

Assignment 4

2024-02-01

Summarize its main finding in 2-3 sentences, using your own understanding and language.

The research paper's goal was to find out how discrimination in the workplace affects minority employees, focused on mainly African cashiers working in French grocery stores. By using an Implicit Association Test and difference-in-difference testing, they found that minority cashiers do in fact perform worse, for example having slower scanning speed and higher absences, when working with managers who have a bias against their minority group. They found that a manager's discriminatory beliefs can directly impact their minority employees' job performance, leading to a self-fulfilling prophecy where if they believe that they'll perform worse, the employee will actually perform worse.

Comment on the research design of the paper. Which of the tools described in the Mastering Econometrics videos did they use? How did they use them?

Of all the tools described in the Mastering Econometrics videos, the tool most evidently used is differences-in-differences research design. This method is used to estimate causal effects by comparing the before-and-after differences in outcomes between a treatment group and a control group, in this case, minority employees working under discriminatory versus non-discriminatory managers. The differences-in-differences approach is a key tool for identifying causal relationships when RCTs are not feasible, which in this case is evidently not used since there's no randomization. This method allowed the researchers to make a stronger argument about the causal impact of managerial bias on minority workers' performance.

Comment on any possible remaining threats to inference that may result from measurement or implementation problems likely encountered by the researchers.

- The reliance on Implicit Association Test (IAT) scores to determine managerial bias might not accurately capture all aspects of bias. Any test has its limitations and the IAT is no exception, so it may not fully capture all real-world discriminatory behaviors that someone can exhibit.
- There could be unobserved variables that influence both the assignment of managers to stores and the performance of cashiers, leading to biased estimates.
- The study's findings in the specific context of French grocery stores might not apply to other settings or industries since it is a very specific case in only one country.
- Changes in external factors over time that aren't accounted for in the study could affect cashier performance independently of managerial bias.
- If the assignment of managers to stores is influenced by factors related to cashier performance, this could confound the results.
- The study might not fully account for the interactions between manager and cashier characteristics beyond ethnic background that can also cause their behaviours.

Think about patent examiners now. If you were to try to establish why examiners leave the USPTO, what could be one causal hypothesis to test? (Hint: Think about many of the reasons certain workers may leave and pick one that you would like to test.)

Based on the information known about the USPTO, one possible reason why examiners leave is due to a lack of career advancement opportunities. Career progression is a significant motivator for many employees. If patent

examiners think that there are limited opportunities for advancement or professional development within the USPTO, it could lead to decreased job satisfaction and increased likelihood of looking for opportunities elsewhere. This is particularly relevant in a niche field like patent examination, where the skills are highly specific and the path to higher positions might seem limited. To see if this was the case, research was done on the USPTO's Glassdoor. Here, there were a few posts whose Cons for working at the USPTO was that they couldn't see what their future could be based on the type of jobs that the USPTO provided (Glassdoor, 2024).

As such, the causal hypothesis to test would be the following: Patent examiners at the USPTO are more likely to leave due to perceived limited opportunities for career advancement and professional growth within the organization.

This would be our alternative hypothesis (H1) to the null hypothesis (H0) which would be that patent examiners at the USPTO don't leave due to perceived limited opportunities for career advancement.

US Patent and Trademark Office Reviews. (2024). Retrieved from <https://www.glassdoor.ca/Reviews/US-Patent-and-Trademark-Office-Reviews-E41351.htm>