



Occupational Therapy Students' Artificial Intelligence Literacy and Attitudes: A Descriptive Study

Özge Buket Arslan*, Şevin Kaplan*

*Department of Occupational Therapy, Faculty of Health Sciences, Hacettepe University, Ankara, Turkey

No financial disclosures.

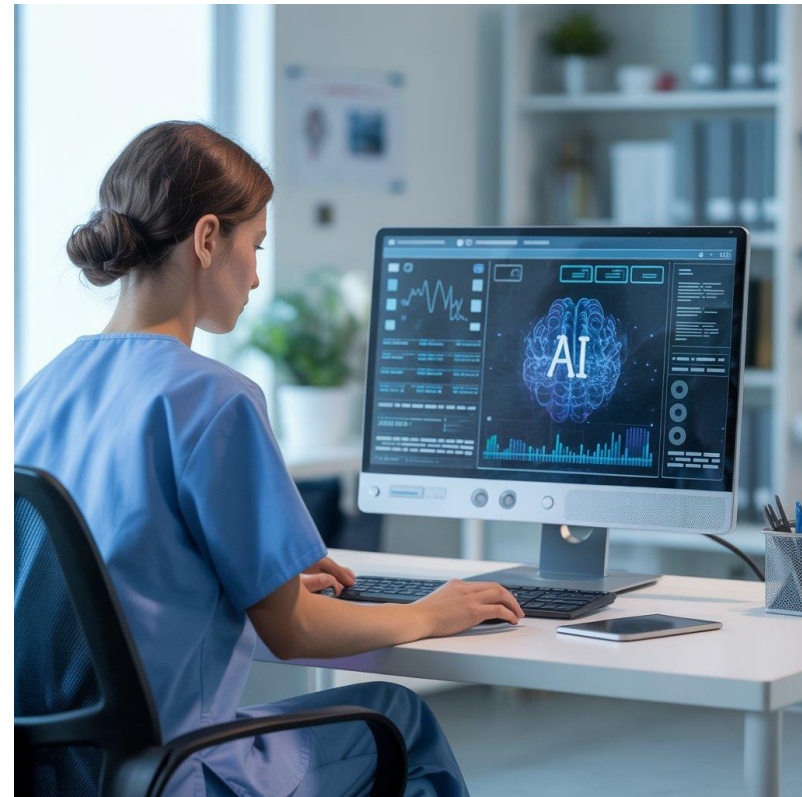
Introduction

- Rapid growth of artificial intelligence in healthcare
- As future clinicians, occupational therapy students are likely to interact increasingly with AI-supported tools.



Objective

- To evaluate the AI literacy and attitudes towards AI of last-year occupational therapy students.



Methods

Inclusion criteria

- Being a last year OT student
 - Willingness to participate in the study
-
- The study included 40 OT students, 39 females and 1 male.
 - Mean age: 23 ± 2.11 (min 21, max 33)
-
- Data were collected face-to-face between January and May 2025.

Assessments

- **AI literacy**- The Artificial Intelligence Literacy Scale (AILS)
- **AI attitude**- The General Attitudes Toward Artificial Intelligence Scale (GAAIS)

The Artificial Intelligence Literacy Scale

- Developed by Wang and colleagues in 2022.
- The Turkish version's validity and reliability were assessed in 2023.
- 12 questions
- 4 dimensions: Awareness, Usage, Evaluation and Ethics
- A seven-point Likert scale ranging from "Strongly disagree" to "Strongly agree"
- AI literacy increases as the score obtained from the scale increases.
- Scores range from 7 to 84.

The Artificial Intelligence Literacy Scale

Description	Construct
I can distinguish between smart devices and non-smart devices.	Awareness
I do not know how AI technology can help me.	Awareness
I can identify the AI technology employed in the applications and products I use.	Awareness
I can skillfully use AI applications or products to help me with my daily work.	Usage
It is usually hard for me to learn to use a new AI application or product.	Usage
I can use AI applications or products to improve my work efficiency.	Usage
I can evaluate the capabilities and limitations of an AI application or product after using it for a while.	Evaluation
I can choose a proper solution from various solutions provided by a smart agent.	Evaluation
I can choose the most appropriate AI application or product from a variety for a particular task.	Evaluation
I always comply with ethical principles when using AI applications or products.	Ethics
I am never alert to privacy and information security issues when using AI applications or products.	Ethics
I am always alert to the abuse of AI technology.	Ethics

General Attitudes Toward Artificial Intelligence Scale

- Developed by Schepman and Rodway in 2022.
- The Turkish version's validity and reliability were assessed in 2022.
- 20 questions
- Two-factor structure: Positive (12 items), Negative (8 items)
- A five-point Likert scale ranging from "Strongly disagree" to "Strongly agree"
- AI attitudes score range: Positive 12–60, Negative 8–40
- Higher scores reflect stronger positive or negative attitudes toward AI.

Schepman, A., & Rodway, P. (2023). The General Attitudes towards Artificial Intelligence Scale (GAAIS): Confirmatory Validation and Associations with Personality, Corporate Distrust, and General Trust. *International Journal of Human–Computer Interaction*, 39(13), 2724–2741. <https://doi.org/10.1080/10447318.2022.2085400>

Kaya, F., Aydin, F., Schepman, A., Rodway, P., Yetişensoy, O., & Demir Kaya, M. (2024). The Roles of Personality Traits, AI Anxiety, and Demographic Factors in Attitudes toward Artificial Intelligence. *International Journal of Human–Computer Interaction*, 40(2), 497–514. <https://doi.org/10.1080/10447318.2022.2151730>

General Attitudes Toward Artificial Intelligence Scale

Item-Positive

- For routine transactions, I would rather interact with an artificially intelligent system than with a human.
- I am optimistic about what Artificial Intelligence can do in my daily life.
- Artificial intelligence can have positive impacts on people's wellbeing.
- An artificially intelligent agent would be better than an employee in many routine jobs.
- Much of society will benefit from a future full of Artificial Intelligence.
- I look forward to using Artificial Intelligence in my own job.

