

Generative Artificial Intelligence Use and Employees' Innovative Behavior: A Cross-level Moderated Mediation Model

Haoxiang Sun, Jianwei Cao*

School of Business, North Minzu University, Yinchuan, China

Email address:

jwcao@nmu.edu.cn (Jianwei Cao)

*Corresponding author

Abstract

With the growing adoption of generative artificial intelligence (AI) tools (e.g., ChatGPT and DeepSeek) in the workplace, understanding how generative AI use can be converted into employees' innovative behavior has become an important topic in organizational behavior and human resource management. Drawing on conservation of resources theory, this study develops a cross-level moderated mediation model to explain the underlying mechanism and boundary condition through which generative AI use relates to innovative behavior. Data was collected via a two-wave matched survey and tested using multilevel structural equation modeling. The results show that generative AI use is positively associated with employees' innovative behavior. Job autonomy partially mediates this relationship, indicating that generative AI use enhances employees' perceived autonomy, which in turn facilitates innovation. Moreover, transformational leadership strengthens the indirect effect of generative AI use on innovative behavior via job autonomy. These findings advance research on the workplace consequences of generative AI and offer practical implications for organizations seeking to stimulate innovation by guiding employees' effective use of generative AI.

Keywords

Conservation of Resources Theory, Generative AI Use, Innovative Behavior, Job Autonomy, Transformational Leadership