

Credit and attention in the adoption of profitable energy efficient technologies in Kenya

On-line Appendix

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1 BDM Script

Section 1: Practice TIOLI ('take it or leave it') with [item1] and practice BDM with [item2]

Households are randomly assigned into one of the following two groups:

Group 1: item1 = soap item2 = lotion

Group 2: item1 = lotion item2 = soap

Each household is also randomly assigned a price for the TIOLI item [pracprice1] and a price for the BDM item [pracprice2].

Introduction

We will first give you the opportunity to buy a Lotion and a Soap. After that, we will sell the Jikokoa. As thank you for your time today, you will receive Ksh 300. If you choose to buy a Lotion or a Soap, this will be paid out of the Ksh 300. For example, if you buy the Lotion for 100 and you do not buy the Sabuni, then you will receive the Lotion and your thank you payment at the end of the day will be 200 Ksh (300 - 100). Do you have any questions?

Practice TIOLI

[FO: Show the [item1] to the respondent]

Let's start with the [item1]. Would you like to buy this [item1] for Ksh [pracprice1]?

If you say 'yes', you will pay [pracprice1] and receive the [item1]. If you say 'no', you will not receive it and not pay anything.

Would you like to buy this item?

Practice BDM

[FO: Please take 1 blank piece of paper that says:

PRICE:

_____ KSH

WITHOUT SHOWING THE RESPONDENT, WRITE DOWN THE PRICE ON THE PIECE OF PAPER: [pracprice2]

FOLD THE PAPER CLOSED. WRITE DOWN "[item2]" on the OUTSIDE. Then, put the FOLDED paper on the table. Just to confirm, please write down the price that you just wrote on the piece of paper: _____]

The process for buying the [item2] and the Jikokoa today will be a little bit different. First, you and I will figure out the highest price that you are willing to pay. Then, we will together open a secret piece of paper to look at the price. If the secret price is higher than what you said you are willing to pay, then you will NOT be able to buy the Jikokoa or the [item2] from us today. If you named a price that was the same or higher as the price that is on the paper, then you will be able to purchase the cookstove from us today. You would then pay the price written on the piece of paper. This may be even lower than the price you chose! You will not have to pay anything more than you want to.

Since this is complicated, we will first make a plan for which price you would like to pay. I will ask you whether you would be willing to pay several prices and you will tell me "yes" or "no" for each price. After we are done, you will not be able to change your plan. You will only be able to buy the cookstove or the [item2] if you are willing to pay more than the secret price.

This offer is available for today only. If you do not get the stove today, you will not be able to get it tomorrow. This lottery is for today only. Do you understand?

[FO: If the respondent does not understand, please re-explain or answer their questions].

This offer is for your household only. This lottery cannot be used by anyone else.

[FO: Show the [item2] to the respondent]

Let's start by doing a practice exercise for this [item2]. The price of this good is written on this piece of paper.

[FO: SHOW THE FOLDED PIECE OF PAPER BUT KEEP IT CLOSED]

Afterwards, we will do the same for the cookstove. We will use a different secret price for the Jikokoa. Do you have any questions?

Note: For this next section, the quantity in each question depends on the answer immediately prior. If the prior answer is "no", the subsequent price will be lower. If the prior answer is "yes", the subsequent price will be higher. This process proceeds with a binary search.

If the price was 75 Ksh, would you want to buy the [item2]?

If the price was [prac_x1] Ksh, would you want to buy it?

If the price was [prac_x2] Ksh, would you want to buy it?

If the price was [prac_x3] Ksh, would you want to buy it?

If the price was [prac_x4] Ksh, would you want to buy it?

If the price was [prac_x5] Ksh, would you want to buy it?

If the price was [prac_x6] Ksh, would you want to buy it?

Confirmation section

So the most you are willing to pay to buy the [item2] is [prac_wtp1]?

So how much is the most you are willing to pay?

Just to make sure you understand, what happens if the price ends up being [prac_wtp1_p5]?

