

The effect of ChatGPT use for communication skills on occupational therapy students' perceived usefulness attitude: A pre-post test study

Lect. Msc. OT Yusuf İslam Değerli

Ankara University, Therapy and Rehabilitation Program

Ankara, Türkiye



yidegerli@ankara.edu.tr

Prof. Çiğdem Öksüz

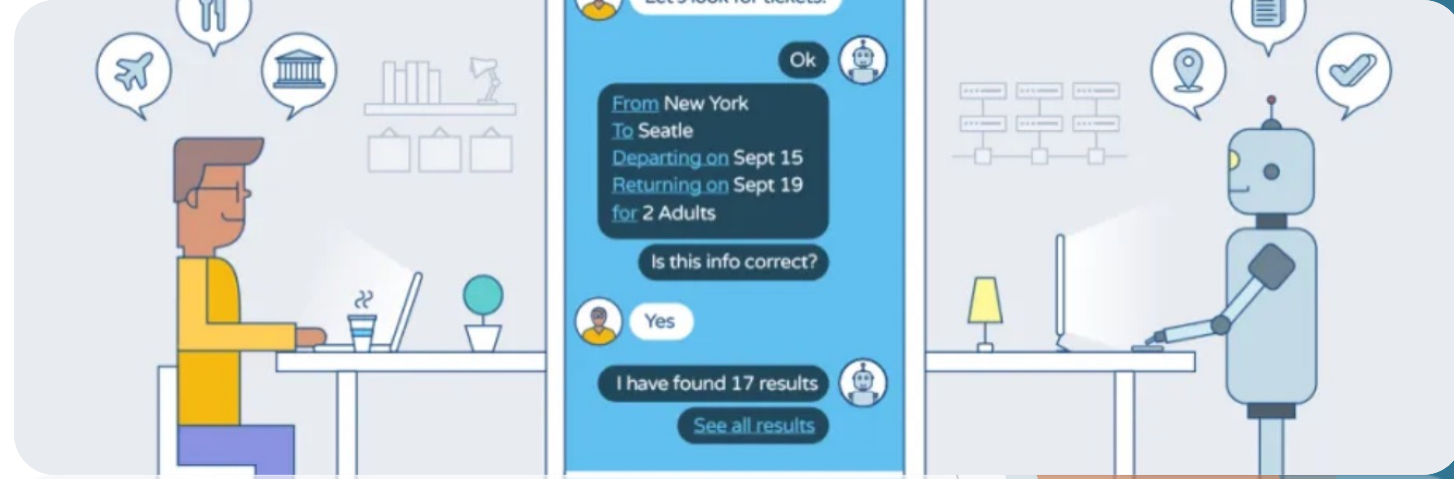
Hacettepe University, Department of Occupational Therapy

Ankara, Türkiye

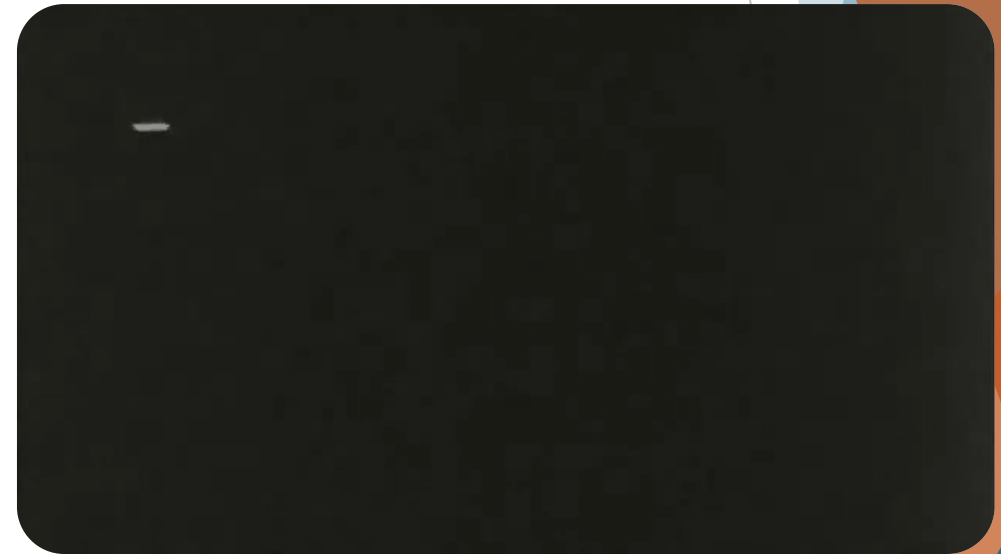
Why does humanity feel the need to converse with artificial intelligence?

