Does Providing Women Living in Rural Areas with Innovative Financial Interventions Change Household Expenditure and Saving Behaviour?

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Pre-analysis plan[1]

Abstract

This document outlines the pre-analysis plan to use a Randomized Controlled Trial (RCT) to assess whether either a simplified less intensive financial treatment or a tailored just-in-time financial treatment can perform better than traditional financial literacy education in overcoming financial inclusion barriers for a sample of young women in Bangladesh. The simplified less intensive financial treatment will entail participants self-recording daily income and expenditure using a financial diary. Financial diaries are believed to assist households to manage daily expenses, cut unnecessary expenditure and save for unforeseen expenses. The tailored just-in-time financial treatment will involve participants receiving individualized financial counselling, which will involve provision of advice on matters such as opening a bank account, obtaining credit and debt refinancing, tailored to the participants need.

Keywords: financial literacy, financial diary, counselling, financial behaviour

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[1]In the event that unforeseen factors necessitate adjustments in the methodology and specifications, such adjustments will be documented and justifications will be provided

1 Introduction

The strong association between the low level of financial literacy and poor financial well-being and behaviour is well-documented in the literature ([van Rooij et al., 2012], [Carpena et al., 2015]). Financial education has dominated attempts to improve financial literacy in both developed and developing countries, targeting groups with different demographic backgrounds. However, the existing literature has found weak, if not zero, impact of standard financial education on improvement in financial behavior.

[Fernandes et al., 2014] conduct a meta-analysis on 201 prior financial literacy studies, including 85 interventions, and find that financial interventions only explain 0.1% of the change in financial behavior and that the effect is even smaller for the low income population. For example, an intervention by [Cole et al., 2011] offering a financial education program to un-banked households only had a modest effect on households decision to open a saving account.

In the developing-country context, it has been argued that the standard approach is too complex and rigid to help less educated individuals make better financial decisions. [Drexler et al., 2014] conducted an experiment with two distinct training programs for micro-entrepreneurs and found that the much simplified, rule-of-thumb intervention significantly improved the business performance, as compared to the standard training program with no measurable impact. This finding suggests that simplifying training methods can yield higher benefits at less expensive cost.

The heterogeneity of individual financial circumstances and values is another hurdle for the one-size-fits-all traditional training. Previous studies, for example [Carpena et al., 2015] and [Bertrand and Morse, 2011], have shown that individuals tend to respond better to individualized instruction and teachable moments feedback. Moreover, some decisions such as credit refinancing require sophisticated knowledge which cannot be acquired in the short term. Therefore, seeking help from experts can be more desirable, relevant and cost effective for improving financial decision making. The aforementioned challenges suggest that the impact of financial intervention crucially depends on the form in which the training is provided. While much effort has been devoted to improving the course material and the evaluation of financial literacy, there has been no well-crafted analysis to determine which forms of financial interventions - simplified, traditional or teachable moments- are most appropriate and cost-effective, especially for low income population. The aim of this project is to test whether innovative and intensive treatments can outperform traditional financial literacy education, with a target group of young women aged 20 to 30 in rural Bangladesh. We propose the use of a financial diary as a less intensive, and more applicable, treatment as the simplified alternative to the traditional financial literacy program. Financial diaries are believed to help households manage daily expenses: cut unnecessary expenditure and save for unforeseen expenses. However, no existing research has attempted to evaluate the effectiveness of maintaining a financial diary as a tool to enhance financial wellbeing.

We employ personal coaching as a real, but narrower, role for just-in-time financial intervention, tied to specific behaviors that it intends to help. Counseling has the advantage of high relevance, low memory lapse between information receipt and behavior. This approach is an attempt to test the financial education fallacy proposed by [Willis, 2011], ie. while outsourcing financial decisions can appear to be expensive at first glance, it is a more feasible and cost-effective option once we have taken the true cost of effective financial education into account.

Finally, we hope that this target group will provide an opportunity to test the effect of the intervention on female financial inclusion and empowerment. Moreover, we also contribute to the existing literature by employing a more diverse set of evaluation tests, compared to the widely-used Lusardi questionnaires- in order to obtain a better measurement of the program effect.

2 Experimental Design and data

Since our main concern is to test whether alternative training would be better than the traditional financial class, we divide our target group into three groups with three treatments and one control. Each treatment group receives only one form of training

- Group A: only a financial training
- Group B: only a financial diary.
- Group C: financial training or financial diary with the option to opt-in for individual financial counseling
- Group D: control group with no treatment given.

2.1 Treatment A - Financial Education only

This treatment follows the traditional approach of financial training intervention: each member would take part in a short course of basic financial knowledge using a standardized curriculum. They would be paid for their time and also based on their performance in the exit tests.

