Online Appendix

Title: Behavioral drivers or economic incentives? Toward a better understanding of elicitation effects in stated preference studies

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Experiment Instructions

You are about to participate in an experiment in economic decision making. Please follow the instructions carefully. At any time, please feel free to raise your hand if you have a question. At the end of today's session, you will be paid your earnings privately and in cash.

You have been randomly assigned an ID number for this experiment. You will never be asked to reveal your identity to anyone. Your name will never be associated with any of your decisions. In order to keep your decisions private, please do not reveal your choices or otherwise communicate with any other participant. Importantly, please refrain from verbally reacting to events that occur during the experiment.

Today's session consists of three parts: Experiment 1, Experiment 2 and a short questionnaire. In Experiment 1, you will have the opportunity to earn money. In Experiment 2, you will be asked whether you are willing to use some of your earnings from Experiment 1 to support an actual tree planting project.

Instructions for Experiment 1

In this experiment, you earn points based on your performance in two tasks. The tasks are:

(1) Counting zeros; and
(2) Encoding words.

You have a limited time to work on each task. A timer will be shown in the upper right-hand corner of your computer screen.

After the two tasks are completed, the computer will rank-order all players in the room according to their total number of points scored in both tasks. When doing so, the computer will randomly break any ties. Your cash earnings for Experiment 1 will depend on your rank as follows:

If your rank is among the …	**You earn …**
top 20% of all players	$25
top 21% to 40% of all players	$22.50
top 41% to 60% of all players	$20
top 61% to 80% of all players	$17.50
bottom 20% of all players	$15

Counting zeros

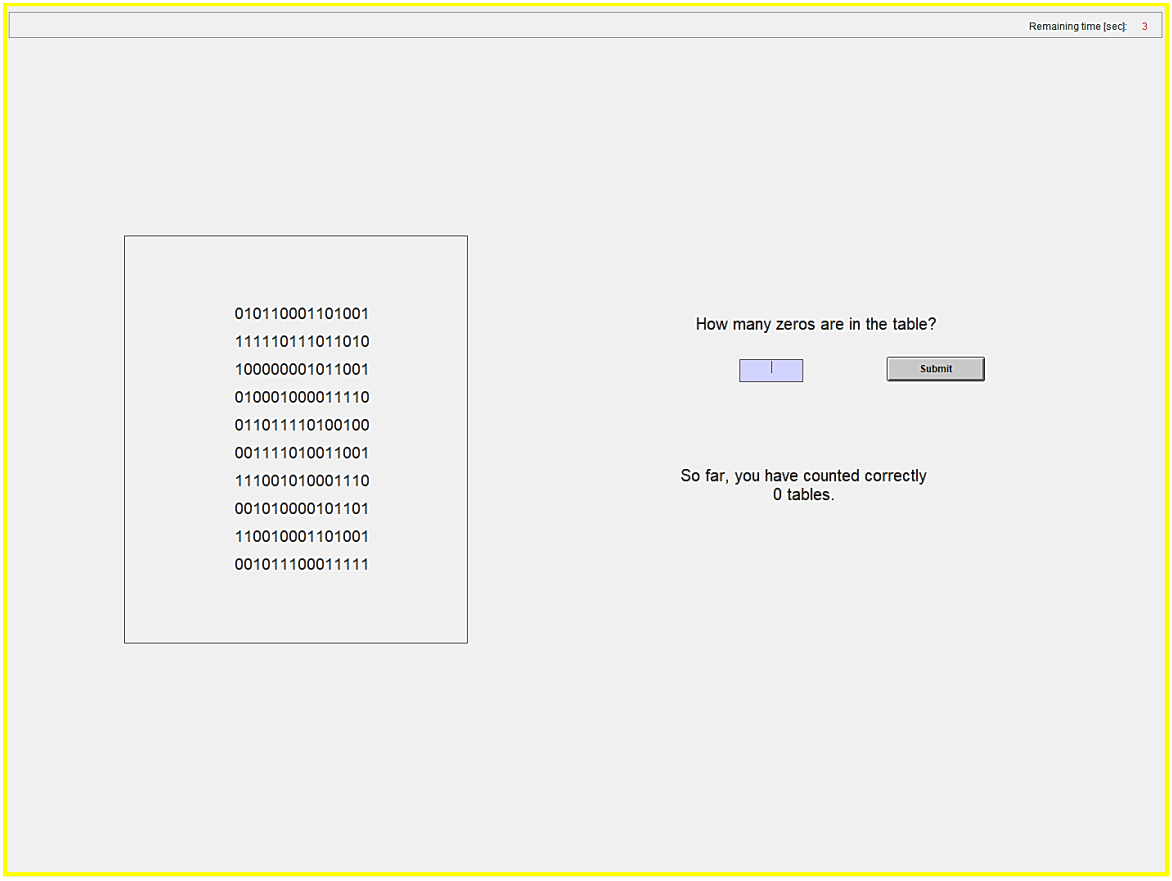
In this task, you are shown tables containing zeros (0s) and ones (1s), as illustrated below. Your job is to count correctly the number of zeros in the table. In the example below, there are 75 zeros.

