

Evaluating a Game Designed to Teach

About Gender Bias



Authors: Jessica Frame & Jessica Cundiff, Psychological Science, Missouri S&T

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OBJECTIVE

Being able to understand and to detect gender bias within the workforce is critical to addressing it. However, common teaching methods like lecture-driven instruction can sometimes backfire and thwart information processing and learning goals. The WAGES project is an interactive board-game designed to accurately display information of gender bias in the workforce in hopes of creating stronger long-term retention of learning outcomes than that of traditional lectures.

HYPOTHESES

Exposing groups of student participants to the WAGES board game as a form of interactive learning will lead to superior long-term retention of learning themes than that of a standard lecture.

METHODS

Participants and Procedure: Student participants were randomly assigned to either play the WAGES board game or watch a recorded lecture. WAGES and lecture both contained the same information about gender bias, but in different formats. Two-to-three months afterwards, they completed a survey to determine if they recalled the themes they learned about.

Themes:

Nature of bias

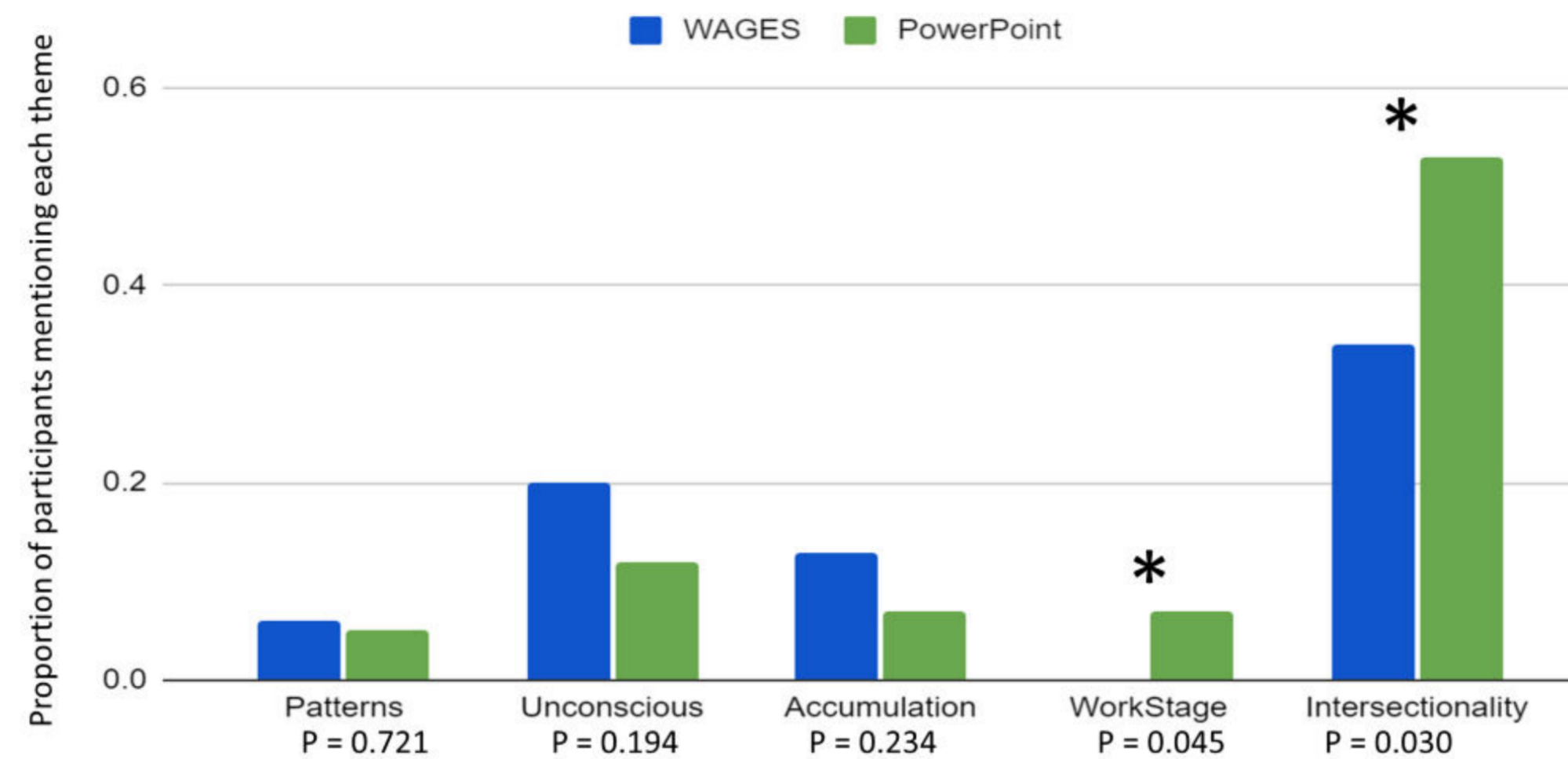
- Bias is most visible in patterns, not single cases
- Bias can be unconscious, not noticeable to one's self
- Bias tends to not just happen once, it's an accumulation
- work stage: Bias can look different at different points of an individual's career
- Intersectionality: Gender bias can be different for different groups of individuals