The programs would last for 6 weeks and cover 6 modules as following:

- Modules 1: Planning and budgeting
  - Session 1- Establishing financial goals
  - Session 2- Understanding income, expenses
  - Session 3- Preparing a budget
- Modules 2: Savings:
  - Session 5- Elements of choosing where to save
  - Session 6- Informal saving services
  - Session 7- Formal saving services

- Modules 3: Borrowing
  - Session 8- Purposes of borrowing
  - Session 9- Borrowing concepts
- Modules 4: Responsible borrowing
  - Session 8- The cost of borrowing
  - Session 9- Borrowing concepts revised
  - Session 10- Good and Bad loans
- Modules 5: Comparing financial services
  - Session 11- Informal financial services
  - Session 12- Formal financial services
  - Session 13- How lenders evaluate your loans
- Module 6: Emergencies and other financial crisis
  - Session 14 - Debt liability
  - Session 15 - Violation to your right on money
  - Session 16 - Violation to your property right
- Final session - Review

Training will be administered by trainers from Khulna University. Each session will involve lecturing and group discussions with graphical illustrations and field exercises. The training will be conducted in the local language and the course content modified to suit regional specificities. We will use standardised topics that have been adopted by a number of researchers, (see Lusardi and Mitchell [2011] , Sayinzoga et al. [2016] and van Rooij et al. [2012]) and the curriculum will be modified to suit our context. Tentatively, the session day will starts at 10:00AM and conclude at 3:00pm on every Friday for 6 consecutive weeks. We will provide snacks and tea and each participant will receive compensation payment for their time. The first exit test will be completed right after the last module of training. All participants will be informed from the beginning that their earnings would vary depend on the exit test score. To check for a longer-term effect, we would conduct another test at the end of the project.

2.2 Treatment B - Financial Diary/Household Budgeting

The treatment effect of standard financial lessons tends to decay in the long term, since participants do not have the opportunity to apply what they have learned on a regular basis, and this is especially so for target groups from low income or less educated backgrounds. We propose the use of the financial diary as a less intensive, and more applicable, treatment as an alternative to the traditional financial literacy program. The saving behaviour and daily financial management of household can be improved through several mechanisms.

Financial diaries are believed to help households manage daily expenses: cut unnecessary expenditure and save for unforeseen expenses. Writing down expenditure and income on a daily basis over a one-year period may increase financial wellbeing awareness by motivating the person to reduce compulsive purchases, seek out new income sources, and prioritize their expenditure. Maintaining a financial diary can also be expected to help households keep better track of their lending and borrowing. Finally, since the participants are required to calculate their income, expenditures and savings (including cash at homes and in other savings account), this treatment also seeks to improve the numeracy skill of the target group. This group will receive financial diary / household budgeting training only. Participants will self-record household daily income and expenditure over a 6-month period.

After the samples are randomly selected, research assistants will visit the household to discuss the diaries and clarify any remaining questions. Considering the sensitivity of financial matters, we will ensure that all the discussion take place in the presence of the participants family members, including her husband and in-laws. To maintain an ongoing and regular relationship with the participants, our field workers will visit households bi-monthly to collect data, cross-verify and provide guidance on how to use the diary to record daily cash inflow and outflow. Because of memory lapse, the standard recall survey method in the existing literature may fail to detect life events and coping strategies of the household. One of the most important tasks of each visit is to balance the inflow and outflow of income. For example, if the expenses for a given fortnight exceeds income, the interviewer may choose to follow up to understand where the sources of income have come from. We aim to keep this gap below 10 percent.

The most critical factor pertaining to the recruitment for this treatment is the willingness of the household to maintain the financial diary throughout the twelve-month period. We use monetary incentives to encourage budget-keeping activities: the participant will be included in a lottery round with a chance to win 10000 taka every two months if their diary input meets the aforementioned standard. During each call or visit, our field worker will remind them about the upcoming lottery. We keep the diary structure simple for the ease of entry: two main columns representing cash inflows (income/borrowing) and outflows (expenditure/lending).

The cash inflow of the budget will track all separate income sources, dividing them into five main categories: agricultural production, loans, casual income, savings withdrawal and self-employment. The expenses cover five categories: groceries, clothing, education, production and services. The diary also collects information on major shocks that households may face and related strategies they use to cope with them. In addition to shocks such as sickness, job loss, accidents and death of a family members, households are also susceptible to external risks including pests and major weather events, as well as market risks such the price drop of agricultural products. The majority of financial diary interventions use regular (biweekly or monthly) visits to interview households on income and expenditure over the period. We propose keeping a daily record to get a more accurate and detailed picture of household spending behavior. Besides, by self-recording their own daily transactions, participant can learn to improve their money management skill and understand their family financial situation better; thereby, hopefully improving their level of confidence in their own financial ability.

Participants in this group are tested using self-efficacy and scenario-based questions at baseline and post-treatment to detect changes in financial behaviour and attitude. (Three treatment groups would all receive the same baseline and post-treatment tests). The measurements of these tests are discussed in detail in the last section. Importantly, we aim to use the financial diary as a channel to detect household bargaining power in the consumption decision. When it comes to the allocation of household resources, women usually take primary responsibility for petty decisions, such as purchasing everyday groceries or children clothes, but not critical decisions, such as the purchase of assets or investment in a business.

2.3 Treatment C - Financial Counseling

We suggest a real but narrower role for just-in-time financial intervention, tied to the specific behaviors that it intends to help. Coaching has the advantage of high relevance, low memory lapse between information receipt and behavior, and opportunities to learn from teachable moments and feedback. A subset of participants who receive financial training will be chosen randomly to take up financial counselling.

At baseline, counsellors will meet with women to identify their financial problems and design coaching sessions in the following categories: preparing budget, obtaining credit/refinancing debt, opening a bank account or small business advice. Throughout the 6-month period, a counselor will visit the household every 2-months to assist them with any problems that arises with household finances or help the women to prepare their budget for the next quarter. This treatment group also has the opportunity to have easier access to expert advice which means that they can readily get an appointment with an advisor outside of their regular visit. This option will create a valuable opportunity to take advantage of the teachable moments.

