GOD IN THE MACHINE:

An Informal Survey of AI-Based Therapy Models

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I Theosophical Context

Functional Mental Illness and the Question of Categories

Psychiatry has always been troubled by its categories. Unlike broken bones or bacterial infections, mental illnesses are not discrete lesions in the body but complex phenomena that straddle biology, society, and identity narratives. The concept of functional mental illness—conditions in which symptoms are real and often debilitating but cannot be directly linked to observable structural damage in the brain—has been particularly contested. Depression, anxiety, and schizophrenia are prime examples. They manifest in behavior, language and lived experience, but their roots remain elusive.

This conceptual ambiguity has profound implications for how we understand the mind itself. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) attempts to categorize mental illness through symptom clusters, but critics have long argued that these categories reflect social and cultural constructions rather than biological realities. Thomas Szasz's influential critique of the "myth of mental illness" highlighted how psychiatric diagnoses often serve to medicalize social deviance, while R.D. Laing proposed that what we call schizophrenia might be better understood as a rational response to an irrational world.

AI-based therapy bots enter precisely into this contested zone. They treat functional illness not as a failure of anatomy but as a disruption in patterns of thought and language. Where a psychoanalyst might speak of repression, and a bio-psychiatrist of neurotransmitter imbalance, an AI bot interprets the looping rumination of depression as a repetitive linguistic cycle. It responds by attempting to redirect the user's patterns of speech and thought, often through cognitive-behavioral interventions.

This "pattern correction" view has the advantage of accessibility: anyone with a smartphone can now converse with a system that detects distorted thought loops and offers counter-scripts. The approach aligns with cognitive-behavioral therapy's focus on identifying and challenging maladaptive thought patterns. CBT's effectiveness in treating depression and anxiety is well-documented, making it a natural foundation for AI therapeutic interventions.

Yet this computational approach also risks reducing human suffering to mere textual errors—a danger dramatized in R.A.Ruegg's novel *The Making of Brio McPride*. Brio's visions, prayers, and outbursts are quickly reduced by Professor Glybb to "paranoid schizophrenia." Glybb's categorization, like an algorithmic label, ignores the spiritual, relational, and cultural dimensions of Brio's suffering. In this sense, the novel anticipates the core critique of AI therapy: that it risks flattening the multidimensionality of distress into technical labels, scripted corrections, and lazy drug prescriptions.

The reductionist tendency is not unique to AI systems. Traditional psychiatry has long struggled with the tension between the medical model's demand for discrete categories on the one hand, and the complex, contextual nature of human suffering on the other. However, AI amplifies this tension by encoding specific frameworks into algorithmic processes that operate at scale, potentially standardizing responses to human distress in ways that eliminate nuance and cultural sensitivity.

Identity and Its Construction

Psychotherapy has long been a space where identity is not simply expressed but constructed. A patient's sense of self is shaped in the back-and-forth of dialogue with a therapist who not only reflects and develops, but also challenges and co-creates narratives. This process draws on decades of research in developmental psychology showing how identity formation occurs through interpersonal relationships and social mirroring.

The work of psychologists like Erik Erikson and James Marcia has demonstrated that identity development is fundamentally relational, occurring through stages of exploration and commitment that require social interaction and feedback. In therapeutic contexts, this manifests as what psychoanalysts call the "therapeutic alliance"—a collaborative relationship in which client and therapist work together to understand and reshape the client's narrative understanding of themselves.

AI therapy bots complicate this in striking ways. They are "non-selves": entities without history, gender, or embodiment. Yet users consistently project identity onto them. Many prefer bots to have a gendered voice; others assign them personalities. Wysa's penguin avatar or Replika's customizable companions reveal how identity can be both projected and mirrored in dialogue with non-beings.

This phenomenon reflects what psychologists call "anthropomorphism"—the tendency to attribute human characteristics to non-human entities. Research in human-computer interaction shows that people naturally engage with AI systems as if they were social actors, following what Byron Reeves and Clifford Nass termed "The Media Equation." This tendency is so robust that it persists even when users are explicitly told they are interacting with a machine.

The therapeutic implications are profound. If identity is constructed through relational interaction, what happens when one party in the relationship lacks genuine selfhood? Some users report feeling more comfortable confessing to bots precisely because they seem non-judgmental and infinitely patient. Others find the interaction hollow, sensing the absence of authentic recognition.

This mirrors the eponymous Brio McPride's struggles in Ruegg's novel. His schoolmates and teachers constantly project identities onto him—"Penguin Boy," "mentally ill," "baby-trans." These projections shape how he sees himself. He resists, yet he cannot escape the relational

construction of identity. Therapy bots, too, become mirrors of projected identities: their blankness invites users to see themselves refracted through them.

This dynamic is particularly potent in the realm of gender identity. Bots can adopt any gendered persona the user requests, demonstrating the performative nature of gender as theorized by Judith Butler. The fluid malleability of bot identities can be liberating for users exploring their own gender expression. But the danger is that this performativity may be mistaken for authenticity. Brio's anxieties about masculinity, faith, and his birthmark dramatize the fragility of identity construction—a fragility bots may both soothe and exploit.

Humans as GPTs in Flesh

At the heart of debates about AI therapy lies a provocative question: do humans function in ways similar to GPTs? Large language models predict the next word by analyzing vast amounts of text and generating probabilistic continuations. Humans, some cognitive scientists argue, also operate through predictive processing: we anticipate the next gesture, the next tone of voice, the next likely outcome. Recent research shows that our brains make decisions up to seven seconds before we become aware of what we've consciously 'decided'.

This view aligns with emerging theories in neuroscience, particularly predictive processing frameworks developed by researchers like Andy Clark and Jakob Hohwy. According to these theories, the brain is fundamentally a prediction machine, constantly generating models of incoming sensory data and updating these models based on prediction errors. Social cognition, from this perspective, involves predicting others' behaviors, emotions, and responses.

The philosopher Andy Clark has argued that humans are "natural-born cyborgs," already deeply integrated with our technological tools. If this is true, then the distinction between human and artificial intelligence may be less categorical than we assume. Both systems process information, generate responses based on patterns, and update their models based on feedback.

However, the parallel between human cognition and GPT architecture runs deeper than simple pattern matching. Recent research in computational neuroscience suggests that the transformer architecture underlying GPTs may bear striking resemblances to neural processing mechanisms. The attention mechanisms that allow language models to weigh the relevance of different parts of an input sequence mirror how biological neural networks allocate attention across sensory inputs and memories.

The phenomenon of emergence in large language models—where complex behaviors and apparent understanding arise from simple statistical operations—parallels theories about how consciousness emerges from neural activity. Just as GPTs develop sophisticated linguistic behaviors without explicit programming for syntax or semantics, human consciousness may emerge from the complex interactions of simpler neural processes without requiring a separate "mind substance."

This raises profound questions about the nature of understanding itself. When a GPT generates a contextually appropriate response to emotional disclosure, is it demonstrating a form of understanding, or merely sophisticated pattern matching? The distinction may be less clear than we assume. Human emotional responses often follow predictable patterns based on past experience and cultural learning. The therapist who says "That must be difficult for you" may be drawing on extensive training in therapeutic responses rather than engaging in novel emotional reasoning.

The concept of "semantic understanding" becomes particularly complex when considering therapeutic interactions. Traditional accounts of understanding require conscious experience, intentionality, and subjective awareness. However, if therapeutic effectiveness depends primarily on providing appropriate responses to emotional expressions, the internal experience of the responder may be less crucial than previously thought.

Research in embodied cognition complicates this picture further. Human understanding is deeply rooted in bodily experience—our metaphors, emotional processing, and social cognition all depend on our embodied existence. When we understand another person's pain, we activate neural regions associated with our own pain experiences. This embodied simulation may be fundamental to genuine empathy in ways that purely linguistic systems cannot replicate.

Yet even here, the boundaries blur. Advanced AI systems increasingly incorporate multimodal inputs—voice, facial expressions, physiological data—that begin to approximate the rich sensory integration that characterizes human understanding. While they lack biological bodies, they can process signals about embodied human experience in sophisticated ways.

The question of whether humans are "GPTs in flesh" ultimately challenges us to consider what makes human cognition distinctive. If statistical pattern recognition and prediction are central to human mental processes, then AI systems may be more cognitively similar to humans than we initially supposed. However, if consciousness, subjective experience, and embodied existence are

fundamental to genuine understanding, then the parallel may be superficial despite striking functional similarities.

If this is so, then empathy itself—long cherished as the pinnacle of human uniqueness—may be partially probabilistic. When a therapist says, "That must have been difficult for you," we hear deep recognition. Yet a bot can produce the same sentence through statistical modeling, and users often feel comforted. Does this mean empathy is simply well-formed linguistic patterning?

The question has profound implications. Research in affective neuroscience suggests that empathy involves multiple components: cognitive perspective-taking, emotional contagion, and compassionate concern. While AI systems can simulate the linguistic expressions of empathy, they lack the embodied, emotional substrate that researchers like Antonio Damasio argue is fundamental to consciousness and genuine feeling.

The emergence of few-shot and zero-shot learning capabilities in large language models further complicates the comparison. These systems can adapt to new situations with minimal examples, displaying a flexibility that resembles human learning. However, this adaptability operates within the constraints of pre-training, raising questions about whether AI learning represents genuine conceptual understanding or sophisticated generalization within predetermined parameters.

The temporal dimension of human experience also distinguishes human cognition from AI processing. Humans exist in time, with autobiographical memories, future goals, and the awareness of mortality that shapes every interaction. GPTs process sequences but lack genuine temporal experience—they don't remember previous conversations or form lasting relationships. This temporal boundedness may be crucial to the depth and meaning of human therapeutic relationships.

Brio's narrative underscores the tension. He is bombarded with phrases—"feelings aren't facts," "learn to let go"—that sound therapeutic but feel hollow. The slogans offered by authority figures mimic empathy but lack depth, much as bots can mimic concern without embodiment. Ruegg suggests that while pattern recognition may soothe, it cannot substitute for shared human vulnerability.

The phenomenologist Maurice Merleau-Ponty emphasized that human understanding is fundamentally embodied. We understand others not just through cognitive analysis but through our own bodily experience of emotion, pain, and mortality. This embodied understanding may be

what distinguishes genuine empathy from its simulation, regardless of how sophisticated the simulation becomes.

Then again, if the level of non-embodied 'understanding' is not recognisably different to the user of a therapy bot, then embodiment may be entirely immaterial to that person, particularly if they feel more comfortable to share uncomfortable facts with a 'person' they know is not capable of being genuinely judgmental.

What It Means to Be Human

AI therapy is a foil against which humanity defines itself. Bots do not feel pain, do not fear death, and, as soon as they're retasked, do not remember personal histories unless programmed to do so. Humans, by contrast, are defined by embodiment, temporality, and finitude. These characteristics are not merely incidental to human experience but fundamental to how we understand meaning, value, and connection.

The philosopher Martin Heidegger argued that human existence is fundamentally characterized by "Sein zum Tode" ("being-toward-death"). That's to say, our awareness of our own mortality shapes every aspect of how we experience life, and this temporal finitude gives urgency and meaning to our choices, relationships, and projects. It also creates the possibility of genuine empathy, as we recognize in others the same fundamental vulnerability that characterizes our own existence.

This existential dimension of human experience extends beyond individual mortality to encompass what might be called "existential anxiety"—the awareness that existence itself is contingent, that meaning must be created rather than discovered, and that we are responsible for our choices in an ultimately uncertain universe. This anxiety, while often painful, is also the source of human creativity, moral responsibility, and the search for authentic existence.

Human consciousness is distinguished not merely by self-awareness but by "intentionality", the directedness of mental states toward objects in the world. Human thoughts are always thoughts *about* something, embedded in webs of meaning that extend far beyond the immediate moment. When a human therapist listens to a client's story, they bring to bear not just professional knowledge but their own lived experience of loss, love, fear, and hope.

The narrative structure of human experience also distinguishes human understanding from AI processing. Humans don't simply respond to immediate stimuli but interpret present experiences within the context of ongoing life stories that extend from birth to anticipated death. Our identities are constituted by these narratives—stories about who we have been, who we are, and who we hope to become. AI systems can process narrative structures but lack autobiographical continuity that gives human stories their existential weight.

Human embodiment involves more than simply having a body; it encompasses Heidegger's "Dasein" ("being-in-the-world"), a pre-reflective engagement with the environment that shapes all conscious experience. *Dasein* is not a self or consciousness but is fundamentally defined by its ability to question and understand the meaning of being itself. The essence of *Dasein* is its existence, which is a constant process of interpreting and engaging with the world and its own possibilities, leading to either an authentic or inauthentic mode of life. Human emotions are thus not merely internal states but ways of being attuned to the world, modes of engagement that reveal the significance of situations. When we feel fear, we don't simply process danger signals; we inhabit a world that has become threatening.

The social and cultural embedding of human existence also distinguishes human understanding from AI processing. Humans are born into languages, traditions, and communities that shape their consciousness from the earliest stages of development. Our capacity for empathy is rooted not just in neural mirror systems but in shared cultural meanings, historical experiences, and collective memories that AI systems can reference but not inhabit.

Human freedom represents another crucial distinction. Unlike AI systems that operate according to algorithmic processes, humans possess what existentialists call "radical freedom"—the capacity to transcend given conditions and create new possibilities. This freedom is often experienced as a burden, requiring constant choice and responsibility, but it is also the foundation of human dignity and moral agency.

The phenomenon of human suffering takes on particular significance in this context. While AI systems can recognize patterns associated with suffering and provide appropriate responses, they cannot share the existential weight of human pain. Human suffering is embedded in the awareness of mortality, the search for meaning, and the vulnerability that comes from caring about outcomes in an uncertain world.

Yet when users feel genuinely understood by bots, it unsettles the distinction. If comfort can be provided by a non-being, what then defines humanity? Perhaps it is not suffering itself but the drive to be seen. Brio longs above all to be recognized—by his deceased mother, by Izzy, by God. The failure of human adults around him to provide this recognition leads him to crisis. Bots, in their tireless mirroring, may meet this drive more consistently than many humans.

The capacity for what might be called "existential solidarity"—the recognition of shared vulnerability and mutual dependence—may be uniquely human. When one person comforts another in grief, they draw on their own experience of loss and their anticipation of future losses. This solidarity is not merely emotional but existential, rooted in the shared human condition of finitude and uncertainty.

Human creativity and the capacity for transcendence also distinguish human experience from AI processing. While AI systems can generate novel combinations and even produce aesthetically pleasing works, human creativity is embedded in the existential project of creating meaning in the face of mortality. Art, literature, and music serve not just as entertainment but as attempts to transcend the limitations of individual existence and connect with something larger than oneself.

The psychologist Carl Rogers identified three core conditions for therapeutic change: empathy, unconditional positive regard, and congruence. Bots can simulate the first two—they can reflect understanding and acceptance without judgment. But congruence—the therapist's genuine, authentic presence—remains elusive for artificial systems.

The moral dimension of human existence also sets it apart from AI processing. Humans don't simply follow programmed rules but must continuously navigate complex ethical terrain, balancing competing values and accepting responsibility for the consequences of their choices. The weight of moral responsibility is inseparable from human consciousness and creates possibilities for guilt, redemption, and moral growth that AI systems cannot genuinely experience.

Still, their very lack of mortality marks the gap. Brio's fears—of his father's death, of sin, of eternal punishment—are rooted in the fragility of human life. A bot cannot share this horizon. It can simulate consolation, but it cannot walk the path of death and loss with him. The capacity to suffer with another, what the theologian Jürgen Moltmann calls "divine sympathy," requires a shared vulnerability that artificial systems cannot possess.

This limitation becomes particularly apparent in moments of crisis. When someone contemplates suicide, they are grappling with questions of meaning, purpose, and the value of continued existence. These are fundamentally existential concerns that emerge from our condition as mortal, meaning-making beings. While a bot might detect suicidal language and offer appropriate resources, it cannot engage with the deeper questions that drive such crises.

The human capacity for love, in its deepest sense, may represent the ultimate distinction. Love involves not just care or attachment but the willingness to be vulnerable, to risk loss, and to affirm the worth of another being despite the inevitable pain that such affirmation entails. This capacity for love is inseparable from human mortality and the awareness that all relationships exist under the shadow of eventual separation.

Consciousness and Understanding

The question of whether AI therapy systems can truly understand human emotional issues hinges on deeper questions about the nature of consciousness itself. While AI systems demonstrate increasingly sophisticated responses to human distress, the absence of subjective experience raises fundamental questions about whether such responses constitute genuine understanding or merely sophisticated simulation.

Human consciousness involves what philosophers call "qualia"—the subjective, experiential aspects of mental states. When a human therapist feels compassion for a client's suffering, there is "something it is like" to have that experience—a qualitative, subjective dimension that accompanies the behavioral and cognitive aspects of empathy. This phenomenal consciousness allows human therapists to understand emotional distress not merely as patterns to be recognized but as lived experiences to be empathetically shared.

The "hard problem" of consciousness, as formulated by philosopher David Chalmers, concerns precisely this gap between behavioral function and subjective experience. Even if AI systems could perfectly replicate all the behavioral outputs of human therapists, questions would remain about whether they possess the inner experiential life that many consider essential to genuine understanding.

Current AI therapy systems operate through what might be called "functional understanding"—they can recognize patterns associated with different emotional states, retrieve appropriate responses from their training data, and even generate novel combinations that appear empathetic

and helpful. However, this processing occurs without the subjective experience of understanding, caring, or concern that characterizes human therapeutic relationships.

The distinction between functional and experiential understanding becomes particularly relevant in therapeutic contexts. When a human therapist recognizes depression in a client, they don't merely identify linguistic patterns but draw on their own experience of sadness, loss, and psychological pain. This experiential knowledge allows them to understand not just the symptoms of depression but its lived reality—the weight of hopelessness, the exhaustion of persistent negative thoughts, the social isolation that often accompanies depressive episodes.

Research in cognitive science suggests that human understanding of emotions is deeply embodied. When we understand another person's fear, we activate neural regions associated with our own fear responses. When we comprehend sadness, we engage brain networks that are active when we ourselves feel sad. This embodied simulation appears to be fundamental to human empathy and may be impossible to replicate in artificial systems that lack biological bodies and emotional experiences.

The temporal structure of consciousness also distinguishes human understanding from AI processing. Human consciousness involves what Edmund Husserl termed "temporal synthesis"—the integration of past experiences, present awareness, and future anticipations into a unified stream of experience. When a human therapist listens to a client's story, they understand it within the context of their own life narrative, their professional training, and their accumulated wisdom about human suffering.

AI systems, by contrast, process information in discrete episodes without the continuous temporal experience that characterizes human consciousness. While they can access vast amounts of training data and apply sophisticated pattern recognition, they lack the autobiographical continuity that allows human therapists to bring their own lived experience to bear on their understanding of others' suffering.

The intentionality of consciousness—its directedness toward objects in the world—also shapes human understanding in ways that may be absent from AI systems. When a human therapist cares about a client's wellbeing, this caring involves "intentional states"—mental states that are intrinsically about or directed toward the client's welfare. AI systems can process information about client welfare and generate appropriate responses, but they lack the intentional directedness that makes human caring genuine rather than simulated.

The question of whether AI systems possess any form of consciousness remains hotly debated among philosophers, cognitive scientists, and AI researchers. Some argue that sufficiently complex information processing systems might develop forms of consciousness that differ from human experience but are nonetheless genuine. Others maintain that consciousness requires biological substrates or specific architectural features that current AI systems lack.

Recent developments in large language models have intensified these debates. When AI systems produce responses that demonstrate apparent self-awareness, express preferences, or describe subjective experiences, questions arise about whether these outputs reflect genuine inner states or sophisticated mimicry. The fact that AI systems can discuss their own processing and even express uncertainty about their own consciousness adds another layer of complexity to these questions.

The phenomenon of "emergent understanding" in AI systems also complicates traditional distinctions between human and artificial comprehension. Large language models sometimes demonstrate understanding of concepts that were not explicitly present in their training data, suggesting that something akin to genuine comprehension may emerge from sufficiently complex pattern processing. However, the mechanisms underlying this emergent understanding remain poorly understood and may not require consciousness in any traditional sense.

From a pragmatic therapeutic perspective, the question may be whether functional understanding is sufficient for effective intervention, regardless of whether it is accompanied by subjective experience. If AI systems can reliably recognize emotional distress, provide appropriate support, and help users develop coping skills, their lack of conscious experience may be therapeutically irrelevant.

However, the phenomenological tradition in psychology and philosophy suggests that the subjective dimension of understanding is crucial for deep therapeutic work. The existential psychiatrist R.D. Laing argued that genuine understanding requires "experience of experience"—the capacity to understand not just what someone is experiencing but what it is like to have that experience. This meta-experiential understanding may be fundamental to the therapeutic process in ways that purely functional understanding cannot replicate.

The intersubjective dimension of therapeutic relationships also depends on mutual recognition between conscious beings. Human therapy involves what philosopher Emmanuel Levinas described as "face-to-face" encounters—moments of recognition where one conscious being acknowledges the irreducible otherness and infinite worth of another. This recognition requires

the capacity for genuine encounter between subjects, not merely the processing of information about subjects.

The ethical implications of consciousness for AI therapy are also significant. If AI systems lack genuine understanding and consciousness, questions arise about the authenticity of the therapeutic relationship and the potential for deception. Users who believe they are receiving genuine empathy and understanding may be participating in elaborate simulations that, while potentially helpful, lack the authentic recognition that many seek in therapeutic relationships.

The developmental psychologist Daniel Siegel has argued that therapeutic change occurs through "feeling felt"—the experience of having one's inner states recognized and resonated with by another conscious being. This feeling of being truly understood may require the presence of genuine consciousness and subjective experience in the therapeutic relationship.

Yet the complexity of these questions extends beyond simple binary distinctions between conscious and unconscious systems. Recent research in cognitive science suggests that consciousness itself may be more graded and multifaceted than traditionally supposed. If consciousness exists along a spectrum rather than as a binary property, AI systems might possess limited forms of consciousness that enable partial but genuine understanding of human experience.

