

AI in Mental Health Therapy: Role and Limitations

Introduction

In recent years, the world has been facing a serious mental health crisis. There simply aren't enough trained professionals to meet the rising demand for psychological support. According to the World Health Organization, on average, there are only 13 mental health workers per 100,000 people worldwide, meaning millions of people struggle to access affordable or timely care [1]. To help bridge this gap, more and more digital solutions have started to use artificial intelligence (AI) as a way to deliver support at scale.

AI-powered mental health tools (like chatbots, mood-tracking apps, and interactive self-help programs) are being promoted as convenient, low-cost alternatives to traditional therapy. As Garg and Glick (2018) point out, AI-based mental health tools can help uncover undiagnosed conditions, analyze large volumes of user data, and support the creation of individualized care plans, functions that can enhance and accelerate what human therapists typically do [2]. These tools are available 24/7 and don't require long waiting times or appointments, which makes them especially appealing for people with limited access to care [3].

Public interest in these technologies is growing. A recent survey found that many people are open to using AI-driven mental health apps, especially for general emotional support, such as receiving mental health tips or undergoing initial assessments. 51.7% of respondents preferred using AI for general mental health tips, and 44.2% would use it for initial assessments and screenings, while only 5.2% expressed interest in using such tools for treatment purposes [4]. Platforms like Woebot, Wysa, and Youper are already being used by thousands of users worldwide [5]. And according to Boucher et al., these AI tools may offer a first step toward care for people who wouldn't otherwise seek help [6]. However, as Park et al. (2025) note, generative AI systems are trained on real-world internet data that naturally include societal biases and can learn stereotypes and biases from these sources, reflect them back, and amplify them, potentially causing further harm to marginalized populations [7]. These tensions underscore the need for a balanced and critical evaluation of AI's role in mental health care, recognizing both its potential benefits and its ethical and practical limitations.

Research Questions:

To help us explore this topic, we formulated the following questions:

- **RQ1:** What roles are AI-driven mental health interventions currently playing, and how do they compare to traditional human therapy?

- **RQ2:** What core skills and functions does a human therapist provide in treatment, and where do current AI systems fall short in replicating these?
- **RQ3:** How do experts envision the optimal integration of AI into mental healthcare, and what should be the respective roles of AI tools and human therapists moving forward?

To answer these questions, we reviewed some recent literature, explored how the AI mental health app “UpLife” works, and conducted two expert interviews: one with Alexander Makhtin, co-founder of UpLife, and one with Prof. Guy Bodenmann, a leading clinical psychologist and founder of relationship maintenance program Paarlife.

Related work on a human therapist’s role and skills

To understand where AI can meaningfully contribute to mental health care, it was important for us to first examine the role and core skills of human therapists. Therapists play a complex role, not just as mental health professionals applying techniques, but as trusted partners who offer emotional support and personalized guidance. Yet, public understanding of this role can be limited. A survey by O’Callaghan et al. found that over a third of participants viewed therapy as open-ended with no clear timeline, and nearly half prioritized cost and insurance over the quality of the therapeutic relationship [8]. This suggests people may undervalue what therapists offer beyond logistics.

In reality, clients often seek more than symptom relief. Sawrikar et al. found that many, especially those with long-term conditions, enter therapy to feel better emotionally, improve routines, and gain self-understanding [9]. They also value practical coping strategies and, most importantly, a supportive connection with a therapist who is responsive to their background and personality.

To meet these needs, therapists bring not only clinical skills but also human qualities. Cuijpers et al. found that outcomes often depend as much on the therapist as on the treatment model itself [10]. A key factor is the therapeutic alliance, which is a strong, trusting relationship that supports healing. This reflects common factors theory, which says that shared human elements, rather than specific techniques, are the main drivers of success.

Empathy and emotional attunement are crucial. Therapists who demonstrate warmth, honesty, and unconditional positive regard help clients feel safe and understood, which are traits shown to enhance therapy effectiveness [11]. Ackerman et al. highlighted core qualities like flexibility, trustworthiness, and genuine interest as essential to strong therapeutic relationships [11].

These qualities are expressed through specific techniques: active listening, empathic responses, collaborative goal-setting, constructive feedback, and clear boundaries. They reflect not only technical competence but also emotional intelligence and real-time ethical judgment. When consistently applied, they strengthen the therapeutic alliance, which is one of the best predictors of positive outcomes, as Ackerman et al. also confirmed [11].

