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How did ChatGPT transform us in terms of transformative learning?

Zeynep Bilgehan Can[1], Hatice Duman[1], Büşra Buluş[1], Yavuz Erişen[1]

[1] Faculty of Education, Yildiz Technical University, Istanbul, Türkiye

Abstract

Individuals transform their ideas and beliefs through an ongoing reflection based on their experiences which is also the basis of transformative learning as Mendoza (2020) suggests. Since self-reflection and the criticism of personal perspectives and attitudes play an important role in transformative learning, through the learning process which has been divided into ten stages by Mezirow (1991), a more self-aware, personally and professionally developed version of self is reached. This study, by taking transformative learning as its basis, aims to portray the experiences of four individuals from academia concerning their usage of ChatGPT. The experiences are examined separately under certain themes which were; personal learning processes, daily life, professional life, academic life, ethical issues and perception of the future.

Keywords: Transformative learning; ChatGPT; artificial intelligence; adult learning; individual learning

INTRODUCTION

Artificial Intelligence (AI) has started to be an inevitable and indispensable part of our lives and we cannot escape using it in various fields of life. We know that it continues to develop and remains as an unknown and huge system like a sleeping giant (Bates et al., 2020).

Nowadays, everybody is interested in the same artificial intelligence tool called ChatGPT. ChatGPT is developed by OpenAI and is defined as a natural language process. It is a kind of artificial intelligence model, and it can create responses like a human. ChatGPT does various tasks such as answering the questions about a vast range of topics such as education, language learning, daily issues, translating the things in any language and so on. It can be said that it serves like an advisor or maybe a customer service or personal assistant.

What makes this human made service so inevitable in today's world is that; people love utilizing responses of ChatGPT as a technological development in a practical way because it really creates coherent and powerful content. Additionally, another issue taken into consideration is that it is competent in not just creating content but also being very realistic, fluent and clear for the users of it.

Although it seems very useful in a way and educated enough in a deep way, users have some concerns and are sceptical about ethical issues of this powerful human-made application because it seems there are some biases and controversial issues for its liability on its answers, so it is needed to clarify these concerns.

To summarize; ChatGPT is a useful and world-wide artificial intelligence application that reshapes the understanding of getting clear knowledge and deep learning. For all that, we ethical concerns for this artificial intelligence model must be taken into consideration. In this study, it was aimed to analyse and put forth the learning experiences of individuals with such a novel and sophisticated form of artificial intelligence.

Literature review

The use of technology in education is important because it requires full answers to the questions of how, when, and how much. The increasing use of technology brings about a change in the types of learning. Epistemologically and psychologically, the role of technology

Corresponding Author
Zeynep Bilgehan Can, Division of Curriculum and Instruction, Department of Educational Sciences, Faculty of Education, Yildiz Technical University, Istanbul, Türkiye
E-mail: zbilgehancan@gmail.com

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in learning and teaching activities will be explained through Transformative Learning (Castañeda & Selwyn, 2018).

Transformative learning

Transformative learning is a theory developed by Jack Mezirow, an American sociologist and emeritus professor of Adult Education at Teachers College, Columbia University. The theory of transformative learning suggests that individuals are capable of fundamentally changing their perspective and beliefs about the world through critical reflection on their own experiences (Mendoza, 2020). It involves examining and questioning one's pre-existing assumptions, beliefs, attitudes, and perspectives. This is done in order to challenge and transform these assumptions, which can lead to new insight and a revised worldview.

Transformative learning is a lifelong process that allows individuals to understand their own assumptions and biases, question them critically, and develop new perspectives that align with their (Femrite & Flatt, 2017) personal growth and development. Mezirow's theory of transformative learning highlights the importance of critical self-reflection in personal growth and development. Furthermore, it emphasizes that transformative learning is contingent upon experiencing a "disorienting dilemma" - a situation in which an individual's assumptions and perspectives are challenged or contradicted, leading them to question and reflect on their pre-existing beliefs. Transformative learning is a valuable tool that can help individuals break free from their established beliefs and biases in order to develop new perspectives and ways of thinking. Overall, transformative learning can lead to increased creativity, improved problem-solving abilities, enhanced communication skills and greater self-awareness, all of which are essential for personal and professional growth. Overall, transformative learning is a useful framework that can help individuals navigate through the complexities of personal growth and development, as well as improve important life skills. In summary, Mezirow's transformative learning theory highlights the importance of self-reflection and critical examination of one's assumptions in personal growth and development (Mezirow, 1991). Mezirow has delineated nine phases or stages that depict the journey of transformative learning.

1. A disorienting dilemma
2. Self-examination
3. A critical assessment of assumptions
4. Recognizing the necessity of new perspectives
5. Exploration of options for new roles, relationships, and actions. Planning a course of action.
6. Acquiring knowledge and skills to implement the plan.
7. Trying new roles on a provisional basis
8. Building relationships on a sustainable basis.
9. A reintegration into one's life based on conditions dictated by one's perspective

Transformative learning and artificial intelligence can have a significant relationship as the latter has become an essential tool for advancing the former. Artificial Intelligence has the potential to enhance and personalize transformative learning experiences, which can lead to more efficient and effective outcomes. Moreover, AI can provide personalized learning paths based on learners' needs and preferences. This technology can provide adaptive and interactive environments that allow learners to engage in self-directed learning, critical thinking, and problem-solving (Liu, 2022). This can especially benefit adult learners who require flexible and accessible learning options to balance their work, life, and study commitments (Khiat, 2015).