[If not correct:]

This is not correct! If you are willing to pay [prac_wtp1] and the price turns out to be [prac_wtp1_p5] then you would NOT be able to buy the stove from us! You previously said that you were not willing to pay [prac_wtp1_p5]. Do you understand?

And what happens if the price ends up being [prac_wtp1_m5]?

[If not correct:]

This is not correct! If you are willing to pay [prac_wtp1] and the price turns out to be [prac_wtp1_m5] then you SHOULD buy the stove from us! You previously said that you were willing to pay [prac_wtp1_m5]. Do you understand?

Just to double check, if the price ends up being [prac_wtp1_p5], would you want to buy the [item2] for [prac_wtp1_p5]?

[If yes:]

So the most you are willing to pay to buy the [item2] is [prac_wtp2]?

[If no:]

So how much is the most you are willing to pay?

Just to make sure you understand, what happens if the price ends up being [prac_wtp2_p5]?

[note: the Confirmation Section can happen up to 4 times. If the respondent still changes their mind, the field officer will start again from the beginning.]

Great! So the final highest price you will pay is [prac_finwtp].

Outcome Section

We have figured out that the maximum amount that you are willing to pay for the [item2] is [prac_finwtp] Ksh. We will now open the piece of paper to see the price.

[FO: Give the respondent the piece of paper and ask them to read the number.]

[If win:]

Congratulations! The price is [pracprice2] Ksh which is less than you said you were willing to spend ([prac_finwtp] Ksh). You may have this [item2] and we will deduct [pracprice2] Ksh from your thank you payment at the end of the survey.

[FO: DO NOT LET THE RESPONDENT CHANGE THEIR MIND AT THIS POINT!!!]

Do you have any questions?

[If lose:]

Unfortunately, the price is [pracprice2] Ksh which is more than you said you were willing to spend ([prac_finwtp] Ksh). You will not be able to buy the [item2] today.

[FO: DO NOT LET THE RESPONDENT CHANGE THEIR MIND AT THIS POINT!!!]

Do you have any questions?

[FO: Did the respondent want to change their mind?

Did the respondent argue?

What was the respondent's argument?]

Section 2: Actual BDM with the Jikokoa

[FO: PLACE THE COOKSTOVE PRICE ENVELOPE IN FRONT OF YOU. KEEP IT CLOSED. The name on the envelope should be [hhname]. Is this the name written on the envelope?

YOU MUST HAVE THE CORRECT ENVELOPE FOR THIS RESPONDENT: [hhname].

If you do not have their envelope, END THE SURVEY, APOLOGIZE, and tell them we will return TOMORROW (or MONDAY).

[if the FO has the wrong envelope] STOP THE SURVEY. Save the survey, and continue later. INFORM THE SFO that this has happened. Then, continue to your next respondent, and tell this respondent that you will return later.]

We are now going to use the same method that we used for the [item2] to see what price you would like to pay for buying the Jikokoa cookstove. The secret price of the Jikokoa for you is inside this envelope. I do not know what the price is. It was randomly chosen using a computer by one of my colleagues. As you can see, the envelope is closed and has your name on it. The price may be lower than the price in the stores!

The price inside this envelope was selected by a random lottery. This means that every participant in our study has a different price inside their envelope, and the prices were selected by random chance. Therefore, the price inside your envelope will be DIFFERENT from the prices that are written inside the envelopes of other people who also participate in the study. Everybody has a different price.

Remember:

- If the price on the envelope is higher than the most you said you were willing to pay, then you will NOT be able to buy the stove today. You cannot change your mind later, and you cannot get another chance tomorrow. This offer is for today only, and it is for you only.

- If you are willing to pay the amount in the envelope, then you SHOULD buy the cookstove from us today.

[Respondents in C0:] - You SHOULD then pay the price that is in the envelope TODAY.

Remember:

- If the price on the envelope is higher than the most you said you were willing to pay, then you will NOT be able to buy the stove today. You cannot change your mind later, and you cannot get another chance tomorrow. This offer is for today only, and it is for you only.

- If you are willing to pay the amount in the envelope, then you SHOULD buy the cookstove from us. You will then pay the price that is in the envelope.

