

AI Technologies and Therapy: The Use of AI devices in Emotional Management Therapy in Contemporary Society Today.

Katelynd Campo

Submitted to: JMIR Mental Health
on: April 08, 2025

Disclaimer: © The authors. All rights reserved. This is a privileged document currently under peer-review/community review. Authors have provided JMIR Publications with an exclusive license to publish this preprint on its website for review purposes only. While the final peer-reviewed paper may be licensed under a CC BY license on publication, at this stage authors and publisher expressly prohibit redistribution of this draft paper other than for review purposes.

Table of Contents

Original Manuscript.....	5
---------------------------------	----------

Preprint
JMIR Publications

AI Technologies and Therapy: The Use of AI devices in Emotional Management Therapy in Contemporary Society Today.

Katelynd Campo¹ BA, MA

¹ None None CA

Corresponding Author:
Katelynd Campo BA, MA

None
None
None
CA

Abstract

Background: Today's social era is inundated with various types artificial intelligence (AI) and chatbot technologies. With the coming of the digital era, society has become more connected to others yet more disconnected from humanity in a way. AI has not taken over in-person and human contact completely, however it has provided an alternative solution or option towards human contact for some. Within these social and digital societies much has adapted, whereby the world of therapy and therapeutic attempts has also undergone transitions to being able to service patient needs offering telehealth and virtual sessions. With the rise in global loneliness and decreased desire for social interaction, such begs the question whether people lend their trust towards human or AI technologies such as chatbot services when seeking therapy.

Objective: The main premise of this paper is to investigate whether or not AI technologies provide an alternative medium to providing efficient and rational therapeutic rehabilitation in better healing humans than by humans. This idea will be explored throughout the rest of this paper by discussing the parameters of AI technologies, telehealth, and robotic therapy in order to hopefully come to a conclusion on the topic.

Methods: This article reviews a number of research studies investigating the use of telehealth technologies in providing therapy and counselling care towards patients. This review also makes use of a Netflix reality television show to demonstrate the use of AI technologies in rendering therapy and counselling services.

Results: Results from this review find that patients would seem to prefer AI technologies.

Conclusions: It would seem that patients find a comfort in chatbot responses derived from AI technology devices when seeking help. Does this have to do with the idea of information precision, or perhaps the lack of trust in humans? AI technology in therapeutic approaches showcases an interesting link between wanting to have human emotions explained yet resorting towards a robotic device that is supposedly not able to feel or conceive human emotions; but rather simply explain to humans what they are programmed to search for and/or respond with based on the set algorithm. All-in-all, this review evaluates data found in various examples investigating AI technology and their use in therapeutic attempts towards emotions as something that seems to be ostensibly preferred amongst patients in current modern-day contemporary society. Albeit, the success rate of patient rehabilitation using AI technology versus human led interventions must be better understood in comparison to each other as well. Clinical Trial: None.

(JMIR Preprints 08/04/2025:75693)

DOI: <https://doi.org/10.2196/preprints.75693>

Preprint Settings

1) Would you like to publish your submitted manuscript as preprint?

✓ **Please make my preprint PDF available to anyone at any time (recommended).**

Please make my preprint PDF available only to logged-in users; I understand that my title and abstract will remain visible to all users.
Only make the preprint title and abstract visible.

No, I do not wish to publish my submitted manuscript as a preprint.

2) If accepted for publication in a JMIR journal, would you like the PDF to be visible to the public?

✓ **Yes, please make my accepted manuscript PDF available to anyone at any time (Recommended).**

Yes, but please make my accepted manuscript PDF available only to logged-in users; I understand that the title and abstract will remain visible to the public.

Yes, but only make the title and abstract visible (see Important note, above). I understand that if I later pay to participate in a JMIR journal, I will be able to make my accepted manuscript PDF available to anyone.

No. Please do not make my accepted manuscript PDF available to anyone.



Original Manuscript

AI Technologies and Therapy: The Use of AI devices in Emotional Management Therapy in Contemporary Society Today.

