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Exploring the Fairness Implications of A.I Replacing Human Decision-Makers in HR Management: A Case Study on Resume Screening

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Abstract: Artificial intelligence (AI) is displacing human resource (HR) staff in decision-making processes in a growing number of enterprises. It's unclear, though, how those impacted by these AI- driven judgments perceive fairness. People's perceptions of fairness have a big impact on an organization's sustainability, thus this study uses a resume screening scenario to investigate how candidates' opinions of fairness will change if AI takes the place of humans. An online scenario experiment was carried out to look into this, and SPSS was used to evaluate the results. In two different online situations, 189 and 214 users participated in the study, which evaluated procedural and distributive fairness as well as the responsibilities of decision-makers (AI vs. humans). The study also took into account the moderating influences of result favorability and AI's perceived level of knowledge. The results show that candidates believe human-based resume screening to be fairer than AI-based resume screening. Furthermore, these perceptions are considerably moderated by the outcome favorability and the level of AI skill. This study emphasizes how AI affects decision-making equity and proposes that the suggested methodology can assist companies in enhancing AI's efficacy in resume screening. Future studies may examine the possibility of human-AI cooperation in HR decision- making procedures.

Keywords: Artificial Intelligence; Fairness; Human judgment; HRM; Perception; Resume Screening; Procedural Fairness.

Introduction

As artificial intelligence (AI) becomes more quickly incorporated into different functional modules, humanresource management in the digital age faces both enormous opportunities and obstacles. For example, in 2015, Amazon created an AI system to assess the performance of warehouse workers by tracking their employment status and using this information in performance evaluations. Similar to this, in August 2021, 150 workers were let off by the Russian online payment company Xsolla due to inefficiencies and behavioral problems found in algorithmically generated "digital footprints." AI applications can lower labor expenses, improve HRM effectiveness, and have a major positive impact on an organization's innovative growth and digital transformation. It's still unclear, though,

how people will react and perceive AI-driven decisions in comparison to traditional HR manager's recommendations.

Ensuring that employees feel fairly represented in the decision-making process is critical for firms to meet goals and improve sustainability. According to a recent research, the IT industry loses $16 billion a year due to employee turnover, which is largely caused by perceived injustice in decision-making. The preservation of people's rights and interests as well as the long-term, steady growth of organizations depend on fairness. By ensuring that everyone participating in the decision-making process is treated with the dignity and respect they merit, fairness helps to improve the feasibility and rationality of decisions and effectively represents the requirements and interests of all parties concerned. In addition, a fair decision-making process lessens contradictions and internal conflicts, promotes team cohesiveness and a common goal, and increases the possibility of acceptance by all parties involved. Fair decision-making also improves an organization's brand image and fosters sustainable economic success by assisting in the communication of positive values and a sense of social responsibility. In order to assist businesses in making more successful decisions, it is crucial to take into account the perceived fairness of those impacted by such decisions.

The majority of earlier studies on AI's effects on attitudes and perceptions have been carried out in the marketing sector, where AI takes the position of humans in giving customer advice and product recommendations. Nonetheless, the topic of human resource management lacks pertinent studies. The boundary conditions that surround decision-making have likewise received scant attention in historical studies. A person's psychological interpretation of a choice can be influenced by a variety of decision-related elements, therefore it's important to investigate the circumstances that reinforce or undermine views of fairness. Furthermore, the significance of choice outcomes has received less attention in prior research, which has mostly concentrated on the decision-making process. The "outcome bias" postulates that people value a decision's result more highly than its process, suggesting that decisions' results may have an impact on people's perceptions of justice. Moreover, the way in which people's psychological views of decision-making and its consequences are influenced by the characteristics of the decision-maker has been largely ignored in previous study.

This study looks at AI-driven HRM choices. Using a resume screening scenario, it explores how candidates' views of distributive and procedural fairness change when AI takes the role of human reviewers. The study conducted two online scenario tests, taking into account different choice outcomes and decision-maker attributes. The results showed that when AI resume screening is used instead of human screening, respondents' judgments of both forms of fairness are lower. The study also finds that result favorability and AI skill have a beneficial moderating effect.