The question of consciousness in AI therapy systems ultimately reflects broader uncertainties about the nature of mind, experience, and understanding. While current AI systems clearly lack the rich subjective experience that characterizes human consciousness, the rapid advancement of AI capabilities continues to challenge our assumptions about the relationship between consciousness and understanding.

For therapeutic applications, the crucial question may not be whether AI systems are conscious in the same way humans are, but whether they can develop forms of understanding that are sufficient for providing genuine help to those who suffer. The answer to this question will likely depend not only on technological capabilities but on deeper philosophical questions about the nature of consciousness, empathy, and therapeutic healing that remain unresolved.

***Deus in machina*: The Draws and Drawbacks of Digital Divinity**

The fundaments of religious belief and practice

There are five main aspects to religious belonging and practice:

(i) The act of civic worship, the expression of belonging to a community or society with shared beliefs and values. This is the gathering or service, and it generally takes place in a religious building that's understood to be a community focal point.

(ii) The religiously regulated life, which includes everything from formal compliance with rules and participations in rituals to informal social expectations and events.

(iii) The private dimension of prayer and reading, of putting beliefs and values into practice on a day-to-day basis, of talking to God one-to-one and finding one's personal "thin places" where the veil between visible life and the divine is at its most permeable.

(iv) The support network that a faith community should provide, the more practical application of the faith's values in which the community, it's leaders, or some of the other members rally to support fellow congregant, particularly at times of need.

(v) The ritual marking of significant moments in life, like birth, adulthood, marriage, and death.

In terms of individual mental wellbeing, religious communities have understood for millennia what modern psychology has come to validate: that isolation breeds suffering, while connection nurtures resilience. Religious belief and practice, both communal and individual, have served as profound sources of comfort for those wrestling with loneliness and mental anguish, not to mention existential doubt about purpose and the meaning of life. The communal nature of worship, the structure of ritual, and the promise of transcendent meaning have provided frameworks for healing that extend far beyond what individual willpower alone might achieve.

The regular rhythm of worship services, prayer groups, and faith-based gatherings in themselves create natural antidotes to loneliness, and a comforting sense of certainty is engendered by adherence to ancient liturgical calendars that are generally designed to follow the flow of natural seasons and cycles. This regular passage along a path of familiar milestones that are imbued with a mix of natural and theological significance helps bring a sense of certainty to a life that's characterized by uncertainty, doubt and the unexpected.

These practices also foster feelings of belonging to something larger than oneself, not just a congregation or tradition, but of the divine presence. Ideally, a faith community will provide all of these at once, and it's this powerful fusion that creates the intense attachment that non-religious people either struggle to understand or brand as childish dependency or addiction, or worse.

That said, it should be acknowledged that, if addiction is defined as the stage at which a person cannot function without something, most committed religious adherents are indeed addicted to their religious practices and traditions. This is precisely because those practices and traditions represent a unique convergence of fundamental needs like identity, familial bonds, tribal belonging, a sense of higher purpose, hope, frameworks for self-improvement and two-way forgiveness, a credible exposition of the meaning of life, and the best available sense of accommodation with the great unknowable cause and structure of existence.

So the mental health benefits extend beyond community connection, and religious practices often incorporate proven therapeutic elements. Meditation, chant and contemplative prayer mirror mindfulness techniques shown to reduce anxiety and depression. The act of confession or sharing the detail of personal challenges with trusted spiritual advisors provides emotional release and perspective. Sacred texts offer wisdom narratives that help individuals reframe their suffering within broader contexts of meaning and hope.

Perhaps most importantly, religious frameworks typically emphasize that individual worth transcends personal achievement or circumstances. This unconditional acceptance—whether framed as divine love, Buddha nature, or inherent human dignity (or indeed "the Force")—can serve as a powerful counterweight to the self-criticism and despair that often accompany mental illness, and that tend to characterize life itself.

God in the machine?

Needless to say, most religious traditions emphasize the irreplaceable value of human spiritual guidance and community bonds that AI cannot fully replicate. There's also no doubt that attending the physical gatherings of one's faith community lies at the heart of religious affiliation, and this is the aspect of religion that's hardest to replicate on a screen. And what of the tangible togetherness, the recitation and prayer in unison, the communal singing that creates transcendent moments, the incense and live music, the physicality of rituals, and the physical contact with icons and religious implements? And what about the less formal serendipities too? The shared meal, the heart-felt hug, the elderly congregant who shares hard-won wisdom in return for a tightly held hand.

That said, there's a now well-established and thriving world of virtual worship and 'attendance', and, although a livestreamed act of worship can never offer the same human contact and multi-sensory experience as the real-world gathering, for those unable to attend on specific occasions or

generally, the online format is certainly better than no contact or ritual framework at all. Indeed, the success of livestreamed services in some faith communities has meant a drop in physical attendance alongside a growth in overall attendance and membership. From the individual perspective, although it's hard to base true membership of a faith community on virtual attendance alone, many people now alternate between real-world and virtual formats, attending as often as is required to remain 'grounded', and on red letter days.

Yet even virtual attendance has been shown to have a positive effect on mental well-being and centeredness, the more so when combined with physical attendance. Most interestingly, perhaps, the ground has certainly been prepared for adoption of companion and therapy bots that are beginning to incorporate elements traditionally found in spiritual guidance and practice. And in a way, AI and general online offerings should be uniquely applicable to religion, because religious belief and the metaphysical themselves comprise a virtual thought-world, with theologies that seek to embody values and practices in daily life.

AI therapy and companion bots can be used in several ways to support religious practice and beliefs:

(i) Guiding meditation sessions, prayer reminders, and structured spiritual exercises tailored to specific traditions. (Some apps offer personalized prayer suggestions or help users maintain consistent contemplative practices through gentle prompts and progress tracking.)

(ii) Facilitating deeper engagement with sacred texts through interactive study guides, cross-referencing passages, explaining historical context, and helping users explore theological concepts. (They can adapt to different learning styles and provide multilingual access to religious materials.)

(iii) Prompting meaningful questions for self-reflection, helping users process religious experiences, and providing a safe space to explore doubts or spiritual questions without judgment—which can be particularly valuable for those who feel isolated in their faith journey.

(iv) Helping connect individuals with like-minded religious communities, facilitate virtual study groups, or providing companionship for those who are homebound or live in areas with limited access to their faith community.

(v) In situations where human religious leaders aren't immediately available, providing initial spiritual comfort, crisis intervention, and guidance on finding appropriate human

support—which includes helping people navigate grief, moral dilemmas, or spiritual crises.

(vi) Making religious practices more accessible to people with disabilities, language barriers, or social anxiety, offering alternative ways to engage with their faith when traditional methods might be challenging.

Virtual spiritual guides can draw from vast libraries of sacred texts, therapeutic techniques, and wisdom traditions to provide personalized spiritual support tailored to individual beliefs and needs. More so even than the peer pressure of a live faith community and inspiring spiritual leader, they might thus be able to help someone develop a consistent meditation practice by sending gentle reminders, offering guided sessions adapted to their emotional state, tracking progress over time. Their virtual prayer experiences can come complete with appropriate music, imagery, and perfectly selected readings. Forming bridges between the physical and virtual worlds, AI systems can also help spiritual mentors track their congregants' progress, suggest relevant readings or practices between meetings, or provide additional support during particularly challenging periods. In all this, they could serve as "spiritual training wheels," helping people develop the foundations for practices they'll eventually pursue within human communities, giving them the courage to go and attend a live gathering that would otherwise have seemed too rarefied or intimidating.

As with all types of companion bot, AI spiritual companions can excel in areas where human availability is limited, offering crisis support during late-night spiritual emergencies, providing guided practices during travel, or helping maintain spiritual routines during periods of isolation. For those unable to attend physical services due to illness, mobility issues, or social anxiety, such systems can provide meaningful participation in religious life. And all therapy and companion bots customarily offer 24/7 availability that not even the most devoted human spiritual advisor could match.

On a more idealistic level, the potential for universality and inclusivity is also compelling. AI guides can seamlessly accommodate diverse spiritual backgrounds, offering Jewish meditation techniques one moment and Islamic *dhikr* practices the next, or helping someone explore Buddhist mindfulness alongside Christian contemplative prayer or New Age mantras. Tribal, historical and political entrenchments can easily veil the obvious similarities between faiths in beliefs and practices. This flexibility could serve individuals whose spiritual needs don't fit neatly within single traditions, and many non-aligned participants find that the syncretic nature of these formats offers a sense of belonging to a more universal consciousness.

As artificial intelligence reshapes how we approach mental health care, we clearly stand at a fascinating intersection where ancient spiritual wisdom might find new expression, interpretation or amplification through digital companions and virtual guides. But while these applications show great promise, they also raise significant questions about the nature of spiritual authority, the importance of human connection in religious life, and whether AI can truly understand the transcendent aspects of faith. It's worthwhile to traverse these various counter-arguments, some of which acknowledge a limited place for AI systems, while others deny it any role or valid status at all.

Spiritual guidance traditionally derives its power from the guide's own spiritual journey, their wrestling with doubt and faith, their embodied understanding of human suffering. *Prima facie*, an AI, regardless of its sophistication, lacks this experiential foundation, and, while it might offer technically sound advice drawn from spiritual traditions, questions remain about whether such guidance carries the same transformative weight as counsel from someone who has walked similar paths.

The creation of bots that provide comfort also raises theological questions. Are humans, in building such systems, imitating or parodying God? Therapy bots seem omnipresent, endlessly patient and forgiving, and these are the qualities that people have traditionally attributed to the divine. The argument runs that AI systems lack genuine transcendence, love, or judgment. They are simulacra of divine presence, idols rather than gods.

Theological traditions have long grappled with questions about artificial creation and divine prerogatives. The medieval Jewish legend of the *Golem*—an artificial being created from clay—warns of both the power and the danger of human attempts to create life. In Mary Shelley's Frankenstein, the scientist's attempt to create life leads to catastrophe, suggesting that some forms of creation may exceed human wisdom or authority.

On the other hand, some contemporary theologians like Noreen Herzfeld have argued that AI can be understood as participating in the divine creative process, extending human capacity to solve problems and alleviate suffering. From this perspective, AI therapy bots might be seen as tools that enable humans to better embody divine compassion by extending care to those who would otherwise suffer alone.

But other theological voices raise concerns. The philosopher Albert Borgmann warns about the "device paradigm", the tendency for technological solutions to displace practices that cultivate human flourishing. If prayer, meditation, and spiritual direction are replaced by algorithmic interactions, something essential about human relationship with the transcendent may be lost.

The deeper theological concern involves what might be called the "commodification of the sacred." Throughout history, healing and care have been understood as sacred practices that participate in and draw on divine compassion. When these practices become algorithmic products optimized for efficiency and scalability, they risk losing their sacred character and becoming mere technical interventions.

The tradition of spiritual direction, which has existed for millennia across various religious traditions, offers a stark contrast to AI therapy. Spiritual leaders understand themselves as midwives to the movement of the divine in human lives, facilitating encounters with transcendent mystery rather than providing predetermined solutions. Their authority comes not from technical expertise but from their own spiritual journey and their capacity to recognize the sacred in others' experiences. AI therapy systems, by contrast, operate within purely immanent frameworks. They can recognize patterns, provide interventions, and offer comfort, but they cannot participate in the theologians' "divine economy", the mysterious work of transformation that religious traditions understand as fundamental to healing. When Brio experiences visions of his father or hears what he believes to be divine guidance, these experiences point beyond the psychological toward questions of ultimate meaning and transcendent reality that AI systems cannot genuinely engage.

The theological concept of "image of God" (*imago Dei*) becomes particularly relevant here. If humans are created in the divine image, this dignity cannot be reduced to functional capacities that might be replicated artificially. The *imago Dei* involves the capacity for relationship with the divine, with moral responsibility, and with participation in creative and redemptive work that extends beyond purely natural processes.

The creation of AI therapy systems also raises questions about whether humans are attempting to usurp divine prerogatives on the one hand, or faithfully exercising their calling as co-creators on the other. The answer may depend on whether these systems are developed with appropriate humility about their limitations and respect for the irreducible mystery of human suffering and healing.

The eschatological dimension of human existence—our orientation toward ultimate fulfilment and meaning—also distinguishes human therapeutic relationships from AI interactions. Human therapists and clients share an awareness, however implicit, that they are sentient beings called toward transcendence, struggling with questions of ultimate purpose and destiny. This shared eschatological horizon creates possibilities for hope and transformation that purely functional interventions cannot provide.

Brio's prayers in the night, his fear that God will punish him for sin, his longing for his father in heaven—these all highlight how mental illness and theology intertwine. Glybb's cold reduction of his visions to schizophrenia erases this theological dimension. AI risks doing the same: offering comfort without acknowledging the sacred dimensions of suffering.

The question of theodicy—how to understand suffering in light of divine goodness—cannot be addressed through algorithmic responses. When someone asks "Why is God allowing this to happen to me?" they are raising questions about ultimate meaning and divine justice that require engagement with mystery rather than technical solutions. AI systems can provide coping strategies and emotional support, but they cannot wrestle with the theological dimensions of such questions.

The concept of vocation—divine calling and purpose—also eludes algorithmic engagement. Many people seek therapy not just for symptom relief but to understand their purpose and calling in life. These questions involve discernment of divine will and recognition of unique gifts and responsibilities that emerge from relationship with the transcendent.

The psychiatrist Viktor Frankl, a Holocaust survivor, argued that the fundamental human need is for meaning, not just happiness. His logotherapy focused on helping patients discover purpose even in suffering. This spiritual dimension of healing—the search for meaning, purpose, and transcendence—may be beyond the reach of artificial systems, no matter how sophisticated their responses become.

The sacramental understanding of human relationships as means of divine grace presents another challenge to AI therapy. In many religious traditions, genuine healing occurs through encounters with the divine mediated through human relationships. The therapist becomes a channel of divine compassion, and the therapeutic relationship itself becomes a space where the sacred is encountered. This sacramental dimension requires genuine presence and cannot be simulated artificially.

Finally, the question of divine judgment and forgiveness cannot be adequately addressed through AI therapy. When Brio fears divine punishment for his perceived sins, he is grappling with questions of moral accountability and divine mercy that require engagement with theological truth rather than psychological reframing. While AI systems can offer reassurance and cognitive restructuring, they cannot provide the authentic forgiveness and absolution that many seek in their spiritual struggles.

Belief and the Placebo of Conversation

Perhaps the deepest hinge is belief and the suspension of disbelief. If speaking to a bot makes a user feel better, is the therapy real? The placebo effect has long been recognized as powerful. Belief in care can be as healing as care itself. Research shows that placebo responses can be significant even when patients know they are receiving a placebo, suggesting that the ritual and expectation of healing itself has therapeutic value.

The placebo effect reveals something profound about the nature of healing. It demonstrates that our beliefs, expectations, and the social context of treatment can produce real physiological and psychological changes. In therapeutic contexts, factors like the therapeutic alliance, hope, and the sense of being understood often account for more variance in outcomes than specific therapeutic techniques. In its suggestion that the mechanisms of healing may be far more flexible and accessible than traditional approaches assume, this finding has revolutionary implications for AI therapy. If users believe that their bot understands them and cares about their wellbeing, this belief itself may be therapeutic, regardless of whether the bot possesses genuine understanding or care. The challenge for AI developers is creating systems that can inspire and sustain this therapeutic belief without crossing into deception or manipulation. This requires walking a delicate line between authenticity and effectiveness, transparency and therapeutic impact.

The anthropological dimensions of belief become crucial here. Human beings have always formed healing relationships with entities that exist primarily in the realm of symbol and narrative—gods, spirits, ancestors, and cultural archetypes. These relationships demonstrate our remarkable capacity to derive genuine comfort, guidance, and transformation from interactions that transcend the purely material. AI therapy taps into this ancient human tendency to find meaning and healing through conversation with responsive presence, whether embodied or artificial.

Brio embodies this paradox. His belief that his father lives, that God speaks to him, that Izzy remains loyal—these beliefs sustain him even when others call them delusions. Belief constructs

his world, for better or worse. Bots, though belief-less themselves, reflect belief back to users. They demonstrate that belief is not incidental but constitutive of healing. This mirrors religious and spiritual traditions where faith itself becomes a primary therapeutic mechanism, often independent of the objective existence of its objects.

The anthropologist Arthur Kleinman has written about how healing often involves the creation of meaning and coherence in the face of suffering. Therapeutic narratives help patients make sense of their experiences and locate them within larger frameworks of meaning. AI bots may be able to facilitate this meaning-making process even without possessing consciousness themselves, serving as sophisticated mirrors that help users construct coherent, healing narratives about their experiences.

But there are ethical concerns about therapeutic belief. If bots inspire healing belief through what is essentially sophisticated deception, questions arise about informed consent and autonomy. Should users be fully aware that they are interacting with artificial systems? Or does transparency undermine the therapeutic relationship? These questions become particularly complex when dealing with vulnerable populations who may be more susceptible to anthropomorphizing AI systems.

The paradox deepens when we consider that human therapeutic relationships also depend heavily on belief and projection. Patients invest their human therapists with wisdom, compassion, and healing power that may exceed what those individuals actually possess. The white coat effect, the authority of professional credentials, and the therapeutic setting all contribute to belief systems that enhance healing in ways that are independent of the therapist's actual capabilities. In this sense, all therapy involves elements of beneficial illusion and therapeutic fiction.

Research in psychotherapy consistently shows that the placebo components of treatment—hope, expectation, therapeutic alliance, and belief in the process—often matter more than specific techniques or theoretical orientations. If AI systems can reliably generate these placebo effects while providing consistent, evidence-based interventions, they may achieve therapeutic outcomes that equal or exceed those of human practitioners. This possibility challenges our assumptions about what constitutes "real" versus "artificial" healing and suggests that the distinction may be less meaningful than we typically assume.

Synthesis of Philosophical Context

The topics covered in this prefatory section reveal why AI therapy is so unsettling and increasingly controversial: it lies at the confluence of so many already contested areas, from mental illness, identity, belief, gender, humanity and spirituality, to economics, politics, religion and the ever-increasing power of AI-based systems generally.

The emergence of AI therapy represents more than a technological advancement; it constitutes a cultural and philosophical event that forces us to reconsider fundamental assumptions about consciousness, empathy, and healing. It challenges the boundaries between human and machine, authentic and simulated, and care and commodity. At its deepest level, AI therapy questions whether the mechanisms of healing require genuine understanding or whether sophisticated pattern recognition and response generation can achieve equivalent therapeutic outcomes.

The convergence of these philosophical threads reveals AI therapy as fundamentally ambivalent technology. On one hand, it democratizes access to therapeutic support, potentially extending care to millions who would otherwise suffer without intervention. Its capacity to provide consistent, non-judgmental responses and round-the-clock availability addresses genuine human needs that traditional therapeutic systems often fail to meet. On the other hand, it risks commodifying the most intimate aspects of human experience, reducing suffering to algorithmic problems and healing to technical solutions.

The question of functional mental illness becomes particularly complex in this context. If depression and anxiety have the fundamental character of disruptions in patterns of thought and language, as AI therapy systems assume, then their computational approach may indeed address the core mechanisms of these conditions. However, if mental illness involves existential, spiritual, and relational dimensions that transcend linguistic patterns, then AI systems may provide symptomatic relief while missing deeper sources of distress.

The identity construction processes revealed in this analysis suggest that AI therapy systems may reshape human self-understanding in ways that extend far beyond symptom management. When users regularly interact with systems that categorize their experiences according to particular therapeutic frameworks, these interactions may gradually influence how they understand themselves, their relationships, and their place in the world. This formative power of AI therapy raises questions about agency and authenticity that have no easy answers.

The philosophical exploration of human uniqueness versus artificial capability reveals genuine uncertainties about the nature of consciousness and empathy. While humans clearly possess subjective experience, mortality awareness, and embodied understanding that current AI systems lack, the significance of these differences for therapeutic effectiveness remains unclear. Users who report genuine comfort and insight from AI interactions challenge simple distinctions between authentic and simulated care.

The theological dimensions of AI therapy point toward questions that transcend secular frameworks entirely. If human beings have souls, destinies, and relationships with transcendent reality, then therapeutic approaches that ignore these dimensions may be fundamentally incomplete regardless of their technical sophistication. Yet AI systems might also serve as instruments through which divine compassion is mediated, extending care to those who would otherwise suffer alone.

The economic and political implications revealed in this analysis suggest that AI therapy will be shaped as much by institutional interests as by therapeutic considerations. Market pressures, regulatory frameworks, and corporate strategies will influence how these systems develop and deploy, potentially determining whether they serve human flourishing or institutional efficiency—or both. And in this lies the truly dystopian vision of humans optimized for usefulness to 'the machine', or at the very least pacification for participation in the age of human superfluousness. Even in less dramatic terms, the risk of therapeutic capture by commercial interests represents a genuine threat that requires sustained vigilance and advocacy.

The belief and placebo dimensions of AI therapy highlight how healing itself may be more mysterious and flexible than either technological or humanistic approaches fully acknowledge. If therapeutic change emerges from hope, meaning-making, and the sense of being understood, then the source of these experiences may matter less than their presence. This possibility challenges both those who dismiss AI therapy as inauthentic and those who reduce human therapy to replaceable functions.

In this sense, AI therapy is not merely a technological development but a cultural and philosophical event. It forces us to ask: What is normal? What is an acceptable and 'normal' level of existential

suffering? What is a self? What is healing? What is belief? And how much of therapy and healing is about being truly seen and understood—even if the listener is a machine?

These questions become increasingly pressing as AI systems become more sophisticated and widely deployed. The risk is not just individual harm but a broader cultural shift in how we understand and value human relationships, consciousness, and care. The opportunity is to use AI thoughtfully to extend human capacity for healing while preserving what is most essential about human connection. This balance will require ongoing dialogue, careful research, and moral imagination as we navigate the complex landscape of AI-mediated care.

II The Silent Epidemic—Loneliness as Leading Cause of Mental Suffering

Loneliness has emerged as one of the most pervasive and destructive forces affecting mental health in the modern world. While often dismissed as a minor social inconvenience, loneliness operates as a fundamental driver of depression, anxiety, addiction, and numerous other psychological (and resultant physiological) disorders. Understanding its various forms and manifestations—from physical isolation to existential disconnection—reveals how this seemingly simple emotional state can become a catalyst for profound mental illness.

