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## Isolated choice effect and its implications for age diversity hiring in organizations

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#### Abstract

Advancing age has a negative impact on hiring outcomes, however gender research suggests that hiring for multiple roles simultaneously (i.e., roles for a team) can lead to more diverse selections than hiring in isolation (i.e., a single candidate for a single role). In a pre-registered, conceptual replication, we asked participants across 3 experiments $(N=1,736)$ to select from three candidates with relevant experience, two younger and one older. We found some support for past research, where participants tasked with selecting for roles simultaneously (set choice) generally selected more older candidates than those tasked with hiring for the same four roles in isolation (isolated choice), however the observed effects were small and did not replicate consistently across experiments.


## 1. Introduction

## 3. Results

## Background

- When making multiple choices, choice bracketing suggests a broad view of options allows consequences to be considered together, but a narrow view forces choices in isolation ${ }^{1}$
- In a study of snack choices, Simonson (1990) found that broader choice bracketing can also lead to more diverse choices, with students choosing more variety in snacks when choosing simultaneously 'all at once' instead of 'week to week' ${ }^{2}$
- Chang et al. (2020) extended this idea to hiring decisions, finding lower selection of female (minority) candidates in hiring for a single role in isolation than for a set of multiple roles to fill a team, an isolated choice effect ${ }^{3}$
- Over 50s in the UK and many other countries are more likely to be out of work than younger workers, and find it harder to get back into employment, leading to an 'unemployment trap' 4


## Hypothesis

- Does choice bracketing also influence the age diversity of job candidates chosen in hypothetical hiring? A pre-registered, conceptual replication of Chang et al. (2020) ${ }^{4}$
- We hypothesized participants hiring for a single position (isolated choice) would choose a lower proportion of older candidates than those hiring for multiple positions (set choice)


## 2. Method

Who would you like to hire for the role of Software Engineer?


## Materials \& Procedure

- Participants imagine hiring roles for a new team at a tech company
- 5 different roles per team (4 relevant + 1 masking).
- 3 candidates per role, all male, two younger $\left(M_{\text {age }}=25\right)$ and one older $\left(M_{\text {age }}=67\right)$ with photo ${ }^{5}$
- Participants from Prolific Academic assigned 4:1,

1. Isolated choice: hire 1 candidate for 1 of 5 roles
2. Set choice: hire 5 candidates for 5 roles* in fixed order

- The experience of older candidates for each team was either:

Non-Competitive (Ex 1-3): Not most, nor least experienced
Competitive (Ex 2-3): Equal most experienced

1. Isolated $\qquad$
$n_{\text {selections }}=2,402$

1 Candidate X 1 of 4 Roles*

2. Set
$n_{\text {selections }}=2,268^{*}$
5 Candidates X 5 Roles*

*A fifth role is described in both conditions but only hired for in the set condition, where 3 younger male workers (1 BAME) are used in to mask the study purpose. These selections are excluded from the analysis here.

## Results

- In Ex.1, we found older workers were selected less in isolated choice than set choice hiring decisions where the older candidate was non-competitive, $X^{2}(1)=4.58, p=.032^{\wedge}(7 \%$ vs. $12 \%)$
- In Ex. 2 and Ex. 3 we were unable to replicate Ex. 1 results, nor did we find a significant difference in a new competitive scenario (older candidates equal most experience) team hiring task.
We meta-analyzed data from the 3 experiments ( $n_{\text {selections }}=4,670$ ), but did not find a significant difference between isolated choice and set choice, $X^{2}(1)=3.15, p=.076^{\wedge}(15 \%$ vs. $17 \%)$.
Non-Competitive: older candidate not most nor least experienced


|  | Candidate - Experience | Experiment 1 |  |  |  | Experiment 2 |  |  |  | Experiment $3^{\text {x }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Isolated |  | Set |  | Isolated |  | Set |  | Isolated |  | Set |  |
|  |  | \# | \% | \# | \% | \# | \% | \# | \% | \# | \% | \# | \% |
| NonCompetitive | 1.Younger - most | 325 | 80\% | 272 | 76\% | 328 | 80\% | 316 | 81\% | 481 | 81\% | 471 | 83\% |
|  | 2.Older - not most nor least | 27 | 7\% | 42 | 12\% | 25 | 7\% | 23 | 6\% | 35 | 6\% | 39 | 7\% |
|  | 3.Younger - least | 54 | 13\% | 42 | 12\% | 52 | 13\% | 49 | 13\% | 77 | 13\% | 58 | 10\% |
| Competitive | 1. Younger - equal most | - | - | - | - | 272 | 67\% | 249 | 64\% | 402 | 68\% | 383 | 67\% |
|  | 2.OIder - equal most | - | - | - | - | 106 | 26\% | 119 | 31\% | 157 | 26\% | 155 | 27\% |
|  | 3.Younger - least | - | - | - | - | 27 | 7\% | 20 | 5\% | 34 | 6\% | 30 | 5\% |

${ }^{\times}$In Ex. 2 participants completed the Non-Competitive Task followed by Competitive Task. Order was randomized in Ex. 3 ${ }^{\wedge}$ Binary logistic regression with clustered standard errors by participant.

## 4. Discussion

## Conclusion

- Some evidence for an isolated choice effect was found, such that participants were less likely to select older candidates when making a single selection in Ex.1.
- The failure to replicate this effect in subsequent experiments suggests choice bracketing effects in selection decisions are smaller than expected and may vary based on the task.
- This evidence shows a strong preference towards younger candidates, even in contexts where they are less experienced.


## Applied Implications

- Encouraging organizations to hire at a team level or view the existing diversity within the team may encourage more diverse selection decisions, however, the effect may depend on contextual factors, such as diversity characteristics and composition of candidates in the team.
- These findings support labor statistics by showing older candidates face genuine discrimination barriers in hiring, and further investigation is needed into potential behavioral solutions.


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