Commentary:

Counseling and Artificial Intelligence: Forging a Path Forward

Russell Fulmer, Husson University

Abstract

The thesis of this editorial is twofold. First, counselors should work with Artificial Intelligence (AI), and AI should work with counseling. Second, counselors should increase their involvement with, essentially, all things AI. Counseling should forge a path forward *with* artificial intelligence. This editorial is a bit premature for pragmatists. Where is artificial intelligence (AI) in mental health? The answer is seemingly a paradox, everywhere yet nowhere. Everywhere, through AI subfields like machine learning, natural language processing applications, chatbots, and the myriad ways that large language models find correlations in data hidden from the human eye. Also, AI is nowhere to be found in the human-to-human act of active listening and showing compassion. To begin, let's define AI. I prefer the straightforward definition of AI being the ability of non-human (read: synthetic, computer) entities to solve problems (Fulmer, 2019) or, perhaps we could say, complex problems (Tegmark, 2018). Without getting into never-ending discussions about what intelligence is, this definition allows us to address AI more practically. Therefore, some*thing* (non-human) is artificially intelligent to the extent to which it can solve problems. Consider some of the many problems in mental health – the question of correct taxonomies, proper diagnosis, the best treatment plan, access to care, and you have an idea about how AI can be applied to our field.

The Counselor and the Juggernaut

Do not presume AI perfection. Concurrently, acknowledging the present and potential future capabilities of AI is important. I advocate for keeping the counselor in the counseling. The prospect of AI supplanting counselors in the near future is improbable. Nevertheless, it is crucial to recognize that individuals worldwide can and will turn to AI for counseling-like services. There is a worldwide shortage of mental health professionals and AI may play a role in meeting the demand (Minerva & Giubilini, 2023). Counselors can insist on their legitimacy, lobby for governments to pass laws that protect them, rightfully point out that technology cannot offer what they do, and emphasize how meaningful change occurs only through the special therapeutic relationship. Provocatively, I might debate the universality of the last point. Still, those skeptics are largely correct *and* missing the forest for the trees because advanced technology is a juggernaut in modernity. Further, advanced technology is a *problem-solving* juggernaut, and that ability attracts a lot of people. Whether the technology shows bias (it certainly can) is another question. Whether technology is the problem it purports to solve in the first place is another question as well, *if you accept the premise* that the rise of technology will not be stopped. You may curtail its development in one locale (e.g., United States), but another (e.g., Singapore, China, European Union, South Korea, etc.) will continue. There is a difference between the descriptive (what is) and the normative (what should be). If you conflate the two (called the "is/ought fallacy"), you risk denying or distorting reality. Accept the premise that AI is a problem-solving juggernaut, extrapolate implications accordingly, and your denial is over, and your advocacy for counselor involvement in AI, at least at the descriptive level, begins.

The Group and the Individual

There are more transformative and potentially transformative phenomena among us now than at any time in history. Some of the most pressing are the threat of a nuclear holocaust through proliferation or provocation from a nuclear state, the effects of climate change, the potential of renewable energy through nuclear fusion, neurotechnology, gene editing, quantum computing, and artificial intelligence. Some are bad (nuclear war), and some are potentially good or bad, like AI.

The advancement or regression of these phenomena is a team effort on some level. Therefore, I recommend that the counseling profession enter the game. Collectively, counselors can influence AI. Yet, on another level, one person can make a difference. One person can prevent a sinister event from occurring. The power of one is perhaps never better illustrated than with the choices made by Russian military officers Vasili Arkhipov in 1962 and Stanislav Petrov in 1983. Few people know their names and their stories are beyond this purview of this editorial, but they saved the world from a nuclear disaster. Read their stories, if you have an interest. Even if the general counseling community is reluctant to get involved, individual counselors can, and can make a difference. They should get involved, because AI has high risk and high reward. To counter the risk, we should advocate for transparency in AI development. To counter the risks involved with AI in counseling, we should keep the counselor in the counseling. Hopefully, AI will not pose a risk on scale with a nuclear war, although some scientists and influential people contend that AI is an existential risk to humanity. I am an AI optimist, impressed by its potential. However, AI should be monitored. If *one counselor* notices and helps rectify AI programming bias before that AI is

launched, then that counselor has practiced nonmaleficence. Now is the time for counselors to get involved with AI at all levels.

Counselor Involvement with AI

I suggest five ways to increase counselor participation in AI.

1. **Counselor education**. First, learn about AI. Some ways to learn include:
   a. Professional development opportunities
   b. Special courses developed
   c. Training seminars created
2. **Counselor research**. Consume and conduct research at the AI/Counseling interface.
   a. Note the sizeable research gap that presently exists. With a timely research question, plentiful opportunities for research studies abound
   b. Doctoral dissertations and master's theses with research questions related to AI and counseling
   c. Study the ethics of AI, which remains a topic in need of inquiry

3. **Counselor advocacy and leadership**. Many companies use and create AI. How many employ counselors or have counselors sit on their boards or committees? At present, not many.
   a. Be proactive. Reach out to AI companies, ask about opportunities for employment and pro bono or volunteer work
   b. Start a committee at the local, regional, or national level
   c. Organize efforts to advocate for AI ethics, such as efforts to reduce bias in AI
4. **Embrace your interdisciplinary orientation**. Professional identity is important *and* so is the recognition that the field of counseling does not exist in a vacuum. Your exploration of AI may temporarily put you on hiatus from 'pure counseling' for a while and into other disciplines. Is that a bad thing? Well, counselors promote professional identity while requiring their papers to use APA style (note: psychology). They also borrow heavily from psychology and psychiatry in other ways, like the use of the DSM (published by psychiatrists) and theories (e.g. Psychodynamic, CBT, etc.), most of which were not developed by counselors. Maybe it's time for counselors to recognize that they are already interdisciplinary. Psychologists especially are already involved with AI. Work with them and create something in AI, particularly for counseling. Be professionally inclusive.

5. **Play**. Some people have little interest in research papers or sitting on review boards. Have fun discovering AI. Watch thought-provoking movies ("Ex Machina" is a good one), read books, or find interesting posts about the AI world. My involvement with AI began with a Google search followed by an email to an AI company. Many people have tried ChatGPT by now. Look into non-text-based applications of generative AI (e.g. Dall-E). I also suggest exploring the world of Emotion AI.

Counselors should work with AI and AI should work with counseling. Of course, that doesn't mean that AI applies to everything a counselor does. It means that the field of counseling should grow more knowledgeable about AI and generally increase involvement in AI's creation and applications. The field of counseling should not fall behind. Counseling should forge a path forward *with* artificial intelligence.

References

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