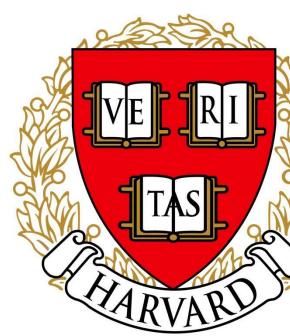
The Effects of Performance-Contingent Financial Incentives in Online Labor Markets



Introduction

SPRING

amazon mechanical turk^m **Artificial Artificial Intelligence**

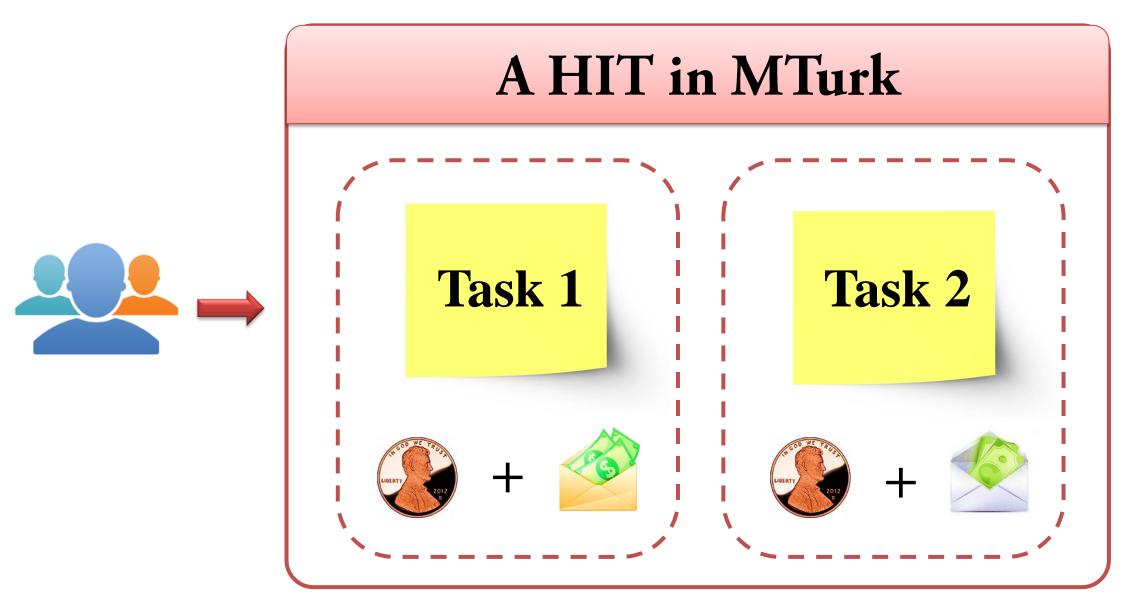


- Financial incentives are commonly used in online labor markets such as Amazon Mechanical Turk (MTurk).
- But how effective are financial incentives in influencing worker effort and work quality?
- Increasing the magnitude of *performance-independent* financial rewards increases the quantity but not the quality of work [Mason & Watts 2009, Rogstadius et al. 2011].

Questions & Method

For *performance-contingent* financial rewards:

- Does a higher reward lead to better performance or higher effort of workers?
- Do changes in the magnitude of the reward affect workers' performance or effort?

