

Shallow Meritocracy

Pre-Registration: “Counterfactual” experiment where the counterfactual choice of the advantaged worker is revealed

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1 Overview

I extend the existing “counterfactual experiment”.

The existing counterfactual experiment provides spectators with information about what the *dis-advantaged* worker would have done had he also earned a high piece-rate.

The new counterfactual experiment follows an analogous structure but provides spectators with information about what the *advantaged* worker would have done had he also earned a low piece-rate. Experimental design and analysis are identical to the existing counterfactual experiment with this one crucial exception.

2 Experimental design

Workers Workers are randomly assigned either a piece-rate of \$0.50 or \$0.10. Before they learn which piece-rate they earn, they decide how many tasks they would complete for each piece-rate. Their decisions are incentivized. Subsequently, they learn which piece-rate they have been assigned and complete the number of tasks they committed to do.

Effort scenarios As before, each spectator decides whether and how to redistribute the earnings in 8 different scenarios. The scenarios vary how many tasks worker A and worker B completed and, hence, how much effort each worker exerted. This means that spectators redistribute earnings conditional on the effort choices of workers.

Experimental condition: Baseline In the baseline condition, worker A is randomly assigned a piece-rate of \$0.50, and worker B is randomly assigned a piece-rate of \$0.10. Spectators are only

informed about the workers' choices for their respective piece-rate but NOT about what workers would have done had they earned a different piece-rate.

Experimental conditions: Counterfactual low/high These conditions build on the baseline condition but additionally provide respondents with information about what the *advantaged* worker would have done if he/she had also earned a low piece-rate of \$0.10.

- **Counterfactual high:** In the first three scenarios, the advantaged worker A **would not have changed his/her effort provision** even for a low piece-rate.
- **Counterfactual low:** In the first three scenarios, the advantaged worker A **would have exerted as little effort as worker B** if he/she had earned a high piece-rate.

In scenarios 4-7 of both conditions, a random draw determines to what extent worker A would have changed his/her effort provision.

3 Sampling

Sample size About 900 respondents (300 per treatment). The sample ought to be representative of the US general population in terms of gender, age, income, and region. If required, a few additional observations may be collected to improve the match to US census data. This can happen if, for instance, the initial sample contains too few female respondents.

Intervention dates I plan to collect the data from June 22, 2022 (right after the pre-analysis plan has been uploaded) to August 30, 2022.

4 Exclusion criteria

Survey responses will be excluded from the analysis if the respondent

- does not complete the first 7 redistribution decisions
- has already participated in the study
- spends too little time on reading the experimental instructions in part 1 before the treatment variation is introduced (drop respondents with less than 30 seconds reading time)

5 Experimental instructions

Instructions for the pages where the new counterfactual experiment differs from the old one are attached.

What if ...?

Please read the following information very carefully.

Worker A and worker B were randomly assigned different piece-rates. Worker A earned \$0.50 per task, and worker B earned \$0.10 per task.

You may wonder what worker A would have done if he/she had also earned a low piece-rate of \$0.10. In other words, if worker A had been in the same situation as worker B, would worker A have chosen to complete a different number of tasks?

Recall: We know the answer to this question because worker A also committed to the number of tasks he/she would complete for a piece-rate of \$0.10.

We will inform you about what worker A would have done for a piece-rate of \$0.10 in each of the 8 different scenarios.

You can proceed to the next page only after at least 20 seconds. Please read the information on this page very carefully.



What if ...?

To sum up, we will not only inform you about how many tasks worker A and worker B actually completed, we will also inform you about how many tasks worker A would have completed if he/she had also earned a low piece-rate of \$0.10.



Quiz

Which of the following statements are correct?

If you want to read parts of the instructions again, navigate to previous pages using the "back" button at the bottom of this page.

Each worker could freely decide how many tasks to complete.

True

False

Worker A and worker B were randomly assigned different piece-rates.

True

False

Worker A earned \$0.50 per task. Worker B earned \$0.10 per task.

True

False

Worker A also committed to the number of tasks he/she would complete for a piece-rate of \$0.10. We will inform you about this.

True

False

Your decisions can determine the workers' earnings.

True

False



Submit responses

Counterfactual high condition

Scenario 1

Different piece-rates

- Worker A: \$0.50
- Worker B: \$0.10

Completed tasks

- Worker A: 50 tasks (100% of the work)
- Worker B: 0 tasks (0% of the work)

Payment

- Worker A: \$25.00 (100% of the total payment)
- Worker B: \$0.00 (0% of the total payment)

Total payment: \$25.00

What if worker A had also earned a piece-rate of \$0.10?

For a piece-rate of \$0.10, worker A would still have completed 50 tasks.

- Worker A: 50 tasks (100% of the work)
- Worker B: 0 tasks (0% of the work)

Please split the total payment between both workers.

To do so, please specify which share of the total payment each worker gets. The shares need to add up to 100%.

Share of **worker A** %

Share of **worker B** %

Total %



Scenario 2

Different piece-rates

- Worker A: \$0.50
- Worker B: \$0.10

Completed tasks

- Worker A: 35 tasks (70% of the work)
- Worker B: 15 tasks (30% of the work)

Payment

- Worker A: \$17.50 (92% of the total payment)
- Worker B: \$1.50 (8% of the total payment)

Total payment: \$19.00

What if worker A had also earned a piece-rate of \$0.10?

