

# **The Human Side of AI at Work: Benefits, Challenges and Psychological Responses**

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## **Abstract:**

As artificial intelligence continues to reshape modern workplaces, understanding its psychological impact on employees has become increasingly crucial. This qualitative study explores how professionals interact with AI tools, examining both the benefits and challenges they encounter, along with their emotional and psychological responses to this technological integration. The research employed a semi-structured interview approach with 15 participants (mean age = 25.93 years) from various professional backgrounds who work closely with Artificial Intelligence and generative AI. Participants were selected based on their regular interaction with AI tools in their work environment. The interviews focused on their experiences, perceptions, and emotional responses to AI integration. Data analysis was done using thematic analysis to identify recurring patterns and significant themes. Five major themes emerged from the analysis: (1) User-friendly features (2) Challenging features (3) Impact on productivity (4) Emotions experienced during AI interaction (5) Techno-overload. This study contributes to our understanding of how employees adapt to AI integration, offering insights for organizations to better support their workforce during technological transitions. The findings emphasize the importance of considering both technical and psychological aspects when implementing AI solutions in professional settings.

**Keywords:** Artificial Intelligence, Generative AI, Techno-Overload, Technology Adaptation.

## **Introduction**

In today's rapidly evolving technological trends, there are many who have been able to benefit from the changes it brings but there is also a portion of the population who have been left feeling overwhelmed about it. Although the concept of AI came into existence long ago around the 1900s, it gained more popularity after the Dartmouth conference in 1956 (Friel, 2023). John McCarthy coined the word 'Artificial Intelligence' and came to be known as the father of artificial intelligence, he was a mathematician and a computer scientist, later he founded the MIT artificial intelligence lab (Haenlein & Kaplan, 2019). Artificial intelligence is a branch of computer science with the aim to create machinery capable of performing tasks which typically require human involvement and human intelligence. These tasks include- learning from experience, solving problems, recognizing patterns, understanding natural language, and making effective decisions. (University of Illinois Chicago, 2024). We often might not recognize how closely we have become associated with artificial intelligence; from personalizing our social media algorithm to optimizing the navigation routes on mobile apps, AI has been secretly present

behind many of our daily conveniences. It has integrated with our daily lives so well that now the thought of a world without AI brings a sense of future unease. With an annual growth rate of 36.6% between 2023 to 2030 as reported by Grand view research (Haan, 2024). This prediction of the future growth emphasises the increasing impact of AI in the states' economies in the coming years.

Along with the benefits of AI there are also multiple side effects which are coming into light and soon might haunt the job market. As artificial intelligence is getting more efficient with each passing day, it's also reducing the need of human resources in the organisations. As artificial intelligence evolves it is estimated to cause a job displacement of more than 400 million employees worldwide by the year 2030. A substantial 77% have also expressed their worry and fear about AI bringing job losses in near future, indicating the potential impact on the job market and employment opportunities. Between 2016-2030, 15% of the global workforce will be affected as predicted by a McKinsey report (Haan, 2024).

The rapid technological advances, although will bring about a lot of development, might also cause a lot of distress among the working population because, as the technology is growing, it is increasingly becoming more automated. This phenomenon is called the Techno-stress theory, often called the 'dark side' of technology. The word technostress was coined in 1984 by clinical psychologist Craig Brod, who described it as a modern disease caused by one's inability to cope or deal with ICTs in a healthy manner (Ayyagari et al., 2011). Technostress is defined as the experience of stress due to interaction and working with information and communication technologies which can manifest itself in the form of confusion, anxiety, burnout and other negative emotional experiences (Bondanini et al., 2020). There are 5 dimensions of technostress: techno-overload, techno-complexity, techno-invasion, techno-uncertainty and techno-insecurity (Salazar-Concha et al., 2021). This paper specifically discusses techno-overload, and many other important factors like the user-friendly features and the challenging features of AI, its impact on productivity and the emotions which users experienced when working with it, and techno-overload.

