Amazon Mechanical Turk Tutorial

Tomer Ullman 2015 BMM Summer Course

Amazon Mechanical Turk

"Artificial artificial intelligence"

Original Turk



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Types of Tasks

Write positive reviews

Translate text

Help train computers / create datasets

Psychophysics Tasks

Perception, attention,

Learning, categorization, bias, ...

Morality, decision making, predictions, ...

Running an Experiment

Register as a requester

Use Amazon template or external website

Test on sandbox

Submit (& announce)

Who's on Turk?

US and India ~80%

Slightly more female

Young, educated

Mason and Siddharth (2011)

Payment

"Workers" are in it for money

"Requesters" have great power

Amazon takes 10-40% of payment

Some attempts to establish minimum pay

Advantages of mTurk

Large scale experiments

Fast

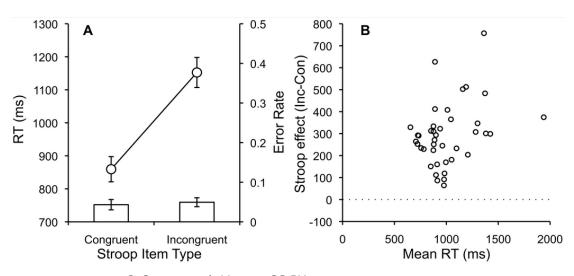
Cheap-ish

Replicable-ish

Participant pool more diverse-ish (Weinberg et al. 2014)

Will it Replicate?

Stroop, Switching, Flanker, Simon, Posner Cueing, attentional blink, subliminal priming, and category learning.



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Concerns on mTurk

Attention

Repeated exposure

"Super-Turkers"

Over-exploited resource (David Rand)



"The internet's hidden science factory" (PBS)

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Concerns on mTurk (cont.)

Ethics

Low pay

No debriefing (dropout)



"The internet's hidden science factory" (PBS)

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Tips

Lower level is more likely to work

Have participants give comments

Communicate

Do not reject (unless extreme, decide ahead of time)

Tips (cont.)

(Good) catch questions

Get IRB approval and assure informed consent

Ethical pay

Helpful tools for running experiments

Link to external website

PsiTurk https://psiturk.org/

Todd Gureckis (NYU)

Other website to check out

TurkerNation

mTurkGrind |

TurkOpticon



Summary

Wonderful resource

Magnifies everything, including concerns

MIT OpenCourseWare https://ocw.mit.edu

Resource: Brains, Minds and Machines Summer Course Tomaso Poggio and Gabriel Kreiman

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