

Utilizing online research subject pools (aka crowdsourcing platforms)

Most widely used:

1. Amazon’s Mechanical Turk ([MTurk](#); US-based)
2. Prolific Academic ([Prolific](#); UK-based)
3. Crowdfunder
4. ...

How does it work, in a nutshell:

1. Set-up an account on a crowdsourcing platform
2. Program your study in any web-based platform, e.g., **Qualtrics**
3. Set-up a study in the crowdsourcing platform, which will include a link to your study
4. Collect data

The screenshot displays the Amazon MTurk interface. At the top, the user is identified as Bastiaan Rutjens, with links for My Account, Sign Out, and Help. The navigation bar includes 'amazonmturk Requester' and options to 'Create', 'Manage', or 'Developer' a project. The main content area is titled 'Start a New Batch with an Existing Project' and features a table of projects. One project, 'JamieStudy', is highlighted with a 'Publish Batch' button and other management options like 'Edit', 'Copy', and 'Delete'. Below this, the 'Manage Batches' section shows a list of batches: 'Batches in progress (0)', 'Batches ready for review (41)', and 'Batches already reviewed (60)'. A detailed view of the 'JamieStudy' batch is shown at the bottom, indicating it is complete with 275/275 assignments completed and 100% submitted.

Project Name	Title	Created ▼	Last Edited	
JamieStudy	You are invited to participate in a 12-minute study on beliefs and societal attitudes	April 2, 2020	June 17, 2020	Publish Batch Edit Copy Delete

Manage Batches

Click on the name of the batch to see more details

- ▶ Batches in progress (0)
- ▶ Batches ready for review (41)
- ▼ Batches already reviewed (60)

← Previous 1 2 3 4 5 6 Next →

JamieStudy	Review Results	Delete
Created: April 20, 2020	Assignments Completed: 275 / 275	
Time Elapsed: 14 days	Estimated Completion Time: COMPLETE	
Batch Progress:	<div style="width: 100%;"><div style="width: 100%; background-color: green;"></div></div> <p>100% submitted 100% published</p>	

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Your project was successfully saved.

Edit Project

This is how your task will look to Mechanical Turk Workers.

1 Enter Properties 2 Design Layout 3 Preview and Finish

You are invited to participate in a 12-minute study on beliefs and societal attitudes

Requester: Bastiaan Rutjens Reward: \$1.00 per task Tasks available: 0 Duration: 3 Hours

Qualifications Required: HIT Approval Rate (%) for all Requesters' HITs greater than or equal to 95 , Location is one of CA, US

exercises. If you do withdraw from the study, the materials that you have completed to that point will be deleted and will not be included in the study.

Instruction

Agreeing to this document means that you have read and understood the information and that you voluntarily agree to participate. If you agree to participate in the study, please open the link below in a **new window/tab** since this will allow you to easily navigate back to this page. Use right mouse click (or control+click for Apple) to open it in a new tab or window.

https://uvacommscience.eu.qualtrics.com/fe/form/SV_1zZXCfkyanpOEUI

At the end of the survey that you'll find at the above mentioned address, you'll be asked to make up a five-digit completion code number and enter it. For us to compensate you, please return to this screen after completing the survey and enter the there chosen code in the box below as well:

THANK YOU VERY MUCH FOR YOUR PARTICIPATION!

Difference between MTurk and Prolific:

MTurk, like many other crowdsourcing platforms, were not explicitly designed for the scientific community. *MTurk* nowadays is used for many things, including having *Mturkers* work on boring excel sheets or programming tasks. *Prolific* as a dedicated research subject pool is designed solely for academic research.

Mturk:

- Sample: Slightly more women than men, average age ~31 years, mostly from US. Total pool: ?? (realistic estimates range between 7,000 and 10,000 unique workers)
 - Preselection opportunities, e.g., nationality (only US, only Canada, only India), household income, etc. (see screenshots 1 and 2)
 - “Masterworkers” only (>95% “[HIT](#)” approval)

This is the amount of time you have to reject a Worker's assignment after they submit the assignment.

