(0.03)	(0.04)	(0.04)
Female	0.08			0.06			0.07			0.23***		
	(0.06)			(0.05)			(0.06)			(0.05)		
Age	-0.00	0.00	-0.00	-0.00	-0.00	0.01	-0.01***	-0.01***	-0.01***	0.00	-0.00	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.64***	0.66***	0.61***	-0.23***	-0.17*	-0.26***	0.59***	0.56***	0.62***	-0.13**	0.02	-0.23***
	(0.08)	(0.10)	(0.12)	(0.06)	(0.09)	(0.09)	(0.07)	(0.08)	(0.11)	(0.06)	(0.09)	(0.09)
Married	0.28***	0.31***	0.19*	-0.12*	0.03	-0.33***	0.16***	0.18***	0.09	-0.12*	0.01	-0.33***
	(0.06)	(0.07)	(0.10)	(0.07)	(0.09)	(0.11)	(0.06)	(0.07)	(0.11)	(0.07)	(0.09)	(0.12)
Outcome mean	-0.00	-0.00	-0.00	-0.00	0.05	-0.05	-0.00	0.00	-0.01	0.00	0.12	-0.12
Observations	1,416	1,024	392	1,424	713	711	1,416	1,024	392	1,424	713	711

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns report survey-specific coefficients from fully interacted specifications. Columns labeled All pool female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors are robust to heteroskedasticity. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C3: Generalized Livelihoods Self-Efficacy and Mental Health: Regression Analysis

	Life satisfaction							
	Current life (10-step)				**Expected life** (10-step)			
	(1) Pooled (1)	(2) All (2)	(3) F (3)	(4) M (4)	(1) Pooled (5)	(2) All (6)	(3) F (7)	(4) M (8)
Generalized Livelihoods SE (GLSE)	0.14***				0.16**			
	(0.00)				(0.01)			
Kenya KYEOP × **Generalized Livelihoods SE (GLSE)**		0.14***	0.13**	0.17***		0.15**	0.15**	0.17***
		(0.00)	(0.00)	(0.00)		(0.00)	(0.00)	(0.00)
Tanzania × **Generalized Livelihoods SE (GLSE)**		0.15***	0.15***	0.19*		0.19**	0.18***	0.19**
		(0.00)	(0.00)	(0.02)		(0.00)	(0.00)	(0.01)
Female	0.00	-0.00			0.21**	0.20*		
	(0.03)	(0.02)			(0.01)	(0.02)		
Age	-0.00	-0.00	-0.00	-0.01	-0.01	-0.01*	-0.01*	-0.01
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.29	0.29	0.31	0.28*	0.20	0.20	0.18	0.23
	(0.05)	(0.05)	(0.07)	(0.04)	(0.06)	(0.06)	(0.07)	(0.05)
Married	0.10	0.10	0.13	0.04	0.03	0.02	0.04	-0.03
	(0.06)	(0.04)	(0.05)	(0.02)	(0.06)	(0.04)	(0.05)	(0.01)
Survey FE		✓	✓	✓		✓	✓	✓
Outcome mean	-0.00	-0.00	-0.02	0.03	0.00	0.00	0.06	-0.10
Observations	10,724	10,724	6,612	4,112	10,724	10,724	6,612	4,112

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Column (1) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Columns (2)–(4) report survey-specific coefficients from fully interacted specifications with survey fixed effects. Column (2) (All) pools female and male respondents, while columns (3) (F) and (4) (M) restrict the sample to female and male respondents, respectively. Standard errors are clustered at the survey level when the model includes survey fixed effects and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C4: Locus of Control and Mental Health: Regression Analysis

	Life satisfaction									**Other mental wellbeing**			
	Current life				**Expected life**	**Time use**				**Happiness**			**Depression**
	10-step	5-step			10-step	3-step			4-step				
	(1) F (1)	(1) All (2)	(2) F (3)	(3) M (4)	(1) F (5)	(1) All (6)	(2) F (7)	(3) M (8)	(1) F (9)	(1) All (10)	(2) F (11)	(3) M (12)	(1) F (13)
Kampala × **Locus of control (S-LOC)**	0.11***				0.16***				0.15***				-0.15***
	(0.03)				(0.03)				(0.03)				(0.03)
Malawi LSMS × **Locus of control (S-LOC)**		0.06**	0.01	0.10***		0.06**	0.01	0.10**					
		(0.03)	(0.04)	(0.04)		(0.03)	(0.04)	(0.04)					
CIV × **Locus of control (S-LOC)**										0.11***	0.12**	0.07	
										(0.04)	(0.04)	(0.10)	
Female		0.08				0.24***				0.19			
		(0.05)				(0.05)				(0.13)			
Age	0.01**	0.00	-0.00	0.01	-0.01***	0.00	-0.00	0.01**	-0.00	-0.00	-0.00	-0.01	-0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.02)	(0.00)
Secondary	0.36**	-0.24***	-0.15	-0.30***	0.03	-0.14**	0.04	-0.27***	-0.00	-0.04	-0.06	0.27	-0.16
	(0.16)	(0.06)	(0.09)	(0.09)	(0.12)	(0.06)	(0.09)	(0.09)	(0.16)	(0.09)	(0.10)	(0.40)	(0.14)
Married	0.34***	-0.11*	0.05	-0.33***	0.29***	-0.12*	0.03	-0.34***	0.22***	0.26***	0.29***	0.04	-0.29***
	(0.07)	(0.07)	(0.09)	(0.11)	(0.07)	(0.07)	(0.09)	(0.12)	(0.07)	(0.09)	(0.10)	(0.40)	(0.07)
Outcome mean	-0.00	-0.00	0.05	-0.05	0.00	0.00	0.12	-0.12	-0.00	-0.00	0.03	-0.19	0.00
Observations	956	1,424	713	711	956	1,424	713	711	956	578	493	85	956

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns report survey-specific coefficients from fully interacted specifications. Columns labeled All pool female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors are robust to heteroskedasticity. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C.1.2 Robustness

Table C5: Goal-Setting Capacity and Mental Health: Regression Analysis (Exc. Acquiescent Respondents)

	Life satisfaction											
	Current life						Expected life			Time use		
	10-step			5-step			10-step			3-step		
	All	F	M	All	F	M	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Tanzania × **Goal-setting (GSC)**	0.09***	0.10***	0.07				0.18***	0.20***	0.07			
	(0.03)	(0.03)	(0.06)				(0.03)	(0.03)	(0.06)			
Malawi LSMS × **Goal-setting (GSC)**				0.01	0.03	0.01				0.05	0.07	0.04
				(0.03)	(0.06)	(0.04)				(0.04)	(0.06)	(0.05)
Female	0.00			0.07			-0.02			0.19***		
	(0.08)			(0.07)			(0.08)			(0.07)		
Age	-0.00*	-0.00	-0.00	0.00	-0.00	0.01	-0.01***	-0.01***	-0.01***	0.00	-0.01	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Secondary	0.61***	0.70***	0.40**	-0.24***	-0.20*	-0.25**	0.71***	0.73***	0.65***	-0.10	0.00	-0.17*
	(0.12)	(0.17)	(0.16)	(0.08)	(0.11)	(0.10)	(0.11)	(0.14)	(0.18)	(0.08)	(0.11)	(0.10)
Married	0.28***	0.29***	0.24*	-0.13	-0.03	-0.27**	0.21***	0.24***	0.13	-0.11	0.03	-0.37**
	(0.07)	(0.08)	(0.12)	(0.08)	(0.11)	(0.13)	(0.07)	(0.08)	(0.15)	(0.09)	(0.11)	(0.16)
Outcome mean	-0.15	-0.17	-0.11	-0.03	0.01	-0.07	-0.16	-0.19	-0.09	-0.05	0.05	-0.14
Observations	687	519	168	889	419	470	687	519	168	889	419	470

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C6: Agricultural Self-Efficacy and Mental Health: Regression Analysis (Exc. Acquiescent Respondents)

	Life satisfaction											
	Current life						Expected life			Time use		
	10-step			5-step			10-step			3-step		
	All	F	M	All	F	M	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Tanzania × **Agricultural SE (AGSE)**	0.12***	0.12***	0.14**				0.16***	0.20***	0.04			
	(0.03)	(0.04)	(0.06)				(0.03)	(0.04)	(0.06)			
Malawi LSMS × **Agricultural SE (AGSE)**				0.02	0.06	-0.00				0.02	0.05	-0.00
				(0.03)	(0.05)	(0.04)				(0.03)	(0.05)	(0.04)
Female	0.06			0.02			0.06			0.20***		
	(0.06)			(0.06)			(0.06)			(0.06)		
Age	-0.00	-0.00	-0.00	-0.00	-0.00	0.00	-0.01***	-0.01***	-0.01***	0.00	-0.00	0.01***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.61***	0.63***	0.56***	-0.29***	-0.24**	-0.32***	0.52***	0.50***	0.51***	-0.18***	-0.04	-0.29***
	(0.08)	(0.10)	(0.12)	(0.07)	(0.10)	(0.09)	(0.08)	(0.09)	(0.12)	(0.07)	(0.10)	(0.09)
Married	0.24***	0.29***	0.13	-0.07	0.09	-0.29**	0.15**	0.17**	0.08	-0.12	0.02	-0.36***
	(0.06)	(0.07)	(0.11)	(0.07)	(0.10)	(0.12)	(0.06)	(0.07)	(0.12)	(0.07)	(0.10)	(0.12)
Outcome mean	-0.04	-0.04	-0.04	-0.03	-0.01	-0.06	-0.05	-0.05	-0.06	-0.02	0.09	-0.13
Observations	1,213	902	311	1,208	604	604	1,213	902	311	1,208	604	604