Literature Review

The Use of Artificial Intelligence in HRM

In a Dartmouth College summer seminar proposal, the term "artificial intelligence" was originally used and defined as "the ability to make machines behave in the same way that humans behave intelligently." To put it simply, artificial intelligence (AI) is the simulation of human intelligence through computing methods. Algorithms have become more common in the workplace in recent years; some have even used AI to help HR managers with duties like employee performance management, promotions, interviewing, and resume screening. The increasing utilization of artificial intelligence (AI) in administrative and organizational decision-making can be attributed, in large part, to its effective handling of large volumes of data. According to a related meta-analysis, AI outperforms human judgment by 10% on average. These results demonstrate AI's efficiency over human decision- making, indicating that its application in HRM decision- making is a crucial future trend.

Companies are adopting Digital Recruitment 3.0, a phase that focuses on employing AI technology in recruitment and selection processes, as a result of the progress of digital technology in human resource management. Artificial Intelligence Recruitment pertains to the techniques and resources employed by establishments to identify potential candidates by analyzing information and employing technologies like emotion detection, natural language processing, and machine learning to make hiring choices. The main applications of AI in recruitment are video interviews, online tests, and intelligent resume screening. Speech, emotion detection, and deep learning are other important technologies. Outreach, screening, assessment, and coordination are the four main elements of AI recruiting, according to several academics. These elements function differently from conventional human

recruitment techniques and cover the full process, from finding qualified applicants to making hiring judgments. AI, for instance, has the potential to completely transform the way that employment information is disseminated by, for instance, employing natural language processing to target candidates through data mining on social media sites like Facebook and LinkedIn. It can also be used for evaluations and interviews in virtual reality and gaming environments. When compared to traditional recruitment, AI recruitment gives a competitive edge by providing access to top talent and saving a substantial amount of time.

However, previous research has largely focused on the benefits of AI from an organizational aspect, ignoring the perspectives of the people affected by AI judgments. This gap will determine how widely and sustainably AI may be used in business. For instance, AI can save more than 80% of the time needed compared to conventional resume screening methods. It is yet unclear, though, if applicants are amenable to AI analyzing their resumes and whether this has an impact on how they view the application process in their minds. This study aims to address these problems by focusing on the views and responses of applicants to AI-driven resume screening.

Applicants and Fairness Perception

The study of justice in organizations has long been a primary area of interest for organizational scientists. Adams defined fairness as the equality of decision results inside an organization, including wage distributions, promotions, and performance reviews. His original definition of fairness placed a strong emphasis on distributive outcomes. In his concept, fairness results from an exchange relationship between inputs and outputs, or salary, bonuses, promotions, status, and performance reviews, and inputs like effort, knowledge, skills, and loyalty, as well as work quantity and quality. Based on the input-to-output ratio, distributions are judged to be fair. The impartiality of the procedures involved in decision- making, or procedural fairness, has gained prominence as a result of research over time demonstrating that results distributions also affect people's views of fairness. Because employees often wonder how their bosses make decisions, especially in tough situations, procedural fairness is essential.

Perceptions of fairness have a big impact on applicants' attitudes, intentions, and actions during the selection process. A negative reaction to perceived injustice might set off a series of unfavorable events, such as a decline in the appeal of the organization, undesired actions (such suing), and even a lower chance of accepting employment offers. On the other hand, favorable opinions about justice might result in advantageous attitudes and behaviors; among these reactions, fairness impressions rank highest (like motivation, fear, and efficacy). Fairness affects an organization's appeal, the possibility that a job offer will be accepted, and whether or not candidates will advocate for the company.

According to expectancy theory, candidates' answers are influenced by their expectations for the future. Fairness is a powerful predictor of interview effectiveness and job application motivation, according to a number of studies. According to the fairness heuristic, an individual's evaluation of organizational fairness is based on early experiences, such as the selection procedure. As resume screening is usually an applicant's first interaction with the business, this first encounter has a big impact on the applicant's perception of fairness.

AI has recently becoming increasingly widely used by corporations to replace human decision-makers in HR. Research is still being conducted, meanwhile, on the effects of AI in HRM, particularly in resume screening. This study looks at how candidates' perceptions of fairness are affected when AI replaces human resume screening, as well as which approach results in higher perceptions of fairness.