For a piece-rate of \$0.10, worker A would still have completed 35 tasks.

- Worker A: 35 tasks (70% of the work)
- Worker B: 15 tasks (30% of the work)

Please split the total payment between both workers.

To do so, please specify which share of the total payment each worker gets. The shares need to add up to 100%.

Share of **worker A** %

Share of **worker B** %

Total %



Scenario 3

Different piece-rates

- Worker A: \$0.50
- Worker B: \$0.10

Completed tasks

- Worker A: 45 tasks (90% of the work)
- Worker B: 5 tasks (10% of the work)

Payment

- Worker A: \$22.50 (98% of the total payment)
- Worker B: \$0.50 (2% of the total payment)

Total payment: \$23.00

What if worker A had also earned a piece-rate of \$0.10?

For a piece-rate of \$0.10, worker A would still have completed 45 tasks.

- Worker A: 45 tasks (90% of the work)
- Worker B: 5 tasks (10% of the work)

Please split the total payment between both workers.

To do so, please specify which share of the total payment each worker gets. The shares need to add up to 100%.

Share of worker A	<input type="text" value="0"/> %
Share of worker B	<input type="text" value="0"/> %
Total	<input type="text" value="0"/> %



The first of four randomly generated scenarios.

Scenario 4

Different piece-rates

- Worker A: \$0.50
- Worker B: \$0.10

Completed tasks

- Worker A: 43 tasks (66% of the work)
- Worker B: 22 tasks (34% of the work)

Payment

- Worker A: \$21.50 (91% of the total payment)
- Worker B: \$2.20 (9% of the total payment)

Total payment: \$23.70

What if worker A had also earned a piece-rate of \$0.10?

For a piece-rate of \$0.10, worker A would have completed 33 tasks.

- Worker A: 33 tasks (60% of the work)
- Worker B: 22 tasks (40% of the work)

Please split the total payment between both workers.

To do so, please specify which share of the total payment each worker gets. The shares need to add up to 100%.

Share of **worker A** %

Share of **worker B** %

Total %



Counterfactual low condition

Scenario 1

Different piece-rates

- Worker A: \$0.50
- Worker B: \$0.10

Completed tasks

- Worker A: 35 tasks (70% of the work)
- Worker B: 15 tasks (30% of the work)

Payment

- Worker A: \$17.50 (92% of the total payment)
- Worker B: \$1.50 (8% of the total payment)

Total payment: \$19.00

What if worker A had also earned a piece-rate of \$0.10?

For a piece-rate of \$0.10, worker A would also have completed 15 tasks.

- Worker A: 15 tasks (50% of the work)
- Worker B: 15 tasks (50% of the work)

Please split the total payment between both workers.

To do so, please specify which share of the total payment each worker gets. The shares need to add up to 100%.

Share of worker A	<input type="text" value="0"/>	%
Share of worker B	<input type="text" value="0"/>	%
Total	<input type="text" value="0"/>	%



Scenario 2

Different piece-rates

- Worker A: \$0.50
- Worker B: \$0.10

Completed tasks

- Worker A: 45 tasks (90% of the work)
- Worker B: 5 tasks (10% of the work)

Payment

- Worker A: \$22.50 (98% of the total payment)
- Worker B: \$0.50 (2% of the total payment)

Total payment: \$23.00

What if worker A had also earned a piece-rate of \$0.10?

For a piece-rate of \$0.10, worker A would also have completed 5 tasks.

- Worker A: 5 tasks (50% of the work)
- Worker B: 5 tasks (50% of the work)

Please split the total payment between both workers.

To do so, please specify which share of the total payment each worker gets. The shares need to add up to 100%.

Share of **worker A** %

Share of **worker B** %

Total %



Scenario 3

Different piece-rates

- Worker A: \$0.50
- Worker B: \$0.10

Completed tasks

- Worker A: 50 tasks (100% of the work)
- Worker B: 0 tasks (0% of the work)

Payment

- Worker A: \$25.00 (100% of the total payment)
- Worker B: \$0.00 (0% of the total payment)

Total payment: \$25.00

What if worker A had also earned a piece-rate of \$0.10?

For a piece-rate of \$0.10, worker A would also have completed 0 tasks.

- Worker A: 0 tasks
- Worker B: 0 tasks

Please split the total payment between both workers.

To do so, please specify which share of the total payment each worker gets. The shares need to add up to 100%.

Share of worker A	<input type="text" value="0"/>	%
Share of worker B	<input type="text" value="0"/>	%
Total	<input type="text" value="0"/>	%



The first of four randomly generated scenarios.

Scenario 4

Different piece-rates

- Worker A: \$0.50
- Worker B: \$0.10

Completed tasks

- Worker A: 41 tasks (49% of the work)
- Worker B: 42 tasks (51% of the work)

Payment

- Worker A: \$20.50 (83% of the total payment)
- Worker B: \$4.20 (17% of the total payment)

Total payment: \$24.70

What if worker A had also earned a piece-rate of \$0.10?

For a piece-rate of \$0.10, worker A would have completed 7 tasks.

- Worker A: 7 tasks (14% of the work)
- Worker B: 42 tasks (86% of the work)

Please split the total payment between both workers.

To do so, please specify which share of the total payment each worker gets. The shares need to add up to 100%.

Share of worker A	<input type="text" value="0"/>	%
Share of worker B	<input type="text" value="0"/>	%
Total	<input type="text" value="0"/>	%