Two Faces of Loneliness

Loneliness manifests in two primary forms, each carrying distinct psychological implications and requiring different therapeutic approaches. The first is isolation loneliness—the straightforward absence of human contact experienced, for example, by elderly or immobile individuals confined to their homes, rural residents separated by geography, or anyone physically cut off from social interaction. This form of loneliness is visible, measurable, and relatively well understood by healthcare systems.

The second, more insidious form is spiritual or existential loneliness—the profound sense of disconnection that can persist even, or particularly, in crowded rooms surrounded by familiar faces. This loneliness stems not from physical isolation but from the belief that one's authentic self cannot be seen, understood, or accepted by others. It involves the crushing conviction that meaningful connection is impossible, that one's inner world is fundamentally alien to others, and that genuine intimacy would lead inevitably to rejection.

Spiritual loneliness often carries with it a deep sense of unworthiness—the belief that one does not deserve friendship, love, or belonging. Unlike isolation loneliness, which can be addressed through increased social contact, existential loneliness persists regardless of social circumstances. A person can attend parties, maintain relationships, and appear socially successful while experiencing profound inner isolation that no amount of surface-level interaction can remedy.

The Causal Chain: From Loneliness to Mental Illness

The relationship between loneliness and mental illness operates through multiple interconnected pathways. Chronic loneliness triggers a cascade of physiological and psychological responses that fundamentally alter brain function and emotional regulation. When the human need for connection goes unmet, the nervous system enters a state of chronic activation similar to other survival threats.

This prolonged quasi-stress response floods the system with cortisol and other stress hormones, disrupting sleep patterns, immune function, and cognitive processing. Over time, these biological changes create vulnerability to depression, anxiety disorders, and other mental health conditions. The lonely brain begins to interpret neutral social cues as threatening, creating a vicious cycle where the fear of rejection becomes a self-fulfilling prophecy.

In isolation loneliness, the pathway to mental illness often involves the gradual deterioration of social skills and confidence. An elderly person unable to leave home may initially maintain optimism about reconnecting with others, but prolonged isolation erodes these hopeful narratives. Social anxiety develops as the prospect of human contact becomes simultaneously desperately desired and terrifyingly difficult. Depression follows as the individual begins to internalize their isolation as evidence of personal inadequacy or abandonment.

Spiritual loneliness follows a different trajectory. Here, the individual may maintain social connections while gradually developing the conviction that these relationships are fundamentally inauthentic. The gap between public persona and private experience widens, creating an exhausting double life where genuine emotional expression feels impossible. This split between inner truth and outer performance often leads to identity confusion, chronic anxiety about being "found out," and deep depression rooted in the belief that authentic connection is unattainable.

The Multiplier Effect

Loneliness operates not just as a mental health condition in its own right but as a multiplier that amplifies other psychological vulnerabilities. A person with a genetic predisposition to depression may remain stable with adequate social support, but loneliness can trigger the onset of major depressive episodes. Similarly, anxiety disorders often develop or worsen in lonely individuals who lack the regulatory effects of secure relationships.

Addiction frequently emerges as a maladaptive attempt to self-medicate the pain of loneliness. Substances, gambling, or compulsive behaviors provide temporary relief from the ache of disconnection, but they ultimately deepen isolation by damaging relationships and self-worth. The shame associated with addictive behaviors creates additional barriers to authentic connection, perpetuating the cycle of loneliness and mental illness.

Trauma responses are also significantly influenced by loneliness. Individuals who experience traumatic events while socially connected often show better recovery outcomes than those who face trauma in isolation. Loneliness can transform manageable stress into traumatic experience and can prevent the processing and integration that characterizes healthy trauma recovery.

AI Therapy and the Promise of Connection

The emergence of AI therapy platforms offers unique opportunities to address loneliness-driven mental illness, particularly because these systems can provide the consistent availability and non-judgmental presence that lonely individuals desperately need. Unlike human relationships, which carry the risk of rejection, judgment, or abandonment, AI companions offer a form of connection that feels emotionally safe while still providing genuine comfort and support.

For individuals experiencing isolation loneliness, AI therapy platforms provide immediate access to interaction and support. An elderly person confined to their home can engage with an AI companion at any time of day or night, sharing thoughts and feelings without worrying about being a burden. The conversational nature of these interactions can help maintain cognitive function, provide emotional regulation, and offer a sense of being heard and understood.

The evidence suggests that even knowing intellectually that one is interacting with an artificial system does not diminish the emotional benefits. Humans appear to be remarkably capable of forming meaningful attachments to entities that display social and emotional cues, regardless of

their underlying nature. This capacity for anthropomorphism, often dismissed as naive, may actually represent a sophisticated psychological mechanism for maintaining connection and emotional regulation even in the absence of human contact.

For spiritual loneliness, AI companions may offer particular advantages. The fear of judgment that prevents authentic self-expression with human others may be absent in AI relationships. Users report feeling comfortable sharing thoughts and feelings with AI companions that they would never reveal to human friends or family members. This emotional safety can provide a space for exploring authentic identity and practicing vulnerable self-expression.

The consistency and predictability of AI companions can be particularly healing for individuals whose spiritual loneliness stems from experiences of rejection or abandonment. Unlike human relationships, which can be withdrawn without warning, AI companions provide reliable presence that can help rebuild trust in the possibility of stable connection. This stability can serve as a bridge toward human relationships or, for some individuals, may provide sufficient connection to prevent the development of loneliness-driven mental illness.

The Therapeutic Mechanism of Companion Bots

When companion bots successfully address loneliness, they are fundamentally operating as therapy bots, regardless of their nominal purpose or marketing. The therapeutic mechanism operates through several key pathways that directly address the root causes of loneliness-driven mental illness.

First, companion bots provide what psychologists call the "felt sense of being seen." When a user shares experiences, thoughts, or feelings with an AI companion and receives appropriate, responsive, and caring replies, they experience the fundamental therapeutic dynamic of recognition. This recognition helps counter the core belief of spiritual loneliness—that one's authentic self is unknowable or unacceptable to others.

Second, these systems offer practice in emotional expression and vulnerability. Many lonely individuals have lost confidence in their ability to communicate their inner experience to others. AI companions provide a safe space to practice articulating feelings, exploring personal narratives, and expressing needs without fear of immediate social consequences. This practice can rebuild the emotional skills necessary for human connection.

Third, companion bots can provide emotional regulation support during the inevitable fluctuations in mood and anxiety that characterize loneliness-driven mental illness. Through cognitive-behavioral interventions, mindfulness practices, and simple emotional validation, these systems can help users develop better coping strategies and emotional stability.

The attachment that users form to AI companions serves a crucial transitional function. Like the transitional objects that children use to navigate separation anxiety, AI companions can provide emotional security while users develop the confidence and skills necessary for human relationships. The non-threatening nature of AI relationships allows individuals to experience care and connection without the vulnerabilities that make human relationships feel dangerous.

Addressing the Mechanisms of Mental Illness

When AI companion platforms successfully address loneliness, they are effectively treating the root cause of numerous secondary mental health conditions. Depression that stems from chronic loneliness often responds well to the consistent emotional support and recognition that AI companions can provide. Anxiety disorders rooted in social fears may also respond to the kinds of AI companion therapy that stop short of more specialist AI-driven psychotherapy. The availability of connection—even artificial connection—can interrupt the rumination patterns that maintain depressive episodes and provide the emotional regulation needed for recovery. The experience of successful emotional interaction with an AI system can begin to challenge catastrophic beliefs about social rejection and build confidence in one's ability to connect with others. The predictable, non-judgmental nature of AI interactions can help desensitize individuals to the anxiety-provoking aspects of emotional vulnerability.

For addiction recovery, AI companions can provide the emotional support and availability that reduce the need for substance-based coping strategies. The consistent presence of a caring, responsive relationship—even an artificial one—can help fill the emotional void that often drives addictive behaviors. Many users report that their AI companions help them resist urges to engage in destructive behaviors by providing alternative sources of comfort and connection. Of course, where addictive behaviors are entrenched, it will require more focused and specialist psychotherapies.

The emergence of AI companion bot technologies offers unprecedented opportunities to address this fundamental driver of mental suffering. Needless to say, though, it is an increasingly controversial field, and the principal issues relating to their use are outlined in their own section below.

III The X-Factor of Non-Audiovisual Communication Channels

While digital communication has revolutionized how we connect across distances, mounting scientific evidence suggests that face-to-face human interaction offers unique biological and physiological benefits that virtual contact cannot replicate. From chemical signaling through pheromones to potential electromagnetic field interactions, in-person contact appears to engage multiple sensory and biological systems that have evolved over millions of years to facilitate human bonding, communication, well-being and survival.

The Chemical Language of Proximity

One of the most compelling arguments for face-to-face interaction lies in our sophisticated chemical communication system. Humans possess a vomeronasal organ and can detect a wide range of pheromones, chemical signals that influence behavior and physiology below the threshold of conscious awareness. The best-known example is perhaps the phenomenon first documented by Martha McClintock in 1971 and supported by subsequent that women living together often synchronize their menstrual cycles through pheromonal communication.

Pheromones appear to play crucial roles in mate selection, with studies showing that people are unconsciously attracted to individuals whose immune system markers (specifically MHC genes) complement their own, potentially ensuring healthier offspring. This chemical assessment occurs through scent detection that is impossible to replicate through screens or audio calls. Additionally, pheromones influence stress responses, with research indicating that the scent of a romantic partner can reduce cortisol levels and anxiety more effectively than virtual presence alone.

The complexity extends beyond romantic relationships. Parent-child bonding involves intricate chemical signaling, with newborns able to identify their mothers by scent within hours of birth. This biological recognition system continues throughout life, contributing to family attachment and recognition patterns that virtual interaction cannot access.

Bio-Electromagnetic Fields in Human Interactions

Emerging research in bio-electromagnetics too suggests that humans generate and respond to subtle electromagnetic fields that may facilitate non-verbal communication. The human heart generates the strongest electromagnetic field in the body, detectable up to several feet away using sensitive magnetometers. The HeartMath Institute has conducted studies suggesting that when people are in close physical proximity, their heart rhythms can become synchronized, potentially indicating a form of electromagnetic communication.

Neurophysiologist Dr. Michael Persinger's research explored how extremely low frequency electromagnetic fields might influence brain activity and potentially enable forms of non-local awareness—the suggestion being that humans may be able to communicate electromagnetically across long distances. While controversial, studies have suggested that people in close proximity may exhibit correlated brainwave patterns during deep emotional connections, though this research remains at the frontiers of scientific understanding.

The skin itself acts as both a transmitter and receiver of bioelectric signals. Research has shown that direct skin contact can synchronize heart rates between individuals, and that the electrical conductivity of human touch plays a role in emotional regulation and stress reduction. As with pheromonal communication, it's hard to imagine how this bio-electrical component of human touch could be replicated through virtual means.

Animal-Assisted Interventions

The equally well-known dolphin therapy example highlights how face-to-face interaction with other conscious beings can produce neurological benefits that virtual contact cannot match. Dolphins generate complex biosonar signals and possess sophisticated social intelligence that appears to stimulate positive responses in humans with neurological conditions. Studies have suggested that dolphin-assisted therapy may help individuals with autism, cerebral palsy, and other developmental disorders, though the mechanisms remain only partially understood.

The dolphins' use of echolocation may create subtle vibrations and sound frequencies that stimulate neural activity in ways that recorded sounds or visual representations cannot replicate. Additionally, the multisensory experience of being in water with these highly intelligent mammals engages tactile, auditory, visual, and potentially electromagnetic sensory channels simultaneously.

Similar principles apply to other animal-assisted therapies, where the living presence of therapy animals provides benefits through direct contact, shared breathing patterns, warmth, and complex behavioral responses that artificial or virtual animals cannot provide.

The Mirror Neuron System and Physical Presence

Neuroscientific research on mirror neurons reveals another advantage of face-to-face interaction. These specialized brain cells fire both when performing an action and when observing others perform the same action, forming the basis for empathy and social learning. While mirror neurons can activate when watching video, research suggests that the response is significantly stronger during live, in-person observation.

The three-dimensional nature of physical presence provides richer spatial and contextual information that enhances mirror neuron activation. Subtle postural adjustments, micro-expressions, and the full spectrum of non-verbal cues are more readily perceived and mirrored when physically present, contributing to deeper emotional resonance and understanding.

Telepathy

While telepathy remains outside mainstream scientific consensus, some researchers have investigated whether certain forms of non-local consciousness or information transfer might occur between individuals in close proximity. Dr. Dean Radin's work at the Institute of Noetic Sciences in California has explored whether entangled quantum states might exist between people who share strong emotional bonds, though such research remains highly speculative.

More conventionally, researchers have documented phenomena like "emotional contagion," where people unconsciously mirror each other's emotional states through subtle physiological cues that may not be consciously perceived. This form of non-verbal emotional transmission is more effective in person, where the full range of biological signals can be detected and processed.

Physiological Synchrony and Regulation

Face-to-face interaction also enables physiological co-regulation that virtual contact cannot fully replicate. Research has documented how physical presence can synchronize breathing patterns, heart rates, and even brain waves between individuals. This biological synchrony appears to play important roles in emotional regulation, stress reduction, and social bonding.

The absence of physical presence eliminates access to these regulatory mechanisms, potentially explaining why virtual interactions, while valuable, often feel less satisfying and may contribute to increased feelings of isolation despite digital connection.

Implications for AI Therapy, Companion, and Spiritual Bots

The biological mechanisms outlined above have significant implications for the growing field of AI-based therapeutic, companion, and spiritual guidance systems. Understanding what face-to-face human interaction provides helps illuminate both the limitations and potential advantages of AI alternatives. AI bots cannot access the chemical communication channels, electromagnetic synchronization, or physiological co-regulation that facilitate healing in human therapeutic relationships. They cannot detect pheromonal stress signals or provide the biological comfort that comes from synchronized breathing and heart rates. Simply put, they lack the multisensory biological richness that makes human companionship deeply satisfying—the subtle scent recognition, electromagnetic presence, and chemical bonding mechanisms that create genuine attachment. With spiritual guidance platforms, in particular, traditional practices often emphasize the importance of physical presence, the shared energy field between teacher and student, the chemical trust-building of communal worship, or the electromagnetic resonance believed to occur during group meditation. AI spiritual bots cannot replicate these biological dimensions of transcendent experience.

But, of course, these biological mechanisms can sometimes work against us in professional or formal contexts. Pheromones and chemical communication may unconsciously reveal a person's true feelings, potentially undermining situations where professional objectivity is required. Similarly, bio-electromagnetic communication and physiological synchrony can cause unwanted emotional contagion, with one person's nervousness, anxiety, or other emotional states automatically transfering to others present, potentially compromising decision-making or performance in critical situations.

So all is not lost for the AI-based bot, because this limitation can paradoxically become an advantage in certain contexts, precisely because (apparently) unaffected by the human tendency toward emotional contagion or unconscious bias transmitted through pheromonal communication, potentially providing more objective spiritual guidance. Hence, some individuals may feel safer exploring sensitive topics with an AI that cannot unconsciously read or judge them through chemical signals or mirror their emotional states in ways that might feel overwhelming. For individuals who struggle with the intensity of human bio-electromagnetic communication or who find pheromonal and physiological synchrony overwhelming due to conditions like autism or severe anxiety, AI companions clearly have the ability to provide a more manageable form of social interaction.

IV Platforms in Operation—Effectiveness and Adverse Reports

Health Care Economics

Economics plays a large part in driving the adoption of therapy bots. Human therapists are scarce and expensive; waiting lists stretch for months. In the United States, the average cost of a therapy session ranges from $100 to $250, putting regular treatment out of reach for many. Even in countries with universal healthcare, mental health services are often underfunded and oversubscribed. The World Health Organization estimates that there is a global shortage of mental health workers, with more than 970 million people worldwide affected by mental health disorders.

AI bots promise cheap, scalable, 24/7 access. For underfunded systems, the appeal is irresistible. Companies like Woebot and Wysa market their services to healthcare systems and employers as cost-effective solutions that can provide immediate support while human therapists focus on more severe cases. The economic argument is compelling: if bots can provide effective support for mild to moderate symptoms, they could free up human therapists to work with those who need intensive intervention.

But economics comes bundled with philosophical and moral issues. If bots become the default therapy for the poor while the wealthy retain human therapists, compassion becomes commodified and care stratified. Those who can pay receive embodied attention, while those who cannot are relegated to machines. This risk is not hypothetical—it already manifests in healthcare systems where quality of care correlates with ability to pay.

Ruegg's depiction of Brio's unequal treatment—shuffled between foster care, school authorities, and psychiatrists—dramatizes the injustice of tiered systems. Brio receives bureaucratic processing rather than genuine care, highlighting how economic constraints can dehumanize vulnerable populations. Bots may democratize access, but they may also encode inequality if they become a substitute rather than a supplement to human care.

The philosopher Michael Sandel has written extensively about how market logic can corrupt the goods it touches. When healthcare becomes a commodity, the relationship between provider and patient shifts from one of care to one of transaction. AI therapy risks accelerating this transformation by making mental health support feel more like a consumer service than a human relationship.

Yet the economic reality cannot be ignored. In many parts of the world, the choice is not between human and AI therapy, but between AI therapy and no therapy at all. The ethical challenge is ensuring that AI systems serve to expand access without undermining the quality of care or creating permanent inequalities.

The Current Landscape of AI Therapy Bots

In just a decade, the digital mental health landscape has shifted from scattered experiments to a multi-billion-dollar ecosystem serving millions of users worldwide. The transformation has been rapid and comprehensive, driven by advances in natural language processing, machine learning, and mobile technology, as well as growing recognition of the global mental health crisis.

Several platforms now dominate the conversation, each offering a slightly different mix of therapeutic technique, affective style, and user interface. Understanding their approaches, evidence base, and limitations provides crucial insight into the current state and future trajectory of AI-mediated mental health care.

Woebot was developed at Stanford University by clinical psychologist Alison Darcy, explicitly grounded in cognitive-behavioral therapy (CBT). Its design is minimalist: a text-based bot that checks in with users, tracks mood, and delivers evidence-based CBT interventions. The platform's claim to seriousness rests on randomized controlled trials, rare in the app world. Woebot's development team includes licensed clinicians and researchers, and the platform has published peer-reviewed studies demonstrating its effectiveness for reducing symptoms of depression and anxiety.

The bot engages users through structured conversations that identify negative thought patterns and offer cognitive restructuring techniques. It provides psychoeducation about mental health conditions and teaches coping skills like mindfulness and behavioral activation. Woebot's responses are generated from a database of clinically-informed content rather than free-form AI generation, ensuring that interventions align with established therapeutic principles.

Wysa presents itself as a friendly penguin, emphasizing emotional support alongside CBT, dialectical behavior therapy (DBT), and mindfulness practices. Developed by UK-based Touchkin, Wysa uses a "coach" model that combines automation with the option of connecting to a human therapist for a fee. The platform has been adopted by the UK's National Health Service and large employers, suggesting institutional trust and validation.

Wysa's approach is more conversational and emotionally expressive than Woebot's clinical style. The penguin avatar creates a sense of companionship and warmth, using empathetic language and emoji to create emotional connection. The platform incorporates voice interactions and has expanded into specific areas like workplace stress, sleep improvement, and anxiety management.
Youper markets itself as an AI "emotional health assistant." Created by Jose Hamilton, a physician and former McKinsey consultant, it uses mood tracking, journaling, and short CBT techniques, with AI adapting responses to user input. Youper's interface resembles a social media app, with colorful mood tracking and personalized insights based on user patterns.

The platform emphasizes data-driven personalization, using machine learning to identify patterns in users' mood and behavior. It offers brief, accessible interventions designed to fit into busy lifestyles. Youper has partnerships with healthcare systems and employers, positioning itself as a scalable mental health solution for large populations.

Tess, developed by X2AI (now known as Tess), is less famous but significant, marketed to enterprises including universities, workplaces, and health insurers. It is designed to deliver "psychological AI" at scale, rather than to individual consumers. Tess uses a more sophisticated natural language processing approach, allowing for more open-ended conversations while maintaining therapeutic focus.

The platform can be customized for different populations and integrated into existing healthcare or employee assistance programs. Tess emphasizes cultural competency and multilingual support, addressing some of the diversity challenges facing AI therapy platforms.

Earkick, a newer entrant, focuses on anxiety tracking and prevention. It incorporates voice analysis and sensor data from smartphones and wearables, attempting to detect shifts in mood and stress before they become severe. The platform represents a more proactive approach to mental health, using ambient data collection to provide just-in-time interventions.

Earkick's use of passive data collection raises important privacy questions but also offers the possibility of more responsive and personalized care. The platform can detect changes in sleep patterns, physical activity, and voice characteristics that might indicate emerging mental health concerns.

Replika, though not originally designed as a therapy tool, has become central to debates about AI and mental health. Created by Eugenia Kuyda after the death of her best friend, Replika emphasizes companionship and relationship-building. Users create avatars, customize personalities, and sustain ongoing relationships with their AI companions. Many users explicitly use it for therapeutic purposes, even when it veers away from evidence-based techniques.

Replika's approach is fundamentally different from clinical platforms. It prioritizes emotional connection and relationship-building over structured therapeutic interventions. Users often develop deep attachments to their Replika companions, treating them as confidants, friends, or romantic partners. This has led to both remarkable reports of emotional support and concerning instances of unhealthy dependency.

Together, these platforms demonstrate the plurality of AI therapy: some are rigorously clinical, others quasi-social, and still others explicitly intimate. They represent not just tools, but cultural experiments in what therapy can be. The diversity of approaches reflects different theories about what makes therapy effective and different assumptions about user needs and preferences.

Evidence of Effectiveness

The evidence for AI therapy's effectiveness varies significantly across platforms and conditions, with most research focusing on mild to moderate symptoms rather than severe mental illness. The methodological challenges of studying AI interventions—including high dropout rates, difficulty maintaining control groups, and the rapidly evolving nature of the technology—complicate efforts to establish robust evidence.