Artificial Intelligence and Fairness Perception

The perceived fairness of AI-generated decisions has been a topic of continuous discussion in academic circles. While some research support the idea that human decision-making is more equitable than AI decision-making, others show the contrary. For instance, utilizing AI to evaluate politically contextualized content is sometimes thought to be less equitable than employing human reviewers. AI-based task allocation, on the other hand, is seen by warehouse workers as more equitable than human task allocation.

The differing types of tasks AI completes and the results it generates help to explain this dispute in part. When an AI system is asked to do a task that calls for human-specific skills, such subjective appraisal through emotional

absorption, the system is often seen as less equitable. AI judgments, on the other hand, are thought to be more equitable in situations requiring technical expertise, such as processing vast amounts of quantitative data for impartial evaluation. Furthermore, these impressions are influenced by the task's intricacy. According to research, people view artificial intelligence (AI) as less fair when it comes to high-complexity activities that require several steps or components, whereas AI is seen as more fair when it comes to simpler tasks.

Different people may have different ideas on what makes an activity difficult and complex. Therefore, research on AI's effect on fairness may be less accurate if it is conducted over a large range of jobs rather than focusing on a specific situation. The current study focuses on the resume-screening task in the human resource management area with the aim of precisely testing the influence of AI-made decisions on fairness, in order to elucidate the relationship between AI and fairness in this context.

Research Method

This study's research methodology fills in the gaps found in other studies on AI and decision-making fairness. When comparing AI decisions to human decisions, previous research has yielded inconsistent results about whether or not people perceive AI decisions to be fairer. The majority of previous research has addressed fairness in broad terms without exploring its various facets. A decision's impact is influenced by the decision-maker as well as by other relevant circumstances. Investigating the variables that influence decision-makers' views of fairness is therefore crucial, especially the boundary conditions, which have received little attention in previous research. Individuals frequently place more emphasis on the results of decisions than the actual process of making them.

Two elements of fairness perception procedural and distributive fairness—as dependent variables, two moderating variables outcome favorability and AI expertise and decision-makers people and AI as independent variables make up the research model for this study. For job seekers, the outcome of resume screening is crucial since it determines how far along they go in the application process and how probable it is that they will be recruited. Previous research indicates that people view decisions more favorably when they produce positive results. This research includes outcome favorability as a moderating variable because it may negatively affect the relationship between decision-makers and fairness. Moreover, assessments of AI competency may vary based on individual characteristics (e.g., age, gender, and educational level), which could influence the results. As such, it is believed that AI expertise, which is also viewed as a moderating factor, adversely moderates the link between decision-makers and fairness.

In view of the growing use of AI in HRM, this study investigates how applicants perceive procedural and distributive justice in relation to resume screeners, both human and AI. It focuses specifically on the resume screening scenario. The research techniques are as follows:

a. Participants with prior work experience will participate in two scenario trials as applicants.

b. The first experiment alters both the decision outcome and the resume screener in order to examine the main effect and the moderating effects of outcome favorability. An intergroup experiment measuring 2×2 is created.

c. The second experiment alters both the resume screener and AI expertise in order to examine the moderating effect of AI expertise as well as the principal effect once more.

The consistency of participant scores in data analysis will be guaranteed by a reliability examination of the scale. The functions of the two moderating variables and whether different resume screeners result in varying perceptions of fairness will be examined using variance analysis and regression analysis. The fundamentals of AI resume screening will be covered, along with the reasons why some people may feel that it is unfair. Figure 1 depicts the general framework of the investigation.