Type of bias

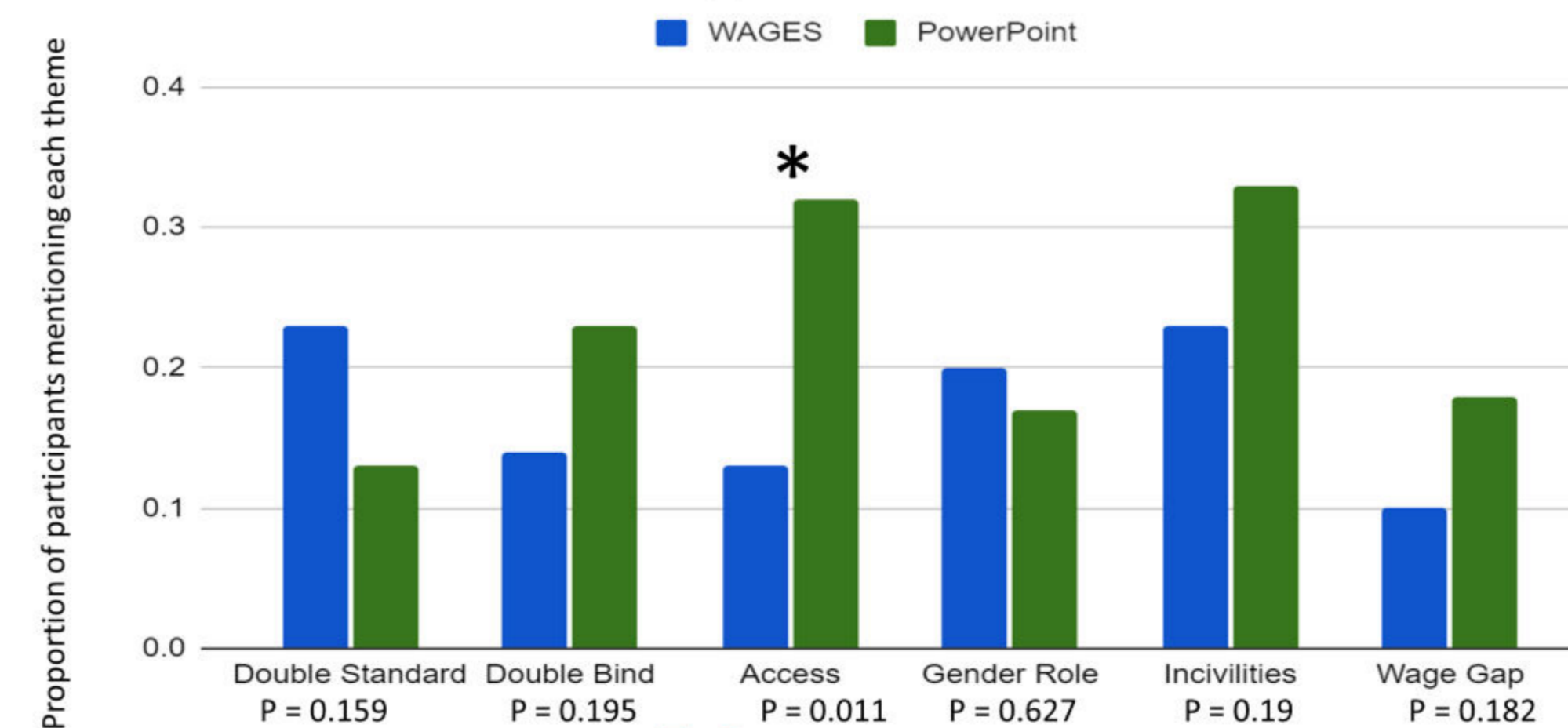
- Bias can be seen as a double standard, getting lower rewards for the same work
- Bias can be a double bind, to be successful women must harbor masculine traits but it is a tightrope
- Bias can be shown through a lack of access to resources
- Bias can be rooted in gender role expectations, women and men have their own agendas to follow
- Bias can be experienced through incivilities, microaggressions in the work force
- Bias can be seen in the workforce wage gap, women having less pay for the same amount of work.

RESULTS

Wages v Powerpoint: Nature of Bias



WAGES v PowerPoint: Type of Bias



MEASURES

Question being coded: "Last semester, you participated in a study that taught you how gender bias works and what it looks like in the workplace. What were the main take-home points about gender bias in the workplace? In other words, what major themes do you remember learning as a result of taking part in this study? Write down as many take-home points as you can remember. Write each take-home point in separate boxes."

Coding was done with 2 coders who met after coding the first 25 responses to refine coding manual. Then, all responses were coded independently and all disagreements were resolved through discussion. Overall Cohen's Kappa: 0.69.

CONCLUSIONS

Overall, the WAGES condition showed little significant difference compared to the lecture condition in long-term retention of information about gender bias within the workforce. Contrary to hypotheses, results suggest a PowerPoint driven lecture demonstrated better long-term retention of some themes: work-stage, intersectionality, and access of resources.

- **Work Stage:** No WAGES participants and 4 PowerPoint participants had made any mention of work stage bias. Even though this difference was statistically significant, neither method did a good job at making this theme memorable.
- **Intersectionality:** WAGES may be improved in the future to incorporate more cards with more examples of intersectionality.
- **Access of resources:** WAGES fell short in this area and may be improved in the future to include more cards with examples of access as well.

Overall, since there was only a few significant differences in long-term retention of information discerning gender bias in the workforce, it seems that implementing lessons with both lectures and the WAGES game would overall improve retention as well as create a more interactive and fun way of learning while being supplemented with mini lectures along the way.