

## **Appendix: For Online Publication**

## Construction of the variables

Table OA.1: **Data Appendix**

| VARIABLE                               | DEFINITION  | SOURCE   |
|--|---|--|
| $Treatment_i$                          | A dummy variable for whether individual $i$ was offered the product $t$ .   | Individual contract offers.  |
| <b>Age</b>                             | The age of individual $i$ (in complete years).  | Baseline questionnaire .   |
| <b>Married</b>                         | A dummy variable for whether individual $i$ is currently married.   | Baseline questionnaire.  |
| <b>Household head</b>                  | A dummy variable for whether individual $i$ is head of her household.   | Baseline questionnaire.  |
| <b>Spouse of household head</b>        | A dummy variable for whether individual $i$ is the spouse of the household head.  | Baseline questionnaire.  |
| <b>Literate</b>                        | A dummy variable for whether individual $i$ assess that she can read and write.   | Baseline questionnaire.  |
| <b>Number of young children</b>        | A continuous variable for the number of children in the household to which individual $i$ belongs.  | Baseline questionnaire; variable coded to count the number of individuals aged 5 or younger in the household.  |
| <b>Number of children</b>              | A continuous variable for the number of children in the household to which individual $i$ belongs.  | Baseline questionnaire; variable coded to count the number of individuals aged 16 or younger in the household. |
| <b>Self employed</b>                   | Individual $i$ is currently self employed i.e has a business.   | Baseline questionnaire.  |
| <b>Business in the past</b>            | A dummy variable for whether individual $i$ has owned a business in the past.   | Baseline questionnaire.  |
| <b>Mother ever had a business</b>      | A dummy variable for whether individual $i$ 's mother ever owned a business.  | Midline questionnaire.   |
| <b>Household has existing business</b> | A dummy variable for whether household members (other than individual $i$ ') currently have a business.   | Midline questionnaire.   |
| <b>Monthly household expenditure</b>   | Household expenditure in an average month (PKR).  | Baseline questionnaire; variable coded by summing up individual expenditure items.                             |
| <b>Home owner</b>                      | A dummy variable for whether someone in the household owns the household home.  | Baseline questionnaire.  |
| <b>Asset index</b>                     | An index created for the assets owned by the household using Principle Component Analysis. Survey records if household has the following: utilities, TV, radio, internet, cable, mobile phone, fridge, freezer, microwave, AC, washing machine, sewing machine and iron | Baseline questionnaire.  |

|                                |   |   |
|--------------------------------|---|---|
| <b>Confidence</b>              | A dummy variable for whether individual $i$ is confident she can financially support her family for 4 weeks.  | Baseline questionnaire.   |
| <b>Empowerment index</b>       | An index that measures if individual $i$ can make decisions (clothing, footwear, medical, recreation, visits, joining credit groups, purchases for self or others, investment, marriage) on her own using the Principle Component Analysis. | Baseline questionnaire.   |
| <b>Agency index</b>            | Inverse variance-covariance index (Anderson, 2008) created out of Confidence and Employment Index variables.  | Baseline questionnaire.   |
| <b>Allowed to work</b>         | A dummy variable for whether individual $i$ feels household members will allow her to look for work.  | Baseline questionnaire.   |
| <b>Bank account</b>            | A dummy variable for whether someone in the household has a bank account.   | Baseline questionnaire.   |
| <b>Took loans in last year</b> | A dummy variable for whether household members took out a new loan in the last one year, other than the treatment product.  | Baseline questionnaire.   |
| <b>Set up a business</b>       | A dummy variable for whether individual $i$ set up a business since treatment loan disbursal.   | Midline & Endline questionnaires; coded by calculating how long ago was a new business set up.                          |
| <b>Business exists</b>         | A dummy variable for individual $i$ has set up a new business since treatment loan disbursal that still exists.   | Midline & Endline questionnaires; coded by calculating if an existing business was set after the treatment was offered. |
| <b>Shut down business</b>      | A dummy variable for if a new business set up by individual $i$ since treatment loan disbursal has shut been down.  | Midline & Endline questionnaires.   |