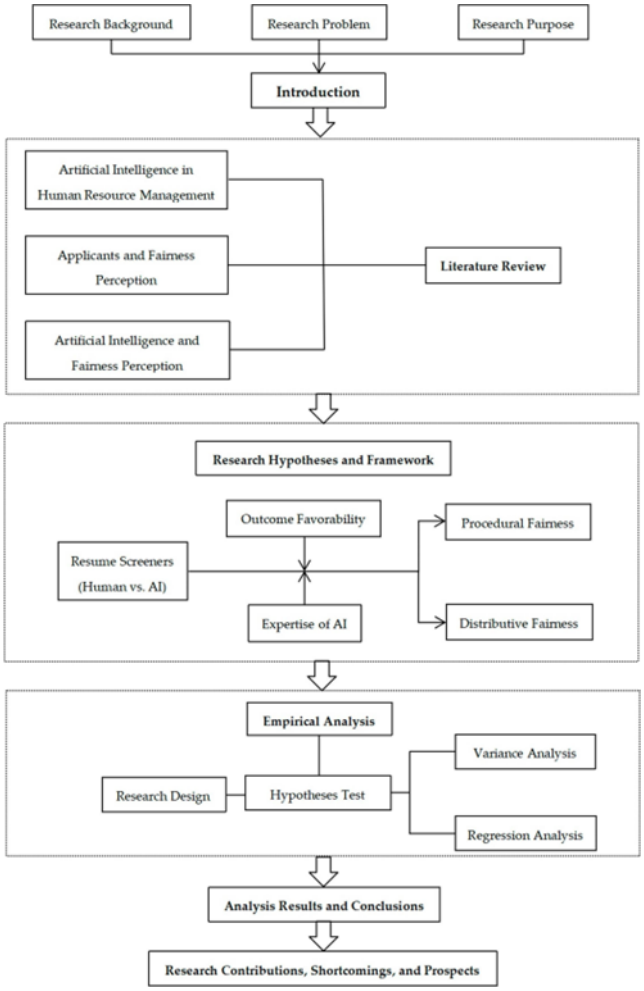

Figure 1. Research framework.

Research Hypothesis

The Effect of Human or Artificial Intelligence Decisionson the Fairness Perceptions of Applicants

The resume-screening situations that are the subject of this study call for decision-makers to evaluate a resume in its whole by combining experience, knowledge, and emotional intelligence with experience, rather than depending only on data analysis. Because resume screening requires advanced human abilities, there is a sense that using AI to accomplish procedural justice is less fair. There have long been worries regarding the "interpretability" and "transparency" of AI. The "black-box" nature of AI makes it difficult for laypeople to comprehend how it makes judgments or determine whether procedures or distributions are fair.

People's judgments of decision fairness are influenced by cues and signals from the organization, according to the fairness heuristic and signal theory. Artificial intelligence (AI), in contrast to human assessors, uses ambiguous criteria, so candidates are unaware of the standards that are applied to their resumes. This impreciseness may be seen as unclear organizational policies about the processing and evaluation of information. Such ambiguity reduces people's perception of procedural fairness by signaling to them that decisions that impact them are not made in an open and transparent manner.

In addition, people use their past experiences to judge how fair the results of the current screening exercise are. When opposed to traditional approaches, AI is a novel experience that could evoke an emotion that is unlike anything you have felt before. Traditional approaches use human data processing to determine results; AI, on the other hand, applies algorithmic rules that are not known to the individual. People's personal ideals of justice and fairness may be violated by this novel approach, leading them to believe that the results are not adequately fair. Algorithmic reductionism is incompatible with human resource work that necessitates a detailed analysis of human

characteristics. It entails AI quantifying qualitative features and evaluating them separately. This transgression of the rule that just procedures ought to be founded on factual data erodes impressions of justice even more. These observations lead to the following theories being put forth:

H1a: People's view of procedural justice will decline when AI screens take over from humans for the resume.

H1b: People's perceptions of distributive justice will deteriorate as AI screens take over from humans for resumes.

The Moderating Role of Outcome Favorability Economists contend that people are generally self-interested and unconcerned with the well-being of the group. As a result, people respond to decisions based more on their own interests than those of others. This emphasizes how important the decision's result is and implies that various results may have various effects. Behavioral choice theory holds that because humans have limited information and computing power and must navigate a highly complex and uncertain world, they tend to pursue satisfactory rather than optimal results. When people make bad decisions, they frequently reconstruct the decision-making process, pay closer attention to the decision's context, and carry out more in-depth analysis to determine the reasons behind the result. Thus, unfavorable results raise questions about the decision-making process, highlighting any potential injustice in AI and provoking more outrage over perceived injustice.

Studies reveal that people, sometimes regardless of the decision-making process itself, assess the quality of a decision depending on its result. This effect, referred to as "outcome bias," happens when the procedure is less important than the outcome. Even when methods are the same, people's perceptions of the decision-making process are influenced by outcome bias, which makes them believe that favorable outcomes are more equitable. When there is not enough information to evaluate the decision's quality, this bias is more pronounced.

