
USING AI TO FACILITATE THE RESEARCH PROCESS

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AI HELPING LEARN ADVANCED STATISTICS

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► AI to Teach Graduate Courses

- Graduate Students enrolled in Independent Study
- Provided with weekly learning objectives for Structural Equation Modeling Topic
- Half of the weeks provided a book chapter on topic
- Half of the weeks must use ChatGPT to learn topic
- Quizzed every week without notes
- Submit their ChatLog on ChatGPT weeks

Technique	Instructional Principle	Explanation
CHATGPT FLASHCARDS	Retrieval Practice, Spaced Practice	Reinforces memory by actively recalling concepts and optimizing review intervals for long-term retention.
Application-Oriented Follow-Up	Contextual Learning	Connects abstract concepts to real-world applications, improving understanding and knowledge transfer.
Concept Simplification	Coherence	Simplifies complex ideas, ensuring learners focus on the critical information without unnecessary distractions.
Making Practice Questions	Retrieval Practice, Feedback	Encourages active recall and reinforces understanding through grading and detailed feedback.
Creating Visuals	Dual Coding	Combines text and visuals to deepen understanding by engaging both verbal and visual cognitive pathways.

Mapping AI Usage Techniques to Instructional Principles

AI HELPING LEARN ABOUT PUBLICATION OUTLETS

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Article Abstract

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On a given workday, employees spend time at work doing tasks that are not work-related, potentially using these micro-breaks (i.e., short breaks that are less than 10 min) to attempt to recover depleted psychological resources such as energy and attention. However, most work break and recovery research has focused on how individuals recover from work during formal nonwork time with longer or unspecified time durations (e.g., lunch breaks, evenings, vacations), limiting theoretical and empirical understanding of whether employees can experience recovery within the workday via brief micro-breaks. In the current investigation, we first conducted interviews from 16 shift workers at a Fortune 500 company to develop research questions about how micro-breaks impact psychological resources and recovery experiences. We then used a randomized experiment with a sample of undergraduate students ($n = 232$) to test the impact of micro-break durations and activities on the recovery of psychological

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Sample Abstract 2

Sample Abstract 3

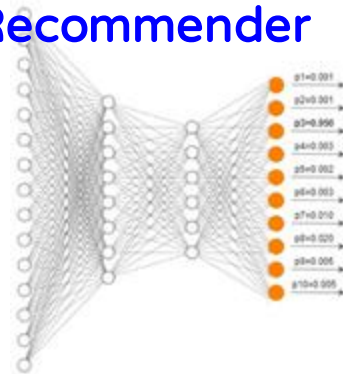
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throughout human history. The preceding section, summarizes the history of animal workers within human society, illustrating how animals, with their own independent knowledge, skills, abilities and other characteristics (KSAD)s, cannot be overlooked when attempting to understand workers within society as these physical and psychological attributes are commonly leveraged to support human industry. Additionally, their roles as laborers within society often have downstream effects on human roles, serving as precursors for many human occupational phenomena. Therefore, human workers cannot be fully understood without their consideration in our field.

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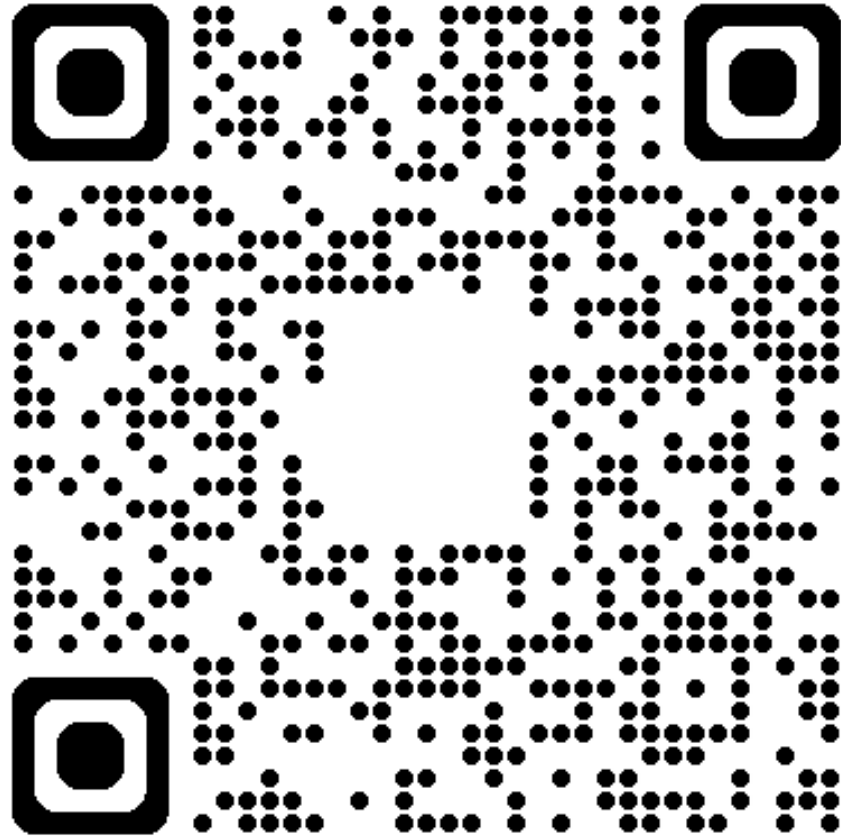
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