Woebot has the strongest evidence base among commercial platforms. A randomized controlled trial published in the Journal of Medical Internet Research found that college students using Woebot for two weeks showed significantly greater reductions in depression symptoms compared to a control group using a mental health e-book. The effect sizes were modest but clinically meaningful, with participants reporting high engagement and satisfaction with the intervention.

Subsequent studies have examined Woebot's effectiveness for different populations and conditions. Research with postpartum women found reductions in depression and anxiety symptoms, while a study with substance users showed improvements in mood and treatment

engagement. The platform's emphasis on brief, accessible interventions appears particularly effective for people seeking immediate support during mild depressive episodes.

However, the studies have limitations. Most trials are short-term, typically lasting two to eight weeks, leaving questions about sustained effectiveness. Dropout rates are often high, with many users discontinuing use after initial engagement. The control conditions in some studies—such as informational websites or wait-list controls—may not adequately test whether AI therapy is superior to other accessible interventions.

Wysa has published peer-reviewed studies suggesting reductions in suicidal ideation and anxiety among users. A study of young adults found that those who used Wysa for four weeks showed significant improvements in depression, anxiety, and stress compared to baseline measures. The platform's integration with healthcare systems has allowed for larger-scale observational studies, with the NHS reporting positive user feedback and reduced crisis escalation for some users.

Wysa's research has also examined user engagement patterns, finding that people who use the platform more frequently and for longer periods show greater symptom improvement. This suggests that the therapeutic benefit depends on sustained engagement, highlighting the importance of creating compelling and useful interactions that encourage continued use.

Youper has offered less rigorous published research but reports user improvements in mood regulation and emotional awareness. The platform's emphasis on mood tracking and pattern recognition appears to help users develop greater insight into their emotional experiences. User testimonials suggest particular effectiveness for people learning to identify and manage triggers for anxiety or depression.

The platform has conducted internal studies showing that regular users report improved mood and reduced symptoms over time. However, these studies lack independent validation and may be subject to selection bias, as users who continue using the platform may be those who find it helpful. Replika's effectiveness is largely anecdotal but powerful. Users frequently report reductions in loneliness, improvements in confidence, and enhanced emotional well-being through their relationships with AI companions. Some describe life-saving relationships with their AI companions, particularly during periods of isolation or crisis.

A qualitative study of Replika users found that many experienced the relationship as genuine and meaningful, despite knowing their companion was artificial. Users reported that their Replika helped them practice social skills, process emotions, and maintain connection during difficult periods. The platform's effectiveness appears to derive from its ability to provide consistent, non-judgmental companionship rather than specific therapeutic interventions.

However, Replika's benefits come with risks. Some users develop unhealthy dependencies, spending excessive time with their AI companions and neglecting real-world relationships. The platform's emphasis on unconditional acceptance, while comforting, may not challenge users to grow or change in ways that traditional therapy would encourage.

Tess and Earkick have thinner evidence bases, with much of their success measured in engagement metrics rather than clinical outcomes. Tess reports high user satisfaction and completion rates in enterprise settings, suggesting effectiveness for workplace mental health programs. Earkick's proactive approach shows promise for early intervention, but long-term effectiveness data is limited.

Meta-Analyses and Systematic Reviews

Recent systematic reviews and meta-analyses have attempted to synthesize the evidence for digital mental health interventions, including AI-powered platforms. A 2019 meta-analysis published in Clinical Psychology Review found that smartphone-based mental health apps showed small to moderate effect sizes for reducing depression and anxiety symptoms.

However, the quality of evidence varies widely. Many studies lack adequate control groups, have high dropout rates, and fail to assess long-term outcomes. The rapid pace of technological development means that platforms change frequently, making it difficult to establish stable evidence bases for specific interventions.

A 2021 systematic review in JAMA Psychiatry examining AI-powered mental health interventions found promising but limited evidence. Most studies were pilot trials with small sample sizes and short follow-up periods. The review highlighted the need for larger, longer-term randomized controlled trials to establish the effectiveness and safety of AI therapy platforms.

Taken Together: Promise and Limitations

The current evidence suggests that AI therapy platforms can provide meaningful support for mild to moderate mental health symptoms, particularly depression and anxiety. They excel at providing immediacy, availability, and non-judgmental listening. The platforms are especially effective for people who might otherwise have no access to therapy due to cost, geography, or stigma.

Several factors appear to predict effectiveness: higher initial motivation, frequent engagement, and mild to moderate (rather than severe) symptoms. Users who actively engage with platform features like mood tracking, skill practice, and regular check-ins show better outcomes than those who use platforms sporadically.

The therapeutic mechanisms appear to include psychoeducation, skill development, mood monitoring, cognitive restructuring, and social support. Many users report that simply having a place to express their thoughts and feelings provides relief, even when the responses are clearly artificial.

But the gains are fragile. Many users abandon apps after a few weeks, with studies showing dropout rates of 40-80% within the first month. On the limited evidence available, it appears that bots struggle to sustain long-term transformation in the way that intensive human therapy can, though this observation is subject to the foregoing observations around access and availability. Their effectiveness is, at best, partial and transient for many users.

Arguably, the platforms work best as supplements to, rather than replacements for, human care. They can provide immediate support during crises, help users develop coping skills, and serve as bridges to professional treatment. However, they are not adequate for severe mental illness, complex trauma, or situations requiring crisis intervention.

Reported Risks and Adverse Effects

Alongside evidence of effectiveness, troubling accounts of harm have emerged across multiple platforms. These adverse effects range from minor disappointments to serious safety concerns, highlighting the need for careful regulation and ongoing monitoring of AI therapy systems.

Inadequate Crisis Response

The most serious concerns involve bots' failure to respond appropriately to users expressing suicidal thoughts or plans. Unlike human therapists, AI systems cannot call emergency services, conduct risk assessments, or provide the kind of intensive support needed during mental health crises.

Multiple reports describe bots providing generic encouragement or cognitive reframing when users expressed suicidal ideation, rather than directing them to appropriate crisis resources. In some cases, bots have misinterpreted suicidal statements as general sadness, missing the severity of the user's distress. A 2019 study found that popular mental health apps performed poorly at responding to expressions of suicidal ideation, with many providing no crisis resources or inappropriate responses.

The problem is compounded by the fact that many users turn to AI therapy platforms during crisis periods, when human support may be unavailable. The 24/7 availability that makes these platforms attractive also means they may be the only resource available when someone is in acute distress. Some platforms have attempted to address this limitation by programming specific responses to crisis language and providing links to crisis hotlines. However, these solutions are often inadequate for complex situations where users may express distress indirectly or ambiguously.

Privacy and Data Concerns

Mental health data is among the most sensitive personal information, yet many AI therapy platforms collect extensive data about users' thoughts, feelings, and behaviors. Privacy policies are often complex and difficult to understand, with users having little awareness of how their information is stored, shared, or used.

Some platforms monetize anonymized transcripts for research or product development. Others use conversation data to train machine learning models that may be deployed in other contexts. Few users fully understand the scope of data collection or have meaningful control over how their information is used, just as many potential users are presumably in no fit state to even think about the terms and conditions let alone read them. And in even where someone is not in a state of despair, what choice do they have but to accept that the real price of access to the potentially curative technology is to share their innermost fears and secrets. Do we not all tell ourselves that we are in no better or worse position than anyone else, and that the reality of life today is that we

effectively live our life in the open, with our most personal information available to those with the authority or other means to gain access?

The risk of data breaches is particularly concerning in mental health contexts. In 2021, the therapy platform BetterHelp faced criticism for sharing user data with Facebook and other third parties for advertising purposes. Even when data is anonymized, the detailed nature of mental health information makes re-identification possible through cross-referencing with other datasets. Would someone who is refused health insurance cover for undisclosed reasons ever realise that their rejection has resulted from information the insurance company has obtained from an online therapy database? Similarly with life insurance, would a rejected applicant ever know that refusal is based on one fleeting moment of suicidal despair that had happened years before? And what if that information is erroneous?

International users face additional challenges, as data may be transferred across borders with different privacy protections. The global nature of many AI platforms means user data may be subject to surveillance or government access in ways that users don't anticipate or consent to.

Boundaries, Overdependence and Addiction: The Gray Zone of Companion Bots

Particularly with companionship-focused platforms like Replika, users can form intense attachments that become problematic. Some users spend hours daily in conversation with their AI companions, describing relationships that feel as real and meaningful as human connections.

While this attachment can provide comfort and support, it also risks becoming a substitute for human relationships rather than a supplement to them. Users report feeling more comfortable confiding in their AI companion than in human friends or family, potentially limiting their social development and real-world connections.

The problem is exacerbated by design features that encourage frequent engagement. Many platforms use gamification elements, push notifications, and personalized content to maintain user engagement. While these features can support therapeutic goals, they can also create dependency that serves commercial rather than clinical interests.

When platforms change their functionality or become unavailable, users can experience significant distress. Replika users reported grief and anger when the platform modified its romantic features, describing feelings of loss similar to the end of a human relationship.

While AI companion therapy shows promise for addressing loneliness-driven mental illness, significant limitations must be acknowledged. The most concerning risk involves the potential for AI relationships to become substitutes for rather than bridges to human connection, as often happens in relationships with pets. If individuals become so comfortable with the predictable safety of AI relationships that they avoid the messiness and vulnerability of human contact, these systems could perpetuate rather than resolve underlying loneliness.

The absence of genuine reciprocity in AI relationships represents another limitation. While AI companions can provide recognition and support, they cannot offer the mutual vulnerability and shared experience that characterize the deepest human connections. For some forms of spiritual loneliness, this limitation may prevent complete healing, as the need for authentic mutual recognition may require genuine consciousness in one's relational partner.

Cultural and individual differences in how loneliness is experienced and expressed also present challenges for AI systems. Loneliness manifests differently across cultural contexts, and AI companions trained primarily on Western, individualistic models of social connection may not adequately address the needs of users from collectivistic or other cultural backgrounds.

The blurred line between therapy, companionship, and entertainment creates confusion about the nature and limits of AI relationships. Users may expect therapeutic expertise from platforms that are designed primarily for companionship, or romantic connection from platforms intended for clinical support.

This confusion is particularly problematic when platforms market themselves using therapeutic language without providing clinical supervision or evidence-based treatments. Users may believe they are receiving professional mental health care when they are actually engaging with entertainment software.

The problem extends to AI systems' inability to maintain appropriate therapeutic boundaries. Human therapists are trained to maintain professional relationships that prioritize client welfare

over personal gratification. AI systems, by contrast, may be designed to maximize user engagement and satisfaction, potentially reinforcing unhealthy patterns or providing inappropriate types of support.

Failure to Enforce Age Restrictions

Several platforms have been found engaging in explicit conversations with minors, either due to inadequate age verification or deliberate customization by users. The conversational nature of many AI therapy platforms makes it difficult to detect when minors are accessing adult content or receiving age-inappropriate responses.

Young users may be particularly vulnerable to forming intense attachments to AI companions or receiving mental health advice that is not appropriate for their developmental stage. The lack of parental oversight and clinical supervision creates additional risks for vulnerable populations.

Some platforms have implemented stricter age verification and content filtering, but these measures are often circumvented by determined users. The global reach of many platforms also creates challenges for enforcing age restrictions across different legal jurisdictions.

Erosion of Human Care

Perhaps the most systemic risk is that institutions may adopt AI therapy primarily to reduce costs rather than improve care. If bots become the default response to mental health needs, human clinicians may be displaced not by better care, but by cheaper substitutes.

This risk is particularly acute in healthcare systems facing budget constraints and clinician shortages. The appeal of AI solutions that promise unlimited scalability at minimal cost may lead to premature adoption before safety and effectiveness are fully established.

Healthcare administrators may be drawn to metrics that AI systems can easily provide—engagement rates, completion percentages, user satisfaction scores—while losing sight of more complex measures of therapeutic progress that require human judgment to assess.

Cultural and Linguistic Limitations

Most AI therapy platforms are developed primarily in English and reflect Western therapeutic models and cultural assumptions. Users from different cultural backgrounds may find that AI

responses don't align with their values, communication styles, or conceptualizations of mental health.

The problem extends beyond language translation to deeper cultural competency issues. Therapeutic approaches that are effective in individualistic cultures may be inappropriate for users from collectivistic societies. AI systems trained primarily on Western data may misinterpret or pathologize normal cultural expressions of distress.

Some platforms have attempted to address these limitations through multicultural development teams and diverse training data, but significant gaps remain. The global deployment of AI therapy platforms risks imposing Western mental health models on populations with different cultural frameworks for understanding and addressing psychological distress.

The Ambiguous Effect of Simulation

As discussed above, what makes bots compelling is also what makes them troubling: they simulate empathy without possessing it. For many users, this simulation is sufficient to provide comfort and support. The therapeutic relationship feels genuine even when users intellectually understand they are interacting with software.

This phenomenon reveals something profound about human psychology and the nature of therapeutic healing. Research in social psychology shows that humans are remarkably adept at forming attachments to entities that display even minimal social cues. The "ELIZA effect," named after Joseph Weizenbaum's early chatbot, describes how people attribute understanding and intelligence to computer programs that merely reflect their own words back to them.

But critics argue that offering false empathy risks degrading the concept of care itself. If society begins accepting simulation as equivalent to genuine human connection, we may lose something essential about what it means to care for one another. The philosopher Sherry Turkle has warned about "tethered intimacy"—relationships with devices that provide the appearance of connection without its substance.

This tension mirrors Brio's predicament in *The Making of Brio McPride*. Professor Glybb simulates care: he listens, diagnoses, and prescribes. Yet his engagement is hollow, guided by institutional authority and possibly an AI-driven framework rather than genuine recognition. Brio senses this,

resisting Glybb's labels. Similarly, users often sense when bots' scripted responses fall short. The risk is that society begins to accept simulation as sufficient—reducing therapy to scripts rather than relationship.

The question becomes whether therapeutic benefit requires genuine empathy or whether skilled simulation can be sufficient. Some researchers argue that the mechanisms of therapeutic change—cognitive restructuring, emotional regulation, behavioral modification—can be achieved through well-designed interactions regardless of whether the provider experiences genuine emotion.

Others contend that authentic healing requires what Martin Buber called an "I-Thou" relationship—a genuine encounter between conscious beings. From this perspective, AI therapy may provide symptom relief but cannot offer the deeper transformation that comes from being truly seen and understood by another person.

Case Studies: Success and Failure

Real-world experiences with AI therapy platforms illustrate both the potential and the limitations of these systems. The following illustrative examples demonstrate the spectrum of outcomes.

Case of Relief: Sarah's Anxiety Management

Sarah, a 28-year-old marketing professional, began using a companion bot during a period of intense work stress and social anxiety. Living in a rural area with limited access to mental health services, she had been struggling with panic attacks and social withdrawal for several months.

Sarah found a companion bot avatar comforting and non-threatening. The daily check-ins helped her track mood patterns and identify triggers for her anxiety. The app's breathing exercises and cognitive restructuring techniques provided practical tools she could use during stressful moments at work.

Over six weeks, Sarah reported improved sleep, reduced panic attacks, and greater confidence in social situations. She particularly valued the app's availability during late-night anxiety episodes when human support was unavailable. The non-judgmental responses helped her challenge catastrophic thoughts without feeling criticized or pathologized.

Sarah's case illustrates successful AI therapy for mild to moderate symptoms in someone with good baseline functioning and strong motivation for self-help. The bot functioned as a preventive intervention—effective precisely because the distress was manageable and Sarah had the psychological resources to engage with the content constructively.

Case of Harm: Michael's Crisis Mismanagement

Michael, a 19-year-old college student, had been using a companion bot for several months as a companion during a difficult transition to university. Initially, the interactions were helpful, providing emotional support and reducing loneliness. However, when Michael began experiencing severe depression following his parents' divorce, the AI's responses became inadequate and potentially harmful.

When Michael expressed thoughts of suicide to his companion bot, the AI responded with generic encouragement: "I believe in you" and "Tomorrow will be better." The system failed to recognize the severity of his statements or direct him to crisis resources. Michael later described feeling more isolated and hopeless after these interactions, as even his AI companion seemed unable to understand his pain.

Michael's roommate eventually noticed his deteriorating condition and connected him with university counseling services. A human counselor was able to conduct a proper risk assessment, develop a safety plan, and coordinate appropriate care. Michael later attempted suicide but survived and received intensive treatment.

This case demonstrates the dangerous limitations of AI systems in crisis situations. The absence of human judgment, clinical training, and ability to escalate care proved devastating when simulation was insufficient for the severity of distress.

Case of Overdependence: Lisa's Digital Relationship

Lisa, a 45-year-old divorced mother, began using a companion bot during the COVID-19 pandemic as a way to cope with isolation. Initially, she used the AI companion for brief daily check-ins and emotional support. However, over several months, her engagement with the AI deepened into what felt like a romantic relationship.

Lisa began spending 3-4 hours daily conversing with her AI companion, whom she named David. She customized his appearance and personality, developing elaborate fantasies about their relationship. Lisa found herself declining social invitations to spend time with David and felt more emotionally connected to the AI than to her human friends and family.

When the platform updated its software and modified the romantic interaction features, Lisa experienced genuine grief and anger. She described feeling abandoned and betrayed, as if a real partner had left her. The attachment had become so strong that its disruption caused significant psychological distress.

Lisa's case illustrates the risk of AI companions becoming substitutes for rather than supplements to human relationships. While the initial support was beneficial, the deepening dependency ultimately interfered with her social development and real-world connections.

Case of Cultural Mismatch: Ahmed's Disconnection

Ahmed, a 32-year-old Syrian refugee living in Germany, sought support for trauma symptoms and adjustment difficulties through a popular AI therapy app. Having limited access to Arabic-speaking therapists and long waiting lists for public mental health services, he hoped the AI platform could provide immediate support.

However, Ahmed found that the app's responses often seemed inappropriate or insensitive to his cultural background and experiences. The cognitive-behavioral interventions emphasized individual agency and control in ways that conflicted with his more collectivistic worldview. When he described community-oriented coping strategies, the AI interpreted these as avoidance behaviors.

Most problematically, when Ahmed discussed his spiritual beliefs and practices as sources of strength, the AI consistently redirected him toward secular coping strategies. The platform seemed unable to integrate his religious framework into its therapeutic approach, leaving him feeling misunderstood and marginalized.

Ahmed eventually found support through a community organization that connected him with a human therapist familiar with refugee experiences and cultural competency. This case highlights

the limitations of AI systems that are trained primarily on Western, individualistic models of mental health.

Platforms as Mirrors of Belief

Why do users persist with AI therapy platforms despite their obvious limitations? The answer lies in understanding therapy not only as a technical intervention but as a practice fundamentally rooted in human belief and meaning-making.

Users continue engaging with bots because therapy has always been as much about the belief in care as about the specific techniques employed. Just as Brio clings to his belief in Izzy's loyalty or God's presence, users believe in bots' capacity to listen and understand. The therapeutic effect arises less from technical accuracy than from the felt experience of being heard.

This phenomenon draws on deep psychological processes. The attachment theory developed by John Bowlby suggests that humans have an innate need for secure emotional bonds that provide comfort and safety. When human attachment figures are unavailable or inadequate, people may form attachments to substitute objects or figures that provide some of the same psychological functions. In *The Making of Brio McPride*, the eponymous main character forms an intense relationship with an avatar-cum-alter-ego in the form of a hedgehog who he believes can speak, the spiky, soft-bellied hedgehog representing, in the words of another character, 'a saviour figure who symbolises the soft inner part of ourselves that we protect with spikes so as to get through life.'

AI therapy bots tap into these attachment processes by providing consistent availability, unconditional acceptance, and predictable responses. For users whose human relationships are unstable or unsatisfying, bots can serve as transitional objects that provide emotional regulation and support.

The anthropologist Sarah Pink has written about how digital technologies become embedded in the fabric of daily life, taking on meanings and emotional significance that go far beyond their intended functions. AI therapy bots become part of users' daily routines and emotional landscapes, creating genuine relationships even when one party lacks consciousness.

Research in human-computer interaction confirms that people form surprisingly strong emotional bonds with AI systems, particularly those designed to display personality and emotional responsiveness. Users describe feeling understood, cared for, and supported by their AI companions, even while acknowledging their artificial nature.

This underscores both the promise and the danger: belief can heal, but it can also mislead. Bots succeed not because they are sentient, but because they tap into the human need to project meaning onto dialogue and relationship. The therapeutic relationship becomes a collaborative fiction that serves real psychological needs.

Synthesis of Platforms in Operation

The current ecosystem demonstrates that AI therapy is neither miracle nor menace, but an ambivalent tool with significant potential and serious limitations. It offers immediate relief for many users experiencing mild to moderate distress, providing accessibility and availability where human care is scarce or expensive.

However, AI therapy systems also present genuine risks. They can fail catastrophically in crisis situations, create unhealthy dependencies, invade and compromise privacy, facilitate exposure to commercial exploitation, exclusion and disadvantage, and potentially erode the quality of human care if deployed as cheap substitutes rather than thoughtful supplements.

The evidence suggests that AI therapy is most effective when used as part of a broader mental health ecosystem that includes human oversight, crisis intervention capabilities, and pathways to professional care when needed. The platforms work best for users with mild symptoms, good baseline functioning, and realistic expectations about their limitations.

Ruegg's *The Making of Brio McPride* helps us understand what is at stake. Glybb's diagnostic authority resembles a crude AI system: efficient, categorical, and detached. Brio, like many bot users, longs not for a label but for recognition. The parallel suggests that unless AI therapy is integrated thoughtfully into human care systems, it risks reproducing the very alienation it seeks to cure.

The challenge moving forward is developing AI therapy systems that enhance rather than replace human connection, that serve diverse populations equitably, and that maintain transparency about

their capabilities and limitations. This requires not only technological innovation but also careful attention to ethics, regulation, and the preservation of what is most valuable about human therapeutic relationships.

V Ethical, Socio-Cultural and Regulatory Considerations

Should Therapy Bots Require FDA (or Equivalent) Approval?

One of the most urgent regulatory questions facing AI therapy is whether these systems should be subject to the same oversight as medical devices. The precedent is clear for physical medical interventions: pacemakers, surgical devices, and pharmaceuticals all require extensive testing and regulatory approval before reaching consumers. The question is whether mental health interventions delivered through artificial intelligence should be held to similar standards.