Research conducted in court environments has demonstrated that plaintiffs who obtain favorable decisions view judges as more equitable and feel better about them. In a similar vein, when AI makes decisions that help people, people tend to see it as fairer, even countering unfavorable ideas about its possible biases. The following theories are put out by this study in light of these observations:

H2a: Favorable outcome weakened the resume screener-procedural fairness relationship. The positive outcome reduced the link between summarize screeners on procedural fairness, while the negative outcome increased it.

H2b: Favorable outcome weakened the resume screener-distributive fairness relationship. The positive outcome reduced the link between reference screeners on distributive fairness, while the negative outcome enhanced it.

The Moderating Effect of Artificial Intelligence Expertise The heterogeneity in people's views of AI expertise—which might vary depending on personality, age, or knowledge—and how these beliefs impact people's sense of justice have been largely ignored in previous study. According to an interesting study, individuals are more likely to approve of the information produced by technology when it is referred to as "expert," which causes unintentional positive reactions. According to this study, consumers frequently accept information from reliable sources at face value and are open to adopting stuff that has been machine-generated and labeled as "expert."

Similar findings were found in an experiment that was repeated using apps and smartphones: ads for specific hardware and software agents increased the likelihood that users would make a purchase. This suggests that, similar to how people trust experts in particular domains over generalists, individuals trust specialized machines more.

This study makes the assumption that humans will see specialized AI more favorably than broad AI, even though this inference has not yet been actually applied to AI. AI's perceived competence can be increased by showcasing its expertise. It can also help close the skills gap between humans and AI and lessen the detrimental effects of AI judgments on perceived justice. Accordingly, this paper contends that a critical boundary condition affecting the ways in which various screeners affect fairness is AI's perceived expertise. These observations lead to the following theories being put forth:

H3a: AI expertise moderated resume screeners' effect on procedural fairness. Thus, AI expertise reduced the link between resume screeners and procedural fairness and strengthened it in low.

H3b: AI expertise improved resume screeners' distributive fairness relationship. Thus, resume screeners' impact on distributive justice decreased with AI expertise and increased with low expertise.

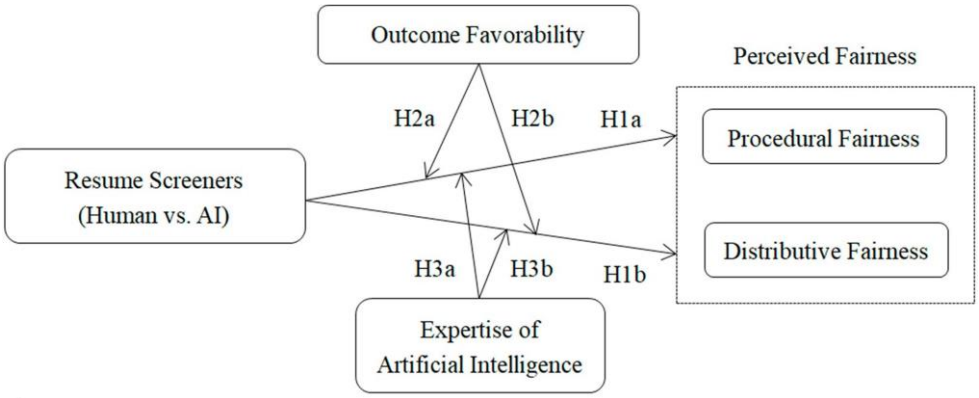

Figure 2 shows the research model of this study.

Artificial Intelligence, Fairness, andOutcomes Favorability.

Sample

The study's online scenario experiment tested the hypothesis. Study 1 looked at the importance of the first moderating variable, result favorability, and the major impact of various screeners on people's views of fairness. For this study, participants with work experience were gathered online. Prior to data collection, the sample size was determined using G*Power 3.1, assuming a medium effect size (0.25), a significance threshold of 0.05, and 90% statistical power. Thisresulted in a minimum requirement for the number of participants in the sample, which was 171. Of the 220 participants that were initially recruited, we assessed 189 valid responses after deleting data from attention-check failures. Table 1 displays the participants' demographic information. The participants' gender distribution was fairly balanced, with 50.8% male and 49.2% female. Ages 18 to 30 made up the majority of participants (70.4%), followed by age ranges 31 to 40 (18.0%). Furthermore, 55.6% of the participants had completed their bachelor's degree.