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C7: Generalized Livelihoods Self-Efficacy and Mental Health: Regression Analysis (Exc. Acquiescent Respondents)

	Life satisfaction					
	Current life (10-step)			**Expected life** (10-step)		
	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)
Kenya KYEOP × **Generalized Livelihoods SE (GLSE)**	0.08***	0.07**	0.10***	0.12**	0.13**	0.11***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Tanzania × **Generalized Livelihoods SE (GLSE)**	0.12**	0.13***	0.14**	0.19**	0.17***	0.18**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Female	-0.02			0.22*		
	(0.02)			(0.03)		
Age	-0.01*	-0.01*	-0.01	-0.01***	-0.01**	-0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.26*	0.27*	0.25*	0.21	0.18	0.24*
	(0.03)	(0.04)	(0.02)	(0.04)	(0.05)	(0.03)
Married	0.08	0.10	0.06	0.01	0.04	-0.05
	(0.05)	(0.08)	(0.02)	(0.05)	(0.07)	(0.02)
Survey FE	✓	✓	✓	✓	✓	✓
Outcome mean	-0.08	-0.11	-0.05	-0.06	0.00	-0.17
Observations	8,495	5,172	3,323	8,495	5,172	3,323

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C8: Locus of Control and Mental Health: Regression Analysis (Exc. Acquiescent Respondents)

	Life satisfaction									**Other mental wellbeing**			
	Current life				**Expected life**	**Time use**				**Happiness**			**Depression**
	10-step	5-step			10-step	3-step			4-step				
	F	All	F	M	F	All	F	M	F	All	F	M	F
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Kampala × **Locus of control (S-LOC)**	0.11***				0.16***				0.15***				-0.15***
	(0.03)				(0.03)				(0.03)				(0.03)
Malawi LSMS × **Locus of control (S-LOC)**		0.05*	0.01	0.09**		0.06**	0.00	0.10**					
		(0.03)	(0.04)	(0.04)		(0.03)	(0.04)	(0.04)					
CIV × **Locus of control (S-LOC)**										0.11***	0.12**	0.09	
										(0.04)	(0.05)	(0.12)	
Female		0.08				0.24***				0.17			
		(0.05)				(0.05)				(0.13)			
Age	0.01**	0.00	-0.00	0.01	-0.01***	0.00	-0.00	0.01**	-0.00	-0.00	-0.00	-0.00	-0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.02)	(0.00)
Secondary	0.36**	-0.24***	-0.14	-0.31***	0.03	-0.14**	0.05	-0.27***	-0.00	-0.04	-0.06	0.32	-0.16
	(0.16)	(0.06)	(0.09)	(0.09)	(0.12)	(0.06)	(0.09)	(0.09)	(0.16)	(0.09)	(0.10)	(0.40)	(0.14)
Married	0.34***	-0.11*	0.05	-0.33***	0.29***	-0.12*	0.03	-0.35***	0.22***	0.27***	0.29***	0.06	-0.29***
	(0.07)	(0.07)	(0.09)	(0.11)	(0.07)	(0.07)	(0.09)	(0.12)	(0.07)	(0.10)	(0.10)	(0.41)	(0.07)
Outcome mean	-0.00	-0.00	0.05	-0.05	0.00	0.00	0.12	-0.12	-0.00	-0.00	0.03	-0.19	0.00
Observations	956	1,416	711	705	956	1,416	711	705	956	573	492	81	956

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C9: Goal-Setting Capacity and Mental Health: Regression Analysis (PCA-index)

	Life satisfaction											
	Current life						Expected life			Time use		
	10-step			5-step			10-step			3-step		
	All	F	M	All	F	M	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Tanzania × Goal-setting	0.12***	0.13***	0.08*				0.18***	0.21***	0.07			
	(0.02)	(0.03)	(0.05)				(0.02)	(0.03)	(0.05)			
Malawi LSMS × Goal-setting				0.05*	0.08	0.03				0.07**	0.13**	0.05
				(0.03)	(0.05)	(0.03)				(0.03)	(0.05)	(0.04)
Female	0.07			0.07			0.06			0.23***		
	(0.06)			(0.05)			(0.06)			(0.05)		
Age	-0.00	0.00	-0.00	-0.00	-0.00	0.01	-0.01***	-0.01***	-0.01***	0.00	-0.00	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.64***	0.67***	0.59***	-0.23***	-0.14	-0.27***	0.58***	0.57***	0.60***	-0.13**	0.04	-0.24***
	(0.08)	(0.10)	(0.12)	(0.06)	(0.09)	(0.09)	(0.07)	(0.09)	(0.11)	(0.06)	(0.09)	(0.08)
Married	0.29***	0.32***	0.22**	-0.11	0.05	-0.33***	0.17***	0.19***	0.11	-0.11*	0.02	-0.34***
	(0.06)	(0.07)	(0.10)	(0.06)	(0.09)	(0.11)	(0.06)	(0.07)	(0.11)	(0.07)	(0.09)	(0.12)
Outcome mean	-0.00	-0.00	-0.00	-0.00	0.05	-0.05	-0.00	0.00	-0.01	0.00	0.12	-0.12
Observations	1,416	1,024	392	1,424	713	711	1,416	1,024	392	1,424	713	711

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C10: Agricultural Self-Efficacy and Mental Health: Regression Analysis (PCA-index)

	Life satisfaction											
	Current life						Expected life			Time use		
	10-step			5-step			10-step			3-step		
	All	F	M	All	F	M	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Tanzania × Agricultural self-efficacy	0.12***	0.12***	0.12**				0.17***	0.20***	0.09*			
	(0.03)	(0.03)	(0.05)				(0.03)	(0.03)	(0.05)			
Malawi LSMS × Agricultural self-efficacy				0.05*	0.12***	0.01				0.04	0.08**	0.01
				(0.03)	(0.04)	(0.04)				(0.03)	(0.04)	(0.04)
Female	0.08			0.06			0.07			0.23***		
	(0.06)			(0.05)			(0.06)			(0.05)		
Age	-0.00	0.00	-0.00	-0.00	-0.00	0.01	-0.01***	-0.01***	-0.01***	0.00	-0.00	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.64***	0.66***	0.61***	-0.23***	-0.17*	-0.26***	0.59***	0.56***	0.62***	-0.13**	0.03	-0.23***
	(0.08)	(0.10)	(0.12)	(0.06)	(0.09)	(0.09)	(0.07)	(0.08)	(0.11)	(0.06)	(0.09)	(0.09)
Married	0.28***	0.31***	0.19*	-0.12*	0.02	-0.33***	0.16***	0.18***	0.09	-0.12*	0.01	-0.33***
	(0.06)	(0.07)	(0.10)	(0.07)	(0.09)	(0.11)	(0.06)	(0.07)	(0.11)	(0.07)	(0.09)	(0.12)
Outcome mean	-0.00	-0.00	-0.00	-0.00	0.05	-0.05	-0.00	0.00	-0.01	0.00	0.12	-0.12
Observations	1,416	1,024	392	1,424	713	711	1,416	1,024	392	1,424	713	711

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C11: Generalized Livelihoods Self-Efficacy and Mental Health: Regression Analysis (PCA-index)

	Life satisfaction					
	Current life (10-step)			**Expected life** (10-step)		
	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)
Kenya KYEOP × Generalized livelihoods self-efficacy	0.10***	0.10**	0.09***	0.13**	0.13**	0.14***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Tanzania × Generalized livelihoods self-efficacy	0.14***	0.15***	0.19*	0.20**	0.18***	0.19**
	(0.00)	(0.00)	(0.02)	(0.00)	(0.00)	(0.01)
Female	-0.01			0.20*		
	(0.02)			(0.02)		
Age	-0.00	-0.00	-0.01	-0.01*	-0.01*	-0.01
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.31	0.32	0.29*	0.21	0.19	0.23
	(0.05)	(0.06)	(0.04)	(0.06)	(0.07)	(0.05)
Married	0.11	0.14	0.05	0.03	0.05	-0.02
	(0.04)	(0.05)	(0.01)	(0.04)	(0.05)	(0.01)
Survey FE	✓	✓	✓	✓	✓	✓
Outcome mean	-0.00	-0.02	0.03	0.00	0.07	-0.10
Observations	10,674	6,588	4,086	10,674	6,588	4,086

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C12: Locus of Control and Mental Health: Regression Analysis (PCA-index)

	Life satisfaction									**Other mental wellbeing**			
	Current life				**Expected life**	**Time use**				**Happiness**			**Depression**
	10-step	5-step			10-step	3-step			4-step				
	F	All	F	M	F	All	F	M	F	All	F	M	F
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Kampala × Locus of control	0.10***				0.05				0.06*				-0.08**
	(0.03)				(0.03)				(0.03)				(0.03)
Malawi LSMS × Locus of control		0.00	-0.08**	0.08*		-0.02	-0.08**	0.04					
		(0.03)	(0.04)	(0.04)		(0.03)	(0.03)	(0.04)					
CIV × Locus of control										0.11***	0.11**	0.11	
										(0.04)	(0.04)	(0.11)	
Female		0.08				0.23***				0.18			
		(0.05)				(0.05)				(0.13)			
Age	0.01**	0.00	-0.00	0.01	-0.01***	0.00	-0.00	0.01**	-0.00	-0.00	-0.00	-0.01	-0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.02)	(0.00)
Secondary	0.39**	-0.22***	-0.11	-0.30***	0.08	-0.11*	0.09	-0.25***	0.04	-0.04	-0.06	0.27	-0.21
	(0.16)	(0.07)	(0.09)	(0.09)	(0.12)	(0.06)	(0.09)	(0.09)	(0.16)	(0.09)	(0.10)	(0.39)	(0.14)
Married	0.36***	-0.10	0.06	-0.32***	0.32***	-0.11	0.04	-0.33***	0.25***	0.26***	0.29***	0.02	-0.31***
	(0.07)	(0.06)	(0.09)	(0.11)	(0.07)	(0.07)	(0.09)	(0.12)	(0.07)	(0.09)	(0.10)	(0.40)	(0.07)
Outcome mean	-0.00	-0.00	0.05	-0.05	0.00	0.00	0.12	-0.12	-0.00	-0.00	0.03	-0.19	0.00
Observations	956	1,424	713	711	956	1,424	713	711	956	578	493	85	956