When investigating the factors that contribute to the desirability and widespread acceptance of AI across different age groups and specifically working professionals and students, it was found that there were multiple features which make Large Language Models a highly convenient tool to use. Few of the most desirable attributes include- efficient text processing, advanced fine-tuning techniques for task adaptation, and expanded applications beyond language processing as key user-friendly features that contribute to the widespread adoption of Large Language Models (Alaktif et al., 2024). Despite the significant benefits that LLMs offer, it has created severe uncertainty about the authenticity of the information being provided. Research examining the robust nature of LLMs revealed that it is vulnerable to adversarial attacks, which may result in generating harmful responses or misleading responses (Yu et al., 2024). The impact on productivity remains a subject of debate - many researches including Necula et al. (2024) have revealed that productivity has substantially increased due to AI usage especially among young employees, on the contrary, some studies also suggest that AI reduces productivity because it induces stress and reduces job satisfaction among employees (Bîzoi & Bîzoi, 2024). There is a very wide range of emotion that users experience while using AI or LLMs, ranging from admiration and curiosity to anxiety, frustration and fear of job displacement and challenges in adapting to new technologies (Can & Tolay, 2024). Coming to techno-overload, although the common consensus is that AI reduces the load over people, evidence suggests that it is increasing the overload further by excessive information dumping according to a study conducted on health care professionals (Siegel et al., 2024).

### Methodology:

A qualitative study was used to explore the experiences of the participants in depth. Qualitative research facilitates learning about lived experiences and detailed narratives leading to a deeper comprehension of participant's experiences (Anis & Olisa, 2024). The aim of the research was to explore the experiences of AI users at the workplace and examine how the integration of AI and professional work has impacted them. The areas of investigation included: user experiences, impact on productivity, emotions experienced, and techno-overload. All the questions were open ended, allowing participants to provide a detailed and rich answer about their experiences.

The questions were formulated based on the area of interest. Open-ended questions were designed, after their formulation, they were sent for peer review. The sampling technique used was convenience sampling. A semi-structured interview method was used to ensure that participants can express themselves while aligning with the study's objectives. Probing questions were asked whenever necessary, to encourage participants to elaborate on the topic.

All participants primarily worked in close association with AI and LLMs. The age group ranged from 22 to 44. All the participant's professions involves close interaction with artificial intelligence and generative AI, spanning multiple sectors like software, education and scholars. All the participants were from India. In total, 15 participants took part in the study, with participation being fully voluntary. Informed consent was obtained before starting the interview, they were also informed that they can withdraw their consent any moment when they feel discomforted by the questions, and there would be no consequences. The participants were assured that confidentiality will be maintained and only their initials, age, and profession will be used for the study. Participants were debriefed about the topics related to the interview. Telephonic interviews were scheduled according to the convenience of the participants. Rapport was established before starting the interview, ensuring that the participants feel comfortable to talk and express their views and opinions. Before conducting the interview, participants were reassured that there would be no bias or judgement regarding their opinions and that they had complete freedom to share their experience honestly. All interviews lasted between 15-20 minutes. The calls were recorded with the consent of the participants. After interviewing 15 participants, it was found that answers were repeating frequently, so the data collection was stopped at 15 participants. Thematic analysis was conducted to identify the underlying themes and subthemes. This method also facilitated the identification of initial codes. The first part of the analysis was data familiarization, in which the transcripts of the call recordings were read to understand the meaning of what the participant's underlying message and view suggested. The transcripts are read and re-read, after this the initial codes were identified and made a note of, the codes which indicated a similar view were written together and others were written separately, hence arranging the codes into sub themes. After all the codes were arranged together, sub themes were identified and named appropriately. The subthemes were ranked in descending order in order to highlight the dominant themes.

