

## The Psychological Impact of Artificial Intelligence Use in Educational Experiences: The Mediating Role of Academic Resilience

Chua Ming Wei Gabriel Chua

National Chengchi University, Taiwan

### Abstract:

The extensive use of Generative Artificial Intelligence tools, such as ChatGPT, has proliferated in educational settings. However, little is known about how such tools influence students' psychological empowerment. Grounded in Self-Determination Theory (SDT), this study examines whether students' use of AI in education enhances their psychological empowerment (PE), both directly and indirectly through academic resilience (AR). A total of 300 college students completed validated measures of Artificial Intelligence Use (AIE), AR, and PE. Mediation analysis revealed that AIE was positively associated with PE ( $\beta = .702, p < .001$ ), with AR partially mediating this relationship. Specifically, AIE predicted greater AR ( $\beta = .692, p < .001$ ), which in turn predicted higher PE ( $\beta = .753, p < .001$ ). The indirect effect through AR was significant ( $\beta = .521, p < .001$ ), and the direct effect remained significant ( $\beta = .181, p < .001$ ), indicating partial mediation. These findings suggest that AI tools can help satisfy students' basic psychological needs by supporting resilience in academic contexts. The study contributes to SDT by identifying AR as a key pathway linking AI use to empowerment and offers practical implications for designing AI-supported learning environments that promote students' motivation and well-being.