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Navigating AI in OT Practice: Current Usage Patterns and Professional Concerns

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About the Author

Julia Tate is a second-year student in the Honours Health Sciences program at McMaster University, Canada. Her academic interests center on healthcare innovation through rigorous research, with a focus on mental health and addictions. She is interested in integrating data-driven research, interdisciplinary collaboration, and community-informed approaches to advance evidence-based, accessible, and patient-centered health care.

Aim of the Project

1. Assess current AI use, proficiency, and attitudes among occupational therapy practitioners within our organization
2. Identify tasks, tools, and barriers related to AI adoption
3. Examine perceived risks and concerns
4. Identify supports needed in order to inform ethical, effective, and practice-relevant AI integration in clinical settings

The findings will be used to guide future training, resource development, and policy discussions to enhance competency of AI tools into everyday OT practice.

Method

Data Collection:

An online survey included multiple-choice questions, Likert-scale ratings (e.g., 1–5), and open-ended questions for additional qualitative feedback.

The survey was distributed via internal email to all OTs and OTAs within the organization. Participation was voluntary, and responses were collected anonymously to encourage honest reporting. Data were collected over a 4-week period in October 2025.

Data Analysis:

Quantitative data (Likert scales, counts of tool usage, etc.) were analyzed using descriptive statistics, including frequencies, percentages, and mean ratings.

Qualitative responses were reviewed to identify common themes regarding barriers, concerns, and suggested supports for AI adoption.

Participants

35 OTs and OTAs from a single publicly-funded Canadian hospital

Well-distributed range of professional experience: 0–5 years: 22.9%, 6–10 years: 22.9%, 11–20 years: 28.6%, 21+ years: 25.7%

Broad range of age groups: Under 30: 14.3%, 30–39: 34.3%, 40–49: 31.4%, 50–59: 14.3%, 60+: 5.7%

This heterogeneity allowed for examination of AI perceptions across career stages and generational cohorts.

Summary of Key Statistics

Self-Rated AI Proficiency: Mean score: **2.37 / 5** (low–moderate)

Attitude Toward AI use in Practice: Mean score: **3.29 / 5** (neutral–moderate)

Perceived Importance of AI Skill Development (next 3–5 years): 3.71 / 5

Most Common AI Tools Used (Multiple responses permitted): ChatGPT: 68.6%, Google Gemini: 31.4% , Microsoft Copilot: 31.4% , Canva AI: 17.1, no AI use reported: 20.0%

Primary Tasks Using AI (Multiple responses permitted): Educational material development: 51.4%, Editing/formatting documentation: 45.7%, Communication: 40.0%, Learning & professional development: 25.7% Literature review/evidence summaries: 22.9%, Assessment interpretation/treatment planning: 14.3%

Summary of Key Statistics (cont.)

Barriers to AI Use (Multiple responses permitted): Lack of time to explore AI tools: 40.0%, Concerns about accuracy or bias: 37.1%, Not aware of relevant tools: 28.6%, Ethical or privacy concerns: 25.7%, Not confident using technology: 14.3%, Lack of organizational support: 8.6%,

Perceived Risks and Concerns (Multiple responses permitted): Bias or inaccuracy in AI-generated content: 85.7%, Data security or privacy issues: 82.9%, Overreliance on technology: 80.0%, Job displacement or role changes: 40.0%, Ethical or professional concerns: 37.1%

Supports to Increase Confidence in AI (Multiple responses permitted): Clear guidelines on ethical and legal use: 77.1%, Hands-on training and tutorials: 68.6%, IT or management support: 51.4%, Examples of AI success stories: 45.7%, Peer mentoring or communities of practice: 40.0%

Qualitative Feedback, Concerns

AI as a Support Tool—Not a Replacement

- Many emphasized AI should augment clinician work, particularly in routine administrative tasks, not replace clinical reasoning or judgment.
- AI viewed as most acceptable for editing, brainstorming and resource development, with consistent need for verification and source checking.

Concerns About Accuracy and Reliability

- Many participants expressed strong hesitation due to AI "hallucinations," inaccuracies, and lack of reliable evidence to support safe clinical use.
- Clear guidelines were repeatedly requested to ensure appropriate and safe use.

Personal & Professional Values, Societal Impact

- Concerns about environmental costs, ethical implications, and long-term impacts on occupational performance and society.
- Concerns that AI overuse may reduce problem-solving skills, especially among students and early-career clinicians.
- Some participants noted reduced sense of professional accomplishment when using AI

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What People Said…

- I think it can be very helpful if used appropriately and as a tool to aid clinicians, not as a replacement for clinical judgement.
- For myself I don't enjoy using AI as I do not feel as big of an accomplishment when completed the task.
- I do not like the future of AI for our planet and I don't think people realize the impacts
- Currently I would not rely on it for anything actually important. it's good for brainstorming, but sometimes takes up more time because I need to weed out false info.
- I'm shocked at the lack concern about the environmental cost and how that may impact occupational function in the future
- I see it to be used to develop resource materials

Conclusion

- ✓ **AI use among clinician is still limited, overall proficiency remains low**
- ✓ **There is strong interest with cautious skepticism**
- ✓ **Key concerns include accuracy, ethics, privacy and preserving clinical judgment**
- ✓ **Support needs: hands-on training, clear ethical/legal guidance**
- ✓ **Focus on guided, voluntary, and responsible AI integration**