

BACKGROUND

Artificial Intelligence (AI) is increasingly shaping healthcare practice, including occupational therapy (OT). At a large metropolitan health service in Melbourne, Australia, the current level of AI knowledge and skill within the OT workforce is unknown. Understanding baseline knowledge is essential to guide relevant professional development initiatives to support effective, efficient and ethical AI use. The aim of this project was to determine the current understanding and use of AI by the OT workforce to assist with development of targeted education.

METHOD

Shinners Artificial Intelligence Perception (SAIP) tool¹ is validated for use in healthcare. A survey incorporating SAIP and bespoke demographic questions was sent to OTs for anonymous voluntary completion online or in hard copy. Staff surveyed worked in acute, sub-acute and outpatient services (excluding mental health).

Descriptive quantitative analysis of survey data was completed, including frequencies, means and standard deviations. Qualitative data was analysed using content analysis.

RESULTS

Fifty-three staff responded, female (n=51, 96%).

- Age was not a major factor in how staff perceive their own AI abilities and comfort.
- Years of OT experience does not clearly predict how knowledgeable, skilled, confident, or comfortable staff feel about using AI.

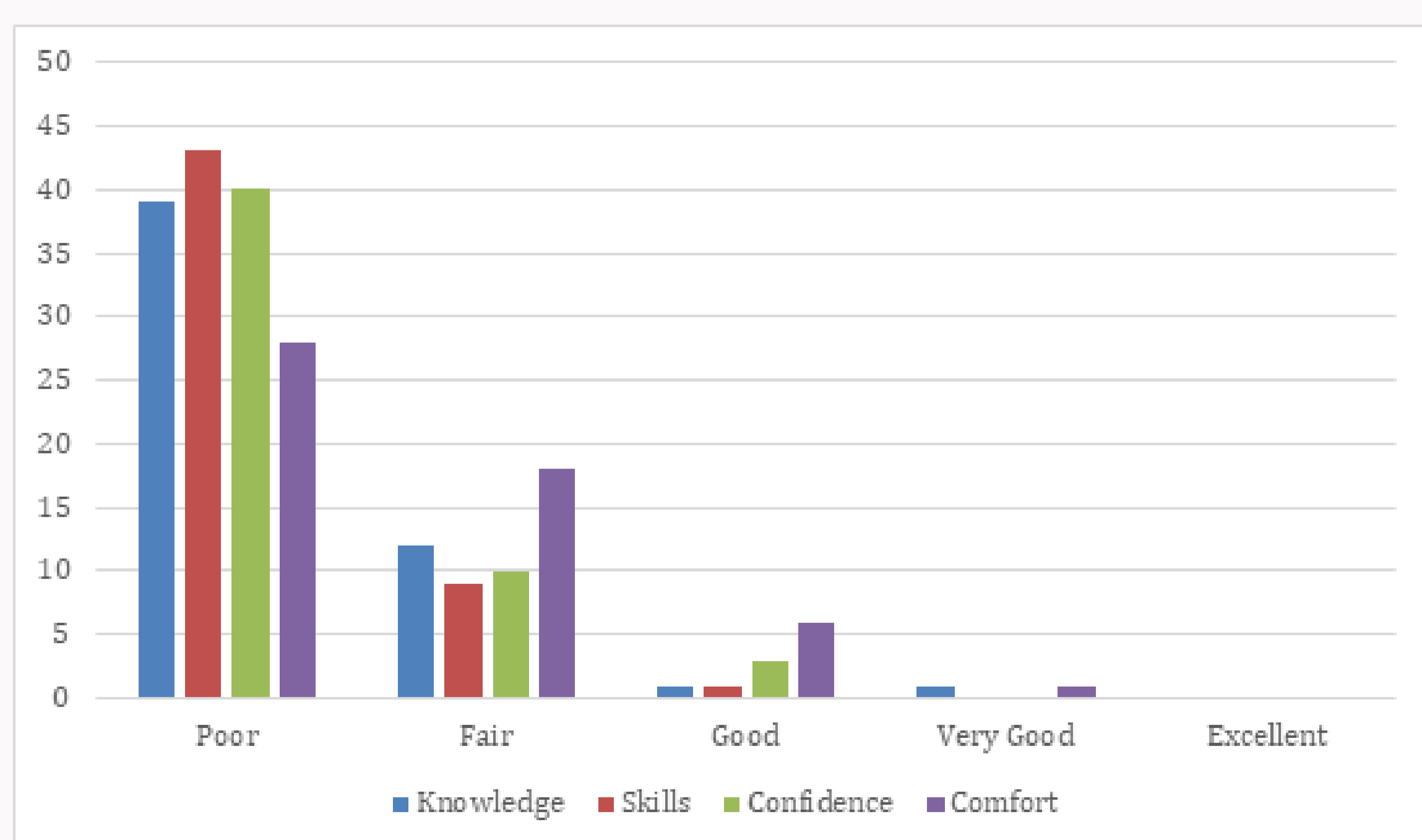
	Average	Range
Age	29.42	23-59
OT experience (years)	7.27	<1-23
AI experience (years)	0.47	0-3

