

When AI Feels Fair: The Distinct Roles of Procedural and Distributive Justice in Reducing Organizational Dehumanization under AI-Enabled HRM

Jihyun Lee, Joohyun Ham

Department of Business Administration, Sogang University, Seoul, Republic of Korea

Abstract

The use of AI-enabled Human Resource Management (AI-HRM) has expanded rapidly as organizations seek to improve the efficiency and fairness of HR practices through greater objectivity, consistency, and reduced bias. However, concerns remain regarding whether algorithm-based decision-making may contribute to organizational dehumanization.

Drawing on Organizational Justice Theory, this study examines the mediating roles of procedural justice and distributive justice in the relationship between AI-HRM and organizational dehumanization. Using employee reviews collected from Glassdoor, we developed organization-level measures of AI-HRM, procedural justice, distributive justice, and organizational dehumanization through a hybrid text-mining approach that combines S-BERT semantic similarity analysis with theory-driven keyword dictionaries.

The results show that AI-HRM is positively associated with both procedural justice and distributive justice, with a stronger effect on procedural justice. Furthermore, both justice dimensions are associated with lower levels of organizational dehumanization, although distributive justice exhibits a substantially stronger effect than procedural justice. Mediation analyses reveal significant indirect effects of AI-HRM on organizational dehumanization through both justice dimensions.

These findings suggest that AI-HRM primarily enhances employees' perceptions of fair procedures by increasing consistency, transparency, and objectivity in decision-making, while fair outcomes play a more critical role in preserving employees' sense of human dignity and reducing perceptions of organizational dehumanization. The study contributes to the AI-HRM literature by identifying organizational justice as a key mechanism linking AI-HRM to employee perceptions of dehumanization.

Keywords: AI-enabled HRM; Distributive Justice; Organizational Dehumanization; Procedural Justice; Text Mining