You enter the number of zeros into the box on the right-hand side of the screen and click the "Submit" button. If your entry is correct, a new table will appear. If your entry is incorrect, you have two additional tries to enter the correct number into the box. After three incorrect attempts, a new table will appear. When a new table appears, your prior entry may remain in the answer box. If this occurs, please erase the number, as it is unlikely to be correct for the new table.

Your objective is to count correctly the number of zeros in as many tables as possible within the allotted time. For each table you count correctly, you earn 4 points.

You will have 5 minutes in total. There will not be any practice before we begin – when we proceed, you will see a screen similar to the one below. Once the task begins, the timer will immediately start counting down.

Are there any questions?



Encoding words

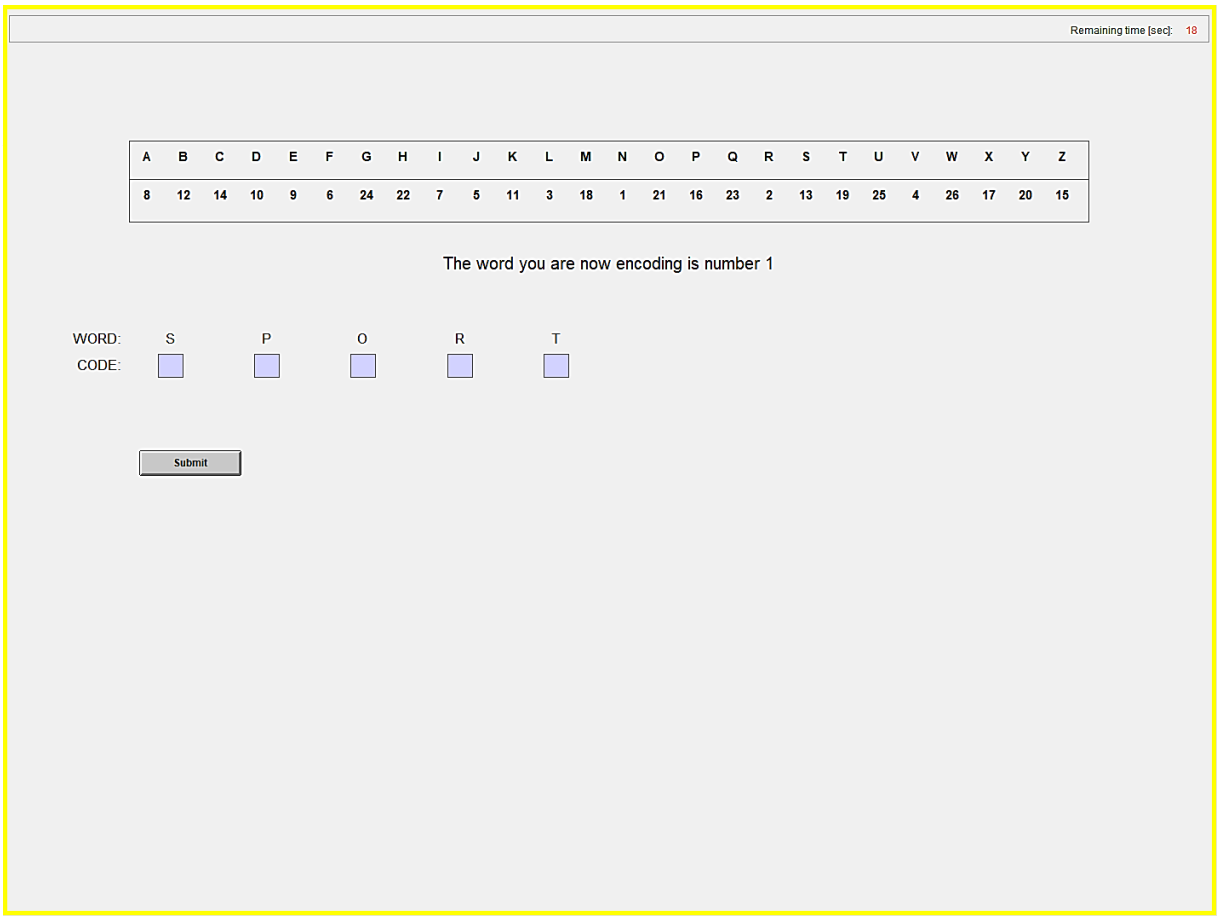
In this task, you are shown a table that assigns a number value to each letter of the alphabet, as illustrated below. Your job is to encode the word below the table by assigning to each letter the number value provided in the table. In the example below, the word is S-P-O-R-T. From the table, the correct numbers for this word are 13-16-21-2-19.

