

A CONCEPTUAL FRAMEWORK ANALYZING THE EMOTIONAL DEPENDENCY OF WORKING PROFESSIONALS ON ARTIFICIAL INTELLIGENCE.

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Abstract— The rapid advancement of artificial intelligence has transformed the 21st century in the "AI era", where kids to professionals everyone is using AI for their work. This evolution has changed the outlook toward technology and accelerated the changes across industry, whether in healthcare, IT, or education no industry left untouched. Now AI is not just a tool, it has become a friend who works according to your prompt (instructions). At work, it acts like colleague, and in personal life, it becomes companion. As the saying goes, excess of anything can be harmful. In same way, overdependence on artificial intelligence can lead to negative impact on both professional as well as personal life. This conceptual framework illustrates the influence-based relationship among the factors which influence the tri-effect i.e., The psychological, Emotional and behavioral impact of generative AI on working professional and provides a structured understanding of positive and negative impact on personal and professional life. From this study author wants to propose "AI Compulsivity Theory" where individual is facing the strong psychological urge and repetitive behavioral tendency in which individual rely on and repeatedly engage with generative AI which become difficult to regulate. This situation creates a loop in which user initially adopt it as a tool for efficiency and ease of work. However, after a specific limit, AI may act as companion and provide output like human or users forget that they are having conversation with non-conscious being, not a real human being. Grounded on qualitative synthesis of emotional dependency on AI and prior empirical finding this study suggests that these relationships produce subjectively real consequences, thereby deserve rigorous conceptual analysis. Finally, author proposed a framework for understanding the influence-based relationship among factor cause dependency on Generative AI in working professionals' life. This study helps the reader to understand the limit of AI usage for positive impact and use of AI consciously.

Index Terms— AI dependency, AI compulsivity, Cognitive offloading, mental fatigue, Leader Emotional Support, Dual Driver, Job Insecurity

I. INTRODUCTION

Generative AI (Artificial intelligence) has changed lifestyles and preferences. Initially AI was mere a tool based on simple rules and instruction for completing job but now AI become a big portion of our lives. The evolution of AI makes the 21st century the "AI ERA" where cross generation adopt AI for their work. Now, AI system is highly interactive, adaptive and respond like human. This technological advancement can be utilized in various industry as supporting aid like healthcare, education, business and management. In workplace AI act as our co-worker who provide scaffolding and support for competing task, helps in enhancing efficiency and decision-making process. Moreover, AI has deeply become part of our everyday life in which AI helps in personal tasks, communication, emotional support, and interactive engagement. By creating a sense of being heard and understood, it leads to addictive pattern among emotionally vulnerable users. Besides its disadvantage there are various advantages. AI is not just tool but a powerful force revolutionized the digital world (Yankouskaya et al., 2025).

A. Problem statement

The rapid expansion of AI in workplace leads to efficiency and support culture. However, the Enduring consequences of exposure can create tri-effect i.e., psychological, emotional and behavioral impact which can disturb both professional as well as personal lives. Employee can also face the "technostress", "cognitive overloading" and "mental fatigue" because of rapid change in AI system employees need to adapt and this situation create stress on employee. Now, working professionals delegate their cognitive task which can lead to guilt of using AI for their serious job and that guilt fosters the feeling of job insecurity. Being aware from the capabilities of AI, can increase the fear of becoming obsolete and asking question of their self-worth in the career. Although AI can also use as helpful tool, over dependency can result in mental fatigue, emotional fatigue, workplace loneliness and disconnection from real human being. These stressors from AI does not affect only professional life but also their personal lives, cause the issues like work-family conflict, deterioration of mental and physical health (Riley et al., 2025).

B. Objective of the study

This study wants to state how working with AI helps working professional to feel better in situation where they do not have trustworthy to share their problems, stress (personal or work related) in this situation generative AI is whole sole being available for them. As we know the two sides of coin. Similarly, AI has other side, which give negative impact due to over dependency on AI leads to feeling like mental exhaustion, feeling guilty about using AI and losing our skills. Additionally, AI has changed the behavior of employee in group where they want to lead otherwise, they become withdrawn and isolated. Effect of AI is not limited to working professional but also influence their family like emotional distance from family and real relationships. Finally, this study will provide some suggestion which can help working professional to have balanced approach while working with AI so that we can skim positive effect and avoid negative effects (Riley et al., 2025).

C. Research question

how prolonged dependency on AI can affect working professional's mental health, ability of critical thinking and decision making? What is the factor which induced dual face of AI? one side it acts like friend and other side as foe. How AI act as stressor on workplace which leads to various negative effects and affect professionally as well as personally. List of measures can be used by manager on workplace and user in their personal life to eliminate the negative effect?