Author¹

Abstract

Today's social era is inundated with various types artificial intelligence (AI) and chatbot technologies. With the coming of the digital era, society has become more connected to others yet more disconnected from humanity in a way. AI has not taken over in-person and human contact completely, however it has provided an alternative solution or option towards human contact for some. Within these social and digital societies much has adapted, whereby the world of therapy and therapeutic attempts has also undergone transitions to being able to service patient needs offering telehealth and virtual sessions. With the rise in global loneliness and decreased desire for social interaction, such begs the question whether people lend their trust towards human or AI technologies such as chatbot services when seeking therapy.

Key Words: Therapy, AI, AI Therapy, Robotic Therapy, Telehealth, Reality Television, Netflix, Chatbot Technologies, Psychology.

Corresponding Author

Author¹
Country
Email:

INTRODUCTION

Emotion - what does this word mean? According to the Merriam-Webster dictionary, the word *emotion* refers to "...a conscious mental reaction (such as anger or fear) subjectively experienced as strong feeling usually directed toward a specific object and typically accompanied by physiological and behavioral changes in the body..." (Merriam-Webster Dictionary, online).

AI and emotion have forever been a taboo when spoken about together. AI is often pitted as unable to experience subjective emotion, and therefore unable to provide inherently personalized and empathetic responses. Rather, AI has been acknowledged as a machine device used to produce efficiency and optimize production. As Erickson et al., (2013) infer in their book *How Reason Almost Lost Its Mind*, the purpose of computer machines is to rationalize the unthinkable, to make ruthless decisions that humans are rather unable to base on felt emotions (p.16). However, when contemplating the Netflix original series *To Hot Too Handle*, this idea that AI mechanisms hold the ineptitude to experience and deliver personalized and sympathetic responses can be re-imaged to indeed actually possibly retain the intelligence and capacity to perhaps do so. For when analyzing this Netflix show, it is observable that AI robots can perhaps act as this sort of robotic therapist, offering possibly higher understanding and agility in effecting change towards problematic emotional behaviors as showcased by the various contestants. In this sense, such begs the question as to whether AI is capable of emotional management therapeutic attempts via AI chatbot technologies.

Something AI is not known for is the ability to formulate sentimental conversations and attachments, which could very well potentially be re-defined and perceived as indeed something plausible when contemplating the famous AI robot Lana from the Netflix series *To Hot Too Handle*. Lana incentivises her participants in the Netflix competition to face their fears of commitment, love, and emotional awareness by working their weaknesses of forming meaningful connections via experimenting in real-life situations and workshops. The AI device used in this Netflix show, whether scripted or whether using AI chatbot technologies, has been observed to ostensibly successfully been able lead her participants to feel foreign emotional experiences (i.e., sentiments of vulnerability) which led them to altering their behaviors as analyzed throughout the television series. Lana was observed to employ the ostensible approach of condition – providing participants with an overall prize-fund that would experience deductions in total prize money to be won when one of her ‘rules’ would be broken (that-is-to-say anything that has to do with sex, touching, kissing, heavy petting, and self-gratification). Lana incentivised and conditioned her participants to abide by her rules and put in effort towards developing meaningful connections between compatible participants by forcing them to focus on building deeper connections rather than based on sexual interactions by getting to know one-another more profoundly and emotionally. It should also be noted that participants do not commit to the show knowingly being sent to a sexless retreat beforehand.

Notwithstanding the competition aspect of Lana’s therapeutic efforts, such begs the questions of what AI technologies can offer in terms of alternative methods of emotional rehabilitation or therapy. Does the use of AI technologies provide the opportunity to avoid human contact where the alleviation of sentiments related to being judged or embarrassed by an actual human therapist? Do AI technologies bring about the ability for people to talk more freely,

feel less restricted, offer greater anonymity, and provide more emotional security? Do the responses from an AI technology device provide a better sense of unbiased and subjective therapy, and therefore provide one with a better sense of autonomy in reflecting on their own emotions versus from a human therapist? Such also begs the question as to where AI technologies derive their interventions from; in that is the intelligence based on the knowledge of a human who programs the AI device? Is it from a chatbot service (such as Chatgpt) that pulls data from all over the internet to answer the individual seeking help?