#### **FAMILY 8: NUMERACY, WORKING MEMORY AND PREFERENCES**

|                         |  |   |
|-------------------------|--|---|
| <b>Numeracy score</b>   | The number of basic mathematical questions answered correctly by individual $i$ .  | Midline questionnaire; coded as the total number of correct answers.                                      |
| <b>Digit span level</b> | The highest level reached in the digit span questions by individual $i$ .  | Midline questionnaire; coded as the highest level answered correctly before making repeating incorrectly. |
| <b>Risk Aversion</b>    | The highest level reached in the hypothetical question asking for individual to select between a risky option and increasing amounts of certain payoff by individual $i$ .     | Midline questionnaire.  |
| <b>Time (near)</b>      | The highest level reached in the hypothetical question asking for individual $i$ to select between a payoff tomorrow and increasing amounts of payoff one month from tomorrow. | Midline questionnaire.  |
| <b>Time (far)</b>       | The highest level reached in the hypothetical question asking for individual $i$ to select between a payoff in 5 months from now and increasing amounts of payoff in 6 months. | Midline questionnaire.  |

|   |  |  |
|---|--|--|
| <b>No business</b>                            | A dummy variable for if individual $i$ prefers that the female respondent not set up a business.   | Incentivized questions administered at endline.  |
| <b>Business at home</b>                       | A dummy variable for if individual $i$ prefers that the female respondent set up a business that can be operated from the home.                                      | Incentivized questions administered at endline.  |
| <b>Business outside home</b>                  | A dummy variable for if individual $i$ prefers that the female respondent set up a business that is operated from outside the home (in nearby neighborhood or city). | incentivized questions administered at endline.  |
| <b>Wants advice from husband</b>              | A dummy variable for if individual $i$ demands advice from husband.  | incentivized questions administered at endline.  |
| <b>Wants advice from expert</b>               | A dummy variable for if individual $i$ demands advice from an expert.  | incentivized questions administered at endline.  |
| <b>Willing to pay for advice from husband</b> | A dummy variable for if individual $i$ is willing to pay a positive cost for advice from husband.  | incentivized questions administered at endline.  |
| <b>Willing to pay for advice from expert</b>  | A dummy variable for if individual $i$ is willing to pay a positive cost for advice from an expert.  | incentivized questions administered at endline.  |
| BranchDummy $_j$                              | Dummy variables for each branch $j$ included in the intervention.  | Individual contract offers (ID control section). |
| ID $_i$                                       | Individual ID.   | Baseline questionnaire (ID control section)      |

## OA.1 Experiment script

Thank you for answering our survey and being a part of our research. Before we start with a small exercise, we would like to give you Rs. 300 as a compensation for your time in participating in this survey. These Rs. 300 are not a part of the activity and are yours to keep.

I would like to have brief conversation with your husband regarding our research. Can you please call him and give us 5 minutes alone in this room?

[Enumerator: If husband is available and willing to talk to us, proceed with the next questionnaire form. If husband not available, ask if it is possible to call him and agree with him on a time to visit again. If husband not available to talk on the phone, agree with the wife on a time to visit the household again when the husband will be present. If the husband is unwilling to talk to us, please record 77.

[Enumerator: If the respondent is unmarried or her husband does not live with her/is not a part of the household roster, then ask for the male household head. If household head is a female, then ask for the main male adult (18 or above) decision maker in the household. Step 1 is then to be administered to this male individual.]

If there is no husband and/or an adult male household member in the household then record 77.

**Step 1: Male respondent** Enumerator: [Communicate the following with the male respondent]

I will now ask you a few questions. Your answers in these questions can help you earn up to Rs. 100 so please answer carefully and honestly. Please ask for clarification if you do not understand any question. Your answers will remain completely confidential and not revealed with your name outside this house. None of the responses here will be recorded with your name.

[Enumerator: Please make sure that the female respondent cannot hear what you are saying to the male household member]

Step 1: with male husband/household head/main male decision maker Record Name. Record Relationship with main female respondent.

1. There are 3 business opportunities: Version I:

1. Business A which is to be done at home and yields Rs.5,000 in sales every month and running cost is Rs. 2,000
2. Business B which is to be done by going to the nearby market and yields Rs. 10,000 every month and running cost is Rs. 6,000

3. Business C which is to be done by going to the big city to work with a big distributor and yields Rs. 16,000 every month and running cost is Rs. 10,000

Version II:

1. Business A which is to be done at home and yields Rs.5,000 in sales every month and running cost is Rs. 1,000
2. Business B which is to be done by going to the nearby market and yields Rs. 10,000 every month and running cost is Rs. 7,000
3. Business C which is to be done by going to the big city to work with a big distributor and yields Rs. 16,000 every month and running cost is Rs. 14,000.

Rank these in order of increasing profit levels. If you get the ranking correct you will get Rs.100. [Enumerator: please show the respondent the paper with the 3 options and record his response].