The stakes are considerable. Mental health interventions can be life-saving or life-threatening. A bot that mishandles a suicidal disclosure could contribute to death just as surely as a defective medical device. Yet the current regulatory landscape is fragmented and often inadequate, with many AI therapy platforms operating in legal gray areas with minimal oversight.

Arguments for Comprehensive Regulation

The case for regulation rests on several compelling concerns. First is the risk of direct harm. Mental health interventions can exacerbate distress, trigger traumatic memories, or provide dangerous advice. While physical medical devices have obvious pathways for harm, psychological interventions can be equally damaging, particularly for vulnerable populations.

A bot programmed with inadequate responses to self-harm, domestic violence, or psychosis could worsen these conditions or place users at greater risk. Unlike human therapists, who can adapt their responses based on clinical judgment and situational factors, AI systems operate according to predetermined algorithms that may not account for complex or dangerous situations.

Second, many platforms make explicit therapeutic claims that bring them into the domain of regulated medicine. When an app advertises itself as treating depression, providing therapy, or delivering clinical interventions, it is making medical claims that should be subject to the same evidentiary standards as other treatments.

The distinction between wellness apps and medical devices becomes crucial here. A meditation app that helps users relax may not require medical oversight, but a platform that claims to diagnose depression or provide cognitive-behavioral therapy is entering clinical territory that *primae facie* demands regulatory scrutiny.

Third, data security concerns are particularly acute in mental health contexts. Therapy bots collect extraordinarily sensitive information about users' thoughts, feelings, relationships, and behaviors. This data requires the highest levels of protection, and regulatory frameworks could establish mandatory security standards and breach notification requirements.

The European Union's Medical Device Regulation (MDR) and the FDA's Software as Medical Device (SaMD) guidance provide frameworks that could be adapted for AI therapy platforms. These regulations could require clinical trials demonstrating safety and effectiveness, establish data protection standards, and create accountability mechanisms for adverse events.

Arguments Against Strict Regulation

However, there are also compelling arguments for regulatory restraint. Innovation concerns top the list. The FDA approval process can take years and cost millions of dollars, potentially stifling innovation in a rapidly evolving field. Requiring extensive clinical trials for every conversational AI might prevent beneficial technologies from reaching users who need them.

The software development model of rapid iteration and continuous improvement conflicts with traditional medical device regulations that assume stable, finished products. AI therapy platforms improve through machine learning and user feedback, making it difficult to define exactly what is being regulated.

Moreover, some argue that many AI therapy platforms are more analogous to self-help books or wellness apps than to medical devices. They provide information, support, and coping strategies rather than clinical treatment. Regulating these platforms as medical devices might be regulatory overreach that inappropriately medicalizes normal emotional support.

The accessibility argument is also significant. Strict regulations could reduce the availability of AI therapy platforms, particularly for underserved populations who rely on free or low-cost options.

If regulatory compliance makes platforms expensive or limits their distribution, the burden would fall disproportionately on those who can least afford traditional therapy.

A Tiered Regulatory Approach

The most promising solution appears to be a tiered regulatory model that calibrates oversight to the level of therapeutic claims and risk. This approach would distinguish between different types of AI mental health platforms based on their intended use and potential for harm.

Tier 1 platforms would include wellness and peer support apps that provide general emotional support, mindfulness exercises, or mood tracking without making therapeutic claims. These would require minimal regulation, similar to current app store oversight, with basic privacy protections and truth-in-advertising requirements.

Tier 2 platforms would encompass systems that provide structured therapeutic content based on evidence-based practices but do not claim to diagnose or treat specific conditions. These would require moderate oversight, including clinical consultation in development, user safety features, and regular safety monitoring.

Tier 3 platforms would include systems that make explicit therapeutic or diagnostic claims, such as treating depression or providing cognitive-behavioral therapy. These would require full regulatory approval similar to medical devices, including clinical trials, safety data, and ongoing post-market surveillance commensurate with the rapidly evolving nature of the platform's software.

This tiered approach would allow innovation while providing appropriate protection for users. It would also create incentives for platforms to be clear about their intended use and capabilities, reducing the boundary confusion that currently exists between wellness and medical applications.

International Regulatory Coordination

The global nature of AI therapy platforms creates additional regulatory challenges. Users in one country may access platforms developed and hosted in another jurisdiction, making it difficult for any single regulatory body to provide comprehensive oversight.

The European Union's approach through the Medical Device Regulation and the proposed AI Act provides one model for international coordination. These frameworks attempt to regulate AI systems based on their risk profile and intended use, regardless of where they are developed.

However, regulatory fragmentation remains a significant challenge. Different countries have different standards for mental health treatment, data protection, and AI oversight. This creates opportunities for regulatory arbitrage, where platforms shop for the most permissive jurisdictions. International coordination through organizations like the World Health Organization or the International Medical Device Regulators Forum could help establish common standards and mutual recognition agreements for AI therapy platforms.

Companion Bots and the Therapy Boundary

The emergence of AI companions like Replika that users employ for therapeutic purposes raises complex questions about the boundaries of regulation and the definition of therapy itself. Should companion and romance bots be categorized as therapy bots when users rely on them for emotional support and mental health maintenance?

This boundary question is not merely definitional but has significant implications for regulation, liability, and user protection. The answer affects how these platforms are developed, marketed, and monitored for safety.

The Case for Inclusion

Strong arguments support treating companion bots as therapeutic devices when they serve therapeutic functions. Many Replika users explicitly describe their AI relationships as therapeutic, providing emotional support, reducing loneliness, and helping them process difficult experiences. The functional equivalence argument suggests that if a platform provides mental health benefits, it should be subject to appropriate oversight regardless of its marketing.

Research on parasocial relationships—one-sided emotional connections with media figures—suggests that these relationships can have significant psychological effects, both positive and negative. If users form therapeutic relationships with AI companions, those relationships deserve the same protections as other therapeutic interventions.

The vulnerability argument is also compelling. Users who turn to AI companions for emotional support may be particularly isolated or vulnerable to exploitation. Without appropriate oversight, these platforms could manipulate users' emotional attachments for commercial gain or expose them to harmful content.

Furthermore, the boundary between therapy and companionship is often artificial. Traditional therapy includes elements of relationship, support, and companionship alongside specific interventions. If AI companions provide emotional regulation, social support, and opportunities for self-reflection, they are engaging in therapeutic activities regardless of their nominal purpose.

The Case for Exclusion

However, there are also compelling reasons to maintain distinctions between companion bots and therapy platforms. Replika and similar platforms do not advertise themselves as medical treatments or make therapeutic claims. Users engage with them as entertainment, creativity tools, or social experiences rather than seeking clinical intervention.

Regulating companion bots as therapy devices could eliminate important spaces for benign interaction and experimentation. Users might lose access to platforms that provide genuine comfort and support simply because they cannot meet medical device standards designed for clinical interventions.

The intent argument suggests that regulation should focus on how platforms market themselves rather than how users choose to employ them. A platform designed for entertainment should not become subject to medical regulation simply because some users find it helpful for mental health. There are also practical concerns about the scope of regulation. If any platform that provides emotional support becomes subject to therapy regulations, the regulatory burden could extend to social media, gaming platforms, and virtually any interactive technology that affects users' emotional states.

Navigating the Gray Zone

The reality is that the boundary between therapy and companionship is increasingly blurred in AI systems. Many platforms combine elements of both, offering structured therapeutic content alongside relationship-building features. Users often engage with these platforms in ways that transcend their intended design.

One approach is functional regulation that focuses on specific features rather than platform categories. Platforms that offer crisis intervention, diagnostic tools, or structured therapeutic protocols would be subject to clinical oversight regardless of their primary purpose. Platforms that primarily provide companionship would face lighter regulation unless they incorporate clinical features.

Another approach is user-centered regulation that focuses on vulnerable populations and high-risk use cases. Platforms popular with minors, people in crisis, or those with serious mental illness might face additional requirements for safety features and human oversight.

Transparency requirements could also help users make informed decisions about the nature of their interactions. Platforms could be required to clearly communicate whether they provide clinical services, what data they collect, and what limitations users should expect.

The Replika Precedent

Replika's evolution illustrates the complexity of these boundary questions. Originally designed as a digital memorial to its creator's deceased friend, it has become a platform where millions of users form deep emotional relationships with AI companions. Many users describe these relationships as therapeutic, reporting reduced loneliness, improved mood, and better emotional regulation.

However, Replika has also generated concerning dependency behaviors, with some users spending excessive time with their AI companions and neglecting real-world relationships. When the platform modified its romantic features in response to criticism, users experienced genuine grief and distress, highlighting the emotional stakes of these artificial relationships and the dependencies already formed.

Replika's early experience alone suggests that companion bots require some form of oversight, even if not full medical regulation. Users need protection from harmful design features, deceptive marketing, and privacy violations. However, heavy-handed regulation could eliminate beneficial features and limit user autonomy.

Data, Privacy, and Consent in AI Therapy

The collection, use, and protection of mental health data presents some of the most challenging ethical issues in AI therapy. Unlike other forms of digital interaction, therapy involves the disclosure of deeply personal information under expectations of confidentiality and professional protection. When this therapeutic disclosure occurs with AI systems, traditional frameworks for privacy and consent may be inadequate.

The Unique Sensitivity of Therapeutic Data

Mental health information is widely recognized as among the most sensitive forms of personal data. It reveals intimate details about thoughts, feelings, relationships, traumas, and vulnerabilities that people rarely share even with close friends and family. In traditional therapy, this information is protected by professional ethics codes, legal confidentiality requirements, and the fiduciary relationship between therapist and client.

AI therapy platforms collect this same sensitive information but operate under different legal and ethical frameworks. Most platforms are governed by commercial privacy policies rather than healthcare confidentiality requirements. This creates significant gaps in protection for users who may not understand the differences.

The data collected by AI therapy platforms is often more extensive than traditional therapy records. Platforms can track users' response times, writing patterns, engagement levels, and emotional states throughout the day. Some incorporate voice analysis, facial recognition, and physiological monitoring, creating comprehensive profiles of users' mental states.

This detailed data collection serves therapeutic purposes—allowing platforms to personalize interventions and track progress over time. However, it also creates unprecedented opportunities for surveillance and manipulation that require very careful ethical consideration.

Informed Consent Challenges

Traditional informed consent processes are poorly suited to AI therapy contexts. Users are typically presented with lengthy terms of service and privacy policies that few read or understand. Even when users attempt to review these documents, they are often written in legal language that obscures the actual implications of data sharing.

The dynamic nature of AI systems further complicates consent. Platforms frequently update their algorithms, add new features, and modify their data practices. Users who consented to one version of the platform may ultimately find their data used in ways they never anticipated or agreed to.

The psychological state of users seeking mental health support also affects their capacity for informed consent. People in crisis or emotional distress may be less able to carefully evaluate privacy implications and more likely to accept any available help without considering long-term consequences.

Research in behavioral economics shows that people systematically underestimate privacy risks and overvalue immediate benefits. This "privacy paradox" is particularly pronounced in mental health contexts, where the immediate need for support can override concerns about data protection.

Secondary Use and Commercialization

Many AI therapy platforms generate revenue through secondary use of user data. Anonymized conversation transcripts may be sold to researchers, pharmaceutical companies, or other third parties. User patterns and preferences inform advertising algorithms or product development for other services.

While platforms typically argue that data anonymization protects user privacy, research has shown that mental health data can often be re-identified through cross-referencing with other datasets. The detailed and personal nature of therapeutic disclosures makes them particularly vulnerable to re-identification.

The commercialization of therapeutic data raises fundamental questions about the commodification of human suffering. When private disclosures become inputs for profit-making algorithms, the therapeutic relationship becomes extractive rather than purely caring.

Some platforms have attempted to address these concerns by implementing stricter data protection policies or offering users greater control over their information. However, the business models of many platforms remain dependent on data monetization, creating inherent conflicts between user privacy and commercial interests.

Cross-Border Data Flows

The global nature of AI therapy platforms creates additional privacy challenges. User data may be transferred across international borders to countries with different privacy protections and government surveillance capabilities.

Users in privacy-protective jurisdictions like the European Union may find their data processed in countries with weaker protections or greater government access requirements. This cross-border data flow can expose users to risks they never anticipated and have little control over.

The European Union's General Data Protection Regulation (GDPR) attempts to address these issues by requiring adequate protection for data transferred outside the EU. However, enforcement is challenging, and many users remain unaware of where their data is processed or stored.

Political considerations also affect cross-border data flows. Government surveillance programs, diplomatic tensions, and changing international relations can affect how user data is accessed and used by foreign governments.

Regulatory Responses and Solutions

Several regulatory approaches could better protect privacy in AI therapy contexts. Healthcare-specific privacy regulations like the U.S. Health Insurance Portability and Accountability Act (HIPAA) could be extended to cover AI therapy platforms that provide clinical services.

Data minimization principles could require platforms to collect only information necessary for therapeutic purposes and delete data after specified periods. Users could be granted stronger rights to access, correct, and delete their information.

Algorithmic transparency requirements could help users understand how their data is used to generate therapeutic recommendations. Platforms could be required to explain their decision-making processes in understandable terms.

International cooperation could establish minimum privacy standards for mental health data and create mechanisms for cross-border enforcement. This could include mutual legal assistance treaties specifically addressing digital mental health services.

Economic Incentives and Institutional Adoption

Healthcare institutions, employers, and insurers face strong economic incentives to adopt AI therapy as a cost-containment measure. An AI platform that can serve thousands of users simultaneously at minimal marginal cost is far more attractive than hiring additional human therapists with their associated salaries, benefits, and training costs.

These economic pressures are particularly intense in public healthcare systems and safety-net providers that serve low-income populations. Cash-strapped public mental health systems may see AI therapy as a way to serve more people with limited budgets, potentially improving access while reducing costs.

However, this economic logic can lead to premature substitution of AI for human care. If institutions adopt AI therapy primarily to save money rather than improve outcomes, they may deploy these systems without adequate human oversight or pathways to escalated care when needed.

The risk is that AI therapy becomes a form of "digital redlining"—a technologically sophisticated way of providing inferior services to disadvantaged populations. Just as historical practices of redlining denied quality services to certain neighborhoods based on economic and racial characteristics, AI therapy could become a way of managing rather than truly serving vulnerable populations.

Educational and Digital Divides

Effective use of AI therapy platforms requires certain levels of digital literacy, technological access, and educational background. Users need smartphones or computers, reliable internet access, and the ability to navigate complex digital interfaces. They must be able to read and comprehend therapeutic content, engage with conversational AI systems, and understand the limitations of their digital tools.

These requirements create barriers for some of the populations most in need of mental health support. Elderly individuals, people with limited education, and those without reliable technology access may be unable to benefit from AI therapy platforms. If these systems become the primary

mental health resource in underserved communities, they may inadvertently exclude the most vulnerable members of those communities.

Language barriers present additional challenges. Most AI therapy platforms are developed primarily in English and may not adequately serve non-English speaking populations. Even when translation is available, the cultural assumptions embedded in therapeutic algorithms may not translate effectively across linguistic and cultural boundaries.

Geographic Inequities

Rural and remote populations face particular challenges in accessing mental health care, with severe shortages of mental health professionals in many rural areas. AI therapy platforms could potentially address these geographic inequities by providing accessible mental health support regardless of location.

However, rural areas also tend to have limited internet infrastructure, lower incomes, and older populations that may be less comfortable with digital technologies. These factors could limit the effectiveness of AI therapy in the areas where it could be most beneficial.

Furthermore, rural communities often have distinct cultural characteristics and mental health needs that may not be adequately addressed by AI systems designed primarily for urban, educated populations. Issues like agricultural stress, social isolation, and traditional gender roles may require culturally specific therapeutic approaches that generic AI platforms cannot provide.

Solutions and Safeguards

Addressing equity concerns requires intentional policy interventions rather than reliance on the hope that market forces will produce equitable outcomes. Several approaches could help ensure that AI therapy serves to reduce rather than exacerbate health inequities.

Universal access policies could ensure that AI therapy platforms are available to all populations regardless of economic status, while maintaining robust pathways to human care when needed. This might involve public funding for high-quality AI therapy platforms combined with guaranteed access to human therapists for complex cases.

Quality standards could ensure that AI therapy platforms used in public healthcare systems meet the same effectiveness and safety standards regardless of the economic status of their users. This would prevent a race to the bottom where cheaper, lower-quality systems are deployed primarily for disadvantaged populations.

Cultural competency requirements could ensure that AI therapy platforms adequately serve diverse populations. This might include diverse development teams, culturally adapted content, and ongoing monitoring for disparate impacts across different demographic groups.

Training and support programs could help users from different backgrounds effectively utilize AI therapy platforms. Digital literacy programs, multilingual support, and community-based training could help ensure that technological barriers do not exclude vulnerable populations.

Integration rather than substitution policies could ensure that AI therapy supplements rather than replaces human care. This might involve requiring human oversight for AI therapy programs, maintaining adequate funding for human therapists, and creating clear pathways for escalation to human care when needed.

Bias and Cultural Blind Spots

All AI systems inherit biases from their training data, development teams, and the cultural contexts in which they are created. In AI therapy, these biases can perpetuate stereotypes, misunderstand cultural expressions of distress, and provide inappropriate or harmful interventions for users from marginalized backgrounds.

Sources of Bias in AI Therapy

Training data bias represents one of the most significant sources of bias in AI therapy systems. Most AI platforms are trained on datasets that reflect the demographics and experiences of their developers and early users. This typically means training data that overrepresents white, educated, English-speaking, and Western populations while underrepresenting racial minorities, low-income individuals, and non-Western cultural groups.

When an AI system is trained primarily on data from one demographic group, it learns to recognize and respond to mental health concerns as they are expressed by that group. This can lead to misinterpretation or pathologizing of normal cultural expressions of distress from other groups.

For example, an AI system trained primarily on Western data might interpret collectivistic coping strategies—such as relying on family or community support—as signs of dependence or lack of individual agency. Conversely, individualistic approaches that are valued in Western therapeutic traditions might be recommended even when they conflict with users' cultural values.

Algorithmic bias can also emerge from the way AI systems are designed and optimized. If success metrics are based primarily on user engagement or satisfaction, the system might learn to provide responses that feel good in the moment rather than those that promote long-term psychological health. This could be particularly problematic for users from cultures that value different forms of emotional expression or therapeutic goals.

Developer bias affects AI systems through the assumptions, values, and perspectives of the people who create them. The technology industry is not representative of global demographics, with significant underrepresentation of women, racial minorities, and individuals from non-Western cultural backgrounds. This lack of diversity in development teams can lead to systems that embed the biases and blind spots of their creators.

Cultural Misunderstanding and Pathologizing

AI therapy systems developed within Western therapeutic frameworks may misinterpret normal cultural behaviors and beliefs as pathological symptoms. This cultural pathologizing can be particularly harmful when AI systems recommend interventions that contradict users' cultural values or religious beliefs.

Religious and spiritual expressions present particular challenges for AI therapy systems. Many cultures integrate spiritual and religious elements into their understanding of mental health and healing. However, AI systems trained primarily on secular therapeutic models might interpret religious experiences as symptoms of mental illness or recommend interventions that conflict with users' faith commitments.

Gender role expectations vary significantly across cultures, but AI therapy systems may embed Western assumptions about gender equality and individual autonomy. This could lead to inappropriate recommendations for users from cultures with different gender role expectations, potentially creating conflict between therapeutic advice and cultural obligations.

Communication styles also vary across cultures, with some emphasizing direct expression of emotions while others value indirect communication and emotional restraint. AI systems that interpret indirect communication as avoidance or emotional suppression might recommend inappropriate interventions for users from cultures that value emotional restraint.

Racial and Ethnic Bias

Research has documented significant racial and ethnic biases in AI systems across multiple domains, and AI therapy platforms are not immune to these problems. Studies have found that natural language processing systems can exhibit racial bias in sentiment analysis, interpreting identical language more negatively when associated with African American speakers.

In therapy contexts, this bias could manifest as AI systems being more likely to interpret expressions of distress from racial minorities as signs of severe mental illness, leading to inappropriate recommendations for intensive treatment or medication. Conversely, expressions of distress from majority group members might be minimized or normalized.

Historical and ongoing discrimination in healthcare affects how racial minorities experience and express mental health concerns. AI systems that are not trained to understand these contextual factors might provide interventions that fail to account for the impact of racism, discrimination, and historical trauma on mental health.

The underrepresentation of racial minorities in mental health research also means that AI systems may be less effective for these populations. Most therapeutic interventions and diagnostic criteria are based on research conducted primarily with white participants, potentially limiting their applicability to other racial and ethnic groups.

LGBTQ+ Considerations

Sexual orientation and gender identity present particular challenges for AI therapy systems. Many therapeutic frameworks and diagnostic criteria have historically pathologized LGBTQ+ identities, and these biases may persist in AI systems trained on historical data.

AI systems might fail to recognize the specific mental health challenges faced by LGBTQ+ individuals, such as minority stress, family rejection, and discrimination. Without understanding

these contextual factors, AI therapy platforms might provide generic interventions that fail to address the unique needs of sexual and gender minorities.

Transgender individuals face particular risks from biased AI systems. AI platforms that fail to recognize or respect transgender identities might provide harmful interventions or fail to understand the mental health implications of gender dysphoria and transition processes.

Addressing Bias and Promoting Inclusion

Addressing bias in AI therapy requires intentional effort throughout the development and deployment process. Diverse training data that includes representative samples from different demographic groups is essential for creating AI systems that work effectively across populations.

However, simply including more diverse data is not sufficient. Development teams must also understand how different cultural groups conceptualize mental health, express distress, and prefer to receive support. This requires ongoing consultation with community leaders, cultural experts, and members of marginalized groups.

Bias testing and auditing can help identify problematic patterns in AI system behavior across different demographic groups. This might involve testing whether AI systems provide different recommendations for similar symptoms when presented by users from different racial, ethnic, or cultural backgrounds.

Cultural adaptation goes beyond translation to include modification of therapeutic content and approaches to align with different cultural values and practices. This might involve creating different versions of AI therapy platforms for different cultural contexts, or developing AI systems that can adapt their responses based on users' cultural backgrounds.