Crucially, therapy is a mutual process. As Glass et al. emphasized, clients bring expectations, preferences, and cultural values, and effective therapists adapt accordingly [12]. This kind of shared decision-making enhances trust, engagement, and results [13].

In sum, human therapists are more than method providers. They build healing relationships defined by presence, responsiveness, and care. These qualities remain essential regardless of the therapeutic approach used.

AI Mental Health Apps in Practice: UpLife, A Case Study

To gain a deeper understanding of how AI mental health apps work and the reasoning behind the design decisions made by their creators, we examined UpLife, a popular mental health platform with 50,000 monthly users worldwide. Below, we describe the app's design, strengths, and limitations:

Co-founded about five years ago by designers and psychologists, UpLife is described as a “digital therapy platform”. Its core feature is a library of guided “Journeys”, which are interactive self-help courses on various well-being topics. Each Journey lasts around 1–2 weeks and targets a specific issue (e.g., anxiety management, building self-esteem, coping with stress, relationships). These journeys are written and designed by licensed therapists and experts, delivered in an engaging format (mixing audio and exercises like a structured podcast/workbook). Importantly, UpLife positions these as educational and preventative resources, not as treatment for serious clinical disorders. In our interview, Alex, the co-founder of UpLife, emphasized that UpLife provides a “holistic service”: the app covers a broad range of mental wellness areas rather than focusing on a single condition and method, on the premise that users cannot benefit from isolated services and hence need a more complete ecosystem addressing multiple facets.

UpLife's AI components work behind the scenes to enhance the user experience. The platform uses AI-based algorithms to suggest personalized Journeys and exercises to users, based on their profile and ongoing app activity. For example, after an onboarding questionnaire, the system might recommend a stress-reduction Journey if the user reports high stress. As the user continues to use the app, the AI monitors their inputs (reflections they write, mood check-ins, etc.) and can adjust recommendations, similar to a recommendation engine that learns what content might benefit the user next. However, a key philosophy at UpLife is that content quality and trust come first: all therapeutic content is human-generated, not AI-generated. Alex noted that users “don't want AI-written content” for something as sensitive as mental health; indeed, people explicitly prefer content written by human professionals in this context. Users have given feedback appreciating that UpLife's advice and exercises are created by qualified therapists rather than by an algorithm. It is further emphasized that the AI is used to curate and deliver the right content at the right time, not to replace the therapist's voice. In fact, currently, “the AI system is not the core” of UpLife, because most users engage with the human-crafted Journeys far more than with any AI chatbot features. The AI's role is currently supportive and focuses mainly on analytics and personalization.

For this platform, the goal is to provide structured psychoeducation in an accessible and interactive format. The success of these features is rooted in the UX of the platform, where the app uses various impactful HCI concepts. E.g., UpLife simplifies the onboarding process with personalized steps, making it easy for users to get started. It adapts to show users the Journeys and exercises that best fit their goals and preferences. These Journeys break down content into manageable steps, using a mix of audio, text, and interactive worksheets to keep the exercises engaging. To help users stay motivated, the app features progress bars, completion badges, mood charts, and streak indicators. These elements create a sense of achievement and encourage users to stay consistent on their journey. Overall, UpLife focuses on making progress feel tangible and rewarding.

Another distinguishing feature of UpLife is that it offers a therapist-facing side for those in clinical care. The app can be used independently by individuals, but it's also designed to be a tool for therapists to use with their clients. For example, a therapist can assign their client to complete a particular Journey (e.g., "Managing Panic Attacks") between sessions, and the app will add it to the client's in-app calendar. Therapists have a dashboard where they can monitor the client's progress and even see the client's daily mood or activity logs collected by the app. UpLife thus helps to automate repetitive tasks in therapy: instead of having a client email a daily mood chart, the app can "fully automate this process" – capturing daily mood, anxiety levels, reflections, etc., and then the therapist can review all that data at once before the next session. This reduces the burden on both client and clinician to remember homework and provides accountability through technology. UpLife is incorporating clinical assessments too. Alex mentioned they are building in PHQ-9 and GAD-7 questionnaires (standard depression and anxiety scales) so that users can regularly take these tests in-app, and the system will track their scores over time. This gives an objective measure of whether the interventions (Journeys, exercises) are improving the user's mental health, adding an evidence-based outcome metric to the platform.