Part of womens financial inclusion is the ability to engage in income-generating activities and managing household finances. Since much of these activities varies greatly, based on household and individual characteristics, we expect that personal counseling sessions will prove to be a more effective tool than general financial lessons to assist women with making financial decisions.

2.4 Baseline/Post-treatment survey - outcome variables

The field work consists of four activities. At baseline, all members take part in a baseline survey including questions asking for basic demographic and financial information and a small test to measure ex-ante numeracy, financial literacy level and risk preference. We then randomize the samples into one control and three treatment groups as discussed above. Approximately 12 months later, we will conduct follow-up tests and survey both treatment and control groups to measure the post-treatment effect of each intervention on their saving behaviour and level of financial literacy.

Financial literacy includes several dimensions that tend to be overlooked in the literature. For example, the majority of research which has measured financial literacy is based on book knowledge and numeracy tests which may not fully capture the financial behavior and level of financial inclusion of the participants. We have developed a set scenario based questions to measure the impact of our interventions on four dimensions of financial literacy: financial confidence, financial attitude and financial behaviour. Since respondents may report what they believe surveyors want to hear rather than their true preference, we also looked for objective measurements such as numeracy test, financial knowledge test, change in saving and income.

2.4.1 Financial Knowledge

The measurement of financial knowledge here is quite similar across previous studies which mainly use numeracy test and standardised multiple choice questions adopted from Lusardi and Mitchell [2011] and Sayinzoga et al. [2016].

The participants are paid on the performance of the test. They are informed that each question only has one correct answer and is worth one point each and we will deduct half a point for every wrong answer. Thus, participants have the incentive to answer I do not know rather than attempt to pick the answer randomly.

2.4.2 Financial Confidence

We use both self-rated questionnaires and questions seeking to measure the level of confidence and financial attitude of participants.

Women are generally believed to be less confident in their financial capacity than men and the difference is especially large in developing countries. Although being overconfident can indicate harmful financial behaviour, improving confidence should be an important aspect of financial intervention, given this target group. In our survey, participants will be asked to rate themselves on knowledge of basic financial concepts and activities, such as loan/interest rate or opening a bank account, ranging from nothing(0) to a lot(4). We also include self-efficacy questions regarding behaviour, such as spending habits and debt management. (Appendix C). The questions are partially adapted from Carpena et al. [2011].

2.4.3 Financial Behaviour

Scenario-based multiple choice questions adapted from Calderone et al. [2014] will be used to assess participant financial behaviour (Appendix D). The participants are informed that some of the questions in this section do not have a singular correct answer, but rather have a descending order of correct answers. The participants are informed about this scoring and that it is designed to provide better measurement for financial awareness.

2.4.4 Other factors

Evaluation of the financial diary has proved to be problematic in past research due to the heterogeneity of spending categories. One possible approach could be to analyse overspending or productive and non-productive consumption over time.

Since financial intervention impacts are highly heterogeneous, a generic test and recall survey are considered insufficient to measure change in financial awareness behavior. Combining an exit test score with follow-up actions, such as opening a bank account and borrowing money for a new business, can evaluate the interventions impact more accurately.

Follow-up saving actions are measured by the following criteria:
Does the participant

- have any type of savings, including a savings account, savings cash at home or retirement savings?
- have any positive savings during the past 3 months?
- pay full or partial of their existing debt?

Exposure to financial instruments are measured by the likelihood of intention to apply for a saving account, a loan, a pension fund or other financial services. Finally, female autonomy is measured by the likelihood of new employment, a rise in income and the intention to open a new business.

2.4.5 Summary of main hypothesis question

Hypothesis 1: A simplified financial training will improve basic financial understanding.

- Primary Intermediate Outcomes
  - Financial knowledge test scores
  - Formal financial service usage
- Secondary Intermediate outcomes
  - Numeracy scores
  - Reported Budgeting Behavior
  - Reported Average Monthly Savings
  - Informal Savings Usage
  - Related scenario based test (”correct” option).

Hypothesis 2: : Maintaining a financial diary will result in positive financial behavior and greater financial awareness.

It is important to note that the main purpose of maintain a financial diary is not to educate, but to empower participants to better understand daily expenditure; therefore our primary outcomes focus on saving behaviours and related financial empowerment.

- Primary Intermediate Outcomes
  - Reported Budgeting Behavior
  - Reported Average Monthly Savings
  - Informal Savings
  - Related scenario based test (”correct” option).

Hypothesis 3: Financial counselling will result in positive financial behavior and greater financial awareness, plus increase the following index:

- Level of confidence and women empowerment index
- Behavioural game: household bargaining power, investment decision game, and standard risk game. [2]

The summary of outcome variables is as following:

[2] The game section will go through substantial modifications subject to the actual literacy level and other demographics information of our participants

