THE UNIVERSITY OF ARIZONA Research & Partnerships

Amazon Mechanical Turk (MTurk)

Background

Use of MTurk has become increasingly popular for conducting online research involving surveys, as MTurk facilitates access to a large and diverse participant population at a relatively low cost to investigators. This guidance is intended to provide investigators with helpful information for addressing issues of privacy and confidentiality that are specific to the MTurk marketplace in order to conduct online research in accordance with 45 CFR 46.

What is MTurk?

MTurk is a website run by Amazon that works as a readily available marketplace to match "Workers" with available work from various "Requesters." Amazon describes MTurk as, "a marketplace for work that requires human intelligence. The Mechanical Turk service gives businesses access to a diverse, on-demand, scalable workforce and gives workers a selection of thousands of tasks to complete whenever it's convenient."

MTurk functions as a virtual labor market where registered Workers complete online Human Intelligence Tasks (HITs) for pay. During registration, all MTurk Workers are required to electronically sign a Participation Agreement confirming that they are at least 18 years of age. Likewise, individuals must register as MTurk Requesters to post HITs and collect data from consenting Workers.

MTurk Anonymity

- **Internal Hits:** For the following reasons, data may be identifiable when HITs are internally run through Amazon:

    - MTurk automatically collects identifiable information, including but not limited to, IP address, e-mail address, location of device/computer, and phone numbers
    - Amazon has access to Workers' personal identifiable information (PII) and survey responses*
    - MTurk Worker IDs are automatically linked to survey responses. *However, MTurk does not allow for Requesters to directly access PII from Workers**

    ** While Requesters do not have direct access to Workers' PII on MTurk, research has shown that Worker IDs are linked to product reviews, ratings, and PII on publicly available Amazon Profiles. This is because Amazon assigns one ID number to individuals who register for both online shopping and MTurk using the same account. This ID number is embedded in the URL of users' Profile pages. Therefore, for MTurk survey respondents who also maintain a publicly available Amazon Profile, it may be possible to identify individuals based on the amount and type of information shared on their public profile.*

- **External Hits:** Requesters may choose to use MTurk as a recruitment tool but embed a link within MTurk that redirects Workers to complete online surveys via a separate, external service managed by the Requester, such as Qualtrics or REDCap. For Workers who choose to complete external HITs, survey data are never available to Amazon MTurk. UA HSPP may consider this type of survey data collection to be generally anonymous (meaning that no identifiers can be linked to the data, either directly or through a coding system) given the following criteria are met:

  - Survey questions do not ask for any PII or MTurk Worker IDs;
  - It would not be possible to identify an individual based on their survey responses;
  - IP address, e-mail address, location of device/computer, phone numbers and other unique identifiers are not collected by the external service (e.g., Qualtrics or REDCap); and
  - Any compensation code automatically generated by the external service for payment in MTurk cannot be used to link individual MTurk Worker IDs to survey responses (i.e., each participant receives the same completion code at the end of the survey instead of a unique completion code linked to survey responses).

- **Notifying Workers:** MTurk does not allow for Requesters to directly access any PII from Workers. In the event that a Requester needs to contact an individual Worker or group of Workers, he/she may do so using MTurk's NotifyWorkers operation. This operation allows Requesters to send email to Workers using only Worker IDs. *However, responding to a Requester's email will expose the Worker's email address to the Requester, and potentially their name along with information about the specific Task (e.g., survey).**

  **Investigators should be cognizant of the possibility of exposing PII when using MTurk's NotifyWorkers operation.*

Amazon.com has stated that the MTurk platform is NOT meant to support participant anonymity. MTurk Worker IDs are linked to Amazon.com public profiles. Amazon.com may disclose worker information. Additionally, worker information may be available to others (who submit a request) for tax reporting purposes.

MTurk and Informed Consent

The HSPP has published consent form templates that should be used based on the type of study and the funding it does/does not receive. Be aware of the following informed consent considerations when using MTurk:

- Adding a disclaimer statement that any work performed on MTurk can be linked to the user's public profile page.
- Adding a disclaimer statement that data collected as a result of the study may be collected and used by Amazon per its privacy agreement.
- Adding a statement that MTurk Worker IDs (i.e., the 14-character sequence of letters and numbers used to identify workers) will NOT be shared with anyone.
- If there is compensation:
  - Adding a statement that, in accordance with MTurk policies, payment may be rejected if the HIT was not completed correctly or the instructions were not followed.
  - Adding a statement that MTurk worker IDs will only be collected for the purposes of distributing compensation and will not be associated with survey responses (if applicable). However, it may be possible to deduce the identify of subjects if they have a publicly available Amazon profile.

Investigators may choose to use "attention checks," also referred to as "trap questions," meant to filter out data from subjects who are not attentive to the research questions. In many cases,

failure to respond correctly to "attention check" questions results in the subject being excluded from further participation in the research. Furthermore, exclusion from further participation may result in the subject not receiving payment for completing a portion of the task.

For studies using "attention checks," consider the following in the informed consent form in addition to the items above:

- A statement that the study contains several checks to make sure that participants are finishing the tasks honestly and completely. As long as the participant reads the instructions and completes the tasks, their HIT will be approved. If they fail these checks, their HIT will be rejected.

Resources

- Amazon MTurk
- Amazon MTurk Worker Privacy Policy
- Amazon MTurk Getting Started Guide
- Amazon MTurk FAQ
- HSPP Consent Templates