2. Imagine a situation where your wife has managed to obtain a loan so finance is not a constraint. Consider the same business options that I just gave you plus the option of 'doing nothing'. Of the 4 options, which would you choose for her?

Before I talk to your wife I would also like to ask you to answer a question. Please let us know of the two possible answers to the following question. Please note that the choices you make may be given as advice to your wife for the same question. If she gets the correct answer, she will earn up to Rs.200.

[Ask version 1/2/3/4 as randomised]

Version 1: Who has the highest wickets in one day cricket? A.Wasim Akram, B. Muttiah Muralithran, C. Shane Warne, D.Waqar Younis

Version 2: In medicine, which of these is usually denoted by 120/80 for an adult? A: Normal Pulse B: Normal Hearing C: Normal vision D: Normal Blood Pressure

Version 3: Starting from the junior most, arrange these ranks in the Pakistan Army in ascending order of seniority: 1. Lieutenant Colonel, 2. general, 3. Colonel, 4.Lieutenant General A.1243 B. 3421 C. 2431 D.1342

Version 4: Which of these cannot be the same for two different people? A. Skin Colour B. Fingerprints C. Blood Group D. Eye Colour.

Please also look at the following pattern. Here are a group of pictures that follow some order. Can you guess what the next picture in this sequence will be? You have the following options. Again, let us know which two shapes could complete the pattern. Please note that the choices you make may be given as advice to your wife for the completing the pattern. If she gets the correct answer, she will earn up to Rs.200.

[Show version 1/2/3/4 as randomised]

[If correct profit ranking] Thank you for your time. You won Rs. 100 from your answer to the first question that I will hand to you now.

I will now like to talk to (female respondent) again to complete the survey with her.

[Enumerator: Please hand over the money won (and get proof of payment.)]

[If incorrect ranking] Thank you for your time. Unfortunately, you did not rank the options correctly and therefore, I am unable to pay you Rs. 100.

I will now like to talk to (female respondent) again to complete the survey with her.

**Step 2: Female respondent** Enumerator: Communicate the following to the female respondent: I will now ask you a few more questions. Your answers in these questions can help you earn up to Rs. 200 so please answer carefully and honestly. Please ask for clarification if you do not understand any question. Your answers will remain completely confidential. None of the responses here will be recorded with your name. 1. There are 3 business opportunities: Version I:

1. Business A which is to be done at home and yields Rs.5,000 in sales every month and running cost is Rs. 2,000
2. Business B which is to be done by going to the nearby market and yields Rs. 10,000 every month and running cost is Rs. 6,000
3. Business C which is to be done by going to the big city to work with a big distributor and yields Rs. 16,000 every month and running cost is Rs. 10,000

Version II:

1. Business A which is to be done at home and yields Rs.5,000 in sales every month and running cost is Rs. 1,000
2. Business B which is to be done by going to the nearby market and yields Rs. 10,000 every month and running cost is Rs. 7,000
3. Business C which is to be done by going to the big city to work with a big distributor and yields Rs. 16,000 every month and running cost is Rs. 14,000.

Rank these in order of increasing profit levels. If you get the ranking correct you will get Rs.100. [Enumerator: please show the respondent the paper with the 3 options and record her response].

2. Imagine a situation where you have managed to obtain a loan so finance is not a constraint and you do not have to consider whether you will be able to obtain permission from your husband/male decision maker. From the business plans specified in step 1 (with the added option of 'doing nothing'), which one would you choose for yourself? [Enumerator: hand the paper to the respondent with 4 options and ask them to select. Once selected, put the answer in the envelope and seal it]. Please tick on the paper, fold it and then give it

to me. I will put it in an envelope and seal it. This will not be revealed to anyone in your household and will only be known to the research team who will never tell anyone.

3. Consider the same business options as in step 2 (3 businesses plus the option to do nothing). Imagine again a situation where you have managed to obtain a loan so finance is not a constraint. Which of the 4 options will your husband/household head choose for you? Your husband//male decision maker was asked to choose for you from these 4 options and you will get Rs.100 if your answer matches his.[Enumerator provide a new piece of paper with 4 options]. Please tick on the paper. [Enumerator: please enter on tablet her choice]

If she chooses the doing nothing option, then ask her why she chose this option: [Enumerator: do not prompt. Multiple responses are allowed. For example if she says she and her household members don't think it is suitable for her to run a business, then tick 1 and 2]

1. Husband/household head doesn't think it's suitable for her to run a business.
2. She doesn't think it is suitable to run a business.
3. Husband/household head thinks she is not capable.
4. She doesn't think she is capable.
5. There are other better uses of the money.