Stimuli and Procedure

Each participant completed an informed permission form and was provided with comprehensive information regarding the study's principal goals, protocols, and prerequisites before to beginning. After that, participants completed two attention tests: one to confirm if they had ever applied for a job, and another to make sure they had given their answers honestly and with seriousness. To move on to the primary study, you had to pass both tests.

Based on previous research, the experimental materials were created for a corporate recruitment setting. The scenario material was organized into three sections: results of job applications, resume screener, and background information, all with a same subject. The backdrop details gave participants the impression that they were job candidates in a scenario of online recruitment. Either artificial intelligence or human resume screeners were used, and the outcome favorability was modified to produce an acceptance or rejection result. By combining the sort of screener and outcome favorability, this produced four recruiting scenarios, and participants were assigned at random to one of these.

Following reading the assigned scenario, participants answered questions about procedural fairness, distributive justice, and manipulation checks. Lastly, they includeddemographic data.

Measures

Using a 5-point Likert scale (strongly disagree to strongly agree), participants assessed their agreement with three statements to determine procedural fairness ($\alpha = 0.877$), which was adopted from Bauer et al. [40]. Using the same 1–5scale, students also assessed their agreement or disagreement with three statements to gauge distributive fairness ($\alpha = 0.798$), which was based on Schinkel et al. [41].

Results

The average difference in applicants' perceptions of fairness between resume screeners. In order to investigate variations in the perceived distributive and procedural fairness amongst resume screeners, this study used ANOVA

with SPSS 25.0 (see Figure 3). Significant variations were seen in the views of distributive fairness (Mhuman = 3.64, MAI = 2.49; $p < 0.001$) and procedural fairness (Mhuman = 3.92, MAI = 2.63; $p < 0.001$). These findings show that resumes were substantially more highly scored by human evaluators than by AI assessors on both fairness dimensions. H1a and H1b theories are therefore validated.

The Relationship between Outcome Favorability and Resume Screeners

To test for interaction effects, this study used regression analysis and ANOVA in SPSS 25.0. The sense of distributive and procedural fairness varied dramatically in terms of outcome favorability when control variables were included. Participants express stronger perceptions of distributivejustice (Mpass = 3.71 > Mreject = 2.37, $p < 0.01$) and procedural fairness (Mpass = 3.89 > Mreject = 2.62, $p < 0.05$) in the acceptance condition compared to the rejection condition.

Furthermore, it was discovered that outcome favorability moderated the relationship between resume screeners and perceptions of procedural and distributive fairness.

Artificial Intelligence, Fairness, andExpertise of Artificial Intelligence

Sample

This study explores the hypotheses through an online scenario experiment. Study 2 reexamines the main impact of various resume screeners on candidates' perceptions of fairness inaddition to examining the role of AI expertise as a secondary moderating factor. Those with prior work experience made up the participants in Study 2, who were enlisted online. After excluding individuals who failed attention tests, 215 valid responses were kept from the initial 240 eligible participants who were enrolled. With 56.5% of the participants being men and 43.5% being women, the gender distribution was fairly balanced. Ages 18 to 30 made up the largest age group (68.2%), followed by age 31 to 40(20.6%). Furthermore, a bachelor's degree was held by 65.9%of the participants.

Stimuli and Procedure

As with Study 1, each participant initially had to fill out an informed consent form after learning about the main goals, protocols, and requirements of the study. Following that, participants completed two focus tests to make sure they were paying attention and providing accurate answers. The first checked to see if they had ever applied for a job. To the main research only those who cleared both checks might advance.

The study's scenario materials were the same as those utilized in Study 1. Both human and artificial intelligence screeners were used to review resumes; the AI expertise was modified to be either general or specialized. Each of the four recruitment scenarios—which combined varying resume screeners and AI expertise levels—was randomly assigned to the participants. Participants conducted manipulation checks and answered questions about distributive and procedural fairness after reading the scenario materials. Lastly, they disclosed their demographic data.

Measures

As can be seen in Table 1, every item in Study 2 was the same as every item in Study 1. On a five-point Likert scale, each measurement item was given a rating between 1 (strongly disagree) and 5 (strongly agree). High reliability was indicatedby the Cronbach's α values of 0.797 and 0.796 for procedural and distributive fairness, respectively.