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C13: Goal-Setting Capacity and Mental Health: Regression Analysis (5-point)

	Life satisfaction											
	Current life						**Expected life**			**Time use**		
	10-step			5-step			10-step			3-step		
	All	F	M	All	F	M	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Tanzania × GSC 5p	0.10***	0.10***	0.08				0.17***	0.20***	0.09			
	(0.03)	(0.04)	(0.08)				(0.03)	(0.04)	(0.07)			
Malawi LSMS × GSC 5p				0.05	0.06	0.05				0.06	0.11*	0.04
				(0.04)	(0.05)	(0.05)				(0.04)	(0.06)	(0.06)
Female	-0.01			0.10			0.07			0.19**		
	(0.08)			(0.08)			(0.08)			(0.08)		
Age	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01***	-0.01***	-0.01**	-0.00	-0.00	0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Secondary	0.67***	0.68***	0.63***	-0.24***	-0.19	-0.26**	0.62***	0.52***	0.80***	-0.11	0.15	-0.29**
	(0.11)	(0.14)	(0.17)	(0.09)	(0.13)	(0.13)	(0.09)	(0.12)	(0.14)	(0.09)	(0.12)	(0.12)
Married	0.25***	0.30***	0.13	-0.03	0.12	-0.19	0.22***	0.22**	0.23*	-0.04	0.20	-0.43**
	(0.08)	(0.09)	(0.14)	(0.10)	(0.14)	(0.18)	(0.07)	(0.09)	(0.13)	(0.10)	(0.13)	(0.17)
Outcome mean	-0.03	-0.05	0.04	-0.01	0.06	-0.09	-0.03	-0.03	-0.02	-0.02	0.08	-0.13
Observations	705	510	195	692	347	345	705	510	195	692	347	345

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C14: Goal-Setting Capacity and Mental Health: Regression Analysis (3-point)

	Life satisfaction											
	Current life						**Expected life**			**Time use**		
	10-step			5-step			10-step			3-step		
	All	F	M	All	F	M	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Tanzania × GSC 3p	0.14***	0.17***	0.07				0.19***	0.23***	0.07			
	(0.03)	(0.04)	(0.05)				(0.03)	(0.04)	(0.06)			
Malawi LSMS × GSC 3p				0.00	0.06	-0.05				0.03	0.09	-0.00
				(0.04)	(0.06)	(0.05)				(0.04)	(0.06)	(0.05)
Female	0.15*			0.05			0.05			0.26***		
	(0.08)			(0.07)			(0.08)			(0.07)		
Age	0.00	0.00	0.00	0.00	-0.00	0.01***	-0.01***	-0.01**	-0.01	0.00	0.00	0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Secondary	0.60***	0.64***	0.52***	-0.19**	-0.10	-0.25**	0.54***	0.59***	0.43**	-0.13	-0.06	-0.19
	(0.11)	(0.13)	(0.18)	(0.09)	(0.13)	(0.12)	(0.10)	(0.12)	(0.19)	(0.09)	(0.13)	(0.12)
Married	0.34***	0.33***	0.36**	-0.17*	-0.02	-0.42***	0.12	0.15	-0.00	-0.17*	-0.14	-0.27
	(0.08)	(0.10)	(0.15)	(0.08)	(0.12)	(0.14)	(0.09)	(0.10)	(0.18)	(0.09)	(0.11)	(0.17)
Outcome mean	0.02	0.04	-0.04	0.01	0.04	-0.01	0.02	0.03	0.01	0.02	0.16	-0.11
Observations	711	514	197	732	366	366	711	514	197	732	366	366

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C15: Agricultural Self-Efficacy and Mental Health: Regression Analysis (5-point)

	Life satisfaction											
	Current life						**Expected life**			**Time use**		
	10-step			5-step			10-step			3-step		
	All	F	M	All	F	M	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Tanzania × AGSE 5p	0.14***	0.11***	0.23***				0.19***	0.21***	0.15**			
	(0.04)	(0.04)	(0.06)				(0.04)	(0.04)	(0.06)			
Malawi LSMS × AGSE 5p				0.03	0.11**	-0.03				0.02	0.09	-0.03
				(0.04)	(0.06)	(0.05)				(0.04)	(0.06)	(0.06)
Female	0.01			0.10			0.09			0.20**		
	(0.08)			(0.08)			(0.08)			(0.08)		
Age	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.01***	-0.01***	-0.01**	-0.00	-0.00	0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Secondary	0.68***	0.70***	0.64***	-0.24***	-0.23*	-0.24*	0.64***	0.55***	0.81***	-0.10	0.12	-0.27**
	(0.11)	(0.14)	(0.16)	(0.09)	(0.13)	(0.13)	(0.09)	(0.12)	(0.14)	(0.09)	(0.12)	(0.12)
Married	0.22***	0.29***	0.05	-0.04	0.10	-0.17	0.19**	0.19**	0.18	-0.04	0.19	-0.40**
	(0.07)	(0.09)	(0.14)	(0.10)	(0.13)	(0.18)	(0.08)	(0.09)	(0.14)	(0.10)	(0.14)	(0.18)
Outcome mean	-0.03	-0.05	0.04	-0.01	0.06	-0.09	-0.03	-0.03	-0.02	-0.02	0.08	-0.13
Observations	705	510	195	692	347	345	705	510	195	692	347	345

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C16: Agricultural Self-Efficacy and Mental Health: Regression Analysis (3-point)

	Life satisfaction											
	Current life						**Expected life**			**Time use**		
	10-step			5-step			10-step			3-step		
	All	F	M	All	F	M	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Tanzania × AGSE 3p	0.10***	0.13***	0.03				0.13***	0.17***	0.02			
	(0.04)	(0.04)	(0.07)				(0.04)	(0.04)	(0.08)			
Malawi LSMS × AGSE 3p				0.08**	0.13**	0.04				0.05	0.06	0.04
				(0.04)	(0.05)	(0.05)				(0.04)	(0.05)	(0.05)
Female	0.16*			0.03			0.05			0.26***		
	(0.08)			(0.07)			(0.08)			(0.07)		
Age	0.00	0.00	0.00	0.00	-0.00	0.01**	-0.01***	-0.01***	-0.01	0.00	0.00	0.01
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Secondary	0.60***	0.62***	0.53***	-0.20**	-0.13	-0.25**	0.54***	0.57***	0.44**	-0.14	-0.08	-0.19
	(0.11)	(0.13)	(0.18)	(0.09)	(0.13)	(0.12)	(0.10)	(0.12)	(0.19)	(0.09)	(0.13)	(0.12)
Married	0.34***	0.34***	0.36**	-0.18**	-0.04	-0.43***	0.13	0.16	0.00	-0.18**	-0.15	-0.27*
	(0.08)	(0.10)	(0.14)	(0.08)	(0.12)	(0.14)	(0.09)	(0.10)	(0.18)	(0.09)	(0.11)	(0.17)
Outcome mean	0.02	0.04	-0.04	0.01	0.04	-0.01	0.02	0.03	0.01	0.02	0.16	-0.11
Observations	711	514	197	732	366	366	711	514	197	732	366	366

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C17: Generalized Livelihoods Self-Efficacy and Mental Health: Regression Analysis (5-point)

	Life satisfaction					
	Current life (10-step)			**Expected life** (10-step)		
	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)
Kenya KYEOP × GLSE 5p	0.13***	0.11**	0.17***	0.18**	0.14**	0.26***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Tanzania × GLSE 5p	0.13***	0.11***	0.26**	0.20***	0.19**	0.24**
	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)
Female	-0.05			0.19*		
	(0.01)			(0.02)		
Age	-0.01	-0.01	-0.01	-0.02	-0.02	-0.01*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.30	0.31	0.28*	0.18	0.16	0.19
	(0.06)	(0.07)	(0.04)	(0.08)	(0.08)	(0.08)
Married	0.10	0.10	0.10*	-0.00	0.00	-0.01
	(0.03)	(0.06)	(0.01)	(0.05)	(0.06)	(0.03)
Survey FE	✓	✓	✓	✓	✓	✓
Outcome mean	0.01	-0.03	0.06	0.01	0.07	-0.09
Observations	5,307	3,262	2,045	5,307	3,262	2,045

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C18: Generalized Livelihoods Self-Efficacy and Mental Health: Regression Analysis (3-point)

	Life satisfaction					
	Current life (10-step)			**Expected life** (10-step)		
	All	F	M	All	F	M
	(1)	(2)	(3)	(4)	(5)	(6)
Kenya KYEOP × GLSE 3p	0.15***	0.16**	0.13**	0.15**	0.17**	0.13***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Tanzania × GLSE 3p	0.16***	0.19**	0.10	0.18**	0.18**	0.13
	(0.00)	(0.00)	(0.02)	(0.01)	(0.01)	(0.03)
Female	0.04			0.21*		
	(0.03)			(0.02)		
Age	-0.00	-0.00*	-0.00	-0.01**	-0.01	-0.01
	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)
Secondary	0.29*	0.31	0.27*	0.22	0.20	0.25*
	(0.05)	(0.05)	(0.04)	(0.05)	(0.07)	(0.02)
Married	0.10	0.17	-0.00	0.05	0.09	-0.03
	(0.05)	(0.05)	(0.04)	(0.03)	(0.03)	(0.01)
Survey FE	✓	✓	✓	✓	✓	✓
Outcome mean	-0.01	-0.01	-0.01	-0.00	0.06	-0.11
Observations	5,417	3,350	2,067	5,417	3,350	2,067