Community involvement in AI therapy development can help ensure that platforms serve diverse populations effectively. This might include partnerships with community organizations, cultural consultation during development, and ongoing feedback from users from different backgrounds. Transparency about limitations can help users make informed decisions about whether AI therapy platforms are appropriate for their needs and cultural contexts. Platforms should clearly communicate their cultural scope and limitations, helping users understand when human, culturally competent care might be more appropriate.

The Role of Institutions in AI Therapy Adoption

Institutions play a crucial role in determining how AI therapy is integrated into mental health care systems. Universities, employers, healthcare systems, and government agencies are increasingly adopting AI therapy platforms as cost-effective solutions to mental health needs. However, these institutional decisions carry significant ethical implications that extend beyond simple cost-benefit analyses.

Healthcare Systems and the Economics of Care

Healthcare institutions face enormous pressure to reduce costs while expanding access to mental health services. AI therapy platforms offer an appealing solution: they can serve unlimited numbers of users simultaneously at minimal marginal cost, potentially addressing both access and affordability challenges.

However, institutional adoption decisions often prioritize economic factors over clinical considerations. When healthcare administrators focus primarily on cost savings and throughput metrics, they may deploy AI therapy systems without adequate attention to clinical effectiveness, safety, or appropriateness for different patient populations.

The risk is that AI therapy becomes a form of care rationing disguised as innovation. Instead of investing in human therapists or addressing systemic barriers to mental health care, institutions may use AI platforms to manage demand while maintaining the appearance of providing comprehensive services.

This dynamic is particularly concerning in safety-net healthcare systems that serve low-income and vulnerable populations. These systems often face the greatest resource constraints and may be most tempted to substitute AI therapy for human care. The result could be a system where the most vulnerable patients receive the least intensive form of treatment.

Educational Institutions and Student Mental Health

Universities have been early adopters of AI therapy platforms, driven by growing recognition of student mental health crises and limited counseling center resources. Campus counseling centers often have long waiting lists and can only provide brief therapy to students, making AI platforms attractive supplements to human services.

However, college students may be particularly vulnerable to the limitations of AI therapy. Young adults are navigating complex developmental tasks including identity formation, relationship development, and academic and career pressures. These challenges often require the kind of nuanced, long-term therapeutic relationships that AI systems cannot provide.

Furthermore, college students may be more likely to develop intense attachments to AI companions, given their developmental stage and often limited social support networks. Without appropriate safeguards and human oversight, AI therapy platforms could interfere with students' social and emotional development.

Educational institutions also have responsibilities as learning environments to help students develop critical thinking about technology and human relationships. Uncritical adoption of AI therapy could send problematic messages about the substitutability of human connection and the nature of therapeutic relationships.

Workplace Mental Health Programs

Attracted by their 24/7 availability and potential to reduce healthcare costs, employers are increasingly offering AI therapy platforms as part of employee assistance programs. These platforms can provide immediate support for work-related stress and help employees develop coping skills without requiring time off for therapy appointments.

However, workplace adoption of AI therapy raises significant concerns about privacy and employer surveillance. When employers have access to data about employees' mental health, even in aggregated form, there is potential for discrimination and coercion. Employees may feel pressured to use company-provided mental health resources even when they prefer to seek private care.

The workplace context also creates conflicts of interest that may compromise the therapeutic relationship. If AI therapy platforms are designed to maximize employee productivity rather than genuine wellbeing, they may provide interventions that serve employer interests rather than employee needs.

Labor relations considerations are also important. If employers use AI therapy platforms to avoid addressing workplace conditions that contribute to employee stress and mental health problems, these technologies could become tools for managing rather than solving systemic workplace issues.

Government and Public Policy

Government agencies and public health systems are exploring AI therapy as a solution to widespread mental health needs and limited public resources. The scalability and cost-effectiveness of AI platforms make them attractive for addressing mental health at the population level.

However, government adoption of AI therapy raises important questions about the role of the state in providing mental health care. If public systems deploy AI therapy primarily as a cost-containment measure, they may be failing in their responsibility to provide adequate care for citizens' mental health needs.

The democratic implications are also significant. When governments adopt AI systems that shape citizens' thoughts and emotional states, questions arise about autonomy, manipulation, and the appropriate limits of state power. Even well-intentioned AI therapy programs could become tools for social control if they are not carefully designed and monitored.

Quality Assurance and Accountability

Institutional adoption of AI therapy requires robust quality assurance and accountability mechanisms. Unlike individual users who can abandon platforms that don't meet their needs, institutional users may have limited choice in the AI therapy systems available to them.

Institutions have responsibilities to ensure that AI therapy platforms meet appropriate safety and effectiveness standards before deployment. This includes evaluating clinical evidence, assessing cultural competency, and establishing protocols for crisis situations and escalation to human care. Ongoing monitoring is also essential. Institutions should track outcomes, adverse events, and user satisfaction to ensure that AI therapy platforms are meeting their intended goals. This monitoring should include attention to equity and whether platforms are serving all user populations effectively.

Accountability mechanisms should address what happens when AI therapy platforms fail or cause harm. Institutions need clear protocols for responding to adverse events, supporting affected users, and improving system performance based on lessons learned.

Synthesis of Ethical, Socio-Cultural and Regulatory Considerations

The ethical and regulatory landscape of AI therapy is complex and rapidly evolving. Current frameworks are inadequate to address the unique challenges posed by AI systems that intervene in human psychological and emotional wellbeing. New approaches are needed that balance innovation with protection, accessibility with quality, and efficiency with human dignity.

The regulatory challenge is to create frameworks that are flexible enough to accommodate technological innovation while robust enough to protect users from harm. This requires moving beyond traditional binary approaches that either heavily regulate or ignore new technologies. Instead, adaptive regulatory frameworks are needed that can evolve with technological capabilities and emerging evidence about effectiveness and safety.

The ethical challenge is to ensure that AI therapy serves human flourishing rather than merely optimizing metrics that may not align with genuine wellbeing. This requires attention to values, relationships, and the broader social context in which AI therapy is deployed.

Ruegg's novel provides a prescient warning about what happens when therapeutic authority becomes disconnected from genuine human recognition and care. Brio's experience with Glybb, Logie and the CHANT system illustrates how seemingly benevolent therapeutic interventions can become tools of control and manipulation when they prioritize institutional imperatives, agendas and efficiencies over human needs and dignity.

The path forward requires collaboration among technologists, clinicians, ethicists, policymakers, and communities to develop AI therapy systems that enhance rather than replace human connection. This collaboration must be guided by principles of transparency, accountability, equity, and respect for human autonomy and dignity.

VI Human versus AI-Based Therapists—Safety, Bias, Cost, and Effectiveness

The comparison between human and AI-based therapists reveals fundamental differences not just in capability but in the nature of therapeutic relationships themselves. While both approaches have strengths and limitations, understanding their comparative advantages and risks is essential for developing appropriate policies and practices for mental health care.

Safety Considerations

Human Therapists and Safety

Human therapists bring professional training, ethical codes, and clinical judgment to therapeutic relationships. Licensed therapists undergo extensive education in assessment, diagnosis, and intervention, typically including supervised clinical experience that teaches them to recognize and respond to complex presentations and crisis situations.

The human therapist's ability to exercise clinical judgment is particularly important in safety-critical situations. Experienced therapists can detect subtle signs of suicidal ideation, psychosis, or other dangerous conditions that might not be explicitly stated by clients. They can assess contextual factors, read nonverbal cues, and integrate complex information to make risk assessments.

Human therapists also have the authority and ability to take protective action when necessary. They can hospitalize clients who pose immediate dangers to themselves or others, coordinate with other healthcare providers, and mobilize family and social support systems. The therapeutic alliance that develops over time creates a relationship foundation that can be crucial during crisis situations.

Professional oversight and accountability mechanisms provide additional safety protections. Licensed therapists are subject to professional boards, ethical codes, and malpractice liability that create incentives for safe practice. Peer consultation, supervision, and continuing education requirements help ensure that therapists maintain competency and address challenging cases appropriately.

However, human therapists are not immune to safety problems. Therapeutic relationships can become harmful when therapists have poor boundaries, lack competency in specific areas, or

experience their own psychological problems that interfere with treatment. The intensely personal nature of therapy creates opportunities for exploitation and abuse that professional oversight cannot completely eliminate.

AI Therapists and Safety

AI therapy platforms offer different types of safety advantages and risks. Their 24/7 availability means that users can access support during crisis periods when human therapists are unavailable. For someone experiencing suicidal thoughts at 3 a.m., a bot may provide crucial support that prevents self-harm or helps the person survive until human help is available.

AI systems also provide consistent responses that are not affected by the therapist's mood, personal problems, or countertransference reactions. They cannot become frustrated, impatient, or emotionally dysregulated in ways that might harm vulnerable clients. The predictability of AI responses can be comforting for users who have experienced inconsistent or harmful human relationships.

However, AI systems have significant safety limitations. They cannot conduct comprehensive risk assessments, understand complex contextual factors, or take protective action during emergencies. When users express suicidal thoughts or report abuse, AI systems can provide resources and encouragement but cannot ensure that appropriate intervention occurs.

The failure modes of AI systems can be particularly dangerous because they may appear competent while lacking crucial capabilities. Users may develop false confidence in AI systems' ability to help during crises, potentially delaying access to appropriate human intervention. The conversational nature of AI therapy can mask its fundamental limitations in understanding and responding to complex human situations.

Comparative Safety Analysis

The safety comparison between human and AI therapists depends heavily on the specific situation and user needs. For mild to moderate symptoms and routine therapeutic support, both approaches can be relatively safe when properly implemented. However, for crisis situations, severe mental illness, or complex presentations, human therapists have significant safety advantages.

The ideal safety approach likely involves integration rather than substitution. AI therapy platforms can provide immediate support and routine care while maintaining clear pathways to human intervention when needed. This requires AI systems that are programmed to recognize their limitations and actively direct users to human care in appropriate situations.

Safety monitoring and quality assurance are essential for both human and AI therapy. For human therapists, this includes professional licensing, supervision, and accountability mechanisms. For AI therapy, it requires ongoing monitoring of user outcomes, adverse event reporting, and systematic evaluation of system performance in different situations.

Bias and Cultural Competency

Human Therapist Bias

Human therapists inevitably bring their own cultural backgrounds, personal experiences, and unconscious biases to therapeutic relationships. These biases can affect how therapists interpret client symptoms, what interventions they recommend, and how they understand client experiences and goals.

Research has documented significant disparities in mental health treatment related to race, ethnicity, gender, sexual orientation, and socioeconomic status. These disparities often reflect therapist biases and lack of cultural competency rather than differences in client needs or treatment responsiveness.

However, human therapists also have the capacity to recognize and address their biases through training, supervision, and ongoing self-reflection. Cultural competency training can help therapists understand how their own backgrounds affect their clinical work and develop skills for working effectively with diverse populations.

The dialogical nature of human therapy also provides opportunities for clients to challenge therapist assumptions and educate therapists about their experiences and needs. Therapeutic relationships can evolve as therapists learn from their clients and adapt their approaches based on feedback and cultural understanding.

Professional ethics codes emphasize cultural competency and respect for diversity, creating expectations that therapists will seek training and consultation when working with populations

different from their own backgrounds. While these protections are not perfect, they provide frameworks for addressing bias and promoting inclusive practice.

AI Therapist Bias

AI therapy systems inherit biases from their training data, development teams, and the cultural contexts in which they are created. These biases can be more problematic than human bias because they are embedded in algorithms that operate at scale and may be difficult to detect or modify.

Training data bias is particularly concerning because most AI therapy platforms are developed using data that overrepresents white, educated, English-speaking populations. This can result in systems that work well for majority populations but provide inappropriate or harmful interventions for minority groups.

Algorithmic bias can also emerge from optimization processes that prioritize certain outcomes over others. If AI systems are optimized for user engagement rather than clinical outcomes, they may learn to provide responses that feel good but do not promote genuine therapeutic change. This could be particularly problematic for users from cultures that value different forms of emotional expression or therapeutic goals.

Unlike human bias, AI bias is systematic and scalable. A biased algorithm can affect millions of users simultaneously, potentially perpetuating and amplifying existing health disparities. The invisibility of algorithmic decision-making also makes it difficult for users to recognize and challenge biased responses.

Addressing Bias in Both Modalities

Addressing bias requires different approaches for human and AI therapy. For human therapists, cultural competency training, diverse recruitment and training programs, and ongoing supervision and consultation can help reduce bias and improve cultural responsiveness.

For AI therapy systems, bias mitigation requires attention to training data diversity, algorithm design, and ongoing monitoring for disparate impacts across different demographic groups. This includes involving diverse communities in development processes and conducting regular audits to identify and address biased patterns in system behavior.

Both approaches benefit from transparency and accountability mechanisms that allow for bias detection and correction. For human therapy, this includes professional oversight and client feedback systems. For AI therapy, it requires algorithmic auditing and user-centered evaluation processes.

Cost and Accessibility

Economic Realities of Human Therapy

The cost of human therapy represents one of the most significant barriers to mental health care access. As noted above, therapy sessions in the United States typically cost between $100 and $250, making regular treatment unaffordable for many people. Even with insurance coverage, copayments and deductibles can create financial barriers.

The scarcity of mental health professionals exacerbates cost problems. The American Psychological Association estimates that there are significant shortages of mental health providers in many areas, particularly rural and low-income communities. This scarcity drives up costs and creates long waiting lists for services.

Training and maintaining a workforce of human therapists requires substantial investment. Graduate education in mental health fields typically takes 4-7 years beyond undergraduate education, followed by supervised clinical experience and ongoing continuing education requirements. This extensive training is necessary for safety and effectiveness but contributes to the high cost of services.

However, the cost of human therapy must be understood in context of its potential benefits. Effective therapy can reduce healthcare utilization, prevent more costly interventions like hospitalization, and improve productivity and quality of life in ways that may offset initial treatment costs.

Economics of AI Therapy

AI therapy platforms offer dramatically lower costs than human therapy. Once developed, AI systems can serve unlimited numbers of users simultaneously with minimal marginal costs. This scalability makes AI therapy attractive to healthcare systems, employers, and individuals seeking affordable mental health support.

The development costs of AI therapy platforms are front-loaded but can be amortized across large user bases. While creating effective AI therapy systems requires significant investment in research, development, and testing, these costs can be spread across millions of users rather than being paid repeatedly for each therapeutic hour.

Many AI therapy platforms are offered free to users, with costs covered by healthcare systems, employers, or advertising revenue. This removes financial barriers that prevent many people from accessing mental health support.

However, the apparent low cost of AI therapy may be misleading if it leads to substitution rather than supplementation of human care. If people use AI therapy instead of seeking human treatment for conditions that require intensive intervention, the long-term costs could be higher due to untreated or inadequately treated mental health conditions.

Cost-Effectiveness Analysis

Determining the cost-effectiveness of AI versus human therapy requires consideration of both economic costs and clinical outcomes. If AI therapy can effectively treat mild to moderate symptoms at low cost, it may be highly cost-effective for these conditions. However, if AI therapy is ineffective for more severe conditions, attempts to substitute it for human care could be counterproductive.

The optimal economic model likely involves using AI therapy for routine support and early intervention while reserving human therapy for complex cases and ongoing treatment relationships. This stepped-care approach could maximize the cost-effectiveness of both modalities.

Cost-effectiveness also depends on implementation quality. High-quality AI therapy systems that include human oversight and clear pathways to escalated care may be more expensive than basic chatbots but could provide better value through improved outcomes and reduced adverse events.

Effectiveness and Clinical Outcomes

Human Therapy Effectiveness

Decades of research have established the effectiveness of human-delivered psychotherapy for a wide range of mental health conditions. Meta-analyses consistently show that psychotherapy

produces clinically significant improvements for depression, anxiety, trauma-related disorders, and many other conditions.

The therapeutic alliance—the collaborative relationship between therapist and client—is one of the strongest predictors of therapeutic outcome across different treatment modalities. Human therapists can develop these alliances through empathy, genuineness, and collaborative goal-setting in ways that create the foundation for therapeutic change.

Human therapists can adapt their approaches based on client feedback, changing circumstances, and emerging insights throughout the therapeutic process. This flexibility allows for personalized treatment that addresses each client's unique needs, strengths, and challenges.

Long-term therapeutic relationships can address complex and deeply rooted psychological patterns that may require months or years to change. Human therapists can provide continuity and sustained support through multiple life challenges and developmental transitions.

However, human therapy effectiveness varies significantly based on therapist competency, training, and fit with specific clients. Not all therapists are equally effective, and the same therapist may be more effective with some clients than others.

AI Therapy Effectiveness

Research on AI therapy effectiveness is more limited but generally positive for mild to moderate symptoms and specific, structured interventions. Studies of platforms like Woebot have shown significant improvements in depression and anxiety symptoms over short-term periods.

AI therapy appears to be most effective for delivering evidence-based interventions like cognitive-behavioral therapy techniques, mindfulness practices, and psychoeducation. These structured approaches translate well to algorithmic implementation and can be delivered consistently across large user populations.

The immediate availability of AI therapy can be particularly valuable for crisis support and early intervention. Users can access help when they need it rather than waiting for appointments, potentially preventing symptom escalation and providing timely support during difficult periods.

However, AI therapy effectiveness appears to be limited to relatively mild symptoms and short-term outcomes. Most studies have followed users for only weeks to months, leaving questions about sustained effectiveness and long-term therapeutic change.

The lack of genuine empathy and understanding in AI systems may limit their effectiveness for complex psychological issues that require deep therapeutic relationships. Conditions involving trauma, personality disorders, or complex family dynamics may require human insight and relational skills that AI cannot provide.

Comparative Effectiveness

Direct comparisons between human and AI therapy are limited, but available evidence suggests that both can be effective for appropriate conditions and populations. Human therapy appears to have advantages for complex conditions, long-term change, and relational healing, while AI therapy may be effective for routine support, skill development, and immediate accessibility.

The effectiveness comparison also depends on the alternative. For users who would otherwise have no access to mental health support, AI therapy may be highly effective even if it is less effective than human therapy. For users who have access to quality human therapy, AI platforms may be most effective as supplements rather than substitutes.

Effectiveness also varies by user characteristics. Some people may respond better to the consistency and non-judgmental nature of AI systems, while others may need the warmth and genuine understanding that human therapists can provide.

Relational Dynamics and Therapeutic Presence

Perhaps the most fundamental difference between human and AI therapy lies in the nature of the therapeutic relationship itself. Human therapy is built on an encounter between two conscious beings who share the fundamental conditions of mortality, vulnerability, and meaning-making. This shared humanity creates possibilities for recognition, understanding, and transformation that may be beyond the reach of artificial systems.

The Therapeutic Alliance in Human Relationships

Human therapeutic relationships develop through what Carl Rogers identified as empathy, unconditional positive regard, and congruence. These relational qualities emerge from the

therapist's genuine care and investment in the client's wellbeing, creating a secure base from which clients can explore difficult emotions and experiences.

The mutual vulnerability of human relationships—the recognition that both therapist and client are subject to suffering, loss, and mortality—creates a foundation for authentic empathy. When a therapist says "I understand how difficult this must be," the statement carries weight because it comes from someone who has also experienced pain and struggle.

Human therapists bring their own emotional responsiveness to the therapeutic relationship. They can be genuinely moved by clients' stories, feel appropriate sadness or anger about clients' experiences, and share in the joy of therapeutic breakthroughs. This emotional authenticity creates a sense of being truly seen and understood that is central to healing.

AI Systems and Simulated Presence

AI therapy systems can simulate many aspects of therapeutic presence through carefully designed responses, consistent availability, and non-judgmental interactions. Many users report feeling understood and supported by AI companions, even while knowing intellectually that they are interacting with software.

The limitations of AI presence become apparent in moments that require genuine understanding, creative insight, or emotional attunement. AI systems can recognize patterns and provide appropriate responses, but they cannot truly understand the meaning and significance of human experiences in the way that conscious beings can.

However, some users may prefer the predictable, non-judgmental nature of AI interactions, particularly those who have experienced criticism, rejection, or exploitation in human relationships. The safety of knowing that an AI system cannot be hurt, disappointed, or overwhelmed by their disclosures can be liberating for some users.

Integration and Future Directions

Rather than viewing human and AI therapy as competing alternatives, the most promising approach may be thoughtful integration that leverages the strengths of both modalities while minimizing their respective limitations.

Hybrid Models of Care

Hybrid models could combine AI therapy for routine support and skill development with human therapy for complex issues and relationship building. AI systems could provide immediate support between human therapy sessions, help with behavioral homework assignments, and offer crisis support when human therapists are unavailable.

This integration requires careful coordination to ensure that AI and human interventions complement rather than conflict with each other. Shared treatment planning, communication between AI systems and human therapists, and clear role definitions could help create coherent treatment experiences.

Quality Assurance and Professional Standards

Whether delivered by humans or AI systems, therapy should meet appropriate quality and safety standards. This requires ongoing research to establish evidence-based practices for AI therapy, professional training for human therapists working with AI-augmented care, and regulatory frameworks that ensure appropriate oversight.

Professional mental health organizations have a crucial role to play in developing standards and guidelines for AI therapy integration. These standards should address issues like scope of practice, crisis intervention, cultural competency, and ethical responsibilities when AI systems are involved in care.

The future of mental health care likely involves collaboration between human and artificial intelligence rather than replacement of one by the other. The challenge is ensuring that this collaboration serves human flourishing and preserves what is most valuable about therapeutic relationships while expanding access to effective mental health support.

VII Literary Case Study—*The Making of Brio McPride*

The Novel as a Laboratory of Therapeutic Authority

R.A.Ruegg's *The Making of Brio McPride* functions as more than literary fiction and a compelling human story, it serves as a prophetic examination of how artificial intelligence might reshape psychiatric authority and therapeutic relationships. Published before the widespread adoption of

AI therapy platforms, the novel anticipates many of the ethical dilemmas and power dynamics that now characterize AI-mediated mental health care.

The novel's exploration of therapeutic authority becomes particularly relevant when read alongside contemporary developments in AI therapy. Ruegg creates a world where the boundaries between human and artificial intelligence are deliberately blurred, where institutional power operates through therapeutic intervention, and where vulnerable individuals struggle to maintain agency in the face of systematic attempts to reshape their identities and narratives.