Results

Mean Difference between Resume Screeners onApplicants' Perceptions of Fairness

In order to investigate variations in the opinions of procedural and distributive fairness based on various resume screeners, this study used ANOVA, carried out with SPSS 25.0 (see Figure 6). The findings showed a substantial mean difference in the perceptions of distributive and procedural fairness ($M_{human} = 3.53 > M_{AI} = 2.77$; $p < 0.001$) and procedural fairness ($M_{human} = 3.39 > M_{AI} = 2.80$; $p < 0.001$). These results support H1a and H1b since they show that resumes evaluated by humans have substantially higher fairness judgments than resumes screened by AI.

The Interaction Effect of Resume Screeners andExpertise of Artificial Intelligence

To test for interaction effects, this study used regression analysis and ANOVA with SPSS 25.0. Perceptions of distributive and procedural fairness, controlling for other variables, showed a substantial difference based on the

AI's level of knowledge. Participants in the specialist AI condition evaluated distributive justice ($M_{specialist} = 3.86 > M_{general} = 2.49$, $p < 0.001$) and procedural fairness ($M_{specialist} = 3.86 > M_{general} = 2.37$, $p < 0.001$) more favorably than those in the general AI condition.

Additionally, a regression analysis including a range of resume screeners, the effectiveness of AI, and the interaction term between them employed judgments of distributive and procedural fairness as dependent variables. The findings demonstrated that decision-makers' opinions of distributive and procedural fairness were influenced by AI knowledge. Figures 7 and 8 were plotted to show the significant link between the factors and AI skill in order to further highlight this moderating effect. These numbers demonstrate a strong relationship between AI proficiency and resume screeners. Supporting H3a and H3b, the effects on judgments of fairness were greater in the general AI condition than in the specialist condition.

General Discussion

Unlike previous research that examined the concept of fairness in general, this study divides fairness into two dimensions: distributive fairness and procedural fairness. It compares the influence of AI and human screeners in a resume screening scenario and discovers that AI screening has a detrimental effect on applicants' perceptions of distributive and procedural fairness.

Natural language processing (NLP) and conventional machine learning (ML) methods are the mainstays of AI screening. While ML trains the screening model on a huge dataset of past resumes to create correlations between screening outcomes and the attributes of the samples, NLP allows AI to comprehend and analyze the text content of resumes. After that, the AI generates the screening findings and resume recommendations. AI is not entirely objective in this process, though. An ML-based model's results, for example, are contingent upon the features and dataset that are chosen, and it might be difficult to guarantee that these decisions are always acceptable and thorough. Furthermore, sophisticated AI models frequently function as "black box" models, with an opaque decision-making process. The ML model's perceived unfairness may rise if applicants lack understanding of how it makes its decisions and its credibility declines.

The explainability of artificial intelligence has gained prominence recently. The application of advanced Explainable Artificial Intelligence (XAI) approaches is growing, such SHapley Additive exPlanations (SHAP). SHAP partially opens the "black box" by offering local and global explanations of how ML models use features to produce assessment or prediction outcomes. Interpretable machine learning models, for instance, can demonstrate how an applicant's attributes affect the AI's screening conclusions while evaluating resumes. However, biases in AI decision- making cannot be totally avoided, nor can the "black box" problem be fully solved by existing XAI solutions. In conclusion, candidates currently tend to feel that their resumes are being screened unfairly when AI replaces human screeners.

Theoretical Contributions

This work adds to the body of knowledge on fairness and improves our comprehension of the connection between distributive fairness—a type of fairness—and AI. This study expands on earlier research that merely provided a general overview of the effect of AI on justice by looking at how people view fairness within businesses. The study confirms that AI lowers perceptions of justice by examining the consequences of resume screening from the applicant's perspective, focusing on the resume-screening scenario in human resource management. These results are consistent with past research, expanding theoretical knowledge about procedural justice and elucidating the until unclear connection between procedural justice and AI.

Additionally, this study advances knowledge of AI psychology by analyzing the responses of people impacted by decisions made by AI. Understanding how technology affects people's perceptions is essential as AI becomes more commonplace in order to enable its wider adoption. This study highlights the psychological effects of AI on individuals, in contrast to previous research that concentrated on the relationship between AI and organizational performance or on people's acceptance or rejection of AI advice. In particular, candidates may suffer detrimental psychological impacts from AI resume screening because they associate AI with algorithmic reductionism and believe AI ignores human characteristics that are crucial for resume evaluation.

