The Dynamics of Discrimination: Theory and Evidence (Bohren et al., 2019)

Belief-based discrimination happens when people incorrectly believe that a minority group has certain characteristics. For instance, there is a social belief that women are poor drivers, and we discriminate women drivers despite the evidence that men have a higher car crash rates than women[1]. In contrast with taste-based discrimination[2], beliefs are malleable and can change over time, making belief-based discrimination dynamic.

One Sentence Summary

The authors develop a model in which they can identify the type of discrimination a certain group faces. In their model, discrimination that can be reversed over time only if the discriminators have incorrect beliefs over a particular group. Then they test this theory using an online mathematics forum where users initially discriminated against female posters. However, when users observe high quality female posts, they overcompensate their initial discrimination and discriminate men posters.

Main Findings

Bohren et al. (2019) argue that discrimination can arise when individuals prefer a group over the other (taste-based or preference-based) or when individuals have some correct/incorrect beliefs of a group's characteristics (belief-based). Among these three types, only belief-based discrimination can change overtime, even leading to a reversal of discrimination.

To test their hypothesis, the authors studied an online mathematics forum where users can post a mathematical problem and other users can reply their answers or evaluate the quality of the post. Users can build their reputation by posting questions that had not been asked before on the forum, accumulating up-votes, and providing correct answers to existing questions.

In low reputations, female users had lower up-votes and accumulated less reputation than similar male users. However, high reputation female posts were favored over men's. This pattern suggests that users initially believe that female posters produce low-quality posts and overtime users understand that their belief was incorrect. Users evaluating reputable posts adjust their belief and attribute higher quality to female post. In fact, these users now believe that women produce higher quality posts than men, and thus the authors observe a discrimination reversal.

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[1] Here you can explore other driving statistics by gender in the US.
[2] Taste-based discrimination is the idea that individuals just prefer a group of people over others. For instance, society just does not like women drivers and would prefer men drivers, despite their higher crash rate.

Concluding Remarks

In contrast with the common misconception that people discriminate others according to their preferences, beliefs play a major role in discrimination. With this point of view, tackling discrimination becomes both easier and harder. Easier because all we need to do is to fix initial beliefs, but changing initial beliefs is quite challenging.

References

- Bohren, J.A., Imas, A., Rosenberg, M., 2019. The dynamics of discrimination: Theory and evidence. Am. Econ. Rev. https://doi.org/10.1257/aer.20171829