Worker requirements

Require that Workers be Masters to do your tasks (Who are Mechanical Turk Masters?)
 Yes No

Specify any additional qualifications Workers must meet to work on your tasks:

HIT Approval Rate (%) for all Requesters' HITs: greater than or equal to 95 [Remove](#)

Location: is one of [Expand](#) | [Remove](#)

- UNITED STATES (US)
- UNITED STATES MINOR OUTL.
- ALABAMA (US-AL)
- ALASKA (US-AK)
- ARIZONA (US-AZ)
- ARKANSAS (US-AR)

-- Select -- [Remove](#)

[\(+\)](#) Add another criterion (up to 2 more)
(Premium Qualifications incur additional fees, see [Pricing Details](#) to learn more)

Project contains adult content (See details)
 This project may contain potentially explicit or offensive content, for example, nudity.

Task Visibility (What is task visibility?)
 Public - All Workers can see and preview my tasks
 Private - All Workers can see my tasks, but only Workers that meet all Qualification requirements can preview my tasks
 Hidden - Only Workers that meet my Qualification requirements can see and preview my tasks

[Save](#) [Design Layout](#)

System Qualifications

- HIT Approval Rate (%) for all Requesters' HITs
- Location
- Number of HITs Approved

Premium Qualifications

- Age 18-25
- Age 25-30
- Age 30-35
- Age 35-45
- Age 45-55
- Age 55 or older
- Blogger
- Borrower - Auto Loans
- Borrower - Business Loan
- Borrower - Credit Cards
- Borrower - Home Mortgage
- Borrower - Personal Loan
- Borrower - Student Loan**

-- Select -- [Remove](#)

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[Save](#) [Design Layout](#)

- Cost: a generally accepted hourly wage = between 6 and 9 US dollars
- More info in the MTurk FAQ [here](#)
- Compared to (psychology) students: better gender balance, better age range, more representative of population
- Compared to (psychology) students coming to the lab: less experimental control
- Compared to (psychology) students in your online study: similar pitfalls
 - Reward/incentive = similar
 - Solutions to these pitfalls: similar (more on that below)
 - Recent MTurk issue: [bots?](#)
- Preventing bad data quality (same for online lab research):
 - Timers and delays

The screenshot displays the Qualtrics survey editor interface. At the top, there are navigation tabs for 'Look & Feel', 'Survey Flow', 'Survey Options', and 'Tools'. On the right, there are buttons for 'Preview', 'Publish', and 'Search'. The main content area is titled 'Untitled Project' and shows a list of questions. The first question, 'Q1', is a multiple-choice question with the text 'Hello everyone :)' and three options: 'hi', 'hello', and '?'. The second question, 'Q2', is a timer question with the text 'This question lets you record and manage how long a participant spends on this page. This question will not be displayed to the participant.' The right sidebar contains settings for 'Change Question Type' (set to 'Timing'), 'Enable submit after (seconds)' (set to 10), 'Auto-advance after (seconds)' (set to 0), and 'Show Timer' (unchecked). At the bottom, there are buttons for 'Import Questions From...', 'Create a New Question', and 'Add Page Break'.

- Instruction and attention checks (see [this paper](#))

For example: *“I posted a coding task where I asked Mturkers to code social media posts for their level of support for a policy (1 = strongly against policy, 5 = strongly supports policy). I also had attention checks (“please answer “4” for this item”, and “please leave this item blank. If you accidentally selected a response, please change it to “3””), and an open ended question just asking what kind of car people drove. As suggested in the above article, there are people giving the usual nonsense/irrelevant responses to open ended questions (e.g., “GOOD” “VERY GOOD” “NOTHING”). Sure enough their data was typically junk.”*

- Note: [“Attentive Turkers: MTurk participants perform better on online attention checks than do subject pool participants”](#)
- Generate unique code (e.g., in Qualtrics) in order to receive reward (on MTurk). Rejection of HIT = possible (workers know this)

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More info on Turker demographics:

- Huff, C., & Tingley, D. (2015). “Who are these people?” Evaluating the demographic characteristics and political preferences of MTurk survey respondents. *Research & Politics*, 2(3), 2053168015604648.
- Levay, K. E., Freese, J., & Druckman, J. N. (2016). The demographic and political composition of Mechanical Turk samples. *Sage Open*, 6(1), 2158244016636433.