About – Methodological Issues – Ethical Issues
Basics and Setup – Creating Studies – Getting Results
Tips and Tricks
What is it?

• “AMT” or “MTurk”
• Popular online crowdsourcing platform – “artificial artificial intelligence”
• Requesters pay workers (“Turkers”) small amounts of money to complete small tasks (“HITs”)
What is it useful for?

- Easy to use for:
  - Survey-based research
  - Transcription
  - Categorization and tagging
  - Some types of coding
  - User testing

- More difficult to use for:
  - Experiments with complex manipulations
  - Longitudinal studies
  - Group studies
Who are workers?

• About 500,000 workers in 190 countries, mostly US and India
• More diverse than student populations, but...
• Less diverse than a nationally representative sample (younger, better educated, more female, and poorer than US average)
• “super turkers” – 10% of workers complete about 40% of HITs
  • Some even make a living doing MTurk HITs. These people can complete thousands of HITs per year, the majority of them academic surveys.
• Data quality and effect sizes are comparable to student samples; however, survey completion rates are lower
Methodological Issues

• Turkers can do the same HIT more than once -> duplicate responses
  • Scripts or screening tools can set a maximum number of survey repeats (eg. http://uniqueturker.myleott.com/)

• Demographics and other factors are difficult to control for
  • Can set preferences for country and state, everything else relies on honesty

• Super-users see the same scales and manipulations often
  • Check questions – “have you seen these questions before?”

• Turkers can be distracted or have little motivation to put thought into their answers
Methodological Issues: Attention & Satisficing

• Online-only format means lab-style attention management isn’t possible; low motivation can cause satisficing behavior

• Solutions:
  • Reverse-coded questions
  • Attention checks – Click the banner at the top of the page rather than select a response.
  • Trap questions – While watching television, have you ever suffered a fatal heart attack?
  • Follow-up questions – How distracted were you while completing this survey?
  • Speed checks – require participants to spend a certain amount of time on each question or set of questions
Ethics and Best Practices

• Set fair pay rates, and pay promptly
• Set clear guidelines for approval/rejection, and follow them
• Provide reasonable time estimates
• Provide accurate contact information, respond to worker questions and comments

Remember – Workers can keep track of your reputation, just as you can keep track of theirs. Treating them as human workers gets you better results.
Setup: Creating an Account

https://requester.mturk.com

Amazon Payments account is needed
Choose personal vs. business account
Choose your Requester Name wisely
Creating Your HIT: Picking a HIT Type

Useful HIT Types:

- **Survey** – Create survey directly in Mturk (HTML form); useful for simple surveys
- **Survey Link** – Link to Qualtrics or other external survey; useful for longer survey studies or experiments with manipulations
- **Transcription** – Upload a link to an audio or video file for participants to transcribe
- **Categorization** – have participants rate an image or piece of text on scales that you define
Creating Your HIT: External Surveys

Information about your HIT – Requirements or anything you’d like participants to know before beginning.

Remember to remove this template reminder!

Enter the link to your own survey here

To ensure that participants complete a survey and to make matching MTurk results with survey results easier, have Qualtrics generate a random number and ask Turkers to enter it into your HIT.
Creating Your HIT: Connecting Qualtrics

To create a random number for Turkers to enter, add a random number generator to the survey flow. This is recorded in both Qualtrics and MTurk for easy comparison. Instructions: http://brentcurdy.net/qualtrics-tutorials/link/

Other tips:

• Ask Turkers to enter their MTurk ID instead of their name on your consent form (yes, you do need a consent form!).

• If you’re testing both student and Turker populations, make sure survey information is correct for each – don’t include mentions of class credit, etc. in surveys for Turkers.

• Make sure your contact information is prominently displayed on the last page.
Creating Your HIT: Uploading External Data

If you’d like each participant to see a different value of a variable or different piece of data, you don’t have to create new HITs for each value!

1. Insert formatted variable names into the text of your HIT, make sure your CSV has the same names as column headers.

2. Select your pre-made HIT, click “Publish Batch”, and upload your CSV file.

3. Values are automatically entered into your HIT text and recorded in your results file.
Creating Your HIT: Details and Worker Criteria

After creating your HIT, you need to enter HIT details and select the Turkers you’ll use as participants.

On the Project Properties page, enter how much you’ll pay per HIT, how many HITs you’d like, and how long each HIT will take.

Specify worker type (Master/non-Master), approval rate, number of HITs approved, and worker location (country or US state).
Adding Funds to Your Account

Amazon charges a 20% fee on top of what’s paid to workers. This increases to 40% for HITs done by 10 or more people. An additional 5% fee is charged for employing workers with Master qualifications.

This is how much money is left in your account.

Click here to pre-pay for HITs. When you purchase HITs, you’ll receive an estimate of how much your batch will cost, including fees, and how much will be left in your account.

Your transaction history will tell you how much you’ve spent on HITs in the past. Receipts from each past purchase can be downloaded and printed from here. Useful for reimbursements!
Monitoring Your HIT and Approving Results

You can monitor workers’ progress as they complete your study.

Manage Batches

Click on the name of the batch to see more details.

<table>
<thead>
<tr>
<th>Metaphors - FB 13</th>
<th>Created: July 17, 2015</th>
<th>Assignments Completed: 67 / 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Elapsed:</td>
<td>3 days</td>
<td>Estimated Completion Time: October 07, 2015 10:00 PM PDT (Wednesday)</td>
</tr>
<tr>
<td>Average Time per Assignment:</td>
<td>9 minutes 49 seconds</td>
<td>Effective Hourly Rate: $1.528</td>
</tr>
<tr>
<td>Batch Progress:</td>
<td>0% submitted</td>
<td>100% published</td>
</tr>
</tbody>
</table>

Remember to approve results in a consistent and timely manner!

Review Results

Select the check boxes on the left to approve or reject results. You only pay for approved results. To evaluate results offline, select Download CSV.
Tips and Tricks: Group and Longitudinal Studies

Use MTurk for:

- Assembling participant pool
- Distributing informed consent information
- Collecting demographics and other survey data
- Paying participants (use bonuses!)
  - To award a bonus, go to Manage -> Workers, find and click on individual worker’s ID -> Bonus Worker

Use other tools for:

- Collecting group data
Tips and Tricks: Preventing Duplicate Work

DON’T: Allow Turkers to do your hit multiple times, and then reject duplicate work.

DO: Be clear that duplicate work will not be accepted, or when a HIT has been re-posted.

DO: Use scripts that automatically block duplicate attempts, even across studies – UniqueTurker, Turkitron, TurkCheck

DO: Check results for copy-and-paste responses
References


Useful Links


https://experimentalturk.wordpress.com – A blog un using Mturk for social science research

http://mechanicalturk.typepad.com/ - Official Mechanical Turk Blog, has a lot of tips, tricks, ideas, and critiques

http://www.mturk-tracker.com/#/general - Continuously updated data on Mturk activity, including demographics

http://www.pbs.org/newshour/updates/inside-amazons-hidden-science-factory/ - A great article from PBS on people making a living through Mechanical Turk