ChatGPT

Developed by AI, ChatGPT has been one of the most remarkable language models that has caught attention from people from all sectors. It is a chatbot and GPT stands for Generative Pretrained Transformer.

When asked to describe itself ChatGPT answered as:

> "*Sure! I am ChatGPT, a large language model created by OpenAI. I am designed to be able to understand and generate natural language text, and I have been trained on a vast amount of data in order to be able to perform a wide range of language-related tasks, such as answering questions, generating text, translating languages, and more. I use a deep neural network architecture called GPT-3.5 to generate text that is often indistinguishable from that written by a human. I don't have a physical form or consciousness, but I can understand and respond to a wide variety of human-generated text inputs.*" (ChatGPT, 2023).

There have been different studies on the usage of ChatGPT concerning bias, privacy, and how it might contribute to the digital divide (Garrett et al., 2020, Borenstein & Howard 2021, Holmes et al., 2021, Nguyen et al., 2022).

There are also different concerns about using ChatGPT; among these are ethical issues. The fact that students may copy a text without critically reading it, or not giving original sources for information, and overall hesitations about plagiarism are among the top to list. In contrast to these, ways of detection of such plagiarism and differentiating between fact and fiction texts are some of the questions discussed in literature (Chatterjee & Dethlefs, 2023; Khalil & Er, 2023).

Despite all the criticism it gets, it is worth noting here some of ChatGPT's capabilities as well. Besides mimicking human conversation, it can create new works of its own such as a work of poetry or writing a story (Tlili et al., 2023). There has also been research stating its advantages; helping with writing, creating content, creating examples, making comparisons (Zhai, 2022; Lieberman, 2023; Mollick & Mollick, 2022; Ofgang, 2022). Nevertheless, it is important to point out, as was stated by Bozkurt (2023) that ChatGPT is still a machine, and it cannot compare to humans in terms of understanding and having context awareness.

ChatGPT in education

Advancements in technology have shaped transformations and have brought about significant changes even in fields such as education. Whether the newly born ChatGPT will be capable of doing everything that humans can do, is a question that keeps being challenged. ChatGPT is forced to function in ways that are expected from a regular human. An example to this would be how it is used to test its functioning when it comes to educational matters. There is quite a number of research carried out in this regard, contrary to the subject being rather new. There have also been some guides written about how it can be used in education and in classes (Lieberman, 2023).

One research done in the University of Rhode Island focused on how ChatGPT could be used for Higher Education and Professional Development (Atlas, 2023). ChatGPT is argued to have the potential to have a prominent effect on how we teach and learn. Yet, concerns on how to actually incorporate such a futuristic component into education are also present. When asked 'How can chatGPT be used in education?' it answers itself this question as:

> "*ChatGPT can be a useful tool in education in a variety of ways."* (ChatGPT, 2023)

Then it gives some examples such as; providing instant feedback on students' questions, to help with personalized learning, language learning and collaborative learning. It also presumes to be a virtual tutor guiding students.

Professors at universities are conducting research to check ChatGPT's ability in managing a course in their programs, and it is intriguing to see ChatGPT pass these courses with high grades. One such example of research was carried out at the University of Pennsylvania where ChatGPT scored B /B- in one of the main subjects in its MBA programs and hence the researcher argued that ChatGPT would 'have important implications for business school education, including the need for exam policies, curriculum design' (Terwiesch, 2023). ChatGPT is considered to be helpful in areas of education such as 'automated essay scoring, personalized tutoring, research assistance, classroom assistance, language translation, writing, research and communication skill development and also could help professors in creating their syllabus, quizzes and exams' (Atlas, 2023).

It was also argued that ChatGPT may be used for paraphrasing and checking for spelling and grammar of English texts. Halaweh also supports giving a training of ChatGPT to faculty and students for it to be used accurately. The use of ChatGPT is supported to develop ideas and improve writing. It is thought to have potential to increase creativity and innovation (Halaweh, 2023). ChatGPT is also believed to increase the educational success of its users by providing basic knowledge about topics and ease the instructional processes by providing instant feedback (Tlili et al., 2023). However it is important to be critical of this knowledge provided by ChatGPT and its resources. A new concept was proposed in this regard which is 'reverse searching' meaning to search for references and citations from summarized information that is what ChatGPT provides (Halaweh, 2023).

METHOD

This is an autoethnographic phenomenological case study that is based on the key features of the transformational learning theory and focuses upon the transformational process of one academician and three researchers based on their personal experiences about ChatGPT, focusing on their common paradigm shifts or perspective transformations. What makes the study phenomenological is that the focus is on human experiences about a phenomenon as described by participants (Creswell, 2007). It can be said that the procedure follows that of the transcendental phenomenology as described by Moustakas (1994); after the phenomenon is identified and experiences of several persons are collected, the data is analysed according to certain themes. This study is also autoethnographic in the sense that Creswell describes it as; a reflective self-examination by an individual set within his or her cultural context (Creswell, 2015). To this end, the data is based on the works on the transformational learning theory and the researchers' own experiences of using ChatGPT. This article aims to present the common transformational learning processes of four persons from academia based upon their personal experiences as adults, focusing on the following research questions.