ChatBot

Chatbots are **tools** that allow users to communicate in a digital environment through text-based **interaction in a manner similar to conversing with a human**, and they are used for various purposes such as obtaining information or completing tasks.



The First Chatbot: 'ELIZA'



It was designed to simulate a **psychotherapist** and was capable of generating human-like dialogue.

The Rise of Chatbots

Developments in the field of
artificial intelligence:

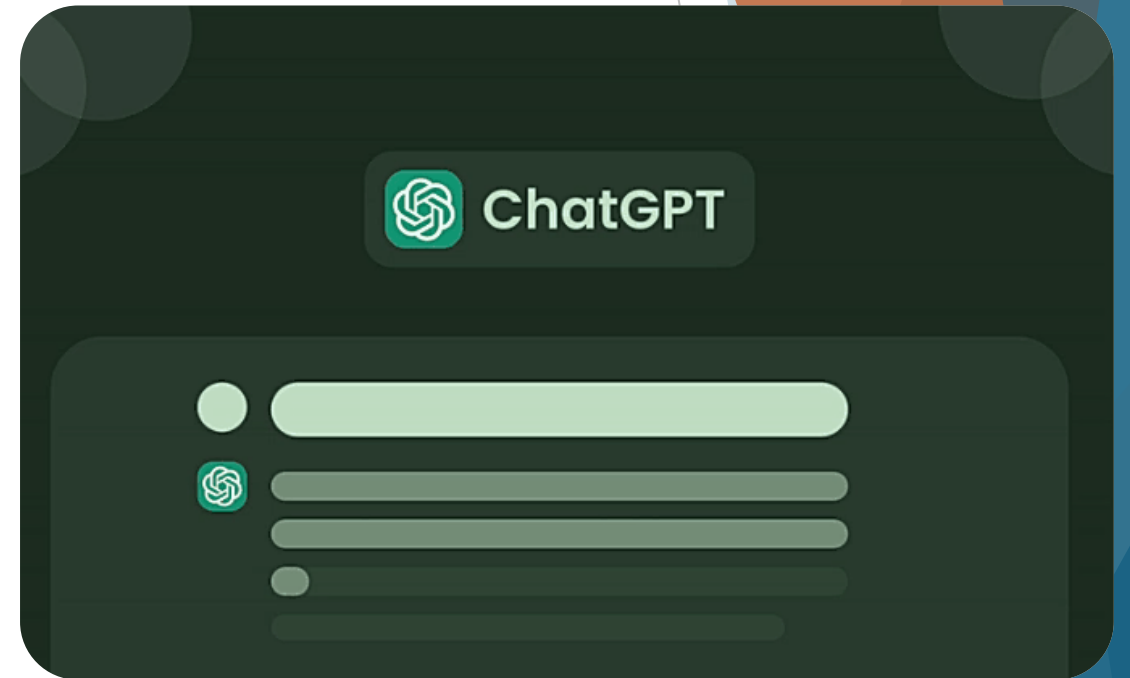
Natural Language Processing

+

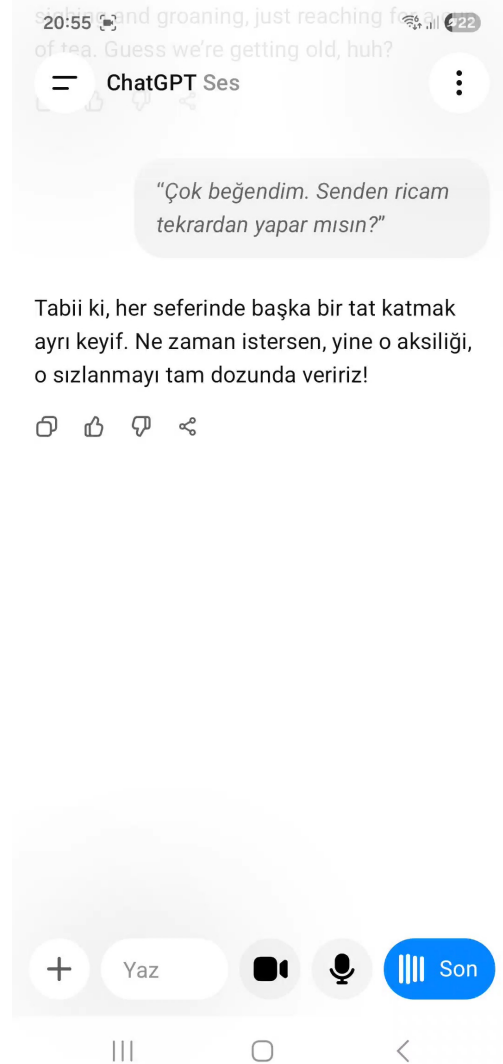
Deep Learning

=

Dialogue-based Artificial
Intelligence.



ROLE-PLAYING GPT



Not Just Text, but 'Personality' and 'Role' Ability

Role Playing

The ability to converse with the person opposite you in a **fluent, natural manner**, **without losing context**.



Human-like Conversation

By following a predefined scenario, **it can take on the roles** of a patient, an anxious parent, or an older adult.



Adapting communication style

It can adjust its **tone of voice and communication style** according to the emotional state and level of the person it interacts with.



Multi-Mode

It deepens interaction by moving beyond **text-based communication** to **include voice and video features**.



The aim of this study was to examine students' attitudes toward the use of ChatGPT as a virtual patient to support communication skills training in occupational therapy education.

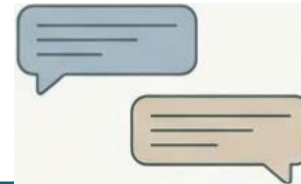
Challenges of Conventional Methods

- ▶ Practical training is associated with several challenges, including the high cost of using professional actors as standardized patients, logistical barriers to involving real patients in classroom instruction, and students' concerns about making communication errors with real patients.



Benefits of Artificial Intelligence

- ▶ Might the characteristics of AI-based virtual patients — constant accessibility, role-playing capability, no cost, opportunities for practice, and tolerance for student errors — be enough to promote positive attitudes toward their use?



What did we do?

Expert Desing

- Clinical scenarios were written by Occupational Therapy experts, focusing on history, symptoms, and daily routines.

GPT-5 Customization

- Scenarios were loaded to create a special model. Prompts ensured that the artificial intelligence remained within its 'character' and only played the role of the patient.

Access to virtual cases

- The developed 'Virtual Patient' has been made available for students to use extensively via the platform's free version.

The Clinical Scenarios

- ▶ Four different virtual cases were created with which students could interact. (ChatGPT version 5.1 was used, enabling the use of the custom GPT creation feature.)