Table 1: Table 1 - Outcome variables

Group	Outcome variables	Description	Questions
Financial Behaviour			
	Savings		
	Saving goals	Change in response to main saving purposes	I1
	Saving frequency	Change from low to high frequency	I2
	Saving amount	Absolute and log value	I5,I6
	Saving for old age	Change to having plan for old-age	I4
	Other factors	Knowledge of and attitude towards formal saving account	I8,I12-I14
	Debts /Debts behaviour		
	Currently in debt		
	Used to be in debt	Only apply for the new debt (loans that occur after joining the program)	
	Borrowing purposes	Only apply for the new debt (loans that occur after joining the program)	
	Loan sources	Only apply for the new debt (loans that occur after joining the program)	
	Financial Service usage		
	Banks account	1= Household having at least one saving account	
	NGO membership	1= Current/Past member of MFI	
	Related-knowledge	Answer related to formal saving account question	L5
	Scenario-based answers		
	Budget deficit strategy (Savings)	Change in strategy in response to scenario when Earning is less than Spending	M1
	Necessary expenditure	Change in strategy in response to scenario when investment/expenditure is productive	M2
	Business investment	Change in borrowing strategy in response to scenario when investment is productive	M3
	Insurance/risk strategy	Change in borrowing strategy in response to risky jobs/life crisis	M4
Financial knowledge			
	Financial test raw score	Total marks of L1-L8	
	Numeracy test raw score	Total marks of section N	
	Interest rate		L1
	Inflation		L2
	Loans/ Cost of borrowing		L3
	Productive expenditure		L4
	Informal/Formal savings		L5
	Budgeting		L6
	Risk		L7
	Productive loans		L8

Group	Outcome variables	Description	Questions
Financial confidence			
	Financial decisions makers	Index computed on the questions related to intra-household decisions making	D1-D3
	Knowledge confidence	The total of ”I do not know” selection in section L	L1-L8
	Self-evaluation	Index computed from section S-A	S-A,1-7
	Capacity	Index computed from section S-B	S-B,1-5
	Confidence	Index computed from section S-C	S-C,1-5
	Postive personality traits	Index computed from section S-D	S-D,1-11
	Negative personality traits	Index computed from section S-D	S-D,1-11
	Empowerment	Index computed from section S-E	S-E,1-7

3 Analysis plan

3.1 Power Calculations

The following are the power calculations for the main effects we are interested in assessing. The estimated standard deviations come from the original pilot conducted in two villages, which are not part of our sample, in June 2018. Assumptions:

- Assume a minimum detectable effect size of 0.2 standard deviations when standardizing the mean values of the main outcome variables of interest.
- Assume a take-up rate for the invitation to attend financial training of 90%. Our pilot yields a take-up rate of 100% out of 30 invitations, however this percentage is unrealistic for a larger project scale. Therefore, we choose our take-up rate assumption based on works from Gibson, McKenzie, and Zia (2014) and Doi, McKenzie, and Zia (2012) who run financial literacy training workshops for migrants.

Assumptions:

Assume a minimum detectable effect size of 0.2 standard deviations when standardizing the mean values of the main outcome variables of interest.

Assume a take-up rate for the invitation to attend the financial training of 90%. Our pilot yields a take-up rate of 100% out of 30 invitations, however this percentage is unrealistic for a larger project scale. Therefore we based on

Not all outcomes in a category are used in constructing the index because it might not be appropriate to include some outcomes. In Appendix we specify which variables are to be included in the category index by marking them with *.

We assume completion-rates for financial training to be 80%, financial diary to be 60%, and financial counselling will be 50%. In other words, 80% of participants will participate in the entire course of training treatment and finish all baseline, midline, and post-treatment surveys. For the remaining treatment arms, 60% of those invited for financial diary will finish the 6 months of recording and 50% will take-up the offer for financial counselling. The assumption is also based on 90% finish rate for the control group. With a sample size 350 for each group, the detectable effect is:

- Effect 1: The impact of the financial education workshop (b1), Power = 0.96
- Effect 2: The impact of financial diary (b2), Power = 0.92
- Effect 3: The joint impact of financial education and financial counselling s (b3), Power = 0.85

However, take-up rates can be much lower during implementation of all three treatments. Since, we anticipate a high attrition rate among the treatment groups based on other field experiments in Khulna and similar field experiments in the field of financial literacy training in other developing countries, we modify the design of this experiment as:

- Group A: only financial diary - 600 observations.
- Group B: only financial training - 600 observations.
- Group C: 300 from group A and 300 from group B to receive further counselling
- Group D: control group with no treatment given (600)

3.1.1 Balance and control for program bias

Clustered randomization will be conducted at the village level based on a sample of more than ten thousand household from non-related projects.

Using a pre-program survey, we will ensure that all treatment groups are balanced across the aforementioned control variables and behavioural indicators at baseline. We will regress the baseline variables (demographics and financial tests) on each of the treatment indicator variables. In addition, since some of the pre-intervention variables are likely to be correlated with each other, we will conduct joint tests to see whether groups of variables predict assignment to each of the treatment groups. In certain cases, relatively low response rates for specific outcome variables may yield the potential for outliers to drive the results. Where outliers are suspected across such variables, we intend to conduct the following robustness checks: (1) drop outliers or (2) truncate the data where there is little to no expected loss in statistical power or (3) transform the data into log form if possible.

The potential effects of attrition will be identified by using a dummy variable to identify participants who withdraw or become unreachable over the course of the evaluation. The attrition group will be analyzed against baseline data examine whether or not attrition has any potential relationship with the error term. Missing values, where substantial, will be imputed at the mean for variables in addition to normal analysis.

We are also going to test for balance on attrition during the endline survey. We will regress an attrition indicator on each of the treatment variables. In addition, we will present a table tabulating the reasons for attrition for all households.