OBJECTIVES

The main premise of this paper is to investigate whether or not AI technologies provide an alternative medium to providing efficient and rational therapeutic rehabilitation in better healing humans than by humans. This idea will be explored throughout the rest of this paper by discussing the parameters of AI technologies, telehealth, and robotic therapy in order to hopefully come to a conclusion on the topic.

LITERATURE REVIEW

What is AI? “Artificial intelligence is a constellation of many different technologies working together to enable machines to sense, comprehend, act, and learn with human-like levels of intelligence...” (Accenture, 2021). AI is also described to exist in varying ‘degrees’ - *Narrow (or “weak”) AI* and *General (or “strong”) AI*. *Narrow AI* is defined as artificial intelligence that accompanies us in our everyday lives, performing single tasks and distributing efficiency in our day-to-day (examples of this type of AI include weather applications, digital assistants, etc.) (Accenture, 2021). *Narrow AI* in sum is constructed and utilized for specific or limited tasks, it is a type of *analytical intelligence* that defines functions and applications (Ryan, 2019). *General (or “strong”) AI* refers to artificial intelligence that relates to the common perception of what AI constitutes (i.e., machines that provide human-like intelligence which thinks strategically and creatively, all whilst handling more complex tasks) (Accenture, 2021). *General AI* therefore refers to the type of artificial intelligence that is capable of finding a solution without human intervention (Ryan, 2019). According to Accenture (2021), “...artificial intelligence remains an extension of human capabilities, not a replacement.”

AI Intelligence/Rationality

The term *rational* by definition refers to “Having reason or understanding.” (Merriam-Webster Dictionary, online). The ability to decide rationally is possessed in the strength and competence to think responsibly (Vetrò et al., 2019). According to Vetrò et al., (2019), AI devices represent *intelligent agents*, which refers to:

“An intelligent agent “takes the best possible action in a situation” (p. 30), i.e. it is a rational agent the one which, for each possible percept sequence, is supposed to “select an action that is expected to maximize its performance measure, given the evidence provided by the percept sequence and whatever built-in knowledge the agent has” (p. 37).

AI therefore is able to engage in rational decision-making processes based on algorithms programmed by the machines primary intelligence source (i.e., the human). However, the AI devices primary source of intelligence rests as potentially being biased, for all human intelligence is sourced from a biased perspective. That said, the computer machine resorts to

producing a “rational decision” based on algorithmic data sets leading to said decision (Vetrò et al., 2019). Be that as it may, is AI therefore then inherently and purely rational in its nature?

Milossi et al., (2021) further elaborate this dilemma by stating that AI refers to a system “...designed by humans, interpreting the already collected data and decision the best action to take, according to the pre-defined parameters, in order to achieve the given goal” (p.58455). The authors note an important aspect whereby the notion of rationality founded in AI’s decision-making process, which refers to the actions of *interpreting* and *deciding on the best action to take* given the pre-determined algorithms, thus illustrating the rationality of AI’s decision making process (Milossi et al., 2021). Is it this process of decision-making that implicates unthinkable, non-emotional, ruthless, and savage ability that renders AI technologies as more rational decision-makers than humans as per according to Erickson et al., (2013).

Reflections of AI Technologies

AI technologies have been deemed to be an important part and element within contemporary society. The abilities of AI technologies to increase efficiency, protect the environment, and increase accuracy in decision-making processes have been regarded as essential within today’s societies (Accenture, 2021). Despite such, AI technologies do have certain downfalls. Notwithstanding AI’s valiant efforts in increasing efficiency, decreasing environmental degradation, and reducing the vicious capitalistic hold (i.e., what can be considered as human slavery), AI may come to eventually replace humans in certain jobs which may require actual human contact at the end of the day.