Geriatric
Virtual Case

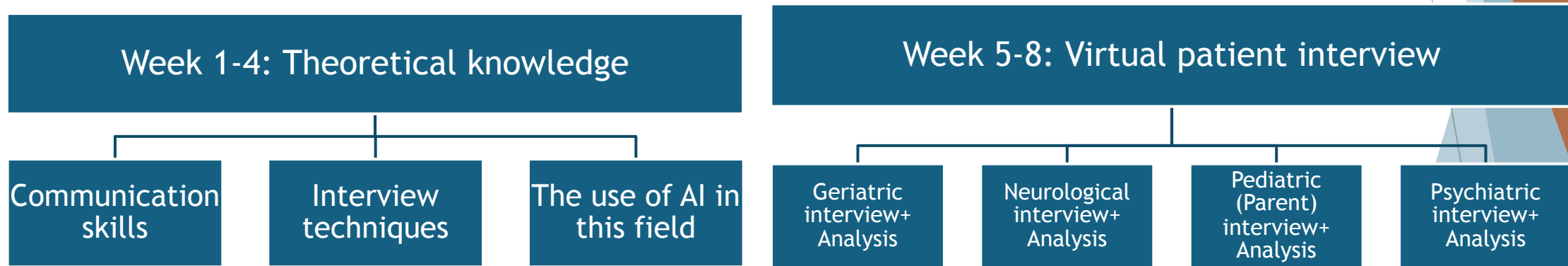
Paediatric
Virtual Case

Neurological
Virtual Case

Psychiatric
Virtual Case

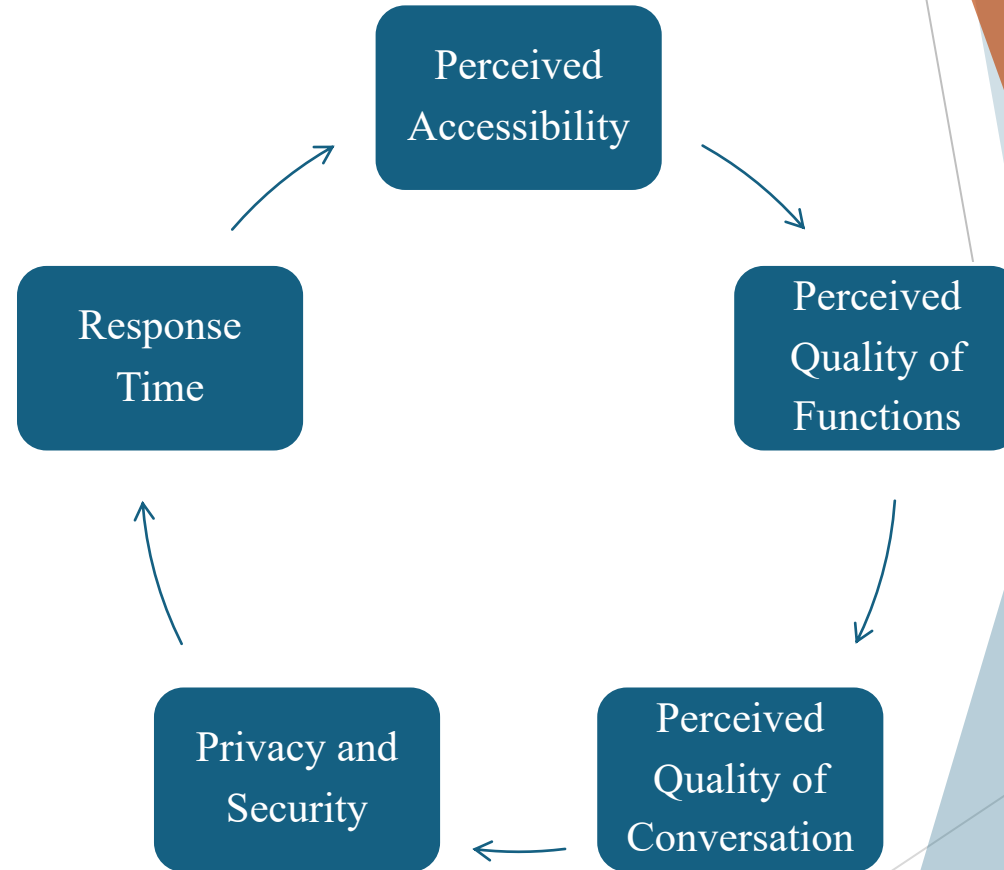
The 8-Week Hybrid Course

A total of 40 undergraduate occupational therapy students voluntarily took part in the communication skills training program.



Measuring Success: The Chatbot Usability Usabiity Scale (BUS-15)

- ▶ In the study, we used the Turkish adaptation of the BUS-15 (Borsci et al.) to measure 'Perceived Usability' before and after the course.
- ▶ The scale had five subheadings.