3.2 Estimation

We estimate the average effect of financial literacy training and financial diary on different outcomes of interest using the following difference-in-difference (DD) regression specification:

$$Y_{i,t} = \alpha + \sum_{j=1}^{3} \gamma_j Treatment_{ij} + \lambda Post_{it} + \sum_{j=1}^{3} \beta_j (Treatment_{ij} Post_{ijt}) + \varepsilon_i t \qquad (1)$$

in which:

- Y_{it} are the outcome variables of interest for individual woman i at time t, including savings, income, financial instrument usage and three measures of financial literacy (knowledge, confidence and behaviour)
- $Treatment_{ij} j = 1, 2, 3$ represents dummy variables for Treatment 1,2,3, in which the base category is the control group.
- $Post_{it}$ is a dummy equal to 1 if the observation is from the post-treatment

As a robustness test, we plan to apply the following: (1) bootstrapping the standard error in the DD regression (2) randomization inference technique to account for multiple hypothesis testing and provide sharpened q-value; (3) non-parametric bootstrap analysis.

3.3 Financial training effects dynamic and ITT for financial counselling

Since the financial training group receive another test in long run, we analyze whether the effect of financial training will decay in long term by interacting the treatment dummy with time in this regression (the sample limits to training and control group only):

$$Y_{i,t} = \alpha + \sum_{j=1}^{3} \gamma_{j,t} Treatment_{ij} + \lambda Post_{it} + \sum_{j=1}^{3} \beta_{j,t} (Treatment_{ij} Post_{ijt}) + \varepsilon_i t \qquad (2)$$

While we run a re-randomization for the sample that will receive financial counselling, we expect some drop-out rate in this treatment which means the participant will decline the offer or decline one of private sessions. If such cases arise, we will limit the regression only to those who choose to take up the full program or change our main parameter of interest to intent-to-treat (ITT) effects for this treatment arm.

3.4 Heterogeneous Effects

The evaluation will also attempt to explore any heterogeneous effects that may potentially arise, resulting in differential effects for sub-groups within the study. The effects will be estimated using the following equation:

$$y_{iB,t} = \beta_0 + \beta_1 T + \beta_2 (TxG) + \beta_3 G + \sigma_B + \varepsilon_{iB,t} \qquad (3)$$

where (T x G) is the interaction between treatment and heterogeneous indicator and G is the indicator variable for the heterogeneous effect.

We will examine the heterogeneous impacts over a range of individual and household level effects. These will include, but not be limited to, variables listed in table 2.

To account for differential attrition between treatment and control groups, we will regress the dummy variable of attrition(1 = surveyed at baseline but not post treatment) on the aforementioned treatment indicators and co-varaiates to estimate whether attrition is statistically different in the treatment group versus the control group. This will also enable us to learn whether absent participants are different across several demographics characteristics, financial well-being, financial behaviour and other characteristics.

Variable	Description	Questions
Demographics Information		
Age	Age of participant in years	
	Age of husband head in years	
Education	Education of the partcipant	
	Husband's education	
	Highest education of any household members	
Children	Total number of children	
	Total number of sons	
	Total number of daughters	
Head of household	1 if head of household is the partcipant (wife)	
Family type	1= Nuclear family	
Household size	Number of household members	
Awareness Index	Computed from questions related to information updates	B1,B2,B3
Mobility Index	Computed from related questions	B4& B5
Empowerment Index	General attitudes towards women empowerment	B6,B7,B8,B9
Income & Assets Index		
Occupation	1= having an income-earning job outside	C1
	1=Income earning work at home	C2,C3
Income	Annual earning (last year)	C5
Assets	Measurement 1 - Land ownership. Measurement 2 - Other asset	C6 / C7
Others		
Risk Preference	Scenario-based risk sensitivity	Section G
Time value	Scenario-based time discount value	Section H
Financial activities	1 = Member of a NGO or MFI	E5
	1 = Used to be in debt (debt fully paid) , value taken at baseline	J1

Table 2: Co-variates

While the aforementioned estimation strategies outline our preferred methodology, we are also be open to future methodological advances in related approaches to assess RCTs treatment effect and randomization inference.

4 Timeline

ACTIVITY	START	END
Preparation	Apr-18	
Final Version of the curriculum	Apr-18	May-18
Materials for trainers	Apr-18	May-18
Financial diaries materials	May-18	May-18
Translation	May-18	Jun-18
Pilot	Jun-18	Jul-18
Revise	Jul-18	Aug-18
Project Start	Aug-18	
Information Session	Aug-18	
Pre-treatment test	Aug-18	Aug-18
Household Survey	Aug-18	Sep-18
Randomization	Sep-18	Sep-18
Financial Training Sessions	Oct-18	Nov-18
Financial Diary - Initial Visit	Oct-18	Apr-18
Midline test for training group	Nov-18	Nov-18
Financial Counselling - Initial Visit	Dec-18	Dec-18
Financial Counselling - First review	Dec-18	Dec-18
Financial counselling - Second Visit	Jan-19	Jan-19
Financial Diary - Second review	Feb-19	Feb-19
Financial Counselling - Final visit	Mar-19	Mar-19
Financial Diary - Final review	Apr-19	Apr-19
Games (Artifactual)	May=19	Jun-19
Wrap up	Jun-19	