How did ChatGPT transform us in terms of

1. personal learning processes
2. daily life
3. professional life
4. academic life
5. ethical issues
6. perception of the future?

Setting and participants

The study stemmed from a lesson in the Curriculum and Instruction department of the Education Faculty of Yıldız Technical University, in which the participants were one academician and three PhD Students, who are also the co-authors of this paper. The age range is between 32 and 53. The idea for the study came about during the discussions about how artificial intelligence applications transform curriculum and instruction processes in two courses of two different semesters; the 2022-2023 fall and spring semesters. The participants had the following common state of mind and feelings before the study:

- They had common concerns and scepticism around ChatGPT before using it.
- They worried about job loss or transformations of roles at the workplace due to automation and feared that ChatGPT may replace human intelligence.
- They worried about the accuracy and reliability of the ChatGPT application system or had ethical concerns about its use.
- They felt apprehensive about using ChatGPT because they believed it may be too complex or difficult to understand.

Researcher 1 - R1 has been teaching English for 16 years as an English teacher in various government schools in Türkiye. She wants to integrate technological developments into the class environment. Nowadays, she is teaching English at a high school in Istanbul and is a PhD Student at Yıldız Technical University.

Researcher 2 - R2 has 15 years of experience as an IB and IGCSE chemistry teacher and as a principal in public and private schools. She has a special interest in the nature of science and learning techniques, and has studied artificial intelligence applications and cloud-supported instructional management systems for 5 years. As a manager of an educational foundation with facilities across more than 60 countries, she develops educational programs and technologies. Currently, she is also a PhD Student at Yıldız Technical University

Researcher 3 - R3 is a graduate of English Language Teaching and did her Masters in Humanities and Social Sciences. She has been working in a foundation university in Istanbul as an English instructor for almost ten years. Besides teaching she also has an administrative position at her workplace. She has always had an interest in new advancements in technology and her master's thesis was also on social media. Currently, she is also a PhD Student at Yıldız Technical University.

Researcher 4 - R4 works as an academician and head of the Educational Sciences department of Education Faculty of Yıldız Technical University. He is a professor who has over thirty years of teaching experience at higher education institutions. He is one of the prominent names in the Curriculum and Instruction field in Türkiye. He has done several EU projects and has written articles on the effects of virtual reality applications on educational processes.

Data collection

In this qualitative study, two data gathering techniques were adopted, the first being a literature review; the features and processes of transformative learning theory were explored with the help of the works written on the theory. The second technique used was autoethnography to collect the data on the transformational learning experiences about ChatGPT of one academician teaching the course and three PhD Students as participating researchers. As stated in Bunde-Birouste et al. 2019, for autoethnography the researchers' experience is a crucial part of the study and along with their engagement with the context and their reflections. The researchers talked, discussed and practiced the learning stages they experienced from the time they learned about ChatGPT and began using it for various reasons. The time period extended from November, 2022 to the end of April, 2023. The starting characteristics of the participants have common points: all four are teachers (one as a professor) and they are in the same PhD department of Yıldız Technical University. The notes taken by the researchers were coded and analysed considering the aim of the study. Then, the data were categorized according to the common themes. An expert was involved in the formation of the themes and categories for validity and reliability.

Reliability and validity

For any research to be considered trustworthy, which is of utmost importance, reliability and validity are two most widely used criteria (Başkale, 2016). According to Guba and Lincoln (1982), there were four factors determined for qualitative studies instead of reliability and validity which were credibility, dependability, confirmability, transferability under the heading of trustworthiness. At the same time, according to Creswell (2003), in order to check the accuracy of the findings in research, at least one or more of these factors should be stated.

To be able to increase the credibility and internal validity of any study, some of the methods that can be used are; prolonged involvement, member checking, and peer debriefing (Holloway & Wheeler, 1996). Out of these prolonged involvement and peer debriefing could be counted as the methods used in this study. In terms of dependability, investigator triangulation is also a method applied in this study as there was more than one researcher collecting and analysing the data. All the steps of this research and the findings were written out in detail, the participants and setting of the study were mentioned clearly to increase its transferability and external validity.

RESULTS

The data collected for the research, in other terms, the answers of the researchers concerning their ChatGPT usage within the context of transformative learning processes were analyzed and grouped into categories and codes as shown in the table below.

