

The Necessity of Soul and the Role of AI in the Art of Rehabilitation

By Michaela Magpile

Freshly moved into my dorm to start my first semester as a Student of Physical Therapy, I spoke to my friend over bowls of pho at the closest Vietnamese restaurant, after we had taken a dance workshop in the city. “I feel like I know my ‘why’ so acutely,” I said between mouthfuls of noodles. “I feel like I choreograph because it’s the most authentic way I can connect with another person.” I laughed at my own banality. Unlike other art forms, dance had always felt the most personal to me.

As someone who creates as a choreographer and dancer, I get to be both the speaker and the speech, the artist and the art. Creating in this way, from and for my own body, I can communicate with my audience through an art form that is characteristically human and that has existed long before the development of modern technology. Simply the act of dancing, too, requires few tools outside of our own bodies. It doesn’t require the possession of a musical instrument, nor a pen, nor even music. Like the practice of physical therapy, dancing only requires one’s physical body, and in general, all external tools are optional.

Now, as I enter the second semester of my graduate program in physical therapy and observe the

integration of artificial intelligence (AI) technology into society, I have a greater appreciation for the similarity between artists who prioritize authentic connection with their audiences and clinicians who prioritize the soulfulness of the patient-provider relationship; making art and providing patient-centered care both seem to stem from genuine, human-to-human communication, regardless of the use of external tools.

Messy but Necessary

One could argue that because AI was developed by humans, that whatever art or plan of care it generates is proximal enough to human authenticity to be effective. But it is the messy, variable nature of humans that cannot be reduced to mere algorithms. It is from this mess of feeling and experience that the most sincere and effective conversations can be had, whether they be in the context of art or patient care.

How many degrees of separation from humanness are needed for a piece of art to lose its authenticity? At what point does the use of AI in clinical practice start to compromise the impact of the patient-provider relationship?

AI as a Useful Tool

AI is often framed as a complementary tool, as opposed to a replacement, for artists and clinicians alike. Although it has the potential to be highly powerful in ways that simulate human intelligence, it may be helpful to view AI as a tool, in the same way as a musical instrument, a pen, or even music is viewed, as a complementary tool or adjunct to certain forms of art. If a dancer can use music as a tool to support their work and still be considered a real artist, so too should a clinician be able to conscientiously use AI and still preserve the essence of humanism in their practice.

I imagine that AI could be helpful in synthesizing and summarizing the results of various clinical studies to assist with the creation of treatment plans, or, when a list of symptoms is pasted into an interface, that it could be useful in helping clinicians more quickly reach an accurate physical therapy diagnosis. This may allow clinicians to more effectively engage in evidence-based practice.

However, relying solely on AI to make clinical decisions sidelines the value of human-to-human conversation when the provider and patient usually have an opportunity to collaborate on the plan of care. The development of a treatment plan is highly dependent on the patient's specific goals, concerns, and lifestyle, and ignoring the unique nuances of their situation, in many ways, displaces aspects of their humanity.

Finding a Balance

Instead, for example, clinicians can use AI to develop a *sample* treatment plan, while also allowing their critical thinking skills, effective conversations on patients' personal factors, and their past clinical experiences to

inform their decisions. In this context, the clinician is the artist using technology as their tool.

Empathy, creativity, and the inherent subjectivity of the human experience are admittedly time-consuming themes to address and thus, they are often dismissed in a capitalist society. However, the principles of humanism are essential to the work of rehabilitation professionals, and understanding the limitations of AI in its ability to account for the diversity of patient experiences is critical for optimizing quality of care.

Society is yet to see the point at which this use of AI becomes excessive and maladaptive, and this boundary will likely be debated over time of implementation.

Nonetheless, one point will consistently hold true: that the purest forms of empathy and art can only come from something that possesses a soul. Human nature is the raw material that no tool can replace; it is the muse for which AI can only ever imitate.

Conclusion

Once I am a fully-licensed physical therapist, I hope that I can use my skills to thoughtfully

employ the correct tools in the most effective way, while still honoring my humanity. Like the art of dance, the act of simply caring for and connecting with another person does not require the presence of a musical instrument, nor a pen, nor music, nor even AI.

And reflecting on my motivation to pursue this profession and of my appreciation for the

complexity of the human experience, I am reminded of my 'why' so acutely: I value the unique opportunity that

physical therapy presents to engage with another's soul.

Acknowledgement of AI Use: I did not use AI to assist me in writing this essay because it is a tool that I did not consider to be necessary to create this work. Not every piece of choreography calls for music.

About the Author



Michaela Magpile, SPT (she/her) is a dancer, choreographer, and first year Doctor of Physical Therapy candidate at Columbia University Vagelos College of Physicians and Surgeons. She graduated in 2022 with a Bachelor of Science in human biology and a minor in business from the University of California San Diego. Her experiences in the San Diego dance community and being exposed to the various health concerns of that population have led her to pursue a career in physical therapy, and she hopes to leverage her education and passion for the humanities in order to grow as a more effective ally to her future patients. Outside of class, she enjoys attending Columbia's Narrative Medicine workshops, volunteering at the student-run clinic CoSMO and at Alvin Ailey American Dance Theatre, working as an English language tutor, learning from her favorite choreographers in the city, and curating obnoxiously specific playlists on Spotify.