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5 Appendix

APPENDIX A

A. Respondent's identity				
A1	Personal ID			
A2	Village			
A3	Union			
A4	Sub-district (Upazila)			
A5	District			
B. Awareness & Mobility				
B1	How often do you read a newspaper?	At least once a week (1)	Less than once a week (2)	**Never (3)**
B2	How often do you listen to the radio or watch TV?	At least once a week (1)	Less than once a week (2)	**Never (3)**
B3	How often do you participate in any club/ committee/ meeting group?	At least once a month (1)	Less than once a month (2)	**Never (3)**
B4	How often do you go on your own to:			
B4.1	your parents' house (only when applicable, if not record as N/A)	At least once a month (1)	Less than once a month (2)	**Never(3)**
B4.2	public places in your village (eg. market/ school/health centre...)	At least once a month (1)	Less than once a month (2)	**Never(3)**
B4.3	places outside your village	At least once a month (1)	Less than once a month (2)	**Never(3)**
B5	If you ever go on your own to these places, do you need to seek permission of anyone?			
B5.1	your parent's house	Yes, spouse's	Yes, someone else's	**No (3)**
B5.2	**Public places in your village (eg. market/ school/health centre...)**	permissio **Yes, spouse's permissio**	permission(2) **Yes, someone else's permission(2)**	No (3)
B5.3	places outside your village	Yes, spouse's permission	Yes, someone else's permission(2)	**No (3)**
B6	What is your opinion on getting married when a girl is below 18 years of old	(1)Good	Bad	Don't know

B7	What is your opinion on advancing women in higher education?	Good	Bad	Don’t know

B8	What is your opinion on paying/receiving dowry while getting married?	Good	Bad	Don’t know
B9	What is your opinion on the equal right of men and women?	Good	Bad	Don’t know
B10	Are you satisfied with the activities of your Union Parishad?	Satisfied	Not satisfied	NA

C. Occupation, Earnings & Assets					
C1	Did you do any income-earning work outside home in the last one year?	Yes (1)	No (2)		
C2	Did you do any income-earning work on your own at home in the last one year? (eg. tailoring, farming, poultry rearing, cottage industry, fishery & hatchery…)	Yes (1)	No (2)		
C3	Did you do any income-earning work jointly with other(s) at home in the last one year? (eg. tailoring, farming, poultry rearing, cottage industry, fishery & hatchery...)	Yes (1)	No (2)		
C4	Does your work require you to stay overnight outside home?	Yes, most of the time (1)		Yes, sometimes (2)	**No, not at all (3)**
C5	How much is your annual earnings in the last one year? (taka)				
C6	Do you own any land on your own?	Yes (1)	No (2)		
C7	Do you own any other asset on your own (eg. jewellery, livestock, equipment...)?	Yes (1)	No (2)		
D. Intra-household decision making					
D1	Who is the main decision maker on each of the following? (only when applicable, if not record as N/A)				
D1.1	How your earnings will be used	You (1)	Spouse (2)	You and spouse, equally (3)	Other (4)
D1.2	How your spouse's earnings will be used	You (1)	Spouse (2)	You and spouse, equally (3)	Other (4)
D1.3	Major household purchases (eg. TV, bikes, fridges...)	You (1)	Spouse (2)	You and spouse, equally (3)	Other (4)
D1.4	Household savings	You (1)	Spouse (2)	You and spouse, equally (3)	Other (4)
D1.5	Expenditures on food	You (1)	Spouse (2)	You and spouse,	Other (4)

equally (3)

D1.6	Expenditures on clothing for yourself	You (1)	Spouse (2)	You and spouse, equally (3)	**Other (4)**
D1.7	**Expenditures on education (eg. tutoring) for** children	**You (1)**	**Spouse**	**You and spouse, equally**	Other
D1.8	expenditures on crop	You (1)	Spouse (2)	You and spouse, equally (3)	**Other (4)**
D1.9	expenditures on cattle	You (1)	Spouse (2)	You and spouse, equally (3)	**Other (4)**
D1.10	expenditures on poultry	You (1)	Spouse (2)	You and spouse, equally (3)	**Other (4)**
D1.11	expenditures on fishery	You (1)	Spouse (2)	You and spouse, equally (3)	**Other (4)**
D1.12	children's marriage (eg. marriage arrangements, marriage expenditures)	You (1)	Spouse (2)	You and spouse, equally (3)	**Other (4)**
D2	Do you keep any money (eg. cash, bank deposit...) by yourself?	Yes (1)	No (2)		
D3	If yes to D2, can you decide how to use that money by yourself? (only when applicable, if not record as N/A)	Yes (1)	No (2)		
E. Financial activities					
E1	Do you have a bank account or an account in any other savings institution in your own name?	Yes (1)	No (2)		
E2	Do you have a bank account or an account in any other savings institution jointly with your spouse?	Yes (1)	No (2)		
E3	Have you yourself ever taken any loan from MFIs?	Yes (1)	No (2)		
E4	How many years have you been with the MFI?				

E5	Are you a member of any other NGO?	Yes (1)	No (2)	
E6	How many years have you been with the NGO?			
E7	Do you plan to take loans from MFIs in future?	Yes (1)	No (2)	
E8	Have you yourself ever taken any loan from other sources?	Yes (1)	No (2)	
F1	Do you like to spend for yourself on:			
F1.1	clothes and accessories	Yes (1)	No (2)	
F1.2	indulgence food (eg. snacks, candies, biscuits...)	Yes (1)	No (2)	
F1.3	Tobacco/ betel leaf	Yes (1)	No (2)	
F1.4	lottery	Yes (1)	No (2)	
F1.5	jewellery	Yes (1)	No (2)	
F2	Does your spouse like to spend for his/herself on:			
F2.1	clothes and accessories	Yes (1)	No (2)	
F2.2	indulgence food (eg. snacks, candies, biscuits...)	Yes (1)	No (2)	
F2.3	Tobacco/ betel leaf	Yes (1)	No (2)	
F2.4	lottery	Yes (1)	No (2)	
F2.5	**jewellery**	**Yes (1)**	**No (2)**	