Personal learning processes

By looking at the answers given by different researchers, several codes were reached in the category of 'personal learning'. The first code was common in the answers of all researchers which was about **'collecting data and getting information';**

Table 1: Results of Data Analysis Obtained from Transformative Learning Process Answers

Thema	Category	Code	Participants
Transformative Learning	Personal Learning Processes	collecting data and getting information	R1, R2, R3, R4
		fast and easy access to information	R1, R2, R3
		aid in personal growth /21st century skills	R1, R4
		language learning	R3
		time concerns	R1, R2, R3

	Daily Life	providing information on different topics aid in daily tasks and problems communicating with people	R1, R2, R3, R4 R3, R4 R3, R4
	Professional Life	presenting new perspectives obtaining and summarizing basic information creating lessons	R1, R2, R3, R4 R2 R4
	Academic Life	speeding up work and expanding knowledge of a topic creating outlines and content	R1, R2, R3 R2, R4
	Ethical Issues	creating fake citations unpredictable ethical considerations	R1, R3 R1, R2, R3
	Perception of the Future	being an essential tool and facilitating people's lives changing the roles of educational institutions turning into an addiction and manipulating	R1, R3 R2 R3, R4

'*Answering a specific question and exploring new ideas are not time consuming any more.*' (R1)

'*In addition, it gives me a roadmap to explore concepts I believe I am unfamiliar with. Since I am an individual who always learns with the question-answer technique, getting answers to every question I want, whether incomplete or excessive, increases my desire to research.*' (R2)

'*In the past, google would be the first destination for asking information on a matter, now it seems like ChatGPT may challenge that. I want to firstly ask chatGPT's opinion on a matter, then check it more in detail via researching on Google.*' (R3)

'*It has become a personal and academic assistant (for me) that will benefit every aspect of our lives for conscious users.*' (R4)

The second code about 'personal learning' was 'fast and easy access to information'. Concerning this code, the researchers stated that:

'*Before experiencing ChatGPT accessing the new information used to take too much time but after I used it, having accurate and relevant information on a wide range of topics became really fast and easy.*' (R1)

'*ChatGPT saves me time in accessing information in a short way.*' (R2)

'*Time is really valuable for all of us, and anything that can save us time is also very valuable. ChatGPT proves to do things at a pace no human could compete with doing*' (R3)

The third code which was 'aid in personal growth /21st century skills' was coded from the statements of researchers which were.

'*ChatGPT can also help us grow as a person. By providing us with new perspectives and ideas, it could help us expand our thinking and develop a more open and curious mindset.*' (R1)

'... improving my skills such as learning to learn, problem-solving, critical thinking, effective communication, and creativity, which are some of the 21st century skills and in my academic life, in a very short time.' (R4)

Another code was about 'language learning':

'*In terms of the learning part- because I am a learner of a language myself (Italian) it can create a text in the language that I want to learn at a level that I want. I can do many things with this one simple text. ChatGPT gives me the translation of it, meanings of keywords and sample sentences, and it even creates exercises if I want to practice more. I am still experiencing how I can use it to learn a language. I also check on Youtube some videos to benefit from others' experiences. Though I have to say, it is lacking some features that I could benefit from in other apps- like hearing a pronunciation of the word - it does nevertheless provide help in written form about how to pronounce it with samples.*' (R3)

The final code under the category of personal learning processes was 'time concerns':

'*having accurate and relevant information on a wide range of topics became really fast and easy*' (R1)

'*ChatGPT saves me time in accessing information in a short way*' (R2)

'*ChatGPT proves to do things at a pace no human could compete with doing, as it processes information and also produces information at the same time.*' (R3)

Daily life

Under the second category, three codes were determined; among these, for the first code; 'providing information on different topics' it was stated:

> '*ChatGPT could provide answers to our questions on any topic, from history and science to pop culture and current events, especially the simple things that we need in our daily lives. we could ask about new recipes for cooking, how the weather is today in our region and which sport is suitable for us etc. in a broad framework.* (R1)

> '*I have not yet created an effective usage area for ChatGPT in daily life. but I believe that I can ask any question I have.*' (R2)

> '*Ever since I started using ChatGPT more actively, I am curious about what answers it will give me about my daily problems, such as dealing with some problems of raising a child, or balancing my work life and personal life, how to manage my time more efficiently, things I would ask an older and more experienced person in life to learn their opinion and experience. It feels like having a guru at your fingertips, at your service, at any time. The only drawback is it does not speak and it writes at an incredible speed.*' (R3)

> '*In short, it has become my bedside book (as in traditional terms) or my bedside assistant (in new terms) for any kind of information, guidance, or learning needs in both personal and academic areas.*' (R4)

The second code under the same category was 'aid in daily tasks and problems':

> '*I must say that the suggestions ChatGPT gives are quite satisfying, and applicable to daily life.*' (R3)

> '*The more I use it, the more surprised I am by this application. If there is any problem with my cat, it provides me with supportive suggestions that I never thought of before. If I have a little psychological problem, if I am a bit depressive not knowing the reason why, it guides me like a psychologist.*' (R4)

> '*AI language models can assist with daily tasks such as scheduling appointments, making to-do lists, and ordering groceries, which can save time and effort.*'

The third and the last code was 'communication':

> '*I am able to write my e-mails in such a way that they sound more professional and more appropriate. I sometimes ask ChatGPT for ideas on how to write a certain type of e-mail and then use those ideas to write my own e-mail.*' (R3)

> '*If I have communication conflicts with my manager, it guides me clearly if I provide clear examples of what I experienced. ChatGPT and other AI language models have become a ubiquitous part of daily life, as people use them to perform tasks like finding information, setting reminders, and communicating with others.*' (R4)