Strengths: UpLife's hybrid model has multiple strengths. For one, users get high-quality therapeutic programs created by experts, which likely makes the advice more trustworthy and effective and can combat the echo chamber trap of AI. The breadth of topics and the structured format can guide users through a comprehensive self-help process, which is more structured than the ad-hoc conversations of a chatbot. Another strength is that it can serve self-driven individuals as a standalone app, and it can plug into traditional therapy as a digital companion tool. In cases of people with mild to moderate issues, it might suffice on its own as a wellness coach. For those with clinical disorders seeing a therapist, it becomes a supplement that enhances therapy (therapists can offload routine psychoeducation and homework to the app, freeing session time for deeper work). In the context of UpLife, this gives us a clear answer to RQ2.

Limitations: UpLife faces some challenges despite its innovative approach:

1. **Limited Interaction:** It lacks a free-form AI chatbot, meaning users looking for spontaneous conversation or crisis support may not find that service, as it is not designed for high-risk situations.

2. Content Connection: The human-created content may not resonate with every user, as pre-written Journeys cannot adjust to individual needs in real-time, unlike a human therapist.

UpLife is positioned to support mild-to-moderate mental health challenges and overall wellness, but may require user motivation and seamless integration with traditional therapy to be truly effective.

Design Perspective: Introducing Alexander Makhtin

Alexander Makhtin is the founder and product design lead of UpLife. As an expert in this field, he provides an insightful perspective on how designers make decisions regarding the implementation of AI features. He was chosen as an expert for his industry perspective on how such AI tools function in therapy and how they might integrate with human clinicians (addressing RQ1 and RQ3).

Makhtin's vision is clear and inspiring: to empower both users and clinicians with tools that foster connection and growth in the healing journey.

Psychology Perspective: Introducing Prof. Guy Bodenmann

Prof. Dr. Guy Bodenmann is a leading Swiss clinical psychologist and psychotherapist, internationally recognized for pioneering the concept of dyadic coping, which is a relational approach to stress that challenges the dominant view of psychological problems as solely individual. His work reframed stress as something experienced and managed jointly within close relationships, particularly among couples. This shift, which was seen as revolutionary at the time, laid the foundation for a more systemic understanding of mental health. Prof. Bodenmann also developed Paarlife, an evidence-based relationship training program aimed at improving couples' communication and stress regulation, now widely used across Europe.

Given his long-standing focus on how psychological support must consider emotional complexity, interpersonal dynamics, and relational trust, we saw Prof. Bodenmann as a uniquely qualified expert to comment on our research questions. His expertise allows us to assess not only the roles AI currently plays in mental health care (RQ1), but also to explore what is uniquely human in therapeutic work that AI systems may not yet replicate (RQ2). Moreover, his openness to digital tools and interest in blended care models made him particularly insightful for discussing the future integration of AI in mental health support, and how human-AI collaboration might be ethically and effectively designed (RQ3).

Expert Insights: AI's Potential and Limits in Therapy

AI as an Augment, Not a Replacement: Both Alex and Prof. Bodenmann stressed that AI can greatly enhance mental health services when working in tandem with human professionals. Prof. Bodenmann envisions a “blended therapy” model to tackle the therapist shortage crisis. In his scenario, an AI could handle certain therapy sessions or screening tasks, while a human therapist handles others. For example, a client might meet with the human therapist for an initial bonding session and treatment planning, then have a few follow-up sessions guided by an AI (with the therapist monitoring progress remotely), and later reconvene with the human for deeper processing. By alternating in this way, one therapist could effectively treat more patients in parallel without sacrificing quality. Routine skill-building or check-in conversations could be offloaded to the AI, whereas critical moments still get the therapist’s personal attention. Alex’s description of UpLife aligns with this blended approach. The app can act as the “between-session” support tool, handling homework exercises and progress tracking, but there is still a therapist in the loop for clients who need clinical care. Both experts highlighted that therapists maintain a guiding role. For example, UpLife allows therapists to “prescribe” app content and override or adjust the app’s recommendations to fit the client’s needs. The AI is seen as extending the therapist’s reach, not working independently. In our interviews, both Alex and Bodenmann were optimistic that such human-AI collaboration could improve outcomes and access. Alex noted that AI is especially powerful in roles like data analysis and pattern recognition, which are tasks where machines outperform humans. As a result, therapists can devote their attention to the empathic and nuanced aspects of care. Prof. Bodenmann likewise said AI is “genius” at diagnostic screening and could quickly analyze who needs what kind of care, which a therapist can then verify and act on. Both implied that the future of mental health care could involve AI handling the heavy logistical load (data crunching, basic psychoeducation, initial triage) so that human therapists can maximize the time they spend in high-value relational and analytical work with patients.

