

Physiotherapy students' perceptions of the ethical implications of artificial intelligence in professional practice: A qualitative study

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Background

- Artificial intelligence (AI) technologies are transforming healthcare by streamlining repetitive tasks, analysing complex data, and supporting clinical decision-making.
- Understanding how physiotherapy students perceive these issues is essential, as they represent the next generation of physiotherapists who will navigate the integration of AI into physiotherapy practice, research, and education.
- This study explored these perceptions with the aim of informing educational curricula and policy while promoting the responsible use of AI in physiotherapy.

Methods

Study Design: Qualitative, interpretive approach.

Participants: Four undergraduate physiotherapy students (aged 20-32 years) from one UK University.

Data Collection: One focus group. Stimulus material was used in the form of newspaper headlines and excerpts.

Data analysis: Reflexive thematic analysis; findings illustrated in a thematic map (Figure 1).

Results

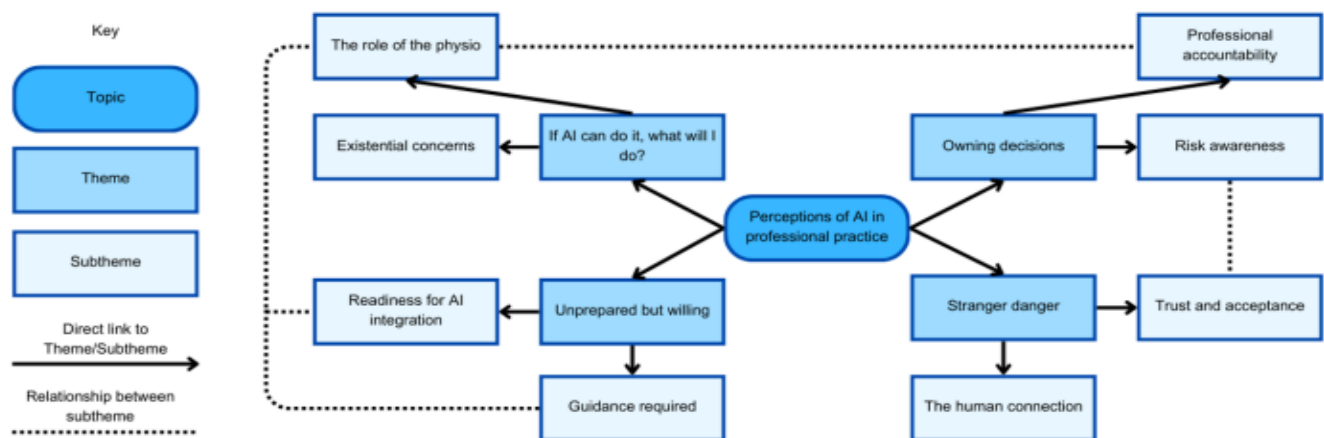


Figure 1: Thematic Map

Findings & Implications for practice

Professional identity under threat:

Students worry that AI could undermine professional identity, reduce autonomy and weaken therapeutic relationships with patients.

Willing, but unprepared:

Students identified a tension between their willingness to engage with AI and feeling unprepared by their education.

Education is key:

Closing knowledge gaps through education and training could better prepare future physiotherapists for ethical AI integration.

Support safeguards wellbeing:

Support systems and guidance could ease students' anxieties about job security and professional identity, helping to protect wellbeing.