### Results:

**Table 1 Thematic analysis table with all the themes, sub-theme, their description and the example quotes.**

Themes	Sub-themes	Description	Example quote
User-friendly features	Ease of Access and Simplicity	AI tools are user-friendly, requiring minimal learning	- "Easy to access" (P1) - "The accessibility. It is very easy to access, gives you a concise data in

		effort, making them accessible to a broad audience.	just a few seconds, very time-saving" (P3) - "A simpler user interface" (P8) - "Anyone who can use a computer or a mobile phone can use, because it's a chat interface" (P9)
	Efficient Information Retrieval and Summarization	AI quickly processes vast amounts of data and provides summarized insights.	- "Can easily find a lot of information quickly in a more concise manner" (P2) - "Provides concise data in just a few seconds, very time-saving" (P3) - "AI is great at summarizing content based on the data on which it was trained" (P14)
	Task Automation and Productivity Enhancement	AI automates repetitive tasks, reducing workload and boosting efficiency.	"Helps with locating errors in my work. I use it for mindless works. Works which do not require any human intelligence or any creativity" (P4) - "It takes care of a lot of menial tasks, which would take a lot of time for anyone. It gives you instant solutions to that" (P5) - "Greatly improved our productivity and also have greatly lessened our tasks and load of tasks" (P6)
	Interactive and Brainstorming Capabilities	AI serves as a collaborative tool for brainstorming and idea validation.	- "I can brainstorm with AI" (P7) - "Just talk to them, talk to the AI models, they have a pretty good catch of whatever I'm speaking. You can plan stuff, you can brainstorm stuff" (P12) - "Like trying to converse with someone who is some sort of an expert in the field, who knows something about everything and trying to know if your particular idea is worth working on or not" (P14)
Challenging features	AI Hallucination & Misinformation	AI can sometimes generate incorrect or biased information.	- "It hallucinates a lot. It has a lot of biases which we have to weed out." (P1) - "A lot of the information you

			<p>actually get is just absolutely nonsense." (P2)</p> <p>- "There are no proper sources that the AI mentions." (P3)</p>
	Time consumption and prompt generation issues.	Employees require structured training to use AI effectively.	<p>- "AI does not produce the correct result on the first prompt. So we'll have to keep fine-tuning our prompts." (P6)"</p> <p>- "AI models are still being polished, they might not understand what you are asking for." (P12)</p> <p>"Sometimes it may also waste your time." (P15)</p>
Productivity	Increased Productivity & Efficiency	AI speeds up work, reduces workload, and simplifies complex tasks.	<p>"Productivity level has definitely gone up... You can gather ideas at the tip of your fingers." (P3)</p> <p>"AI has helped my productivity a lot. Much lesser workload than before." (P6)</p> <p>"Coding becomes very easy. I can develop features in hours instead of days." (P7)</p>
	Over-Reliance & Reduced Learning Effort	AI makes tasks easier but discourages its users from learning independently.	<p>"It reduces productivity because you're not making an effort to learn things yourself." (P2)</p> <p>"AI helps me write well, not think well." (P11)</p>
Overload	Information Overload & Cognitive Strain	AI generates excessive information, making it difficult to process and filter.	<p>"AI provides so much information that it causes cognitive overload, making it hard to filter relevant content." (P1)</p> <p>"It's overwhelming when AI gives wrong information with confidence, making me doubt previous answers." (P11)</p> <p>"Sometimes the AI-generated results are far better than mine, which is overwhelming." (P12)</p>
	Pressure to Keep Up with AI Advancements	Users feel constant pressure to stay updated to prove their relevance.	<p>"Managing my regular work along with learning AI is an extra load rather than a time-saver." (P9)</p> <p>"You are now expected to do more things</p>

			because AI exists." (P10) "Every day, a new AI tool emerges, making it difficult to keep up." (P13)
Emotions Experienced	Anxiety, Fear and Job Insecurity	AI's rapid growth and its ability to replace human roles is creating anxiety and fear.	"Overwhelmed, anxious about AI replacing me. My creativity doesn't hold value anymore." (P6) "I feel insecure. AI may replace you, pick from your ideas, and outdo you." (P9) "Pushed to anxiety. AI poses a threat sometimes." (P12) "Overwhelming, fear of losing originality." (P14)
	Excitement & Amazement	Many participants find AI fascinating, thrilling, and are curious about it.	"First reaction was surprise. Mind-blown by the pace of development. Overwhelming but positive." (P7) "Excitement, we want to try it out." (P8) "Excited, intrigued, appreciative of AI's capabilities." (P10)
	Frustration and Emotional Exhaustion	The need to prove oneself and AI's impact on originality cause emotional strain.	"Constantly proving my work isn't AI-generated is emotionally exhausting." (P3) "Frustration of having to write like AI instead of expressing creativity." (P6) "AI can be very stressful, overwhelming, and concerning." (P13)
	Emotional Detachment & Dependency	AI is seen as reducing human connection and making users machine dependent.	"People are emotionally dry, AI is making us machine-dependent." (P9)

