Screening participants from previous studies on Amazon Mechanical Turk and Qualtrics

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Duplicate respondents across related experiments are a substantial problem for conducting programmatic research on AMT (Chandler, Mueller, & Paolacci). In this tutorial, we provide a straightforward alternative that allows researchers who use Qualtrics to exclude workers who participated in a previous study. This approach allows researchers to exclude workers who have completed any HIT before, without having to use AMT's Command Line Tools.

The overall logic of the solution outlined below is to a) add code to your HIT that will transmit the worker's WorkerID to Qualtrics and b) create a screening survey prior to your actual survey that contains a list against which WorkerIDs are checked. If there is a match between the worker's WorkerID and the list, the worker is redirected to an end-of-survey message telling them that they cannot participate in this survey. If there is not a match, the worker is allowed to complete the HIT.

Step 1 - Checking WorkerIDs against previous WorkerIDs on Qualtrics

Qualtrics has an <u>Embedded Data</u> feature that allows you to import information about survey respondents in addition to their responses. This information can be imported from external sources, or specified manually. Embedded Data can also be used to govern branching and skip logic within Qualtrics. Using these features, Qualtrics can be instructed to extract the WorkerID from the survey URL (which will include the WorkerID after you complete the second step in this manual), and compare it against a predefined list of WorkerIDs.

1.1. Extract WorkerID from the Survey URL

- 1.1.1. In your Qualtrics survey, open the Survey Flow.
- 1.1.2. Add an embedded data and name it MID. By default, it will be set to look for the variable

MID in a panel or the survey URL

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Set Embedded Data:

MID Value will be set from Panel or URL. Set a Value Now

Add a New Field

Add Below Move Add From Panel Delete
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1.2. Create a List of Excluded Workers

- 1.2.1. Add another Embedded Data
- 1.2.2. Name the Embedded Data as "Excluded"
- 1.2.3. Select "Set Value Now" and enter the WorkerIDs of all workers that you do not want to take your survey, separated by a comma. (Note: If you have the WorkerIDs to be excluded in a single column of a spreadsheet, you can add them simultaneously to the excluded list: i.) In the spreadsheet, add a column next to the IDs that holds a comma on each cell. ii.) Select the two columns and copy and paste them to the Survey Flow on Qualtrics.)



(optional) Identify Workers without appended WorkerIDs

Embedded data can be used to determine which branch of a survey respondents are guided to. You may want to add a branch in the screening survey that will check if MID is empty. This may be a prudent step because at present it is not known whether the script will successfully identify WorkerIDs under all possible cases.

1.) Add a branch with the following condition:

If MID is Empty



2.) Within this branch, show a question block that will include a text-response question such as the following example:



This question should be set to be force-response and have a default response of \$ \{e://Field/MID\}.

1.3. Excluding Workers Using Branching

Now we want to use branching and embedded data within Qualtrics to direct workers who have a value in MID that matches previous WorkerIDs to be directed to the end of the survey.

1.3.1. Add a branch with the following condition:

IF Excluded is contains \${e://Field/MID}

This branch will check if the worker ID (appended **to the** URL) is in the Excluded list or not.

1.3.2. Set the result of this branch to lead to an "End of Survey" element

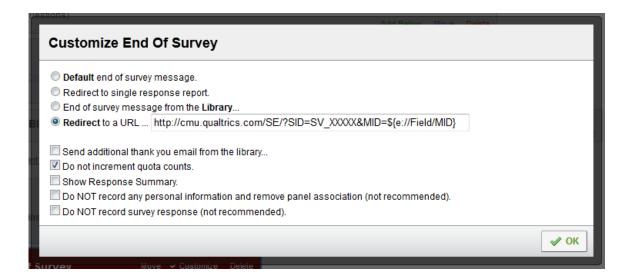


1.3.3. Click on Customize, select "Create a customized end of survey message", and then select "From Library"

- 1.3.4. Select "Create a new Message" that says something like "Our records show that you already took this survey, or a similar survey, already. We thank you for your interest and hope to see you in future surveys. Thank you and goodbye."
- 1.3.5 After and outside of the branch, add an End of Survey element that will redirect users who were not excluded to your actual survey. You can change this link each time you add a related study. To do that, add an End of Survey element, click on Customize and then select "Redirect to a URL" and paste the URL of your survey there.

(optional) Adding workers' ID (MID) to the Next Survey

You may wish to pass the workers' IDs in the actual survey too (for example, you may want to check that indeed only workers who were not on your excluded list did the survey. Also, you may want to use these IDs to exclude these workers from another future survey). To do this, add the following to your survey URL: **&MID=\${e://Field/MID}** that you entered on the last End of Survey element in your screening survey, Next, add MID as an embedded data to your actual survey (by repeating the steps outlined above), if you want it to appear in your actual survey results. (see more instructions here)



Step 2 - Appending WorkerIDs to your survey URL

The next thing you'll need to do is to add a script to your HIT on AMT that will append the worker's ID to your survey URL so it could be used in the screening survey. Here is what you'll need to do:

- 2.1. Download the script <u>here</u>.
- 2.2. Replace the survey link in the script with the link to your screening survey, without replacing the &MID= text and what follows it. Copy and paste the modified script where you would like the link to your survey to appear.
- 2.3. Notice that after you paste the script in the HTML code of the HIT and view it in the Design Layout mode, it will show this error message: "URL not shown because there is an error with Javascript on your computer. To perform this HIT, you must have Javascript and cookies enabled on your browser. " This is normal. Once you move to the Preview and Finish mode, this text should change to: "The link will appear here only if you accept this HIT." This means that the script works and workers will be able to use your link after they accept the HIT.

2.4. Publish your HIT.

After you complete both Step 1 and Step 2, workers who will click on the link to your survey (or copy and paste it to a new browser window) will get to the screening survey first and their worker ID will be appended to the survey URL. The screening survey will check if that ID is in the Excluded list of IDs you entered and only if it is not redirect workers your actual survey.

Disclaimers

- 1. While many workers IDs are 14 characters long, some have 12 or 13. Because the branching uses a "contains" condition, it is possible that a worker with a 12 characters ID might be rejected because these 12 characters are included in another worker's 14 characters ID. However, this is very unlikely since workers IDs are generated randomly on AMT.
- 2. The limit on the embedded data field seems to be about 20,000 characters. If you run out of space, you can create another embedded data called "Excluded2", "Excluded3", etc. Then,

you'd have to change the above logic to check if the worker's ID is included in the Excluded field **or** Excluded2 **or** Excluded3, etc.