Your friend owe you 1000 taka and you are facing these two following options, please select ONLY one:				
Option A	**Option B**	**I prefer A**	**I prefer B**	**I am indifference**
Collect 1000 taka now	Collect 1010 taka in one month			
Collect 1000 taka now	Collect 1025 taka in one month			
Collect 1000 taka now	Collect 1038 taka in one month			
Collect 1000 taka now	Collect 1051 taka in one month			
You have 1000 taka to invest in either goat or shrimp farming. If you choose to buy goat to raise and sell you can earn 1200 taka at no risk. If you choose shrimp farming you can earn 2500 taka if the shrimp seed is healthy and 100taka if the shrimp juvenile patch is infected with virus. Please indicate your preference (buying goat or shrimp seed) in each scenario below				
Scenario		**Buying goat**	**Buying shrimp seed**	**I am indifference**
The quality of shrimp seed is good and there is no chance for it to be infected				
20% of the shrimp hatchery is infected				
40% of the shrimp hatchery is infected				
60% of the shrimp hatchery is infected				
80% of the shrimp hatchery is infected				
50% of the shrimp hatchery is infected				
100% of the shrimp hatchery is infected				

Saving behaviour

I1. What are your main saving goals

☐ a. For use in case of emergency

☐ b. Renovate/Build house

☐ c. Purchase land

☐ d. School fees for children

☐ e. Education for adult members of the household

☐ f. Debt repayment

☐ g. Clothing

☐ h. To open a new business

☐ i. Buying land/livestock/other assets

☐ j. For a better future of your children

☐ k. For the expense of your children's marriage

☐ k. For your own future

☐ l. Others (Please specify……………………..)

I2. How often do you save money?

☐ a. Every day

☐ b. Once a week

☐ c. Once a month

☐ d. Once in every six months

☐ e. Once a year

☐ f. After receiving pa

☐ g. Randomly

☐ h. Others (Please specify……………………..)

I3. How do you save money

☐ a. Spend first, then save what is left at the end of the week/month/year

☐ b. Set aside money for savings first, then spend within the rest

☐ c. Others (Please specify……………………..)

I4. Have you had a saving plan for old age?

☐ a. I have thought about it but have not had a plan yet

☐ b. I have had savings for old age

☐ c. I have never thought about it

☐ d. My children will take care of me when I am old.

I5 how much have you saved in last year? …………….

I6. On an average how much do you save per month? …………….

I7. Has your household ever had a saving account?

☐ a. Yes (go to I7)

☐ b. No (go to I6)

☐ c. I do not know

I8. Why haven't you opened a bank account

☐ a. I do not trust the bank

☐ b. The procedure is complicated

☐ c. I live too far from the bank branch

☐ d. I do not need a bank account

☐ e. **Because financial services are too expensive**

☐ f. **Because you don't have enough money to use financial institutions**

☐ g. I use other forms of savings

☐ h. Others ……………………..

I9. Is the account under your name:

☐ a. It's under my name only

☐ b. It's under my husband name only

☐ c. It's under both names

☐ d. It's under other family member's name. Please specify …………..

I10. Who opened the account?

☐ a. I did

☐ b. My husband did.

☐ c. Both I and my husband did

☐ c. My in-laws / other members did.

☐ d. I do not know

I11. Is the account still open?

☐ a. Yes

☐ b. No

☐ c. I do not know

I12. How often you deposit money into the account?

☐ a. At least once a week

☐ b. At least once a month

☐ c. I only deposit once very few months

☐ c. Only once a year

I13. Do you know where is the bank in/nearest to your village?

☐ a. Yes

☐ b. No

I14. Have you ever visited the bank branch in B1?

☐ a. Yes

☐ b. No

Debt Behaviour
J1. Do you or your family currently owe money to other people or have outstanding loans to banks?
☐ a. Yes, I am currently owing money ☐ b. Yes, I used to owe money but it was fully paid already. ☐ c. No, I have never owed money before. (go to J5) ☐ d. I do not know (go to J5)
J2. The loan was for:
☐ a. For use in case of emergency ☐ b. Renovate/Build house ☐ c. Purchase land ☐ d. School fees for children ☐ e. Education for adult members of the household ☐ f. Debt repayment ☐ g. Clothing ☐ h. To open a new business ☐ i. Buying land/livestock/other assets ☐ g. Others (Please specify……………………..)
J3. The loan is from which of the following sources:
☐ a. Banks ☐ b. Saving groups ☐ c. Relatives ☐ d. Other members in the village ☐ e. NGO

☐ f. Mahajan/Merchant

☐ g. Others (Please specify……………………..)

J4. Do you find it challenging to repay the current loan:

☐ a. Yes

☐ b. No

☐ c. I do not know.

J5. Does your household owe livestock that you use for production or for food or other?

☐ a. Yes

☐ b. No

☐ c. I do not know

J6. Would you be interested in a counselling session for any of the following:

☐ a. Debt refinancing

☐ b. Lessons on loan application

☐ c. Saving account application

☐ d. I am not interested in any of the above.

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Section A – How do you feel about the following statements:					
It is hard to stick to my spending when unexpected expenses arise.					
It is challenging to save for my goals.					
When unexpected expenses occur, I usually have to borrow money.					

