

PSYCHO-TECH

The interaction Between Humans and Technology — AI as a Partner in Therapy and Coaching

We live in an era of accelerated change, where technological tools are rapidly becoming an inseparable part of our lives. This reality creates a fascinating encounter between the worlds of psychology and technology. This partnership — which in the past sounded like science fiction — is becoming reality in research circles, and hints at a future where technology and human beings work together to strengthen psychological wellbeing, both personal and collective.

At the Maytiv Center for Positive Psychology Research, we closely follow this fascinating development and learn about the advantages of technology in the worlds of diagnosis and treatment alongside the emotional and ethical challenges it entails.

This series of articles will present a review of leading research in the field and will focus on three central aspects of the encounter between artificial intelligence and psychology:

- AI-based support in therapy and coaching processes — how smart systems can be integrated into therapy, coaching, and counseling processes to streamline and strengthen them.
- Psychological and social effects of interaction with artificial intelligence — examining the way in which people develop emotional connections with AI systems, with the opportunities and challenges therein.
- The future of computational positive psychology — an emerging and developing field that seeks to measure, predict, and design psychological wellbeing in real time using data and advanced tools.

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<https://www.runi.ac.il/research-institutes/psychology/maytiv>



In the current article, we will focus on the first aspect and examine how artificial intelligence can serve as a partner in therapy and coaching processes, examining its contribution to deepening insights, streamlining work, and expanding the tools available to professionals.

Building My Story — Narrative Identity

Artificial intelligence enters the therapy room and offers a new and precise way to understand the person before us.

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In a study led by Martin Seligman, a leading positive psychology researcher (Seligman & Blyler, 2024), the ability of GPT-4 Chat to create a 'narrative identity' for the patient was examined, and whether this narrative identity could be used to offer personalized interventions.

Narrative identity is a structured story of the person about themselves, based on a stream of free thoughts and basic details — forming the basis for constructing the individual's personal meaning and a central foundation in psychological coaching and therapy. As part of the study, participants provided a stream of approximately 50 spontaneous thoughts and several basic demographic details. Based on this, GPT-4 succeeded in creating remarkably accurate narrative identities and proposed personalized coaching strategies and interventions. Not only did approximately 89% of participants report that the narrative described them accurately, approximately 69% of participants even learned something new about themselves through the AI's telling of their story. The researchers examined and analyzed the quality of the recommendations offered and their fit with recognized therapeutic approaches.

The study results were impressive — the AI not only formulated an accurate story, but also offered personalized treatment and coaching strategies. The article suggests that through this intervention, it is possible to shorten the diagnostic phase, reach the depth of the therapeutic process faster, and free up valuable time for human interaction — without sacrificing precision and personalization.

AI-Based Coaching Processes

Artificial intelligence also presents significant potential in coaching processes. A recent study (Xie & Ostrowski, 2025) sought to examine whether coaching based on a Large Language Model (LLM) is more effective than a regular conversation with GPT, and whether it is capable of yielding results similar to human coaching — particularly on measures of emotional wellbeing, conversational depth, sense of empathy, encouragement, engagement, and motivation to act.



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The researchers compared three types of coaching: traditional human coaching, a dedicated AI coach named 'Hey Sherry' that was pre-programmed with tailored prompts, conversation scripts, and focused questions (structured LLM-based coaching), and a free (unstructured) conversation with GPT-4 Chat.

It was found that the structured AI-based coaching (Hey Sherry) led to the greatest improvement on measures of emotional wellbeing, with an increase in positive emotions and a decrease in negative emotions. On measures of coaching quality — such as empathy, encouragement, connection, and engagement — the structured AI-based coaching received much higher scores than a regular interaction with GPT, and in some areas even matched human coaching.

In terms of emotional depth, personal connection, and personal relationship, human coaching was still perceived as superior, while participants in coaching with Hey Sherry noted a sense of clarity, focus, and effective planning tools alongside a certain sense of formality. This suggests that LLM-based coaching may constitute an effective and accessible alternative to human coaching — especially in contexts where there is a shortage of human resources or a need for high flexibility and availability.

On the Importance of Human Connection in the Age of AI

These studies illustrate the value that exists in integrating artificial intelligence into counseling, coaching, and therapy processes. It is important for us to emphasize that technology does not serve as a replacement for human connection, but rather as a partner capable of expanding, streamlining, and deepening guidance and counseling processes.

In situations of crisis, trauma, or coping with complex emotional challenges, there is no substitute for human connection — for presence, listening, and the personal touch of a skilled professional. While AI enables an improvement of the counseling or therapy process, it cannot provide a full emotional response. We need to be aware that in a therapeutic process, there is value in the connection created with the therapist — a connection based on trust, containment, and empathy, qualities that no algorithm can fully replicate.

This does not mean abandoning traditional therapy processes, as technology alone is not sufficient. The effectiveness stems from the way it is integrated into the counseling process.

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Practical Training Through Technology

In addition, smart digital tools can constitute a significant addition even outside the therapy room. A pilot study from the current year (Gross & Schooler, 2025) showed how a daily app-based intervention succeeded in raising curiosity, a sense of meaning, and creativity — and even reducing boredom — in just 21 days, and without human guidance. The intervention combined behavioral tasks and 'mindful curiosity' exercises designed to cultivate curiosity. Participants received guiding principles for goal-setting via instructional videos and guiding text and entered their goals. They were then guided on how to convert their goals into intentions using a logical 'if-then' technique (for example, when I go for a lunch break, I will listen to a new podcast), and the app reminded and encouraged them to complete the goals every two days throughout the intervention. In parallel, they received a daily challenge divided by difficulty level based on the time and energy available to them on any given day. Each challenge encouraged participants to explore their current context, change their viewpoints, break routine, or engage with something new in their environment. The app succeeded in generating positive effects without human intervention — suggesting the broad potential of technological solutions for personality development and psychological wellbeing.

This finding demonstrates that smart tools can serve to elevate psychological wellbeing, maintain motivation, and encourage the adoption of positive habits in the daily lives of all of us.

In the next article in the series, we will dive into the depth of the 'second arm': the psychological and social effects of interaction with artificial intelligence, and present several fascinating studies and facts on the subject.

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