That said, the over presence of AI technologies possesses the potential to lead to a sort-of technological domination over humanity and perhaps in a grandiose discourse, eradicate any further evolutionary steps for humans wherein specific jobs are concerned (for example: surgeons, factory workers, customer service workers). Meaning, despite the abilities of AI technologies to provide superior customer service over humans as well as the capabilities of AI technologies to perform certain tasks more efficiently and accurately than humans, this technological revolution can possibly increase the capitalistic hold over society via AI technologies faster and more precise production of goods and services whereby more product is manufactured with less sells in retails due to the replacement of humans and therefore creating a loss of jobs and wages. Grandiose thought indeed however, when reflecting on what is going on in the world in current day, such as robotic surveillance dogs during the COVID-19 pandemic in China, robotic servers in various countries, surgical technologies promoting the use of robotic technologies during real-life human surgery, self-checkout kiosks, 24/7 *depanneurs* that do not have any human staff present; in addition to various movies and another Netflix show – *Better Than Us*, it is clearly observable how AI technologies have already begun to reduce the presence of humans in certain jobs.

Zuboff (2015) stipulates in his coined term *surveillance capitalism*, such aims to dictate a “...new form of information capitalism...[purposed] to predict and modify human behavior as a means to produce revenue and market control” (p.75). That said, the dialect mentioned above holds a certain truth and reality within contemporary society today whereby AI labour provides a new avenue of thought to re-image how certain human-lead jobs are now being robotically transformed; that-is-to-say “...replace the human body with machines that enable more

continuity and control” as Zuboff (2015) suggests. With that said, AI technologies possess the potential to revolutionize and feasibly even innovate spaces that humans did not think was even possible (such as major intricate surgeries for example). AI technologies in this sense can be argued to therefore hold both positive and negative attributes towards their contributions in modern-day contemporary societies today.

AI Technologies and Therapy

Having briefly covered the basis of what AI technologies constitute, returning back now to the purpose of this review – analyzing and evaluating the impact and utility of AI technologies within emotional management therapeutic attempts.

Netflix show: To Hot Too Handle

As previously briefly discussed in the introduction, the Netflix series To Hot Too Handle hosts multiple seasons of casted hot, single, and emotionally disconnected participants for a cash prize earned at the end of the show based on who has made the most emotional progress by following AI robot Lana’s island rules. The spectacle is purposed to showcase the harsh reality of today’s singles and the emotionless hook-up culture engaged in in today’s societies all around the world (the Netflix series is an international phenomenon that is filmed in America, South America, and Europe). As previously discussed, the total amount of the final cash prize is dependent on how the contestants act. Meaning, if they break the rules, the total prize money decreases based on Lana’s dictations. Lana’s objectives are not only to keep the contestants abstinent, but also to keep them from making bad choices and show them how to form meaningful romantic connections via her interventions through AI technology (i.e., a cone – similar to Google Home).

In addition to Lana’s personalized interventions throughout the retreat, contestants are also to participate in a series of therapeutic workshops throughout the retreat, which include “vagina workshop” (girls only), vulnerability workshops, communication workshops, etc. It should be noted however, that the workshops are given by human beings in-person with the show participants. Moreover, Lana also includes an interesting practice where once it is felt that a couple has developed an intimate and meaningful connection with each other based on sincere and authentic relations, Lana provides said couple with a green light to kiss. Thus highlighting to the participants what a meaningful connection feels, looks, and sounds like in terms of a romantic relationship. This type of “reward” serves as a learning example relating to the type of positive behavior and language engaged which is necessary towards creating meaningful romantic connections, rather than simply sexual banter with no intention held other than to have sex.