## Discussion:

The first theme is the user-friendly features of AI. The dominant subtheme was accessibility and simplicity- reflects participant's appreciation of generative AI's easy access and quick data summarization. Many also mentioned its intuitive interface, reducing the complexity and shortens learning curve across various fields. Related research suggests that AI has the capacity of enhancing accessibility in software development but, human oversight remains essential (Fjeld & Brynn, 2024).

The second dominant subtheme under user-friendly features is efficient information retrieval and summarization- participants praised generative AI's ability to deliver concise, relevant data quickly, saving time and helping in further exploration. Growing technology on AI-led summarization have



inspired several researches, one of the studies found AI very effective in summarisation and extracting information from videos, enhancing access to key contents (Kanagaraj et al., 2023).

The next subtheme identified is- task automation and productivity enhancement. Participants stated that AI efficiently handles time-consuming tasks that don't require human intelligence, allowing them to work faster and reduce their workload, which helps in boosting productivity. They also appreciated the AI's ability to extract web-based information and respond to queries. A supporting study shows that AI improves job satisfaction by streamlining workflows and enabling employees to focus on more meaningful tasks (Dutt & Jain, 2024).

The final subtheme under user friendly features is AI's interactive and brainstorming capabilities. participants described AI as a conversational tool that enables easy brainstorming allowing feedback and idea generation. AI has also been personified as a knowledgeable individual with a vast database, always offering relevant input. Few participants also mentioned that AI helps assess whether an idea is worth pursuing, acting like a "preliminary filter". Research on cognitive capabilities of LLMs reveals that they often surpass human benchmarks in verbal comprehension (Galatzer-Levy et al., 2024).

Moving to the second theme, Challenging features of AI. participants emphasised that despite its benefits, AI also presents significant limitations. Most dominant concern was AI's hallucinations and misinformation, where LLMs generate fabricated responses when asked unfamiliar or highly specific queries. AI also has a lot of biases, false information and does not cite proper sources. Some participants mentioned that AI IS in its "nascent stage". These issues often stem from limited or biased training data, leading to errors in novel contexts (Sakib, 2024).

The second dominant sub theme under challenging features of AI is need for fact checking and verification. Participants highlighted the constant requirement to cross-check AI-generated information due to its potential inaccuracy and lack of source citation. This creates a sense of uncertainty among users, as the risk of hallucinating content raises ongoing concerns about the authenticity of the output. The origin behind these faulty information is that AI driven tools have a tendency to produce answers on the training data and identify patterns to answer queries which might result in faulty answers (Sidhu, 2025).

Another subtheme identified is that AI can be time-consuming. Participants shared that crafting accurate prompts often requires repeated feedback and fine-tuning, making the process inefficient. Limited understanding of prompt engineering contributes to a gap between user intent and AI's interpretation, leading to contextual misunderstandings. While AI can save time in specific domains—such as CADt systems in healthcare that accelerate radiological reviews and reduce patient wait times (Thompson et al., 2023)—general users still face challenges in optimizing everyday AI interactions.

Proceeding to the next major theme, Productivity, this section explores how participants' workplace efficiency has been influenced by AI. Most participants reported a significant increase in productivity, due to reduced workload, faster task completion, simplified learning, and decreased task complexity. Some also noted AI's ability to generate new ideas quickly. Overall, participants agreed that generative AI enhances productivity. Supporting research highlights that AI automates repetitive tasks, enabling employees to focus on higher-value activities (Tasheva & Karpovich, 2024).