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C19: Locus of Control and Mental Health: Regression Analysis (5-point)

	Life satisfaction									Other mental wellbeing			
	Current life				Expected life	Time use				Happiness			Depression
	10-step	5-step			10-step	3-step			4-step				
	F	All	F	M	F	All	F	M	F	All	F	M	F
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Kampala × S-LOC 5p	0.16***				0.17***				0.18***				-0.17***
	(0.05)				(0.04)				(0.05)				(0.04)
Malawi LSMS × S-LOC 5p		0.04	-0.04	0.11*		0.07*	0.02	0.11*					
		(0.04)	(0.05)	(0.06)		(0.04)	(0.05)	(0.06)					
CIV × S-LOC 5p										0.09	0.10	0.01	
										(0.06)	(0.07)	(0.20)	
Female		0.11				0.20**				-0.02			
		(0.08)				(0.08)				(0.18)			
Age	0.00	-0.00	-0.00	-0.00	-0.02***	0.00	-0.00	0.01**	0.00	-0.00	-0.00	-0.02	-0.01
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.03)	(0.00)
Secondary	-0.15	-0.25***	-0.18	-0.29**	-0.28*	-0.13	0.14	-0.32***	0.01	-0.01	-0.00	-1.01*	0.14
	(0.17)	(0.09)	(0.13)	(0.13)	(0.16)	(0.09)	(0.12)	(0.12)	(0.24)	(0.13)	(0.13)	(0.51)	(0.21)
Married	0.28***	-0.04	0.14	-0.19	0.12	-0.05	0.21	-0.43**	0.05	0.40***	0.44***	-0.14	-0.11
	(0.09)	(0.10)	(0.14)	(0.18)	(0.09)	(0.10)	(0.13)	(0.17)	(0.10)	(0.13)	(0.13)	(0.55)	(0.09)
Outcome mean	0.01	-0.01	0.06	-0.09	0.03	-0.02	0.08	-0.13	0.03	-0.04	-0.04	-0.10	-0.04
Observations	477	692	347	345	477	692	347	345	477	302	261	41	477

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C20: Locus of Control and Mental Health: Regression Analysis (3-point)

	Life satisfaction									Other mental wellbeing			
	Current life				Expected life	Time use				Happiness			Depression
	10-step	5-step			10-step	3-step			4-step				
	F	All	F	M	F	All	F	M	F	All	F	M	F
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Kampala × S-LOC 3p	0.07				0.18***				0.11**				-0.13***
	(0.04)				(0.05)				(0.04)				(0.05)
Malawi LSMS × S-LOC 3p		0.08**	0.07	0.09*		0.04	-0.01	0.09					
		(0.03)	(0.05)	(0.05)		(0.04)	(0.05)	(0.06)					
CIV × S-LOC 3p										0.09	0.12*	-0.03	
										(0.06)	(0.06)	(0.14)	
Female		0.06				0.28***				0.38**			
		(0.07)				(0.07)				(0.18)			
Age	0.01***	0.00	0.00	0.01**	-0.00	0.01*	0.00	0.01*	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.03)	(0.00)
Secondary	0.80***	-0.23**	-0.12	-0.30**	0.30*	-0.15*	-0.06	-0.24*	-0.03	-0.08	-0.12	0.42	-0.41**
	(0.23)	(0.09)	(0.13)	(0.12)	(0.17)	(0.09)	(0.13)	(0.13)	(0.23)	(0.13)	(0.14)	(0.47)	(0.18)
Married	0.40***	-0.18**	-0.02	-0.43***	0.43***	-0.18**	-0.13	-0.28*	0.39***	0.10	0.09	0.14	-0.44***
	(0.10)	(0.08)	(0.12)	(0.14)	(0.10)	(0.09)	(0.11)	(0.17)	(0.09)	(0.14)	(0.14)	(0.65)	(0.10)
Outcome mean	-0.01	0.01	0.04	-0.01	-0.03	0.02	0.16	-0.11	-0.03	0.04	0.10	-0.29	0.04
Observations	479	732	366	366	479	732	366	366	479	276	232	44	479

Notes: This table presents OLS regressions where the dependent variable are psychological well-being measures. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C.2 Economic Achievement

Table C21: Generalized Livelihoods Self-Efficacy and Business Profits (w5%): Regression Analysis

	Kenya		
	All	F	M
	(1)	(2)	(3)
Generalized Livelihoods SE (GLSE)	6.86***	5.89***	9.08***
	(0.32)	(0.36)	(0.66)
Female	-11.02***		
	(0.81)		
Age	0.64***	0.51***	0.73***
	(0.14)	(0.16)	(0.26)
Secondary	4.47***	4.27***	4.97***
	(0.82)	(0.97)	(1.42)
Married	5.92***	3.54***	9.50***
	(0.79)	(0.91)	(1.48)
Outcome mean	25.39	20.51	32.70
Observations	9,204	5,516	3,688

Notes: This table presents OLS regressions where the dependent variable is business profits (winsorized at both tails at 5%) among business owners. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C22: Agency and Economic Achievement: Regression Analysis (Exc. Acquiescent Respondents)

	Extensive margin				Intensive margin				Weekly earnings (USD)				Has business?				Food insecurity			
	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M
A. GSC																				
Pooled	0.04*				1.61				0.69				0.01				–0.02			
	(0.01)				(0.93)				(0.81)				(0.01)				(0.05)			
Kenya IDRC		0.04***	0.05***			1.85***	2.04***			0.90	1.29			0.01	0.01					
		(0.00)	(0.00)			(0.17)	(0.14)			(0.51)	(0.50)			(0.00)	(0.00)					
Malawi LSMS		0.01*	0.03**	–0.00		0.02	0.86*	–0.68**		0.32	–0.04	–0.04		0.00	0.01*	–0.01		0.02	0.01	0.01
		(0.00)	(0.01)	(0.00)		(0.21)	(0.24)	(0.01)		(0.32)	(0.19)	(0.60)		(0.00)	(0.00)	(0.02)		(0.01)	(0.01)	(0.00)
Tanzania		0.06***	0.06***	0.06		2.33***	1.90***	4.77***		2.15	–0.32	6.59						–0.13***	–0.05*	–0.23**
		(0.00)	(0.00)	(0.01)		(0.20)	(0.13)	(0.06)		(1.13)	(1.18)	(1.09)						(0.00)	(0.01)	(0.00)
Observations	2,707	2,707	1,953	754	2,707	2,707	1,953	754	2,089	2,089	1,452	637	1,845	1,845	1,303	542	1,337	1,337	721	616
B. AGSE																				
Pooled	0.00				1.28				0.70				–0.00				–0.07			
	(0.01)				(0.89)				(0.42)				(0.00)				(0.05)			
Malawi LSMS		–0.00	0.01	–0.01		0.92	2.29*	–0.15		0.18	0.01	0.02		–0.00	–0.01	0.00		–0.03	0.00	–0.05
		(0.01)	(0.01)	(0.02)		(0.70)	(0.35)	(1.04)		(0.76)	(2.29)	(0.08)		(0.01)	(0.02)	(0.02)		(0.02)	(0.00)	(0.02)
Tanzania		0.01	0.03*	–0.03		1.68	1.97**	1.80		3.00	3.56	0.71**						–0.20**	–0.17*	–0.23***
		(0.01)	(0.00)	(0.01)		(0.30)	(0.13)	(0.72)		(0.62)	(1.14)	(0.04)						(0.00)	(0.02)	(0.00)
Observations	2,520	2,520	1,563	957	2,520	2,520	1,563	957	1,607	1,607	841	766	1,276	1,276	639	637	1,777	1,777	993	784
C. GLSE																				
Pooled	0.05***				1.99**				7.10*				0.08				–0.19			
	(0.00)				(0.26)				(2.21)				(0.02)				(0.00)			
Kenya IDRC		0.04***	0.04***			1.62***	1.57***			0.33	0.38			0.02*	0.02*					
		(0.00)	(0.00)			(0.08)	(0.11)			(0.29)	(0.36)			(0.00)	(0.00)					
Kenya KYEOP		0.04***	0.05***	0.02*		2.04***	2.50***	0.85**		8.87***	7.86***	11.03***		0.09***	0.08***	0.10***				
		(0.00)	(0.00)	(0.00)		(0.08)	(0.09)	(0.06)		(0.16)	(0.28)	(0.10)		(0.00)	(0.00)	(0.01)				
Tanzania		0.08***	0.09***	0.04		3.39***	3.54***	4.55*		10.94***	4.89**	22.93**						–0.19***	–0.16***	–0.36***
		(0.00)	(0.00)	(0.02)		(0.07)	(0.10)	(0.54)		(0.73)	(0.60)	(1.03)						(0.06)	(0.06)	(0.12)
Observations	10,824	10,824	7,206	3,618	9,216	9,216	6,176	3,040	8,177	8,177	5,374	2,803	9,669	9,669	6,345	3,324	442	442	317	125
D. S-LOC																				
Pooled	0.03				–0.35				2.86				0.02**				–0.18			
	(0.02)				(0.40)				(1.39)				(0.00)				(0.00)			
Uganda (Kampala)		0.03***	0.04***							0.62	0.83**			–0.00	–0.00					
		(0.00)	(0.00)							(0.27)	(0.18)			(0.00)	(0.00)					
CIV		–0.03***	–0.03***	–0.04***		–1.69**	–1.10**	–2.60***		–3.80***	–2.99***	–4.50***								
		(0.00)	(0.00)	(0.00)		(0.11)	(0.06)	(0.02)		(0.25)	(0.11)	(0.00)								
Malawi LSMS		0.00	0.01**	–0.00		0.02	0.04	–0.07**		2.87**	1.63***	3.39***		0.01**	–0.00	0.02		–0.18***	–0.13***	–0.22***
		(0.00)	(0.00)	(0.00)		(0.23)	(0.02)	(0.00)		(0.31)	(0.11)	(0.03)		(0.00)	(0.00)	(0.02)		(0.02)	(0.04)	(0.03)
Observations	2,946	2,946	2,155	791	1,994	1,994	1,203	791	2,905	2,905	2,114	791	2,383	2,383	1,673	710	1,421	1,421	712	709