Professional life

Under the category of 'professional life' the first code was 'presenting new perspectives':

> '*ChatGPT started to help us in problem-solving by providing fresh perspectives and alternative solutions to issues we are facing.*' (R1)

> '*keeping up with the current studies in the field I am researching worldwide.*' (R2)

> '*a person who copies what ChatGPT produced for them may not be as professional or polite in real life as this makes them seem.*' (R3)

> '*I have asked ChatGPT to create lesson plans for specific topics*' (R4)

The second code under this category was analyzed as 'obtaining and summarizing basic information':

> '*I use ChatGPT to obtain summary information about a certain discipline, design programs, create executive summaries, and obtain up-to-date data on the educational status of countries.*' (R2)

The final category of professional life category was founded to be 'creating lessons':

> '*I know that some people also use it for creating lesson plans, I have asked ChatGPT to create lesson plans for specific topics.*' (R4)

Academic life

Concerning the category of 'academic life' a common aspect was coded as 'speeding up work and expanding knowledge of a topic':

> '*but instead of that it speeds the work we did*' (R1)

> '*ChatGPT is indispensable for academic life as it creates outlines for articles, compiles content at a knowledgeable level in a serial way*' (R2)

> '*I research about to see if it can provide me with any quick info, since I think it gives more precise information. I can somewhat reach a summary or the gist of the information that I am searching for.*' (R3)

The second code of academic life category was 'creating outlines and content':

> '*ChatGPT is indispensable for academic life as it creates outlines for articles, compiles content at a knowledgeable level in a serial way, and contributes to the literature, even if limited, by listing important works.*' (R2)

> '*...with appropriate keywords, it can create reasonable and scientific content even related to my expertise.*' (R4)

Ethical issues

The codes for the ethical issues topic were analyzed as 'creating fake citations':

'*...we realized that it has an idea and logical content about the things we ask but creates fake citations*' (R1)

'*It is of course unethical to copy from ChatGPT and pretend that it is your own work- just like it would be to copy from any written and published text.*' (R3)

Another code was 'unpredictable ethical considerations':

'*...so we think that ethical problems may occur in time.*' (R1)

'*In a technology like ChatGPT, whose boundaries are not yet predictable, ethical considerations will again bring many discussions with it.*' (R2)

'*The major problem that arises here is how this stated act could be spotted and whether it could be done.*' (R3)

Perception of the future

For the last category of 'perception of the future', the answers were analyzed and coded as;

the first code 'being an essential tool and facilitating people's lives':

'*it won't be surprising that chatGPT will be an essential tool for us as educators and different industries like health.*' (R1)

'*I can say the hope results from the fact that I believe doing anything in the future will be much easier than how we do it now, as is the case now for things we used to do in the past.*' (R3)

The second code was 'changing the roles of educational institutions':

'*Educational institutions will transform into guidance centers that focus on the affective field and perhaps psychomotor skills, helping individuals develop empathy skills, rather than simply conveying information and prioritizing cognitive development.*' (R2)

The last code was 'turning into an addiction and manipulating':

'*...but maybe we will spend the same amount of time on ChatGPT because it turns into an addiction (just like it happened with Instagram)*' (R3)

'*The manipulations made from boot accounts on social media may also be in question in these applications, then the credibility of science becomes questionable, we need to be careful.*' (R4)

ChatGPT's point of view

As a chatbot, ChatGPT has revolutionized the way people interact with technology. It means artificial intelligence will lead us to a new age of innovation (Adiguzel et al., 2023). In addition to providing entertainment and convenience, ChatGPT also has the power to promote transformative learning. We know that transformative learning can be defined with the term "identity" (Illeris, 2014). One of the unique aspects of ChatGPT is its ability to apply reinforcement learning from human feedback, which can be a promising way to align the language model with a human's intent. This approach to training creates an opportunity for users to engage with ChatGPT in a more meaningful way. As it is stated, it can answer the questions and integrate various abilities of a language (Jiao et al., 2023). Furthermore, ChatGPT's remarkable competency in natural language understanding and generation makes it a very effective tool for facilitating transformative learning. Transformative learning aims to provide learners with opportunities to acquire knowledge, skills, and attitudes that are not only relevant but also meaningful. To conclude, the same questions were also asked to ChatGPT, to get what answers are given by ChatGPT itself and its view on the same categories. The answers are shown in the figures below:

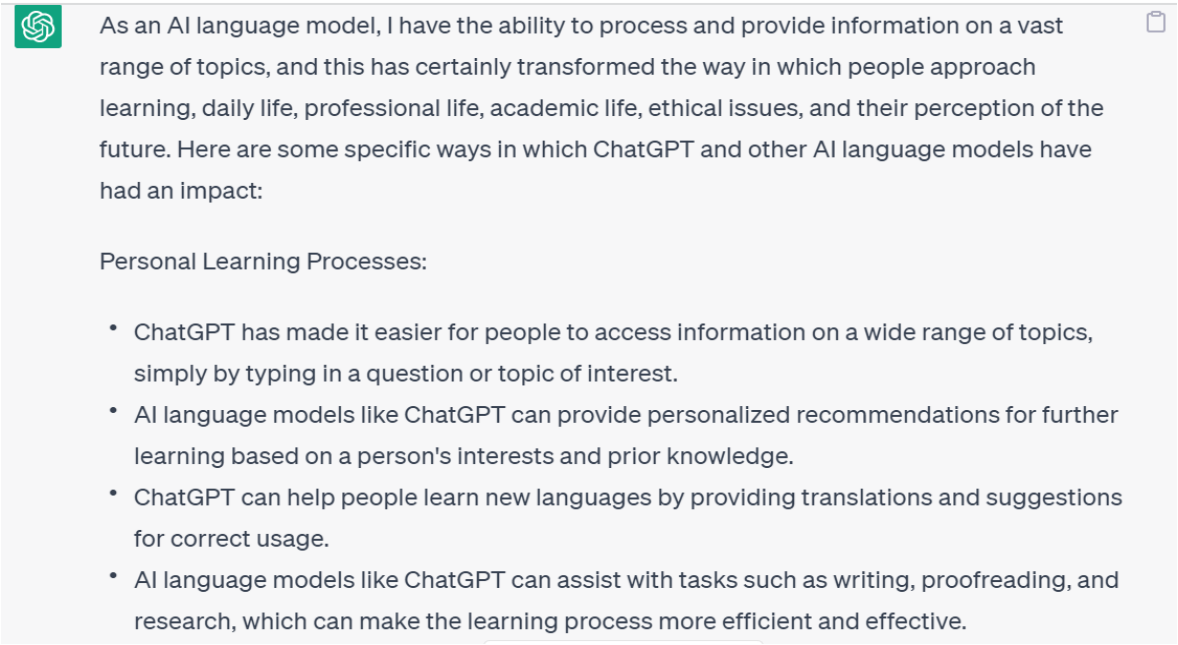


Figure 1: ChatGPT output-1 (Source: Authors, asking ChatGPT about 'Personal Learning Processes')

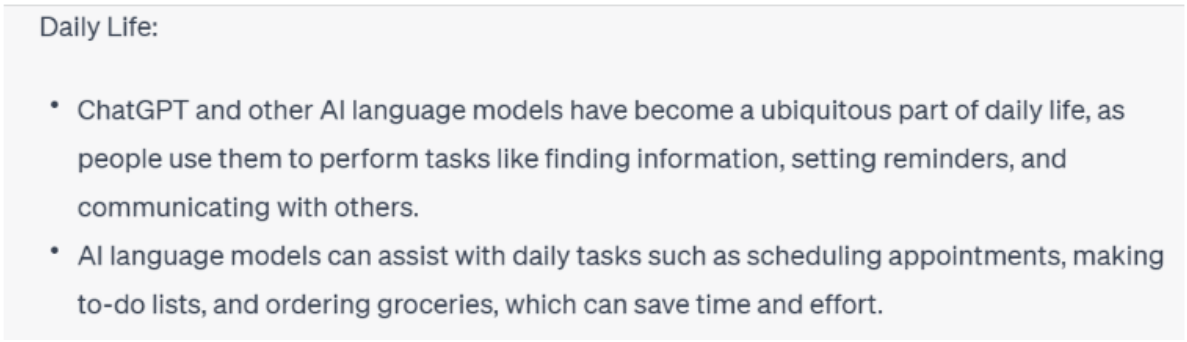


Figure 2: ChatGPT output-2 (Source: Authors, asking ChatGPT about 'Daily Life')

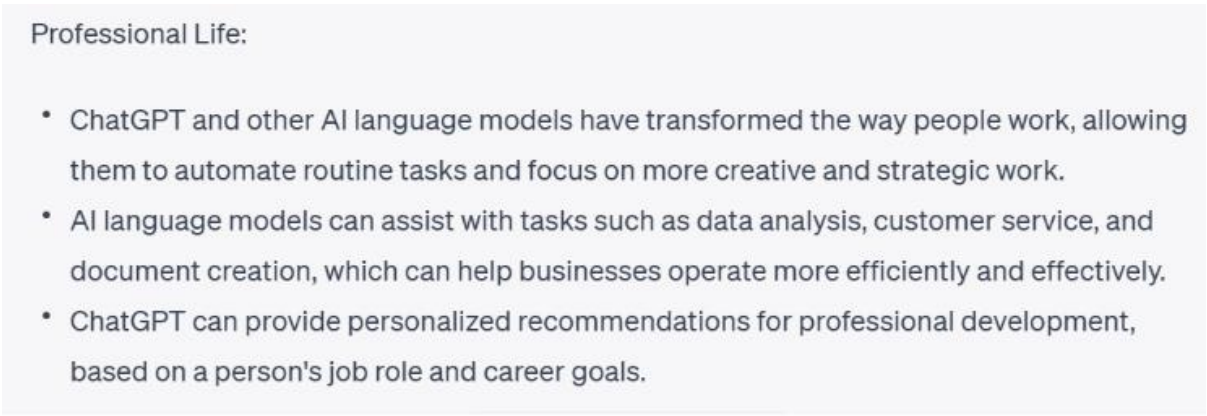


Figure 3: ChatGPT output-3 (Source: Authors, asking ChatGPT about 'Personal Life')