Moreover, Lana throughout various moments during the retreat would introduce new participants in order to try and test the boundaries of emotional and romantic connections made in the face of temptation (i.e., a new person). This attempt at emotional rehabilitation presented by Lana engages an interesting challenge towards the emotional inhibitions of the participants whom are starting to become more vulnerable and exploring their emotions with another individual, providing a true test of their abilities to disengage in adultery whilst rather engaging in adulting and emotional awareness. Lana’s therapeutic efforts do not reform all participants, however viewers are able to observably witness participants becoming more open about their experiences which have led them to becoming more closed off to making meaningful romantic

connections based on fears of being hurt. Lana's therapeutic workshops are also observed to seemingly guide participants into better understanding their hurt and fears wherein meaningful connections are concerned by forcing participants to reflect and delve into painful experiences.

When analyzing the Netflix show *To Hot Too Handle*, the series ostensibly presents a social and psychological experiment aimed at emotionally rehabilitating professedly emotionless beings via AI technology. When reflecting on the premise of the Netflix show, is the program an attempt to uncover if less vulnerable individuals would better respond to a robot than to an actual real-life, in-person human therapist? The show admittedly does however provide a mixed approach of both AI and human intervention, is it therefore conceivable that a combination approach is necessary? In today's society, we rely heavily on our technological devices for help and service, hiding behind our phones more-so than ever before. In this sense, could therapy be taking a new route to rehabilitation given the data as presented in the *To Hot Too Handle* Netflix television show? In light of this compelling example, telehealth should also be pondered on in terms of AI technologies and therapeutic attempts.

Telehealth

Telehealth throughout the years has proven to be a time-effective, cost-effective, and accessibility-effective solution to seeking therapy from professionals and/or web-based applications developed by healthcare professionals. Throughout the years, we have seen multiple phone applications emerge such as MoodKit, Mind Shift, Head Space, Calm, Unplug, and many others; all with the objective to help patients find better mental health care. Telehealth used by doctors, nurses, social workers, etc., has also been increasingly utilized in order to better service patients throughout the world. Especially with the COVID-19 pandemic. Telehealth has provided an innovated avenue for patients to receive care and services from professionals in reaching more rural communities and other populations which would otherwise encounter more difficulties in accessing care and services. Telehealth offers the possibility for individuals that are more hesitant towards seeking mental health services for their problems and/or individuals who may not necessarily believe in therapy in a more anonymous (one does not need to provide one's name, location or even show one's face if they do not want to), geographical, costly, and temporal manner (Hilty et al., 2019).

That said what is telehealth? Telehealth in its simplest of forms denotes healthcare that is provided by means of telecommunication (Hilty et al., 2019). Telehealth invokes the long-lived question as to whether or not a better health-care system is possible (Everett Koop et al., 2008). Telehealth (also known as Cybercare), promotes telemedicine in a more affordable realm, introducing with it improved quality of care and access to more populations (Everett Koop et al., 2008). Telehealth brings with it the possibility to diagnose and provide treatment to individuals at a more efficient rate (Everett Koop et al., 2008). In addition, telehealth has presented as an opportune alternative to in-person therapy for individuals that cannot otherwise attend in-person sessions due to physical disabilities and/or pains experienced (Scott Herbert et al., 2017). Scott Herbert et al., (2017) found that individuals with lower activity levels (i.e., motivation to leave the house to attend therapy sessions), actually increased when presented with the option to attend their therapy sessions online, consequently increasing the positive therapeutic outcomes and lowering experiences of pain for said individuals (p.209). Telehealth in this sense does require the use of an AI technology of a sort wherein *anonymous therapy* is concerned (i.e., therapy

sessions that are done remotely using the phone or platform where one's face is not shown). When considering telehealth and certain populations that would otherwise be harder to reach, such lends as a good segway towards the next topic to be covered – robot therapy.