You enter the number associated with each letter in the box below the letter. To type a number into a box, you first move your mouse pointer to the box, and then use a left mouse click. You can also use the tab key to move to different boxes, although know that this will move the cursor from left to right. After encoding a word, click the "Submit" button. If your entry is correct, a new word for encoding will appear. You cannot move to a new word until your entry is correct.

Your objective is to encode as many words as possible within the allotted time. For each word you encode correctly, you earn 1 point.

You will have 5 minutes in total. There will not be any practice before we begin – when we proceed, you will see a screen similar to the one below. Once the task begins, the timer will immediately start counting down.

Are there any questions?



Instructions for Experiment 2

In this experiment, you will be asked to vote in a referendum on whether all participants in the room will fund an actual tree planting project. If the referendum passes, some of your earnings from Experiment 1 will be used to fund the project.

The project involves planting and maintaining 160 trees along the Mississippi River Valley, which includes the state of Tennessee. To carry out the tree planting, we have partnered with the organization GreenTrees. GreenTrees contracts with farmers to create forests that landowners permanently maintain.

The Mississippi River is a critical body of water in North America for commerce, climate and energy. It is the largest river in the United States and the third largest in the world. The Mississippi River Valley is a vital habitat for migratory birds and numerous plant and animal species. 40% of North America's waterfowl and 60% of all bird species migrate along the Mississippi River, although their population has declined from habitat loss.

There are many benefits of reforestation, including:

- **Improved water quality**. 180 million Americans depend on forest watersheds for their drinking water. The natural water filtration trees provide can lower costs associated with drinking water treatment.
- **Improved air quality**. Trees remove pollution from the atmosphere, improving air quality.
- **Riparian buffers**. Trees help improve water quality in streams, rivers and lakes, and protects these waterways from the impact of adjacent land uses.
- **Flood control**. Forests reduce floods, therefore minimizing sediment, nitrates and phosphorus runoff into critical waterways.
- **Soil Stabilization**. Trees reduce the effects of erosion caused by water and wind.
- **Wildlife habitat**. Large populations of wildlife rely on forests for food, shelter and water.

Based on related projects carried out by GreenTrees in the Mississippi River Valley, the estimated impacts from the proposed project of planting 160 trees, over a 15 year period, are as follows:

- 4,275 gallons of water stored.
- 62 pounds of nitrogen and phosphorous out of runoff and groundwater before it reaches the Mississippi River.
- 30 metric tons of carbon dioxide (CO_2) captured.

Payment procedures

If the referendum passes, we will subtract a specified amount from your prior earnings in today's session and set this cash aside. We will take this cash and write a check to GreenTrees to pay for the project. The check will be mailed directly to GreenTrees. Along with the check, we will include a letter that briefly describes the project and recognizes that students from the University of Tennessee are funding the project. We have appended a copy of this letter to the instructions. If the referendum passes, we will ask a volunteer to place the stamped envelope containing the check and letter in the mail immediately after this session. As soon as we receive receipt of payment from GreenTrees, we will email it to all participants in this session.

If the referendum does not pass, no money will be subtracted from your earnings. No check will be sent to GreenTrees and the tree planting project will not be funded.

We have already negotiated a price for the project with GreenTrees. This amount may be higher than the money that would be collected from you and the other participants should the referendum pass. If the referendum passes, money from a research grant will be used to pay the difference.

The voting process

<SBC Treatment>
You will now vote on whether to fund the tree planting project. In the referendum, we will ask you to place a YES or NO vote on whether you are in favor of funding the project if it cost you a specific amount.

