



Improving Interpersonal Skills Through Artificial Intelligence

Lijy Mathew¹ & Lydia Pacheco²

¹Research Scholar, SNTD; Asst. Teacher, St. George High School

lijymathew12@gmail.com

²Research Scholar, SNTD University

Corresponding Author – Lijy Mathew

DOI - 10.5281/zenodo.19399421

Abstract:

Interpersonal skills such as effective communication, empathy, cooperation, and emotional awareness are essential for success in academic, professional, and social environments. However, many learners find it challenging to develop these skills through traditional instructional methods alone. With recent advancements in Artificial Intelligence (AI), innovative tools have emerged that offer personalized, interactive, and adaptive learning experiences. With rapid technological advancement, Artificial Intelligence (AI) has emerged as a transformative tool in education, offering personalized and interactive learning environments. This paper explores the potential role of AI-based interventions—such as chatbots, role-play simulations, feedback systems, and emotion analysis tools—in enhancing interpersonal skills among learners. The study highlights how AI can support communication practice, emotional intelligence, and reflective learning. It aims to provide theoretical insights into the integration of AI for interpersonal skill development and to guide future empirical research in this emerging area.

Keywords: Artificial Intelligence, Interpersonal Skills, Communication, Empathy, Soft Skills

Introduction:

“Our intelligence is what makes us human, and AI is an extension of that quality.”

–Yann LeCun (Chief AI Scientist)

Interpersonal skills are fundamental human abilities that enable individuals to interact effectively with others in personal, academic, and professional contexts. Skills such as active listening, clear communication, empathy, teamwork, and conflict resolution are increasingly valued in modern society. Despite their importance, many learners struggle to develop these skills due to limited opportunities for practice and feedback. Artificial Intelligence (AI) has gained prominence in education for its ability to provide personalized, interactive, and learner-centered experiences. This study examines how AI can be used to support and enhance interpersonal skills development.

Need for the Study:

The growing reliance on digital communication has reduced face-to-face interactions, impacting the development of interpersonal skills. AI-based learning tools offer adaptive feedback and simulated interactions, making them a promising approach for interpersonal skills training. AI enables learner-centric approaches by analyzing behavioural patterns and tailoring activities to individual needs. Research is required to validate the effectiveness of such personalization in enhancing interpersonal competencies. Interpersonal skills are closely linked with SEL (Social Emotional Learning). Investigating AI-supported SEL frameworks can help establish structured models for integrating emotional awareness and empathy into mainstream education. Therefore, exploring the potential of AI in this area is both timely and necessary.

Statement of the Problem:

Although Artificial Intelligence is widely used in education and training, its role in developing interpersonal skills has not been sufficiently explored. There is a need to understand how AI-based interventions can contribute to improving communication, empathy, and social awareness among learners.

Objectives of the Study:

The objectives of this study are:

1. To explore the role of Artificial Intelligence in interpersonal skills development.
2. To identify AI-based tools suitable for enhancing communication and empathy.
3. To propose a conceptual framework for AI-supported interpersonal skills training.
4. To highlight the educational implications of AI-assisted interpersonal learning.

AI-Based Interventions for Interpersonal Skills:

AI-based interventions provide learners with opportunities to practice interpersonal skills in a safe and non-judgmental environment. Chatbots enable conversational practice, role-play simulations recreate real-life social scenarios, and feedback systems analyze language use and emotional tone. Emotion recognition tools further support emotional awareness and empathy. Soft skills can be taught very well to students through artificial intelligence. AI provides instant, individualized feedback that supports ongoing skill development. For instance, in a negotiation simulation, the system can evaluate learners' responses in real time and offer targeted suggestions to enhance their communication and persuasive abilities. One of the major innovations brought about by AI is virtual mentoring. AI acts as a mentor, interacting with learners to guide them, answer their questions and provide them with personalized advice throughout their

interactions., Artificial Intelligence can improve students' interpersonal skills by providing personalized, interactive, and continuous learning experiences. Through AI-powered chatbots and virtual assistants, students can practice conversations, express ideas, and respond to different social situations in a safe and non-judgmental environment. AI-driven role-play and simulations expose learners to real-life scenarios such as group discussions, interviews, teamwork, and conflict resolution, helping them develop confidence and social adaptability. By offering real-time feedback on tone, clarity, word choice, and emotional appropriateness, AI enables students to reflect on and refine their communication skills immediately. In addition, emotion and sentiment analysis help learners build empathy and emotional intelligence by understanding others' feelings and responding appropriately. AI also supports collaborative learning by monitoring participation and encouraging balanced interaction among peers. Continuous progress tracking ensures sustained improvement, making AI an effective tool for enhancing students' interpersonal skills and preparing them for academic success and future professional environments.

Interpersonal skills in students can be effectively enhanced through the strategic use of Artificial Intelligence in the following ways:

- **Practice with AI Chatbots and Virtual Assistants:** Students can engage in simulated conversations (like ChatGPT) to improve clarity, politeness, and confidence.
- **Personalized Skill Development:** AI analyzes individual patterns and provides tailored exercises targeting specific skills like empathy, teamwork, or assertiveness.
- **Role-Play and Simulation Activities:** AI creates real-life scenarios such as group discussions, interviews, or conflict resolution for practical learning.