Item-Negative

- Organisations use artificial intelligence unethically.
- I think artificially intelligent systems make many errors.
- Artificial intelligence might get out of control.
- I think Artificial Intelligence is dangerous.
- People like me will suffer if Artificial Intelligence is used more and more.
- Artificial intelligence is used to spy on people.

Results

Scale / Subscale	Mean \pm SD	Min	Max
AILS – Awareness	14.25 \pm 2.44	10	20
AILS – Usage	14.40 \pm 2.84	8	19
AILS – Evaluation	15.10 \pm 2.85	8	19
AILS – Ethics	16.70 \pm 2.30	11	21
AILS – Total	60.45 \pm 7.49	46	76
GAAIS – Negative Attitude	26.50 \pm 3.15	22	36
GAAIS – Positive Attitude	39.72 \pm 4.30	30	50

*AILS: Artificial Intelligence Literacy Scale, GAAIS: General Attitudes Toward Artificial Intelligence Scale

Results- Positive Attitudes Toward Artificial Intelligence

Item	Points
For routine transactions, I would rather interact with an artificially intelligent system than with a human.	2,91
Artificial intelligence can provide new economic opportunities for this country.	3,95
Artificially intelligent systems can help people feel happier.	3,45
I am impressed by what Artificial Intelligence can do.	3,92
I am optimistic about what Artificial Intelligence can do in my daily life.	3,69
Artificial intelligence can have positive impacts on people's wellbeing.	3,72
Artificial intelligence is exciting.	3,78
An artificially intelligent agent would be better than an employee in many routine jobs.	3,14
The use of artificially intelligent systems can perform better than humans.	3,30
Artificial intelligence has many useful applications.	4,10
Much of society will benefit from a future full of Artificial Intelligence.	3,92
I look forward to using Artificial Intelligence in my own job.	3,90

Results- Negative Attitudes Toward Artificial Intelligence

Item	Points
Organisations use artificial intelligence unethically.	3,38
I think artificially intelligent systems make many errors.	3,33
I find Artificial Intelligence sinister.	2,56
Artificial intelligence might get out of control.	2,85
I think Artificial Intelligence is dangerous.	3,49
People like me will suffer if Artificial Intelligence is used more and more.	2,80
Artificial intelligence is used to spy on people.	2,86
I shiver with discomfort when I think about future uses of Artificial Intelligence.	2,21

Conclusions

- High AI literacy
- Predominantly positive attitudes toward AI, despite moderate concerns
- Final-year OT students are well positioned to integrate AI into clinical practice
- Need for structured AI education (ethics, data privacy, human-centered AI)

References

- Hamad, N. I., El-Ashry, A. M., Ibrahim, I. M., & Hassan, E. A. (2025). Embracing the future: An insight into nursing students' attitude and perception towards the usability of artificial intelligence in healthcare. *Teaching and Learning in Nursing*, 20(2), e500-e508.
- Wang, B., Rau, P. L. P., & Yuan, T. (2023). Measuring user competence in using artificial intelligence: validity and reliability of artificial intelligence literacy scale. *Behaviour & Information Technology*, 42(9), 1324–1337. <https://doi.org/10.1080/0144929X.2022.2072768>
- Polatgil, M., & Güler, A. (2023). Adaptation of Artificial Intelligence Literacy Scale into Turkish. *Sosyal Bilimlerde Nicel Araştırmalar Dergisi*, 3(2), 99–114.
- Schepman, A., & Rodway, P. (2023). The General Attitudes towards Artificial Intelligence Scale (GAAIS): Confirmatory Validation and Associations with Personality, Corporate Distrust, and General Trust. *International Journal of Human–Computer Interaction*, 39(13), 2724–2741. <https://doi.org/10.1080/10447318.2022.2085400>
- Kaya, F., Aydın, F., Schepman, A., Rodway, P., Yetişensoy, O., & Demir Kaya, M. (2024). The Roles of Personality Traits, AI Anxiety, and Demographic Factors in Attitudes toward Artificial Intelligence. *International Journal of Human–Computer Interaction*, 40(2), 497–514. <https://doi.org/10.1080/10447318.2022.2151730>
- Long, D., & Magerko, B. (2020). What is AI literacy? Competencies and design considerations. *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*.
- Roffey, T., Raffaghelli, J. E., & Cucchiara, S. (2020). AI literacy in education: Competencies and design considerations for equitable learning. *British Journal of Educational Technology*, 52(4), 1532–1547.
- Zhang, B., Dafoe, A., & Dafoe, R. (2021). *Artificial intelligence: American attitudes and trends*. Brookings Institution
- Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Center for Curriculum Redesign.
- Kimiafar, K., Sarbaz, M., Tabatabaei, S. M., Ghaddaripouri, K., Mousavi, A. S., Mehneh, M. R., & Baigi, S. F. M. (2023). Artificial intelligence literacy among healthcare professionals and students: a systematic review. *Frontiers in Health Informatics*, 12(0), 168.



WFOT
Congress 2026
9-12 FEBRUARY BANGKOK, THAILAND

*Inspiring Change,
Innovating Futures*

WFOT
World Federation of
Occupational Therapists

wfot.org/2026

THANK YOU

obuket.cesim@hacettepe.edu.tr