

The Role of Algorithm Aversion in Employee Selection

- A Candidates' Perspective on Artificial Intelligence

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Organisations are increasingly introducing artificial intelligence (AI) into their recruiting processes, fundamentally changing the way talent is acquired. While this was shown to save companies money and time and is mostly accepted by recruiters, the effects on applicants are so far unknown. This is a critical research gap, as it was demonstrated that applicants who are happy with the recruiting process and feel treated fairly are more likely to accept an offer, stay longer in a company and have a higher job satisfaction.

According to decision making and organisational justice theory, algorithms should be perceived as positively and reasonable. Algorithms have been shown to predict future outcomes better, to be more consistent and less biased. Consequently, it would be logical that algorithm-based decisions are perceived as being better and more fairly than those made by humans. However, research in different contexts has shown that humans generally distrust algorithms. This effect is called algorithm aversion.

Therefore, this paper intended to provide further insight into how employee selection using AI is perceived from the candidate's perspective by conducting an experimental study and both quantitative and qualitative analysis. The main goal was to show how test perception and fairness changes, when comparing a human recruiter to an AI recruiting tool and whether algorithm aversion is prevalent in the recruiting context. Furthermore, it was tested if there are other factors that might moderate this relation between recruiter and candidate perception. The two moderators used were candidate fit (good versus bad candidate fit for the open position) and outcome favourability (receiving and offer versus being rejected).

By conducting an online-based experiment, it was revealed that an algorithm aversion is also prevalent in recruiting. Results from a vignette study with 244 employees and students from over 30 countries showed that recruiting processes where the hiring decision relies on an AI recruiting tool are perceived as being generally less favourable and fair than if the decision is made by a human recruiter. These findings were as expected in line with previous research

about general distrust of algorithms making decisions. Furthermore, the analysis for moderating effects of candidate fit and outcome favourability on algorithm aversion, could not be empirically supported. In contrast to the hypothesis, a candidate's positive fit for a position or a positive outcome could not be shown to reduce algorithm aversion.

By complementing the quantitative analysis with a qualitative aspect, two potential explanations were presented. First, a lack of awareness with regard to the benefits of algorithmic decision-making, and second, the belief that applicants should not be reduced to purely quantitative attributes. Participants felt that the AI recruiting tool could only assess quantifiable aspects from CV's or tests (e.g. skills and knowledge). Less quantifiable traits, such as personality, cultural fit, or empathy were considered to be important elements that can only be captured by a human recruiter.

These findings have various implications. First and foremost, companies should be aware about the fact that recruiting through AI tools is perceived to be less fair by candidates and hence could lead to an increased number of rejected job offers or turnover. Second, most participants stated that they saw the algorithm as a good first step but not as capable of taking an appropriate final decision. Therefore, a combined recruiting process could be suggested. Lastly, the findings could also have implications on other areas of research. Applications can be made in general organisational decision making in organisational psychology, organisational behaviour, or behavioural economics.

In summary, this paper showed that algorithm aversion, the phenomenon of individuals disliking decisions made by machines, is also prevalent in recruiting. A recruitment process where the hiring decision relies on an AI-based recruiting tool is perceived as generally less favourable and fair than if the decision is made by a human recruiter. Overall, this study contributes to a better understanding of, firstly, perceptions of algorithm-based decision making, and secondly, what is needed to successfully implement an AI recruitment strategy where time and cost savings can be created without losing good applicants.