- **Instant Feedback:** AI gives immediate suggestions on tone, word choice, and emotional expression to help students improve communication.
- **Emotional Intelligence Support:** AI tools can detect emotions in responses and guide learners to respond empathetically.
- **Continuous Progress Tracking:** AI monitors students' development over time, ensuring steady and measurable improvement in interpersonal skills.
- **Safe Learning Environment:** Students can practice interactions without fear of judgment, boosting confidence, especially for shy or hesitant learners.
- AI-supported collaborative platforms facilitate group discussions, peer assessments, and teamwork activities. By guiding interactions, balancing participation, and resolving conflicts, AI helps learners develop cooperation, leadership, and respect for diverse perspectives.
- Virtual reality (VR) and AI-driven simulations expose learners to realistic social situations such as interviews, group discussions, or problem-solving tasks. These immersive experiences help learners practice interpersonal behaviors in controlled yet authentic contexts.
- For shy learners or those with communication barriers, AI provides a low-pressure environment to practice interpersonal interactions. This inclusivity promotes equal participation and gradual confidence building.
- **Human-AI Interaction Design** focuses on creating interfaces and interactions that facilitate effective communication between humans and AI. Real world scenarios can be created through AI to enable the

learners to face different situations and interact.

- It can also provide counselling sessions, guidance and support to the learners and help them to solve many of their social interaction doubts and problems.

Interacting with others require good communication skills. AI can help to polish the communication skills of the learners. Some examples of how AI-powered tools improve learners' speaking and pronunciation skills:

I. Speech Recognition–Based Language Learning Apps:

Example: *ELSA Speak, Duolingo, Google Speech-to-Text*

These tools analyze learners' speech and compare it with native-speaker models. They provide instant feedback on:

- Pronunciation of individual sounds
- Stress, intonation, and rhythm
- Accuracy of spoken responses

Learners can identify specific pronunciation errors and practice repeatedly, leading to improved clarity and confidence in speaking.

II. AI Virtual Tutors and Chatbots:

Example: *AI chatbots, ChatGPT-based speaking tutors*

Virtual tutors engage learners in simulated conversations on every day or academic topics. They:

- Encourage spontaneous speaking practice
- Correct pronunciation and grammar in real time
- Adapt difficulty levels based on learner performance

Learners develop fluency and conversational competence in a supportive, non-judgmental environment.

III. Accent and Pronunciation Training Systems:

Example: *Speech ace, Rosetta Stone TruAccent*

These AI systems use phonetic analysis to detect subtle pronunciation deviations. They provide:

- Visual representations of sound production
- Targeted drills for problematic phonemes
- Progress tracking over time

Learners achieve more native-like pronunciation through focused, personalized practice.

IV. AI-Assisted Classroom Tools:

Example: *Microsoft Immersive Reader, AI language labs*

Teachers use AI tools to:

- Monitor students' speaking performance
- Provide individualized feedback at scale

- Support inclusive learning for diverse proficiency levels

Improved speaking outcomes and greater learner engagement in classroom settings.

V. Automated Speaking Assessment Systems

Example: *IELTS AI practice platforms, TOEFL speaking simulators*

These systems evaluate speech based on fluency, coherence, pronunciation, and vocabulary. Learners gain speaking practice with objective and consistent feedback.

Conceptual Framework:

AI-based interventions facilitate interactive practice, which leads to feedback and reflection. This continuous cycle contributes to the enhancement of interpersonal skills such as communication, empathy, and emotional intelligence.



AI-based Interpersonal skills Cycle

Significance of the Study:

This study contributes to the theoretical understanding of AI-supported interpersonal skills development. It offers insights for educators, curriculum designers, and researchers interested in integrating AI tools into soft skills training programs. While AI is rapidly transforming education, its potential role in

developing interpersonal skills remains underexplored. This study aims to conceptually address that gap.

Limitations of the Study:

The effectiveness of AI-based interventions depends on the quality, accessibility, and ethical use of AI tools. Future

studies are required to empirically validate the proposed framework.

Conclusion:

Artificial Intelligence has significant potential to enhance interpersonal skills by providing personalized, interactive, and reflective learning experiences. When integrated thoughtfully, AI can complement traditional teaching methods and support holistic learner development. This paper lays a conceptual foundation for future research on AI-driven interpersonal skills training. Artificial Intelligence provides novel, learner-focused methods for strengthening interpersonal skills. Using AI-driven conversational tools, emotion-sensing technologies, collaborative learning systems, and immersive simulations, educators can effectively support the development of communication abilities, empathy, and social awareness among learners. When applied responsibly and with ethical consideration, AI serves as a valuable support to human teaching, significantly enriching the cultivation of interpersonal skills in educational environments. So, efforts should be made for *the development of AI systems that prioritize emotional intelligence, foster authentic interactions, and adhere to ethical design principles.*

References:

1. How to Use AI to Improve Your Communication Skills (Published by TCS ion | September 16,2025)
2. Tools of Artificial Intelligence for Improving Interpersonal Skills of Higher Education Learners by Authors: Shashank R, Prof. Rajgopal
3. https://www.ijset.in/wp-content/uploads/IJSET_V13_issue1_164.pdf
4. <https://www.iosrjournals.org/iosr-jrme/papers/Vol-15%20Issue-1/Ser-1/C1501012333>
5. Alafnan M, Dishari S, Mohdzuki Sf. Developing Soft Skills in The Artificial Intelligence Era: Communication, Business Writing, And Composition Skills. Journal Of Artificial Intelligence and Technology. 2024.
6. S. Li, C. Zeng, J. Shang, Y. Liu and X. Wu, "Interpersonal Communication Skills Training Platform for Teachers: Using Generative AI to Simulate Educational Conflict Resolution,"
7. <https://www.geeksforgeeks.org/artificial-intelligence/interpersonal-intelligence-in-ai>
8. <https://www.ijirmf.com/impact-of-ai-on-interpersonal-communication>
9. *Artificial Intelligence: A Modern Approach* by Stuart Russell and Peter Norvig.