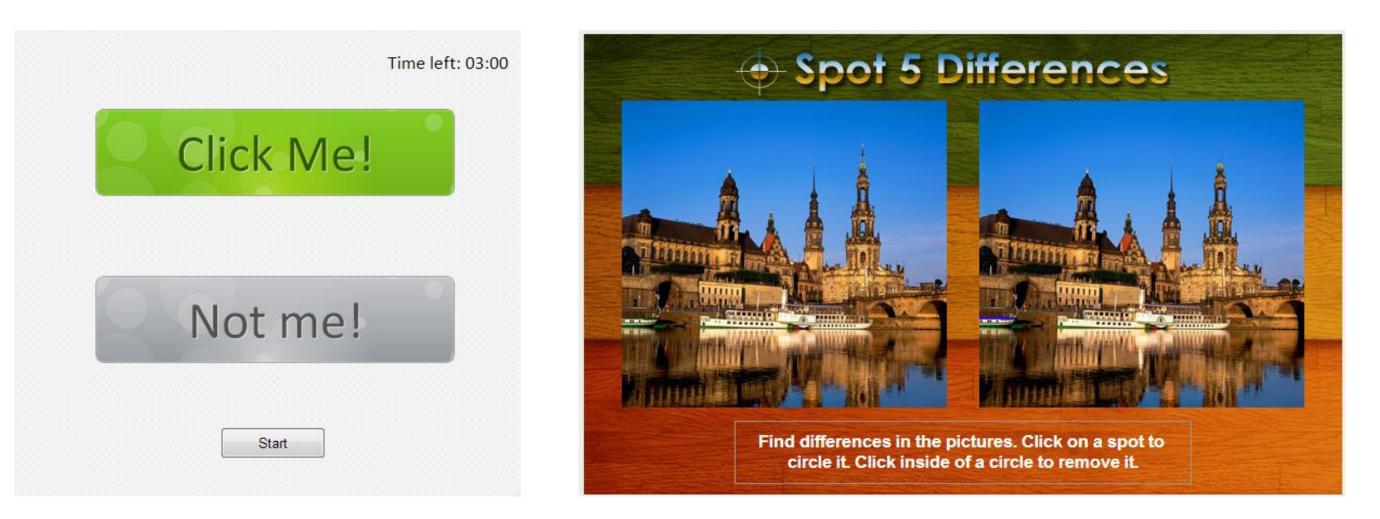


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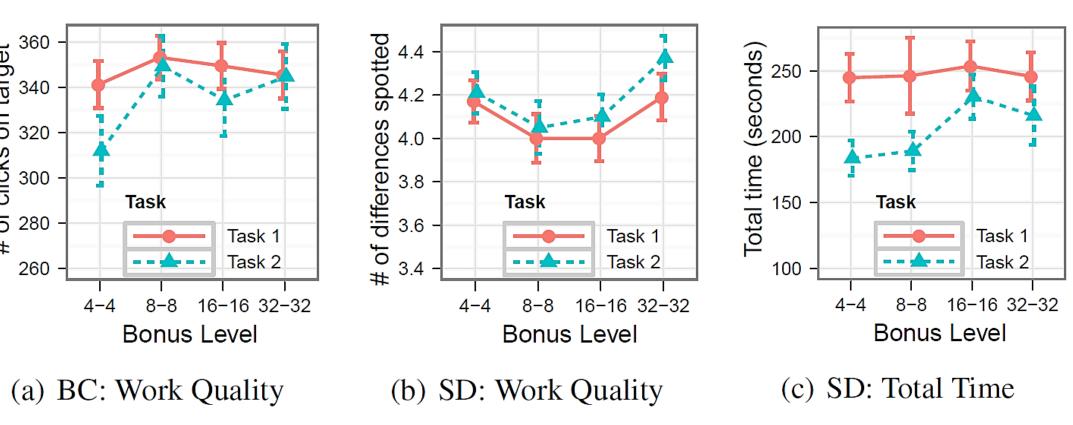
Experiment Settings

• Ten treatments with varying bonus levels (cents): Base treatments: 4-4, 8-8, 16-16, 32-32 Treatments with increasing bonus: 4-8, 4-16, 4-32 Treatments with decreasing bonus: 8-4, 16-4, 32-4



- Motor skill task Button Clicking (BC) Work Quality: # of clicks on the green button
- Cognitive skill task Spotting Differences (SD) Work Quality: # of differences correctly spotted Worker Effort: Total time and longest interval

Higher Reward Better Performance / Higher Effort



Both work quality and worker effort have similar mean values across 4 base treatments for both types of tasks.

Task

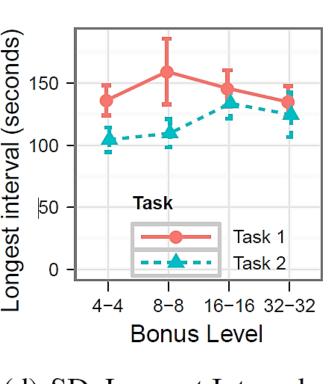
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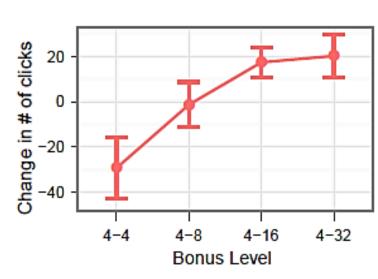