[Respondents in C0:] - To purchase the stove, you will need to have the money to pay us via MPESA TODAY. We understand that if we came back in one week, perhaps you will have more money available. For now, we would like you to just think only about the cash that you have available RIGHT NOW, to spend on MPESA. Only think of the money that you have that you can use to buy the cookstove TODAY.

[FO: give respondent some time to think].

[Respondents in C0:] When we go through the exercise, please only offer to pay what you have available to buy the cookstove today.

We are not affiliated with the Jikokoa company and to us it does not matter whether you would like to buy the stove or not. We are not sales people: we are researchers and we are just trying to learn about people like you. If you do not want to buy the stove today, or if you think the price is too high, that is okay. It does not matter to us whether you buy the stove or not.

We will do our best to keep all our answers completely confidential. We will not share your name or individual information with anyone, and none of your neighbors, family, or friends will ever be able to see your answers. When you are answering the questions, please answer honestly. We are simply trying to learn from the people we are interviewing.

There is no such thing as "too low" or "too high", and there are no right or wrong answers. Throughout this process, you will be able to look at this screen to see the different prices.

[For respondents in A2 and in C1, C2:] The screen will also show how much you will have to pay for each payment. It will also show how much you will probably save in each week. The computer will then take the savings that you expect in every week, and then subtract any payments that you have to make each week. If your savings are larger than your payments for that week, it will show you how much you will save that week. If your payment is larger than how much you will save, it will show you how much you have to pay that week.

Do you understand?

[FO: If the respondent does not understand, please re-explain, and answer any questions].

Do you have any other questions? Let's begin.

Decision Section

[FO: Place the ATTENTION SHEET on the table so the respondent can see it.
REMEMBER: Go through the savings slowly, make sure the respondents understands how it works.

[For respondents in A2:] The screen will show the savings, and then subtract the cost of payment. Explain this carefully -- make sure the respondent understands.]

If the price of the Jikokoa is [x0] Ksh would you want to buy it?

[For respondents in C1:] You would need to pay [x0w] Ksh per week for the next 12 weeks.
[For respondents in C2:] You would need to pay [x0m] Ksh per month for the next 3 months.

[For respondents in A1:] Show all the savings over all weeks.

[For respondents in A2, C0:]

Week 1: [SnetC_x0] [netC_x0] Ksh . This is your savings of [attw1] Ksh minus the cost of the stove [x0] Ksh.

After you pay for your stove today, you can keep all of your weekly savings:

[Show all the savings over all remaining weeks.]

[For respondents in A2 and in C1:]

Week 1: [Snet1_x0] [net1_x0] Ksh. This is your weekly savings of [attw1] minus your weekly payment of [x0w].

Week 2: [Snet2_x0] [net2_x0] Ksh ([attw2] Ksh - [x0w] Ksh)

Week 3: [Snet3_x0] [net3_x0] Ksh ([attw3] Ksh - [x0w] Ksh)

Week 4: [Snet4_x0] [net4_x0] Ksh ([attw4] Ksh - [x0w] Ksh)

Week 5: [Snet5_x0] [net5_x0] Ksh ([attw5] Ksh - [x0w] Ksh)

Week 6: [Snet6_x0] [net6_x0] Ksh ([attw6] Ksh - [x0w] Ksh)

Week 7: [Snet7_x0] [net7_x0] Ksh ([attw7] Ksh - [x0w] Ksh)

Week 8: [Snet8_x0] [net8_x0] Ksh ([attw8] Ksh - [x0w] Ksh)

Week 9: [Snet9_x0] [net9_x0] Ksh ([attw9] Ksh - [x0w] Ksh)

Week 10: [Snet10_x0] [net10_x0] Ksh ([attw10] Ksh - [x0w] Ksh)

Week 11: [Snet11_x0] [net11_x0] Ksh ([attw11] Ksh - [x0w] Ksh)

Week 12: [Snet12_x0] [net12_x0] Ksh ([attw12] Ksh - [x0w] Ksh)

After 12 weeks, you have paid off your stove, and you can keep all of your weekly savings:

[Show all the savings over all remaining weeks.]