Optimism and Perceived Benefits

Item	M (SD)
I believe that the use of AI in my specialty could improve the delivery of patient care	3.51 (0.67)
I believe that the use of AI in my specialty could improve clinical decision making	3.08 (0.83)
I believe that AI can improve population health outcomes	3.45 (0.72)
I believe that the introduction of AI will reduce financial cost associated with my role	3.13 (0.76)

Limited Preparedness

Staff reported overall fair or poor knowledge, skills, confidence and comfort using AI.



Item	M (SD)
I believe that I have been adequately trained to use AI that is specific to my role	1.81 (0.92)
I am knowledgeable about the steps involved in AI decision-making	1.62 (0.79)
Considering all my experience, I am relatively proficient in the field of AI	1.58 (0.82)

Training Needs

- OT specific content, platforms and examples (n=7)
- When and where to use AI (n=6)
- Practical sessions on how to use AI, supported by case studies and evidence-based examples (n=6)
- The risks, ethics and legalities associated with AI (n=5)
- Basic information about what AI is (n=4)
- Implementation to assist with time management and efficiency (n=3)
- How to use AI to increase patient outcomes (n=2)
- The majority of respondents rated their awareness of service level guidelines on the use of AI as poor or fair.

Barriers and Facilitators to Adopting AI

Barriers	Facilitators
Staff lack of knowledge about the technology (n=21)	Better accessibility to technology (n=5)
Staff lack of skill in applying AI to practice (n=5)	Access to training or peer learning (n=4)
Privacy and ethical concerns (n=10)	Staff and managers' openness to adopting the technology (n=2)
Uncertainty AI impact on clinical reasoning given the current lack of evidence about its use in practice (n=6)	
Access to appropriate technology (n=2)	

KEY FINDINGS

An Immediate Need for Foundational Training

- Most OTs have little to no formal AI education. Providing structured learning opportunities—from introductory overviews of AI basics to hands-on demonstrations of relevant tools—would help increase baseline literacy, confidence, and comfort.

Focus on Ethical and Person-Centred Integration

- OTs place high value on individualised care and holistic reasoning. Training should address how AI technologies can be harnessed without compromising personalised therapy. Topics such as privacy, ethics, and the scope of AI's decision support can reduce concerns, support buy-in and guide responsible adoption.

Potential for Enhanced Efficiency and Innovation

- Despite low familiarity, many therapists were interested by AI's time-saving potential, ability to generate evidence-based ideas, and capacity to streamline administrative tasks. Targeted resources and examples of AI in action—especially in an OT context—could accelerate adoption and spark innovative practices.

CONCLUSION

OT use of AI at this health service is currently shaped by limited knowledge, few approved platforms and health service policies. While clearer guidelines are emerging, practice remains constrained. Targeted education can prepare the workforce to engage with AI safely and effectively.

REFERENCES

- ¹ Shinners L, Grace S, Smith S, Stephens A, Aggar C. Exploring healthcare professionals' perceptions of artificial intelligence: Piloting the Shinners Artificial Intelligence Perception tool. Digit Health. 2022 Feb 7;8:20552076221078110. doi: 10.1177/20552076221078110.

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