The final subtheme under this theme is over- reliance and decreased learning effort. Participants expressed concerns that, although AI has helped with productivity, it also led to over-reliance on its capabilities, which has reduced the overall effort of the users to learn new skills. Few participants have expressed their concern saying that AI reduces productivity because the users end up learning nothing. The ethical implications of AI dependency are significant, as it raises concerns about accountability and autonomy

(Ananta et al., 2025).

Moving to the next theme- Techno-overload. The first major subtheme which was identified under this theme was- Information overload and cognitive strain, many participants reported that AI generates excessive content that it leaves them overwhelmed and missing out on the key insights. This phenomenon is also called 'infobesity'. A study conducted by Tao Zhou, Songtao Li (2004) indicates that Information overload can cause dissatisfaction among users, this impacts their overall experience of potentially influencing their intention to switch from search engines.

The second major subtheme under this theme is- Pressure to keep up with AI Advancements. Participants expressed a persistent need to stay updated with AI developments to maintain their relevance. This expectation often leads to feelings of overwhelm and discomfort. Few participants noted that continuous learning about evolving AI tools adds to their workload rather than reducing it. Those not using AI also reported being burdened with tasks based on the assumption of being proficient with such tools. Users very often experience technostress because of the pressure to keep up with AI developments, this can lead to dissatisfaction and decline in performance (Sun et al., 2021).

The next theme identified was emotions experienced during interaction with AI. The first major subtheme is Anxiety, fear and job insecurity. Majority of the participants reported experiencing anxiety and fear while engaging with AI, largely due to the perception that AI is becoming increasingly capable of surpassing human efficiency. Many participants mentioned that their creativity may lose value to AI's capabilities. One research conducted in 2024 suggested that people go through deep anxieties about AI's impact on job security and data privacy (Gerlich, 2024).

The next major subtheme identified was the emotion Excitement and Amazement. While AI evokes some anxiety, it also sparks curiosity and excitement about its growth. Many participants described feeling excited when exploring new LLMs or AI tools. Although some initially felt overwhelmed, by the speed of ICT advancements, the general emotional response is positive. Research done to enquire about this excitement reveals that LLMs have portrayed significant abilities of generating data with accuracy, speed and problem-solving capabilities (Gurung et al., 2024).

The final sub theme identified under this theme is- Frustration. Few participants reported frustration stemming from unrealistic expectations from employees to produce AI polished output, maybe often at the cost of originality and creativity. Other participants reported about the constant pressure among employees to prove their work is not AI-generated, which causes a lot of frustration and emotional exhaustion. In enterprise environments, users often face frustration due to complex software and hardware interactions, despite advancements in AI (Nafus et al., 2022).

## Conclusion:

This study was carried out to explore the human side of AI at work, aiming to understand specifically about the major user friendly features, Challenging features, its impact on productivity, user emotions during AI interactions, and the specific type of techno-overload which users experience. In the theme 'user friendly features' the major sub theme identified was Accessibility and simplicity. The most challenging feature as per the participants is AI hallucinations. When enquired about the impact on productivity most participants claimed that it has improved their productivity and efficiency. The most dominant emotion which most participants feel while interacting with AI was found to be Anxiety and fear. The form of techno-overload which the participants majorly felt was information overload and cognitive strain.



This study addresses the significant shift of information technology and aims to understand how it is impacting working professionals. It contributes to the existing knowledge of AI and gives an in-depth understanding about the perceived nature of AI and LLMs specifically. It tries to explore different factors which can improve users' experience when interacting with LLMs. It also suggests that there is a vast scope for advancement in NLP (Natural Language Processing). Advancements in the workplace can help the users regulate their emotions more effectively. The study was successful to explore further about the techno stress theory and techno-overload specifically, the major sub themes under techno-overload gives policy makers, owners of companies and managers a broad perspective about the perception and discomfort which employees might be facing. The study has multiple implications, AI developers can design more user friendly features, by addressing common challenges claimed by participants. Organisations can enhance their adoption strategies to further boost the productivity and satisfaction of employees. Understanding user emotions can help design training programmes or support programmes for employees. Overall, it's important that businesses focus more on promoting a conducive environment for human-AI collaboration, rather than job displacement, this would also ensure a smooth transition into AI- driven workspaces.