Notes: This table presents OLS regressions where the dependent variable are measures of economic achievement. The coefficient displayed corresponds to each of the psychological construct scales by survey implementation. Extensive margin is an indicator variable equal to one if working for pay. Intensive margin is a measure of weekly working hours, equal to zero if the respondent is not working. Weekly earnings are expressed in international USD dollars. Business ownership is an indicator variable equal to one if the respondent owns or runs a business. Food insecurity is standardized index based on the FIES scale. Within each panel, the first row (Pooled) reports the coefficient from a pooled regression with demographic controls (gender, age, education, marital status) but no survey fixed effects. Subsequent rows report the survey-specific coefficients from fully interacted specifications with demographic controls and survey fixed effects. For the Pooled row, column (1) shows the pooled regression with controls for all respondents. For survey-specific rows, columns (1)–(3) show results for all respondents, female respondents, and male respondents respectively. Standard errors are clustered at the survey level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C23: Agency and Economic Achievement: Regression Analysis (PCA-Index)

	Extensive margin				**Intensive margin**				**Weekly earnings** (USD)				**Has business?**				**Food insecurity**			
	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M
A. GSC																				
Pooled	0.04*				1.64				1.35				0.01				–0.02			
	(0.01)				(0.68)				(0.68)				(0.00)				(0.06)			
Kenya IDRC		0.04***	0.04***			1.83***	1.91***			0.70	0.99			0.01*	0.01					
		(0.00)	(0.00)			(0.11)	(0.07)			(0.49)	(0.45)			(0.00)	(0.00)					
Malawi LSMS		0.02**	0.02*	0.01		0.63	1.66**	–0.27		0.87	–0.37	0.83		0.01**	0.00	0.01		0.03	0.06	0.00
		(0.00)	(0.01)	(0.00)		(0.28)	(0.24)	(0.36)		(0.35)	(0.31)	(0.35)		(0.00)	(0.00)	(0.01)		(0.01)	(0.01)	(0.00)
Tanzania		0.05**	0.07**	0.02***		2.41**	2.47**	3.01**		7.68**	3.57	13.64**						–0.13**	–0.10	–0.17***
		(0.01)	(0.01)	(0.00)		(0.27)	(0.31)	(0.19)		(1.35)	(1.30)	(0.89)						(0.01)	(0.02)	(0.00)
Observations	4,509	4,509	3,404	1,105	4,509	4,509	3,404	1,105	3,477	3,477	2,605	872	3,093	3,093	2,380	713	2,028	2,028	1,123	905
B. AGSE																				
Pooled	0.01				1.29				1.53				–0.01				–0.06			
	(0.01)				(0.92)				(2.19)				(0.00)				(0.03)			
Malawi LSMS		–0.00	0.01	–0.01		0.87	2.20*	–0.05		–0.17	–0.09	–0.48*		–0.01	–0.01	–0.00		–0.03	–0.02	–0.04
		(0.01)	(0.01)	(0.02)		(0.64)	(0.34)	(0.97)		(0.70)	(2.04)	(0.06)		(0.01)	(0.02)	(0.01)		(0.02)	(0.01)	(0.02)
Tanzania		0.02	0.04*	–0.02		1.71	2.24**	0.95		6.21	6.65	3.63***						–0.13**	–0.10	–0.14**
		(0.01)	(0.00)	(0.02)		(0.34)	(0.16)	(0.84)		(1.07)	(1.98)	(0.01)						(0.00)	(0.02)	(0.01)
Observations	2,847	2,847	1,742	1,105	2,847	2,847	1,742	1,105	1,815	1,815	943	872	1,431	1,431	718	713	2,028	2,028	1,123	905
C. GLSE																				
Pooled	0.05***				2.22***				7.17*				0.07				–0.18			
	(0.00)				(0.21)				(1.93)				(0.02)				(0.00)			
Kenya IDRC		0.04***	0.04***			1.69***	1.60***			0.25	0.17			0.01	0.01					
		(0.00)	(0.00)			(0.09)	(0.12)			(0.29)	(0.37)			(0.00)	(0.00)					
Kenya KYEOP		0.04***	0.05***	0.02**		2.20***	2.38***	1.68**		8.61***	7.60***	10.79***		0.08***	0.08***	0.08***				
		(0.00)	(0.00)	(0.00)		(0.06)	(0.06)	(0.03)		(0.14)	(0.26)	(0.09)		(0.00)	(0.00)	(0.01)				
Tanzania		0.09***	0.11***	0.03		3.65***	3.93***	4.36*		12.20***	7.66**	21.64**						–0.18***	–0.14***	–0.34***
		(0.00)	(0.00)	(0.02)		(0.10)	(0.15)	(0.37)		(0.71)	(0.78)	(1.18)						(0.04)	(0.05)	(0.10)
Observations	12,338	12,338	8,252	4,086	10,418	10,418	6,988	3,430	9,162	9,162	6,039	3,123	10,922	10,922	7,228	3,694	603	603	410	193
D. S-LOC																				
Pooled	0.01				–0.06				3.10				0.03				–0.18			
	(0.01)				(0.95)				(1.73)				(0.01)				(0.00)			
Uganda (Kampala)		–0.01**	–0.01***							1.74***	1.88***			–0.01**	–0.01*					
		(0.00)	(0.00)							(0.16)	(0.14)			(0.00)	(0.00)					
CIV		–0.04***	–0.03***	–0.05**		–2.14**	–1.45**	–3.56**		–4.08***	–3.18***	–5.19**								
		(0.00)	(0.00)	(0.00)		(0.16)	(0.05)	(0.15)		(0.27)	(0.15)	(0.25)								
Malawi LSMS		0.01	0.02***	–0.02		0.63	0.74	0.39		2.93**	2.29***	2.91*		0.01	0.01	0.01		–0.18***	–0.15***	–0.21***
		(0.00)	(0.00)	(0.00)		(0.19)	(0.19)	(0.18)		(0.38)	(0.05)	(0.27)		(0.00)	(0.00)	(0.02)		(0.03)	(0.04)	(0.04)
Observations	2,954	2,954	2,156	798	2,002	2,002	1,204	798	2,913	2,913	2,115	798	2,387	2,387	1,674	713	1,425	1,425	713	712

Notes: This table presents OLS regressions where the dependent variable are measures of economic achievement. The coefficient displayed corresponds to each of the psychological construct scales by survey implementation. Extensive margin is an indicator variable equal to one if working for pay. Intensive margin is a measure of weekly working hours, equal to zero if the respondent is not working. Weekly earnings are expressed in international USD dollars. Business ownership is an indicator variable equal to one if the respondent owns or runs a business. Within each panel, the first row (Pooled) reports the coefficient from a pooled regression with demographic controls (gender, age, education, marital status) but no survey fixed effects. Subsequent rows report the survey-specific coefficients from fully interacted specifications with demographic controls and survey fixed effects. For the Pooled row, column (1) shows the pooled regression with controls for all respondents. For survey-specific rows, columns (1)–(3) show results for all respondents, female respondents, and male respondents respectively. Standard errors are clustered at the survey level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C24: Agency and Economic Achievement: Regression Analysis (5-point)