Robot Therapy

Robot therapy is observed to be on the rise world-wide. Robot therapy can take the two form types – (1) *robot-assisted therapy* (which constitutes of therapy programs designed by healthcare professionals such as doctors, nurses, social workers, etc.) and (2) *robot-assisted activity* (which refers to patients interacting with robots with no specific therapeutic goal associated with the interaction) (Wada et al., 2008). Paro, a *mental commitment robot* (a robotic stuffed animal sort-to-speak) was constructed for therapeutic purposes and tested in pediatric wards as well as in elderly institutions in several countries. The results yielded by this experiment showcased that through interactions with Paro, patient's moods improved, enhancing activity amongst patients as well as increased communication between other patients and their caregivers (Wada et al., 2008). In addition to such, urine tests sampled from the patients whom interacted with Paro indicated reduced stress levels as well (Wada et al., 2008). Paro provides concrete proof that robot therapy can have a positive impact on patient behavioral changes via AI technologies.

In addition to such *chatbots*, which are machine agents that service patients in natural language are also used by patients in modern day as an anonymous, asynchronic, personalized, and consumerable method to seek help (Pereira and Diaz, 2019). Chatbots have been therapeutically employed to help assist patients in effecting behavioral changes amongst patients who suffer from a myriad of different diagnosis including mental health/neurological disorders, addictions, sexually-transmitted diseases, nutritional-metabolic disorders, mental and physical wellness and others (Pereira and Diaz, 2019).

Chatbots are explained to have been designed to help and assist patients in their decision-making processes by counseling patients awareness of their mental state; providing goals and solutions towards patient problems (Pereira and Diaz, 2019). Chatbots have proven successful in altering patient behaviors through the bots abilities to foster a secure and anonymous setting that would typically make patients feel less inclined to speaking to a human therapist based on emotions of fear, shame, and embarrassment towards the problem that the patient is facing (Pereira and Diaz, 2019). Not only so, chatbots can also gage the patients mood and affect change via the abilities of chatbots to capture patients facial expressions through a camera, or analyzing text messages, which enables the chatbot to algorithmically respond to the patient in the most appropriate manner (e.g. responses directed towards attitudinal changes, jokes, motivational interviewing, etc.) (Pereira and Diaz, 2019). Just as a human therapist can personalize a rehabilitation/treating plan for their patients, chatbots can do the exact same based on the information provided and gathered throughout the chatbots and patients therapy sessions (Pereira and Diaz, 2019).

Importantly found in the study conducted by Pereira and Diaz (2019), the researchers refer to the fact that patients are more inclined within today's contemporary modern-society to seek robot therapy due to factors associated with time, cost, anonymity, and secure therapy sessions based on decreased sentiments of embarrassment and shame that would otherwise be

felt when confronting a real-life human being capable of feeling the same emotions as they are. The idea of trusting and communicating with a robot that does not have real-life friends to talk to and vent about their day as a human therapist would, or cast judgements towards the patient, presents an appealing attraction towards robot therapy as data amongst study participants (Pereira and Diaz, 2019). In conjunction with such, Axelsson et al., (2021) found similar results in their study concluding engendered data that described their participants acceptance towards the use of social robots as a source of a more economically friendly therapy option, more available/accessible, neutral, and anonymous therapy option; as well as a more interactive and affirming option of therapy, a more personalized form of therapy that holds the ability to be more open during sessions (p. 1083-1087).

Similarly, Griffiths and Christensen (2007) found that automated telehealth online services that provide web-based educational programs for individuals suffering from anxiety and depression proved successful in improving depressive symptomologies amongst the patients using uniquely web-based lessons with no therapist present (p.83). The researchers also found that telehealth mental health programs not only provided a cost-effective therapy option, but also helped to reduce perceived and felt stigmatizations associated with seeking professional mental health therapy (Griffiths and Christensen, 2007).

Evaluating the various different years that robot therapy has been investigated and elaborated, such provides conclusive evidence towards relating the possibility that the use of AI robot technologies may be a more attractive medium to obtaining therapy for a number of reasons. With societies around the world increasingly becoming more technologically advanced and having a phone application for anything and everything, will the world of therapy be taken over by AI therapists such as chatbots and guided meditation applications?