There are some limitations to the study which can be further worked upon by future studies, the number of participants for this study were only 15 which is a very small number to generalise the findings, the age range was not well distributed among young users and older AI adopters. There also might be some level of researchers' bias over the interpretation of results. In future there is ample scope to research on the other factors of the techno-stress theory and give meaningful insights to the users, adopters and creators of artificial intelligence.

## References

1. Alaktif, A., Chergui, M., Daoudi, I., & Ammoumou, A. (2024). *All You Should Know About Large Language Models (LLMs)*. 1–10. <https://doi.org/10.1109/commnet63022.2024.10793270>
2. Ananta, B. R., Rosadi, M. M. A., & Wijaya, K. (2025). *Ethical Boundaries and Human-AI Dependency in Movie Entitled Atlas: Ethics of Technology Perspective*. 12(1), 219–233. <https://doi.org/10.25139/eckll.v12i1.9622>
3. Anis, A., & Olisa, N. (2024). *The end of traditional focus groups?* <https://doi.org/10.36367/ntqr.20.1.2024.e799>
4. Ayyagari, R., Grover, V., & Purvis, R. (2011). Technostress: Technological Antecedents and Implications. *MIS Quarterly*, 35(4), 831–858. <https://doi.org/10.2307/41409963>
5. Bîzoi, A.-C., & Bîzoi, C.-G. (2024). Neuroethical implications of AI-driven productivity tools on intellectual capital: a theoretical and econometric analysis. *Journal of Intellectual Capital*, 26(7), 1–23. <https://doi.org/10.1108/jic-07-2024-0218>
6. Bondanini, G., Giorgi, G., Ariza-Montes, A., Vega-Muñoz, A., & Andreucci-Annunziata, P. (2020). Technostress Dark Side of Technology in the Workplace: A Scientometric Analysis. *International Journal of Environmental Research and Public Health*, 17(21), 8013. <https://doi.org/10.3390/ijerph17218013>
7. Can, G. N., & TOLAY, E. (2024). Examining employees' emotions towards artificial intelligence (ai): a qualitative research. *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*. <https://doi.org/10.16953/deusosbil.1561404>

