Effects of an Open Artificial Intelligence Chatbot into a Psychomotor Skills Doctor of Physical Therapy Course

PRESENTER:
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INTRO

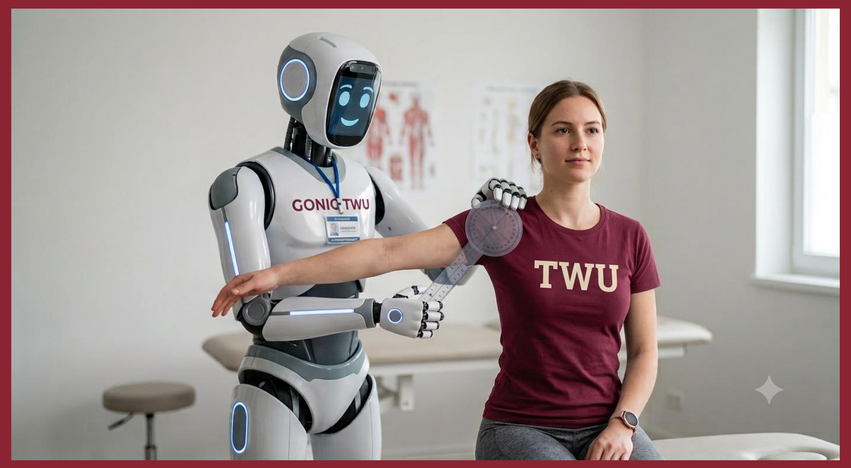
- Open Artificial Intelligence (AI) has grown exponentially in the educational arena the past few years.
- No previous studies have examined the Open AI Chatbot effects in a Doctor of Physical Therapy (DPT) course with a heavy psychomotor skills emphasis.
- The study purpose is to determine if an Open AI Chatbot will result in superior outcomes on the learning of DPT psychomotor skills.

METHODS

1. Convenience sample of 38 healthy students was recruited: 29 females to 9 males; ranging 23-32 years (x= 25.2 yr).
2. Subjects performed an initial psychomotor skills checkoff for a score (1-novel to 10- mastered) and pre-narrative. Then students interacted with an Open AI Chatbot x 15 minutes. Afterwards, enrolled students received live instruction, practiced, post skills checkoff, then wrote post-narrative.

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AI Chatbot improved skills performance in a psychomotor DPT course, although subjective themes were mixed

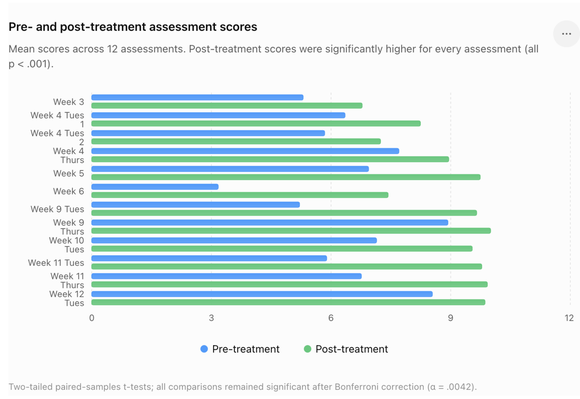


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RESULTS

- Paired t-test analysis revealed improved skills score by 5.7 points in the AI Chatbot group



"COMMON THEMES"

- *"improved confidence", "improved images needed of the skills", "difficulty determining exact hand hold positioning", "at times Chatbot information was not correct/exact",* and *"difficult to get a gauge on speed and force of the skill".*

CONTEXT

- AI Chatbot improvement was skill dependent- skills with particular handholds, forces, and nuances were challenging for the Chatbot.
- AI Chatbot may be useful for initial basic skills encounters, compliment, or for remediation.

The study results provided support for the structured use of an Open AI Chatbot to supplement live instruction in a heavy psychomotor skills course.