### **Advice taking**

*Part I: knowledge question* [Randomise order between part I and part II]

We will now ask you a question for which if you give the correct answer you will get Rs.200. We will also offer you the opportunity to get advice on the answer for the question we ask you from your husband/household head or an expert with knowledge of the field we have asked you the question about. Please listen to the question first and then wait for us to offer you the opportunity to take advice before you give your answer.

[Ask version 1/2/3/4 as randomised]

In this envelope there is a voucher for Rs.0, Rs. 50 or Rs. 100 for advice from either husband or an expert. We will now offer you to get advice from husband and/or an expert for giving up this amount from your winnings. We will open this envelope later to reveal what amount is written in it and who you have the opportunity to get advice from but before that for all amounts, we will ask you what you would want to do.

Whatever you decide, we will implement it once the envelope is opened. Please note that the advice will be two correct choices in the opinion of the expert.

[Enumerator: make sure respondent understands that we will implement the choice that she makes now once the envelope is opened]

1. Would you be willing to pay Rs. 0 to get advice from your husband?
2. Would you be willing to pay Rs.50 to get advice from your husband?



3. Would you be willing to pay Rs.100 to get advice from your husband?
4. Would you be willing to pay Rs. 0 to get advice from an expert?
5. Would you be willing to pay Rs. 50 to get advice from an expert?
6. Would you be willing to pay Rs. 100 to get advice from an expert?

[Enumerator: Open envelope: Advice from husband/expert and voucher amount 0/50/100. Accordingly implement choice. If expert choice is written on the voucher and woman willing to take it for the voucher amount, show options B and D as two possible correct choices. If husband choice is written on the voucher and woman is willing to take it for the voucher amount, show the two cards the husband chose.]

### *Part II: Abstract reasoning question*

We will now ask you a question for which if you give the correct answer you will get Rs.200. We will also offer you the opportunity to get advice on the answer for the question we ask you from your husband/household head or an expert with knowledge of the field we have asked you the question about. Please listen to the question first and then wait for us to offer you the opportunity to take advice before you give your answer.

The question is: [randomised] Here are a group of pictures that follow some order. Can you guess what the next picture in this sequence will be? You have the following options. [Enumerator: Show the respondent the graphic cards and then ask them to select their best guess. Enter their guess here].

[Show and ask version 1/2/3/4 as randomised]

In this envelope there is a voucher for Rs.0, Rs. 50 or Rs. 100 for advice from either husband/male decision maker or an expert. We will now offer you to get advice from husband/male decision maker and/or an expert for giving up this amount from your winnings. We will open this envelope later to reveal what amount is written in it and who you have the opportunity to get advice from but before that for all amounts, we will ask you what you would want to do.

Whatever you decide, we will implement it once the envelope is opened. Please note that the advice will be two correct choices in the opinion of husband/male decision maker or the expert.

[Enumerator: make sure respondent understands that we will implement the choice that she makes now once the envelope is opened]

1. Would you be willing to pay Rs. 0 to get advice from your husband/male decision maker?
2. Would you be willing to pay Rs.50 to get advice from your husband/male decision maker?

3. Would you be willing to pay Rs.100 to get advice from your husband/male decision maker?
4. Would you be willing to pay Rs. 0 to get advice from an expert?
5. Would you be willing to pay Rs. 50 to get advice from an expert?
6. Would you be willing to pay Rs. 100 o get advice from an expert?

[Enumerator: Open envelope: Advice from husband/male decision maker or expert and voucher amount 0/50/100. Accordingly implement choice. If expert choice is written on the voucher and woman willing to take it for the voucher amount, show options B and D as two possible correct choices. If husband/male decision maker choice is written on the voucher and woman is willing to take it for the voucher amount, show the two cards the husband chose.]

*Payment:* [Profit ranking questions: Your answer matches that of your husband/male decision maker whom we asked earlier. Therefore, you win Rs 100./ Your answer does not match that of your husband/household member. Therefore we cannot pay you Rs. 100.]

[Your answer to the [knowledge and/or abstract reasoning question] was correct. You win (additional) Rs. 200 (or Rs. 400 if both correct)/ Your answer to the [knowledge/abstract reasoning question] was incorrect. Therefore you do not get the Rs. 200 from that question. Deduct the applicable cost of advice if the respondent has positive earnings and opted for advice.]