Trust and Content Quality: An overlap in their views was the importance of trust and the source of therapeutic content. Alex observed that users of UpLife are “grateful for high-value content written by professionals”, whereas many are skeptical of advice purely generated by AI. This is why UpLife’s strategy is to keep a human in the content creation loop and use AI mainly to deliver or customize that content. Prof. Bodenmann added that the therapeutic relationship is a key factor in outcomes and may be even more important than the specific techniques used.. This implies that patients need to feel a sense of personal connection and care, which is hard to develop with a faceless AI. In practice, this might mean that even as AI tools become more common, having a known human therapist involved (even if less frequently) can boost the patient’s confidence in the process. Interestingly, prof. Bodenmann’s preliminary experiment found that some students actually mistook ChatGPT for a human psychologist because it responded (after training) in a very measured, understanding way. They were astonished to learn it was an AI. This suggests that AI can emulate the tone of a therapist well enough to fool some people in short interactions. However, both experts would likely caution that sustaining that illusion over time is harder, and users eventually detect the lack of genuine human empathy or get frustrated by the bot’s limitations. Indeed, as sessions get longer or more complex, ChatGPT’s lack of true intuition would show, according to prof. Bodenmann. In sum, both Alex and Guy recognize a role for AI in therapy, but not as a solo act. The human element remains

crucial for trust, for nuanced judgment, and for delivering certain therapeutic inputs (or simply “being there” in a way an AI cannot fully replicate yet).

AI best performs in analytics, consistency, and motivation: When discussing what AI is actually good at in the therapy context, Alex and Prof. Bodenmann had similar views. AI excels at data-driven analysis and consistent support, whereas humans excel at creativity, empathy, and handling the unexpected. Alex highlighted that AI can analyze “lots of information” (user data, journaling, symptom scores) to output insights that would be hard for a person to compile quickly. For example, an AI can notice if a user’s mood dips every Sunday and might infer a “Sunday night anxiety” pattern, which something a busy therapist might overlook without data visualization. AI can also ensure no appointment is ever missed, because it’s there 24/7 to send a reminder or a supportive message. Prof. Bodenmann similarly noted that AI is faster than humans in going through diagnostic checklists or maybe detecting patterns across large datasets of what interventions work (given enough data, an AI could possibly predict which therapy techniques best suit which patient, something currently done by therapist judgment). Both see these as opportunities: AI as a tool for screening, for monitoring between sessions, and for handling routine conversations that reinforce therapeutic practices. Notably, both also acknowledge limits to AI’s role. Prof. Bodenmann pointed out AI might weaken as interactions go on and new unforeseen topics emerge, and Alex acknowledged that at present people mainly use UpLife’s AI for auxiliary features rather than core therapy, because it’s not yet capable of deeper counseling. Their shared view suggests that in the near future, AI will work best as a coach or assistant by tracking moods, guiding mindfulness exercises, offering CBT worksheets, and flagging concerns. The human therapist will take on the role of strategist, focusing on planning, complex emotions, and providing empathic support.

Ethical and practical considerations: Both interviewees touched on the boundaries of AI. Alex discussed “boundaries” in terms of ensuring the therapist remains the authority in clinical situations, e.g., the app may recommend a certain therapeutic exercise, but if the user has a therapist, the therapist should approve and tailor that recommendation. This highlights an ethical design principle that the AI should defer to human expertise when there is uncertainty. Prof. Bodenmann raised the point that not all therapists are equal, and ironically, a well-designed AI might outperform average therapists in some respects (for instance, always using evidence-based responses, never getting tired or biased). However, he also emphasized a top therapist’s clinical intuition and ability to read between the lines is something AI likely cannot match soon. An interesting ethical consideration he mentioned is that as AI gets more convincing, users might develop a strong emotional bond to the chatbot. If users begin to see the AI as their main confidant, there is a risk of over-reliance and “therapeutic misconception,” where they mistakenly believe the chatbot offers the same support as a human therapist. From an HCI perspective, designing AI therapy tools requires careful attention to these trust and safety factors to avoid harm.

Conclusion

To conclude, our study addressed three research questions exploring the current role of AI in mental health care, the unique strengths of human therapists, and how the two can best work together in the future.