[For respondents in A2 and in C2:]

Week 1: You would save [attw1] Ksh. You can keep all of your savings from the stove.

Week 2: You would save [attw2] Ksh

Week 3: You would save [attw3] Ksh

Week 4: [Snet4_x0] [net4_x0] Ksh. This is your weekly savings of [attw4] minus your monthly payment of [x0m] Ksh

Week 5: You would save [attw5] Ksh

Week 6: You would save [attw6] Ksh

Week 7: You would save [attw7] Ksh

Week 8: [Snet8_x0] [net8_x0] Ksh. This is your weekly savings of [attw8] minus your monthly payment of [x0m] Ksh

Week 9: You would save [attw9] Ksh

Week 10: You would save [attw10] Ksh

Week 11: You would save [attw11] Ksh

Week 12: [Snet12_x0] [net12_x0] Ksh. This is your weekly savings of [attw12] minus your monthly payment of [x0m] Ksh

After 12 weeks, you have paid off your stove, and you can keep all of your weekly savings.

[Show all the savings over all remaining weeks.]

If the price of the Jikokoa is [x0] Ksh would you want to buy it? Select yes or no:

[Note: The Decision Section is repeated 12 times, until the respondent has stated their WTP to the nearest 1 Ksh.]

Confirmation section

[If yes:] So the most you would be willing to pay for the cookstove is [wtp1]?

[If no:] So how much is the most you are willing to pay?

Just to make sure you understand, what happens if the price ends up being [wtp1_p5]?

[If incorrect:] This is not correct! If you are willing to pay [wtp1] and the price turns out to be [wtp1_p5] then you would NOT be able to buy the stove from us! You previously said that you were not willing to pay [wtp1_p5]. Do you understand?

[If incorrect:] This is not correct! If you are willing to pay [wtp1] and the price turns out to be [wtp1_p5] then you SHOULD buy the stove from us for [wtp1_p5] Ksh! Do you understand?

And what happens if the price ends up being [wtp1_m5]?

This is not correct! If you are willing to pay [wtp1] and the price turns out to be [wtp1_m5] then you SHOULD buy the stove from us for [wtp1_m5].

Do you understand?

Just to double check, if the price ends up being [wtp1_p5], would you like to buy the cookstove and pay [wtp1_p5]?

[note: the Confirmation Section can happen up to 4 times. If the respondent still changes their mind or does not understand, the field officer will start again from the beginning]

We have figured out that the maximum amount that you are willing to pay for the cookstove is [finwtp]. We will now open the envelope to see the price. Remember:

- if the price on the envelope is higher than [finwtp], then you will NOT be able to buy the stove today.
- if the price is less than or the same as [finwtp], you SHOULD buy the cookstove today. You will pay the price in the envelope.

Just to make sure you understand, if the price ends up being [finwtp], do you agree to buy the cookstove and pay [finwtp]?

[FO: [If no:] The respondent does not understand! Please repeat the rules again.]

And what happens if the price ends up being [checkFinal]?

[If incorrect:] The respondent does not understand! Please repeat the rules again. If they change their mind, that is okay. Please go back and re-do the BDM BEFORE they open the envelope.

Outcome Section

[FO: Please give the respondent the envelope and ask them to open it and read the price.

The price written in the envelope should say Ksh [hhbdm]. Is this correct?

[FO: [If no:] What is the price written inside the envelope?]

[If lose:]

[FO: DO NOT LET THE HOUSEHOLD PURCHASE THE STOVE]

Unfortunately the price ([price] Ksh) is higher than you are willing to pay ([finwtp] Ksh). You will not be able to purchase the Jikokoa cookstove today. You may still buy a Jikokoa at the regular price of Ksh 2,990 in major supermarkets.

[FO: Did the respondent argue when they found out they could not buy the stove?]

[If win:]

Congratulations! The price is less than you are willing to pay. You may now purchase the stove for [price].