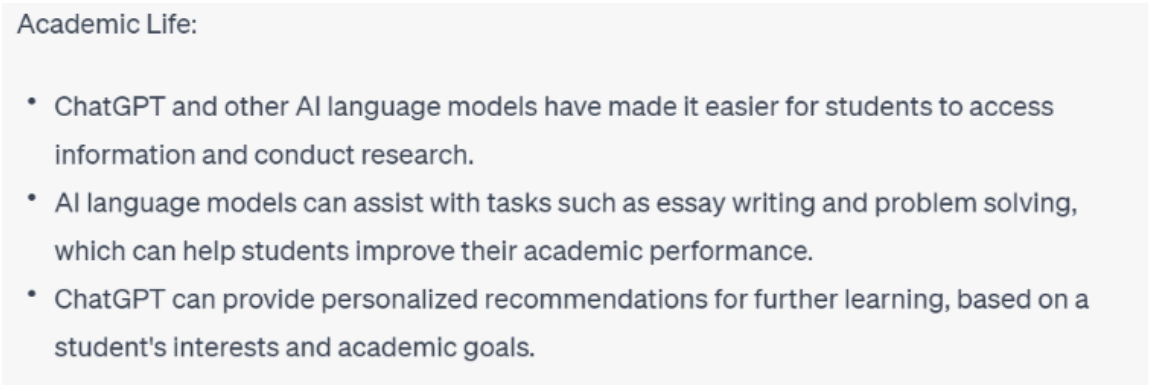


Figure 4: ChatGPT output-4 (Source: Authors, asking ChatGPT about 'Academic Life')

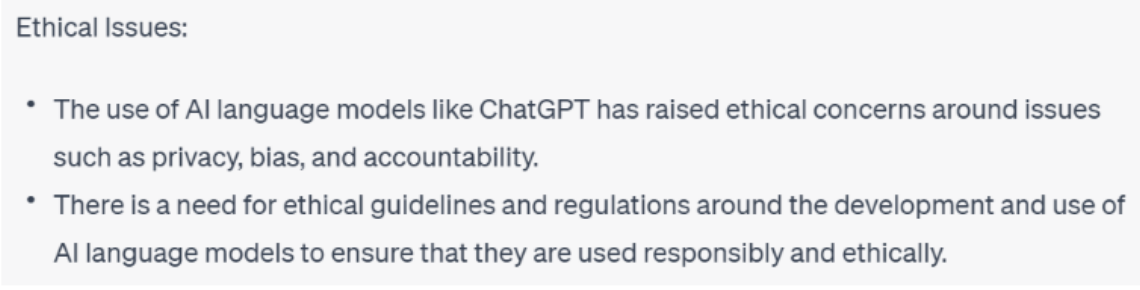


Figure 5: ChatGPT output-5 (Source: Authors, asking ChatGPT about 'Ethical Issues')

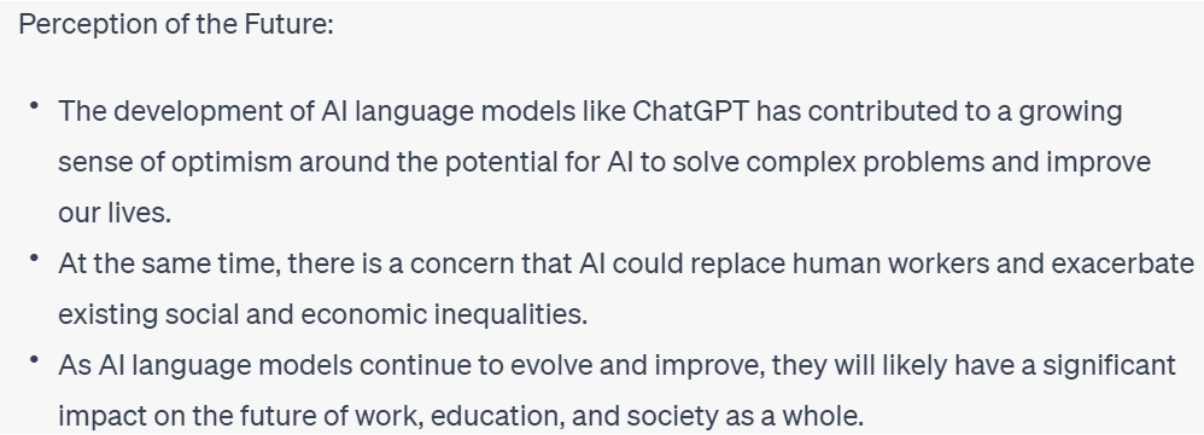


Figure 6: ChatGPT output-6 (Source: Authors, asking ChatGPT about 'Perception of the Future')

DISCUSSION

The findings of this study are remarkable as they demonstrate the current state of one of most popular Artificial Intelligence platforms of our day which is ChatGPT and its repercussions and transformations in the personal, academic, and professional lives of four academicians. This study is well-built and puts forth the experiences of the participants in an organized sequence. The categories under the related themes were specified relevant to the topic of the research. The data collection based on the usage of ChatGPT stemmed from the ten phases of transformative learning.