	Extensive margin				**Intensive margin**				**Weekly earnings** (USD)				**Has business?**				**Food insecurity**			
	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M
A. GSC																				
Pooled	0.03**				1.43*				1.01				0.01				0.02			
	(0.00)				(0.36)				(0.75)				(0.00)				(0.00)			
Kenya IDRC		0.04***	0.04***			1.55***	1.57***			0.74*	0.89*			0.01**	0.01					
		(0.00)	(0.00)			(0.06)	(0.06)			(0.24)	(0.21)			(0.00)	(0.00)					
Malawi LSMS		0.03**	0.05**	0.01		0.97*	2.43***	−0.31		0.52	−0.18	0.02		0.01**	0.00	0.00		0.02	0.09	−0.03
		(0.00)	(0.01)	(0.00)		(0.28)	(0.24)	(0.19)		(0.36)	(0.10)	(0.69)		(0.00)	(0.00)	(0.02)		(0.03)	(0.06)	(0.04)
Tanzania		0.04**	0.05**	−0.01		1.76**	1.31**	4.27*		5.93**	0.86	13.61*								
		(0.00)	(0.01)	(0.01)		(0.21)	(0.18)	(0.43)		(1.25)	(0.75)	(1.61)								
Observations	2,248	2,248	1,707	541	2,248	2,248	1,707	541	1,736	1,736	1,305	431	1,543	1,543	1,197	346	692	692	347	345
B. AGSE																				
Pooled	0.01				1.08**				0.23				−0.01				−0.07			
	(0.01)				(0.03)				(1.24)				(0.00)				(0.00)			
Malawi LSMS		0.00	−0.02*	0.02		1.63	1.87*	1.05		−0.86	0.36	−2.23		−0.01	−0.03	−0.00		−0.07*	−0.02	−0.12***
		(0.01)	(0.00)	(0.02)		(0.66)	(0.25)	(0.94)		(1.12)	(1.62)	(1.10)		(0.02)	(0.03)	(0.02)		(0.04)	(0.06)	(0.05)
Tanzania		0.02	0.02**	−0.01		0.58	0.65**	0.40		6.32*	5.60	5.07*								
		(0.00)	(0.00)	(0.03)		(0.33)	(0.05)	(1.17)		(0.66)	(0.97)	(0.53)								
Observations	1,402	1,402	861	541	1,402	1,402	861	541	890	890	459	431	697	697	351	346	692	692	347	345
C. GLSE																				
Pooled	0.05***				2.26**				7.68*				0.09				.			
	(0.00)				(0.26)				(2.47)				(0.02)				.			
Kenya IDRC		0.04***	0.04***			1.59***	1.56***			0.39	0.52			0.02*	0.02		.			
		(0.00)	(0.00)			(0.07)	(0.09)			(0.22)	(0.29)			(0.00)	(0.00)		.			
Kenya KYEOP		0.05***	0.05***	0.03***		2.34***	2.73***	1.05**		9.64***	8.93***	11.55***		0.10***	0.08***	0.14***	.			
		(0.00)	(0.00)	(0.00)		(0.04)	(0.05)	(0.03)		(0.20)	(0.37)	(0.05)		(0.00)	(0.00)	(0.01)	.			
Tanzania		0.08***	0.09***	0.04		3.36***	3.36***	4.34*		14.02***	4.96**	24.43***					.			
		(0.00)	(0.00)	(0.01)		(0.11)	(0.14)	(0.44)		(0.84)	(0.58)	(0.22)					.			
Observations	6,155	6,155	4,110	2,045	5,175	5,175	3,476	1,699	4,565	4,565	3,008	1,557	5,450	5,450	3,600	1,850	692			
D. S-LOC																				
Pooled	0.02				−0.63*				3.00				0.01***				−0.20			
	(0.02)				(0.06)				(1.38)				(0.00)				(0.00)			
Uganda (Kampala)		0.04***	0.04***							2.86***	3.00***			0.01**	0.00					
		(0.00)	(0.00)							(0.10)	(0.03)			(0.00)	(0.00)					
CIV		−0.02**	−0.00	−0.06***		−1.35**	−0.59	−3.67**		−3.36***	−1.85***	−8.21***								
		(0.00)	(0.01)	(0.00)		(0.03)	(0.15)	(0.07)		(0.21)	(0.15)	(0.02)								
Malawi LSMS		0.01	0.04***	−0.02***		−0.57*	−0.52*	−0.46**		3.07***	2.31***	3.48***		0.01*	0.02**	0.00		−0.20***	−0.15***	−0.22***
		(0.00)	(0.00)	(0.00)		(0.09)	(0.04)	(0.01)		(0.13)	(0.03)	(0.03)		(0.00)	(0.00)	(0.02)		(0.03)	(0.05)	(0.04)
Observations	1,468	1,468	1,081	387	994	994	607	387	1,449	1,449	1,062	387	1,174	1,174	828	346	692	692	347	345

Notes: This table presents OLS regressions where the dependent variable are measures of economic achievement. The coefficient displayed corresponds to each of the psychological construct scales by survey implementation. Extensive margin is an indicator variable equal to one if working for pay. Intensive margin is a measure of weekly working hours, equal to zero if the respondent is not working. Weekly earnings are expressed in international USD dollars. Business ownership is an indicator variable equal to one if the respondent owns or runs a business. Food insecurity is standardized index based on the FIES scale. Within each panel, the first row (Pooled) reports the coefficient from a pooled regression with demographic controls (gender, age, education, marital status) but no survey fixed effects. Subsequent rows report the survey-specific coefficients from fully interacted specifications with demographic controls and survey fixed effects. For the Pooled row, column (1) shows the pooled regression with controls for all respondents. For survey-specific rows, columns (1)–(3) show results for all respondents, female respondents, and male respondents respectively. Standard errors are clustered at the survey level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C25: Agency and Economic Achievement: Regression Analysis (3-point)

	Extensive margin				Intensive margin				Weekly earnings (USD)				Has business?				Food insecurity			
	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M	(1) Pooled	(2) All	(3) F	(4) M
A. GSC																				
Pooled	0.04				1.59				0.53				0.00				–0.03			
	(0.02)				(1.24)				(1.51)				(0.01)				(0.09)			
Kenya IDRC		0.05***	0.05***			2.27***	2.42***			0.70	1.16			0.01	0.01					
		(0.00)	(0.00)			(0.20)	(0.06)			(0.83)	(0.81)			(0.00)	(0.00)					
Malawi LSMS		–0.00	0.00	0.01		–0.58	0.77	–1.48		–1.13*	–1.56	–0.87		–0.01	0.02	–0.02		0.08	0.12	0.05
		(0.01)	(0.01)	(0.01)		(0.37)	(0.49)	(0.53)		(0.37)	(0.80)	(0.80)		(0.00)	(0.00)	(0.02)		(0.02)	(0.03)	(0.02)
Tanzania		0.06**	0.09**	0.02***		2.84**	3.48**	2.22*		10.64**	7.74*	15.65**						–0.14**	–0.10*	–0.18**
		(0.01)	(0.01)	(0.00)		(0.33)	(0.49)	(0.23)		(1.45)	(2.06)	(0.43)						(0.00)	(0.01)	(0.00)
Observations	2,261	2,261	1,697	564	2,261	2,261	1,697	564	1,741	1,741	1,300	441	1,550	1,550	1,183	367	1,336	1,336	776	560
B. AGSE																				
Pooled	0.00				1.64				3.08				0.00				–0.06			
	(0.02)				(2.02)				(3.14)				(0.00)				(0.05)			
Malawi LSMS		–0.00	0.05*	–0.03		0.24	2.34*	–1.06		0.69	–0.55	1.50		0.00	0.01	–0.00		–0.00	–0.02	0.01
		(0.01)	(0.01)	(0.02)		(0.59)	(0.29)	(0.86)		(0.25)	(2.51)	(0.86)		(0.02)	(0.03)	(0.02)		(0.02)	(0.02)	(0.02)
Tanzania		0.02	0.06***	–0.03*		3.15	4.25**	2.09		5.59	6.90	2.26						–0.13***	–0.11	–0.13**
		(0.01)	(0.00)	(0.00)		(0.50)	(0.17)	(0.38)		(1.82)	(3.18)	(1.04)						(0.00)	(0.02)	(0.01)
Observations	1,445	1,445	881	564	1,445	1,445	881	564	925	925	484	441	734	734	367	367	1,336	1,336	776	560
C. GLSE																				
Pooled	0.05**				2.27**				8.58*				0.08				–0.17			
	(0.01)				(0.26)				(2.20)				(0.02)				(0.00)			
Kenya IDRC		0.06***	0.06***			2.33***	2.26***			0.89*	0.73			0.01	0.01					
		(0.00)	(0.00)			(0.11)	(0.13)			(0.24)	(0.29)			(0.00)	(0.00)					
Kenya KYEOP		0.04***	0.06***	0.01**		2.22***	2.87***	0.93**		10.32***	9.28***	12.36***		0.09***	0.09***	0.08***				
		(0.00)	(0.00)	(0.00)		(0.08)	(0.06)	(0.04)		(0.18)	(0.28)	(0.06)		(0.00)	(0.00)	(0.01)				
Tanzania		0.10***	0.13***	0.05		4.11***	4.76***	4.37**		11.77***	10.47**	20.30**						–0.17***	–0.14***	–0.32***
		(0.00)	(0.00)	(0.02)		(0.16)	(0.19)	(0.32)		(0.74)	(1.11)	(1.21)						(0.04)	(0.05)	(0.10)
Observations	6,233	6,233	4,166	2,067	5,281	5,281	3,528	1,753	4,633	4,633	3,047	1,586	5,522	5,522	3,652	1,870	603	603	410	193
D. S-LOC																				
Pooled	0.03				–0.07				2.86				0.04*				–0.17			
	(0.02)				(1.12)				(1.62)				(0.00)				(0.00)			
Uganda (Kampala)		0.03***	0.03**							–2.00**	–1.63*			–0.01*	–0.01***					
		(0.00)	(0.00)							(0.46)	(0.43)			(0.00)	(0.00)					
CIV		–0.05***	–0.05***	0.02**		–2.67*	–2.17**	–1.31**		–4.23***	–4.65***	3.53**								
		(0.00)	(0.00)	(0.00)		(0.26)	(0.04)	(0.08)		(0.40)	(0.11)	(0.17)								
Malawi LSMS		0.00	–0.02***	0.02**		0.91	0.77***	0.52**		3.03**	0.88**	3.94**		0.01	–0.02**	0.05**		–0.17***	–0.11**	–0.23***
		(0.01)	(0.00)	(0.00)		(0.44)	(0.01)	(0.03)		(0.67)	(0.17)	(0.20)		(0.00)	(0.00)	(0.02)		(0.04)	(0.05)	(0.05)
Observations	1,486	1,486	1,075	411	1,008	1,008	597	411	1,464	1,464	1,053	411	1,213	1,213	846	367	733	733	366	367

Notes: This table presents OLS regressions where the dependent variable are measures of economic achievement. The coefficient displayed corresponds to each of the psychological construct scales by survey implementation. Extensive margin is an indicator variable equal to one if working for pay. Intensive margin is a measure of weekly working hours, equal to zero if the respondent is not working. Weekly earnings are expressed in international USD dollars. Business ownership is an indicator variable equal to one if the respondent owns or runs a business. Food insecurity is standardized index based on the FIES scale. Within each panel, the first row (Pooled) reports the coefficient from a pooled regression with demographic controls (gender, age, education, marital status) but no survey fixed effects. Subsequent rows report the survey-specific coefficients from fully interacted specifications with demographic controls and survey fixed effects. For the Pooled row, column (1) shows the pooled regression with controls for all respondents. For survey-specific rows, columns (1)–(3) show results for all respondents, female respondents, and male respondents respectively. Standard errors are clustered at the survey level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C.3 Empowerment Outcomes