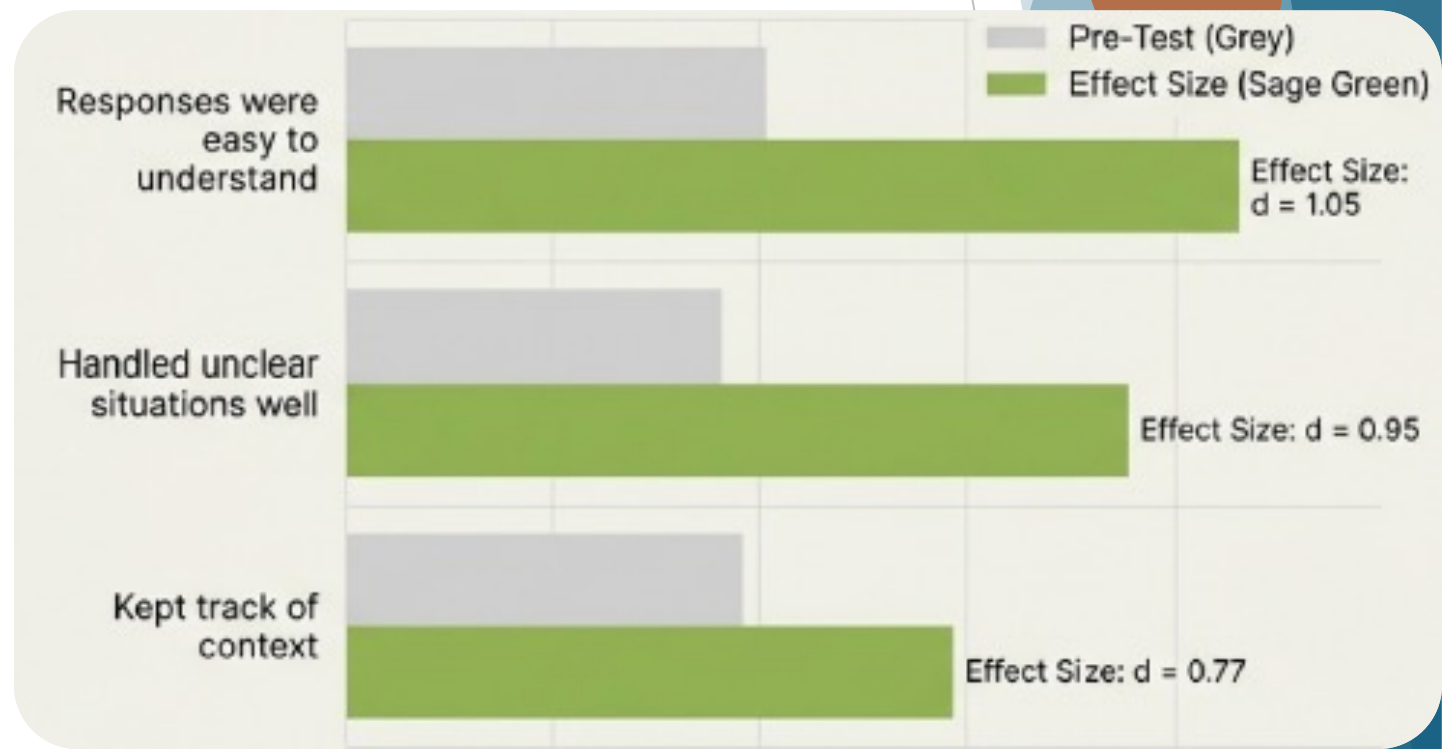
Results

- ▶ Finding 1: Increases in perceived accessibility were observed.
- ▶ The chatbot function was **easily detectable**: $t = -8.317$, $p = .001$
- ▶ It was **easy to find** the chatbot: $d = 1.03$ (Large Effect).

- ▶ **Students reported that they could easily access the virtual cases through ChatGPT from any environment.**

Results

- ▶ Finding 2: Students reported that the AI was capable of maintaining a natural therapeutic dialogue.



Results

- ▶ Finding 3: Although the system was described as conversationally fluent, no statistically significant difference was found in perceived information quality.



Conclusion

- ▶ AI-supported chatbots show strong potential for acting in the role of patients. Their ability to engage in contextual conversation, remain accessible regardless of location, and allow room for mistakes offers significant advantages.
- ▶ However, they may still fall short in providing a sense of realism.
- ▶ Additionally, concerns remain regarding the reliability and consistency of the information they provide.

Thank you for listening.

Yusuf İslam DEĞERLİ

yidegerli@ankara.edu.tr



<https://www.linkedin.com/in/yusuf-islam-degerli/>

References

1. Anonymous. (2025). The Effect of Using ChatGPT in Communication Skills Courses on Occupational Therapy Students' Perceived Usefulness Attitudes: A Single-Group Intervention Study.
2. Borsci, S., et al. (2022). The Chatbot Usability Scale (BUS-15). Personal and Ubiquitous Computing.
3. Labadze, L., et al. (2023). Role of AI chatbots in education: systematic literature review.
4. Knight, A, et al. (2020). Communication skills teaching for student dietitians. Journal of Human Nutrition and Dietetics.
5. OpenAI (2023). ChatGPT functionality and language patterns.
6. Yavuz, M., et al. (2023). Chatbot Usability Scale: Adaptation to Turkish and Validation/Reliability Analysis.