The referendum passes if a majority, more than half of the votes, are YES votes. Otherwise, the referendum does not pass. If the referendum passes, each participant will pay the specified cost and the tree planting project will actually be funded. If the referendum does not pass, no money will be collected and the tree planting project will not be funded.

Before we proceed to the referendum, where you will be presented with the specific cost to you for funding the project, are there any questions?

<DB Treatment>
You will now vote on whether to fund the tree planting project. In this context, a referendum is usually framed as a YES or NO vote on whether you would fund the project if it cost you a specific amount. In this experiment, however, the per person cost is uncertain. For this reason, we will ask you to vote YES or NO separately for two possible cost amounts. You will be first presented with one possible cost amount and asked to vote YES or NO. Then, you will be presented with another possible cost amount and again asked to vote YES or NO.

To determine the cost to you, the computer has been programmed to select randomly one of the two stated cost amounts. You will not know the selected cost prior to entering your decisions.

Your YES or NO vote for the randomly selected cost will be used to determine whether the referendum passes.

The referendum passes if a majority, more than half of the votes, are YES votes. Otherwise, the referendum does not pass. If the referendum passes, each participant will pay the randomly selected cost and the tree planting project will actually be funded. If the referendum does not pass, no money will be collected and the tree planting project will not be funded.

Before we proceed to the referendum, where you will be presented with two possible cost amounts to consider, are there any questions?

<PC Treatment>
You will now vote on whether to fund the tree planting project. In this context, a referendum is usually framed as a YES or NO vote on whether you would fund the project if it cost you a specific amount. In this experiment, however, the cost to each person is uncertain. For this reason, we will ask you to vote YES or NO separately for several possible cost amounts.

To determine the cost to you, the computer has been programmed to select randomly one of the stated cost amounts. You will not know the selected cost prior to entering your decisions.

Your YES or NO vote for the randomly selected cost will be used to determine whether the referendum passes.

The referendum passes if a majority, more than half of the votes, are YES votes. Otherwise, the referendum does not pass. If the referendum passes, each participant will pay the randomly selected cost and the tree planting project will actually be funded. If the referendum does not pass, no money will be collected and the tree planting project will not be funded.

Before we proceed to the referendum, where you will be presented with several possible cost amounts to consider, are there any questions?

<OE Treatment>
You will now vote on whether to fund the tree planting project. In this context, a referendum is usually framed as a YES or NO vote on whether you would fund the project if it cost you a specific amount. In this experiment, however, the cost to each person is uncertain. Rather than ask you to vote YES or NO separately for each possible cost amount, we will ask: "What is the highest amount that you would pay and still vote in favor of funding the tree planting project?" By knowing the highest amount that you would pay, we will know all the possible costs for which you would vote NO (i.e. any cost that is higher than the amount you entered) and all the possible costs for which you would vote YES (i.e. any cost that is equal to or lower than the amount you entered).

To determine the cost to you, the computer has been programmed to select randomly from a wide range of possible cost amounts. These range from very low to very high amounts. You will not know the selected cost prior to entering your decision.

After all participants have made a decision, the amount you entered will be compared to the randomly selected cost and converted to either a YES or a NO vote. If you entered an amount that is greater than or equal to the cost, this will become a YES vote. If the amount you entered is less than the cost, this will become a NO vote.

The referendum passes if a majority, more than half of the votes, are YES votes. Otherwise, the referendum does not pass. If the referendum passes, each participant will pay the randomly selected cost and the tree planting project will actually be funded. If the referendum does not pass, no money will be collected and the tree planting project will not be funded.

Before we proceed to the referendum, are there any questions?

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GreenTrees, LLC
ATTN: Reed Haynie, Director of Business Development
4243 Jackson Street, Box 250
The Plains, VA 20198

Dear Mr. Haynie,

Enclosed you will find a check made payable to GreenTrees, LLC, to support the project we discussed to plant 160 trees in the Mississippi River Valley. This payment is made possible by a research study conducted through the University of Tennessee Experimental Economics Laboratory. Participants in the study are students currently enrolled at the University of Tennessee. As a part of the study, the group of participants voted to use some of their earnings from the experiment to help pay for the tree plantings. On behalf of the students, it is my honor to present you with this support.

In return, I have a favor to ask. Upon receiving this payment, I would be very thankful to receive from you a formal acknowledgement of this purchase that I can share with the participants of this study.

Sincerely,

Christian A. Vossler
Professor of Economics
Director, UT Experimental Economics Laboratory
http://web.utk.edu/~cvossler/