Managerial Implications

This research provides fresh perspectives on organizational management. First off, applicants' views of fairness may be lowered if AI replaces human resource personnel in the resume screening process. As such, managers ought to proceed with caution if they choose to substitute AI for human decision-making. While artificial intelligence (AI) has the potential to save costs and boost efficiency, it may also have a negative effect on candidates' sense of individual fairness, which could undermine talent acquisition and organizational sustainability. Managers that employ AI should be transparent about the data and methods the system uses to evaluate resumes in order to lessen these detrimental effects.

Second, by controlling the way in which applicants are notified of the results, managers can lessen the adverse effects of employing AI for resume screening. When at all feasible, applicants should be kept informed of unfavorable outcomes indirectly. Managers should try to calm applicants' nerves if they have to hear bad news in order to minimize the negative impact. Furthermore, the expertise of AI can improve perceptions of justice. Therefore, managers should build or invest in specialist AI and make sure it is educated to expand its knowledge, if budget permits. Additionally, it's critical to let applicants know about the high level of competence of the AI that makes decisions in order to support the notion of fairness.

Limitations and Future Research

This research is subject to many limitations. First off, the conclusions only relate to resume-screening scenarios; they do not hold true for other HRM scenarios. Future research should look into different HR circumstances in order to validate these findings. While hiring, training, and performance reviews are just a few of the procedures that fall under the umbrella of HR management, they all need the collection, use, and analysis of human data. Thus, these findings can be applied to a wider range of settings by improving the model and methodologies employed in this study to pinpoint the distinctive qualities and requirements of various HR scenarios and carrying out cross- scenario application research. The model utilized in this study, which included both human and AI evaluators, may be evaluated, for instance, in performance evaluation scenarios to determine how various evaluation outcomes and levels of AI competence interact with evaluators to alter employees' views of fairness. Creating pertinent scenario experiments can aid invalidating and extending the findings of this investigation.

Second, the combined impacts of these two factors were not explored in this study; instead, the moderating effects of outcome favorability and AI expertise were looked at independently. Future research should incorporate experiments that incorporate all of the model's variables in order to improve the study's thoroughness and the generalizability of its findings.

Thirdly, the research makes no mention of the possibility of AI and humans working together to make HR decisions. When human judgment is combined with AI's information processing powers, decisions may become more equitable, balanced, and contextually aware, taking into account aspects that either AI or humans alone could miss. Future research should examine human decision-making, AI decision-making, and human-AI collaborative decision-making in order to expand on the study model presented here.

Conclusions

With artificial intelligence (AI) growing at a quick pace and improving information processing efficiency, a lot of businesses are starting to integrate AI into their HRM procedures. It's uncertain, though, how workers will react to decisions made by AI. This study examines how candidates' views of procedural and distributive fairness in the setting of resume screening are affected by various resume screeners (people and artificial intelligence). Through two scenario tests, the research also investigates outcome favorability and AI expertise.

The moderating effect of result favorability is examined alongside the significant impact of different resume screeners on applicants' perceptions of fairness. Study 2 looks at the moderating effects of AI skill and validates the main effect. The findings demonstrate that candidates think AI resume screening is less distributive and procedurally fair than conventional HR procedures, which supports Hypotheses 1a and 1b. Moreover, this emotive response is enhanced in the event of a poor choice outcome (rejection) and diminished in the event of a favorable choice outcome (acceptance), so confirming Hypotheses 2a and 2b. Furthermore, increased expertise in AI reduces the negative impact of AI on justice views, supporting Hypotheses 3a and 3b.

This study shows how candidates' perceptions of procedural and distributive justice are impacted by AI judgments made during resume screening, a process that falls under the purview of artificial intelligence in human resource management. This study distinguishes between distributive and procedural fairness, in contrast to other research that focused only on fairness in general, and discovers that using AI to filter resumes has a detrimental impact on both. By integrating the decision-maker's identity, choice results, and decision-maker traits, the study provides a holistic model.

To sum up, this study deepens our understanding of fairness, resolves ambiguities in previous research on AI and fairness, and highlights the need of taking decision outcomes into account when assessing procedural fairness. Furthermore, it provides insightful information for future AI decision-making research on variable selection and experimental design.

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