CONCLUSION

When analyzing the use of AI technologies in therapy, it has become abundantly clear in the research data discussed throughout the various research studies used throughout this review as well as the Netflix show *To Hot Too Handle* evaluated, that said type of therapy approach provides patients with an interesting and evolved type of therapy medium offering a number of benefits in today's busy life. The concept of confiding in a robot and/or AI technology wherein emotions are concerned does still seem like a trivial pursuit; given how the cold hard-drive of AI technologically stereotypically does not provide the senses of a warm and comforting as a human might. Notwithstanding such, AI technology devices have been understood throughout this review to provide other perhaps more inciteful benefits such as cost, time, and geographic efficiency to patients. This does beg the question however – at what price are we willing to replace emotion with convenience?

In this sense, it would seem that patients find a comfort in chatbot responses derived from AI technology devices when seeking help. Does this have to do with the idea of information precision, or perhaps the lack of trust in humans? AI technology in therapeutic approaches showcases an interesting link between wanting to have human emotions explained yet resorting towards a robotic device that is supposedly not able to feel or conceive human emotions; but rather simply explain to humans what they are programmed to search for and/or respond with based on the set algorithm. All-in-all, this review evaluates data found in various examples

investigating AI technology and their use in therapeutic attempts towards emotions as something that seems to be ostensibly preferred amongst patients in current modern-day contemporary society. Albeit, the success rate of patient rehabilitation using AI technology versus human led interventions must be better understood in comparison to each other as well.

DISCUSSION

Pasquinelli (2017) writes an interesting reflection on AI technologies and human intellect:

“Any machine is always a machine of cognition, a product of the human intellect and unruly component of the gears of extended cognition. Thanks to machines, the human intellect crosses new landscapes of logic in a materialistic way...” (p.1).

For when contemplating the set of algorithms that AI technologies follows (similar to an online survey that takes you to the next question based on your given answer), or rather “... Constructing instruction tables is usually described as “programming.” To “programme a machine to carry out the operation A” means to put the appropriate instruction table into the machine so that it will do A.” (Turning, 1950) describes, would it therefore be possible to refute that AI technologies programmed to give therapy to patients is not inherently unbiased given the human act of programming?

Chatbots in this sense provide an example to my thought above. Chatbots have been elaborated as a robotic technology that engages in both *Narrow* and *General AI* intelligence, perpetuating effective therapy sessions for its patients by both performing latent and systematic functions, whilst also executing more complex interventions separate from human intervention. Evidently, AI devices are able to provide a rational decision within a time-efficient window. That said, it is believed that this fact alone stands as being an important differentiating factor between human and machine intervention in distributing practical advice and coaching within a timely manner; providing the patient also with more reassuring answers and suggestions almost instantaneously. Thus situating AI robot therapy as a new, important, and pertinent innovation in the world of therapy and rehabilitation.

Therapy is a subjective experience, in that therapy sessions provide individuals with the opportunity to vent, decipher, reflect, question, realize, cry, yell, find happiness, you name it. AI technologies utilized in therapeutic attempts at greater and more profound emotional awareness and/or in the search for comfort and anonymity has been presented throughout this review to stand as a desirable option towards obtaining psychological help. What needs to be better understood in the realm of AI technologies used in therapeutic attempts however is the use of academically trained humans versus AI technologies collecting information from the Internet to provide tailored and appropriate support to patients. There exists a number of pros and cons when comparing human and robot therapy against each other, where perhaps the combination of AI generated therapy and human therapy are required in order to provide optimal patient care and services; food for thought.

FUTURE RESEARCH

Future research can use this review to build upon further investigation wherein AI and therapy are contemplated using Chatgpt specifically and other forms of AI platforms. That-is-to-say, future research can use this review to assess the authenticity between human interaction and AI interactions, deciphering through the interchanging differences between what an AI robot says and a human says base searched for information in a Google database versus what is learnt in an academic facility by a human – does the AI technology inherently present anything more profoundly different than what a trained human does?