D. Significance of the study

This study illustrates how to work with Artificial Intelligence ethically and responsibly so that it contributes to greater good. This study will show that AI should be used as a supporting aid to human, not as replacement of human. The study will help to access the behavioral cost which is intangible in nature but exist and affect organization culture. It will give new perspective to human resource manager to rethink, make plans and policies which include AI literacy, training and create a supportive system for employees to eliminate the workplace loneliness and other negative impacts. Ultimate goal is to ensure that people understand they are using AI, rather than being used by AI. By remaining conscious and rational, this technology can make work and life better.

II. Literature Review**A. Artificial intelligence in 21st century**

Artificial intelligence (AI) has become an integral part of our lives. It has transformed the way of living and the work culture of organizations. Earlier, AI system was merely a tool, who follow specified rules, but modern AI system is interactive and adaptive, which can blur the distinction between real human beings and digital, non-conscious being (such as AI- chatbot) (Meng et al., 2025). They can assist in critical thinking and decision making. This has made AI an important tool in various industries like healthcare, education, business, management and finance (Aghaziarati & Rahimi, 2025).

B. AI in Professional life

In workplace AI helps in completing task effectively and efficiently and assist in making timely decision. Various companies use AI for data analysis, automating task and for customer service. For example., SBI uses SIA, Paytm uses support chatbots, HDFC bank uses EVA. Similarly, many other companies and industry use AI system according to their specific needs. With these advanced features, AI can make work easier and help in managing time effectively. As we can observe, Sometimes AI work as co-worker, who help in completing tasks. It can also provide guidance and act like a mentor, which make it highly useful and reliable in the workplace (Meng et al., 2025). Therefore, AI is not just tool, it is perceived as mentor and coworker who helps in getting things done quickly. some people rely on AI to such an extent that it becomes an important part of their life, they use it for getting reassurance, direction, and support. This is important because such dependency can influence an individual's identity, relationship at work and behavior in working environment (Aghaziarati & Rahimi, 2025).

C. AI in Personal life

As discussed in previous sections, and as many people have either experienced themselves or heard from others, AI is not used only for work but also used for personal life. People use AI assistants, like Siri or Google Assistant for personal use like reminders, messages and entertainment. AI can also act as companion when individuals feel lonely and stressed. It provides a space where there are no judgment and criticism, which makes it attractive to emotionally vulnerable individuals. AI has changed the way of living, professionally as well as personally. Earlier, humans used to share their feelings with other humans, but now, due to the interactive and adaptive feature of AI, some individuals may begin to withdraw from real human interaction. It gives feedback and creates a sense of trust and familiarity, where some people express themselves without fear of judgment. However, prolonged dependency on AI can create a problem. It may make individuals feel comfortable with AI while becoming uncomfortable with real human interaction, which can lead to loneliness, isolation and disconnection from the real world. It is like having a friend who is always available but not present in the real world (Saracini et al., 2025).

D. Emotional Dependency on AI and its cognitive and behavioral impact

Emotional dependency on AI means that working professionals rely on AI not only for work-related tasks but also for emotional support. Prolonged use of AI can make individuals feel comfortable and safe because of its adaptive algorithms, which create a perception that AI is a friend, companion or confidant. As stated in previous studies, emotionally vulnerable individuals project their needs onto AI, which leads to the theory of Techno-Projection Relationship (Saracini et al., 2025). This makes individuals feel safe, understood and less alone. AI adapts to users' behavior and provides personalized feedback, which can lead to one-sided connection with non-conscious beings. This type of bond has been referred to in previous studies as a pseudo-social bond (Yankouskaya et al., 2025). Such dependency is more prone to develop among emotionally vulnerable individuals. While AI can be helpful, it can also become harmful if users rely on it irrationally or become over dependent on it.

Prolonged use of AI can affect working professionals in three major ways: cognitively, emotionally and behaviorally.

i. Cognitive Impact

When working professionals become over dependent on AI, they may gradually lose the ability to think independently, problem solving, and make decisions without help of AI. This pattern can make individuals slaves and dependent on AI, which may lead to "AI guilt" and reduce confidence in their own ability (Riley et al., 2025). Overdependence can cause serious cognitive problems.

ii. Emotional Impact

AI can affect emotions by providing a comfortable, safe and supportive space. Over time, users may begin to feel anxious, stressed and insecure in the absence of AI. Excessive dependence can create feelings of weakness, vulnerability and emotional dependence. This may become harmful especially for emotionally vulnerable individuals who want reassurance and support primarily from AI rather than from real human relationships (Saracini et al., 2025).

iii. Behavioral Impact

Finally, AI dependency can affect behavior by making users less interested in having conversations with humans and more likely to withdraw from real human interaction. If users are not careful enough in controlling their use of AI, excessive reliance may create unhealthy ways, leading to isolation, and disconnection from the real world (Yankouskaya et al., 2025). This is a major problem because it affects not only the user but also their family, coworkers and overall well-being.