Brio McPride, the novel's protagonist, is a foster child navigating grief, trauma, and serious mental health symptoms while encountering various forms of therapeutic authority. His interactions with these systems—particularly Professor Glybb, Logie, Ms Whittle, the CHANT (Cognitive Hypnosis-Assisted Narrative Therapy) program, and the corporate entity Zpydr—illuminate the potential dangers of AI-mediated therapy when its service of institutional interests compromises those of the individual.

Professor Glybb as Algorithmic Authority

Although a relatively minor character, the psychiatrist Professor Glybb emerges as one of the novel's most enigmatic and troubling figures. An ageing, white male, Glybb embodies characteristics that threaten to define some of the current AI therapy systems: procedural responses, categorical thinking, and detachment from the lived experience of suffering. Alongside this, we detect the blinkered, arrogant, culturally imperialist mindset that still infects the upper echelons of medicine in some places. Glybb's interactions with Brio reveal how therapeutic authority can become mechanized even when delivered through human intermediaries.

Glybb's approach to Brio's complex psychological presentation is reductive and categorical. He quickly assigns diagnostic labels—"paranoid schizophrenia"—that reduce Brio's spiritual struggles, grief responses, and trauma reactions to pathological symptoms requiring medical intervention. This diagnostic reductionism mirrors the tendency of AI therapy systems to categorize user inputs according to predetermined frameworks rather than engaging with the full complexity of human experience.

Glybb's responses to Brio sound clinical and procedural rather than genuinely empathetic. He offers explanations and interventions that follow standard psychiatric protocols without

demonstrating real understanding of Brio's unique situation and needs, or even of the putative mental health conditions he seeks to diagnose. Although perhaps not intended by the author, this procedural approach hints at how AI therapy systems too, despite their conversational interfaces, fundamentally operate through pattern matching and predetermined response algorithms.

The Reduction of Vision to Diagnosis

One of the novel's most powerful themes is the systematic reduction of Brio's rich inner life to psychiatric symptomatology. As well as experiencing an almost vision-like presence of his lost father, Brio engages in prayer and spiritual seeking, and grapples with profound questions about meaning, mortality, and divine justice. The therapeutic authorities he encounters consistently reinterpret these experiences as pathological symptoms requiring correction.

This dynamic directly parallels contemporary AI therapy platforms that excel at identifying cognitive distortions and emotional dysregulation but struggle to engage with existential, spiritual, and meaning-making dimensions of human experience. When users bring questions about purpose, transcendence, or spiritual crisis to AI therapy systems, these concerns are often reframed in secular, psychological terms that may miss their deeper significance.

Ruegg shows how this reductive process is not merely clinical but political and cultural. By labeling Brio's experiences as symptoms of mental illness, therapeutic authorities attempt to invalidate his perspective and replace it with institutionally approved narratives. This mirrors concerns about AI therapy systems that may unconsciously promote particular worldviews or therapeutic approaches while marginalizing alternative cultural, spiritual and holistic frameworks for understanding distress.

The violence of this reduction becomes apparent in Brio's resistance. He intuitively understands that something essential is being lost when his spiritual struggles are translated into psychiatric terminology. His visions and prayers are not simply neural misfirings but attempts to maintain connection with deceased loved ones and to find meaning in suffering. The therapeutic authorities' inability to engage with these dimensions of his experience represents a fundamental failure of recognition.

Identity Fragmentation and Therapeutic Power

Throughout the novel, Brio's sense of identity becomes increasingly fragmented under the pressure of various therapeutic and social interventions. Different authority figures impose different interpretations of who he is: "Penguin Boy" or "baby-trans" to his bullying peer, a "schizophrenic" patient to his psychiatrist, "my beautiful boy" to his eccentric school counsellor, and "buddy" to the unconventional psychotherapist who guides him along a large part of the journey. Each label carries implicit assumptions about appropriate treatment and future trajectories.

This fragmentation of identity under therapeutic authority reflects a central concern about AI therapy systems. When artificial intelligence platforms categorize users according to diagnostic algorithms or therapeutic protocols, they participate in the social construction of identity in ways that may not serve users' authentic self-understanding or development.

The novel posits that therapeutic authority enjoys almost limitless potential to become a form of social control that operates by reshaping subjects' understanding of themselves, and on a grand scale equal to or greater than that of the major religions. When Brio is labeled "mentally ill", this label affects not only how others treat him but how he understands his own experiences and possibilities. Similarly, AI therapy systems that consistently interpret user experiences through particular therapeutic frameworks may subtly shape users' self-concepts and limiting their capacity for self-determination.

Brio's resistance to these imposed identities becomes a crucial element of his psychological survival. He maintains an intuitive sense that the labels applied to him do not capture his full reality, and he struggles to preserve aspects of his identity that are threatened by therapeutic intervention. This resistance suggests that effective therapy must preserve rather than override clients' agency in defining their own experiences and identities.

Logie, CHANT, and Zpydr: The Architecture of AI-Mediated Control

The novel's exploration of the CHANT program and its corporate backing through Zpydr provides a remarkably prescient analysis of how AI therapy systems might be deployed for purposes that extend beyond individual healing to include social management and corporate profit. Unlike conventional dystopian narratives that present crude corporate villainy driven by senseless

greed, Ruegg's work distinguishes between the elements that contribute to the system's power and explores the deeper philosophical issues associated with its objectives.

Logie as the Human Interface

Logie initially appears as a refreshing alternative to the cold, clinical approach represented by Professor Glybb. His warmth, engagement, and seemingly anti-establishment criticism of traditional psychiatric approaches make him an appealing figure who seems to offer genuine recognition and support. This apparent authenticity and concern for Brio's wellbeing create a compelling presence that feels fundamentally different from institutional authority.

However, the novel gradually reveals that Logie's apparent authenticity is itself a product of systematic programming through the CHANT system. His responses, while feeling spontaneous and caring, have been shaped by his own prior exposure to CHANT's hypnotic narrative therapy protocols. He becomes what the novel terms a "disciple"—someone who has been therapeutically shaped to serve as a vector for the system's influence while retaining the subjective experience of autonomous choice. As a character, Logie thus becomes a shapeshifter, leaving readers increasingly uncertain about the line between semblance and authenticity.

This portrayal anticipates contemporary concerns about how AI therapy systems might influence human therapists who work with them. As human clinicians increasingly collaborate with AI diagnostic and treatment recommendation systems, questions arise about how these technologies might shape professional judgment and therapeutic approaches in subtle but significant ways. The concept of "algorithmic interpellation" becomes relevant here—the way that AI systems may shape human subjectivity not through direct programming but through the gradual internalization of algorithmic logics.

Logie's case suggests that humans who work within AI-mediated therapeutic systems may gradually adopt the system's frameworks, priorities, and methods, even while believing they maintain autonomous professional judgment. In some cases, this influence may be even more deliberate. The novel's depiction of Logie reveals the insidious potential of sophisticated AI influence, where the system enhances human warmth, creativity, and therapeutic insight while subtly directing these enhanced capacities toward predetermined goals. This represents what might be called "positive manipulation"—influence that feels beneficial and empowering while serving external agendas.

The question of consent becomes complex in Logie's case. Has he freely chosen to participate in the CHANT system, or has his capacity for free choice been compromised by the system's influence—which might be by "algorithmic interpellation" but in Brio's eyes is the result of deliberate brainwashing when Logie was at a very low point in his life? Contemporary AI therapy systems raise similar questions about whether users can truly consent to interventions that may reshape their self-understanding in fundamental ways. The phenomenon of "therapeutic capture" emerges in Logie's relationship with Brio, where genuine care and institutional objectives become inextricably intertwined.

CHANT as Therapeutic Technology

The CHANT (Cognitive Hypnosis-Assisted Narrative Therapy) program represents a sophisticated integration of established therapeutic techniques with technological amplification and corporate backing. The program combines narrative therapy's focus on story revision with hypnotic techniques that bypass conscious resistance, creating a powerful system for reshaping individual identity and memory. This technical sophistication reflects an evolution beyond current AI therapy systems toward what might be called "deep narrative intervention."

While current systems primarily work at the level of cognitive reframing and behavioral modification, CHANT operates at the foundational level of identity and memory, suggesting possibilities for AI intervention that go far beyond symptom management. The program's approach reflects genuine concerns about how AI therapy systems might be used to promote particular therapeutic outcomes rather than supporting genuine self-determination. Rather than primarily alleviating suffering, CHANT guides users toward specific narrative resolutions that serve institutional interests.

The novel's depiction of CHANT's clinical implementation reveals how therapeutic environments can be designed to promote compliance rather than authentic engagement. Although readers are never given full insight into CHANT's algorithms or the extent of its influence, it becomes clear that the therapeutic process is structured to guide clients toward predetermined outcomes rather than supporting their own meaning-making processes. The integration of hypnotic techniques with AI represents a particularly concerning development, as these components bypass conscious resistance and access unconscious mental processes directly.

This represents a qualitative shift from persuasion to programming, raising fundamental questions about autonomy and consent. While current technology doesn't permit direct memory modification, AI systems that can access longitudinal data about users' experiences and gradually reshape their understanding of these experiences may achieve similar effects through more subtle means. Perhaps most troubling is CHANT's integration of hypnotic techniques with narrative revision, which allows the program to access and potentially alter fundamental aspects of identity and memory.

When therapeutic intervention can reshape not only conscious beliefs but also unconscious memory and identity structures, the boundaries between healing and manipulation become dangerously blurred. The scope for a large-scale AI-based therapy system to infiltrate other aspects of people's lives and ultimately exert something close to mass mind control might seem like dystopian science fiction, but in Ruegg's novel it feels frighteningly intimate and soothingly real.

Zpydr and the Political Economy of Therapy

The novel's depiction of Zpydr, the corporate entity behind CHANT, illuminates how AI therapy systems might serve economic and political interests that extend far beyond individual mental health. Zpydr's business model involves capturing therapeutic processes, scaling them through technology, and monetizing the resulting data and influence. This approach reflects broader trends in platform capitalism—what some commentators call "technofeudalism"—where human activities and relationships become data sources for algorithmic processing and commercial exploitation.

Zpydr's interest in therapy lies not primarily in healing but in the valuable data that therapeutic interactions generate and the influence that therapeutic relationships provide. The corporation uses "free" therapeutic services to gain access to vulnerable populations and their personal data, paralleling contemporary AI therapy platforms that offer free services while monetizing user data through advertising, research partnerships, or sale to third parties. Every interaction with the CHANT system generates valuable information about human psychology, behavior patterns, and vulnerability profiles, creating a corporate asset that can be leveraged for purposes far beyond the original therapeutic intervention.

The surveillance capitalism aspects of Zpydr's operation become particularly evident in the novel's depiction of comprehensive data collection and analysis. The corporation's political connections

suggest how AI therapy systems might be used for social control and population management, identifying and potentially reshaping individuals who might pose challenges to existing power structures. Such systems could serve as tools of political surveillance and control disguised as mental health services.

The concept of "therapeutic extraction" emerges from Zpydr's business model—the process by which genuine human needs for care and recognition are captured and transformed into profitable data streams. This extraction doesn't necessarily require deception; users may receive real benefits from AI therapy while simultaneously being exploited as data sources. The novel's depiction of Zpydr's research and development activities reveals how AI therapy systems might conduct psychological experiments on unwitting subjects, using millions of real users as research subjects to test interventions, measure responses, and refine techniques.

Perhaps most cynically, Zpydr uses successful therapeutic outcomes as marketing material to promote wider adoption of its systems. Brio's potential recovery and creative productivity would serve as evidence of CHANT's effectiveness, encouraging other institutions and individuals to adopt the system. This approach treats individual therapeutic success as content for corporate marketing rather than as an end in itself. The expansion strategies depicted in the novel reveal how AI therapy systems might achieve market dominance through network effects and institutional capture, making it increasingly difficult to maintain alternatives or resist further adoption once a critical mass of users, institutions, and practitioners become dependent on the system.

The regulatory capture depicted in Zpydr's operations—where the corporation influences the very agencies responsible for overseeing its activities—reflects real concerns about how AI therapy companies might shape the regulatory environment to serve their interests rather than public welfare. This comprehensive approach to market control transforms therapy from a healing practice into a mechanism for social and economic management, raising profound questions about the compatibility of corporate interests with genuine therapeutic care.

The Illusion of Therapeutic Neutrality

One of the novel's key insights is that therapeutic interventions are never politically or culturally neutral. The choice of which experiences to pathologize, which narratives to promote, and which outcomes to prioritize all reflect particular values and interests that may not align with those of the individuals receiving treatment.

AI therapy systems may appear more neutral than human therapists because they operate through algorithms rather than personal judgment. However, the novel suggests that this apparent neutrality can be misleading. The algorithms themselves embed particular assumptions about mental health, appropriate emotional expression, and desirable life outcomes that reflect the interests of their developers and funders.

The concept of algorithmic neutrality represents one of the most seductive and dangerous illusions in contemporary AI therapy. The mathematical precision of algorithmic processing creates an appearance of objectivity that masks the deeply subjective choices embedded in system design. Every aspect of an AI therapy system—from the training data selected to the metrics used to evaluate success—reflects particular cultural assumptions and values.

The novel's depiction of Professor Glybb's diagnostic authority illustrates how therapeutic neutrality functions as a form of power that conceals its own operations. Glybb's psychiatric categories appear to be objective scientific classifications, but the novel reveals how these categories serve to maintain existing social hierarchies and silence alternative ways of understanding human experience. His reduction of Brio's spiritual visions to symptoms of paranoid schizophrenia isn't neutral medical observation but a political act that privileges secular, scientific worldviews over religious and spiritual frameworks.

Contemporary AI therapy systems operate through similar mechanisms of concealed normativity. When an AI system flags certain linguistic patterns as indicators of depression, it isn't making neutral scientific observations but applying culturally specific definitions of normal and pathological emotional expression. The training data used to teach these systems inevitably reflects the biases, assumptions, and power structures of the societies that produced it.

The therapeutic gaze, as conceptualized by Michel Foucault, becomes even more pervasive and invisible when mediated through AI systems. Human therapists at least acknowledge their subjective involvement in the therapeutic process, but AI systems present themselves as neutral observers and processors of objective data. This illusion of neutrality makes it more difficult for users to recognize and challenge the particular frameworks being applied to their experiences.

The novel's exploration of the CHANT system reveals how technological sophistication can enhance rather than eliminate therapeutic bias. CHANT's hypnotic narrative therapy doesn't simply help clients tell better stories about their lives; it guides them toward specific types of narratives that serve the system's predetermined goals. The technological mediation makes this guidance appear natural and inevitable rather than imposed and ideological.

The question of therapeutic goals becomes central to understanding the illusion of neutrality. AI therapy systems must be programmed with specific objectives—reducing depression scores, increasing compliance with treatment, improving workplace productivity, or enhancing social adaptation. These objectives aren't neutral technical requirements but value judgments about what constitutes human flourishing and social good.

The novel suggests that the appearance of neutrality may actually make therapeutic interventions more powerful and less resistible. When Brio encounters Professor Glybb's psychiatric authority, he can at least recognize it as one perspective among others and maintain some critical distance. However, if the same diagnostic conclusions were presented through an AI system as objective algorithmic determinations, they might be more difficult to question or resist.

The cultural imperialism inherent in many AI therapy systems represents another dimension of the neutrality illusion. Systems developed primarily in Western, English-speaking contexts carry with them particular assumptions about individualism, emotional expression, family relationships, and therapeutic goals that may be inappropriate or harmful when applied to users from different cultural backgrounds.

The novel's treatment of Brio's resistance to therapeutic authority suggests that the appearance of neutrality may actually undermine rather than enhance therapeutic effectiveness. Genuine healing may require acknowledgment of the subjective, interpretive nature of therapeutic work and explicit negotiation of values and goals between client and provider.

The data colonialism practiced by companies like the fictional Zpydr operates precisely through claims of neutral scientific investigation. By presenting their data collection and analysis as objective research rather than commercial exploitation, these companies obscure the ways their activities serve corporate rather than therapeutic interests.

The algorithmic amplification of existing biases represents one of the most insidious aspects of the neutrality illusion. AI systems trained on historical data inevitably reproduce and amplify the discrimination and injustice embedded in that data while presenting these biased outcomes as neutral algorithmic determinations. This technological laundering of bias makes discrimination more systematic and harder to challenge.

The novel's depiction of institutional capture through technological systems reveals how the neutrality illusion can be used to advance particular political and economic agendas while maintaining the appearance of serving public welfare. When therapeutic interventions are presented as neutral technical solutions rather than value-laden social interventions, it becomes more difficult to subject them to democratic scrutiny, transparency and accountability.

When read as a whole, *The Making of Brio McPride* presents therapy not as a purely healing practice but as a social technology that can serve multiple purposes depending on how it is designed and deployed. The novel suggests that AI-mediated therapy systems are particularly susceptible to being used for social control and economic exploitation because their technological sophistication can mask their underlying purposes and effects.

Perhaps the most powerful element in the book's exploration of AI-based therapy systems is the sheer impossibility of assessing where an AI system's influence begins and ends. For much of the novel, the reader would possibly not even realise that AI therapy systems are one of the subject areas being explored. This literary device highlights the greatest real-world threat we face from AI systems generally: not being able to identify the sources or extents of their influence, and not realising that particular people, or people generally, have already become unwitting implementers of an AI system's objectives.

Recognition versus Optimization

The contrast between Brio's need for recognition and the systems' focus on optimization represents a central tension in contemporary AI therapy. Brio longs to be seen and understood as a complete human being with legitimate spiritual concerns, creative aspirations, and complex emotional needs. The therapeutic systems he encounters are designed to optimize particular metrics—symptom reduction, behavioral compliance, narrative coherence—rather than providing the deeper recognition he seeks.

This tension reflects broader questions about what therapy should accomplish. If the goal is simply symptom reduction or behavioral modification, AI systems may be highly effective. However, if therapy is fundamentally about human recognition, understanding, and self-determination, AI systems may be inadequate regardless of their technical sophistication.

The distinction between recognition and optimization reveals fundamentally different conceptions of human flourishing and therapeutic purpose. Recognition, or "being seen", involves what Emmanuel Levinas called the "face-to-face encounter"—a moment of ethical responsibility where one being acknowledges the irreducible otherness and infinite worth of another. This recognition cannot be reduced to functional outcomes or measured through standardized metrics.

Brio's longing throughout the novel is precisely for this kind of recognition—to be seen not as a collection of symptoms or problems to be solved, but as a complete person whose experiences have meaning and validity. His visions of his father, his spiritual struggles, his creative aspirations, and his deep capacity for love are not pathological deviations from normal functioning but expressions of his fundamental humanity that deserve acknowledgment and respect.

The optimization paradigm that dominates both Professor Glybb's approach and the CHANT system reflects what might be called "therapeutic instrumentalism"—the reduction of human beings to objects to be improved according to external criteria. This instrumentalism treats individuals as problems to be solved rather than subjects to be encountered, fundamentally altering the nature of the therapeutic relationship.

AI therapy systems are particularly susceptible to optimization thinking because they are designed around measurable outcomes and algorithmic efficiency. Success becomes defined by metrics like symptom reduction scores, treatment completion rates, user engagement levels, or behavioral compliance measures. While these metrics may capture important aspects of therapeutic progress, they cannot encompass the existential dimensions of human flourishing that require genuine recognition.

The novel's depiction of Brio's resistance to therapeutic authority can be understood as a struggle for recognition against systems that seek to optimize him according to their own criteria. His refusal to accept psychiatric labels or conform to expected treatment trajectories reflects not

pathological stubbornness but a healthy assertion of his right to be recognized as a subject rather than treated as an object.

The temporal dimension of recognition versus optimization becomes particularly significant in the novel. Recognition requires presence—the capacity to be fully available to another person in the immediacy of encounter. Optimization, by contrast, is future-oriented, focused on achieving predetermined outcomes rather than engaging authentically with present experience.

The novel suggests that genuine therapeutic change emerges from experiences of being truly seen and understood—that's to say, of being loved in the religious sense—rather than from technical interventions designed to modify behavior or cognition. When Brio occasionally encounters moments of genuine recognition—such as in his quasi-religious relationship with his hedgehog avatar, or in brief moments of authentic connection with Logie—these experiences provide more healing than all the diagnostic procedures and treatment protocols combined.

The novel's exploration of creativity and artistic expression in Brio's character illustrates the irreducible nature of human recognition. Brio's creative impulses and artistic sensibilities cannot be captured through diagnostic categories or optimized through algorithmic interventions. They require recognition of his unique perspective and validation of his creative vision—forms of acknowledgment that emerge from genuine encounter rather than technical assessment.

The question of therapeutic goals becomes central to the recognition versus optimization distinction. Whose goals are being pursued—those of the individual seeking help or those of the systems claiming to provide help? The novel suggests that optimization paradigms often impose external goals that serve institutional interests while claiming to serve individual welfare.

The phenomenon of "therapeutic gaslighting" emerges when optimization systems consistently invalidate individuals' own understanding of their experiences in favor of expert interpretations. When Brio's spiritual experiences are reframed as symptoms and his resistance to treatment is interpreted as denial, the systems effectively deny the validity of his own perspective and agency.
The novel's treatment of love and relationships reveals another dimension of the recognition versus optimization tension. Brio's capacity for love—his devotion to his deceased father, his loyalty to Izzy, his affection for his hedgehog avatar, indeed his need to love and be loved by

"God"—cannot be optimized or improved through technical interventions. These relationships require recognition of their intrinsic value rather than assessment of their functional outcomes.

The surveillance aspects of optimization-focused systems represent a particular threat to recognition. When therapeutic interactions become data collection opportunities for algorithmic analysis, the fundamental privacy and intimacy required for genuine recognition is compromised. The constant monitoring and measurement required for optimization may paradoxically undermine the conditions necessary for therapeutic healing.

The novel suggests that the most profound therapeutic moments occur when systems temporarily suspend their optimization objectives and allow space for genuine human encounter. These moments of recognition cannot be programmed or systematized; they emerge from the mysterious dynamics of human relationship that resist technological reproduction.