C.3.1 Main Results

Table C26: Goal-Setting Capacity and Intra-Household Decisionmaking: Regression Analysis

	All				Married			
	(1) Pooled (1)	(2) All (2)	(3) F (3)	(4) M (4)	(1) Pooled (5)	(2) All (6)	(3) F (7)	(4) M (8)
Goal-setting (GSC)	0.11				0.13			
	(0.02)				(0.03)			
Kenya IDRC × **Goal-setting (GSC)**		0.09**	0.09**			0.10*	0.09	
		(0.00)	(0.00)			(0.01)	(0.01)	
Tanzania × **Goal-setting (GSC)**		0.14***	0.16***	0.07**		0.17**	0.21**	0.05
		(0.00)	(0.00)	(0.03)		(0.00)	(0.01)	(0.03)
Female	-0.58	-0.76**			-0.81	-1.04***		
	(0.31)	(0.04)			(0.23)	(0.01)		
Age	0.01	0.02	0.03	0.00	-0.00	0.01**	0.01*	0.00
	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)
Secondary	0.15	-0.01	-0.01	0.04	0.42*	0.15	0.18	0.03
	(0.09)	(0.09)	(0.09)	(0.07)	(0.06)	(0.10)	(0.15)	(0.07)
Married	0.03	0.16	0.17	0.19***				
	(0.47)	(0.45)	(0.48)	(0.07)				
Survey FE		✓	✓			✓	✓	
Outcome mean	-0.00	-0.00	-0.09	0.62	0.07	0.07	-0.08	0.67
Observations	3,077	3,077	2,685	392	1,446	1,446	1,159	287

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C27: Agricultural Self-Efficacy and Intra-Household Decisionmaking: Regression Analysis

	All				Married			
	(1) Pooled (1)	(2) All (2)	(3) F (3)	(4) M (4)	(1) Pooled (5)	(2) All (6)	(3) F (7)	(4) M (8)
Agricultural SE (AGSE)	0.14***				0.15***			
	(0.02)				(0.03)			
Tanzania × **Agricultural SE (AGSE)**		0.14***	0.16***	0.06**		0.15***	0.18***	0.04*
		(0.02)	(0.03)	(0.03)		(0.03)	(0.04)	(0.03)
Female	-0.78***	-0.78***			-1.01***	-1.01***		
	(0.04)	(0.04)			(0.05)	(0.05)		
Age	0.01***	0.01***	0.02***	0.00	0.01***	0.01***	0.01***	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.18***	0.18***	0.23***	0.05	0.24***	0.24***	0.34***	0.04
	(0.06)	(0.06)	(0.08)	(0.07)	(0.07)	(0.07)	(0.10)	(0.07)
Married	-0.38***	-0.38***	-0.55***	0.18**				
	(0.05)	(0.05)	(0.07)	(0.07)				
Outcome mean	-0.00	-0.00	-0.24	0.62	-0.13	-0.13	-0.45	0.67
Observations	1,416	1,416	1,024	392	988	988	701	287

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C28: Generalized Livelihoods Self-Efficacy and Intra-Household Decisionmaking: Regression Analysis

	Intra-Household Decisionmaking								IPV(Female)		
	All				Married				All		
	(1) Pooled (1)	(2) All (2)	(3) F (3)	(4) M (4)	(1) Pooled (5)	(2) All (6)	(3) F (7)	(4) M (8)	Any IPV (9)	Emotional IPV (10)	Physical IPV (11)
Generalized Livelihoods SE (GLSE)	0.24**				0.25**						
	(0.04)				(0.03)						
Kenya IDRC × **Generalized Livelihoods SE (GLSE)**		0.12***	0.12***			0.09***	0.09***				
		(0.00)	(0.01)			(0.00)	(0.00)				
Kenya KYEOP × **Generalized Livelihoods SE (GLSE)**		0.27***	0.28***	0.14***		0.27***	0.27***	0.01	-0.03***	-0.02***	-0.02**
		(0.00)	(0.00)	(0.00)		(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
Tanzania × **Generalized Livelihoods SE (GLSE)**		0.23***	0.23***	0.11**		0.22***	0.23***	0.09***			
		(0.02)	(0.01)	(0.00)		(0.01)	(0.00)	(0.00)			
Female	-0.38	-0.62**			-0.64**	-0.89**					
	(0.16)	(0.10)			(0.14)	(0.10)					
Age	0.01	0.02*	0.03*	0.00*	-0.00**	0.01***	0.01*	0.00	0.01**	0.01**	0.00
	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.05	0.04	0.04	0.02	0.16	0.09*	0.10	0.02	-0.07***	-0.04**	-0.07***
	(0.03)	(0.04)	(0.04)	(0.02)	(0.10)	(0.03)	(0.04)	(0.02)	(0.02)	(0.02)	(0.01)
Married	0.04	0.07	0.06	0.17*					-0.49***	-0.49***	-0.45***
	(0.14)	(0.12)	(0.13)	(0.03)					(0.03)	(0.03)	(0.03)
Survey FE		✓	✓	✓		✓	✓	✓			
Outcome mean	-0.00	-0.00	-0.03	0.59	0.04	0.04	-0.01	0.66	0.31	0.25	0.20
Observations	8,623	8,623	8,201	422	4,335	4,335	4,034	301	2,880	2,880	2,880

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C29: Locus of Control and Intra-Household Decisionmaking: Regression Analysis

	All		Married	
	(1) Pooled (1)	(2) F (2)	(1) Pooled (3)	(2) F (4)
Locus of control (S-LOC)	0.02		0.03	
	(0.03)		(0.01)	
CIV × **Locus of control (S-LOC)**		0.05*		0.03*
		(0.00)		(0.00)
Kampala × **Locus of control (S-LOC)**		-0.00		0.02**
		(0.01)		(0.00)
Female				
Age	-0.01	-0.01	-0.00	0.00
	(0.02)	(0.01)	(0.01)	(0.01)
Secondary	0.18**	0.21	0.20	0.28
	(0.01)	(0.04)	(0.05)	(0.05)
Married	0.59***	0.59***		
	(0.00)	(0.00)		
Survey FE		✓		✓
Outcome mean	0.01	0.01	0.31	0.31
Observations	1,449	1,449	741	741

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C.3.2 Robustness

Table C30: Goal-Setting Capacity and Intra-Household Decisionmaking: Regression Analysis (Exc. Acquiescent Respondents)

	All				Married			
	(1) Pooled (1)	(2) All (2)	(3) F (3)	(4) M (4)	(1) Pooled (5)	(2) All (6)	(3) F (7)	(4) M (8)
Goal-setting (GSC)	0.09				0.11			
	(0.02)				(0.06)			
Kenya IDRC × **Goal-setting (GSC)**		0.10**	0.10**			0.08**	0.08*	
		(0.00)	(0.01)			(0.00)	(0.01)	
Tanzania × **Goal-setting (GSC)**		0.13**	0.15**	0.03		0.18***	0.22***	0.04
		(0.00)	(0.01)	(0.04)		(0.00)	(0.00)	(0.04)
Female	-0.62	-0.78**			-0.96	-1.14***		
	(0.24)	(0.02)			(0.19)	(0.00)		
Age	0.01	0.02	0.02	0.00	-0.00	0.01*	0.01**	-0.00
	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)
Secondary	0.17	-0.03	-0.04	-0.05	0.57***	0.29	0.33	-0.01
	(0.08)	(0.08)	(0.06)	(0.14)	(0.01)	(0.05)	(0.12)	(0.11)
Married	-0.08	0.04	0.02	0.33***				
	(0.44)	(0.47)	(0.57)	(0.12)				
Survey FE		✓	✓			✓	✓	
Outcome mean	-0.10	-0.10	-0.20	0.53	-0.11	-0.11	-0.28	0.64
Observations	1,244	1,244	1,076	168	608	608	496	112

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C31: Agricultural Self-Efficacy and Intra-Household Decisionmaking: Regression Analysis (Exc. Acquiescent Respondents)

	All				Married			
	(1) Pooled (1)	(2) All (2)	(3) F (3)	(4) M (4)	(1) Pooled (5)	(2) All (6)	(3) F (7)	(4) M (8)
Agricultural SE (AGSE)	0.11***				0.14***			
	(0.03)				(0.04)			
Tanzania × **Agricultural SE (AGSE)**		0.11***	0.11***	0.07**		0.14***	0.15***	0.04
		(0.03)	(0.04)	(0.03)		(0.04)	(0.05)	(0.03)
Female	-0.83***	-0.83***			-1.08***	-1.08***		
	(0.05)	(0.05)			(0.05)	(0.05)		
Age	0.01***	0.01***	0.02***	0.00	0.01***	0.01***	0.01***	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.18**	0.18**	0.23**	0.02	0.24***	0.24***	0.34***	0.00
	(0.07)	(0.07)	(0.09)	(0.08)	(0.09)	(0.09)	(0.12)	(0.09)
Married	-0.38***	-0.38***	-0.55***	0.20**				
	(0.06)	(0.06)	(0.07)	(0.08)				
Outcome mean	-0.06	-0.06	-0.29	0.60	-0.20	-0.20	-0.51	0.66
Observations	1,213	1,213	902	311	832	832	612	220

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C32: Generalized Livelihoods Self-Efficacy and Intra-Household Decisionmaking: Regression Analysis (Exc. Acquiescent Respondents)