8. Dutt, Dr. S., & Jain, D. (2024). Impact of Artificial Intelligence on Employee Satisfaction. *Indian Scientific Journal Of Research In Engineering And Management*, 08(008), 1–7. <https://doi.org/10.55041/ijsrem37440>
9. Fjeld, E. K., & Brynn, R. (2024). AI in Software Development and Its Potential Influence on Accessibility Compliance. *Studies in Health Technology and Informatics*. <https://doi.org/10.3233/shti241046>
10. Friel, K. (2023, May 19). *A Look Back on the Dartmouth Summer Research Project on Artificial Intelligence*. The Dartmouth. <https://www.thedartmouth.com/article/2023/05/a-look-back-on-the-dartmouth-summer-research-project-on-artificial-intelligence>
11. Galatzer-Levy, I. R., Munday, D., McGiffin, J. N., Liu, X., Karmon, D., Labzovsky, I., Moroshko, R., Zait, A., & McDuff, D. (2024). *The Cognitive Capabilities of Generative AI: A Comparative Analysis with Human Benchmarks*. <https://doi.org/10.48550/arxiv.2410.07391>
12. Gerlich, M. (2024). Public Anxieties About AI: Implications for Corporate Strategy and Societal Impact. *Administrative Sciences*, 14(11), 288. <https://doi.org/10.3390/admsci14110288>
13. Gurung, G., Shah, R. K., & Jaiswal, D. P. (2024). *Recent Challenges and Advancements in Natural Language Processing*. 350–369. <https://doi.org/10.2174/9789815238488124020020>
14. Haan, K. (2024, June 15). *24 top AI statistics & trends in 2023 – forbes advisor* (R. Watts, Ed.). Forbes. <https://www.forbes.com/advisor/business/ai-statistics/>
15. Haenlein, M., & Kaplan, A. (2019). A brief history of artificial intelligence: On the past, present, and future of artificial intelligence. *California Management Review*, 61(4), 5–14. <https://doi.org/10.1177/0008125619864925>
16. Kanagaraj, K., Abhang, S., Kumar, J. S., R.K., G., & V, B. (2023). Ai-based video summarization for efficient content retrieval. *ICTACT Journal on Image and Video Processing*. <https://doi.org/10.21917/ijivp.2023.0446>
17. Nafus, D., Aslan, S., & Foster, C. E. (2022). *It's Still Frustrating! Human-Centered Approaches to Data in Enterprise PC Maintenance* (pp. 663–670). [https://doi.org/10.1007/978-3-031-19682-9\\_84](https://doi.org/10.1007/978-3-031-19682-9_84)
18. Necula, S.-C., Fotache, D., & Rieder, E. (2024). Assessing the Impact of Artificial Intelligence Tools on Employee Productivity: Insights from a Comprehensive Survey Analysis. *Electronics*, 13(18), 3758. <https://doi.org/10.3390/electronics13183758>
19. Sakib, S. M. N. (2024). *Bane and Boon of Hallucinations in the Context of Generative AI* (pp. 276–299). IGI Global. <https://doi.org/10.4018/979-8-3693-2643-5.ch016>
20. Salazar-Concha, C., Ficapal-Cusí, P., Boada-Grau, J., & Camacho, L. J. (2021). Analyzing the evolution of technostress: A science mapping approach. *Heliyon*, 7(4), e06726. <https://doi.org/10.1016/j.heliyon.2021.e06726>
21. Sidhu, B. K. (2025). Hallucinations in Artificial Intelligence: Origins, Detection, and Mitigation. *International Journal of Science and Research*, 14(1), 8–15. <https://doi.org/10.21275/sr241229170309>
22. Siegel, M. G., Rossi, M. J., & Lubowitz, J. H. (2024). Artificial Intelligence and Machine Learning May Resolve Health Care Information Overload. *Arthroscopy*, 40(6), 1721–1723. <https://doi.org/10.1016/j.arthro.2024.01.007>
23. Sun, Y., Li, S., & Yu, L. (2021). The dark sides of AI personal assistant: effects of service failure on user continuance intention. *Electronic Markets*, 1–23. <https://doi.org/10.1007/S12525-021-00483-2>

24. Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The Impact of Technostress on Role Stress and Productivity. *Journal of Management Information Systems*, 24(1), 301–328. <https://doi.org/10.2753/mis0742-1222240109>
25. Tasheva, Z., & Karpovich, V. (2024). Supercharge human potential through ai to increase productivity the workforce in the companies. *American Journal Of Applied Science And Technology*. <https://doi.org/10.37547/ajast/volume04issue02-05>
26. Thompson, Y. L. E., Levine, G., Chen, W., Sahiner, B., Li, Q., Petrick, N., Delfino, J. G., Lago, M. A., Cao, Q., & Samuelson, F. W. (2023). *Evaluation of wait time saving effectiveness of triage algorithms*.
27. University of Illinois Chicago. (2024, May 7). *What is (AI) Artificial Intelligence?* University of Illinois Chicago. <https://meng.uic.edu/news-stories/ai-artificial-intelligence-what-is-the-definition-of-ai-and-how-does-ai-work/>
28. Yu, L., Do, V., Hambardzumyan, K., & Cancedda, N. (2024). *Robust LLM safeguarding via refusal feature adversarial training*. <https://doi.org/10.48550/arxiv.2409.20089>
29. Zhou, T., & Li, S. (2024). Understanding user switch of information seeking: From search engines to generative AI. *Journal of Librarianship and Information Science*. <https://doi.org/10.1177/09610006241244800>