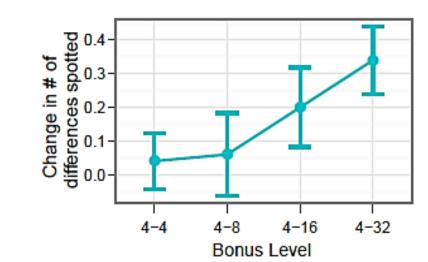




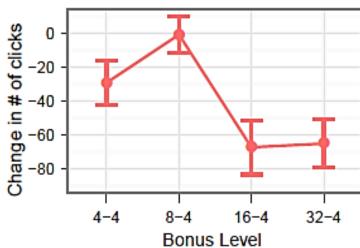
(d) SD: Longest Interval

Increasing Reward Better Performance / Higher Effort





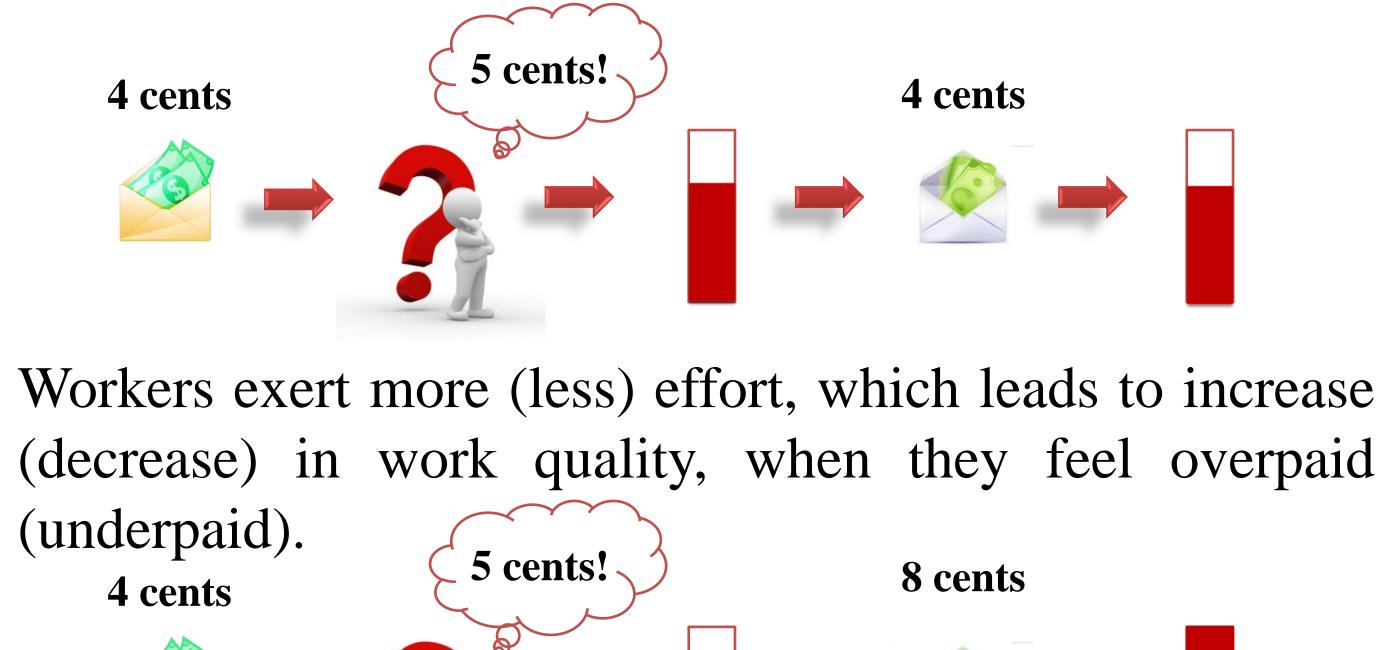
treatments with increasing bonus



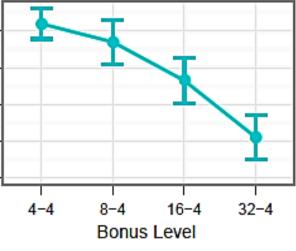
treatmen
-0.0 Change in # of -7.0- spotted -9.0- -9.0- -9.0- -9.0-

(d) BC: Change in work quality for treatments with decreasing bonus

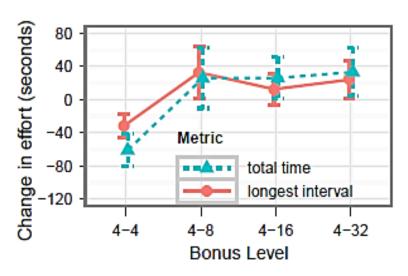
• Work quality and worker effort increase (decrease) as the reward increases (decreases) in a sequence.



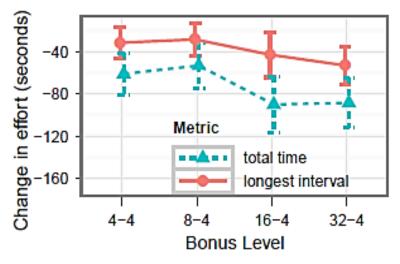
(b) SD: Change in work quality for nts with increasing bonus



(e) SD: Change in work quality for treatments with decreasing bonus



(c) SD: Change in worker effort for treatments with increasing bonus



(f) SD: Change in worker effort for treatments with decreasing bonus

Interpretation

• Workers *anchor* their perception of "fair" payment on the initial bonus level that they receive and supply a corresponding fraction of their normal effort level.