	Intra-Household Decisionmaking								IPV(Female)		
	All				Married				All		
	(1) Pooled (1)	(2) All (2)	(3) F (3)	(4) M (4)	(1) Pooled (5)	(2) All (6)	(3) F (7)	(4) M (8)	Any IPV (9)	Emotional IPV (10)	Physical IPV (11)
Generalized Livelihoods SE (GLSE)	0.29**				0.29**						
	(0.05)				(0.04)						
Kenya IDRC × **Generalized Livelihoods SE (GLSE)**		0.15***	0.15***			0.11***	0.10***				
		(0.00)	(0.00)			(0.00)	(0.00)				
Kenya KYEOP × **Generalized Livelihoods SE (GLSE)**		0.33***	0.33***	0.07*		0.33***	0.33***	0.91*	-0.04***	-0.03***	-0.03***
		(0.00)	(0.00)	(0.01)		(0.00)	(0.00)	(0.09)	(0.01)	(0.01)	(0.01)
Tanzania × **Generalized Livelihoods SE (GLSE)**		0.25***	0.24***	0.11**		0.21***	0.21***	0.10***			
		(0.02)	(0.01)	(0.00)		(0.01)	(0.00)	(0.00)			
Female	-0.36	-0.63**			-0.67**	-0.96***					
	(0.19)	(0.11)			(0.15)	(0.09)					
Age	0.01	0.02*	0.03*	0.00*	-0.01**	0.01***	0.01***	-0.00*	0.01*	0.00	0.00
	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.04	0.02	0.02	-0.07	0.18	0.09**	0.10*	-0.04	-0.05***	-0.03	-0.07***
	(0.02)	(0.04)	(0.04)	(0.02)	(0.10)	(0.02)	(0.03)	(0.05)	(0.02)	(0.02)	(0.02)
Married	0.05	0.08	0.07	0.21**					-0.45***	-0.45***	-0.45***
	(0.15)	(0.13)	(0.14)	(0.01)					(0.03)	(0.04)	(0.04)
Survey FE		✓	✓	✓		✓	✓	✓			
Outcome mean	-0.05	-0.05	-0.07	0.56	-0.02	-0.02	-0.06	0.64	0.31	0.26	0.21
Observations	6,883	6,883	6,596	287	3,332	3,332	3,137	195	2,202	2,202	2,202

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C33: Locus of Control and Intra-Household Decisionmaking: Regression Analysis (Exc. Acquiescent Respondents)

	All		Married	
	(1) Pooled (1)	(2) F (2)	(1) Pooled (3)	(2) F (4)
Locus of control (S-LOC)	0.02		0.03	
	(0.03)		(0.01)	
CIV × **Locus of control (S-LOC)**		0.05*		0.04**
		(0.00)		(0.00)
Kampala × **Locus of control (S-LOC)**		-0.00		0.02**
		(0.01)		(0.00)
Female				
Age	-0.01	-0.01	-0.00	0.00
	(0.02)	(0.01)	(0.01)	(0.01)
Secondary	0.18**	0.21	0.21	0.28
	(0.01)	(0.04)	(0.05)	(0.05)
Married	0.59***	0.59***		
	(0.00)	(0.00)		
Survey FE		✓		✓
Outcome mean	0.01	0.01	0.31	0.31
Observations	1,448	1,448	740	740

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C34: Goal-Setting Capacity and Intra-Household Decisionmaking: Regression Analysis (PCA-index)

	All				Married			
	(1) Pooled (1)	(2) All (2)	(3) F (3)	(4) M (4)	(1) Pooled (5)	(2) All (6)	(3) F (7)	(4) M (8)
Goal-setting	0.09				0.13			
	(0.02)				(0.03)			
Kenya IDRC × Goal-setting		0.08***	0.08***			0.10*	0.10*	
		(0.00)	(0.00)			(0.01)	(0.01)	
Tanzania × Goal-setting		0.13***	0.14***	0.06*		0.16**	0.20**	0.04
		(0.00)	(0.00)	(0.03)		(0.00)	(0.01)	(0.03)
Female	-0.58	-0.76**			-0.81	-1.04***		
	(0.31)	(0.05)			(0.23)	(0.01)		
Age	0.01	0.02	0.03	0.00	-0.00	0.01**	0.01*	0.00
	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)
Secondary	0.16	-0.00	-0.00	0.04	0.42*	0.16	0.18	0.03
	(0.09)	(0.08)	(0.08)	(0.07)	(0.06)	(0.10)	(0.15)	(0.07)
Married	0.03	0.16	0.17	0.20***				
	(0.47)	(0.45)	(0.48)	(0.07)				
Survey FE		✓	✓			✓	✓	
Outcome mean	-0.00	-0.00	-0.09	0.62	0.07	0.07	-0.08	0.67
Observations	3,077	3,077	2,685	392	1,446	1,446	1,159	287

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C35: Agricultural Self-Efficacy and Intra-Household Decisionmaking: Regression Analysis (PCA-index)

	All				Married			
	(1) Pooled (1)	(2) All (2)	(3) F (3)	(4) M (4)	(1) Pooled (5)	(2) All (6)	(3) F (7)	(4) M (8)
Agricultural self-efficacy	0.14***				0.15***			
	(0.02)				(0.03)			
Tanzania × Agricultural self-efficacy		0.14***	0.15***	0.06**		0.15***	0.18***	0.04*
		(0.02)	(0.03)	(0.03)		(0.03)	(0.04)	(0.03)
Female	-0.78***	-0.78***			-1.01***	-1.01***		
	(0.04)	(0.04)			(0.05)	(0.05)		
Age	0.01***	0.01***	0.02***	0.00	0.01***	0.01***	0.01***	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.18***	0.18***	0.23***	0.05	0.24***	0.24***	0.34***	0.04
	(0.06)	(0.06)	(0.08)	(0.07)	(0.07)	(0.07)	(0.10)	(0.07)
Married	-0.38***	-0.38***	-0.55***	0.18**				
	(0.05)	(0.05)	(0.07)	(0.07)				
Outcome mean	-0.00	-0.00	-0.24	0.62	-0.13	-0.13	-0.45	0.67
Observations	1,416	1,416	1,024	392	988	988	701	287

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C36: Generalized Livelihoods Self-Efficacy and Intra-Household Decisionmaking: Regression Analysis (PCA-index)

	Intra-Household Decisionmaking								IPV(Female)		
	All				Married				All		
	(1) Pooled (1)	(2) All (2)	(3) F (3)	(4) M (4)	(1) Pooled (5)	(2) All (6)	(3) F (7)	(4) M (8)	Any IPV (9)	Emotional IPV (10)	Physical IPV (11)
Generalized livelihoods self-efficacy	0.27**				0.26**						
	(0.04)				(0.04)						
Kenya IDRC × Generalized livelihoods self-efficacy		0.14***	0.13***			0.09***	0.09***				
		(0.00)	(0.00)			(0.00)	(0.00)				
Kenya KYEOP × Generalized livelihoods self-efficacy		0.30***	0.30***	0.31**		0.29***	0.29***	0.03	-0.03***	-0.02**	-0.02***
		(0.00)	(0.00)	(0.01)		(0.00)	(0.00)	(0.03)	(0.01)	(0.01)	(0.01)
Tanzania × Generalized livelihoods self-efficacy		0.23***	0.24***	0.11**		0.22***	0.23***	0.10***			
		(0.02)	(0.01)	(0.00)		(0.01)	(0.00)	(0.00)			
Female	-0.37	-0.62**			-0.63**	-0.89**					
	(0.16)	(0.10)			(0.14)	(0.10)					
Age	0.01	0.02*	0.03*	0.00*	-0.01**	0.01***	0.01*	0.00	0.01***	0.01**	0.00
	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Secondary	0.05	0.04	0.04	0.02	0.16	0.09*	0.10	0.02	-0.07***	-0.04**	-0.07***
	(0.03)	(0.04)	(0.04)	(0.01)	(0.10)	(0.03)	(0.04)	(0.02)	(0.02)	(0.02)	(0.01)
Married	0.05	0.08	0.08	0.17					-0.49***	-0.49***	-0.44***
	(0.14)	(0.12)	(0.13)	(0.04)					(0.03)	(0.03)	(0.03)
Survey FE		✓	✓	✓		✓	✓	✓			
Outcome mean	0.00	0.00	-0.03	0.59	0.04	0.04	-0.01	0.66	0.31	0.25	0.20
Observations	8,599	8,599	8,177	422	4,319	4,319	4,018	301	2,864	2,864	2,864

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C37: Locus of Control and Intra-Household Decisionmaking: Regression Analysis (PCA-index)

	All		Married	
	(1) Pooled (1)	(2) F (2)	(1) Pooled (3)	(2) F (4)
Locus of control	0.03		0.06	
	(0.03)		(0.01)	
CIV × Locus of control		0.08*		0.06**
		(0.01)		(0.00)
Kampala × Locus of control		0.01*		0.05**
		(0.00)		(0.00)
Female				
Age	-0.01	-0.01	-0.00	0.00
	(0.01)	(0.01)	(0.01)	(0.01)
Secondary	0.18**	0.20	0.20	0.28
	(0.01)	(0.04)	(0.05)	(0.05)
Married	0.59***	0.59***		
	(0.00)	(0.00)		
Survey FE		✓		✓
Outcome mean	0.01	0.01	0.31	0.31
Observations	1,449	1,449	741	741

Notes: This table presents OLS regressions where the dependent variable is the intrahousehold decisionmaking index (in standard deviations). Within each group, the first column (Pooled) reports the coefficient from a pooled regression with demographic controls but no survey fixed effects. Subsequent columns report survey-specific coefficients from fully interacted specifications with survey fixed effects. Columns labeled All pools female and male respondents, while columns labeled F and M restrict the sample to female and male respondents, respectively. Standard errors, reported in parentheses, are clustered at the survey level for the pooled specification and when the model includes survey fixed effects (if the outcome variable is available in more than one survey) and are robust to heteroskedasticity otherwise. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.