DECLARATIONS

There are no declarations to be made for this project.

ETHICAL APPROVAL & CONSENT STATEMENT

Not applicable – no research subjects.

FUNDING

No funding was received for this project.

AVAILABILITY OF DATA AND MATERIALS

Information, referenced articles, and statistics cited throughout this review can be accessed online.

REFERENCES

- Accenture. What is Artificial Intelligence? 2021. Website: https://www.accenture.com/ca-en/insights/artificial-intelligence-summary-index?c=acn_glb_brandexpressiongoogle_12362609&n=psgs_0921&gclid=Cj0KCQjwnJaKBhDgARIsAHmvz6f4Sd8cPFBYRdr9JK7y7NzySJyQM4PLuqQYVC-GCxoshJ9N-mp5L7caAhXUEALw_wcB&gclidsrc=aw.ds
- Axelsson M, Bodala I-P, and Gunes H. Participatory Design of a Robotic Mental Well-Being Coach. 2021. IEEE International Conference on Robot and Human Interactive Communication (RO-MAN).
- Erickson P, Daston L, Lemov R, Sturm T, and Gordin M-D. How Reason Almost Lost Its Mind: The Strange Career of Cold War Rationality. 2013. University of Chicago Press.
- Everett-Koop, C, Mosher R, Kun L, Geiling J, Grigg E, Long S, Macedonia C, Merrell R-C, Satava R, and Rosen J-M. Future Delivery of Health Care: Cybercare. A Distributed Network-Based Health-Care System. 2008. IEEE Engineering in Medicine and Biology Magazine.
- Griffiths K-M., and Christensen H. Internet-based mental health programs: A powerful tool in the rural medical kit. 2007. Australian Journal of Rural Health. 15:81-87.
- Hilty D-M, Chan S, Torous J, Luo J, and Boland R-J. A Telehealth Framework for Mobile Health, Smartphones, and Apps: Competencies, Training, and Faculty Development. 2019. Journal of Technology in Behavioral Science. 4:106-123.
- Merriam-Webster Dictionary. Website: <https://www.merriam-webster.com/dictionary/emotion>.
- Milossi M, Alexandropoulou-Egyptiadou E, and Psannis K-E. AI Ethics: Algorithmic Determinism or Self-Determination? The GDPR Approach. 2021. IEEE Access. 9:58455-58466.
- Pasquinelli M. Machines that Morph Logic: Neural Networks and the Distorted Automation of Intelligence as Statistical Inference. 2017. Glass Bead, 1: "Logic Gate: The Politics of the Artificial Mind".
- Pereira J, and Diaz O. Using Health Chatbots for Behavior Change: A Mapping Study. 2019. Journal of Medical Systems. 43:135.
- Ryan M. In AI We Trust: Ethics, Artificial Intelligence, and Reliability. 2019. Science and Engineering Ethics.
- Scott-Herbert M, Afari N, Liu L, Heppner P, Rutledge T, Williams K, Eraly S, VanBuskirk K, Nguyen C, Bondi M, Atkinson J-H, Galshan S, and Leobach-Wetherell J. Telehealth Versus In-Person Acceptance and Commitment Therapy for Chronic Pain: A Randomized

- Noninferiority Trial. 2017. *The Journal of Pain*. 18(2),200-211.
- Turing A-M. Computing Machinery and Intelligence. 1950. *Mind* 49. 433-460.
- Vetrò A, Santangelo A, Beretta E, and De Martin, J-C. AI: from rational agents to socially responsibly agents. 2019. *Digital Policy, Regulation and Governance*. 21(3):291-304.
- Wada K, Shibata T, Musha T, and Kimura S. Robot Therapy for Elders Affected by Dementia: Using Personal Robots for Pleasure and Relaxation. 2008. *IEEE Engineering in Medical and Biology Magazine*.
- Zuboff S. Big other: surveillance capitalism and the prospects of an information civilization. 2015. *Journal of Information Technology*. 30:75-89.