Can we Increase Competitiveness in Women by Making Competitions Less Risky?
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Introduction

Men outnumber women in top leadership positions and receive higher wages for the same jobs (1)
Gender differences in competitiveness account for a proportion of the gender wage gap.
- On average, women compete less than men (2), partly due to their greater risk aversion (3). When given the choice between a piece-rate payment scheme based on own individual performance or a tournament payment scheme based on the outcome of a competition against another person, relatively more men prefer the tournament option (4).
- A previous study in our lab tested whether women would prefer competitions that are lower in risk:
  - Men and women were given the option to compete in 5-small tournaments (low-risk option) or 1-large tournament (high-risk option). Women preferred the 5-small tournaments option and men preferred the 1-large tournament option.
- Can we reduce the gender gap in competitiveness by offering women less risky competitions?
- We split participants into two conditions.
  - **Condition 1:** Choice between piece-rate vs. 5-small tournaments
  - **Condition 2:** Choice between piece-rate vs. 1-large tournament

Hypothesis: The gender difference in willingness to compete will be significantly smaller in condition 1 than condition 2.

Methods

- **N=757 adults recruited from Prolific**

Experimental design

<table>
<thead>
<tr>
<th>Task 1</th>
<th>Baseline: Piece-rate</th>
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<tbody>
<tr>
<td>Task 2</td>
<td>Condition 1: Piece-rate vs. 5-small tournaments</td>
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<tr>
<td></td>
<td>Condition 2: Piece-rate vs. 1-large tournament</td>
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- Participants solved as many multiplication problems as possible within 100 seconds in both task 1 and task 2.
- Piece-rate: The participant will be paid $0.05 for every question answered correctly.
- 5-small Tournaments: The winner of each of the 5-small tournaments will be paid $0.10 for every correct answer in each tournament while the loser will be paid $0.
- 1-large tournament: The winner of the 1-large tournament will be paid $0.10 for every correct answer while the loser will be paid $0.
- Lay beliefs: Participants were asked to predict which option male and female participants in their condition would prefer.
- The majority of participants in condition 1 (65.5%) and in condition 2 (67.9%) predicted that men would choose to compete over the piece-rate option.
- Only 6.38% of participants in condition 1 and 6.5% of participants in condition 2 predicted that women would choose to compete.

Results

**Percentage of participants who chose to compete broken down by gender**

Contrary to the hypothesis, the gender difference in willingness to compete was not significantly smaller in condition 1 than in condition 2. Instead, the opposite pattern was observed: A greater proportion of men (46.4%) than women (27.6%) chose to compete in the 5-small tournaments. The difference-in-difference between conditions was significant (p=.006) and largely due to men preferring the 5-small tournaments.

**Percentage of participants predicting the payment scheme most often chosen by men and women by condition**

In both conditions, participants who chose to compete had a bigger boost in performance than those who chose the piece-rate option.

Discussion

- Our prior work found that women prefer 5-small tournaments to the 1-large tournament. Here we find that when given the option of a piece-rate scheme over each type of competition, women still prefer the piece-rate payment scheme.
- Contrary to our prediction, offering 5-smaller tournaments to a piece-rate scheme exacerbates the gender difference because more men chose to compete in the 5-tournament condition.
- Future research on this topic might offer all three options simultaneously. The 5-small tournaments option may be perceived as less risky when juxtaposed against the 1-large tournament option.

References


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