RQ1: What roles are AI-driven mental health interventions currently playing, and how do they compare to traditional human therapy?

AI tools are becoming increasingly common in mental health care, especially for people who may not otherwise receive support. At the moment, their role is mostly supportive. They help users track symptoms, follow structured self-help programs, and access psychoeducation in an accessible and non-judgmental way. This kind of support is particularly valuable in contexts where there are long waiting lists, cost barriers, or stigma that prevent people from seeking traditional therapy.

Compared to human therapists, AI offers advantages like 24/7 availability, immediate responses, and scalability. These features allow basic mental health support to reach far more people at a lower cost. However, when compared directly to traditional therapy, AI still falls short. It lacks emotional understanding, adaptability, and the ability to manage complex or high-risk situations. While users may appreciate the ease and privacy of interacting with AI, they still tend to place greater trust in human care, especially when it comes to sensitive emotional issues.

RQ2: What core skills and functions does a human therapist provide, and where do current AI systems fall short?

Human therapists offer a unique combination of emotional presence, clinical judgment, and interpersonal sensitivity. They are able to build strong therapeutic relationships, read subtle nonverbal cues like tone and facial expression, and respond in real time to a client's changing emotional state. These human qualities are essential in helping clients feel safe, understood, and supported throughout the therapeutic process.

AI, on the other hand, cannot perceive tone, facial expressions, or body language. It lacks the life experience and intuition that therapists draw on when navigating difficult topics or making ethical decisions. Even when AI uses empathetic language, it often feels scripted or impersonal. Prof. Bodenmann emphasized that true healing in therapy comes not just from using the right technique, but from the presence of a therapist who is genuinely engaged and emotionally attuned. These human elements are still far beyond what AI can offer.

RQ3: How should AI and human therapists work together in the future?

Both Prof. Bodenmann and Alex support a blended care model where AI and therapists work together. In this model, AI plays a complementary role by handling structured, routine tasks like progress tracking, psychoeducation, and daily check-ins. This allows therapists to focus on what matters most by building trust, offering deep emotional support, and tailoring care to each individual's needs.

Alex explained that UpLife was designed specifically to fill the space before or between therapy sessions. It supports users with guided exercises and tracks progress, but therapists remain involved when clinical care is needed. All therapeutic content is written by professionals, and users are referred to human support when the situation calls for it. Therapists can also assign content through the app, allowing them to stay connected with clients between sessions.

Both interviewees agreed that AI should enhance what therapists already do, not replace it. Therapists remain at the center of care, while AI can expand access and ease the workload by handling supportive tasks. The most promising future is one where AI strengthens the therapeutic process without ever removing the human connection at its core.

Our Team's Reflections (HCI Perspective): From a human-computer interaction standpoint, we conclude that the future of mental health support lies in designs that blend human empathy with AI efficiency. Rather than asking “AI or human – which is better?”, the question becomes how to design interfaces and workflows where AI and human therapists complement each other's strengths. A well-designed system could, for example, have an AI chatbot that handles routine mood coaching but seamlessly hands off to a human therapist (or hotline) if a conversation crosses a risk threshold. The user might not need to decide, as the system could be designed to escalate when needed. In our exploratory study, both the industry expert and the academic expert independently arrived at this blended vision, reinforcing its viability. We believe HCI researchers and practitioners should prioritize user-centered design in this domain: understanding when users prefer a machine vs. a person, ensuring clarity of who/what they are interacting with, and making transitions between AI and human support smooth. Importantly, the value of human therapists is not diminished by AI. Therapists provide the compassionate, creative problem-solving that AI lacks, while AI can relieve therapists (and patients) of some logistical burdens and enhance adherence to therapeutic activities.

In conclusion, our study finds that AI mental health therapy is a powerful new tool that can widen access and supplement care, but it remains a tool, not a standalone solution. The growing reliance on AI in therapy must be paired with an appreciation of its limits. Human therapists and AI apps have distinct and complementary roles: by focusing on their respective strengths and working in tandem, they can deliver better mental health outcomes than either could alone. We are optimistic that with thoughtful design and collaboration, AI will not replace the therapist's chair but will rather sit helpfully beside it – a digital ally improving the reach and effectiveness of mental health support for all who need it.

Disclaimer

We used ChatGPT to refine the language for clarity and style, and NotebookLM to help search for related literature.

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