When faced with financial challenge, I can figure out a solution by myself.					
I lack confidence in my ability to manage my finances.					
I am not worried about running out of money in old-age.					
I live from paycheck to paycheck					
Section B – In your opinion, you are capable of the following:					
Controlling my spending					
Paying my bills/loan repayment on time					
Planning for my (family) finance					
Saving money					
Following a budget					
Section C – I feel confident about:					
How to apply for a savings account					
How to apply for a loan/ participate in microfinance program					
Interest rates, loan repayment					
Invest money in small income-generating business					
How to manage daily expense					
Section D – Generally					
I dislike risky activities					
I plan for everything in advance					
I do not follow rules					
I plan tasks carefully					

I never try anything that I am not sure of					
I'm always optimistic about my future					
A person can get rich by taking risks					
If something can go wrong for me, it will					
I can think of many times when I persisted with work when others quit					
In uncertain times I usually expect the best					
I make up my mind quickly					
Section E – What do you think about the following statement					
The important decisions in the family should be made only by the men of the family.					
A married woman should be allowed to work outside the home if she wants to.					
The wife has a right to express her opinion even when she disagrees with what her husband is saying.					
In general a woman should expect to have rights to do everything that a man can do.					
In general the important decisions in the society should be made only by men.					
In general are men or women better in working with numbers and making financial decisions?					
Are you or your wife/husband better in working with numbers and making financial decisions?					

Financial Knowledge and Numeracy Test	
ID	Age
Name:	
Address:	
Contact Number:	

Please answer the following questions. Make sure you answer all the questions in the spaces provided and tick on the appropriate answers in the multiple-choice questions.

There is only one correct answer per question. Your payment will depend on your total marks, which is calculated as:

- Correct answer = 2 marks. - Incorrect answer = - 1 mark - I do not know = 0 mark.

For example, if you do not know the correct answer of question L1, you have two options:

- Guess the answer. If you guess correctly, you will receive 2 marks, if not, then you will get penalized -1 marks , or
- Select “I do not know”, you will lose your chance to earn 2 marks, but you will not penalized your incorrect attempt.

L1. Suppose you had 10000 taka in savings account and the interest rate was 10% per year. How much you would have in this account after 1 year:

☐ a. More than 11000 taka

☐ b. Exactly 11000 taka

☐ c. Less than 11000 taka

☐ d. I do not know

L2. Imagine you have 10000 taka in your savings account. The interest is 10% per year and inflation is 20% per year (20% inflation means the average price will increase by 20% per year). After one year, how much would you be able to buy with the money in the account:

☐ a. Less than today

☐ b. Exactly like today

☐ c. More than today

☐ d. I do not know

L3. Imagine you are forced to select one loan repayment from the list below, which one should take priority:

☐ a. The one with lowest interest rate

☐ b. The one with highest interest rate ☐ c. The one with lowest amount of debt

☐ d. I do not know.

L4. What should NOT be the reason to create an emergency fund?

☐ a. Buying clothes for an upcoming holiday

☐ b. To pay for the necessities in case of crop failure

☐ c. To pay for the expenses in the case of a death

☐ d. I do not know.

L5. In the following saving options, which one is least likely to cause savings to lose their value:

☐ a. Cash at home

☐ b. Saving groups

☐ c. Saving accounts

☐ d. I do not know

L6. Shanti is preparing a budget for her household. Which of the following needs to be

included in the budget?

☐ a. Income only ☐ b. Expenses only ☐ c. Both.

☐ d. I do not know

L7. For a farmer, planting one crop is usually:

☐ a. safer than planting multiple crops

☐ b. riskier than planting multiple crops

☐ c. as safe/risky as planting multiple crops

☐ d. I do not know

L8. Manoj recently borrowed some money from a local moneylender. He needed this money to buy some clothes for his children for the upcoming festival. Do you think that Manoj's loan is:

☐ a. A productive (good) loan

☐ b. An unproductive loan

☐ c. Neither good nor bad

☐ d. I do not know

The following questions may have multiple correct answers, please select only <u>one</u> answer that is truest to your preference.

Every correct answer will receive 1 mark. There is no penalty for incorrect answer.

M1. If what you (your household) earn is less than what you (your household spend), what would you do:

☐ a. Cut back spending

☐ b. Work to earn extra money

☐ c. Borrow money from relatives and friends

☐ d. Sell crops

☐ e. Sell assets

☐ e. Do nothing

M2. Your friend has a very bright child who is currently in secondary school, but will probably do well in university. She is worried how her family will pay for the child's education. If she comes to you for advice, what would you suggest among:

☐ a. Buy child life insurance policy

☐ b. Borrow money from a moneylender

☐ c. Open a savings account in a bank

☐ d. Save at home

☐ e. Discontinue education?

☐ e. Do nothing

M3. Your uncle currently drives a rented baby taxi. He wants to purchase his own but does not have the money and is considering taking out a loan. If he comes to you for advice, what would you suggest him?

☐ a. Borrow money from relatives/friends

☐ b. Borrow money from a moneylender

☐ c. Borrow money from a bank/ saving institution

☐ d. Do not borrow money at all

M4. Ramesh does plastering on tall buildings and he is worried that his family will have inadequate income to meet their daily needs. What is your suggestion for him to prevent this?

☐ a. Take up some different work

☐ b. Try to spend less/ save more

☐ c. Purchase life or accident insurance

Please answer as many of the following questions as you can within 5 minutes. Every correct answer worth 0.2 mark, there is no penalty for wrong answers.
N1. 8+15 131+20 105+126
N2. 7+6-3 25+36-11 120+61-15
N3. 6 x 9 = 4 x 15 = 14 x 10 =
N4. 6 x 12 / 4 = 4 x 12.5 / 5 = 120 x 2 / 3 =