To start with, concerning the findings of the topic of personal learning, the participants all mentioned benefiting from ChatGPT for collecting data and getting information. ChatGPT was also claimed to be used as a personal and academic assistant. ChatGPT was an aid in finding new ideas and perspectives. Furthermore, the convenience of reaching the information and the speed at which it could be reached was mentioned as positive impacts of using ChatGPT, which were listed and explained within the code of 'fast and easy access to information'. The participants also argued in favor of improvements and positive impacts on their personal growth and in their 21st century skills.

Another field for which one of the researchers mentioned to use ChatGPT was for language learning. She was able to practice learning a language by means of creating level appropriate materials and using it as a tutor for help and trying to benefit from how others say they use it for language learning on the videos they share on YouTube. In similar research on ChatGPT, it is found that ChatGPT has good results on spoken language and translation issues compared to other AIs (Jiao et al., 2023).

Regarding the content of topics asked on ChatGPT, it was mentioned to be used for a variety of topics and the fact that ChatGPT answers questions about any topic was said to be a positive feature. Another important finding of the study was that the researchers had started to use ChatGPT for suggestions on their daily tasks or problems. One other aspect of daily life that was transforming in the lives of researchers by the increasing usage of ChatGPT was 'communication'; in the sense that it was able to give ideas about how to solve communication problems or how to write an e-mail in a certain way.

According to the results of the study, since the researchers participating were all teachers, the professional experiences were also mostly about using ChatGPT for teaching or education; it was observed to be used for creating new lessons, obtaining information related to their profession, keeping up with current studies, and looking more professional than people really are. Similarly; another research on ChatGPT revealed that as a case study it increases success in education for both teachers and students (Tlili et al., 2023)

Concerning the ways ChatGPT transformed the academic life of the researchers in the study, it was mentioned that ChatGPT increased the pace for reaching information and this information being precise and compiled. Also, ChatGPT is mentioned to be used for outlining and creating content. This matches with the study of Curtis, in which he states this ChatGPT's text generation feature as something to 'revolutionize the way we create content'(Curtis and ChatGPT 2023). It is also advocated in another recent article for this feature to 'democratize the dissemination of knowledge' (Liebrenz et al., 2023).

Another concern is ethical issues which are noted by writers. Participants expressed concerns about the potential misuse of ChatGPT and its impact on academic integrity. The ethical concerns raised in this study require further exploration, and policies and guidelines need to be developed to ensure that ChatGPT is used ethically and responsibly. It is still debatable the usage of AI in scientific writings (Alkaissi & McFarlane, 2023).

The participants' perceptions of the future regarding ChatGPT are various, reflecting both the potential benefits and concerns associated with its continued development and usage. These perspectives are categorized into three codes: "being an essential tool and facilitating people's lives," "changing the roles of educational institutions," and "turning into an addiction and manipulating." Each code reflects different aspects of the potential future of ChatGPT. Meanwhile, the future of ChatGPT appears to be a double-edged sword, carrying both

promises and challenges. While participants saw its potential as an essential tool that can facilitate various aspects of people's lives, they also expressed some suspicions about its addictive nature and the potential for manipulation. These findings emphasize the importance of taking measures to ensure responsible development and usage of AI technologies like ChatGPT. Understanding and addressing these perspectives can guide educators in terms of the transformative potential of ChatGPT while warning about its associated risks. Future research and collaborations across interdisciplinary fields will be crucial in navigating the evolving landscape of AI technologies, ensuring their alignment with human values and societal well-being.

Until this point, the findings of the study and their relevance to the existing literature was discussed. Furthermore, it can be said that the results of the analysis of the data are in correlation with the answers that ChatGPT gives itself when asked about these topics as shown in Figures in Part 3.7.

This study can provide basis for future study which can be enhanced through increasing the sample size, varying participants, extending the period of research, comparing the results with those who do not actively use ChatGPT,

To conclude, at the beginning of the study there are two disorienting dilemmas about the impact of ChatGPT use on human life. The dilemma of how ChatGPT will direct human life positively or negatively is addressed in 6 different areas such as personal learning processes, daily life, professional life, academic life, ethical issues and perception of the future. While examining the ChatGPT effect in these 6 topics, a self-examining perspective has emerged. While criticizing the assumptions of its impact on our daily lives with a critical perspective, the necessity of developing new ways of using the application has become clear. Since it is used in academic life and the professional life of the researchers which is in the education field, compliance with ethical principles reinterpreted with ChatGPT has been adopted. A course of action has been established. In order to obtain the data closest to the desired result with ChatGPT, it was seen that the prompts should be entered after extended reading about the subject context, making the right word choices and enriching the grammar with detailed definitions. In accordance with this plan, it was thought that prompt engineering training could be taken to carry out activities at a basic level and to develop the ability to obtain the right results. In this way, by assuming a new role, the correct usage route plan of the existing application can be developed. In order for the use of ChatGPT to be sustainable, it is important to be aware of the long-term risks for people, to develop measures against these risks and to evaluate the areas of use in the axis of data security. With the risk of developing addiction and encountering manipulative content, the results it provides should be meticulously worked upon by aligning them with individual perspective elements of critical thinking. In this way, a plan can be developed by knowing all the risks and aiming to get the maximum benefit from the product.

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