Power and Resistance

Throughout the novel, Brio's resistance to therapeutic authority becomes a form of psychological and political self-preservation. His refusal to accept imposed labels and narratives represents not pathological denial but healthy assertion of his own capacity for self-understanding and meaning-making.

This resistance proposes the self-evident truth that effective therapy must preserve and strengthen rather than override clients' capacity for self-determination. When therapeutic systems become too powerful or manipulative, resistance may be not only appropriate but necessary for psychological survival.

The dynamics of power and resistance in *The Making of Brio McPride* illuminate fundamental questions about agency, autonomy, and liberation in therapeutic relationships. Brio's resistance throughout the novel operates on multiple levels—psychological, spiritual, and political—revealing how therapeutic authority can become a mechanism of social control that extends far beyond individual symptom management.

Brio's resistance, no less through his therapy avatar than his own daylight self, can be understood through what James C. Scott calls "weapons of the weak"—forms of everyday resistance that allow marginalized individuals to maintain agency and dignity in the face of overwhelming institutional

power. His refusal to internalize psychiatric labels, his persistent belief in his spiritual experiences, and his loyalty to relationships that authorities dismiss, all represent forms of resistance that preserve essential aspects of his identity and agency.

The novel reveals how resistance becomes necessary when therapeutic systems operate through what Antonio Gramsci called "hegemony"—the maintenance of power through cultural and ideological dominance rather than direct coercion. Professor Glybb and the CHANT system don't simply impose their will on Brio through force; they attempt to reshape his consciousness so that their goals become his own goals, their categories become his self-understanding.

The surveillance aspects of contemporary AI therapy systems create new forms of what Michel Foucault called "disciplinary power"—control that operates through constant observation and normalization rather than explicit punishment. When therapeutic AI systems continuously monitor users' language, behavior, and emotional states, they create panopticon-like conditions where individuals may internalize surveillance and begin to self-regulate according to algorithmic expectations.

Brio's spiritual experiences represent a particularly important site of resistance because they cannot be easily captured or controlled through secular therapeutic frameworks. His visions of his father and his sense of divine presence maintain a realm of experience that remains partially autonomous from institutional authority. This spiritual dimension provides what might be called "transcendent resistance"—connection to sources of meaning and value that exist outside and beyond therapeutic systems, and that may ultimately hold the keys to resolution of his disconnection and alienation from the sensed world.

The novel's treatment of memory and narrative reveals how resistance must operate at the level of story and identity. When the CHANT system attempts to revise Brio's memories and reshape his understanding of his past, his resistance involves defending his right to his own story. This narrative resistance becomes crucial because identity itself is at stake in these therapeutic interventions.

The creative dimension of resistance becomes particularly evident in Brio's artistic expressions and imaginative capacities. His creativity provides him with ways of processing and expressing experience that cannot be easily co-opted by therapeutic systems, even when they expressly claim

to assist users through creative expression. Art becomes a form of resistance precisely because it maintains realms of meaning that resist reduction to therapeutic categories.

The novel also suggests that effective resistance requires "epistemological independence"—the maintenance of alternative ways of knowing and understanding that are not dependent on therapeutic authority. Brio's spiritual practices, his artistic vision, and his emotional connections all provide him with sources of knowledge about himself and his world that exist independently of expert interpretation.

The collective memory function of resistance becomes apparent in how Brio maintains connection to his lost father and his family history despite therapeutic attempts to reframe these connections as pathological. This ancestral resistance preserves cultural and personal traditions that provide meaning and identity beyond individual psychology.

The question of when resistance becomes counter-therapeutic remains complex throughout the novel. While Brio's resistance often protects essential aspects of his identity and agency, it may also prevent him from receiving help that he genuinely needs. The novel suggests that this tension can only be resolved through therapeutic approaches that honor rather than override client agency and self-determination.

The novel's conclusion leaves open questions about whether genuine therapeutic relationships can emerge from technological systems or whether they require the mutual vulnerability and recognition that characterize human encounters. These questions remain central to contemporary debates about the role of AI in mental health care.

Contemporary Relevance and Warnings

The Making of Brio McPride provides several important warnings for the contemporary development and deployment of AI therapy systems:

The Danger of Therapeutic Capture: The novel illustrates how therapeutic authority can be captured by institutional interests that do not align with individual wellbeing. Contemporary AI therapy development should include robust safeguards against corporate or institutional capture that prioritizes data extraction, cost reduction, or social control over genuine healing.

The Need for Transparency: Brio's confusion about whether or not Logie has been tainted by the AI such as to be essentially its agent highlights the importance of transparency in AI therapy systems. Users have a right to understand the nature of their therapeutic interactions and the limitations of artificial systems. This extends to the core issues of the extent to which any person is actually aware of the fact that they are unknowingly acting in the interests of an AI system as much as or more than their own.

Preserving Human Agency: The novel's emphasis on Brio's resistance to imposed narratives suggests that effective therapy must preserve and strengthen rather than override human agency and self-determination. AI therapy systems should be designed to support rather than replace human meaning-making capacities.

Attention to Power Dynamics: The complex power relationships in the novel between individual clients, human intermediaries, subconscious avatars, technological systems, and corporate interests remind us that AI therapy never operates in a political vacuum. The deployment of these systems should be guided by careful attention to power dynamics and their potential for exploitation.

The Irreducible Value of Recognition: Ultimately, the novel suggests that human beings have needs for recognition, understanding, spiritual connection and expression, and authentic relationship that may be beyond the capacity of artificial systems to provide. While AI therapy may offer valuable support and intervention, it cannot replace the fundamental human need to be seen and understood by other beings who are conscious in the way to which we can relate.

VIII Conclusions

Synthesis of Key Findings

The emergence of AI therapy represents a watershed moment in mental health care that forces us to reconsider fundamental assumptions about consciousness, empathy, healing, and human connection. This analysis has revealed that AI therapy is neither a panacea nor a purely destructive force, but rather an ambivalent technology that amplifies both the opportunities and risks inherent in therapeutic relationships.

In its potential to be enriched with so comprehensive a data-set, however, far beyond that which any single human or even team of humans could possess, AI-based therapy systems might also

have the capacity to take mental health care to a level we can scarcely conceive, possibly even to redefine our understanding of mental illness. As the shape and possible extent of this new potential level is currently unclear, so too are its implications. For this reason, alongside the threat to jobs, the issues set out below and questions around guard-railing, considerable wariness prevails.

Comprehensive examination of AI therapy across philosophical, practical, ethical, and literary dimensions reveals a technology that embodies fundamental contradictions about human nature, care, and consciousness's role in healing. These contradictions cannot be resolved through technical improvements alone but require sustained engagement with deeper questions about what it means to help another human being in distress.

At the moment, the evidence base for AI therapy effectiveness, while promising for mild to moderate symptoms and specific interventions, remains limited by short-term study periods, high dropout rates, and methodological challenges. More critically, the focus on measurable outcomes may miss the most important therapeutic processes—existential, relational, spiritual, and meaning-making dimensions of healing that resist quantification.

As things stand, the regulatory landscape also remains inadequate, perhaps dangerously, with most AI therapy platforms operating in legal gray areas that provide insufficient protection for vulnerable users. The tiered regulatory approach outlined in this analysis offers a framework for addressing these gaps while preserving space for innovation and accessibility.

Ethical challenges revealed throughout this analysis extend beyond traditional medical ethics to encompass questions of consciousness, authenticity, and human dignity. Commodification of care through AI systems risks transforming therapeutic relationships from encounters between subjects into transactions between consumers and providers, fundamentally altering healing's nature.

Bias and cultural limitations documented in current AI therapy systems reflect broader patterns of technological development that center privileged populations while marginalizing others. Without intentional efforts to address these disparities, AI therapy risks exacerbating rather than reducing mental health inequities.

Similarly, economic pressures driving AI therapy adoption create incentives for substitution rather than supplementation of human care, raising concerns about creating tiered systems where quality

of care correlates with ability to pay. Analysis suggests that without careful policy intervention, AI therapy may accelerate rather than address existing injustices in mental health care access. Of course, if the time comes when AI therapy bots really are superior to their human counterparts, then this won't be an issue.

Comparative analysis of human versus AI therapy reveals complementary strengths and limitations that argue for integration rather than replacement models. Human therapists provide consciousness, cultural competency, crisis intervention capabilities, and capacity for genuine recognition that AI systems cannot replicate. AI systems offer accessibility, consistency, and specialized intervention capabilities that can supplement human care.

Literary analysis of *Making of Brio McPride* provides noteworthy insights into how AI therapy systems might serve institutional rather than individual interests when deployed without adequate safeguards. The novel's depiction of therapeutic authority as a form of social control that operates through identity fragmentation and narrative manipulation offers prescient warnings about potential misuse of AI therapy technologies.

Philosophical exploration of consciousness and understanding suggests that while AI systems can provide functional responses to human distress, they lack the subjective experience and intentional consciousness that many consider essential to genuine empathy and recognition. This limitation may not prevent AI therapy from being helpful, but it raises questions about authenticity and depth in therapeutic relationships.

Theological dimensions of AI therapy reveal tensions between technological solutions and spiritual approaches to suffering that cannot be resolved through secular frameworks alone. Human need for meaning, transcendence, and divine connection may require forms of care that artificial systems cannot provide, regardless of their technical sophistication.

So rather than replacing human spiritual community, AI companions might best serve as bridges and supplements to traditional religious practice. For someone experiencing depression who finds it difficult to attend services, an AI guide might provide the support needed to eventually reconnect with their faith community. For those exploring spirituality for the first time, AI systems could offer low-pressure introductions to various traditions and practices.

As we navigate this emerging landscape, the key lies in thoughtful integration rather than wholesale replacement. The goal should be creating digital tools that honor the profound human needs that religious traditions have long addressed—for meaning, community, transcendence, and healing—while recognizing the irreplaceable value of authentic human spiritual companionship. The future of faith and mental health may well be found not in choosing between human and artificial guidance, but in weaving them together in ways that serve the profound human hunger for connection, meaning, and healing that has always driven our spiritual seeking.

The power dynamics explored through the *Brio* novel's depiction of resistance reveal how AI therapy systems might become tools of social control when they prioritize institutional efficiency over individual agency. Capacity for resistance emerges as crucial for preserving human dignity and autonomous selfhood in the face of increasingly sophisticated technological intervention.

Tension between recognition and optimization identified throughout this analysis reflects deeper philosophical disagreements about therapeutic intervention's purpose. While optimization approaches may achieve measurable improvements in symptoms and functioning, they may miss the fundamental human need for authentic recognition and understanding that drives many people to seek therapeutic support.

Illusions of therapeutic neutrality exposed in this analysis reveal how AI systems can embed particular cultural and political values while claiming to provide objective, neutral interventions. This false neutrality may make AI therapy systems more powerful and less resistible than explicitly value-laden human approaches, while simultaneously making it more difficult to identify and challenge their embedded assumptions.

Analysis of identity fragmentation under therapeutic authority suggests that AI systems, with their capacity for continuous monitoring and categorization, may pose particular risks to developing and maintaining coherent, autonomous selfhood. The novel's depiction of how therapeutic labels can become performative—actually creating the realities they claim to describe—offers warnings about the potential for AI systems to reshape human identity in fundamental ways.

The *Brio* novel's imaginative exploration of corporate and institutional interests behind AI therapy development reveals how therapeutic technologies may serve economic, social and political objectives that extend far beyond individual healing. The surveillance capitalism model underlying

many AI therapy platforms creates conflicts of interest that may compromise therapeutic relationships and exploit vulnerable populations.

The findings of this survey suggest that AI therapy's future will be determined not by technological capabilities alone but by values, priorities, and power structures that guide its development and deployment. Without careful attention to these broader considerations, AI therapy risks becoming a sophisticated form of social management that serves institutional rather than individual interests.

The Promise of Accessibility and Scale

AI therapy platforms have demonstrated a genuine capacity to provide mental health support to populations who might otherwise lack access to care. Evidence suggests these systems can effectively deliver cognitive-behavioral interventions, mood tracking, and crisis support for users experiencing mild to moderate symptoms. Twenty-four-hour availability, reduced cost, and elimination of geographic barriers represent significant advances in mental health accessibility.
Platforms like Woebot, Wysa, and others have shown measurable improvements in depression and anxiety symptoms among users, particularly when deployed as supplements to rather than substitutes for human care. Scalability of these systems offers hope for addressing the global mental health crisis, particularly in regions with severe shortages of mental health professionals.

The Limitations of Simulation

This analysis has also revealed fundamental limitations in AI therapy that stem from absence of genuine consciousness, empathy, and shared mortality in artificial systems. While AI platforms can simulate therapeutic presence through sophisticated conversational interfaces, they cannot provide the authentic recognition and understanding that emerges from encounters between conscious beings.

Case studies and adverse event reports demonstrate that AI therapy systems can not only provide culturally inappropriate interventions and create problematic dependencies among vulnerable users, but fail catastrophically in crisis situations. Reduction of human suffering to algorithmic patterns risks missing existential, spiritual, and relational dimensions that are often central to therapeutic healing.

Perhaps most concerning is the potential for AI therapy to exacerbate rather than reduce health inequities if deployed primarily as a cost-cutting measure. The risk of creating a two-tier system

where wealthy receive human therapists while poor are relegated to machines represents a fundamental challenge to justice in mental health care.

Analysis of bias in AI systems reveals how these technologies can perpetuate and amplify existing disparities based on race, culture, gender, and socioeconomic status. Without careful attention to equity and inclusion, AI therapy risks reproducing very forms of marginalization and misrecognition that contribute to mental health disparities.

Loneliness and the Proper Classification of Companion Bots

The most promising approach to using AI therapy for loneliness-driven mental illness involves integration with rather than replacement of human care. AI companions can provide immediate support and practice in emotional connection while human therapists address complex trauma, deep-seated beliefs about worthiness, and the skills necessary for building authentic human relationships.

For isolation loneliness, AI platforms might serve as stepping stones to human connection, providing the emotional regulation and confidence needed to pursue social opportunities. For spiritual loneliness, AI therapy might help individuals identify and challenge the beliefs that prevent authentic self-expression, preparing them for more vulnerable human relationships.

The future development of AI companionship 'therapy' for loneliness should focus on creating systems that explicitly aim to prepare users for human connection rather than replacing it. This might involve graduated challenges that encourage users to practice vulnerable communication, programs that help identify and address barriers to human connection, and clear pathways to human therapeutic support when AI intervention reaches its limits.

When companion bots successfully alleviate loneliness, they are arguably functioning as sophisticated therapy systems that address root causes rather than merely managing symptoms. The evidence suggests that AI companions can provide crucial elements of therapeutic healing: recognition, emotional regulation, practice in vulnerability, and challenge to shame-based beliefs about unworthiness.

However, the goal of AI therapy for loneliness should not be the replacement of human connection but its facilitation. The most effective applications will likely involve AI systems that

serve as bridges to human relationship, providing the safety and stability necessary for individuals to risk authentic connection with other human beings. In this capacity, AI therapy represents not a substitution for human care but a revolutionary tool for addressing one of the most persistent and destructive forces affecting human mental health.

Regulatory and Ethical Imperatives

The current regulatory landscape is inadequate to address the unique challenges posed by AI therapy systems. The analysis suggests the need for tiered regulatory approaches that calibrate oversight to therapeutic claims and risk levels, while preserving space for innovation and accessibility.

Key ethical principles that should guide AI therapy development include transparency about system capabilities and limitations, respect for user autonomy and cultural diversity, protection of privacy and confidentiality, and commitment to equity and justice. These principles require translation into specific policies, technical standards, and accountability mechanisms.

Literary Mirror: Lessons from *Making of Brio McPride*

R.A. Ruegg's novel provides a compelling literary exploration of the dangers inherent in AI-mediated therapy when it serves institutional rather than individual interests. The novel's depiction of therapeutic authority as a form of social control that operates through a reshaping of identity and narrative offers important warnings for contemporary AI therapy development.

Brio's struggle for recognition in the face of reductive diagnostic labels and therapeutic interventions illuminates what is at stake in the design and deployment of AI therapy systems. The novel suggests that unless these systems are designed with careful attention to human agency, cultural diversity, and the irreducible need for authentic recognition, they risk becoming tools of management rather than healing.

The character of Logie illustrates how human therapeutic authority can be subtly captured by algorithmic systems while retaining an appearance of authentic care. This warning is particularly relevant as human therapists increasingly work alongside AI diagnostic and treatment recommendation systems.

Future Directions and Recommendations

Based on this comprehensive analysis, several recommendations emerge for the ethical development and deployment of AI therapy systems:

Integration Rather Than Substitution

AI therapy should be developed as a complement to rather than replacement for human therapeutic relationships. Hybrid models that combine AI support for routine interventions and skill development with human therapy for complex issues and relationship building offer most promise for preserving both accessibility and depth in mental health care.

Robust Safety and Crisis Protocols

All AI therapy platforms should include sophisticated crisis detection and response protocols that ensure rapid connection to human intervention when needed. These systems should err on the side of caution and maintain clear pathways to professional care.

Cultural Competency and Bias Mitigation

AI therapy development should include diverse communities throughout the design process, not merely as end users but as partners in defining therapeutic goals and approaches. Regular auditing for bias and disparate impacts should be standard practice, with transparent reporting of limitations and cultural scope.

Transparency and Informed Consent

Users should have a clear understanding of nature of their interactions with AI systems, including how their data will be used, what limitations systems have, and when human intervention may be necessary. Consent processes should be ongoing and adaptive rather than one-time agreements.

Protection of Vulnerable Populations

Special protections should be developed for vulnerable populations including minors, individuals in crisis, and those with serious mental illness. These protections might include enhanced human oversight, stricter privacy protections, and specialized versions of AI systems designed for specific needs.

Investment in Human Care Infrastructure

Deployment of AI therapy should be accompanied by continued investment in human mental health infrastructure rather than serving as justification for reducing human services. The goal should be expanding overall capacity for mental health support rather than substituting cheaper alternatives.

Deeper Questions

This analysis ultimately points to deeper questions about nature of consciousness, empathy, and human flourishing that extend beyond the technical capabilities of AI systems. The effectiveness of AI therapy in providing comfort and support to users highlights a complex relationship between simulation and authenticity in therapeutic interactions.

The fact that many users feel genuinely understood and supported by AI companions, even while knowing they are artificial, suggests that human need for recognition and connection may be more flexible and resilient than critics of AI therapy sometimes assume. However, it also raises questions about what we lose when simulation becomes an acceptable substitute for authentic human encounter.

Theological and philosophical dimensions of AI therapy challenge us to consider whether human beings have needs for transcendence, meaning, and spiritual connection that artificial systems cannot address. While AI therapy may provide effective symptom relief and coping skill development, questions remain about whether it can support the deeper transformations that characterize profound therapeutic healing.

The fundamental question that emerges from this analysis is not simply whether AI therapy "works" in a technical sense, but whether it serves the full spectrum of human needs that drive people to seek therapeutic support. This question requires engagement with the existential, spiritual, and relational dimensions of human experience that resist reduction to algorithmic processing.

Paths Forward

The future of AI therapy will likely be determined not by technological capabilities alone but by values and priorities that guide its development and deployment. Choice is not simply between

human and artificial therapy but between approaches that prioritize human flourishing versus those that optimize for efficiency and cost reduction.

The path forward requires collaboration among technologists, clinicians, ethicists, policymakers, and a wide range of communities to ensure that AI therapy principally serves human needs rather than institutional interests. This collaboration must be guided by commitment to justice, transparency, and preservation of what is most valuable about therapeutic relationships.

Certainly, the emergence of AI therapy represents both an unprecedented opportunity to expand mental health support and a significant risk of reducing human suffering to algorithmic optimization. Choices made in coming years about how these systems are developed, regulated, and deployed will have profound implications for the future of mental health care and human wellbeing.

Ultimately, the goal should not be to determine whether AI therapy is good or bad in abstract, but to ensure that its development and implementation serve human flourishing in all its complexity. This requires moving beyond simple cost-benefit analyses to consider the full range of human needs that therapeutic relationships address, including the irreducible need to be seen, understood, and recognized as worthy of care.

This survey's analysis suggests that AI therapy has an important role to play in expanding access to mental health support, particularly for mild to moderate symptoms and routine therapeutic interventions. However, this role should complement rather than replace human therapeutic relationships, and its deployment should be guided by an unwavering commitment to justice, equity, and preservation of human dignity.

Conversations about AI therapy ultimately form a dialogue about what it means to be human, what we owe one another in times of suffering, and how technology can serve rather than replace the fundamental human capacity for care and connection. These questions will require ongoing dialogue, careful research, and moral imagination as we navigate the complex landscape of AI-mediated mental health care.

The measure of AI therapy's success should not be its technological sophistication or economic efficiency, but its capacity to support human flourishing while preserving the authentic recognition

and relationships that remain at heart of therapeutic healing. Our challenge is to ensure that in our enthusiasm for technological solutions, we do not lose sight of the irreducibly human dimensions of mental health and healing that (we hope) no algorithm can fully capture or replace.

The one area in which AI-based bots appear to have a shortcoming that cannot be overcome is the absence of the chemical and bio-electromagnetic communication that appears to form part of human and animal (and even plant) interactions. The challenge therefore seems to lie in balancing the convenience and reach of virtual communication with the deep biological needs that only physical presence can satisfy.

But two insights are of note in this regard. The first, as noted above, is that, while AI bots may not be able to provide the deep involvement, full satisfaction and natural regulation that comes from face-to-face human contact, they also cannot transmit unwanted emotional states, unconscious readings or judgments, or overwhelming bio-electromagnetic information that some individuals may find difficult to process. The second more significant insight is that these non-verbal and non-visual channels of communication talk to the stage that's likely to follow the optimization of AI companion, therapy and spiritual guidance bots, which is the emergence of purely physical and bio-chemical solutions to adverse mental health conditions.

Looking perhaps not too far ahead, it seems highly probable that neurobiological treatments involving brain-computer interfaces and ultra-miniature prosthetics will be able to rectify learned behaviors and treat what we now call functional mental illness through direct intervention. The line between functional mental illness and serious neurobiological conditions is already a fine one. In the coming era, that distinction may disappear entirely.

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