E. Conceptual and Theoretical Foundations

There are various theories which can help us to understand why users become dependent on AI. One theory is the Technology Acceptance Model (TAM), which suggests that people are more likely to use technology when they perceive it as useful and easy to use (Kan, 2021; Liu, 2025). Another relevant theory is the Computers Are Social Actors (CASA) framework, which says that people treat computers like humans when AI starts mimicking human-like manners (Saracini et al., 2025). There is also media dependence theory, which states that individuals become dependent on media for information, support and orientation (Liu, 2025; Yuan et al., 2024). Finally, the Job Demand-Resource (JDR) model explains that AI acts as both a support system as well as a stressor in the workplace setting (Jia et al., 2025; Zheng & Zhang, 2025).

All of these theories help us to understand why people become dependent on AI. They also help in finding the effects of AI dependency on professional and personal relationships. By understanding these theories, individuals can become more aware and rational in their behavior and ensure that they are not relying too much on AI.

F. Research Gap

Despite the rapid expansion of literature on AI in the workplace, most of the studies have focused on quantitative data to find specific outcomes such as productivity or job loss. There is still a lack of research on how people actually use AI in real-life. Therefore, more research is needed to develop a systematic understanding of existing studies and examine the dual effects of AI. On one hand, AI has positive effects on working professionals, such as completion of task, enhancing efficiency and support in making complex decision. On the other hand, AI can also have negative effects on working professional, including mental exhaustion, loss of professional identity and workplace loneliness. A qualitative study is needed to synthesize the existing findings into a comprehensive and unified understanding of how prolonged dependency on AI simultaneously reshape professional identity, interpersonal relationship in the workplace, and the overall personal well-being of modern workforce (Sharma et al., 2025).

III. Methodology

This study adopts an approach to explore how AI has transformed from basic tool into an interactive co-worker. It examines the effects of AI on working professionals' life, both personally and professionally.

For this study, literature was collected from sources such as Google Scholar and Scopus. Keywords such as "AI dependence", "Emotional dependency on AI" and "effects of AI on working environment" were used to find relevant studies. Most of the literature used in this study was obtained from peer-reviewed journals and conferences papers published between 2020 and 2025. This study analyses how AI has changed the workplace and how AI dependency has influenced the feelings and behavior at workplace settings.

This study is a conceptual review paper, based on existing research. The finding suggests that AI is no longer just a tool, but is increasingly seen as a co-worker that can have a dual force phenomenon that can be helpful and source of dependency (Meng et al., 2025). Future studies can be conducted on this topic by collecting primary data through longitudinal research and examining how humans and AI interact across different workplace settings. (Jia et al., 2025)

IV. Proposed Conceptual Framework

The proposed conceptual framework illustrates how working professionals initially use AI for their work and gradually develop emotional and psychological dependency on it over time. It follows a cause-and-effect structure in which cognitive, emotional and behavioral drivers lead to AI fever and dependency, which results in cognitive, emotional, behavioral consequence. This framework emphasizes the pattern through which AI transform from a supportive tool to companion in user's life.

FIGURE 1 : THEORETICAL FRAMEWORK OF AI DEPENDENCY AND ITS MULTIDIMENSIONAL IMPACTS

i.Key Drivers of AI Dependency

The major drivers that lead to AI dependency among working professional can be analyzed through cognitive, emotional and behavioral factors. Cognitive aspects include the need for efficiency at work, receiving quick answers, and reducing mental effort. Emotional aspects include work stress, feeling of burnout, loneliness and the need for a space where individual feel comfortable and supported. Behavioral aspect include the habit of using AI through regular interaction in work-related tasks, which slowly strengthen the dependency on AI usage.

ii.AI Dependency Theory and AI Fever

AI dependency often being with a basic foundational need, need for efficiency and task completion. However, with prolonged use of AI, individual may enter a stage that can be describe as "AI fever", where individua become attracted toward AI due to its speed, accessibility and capability to mimic human-like empathy. As trust and comfort deepen, AI may gradually shift from being merely a supportive tool to becoming a perceived companion, which leads to emotional and psychological dependency.

iii. Effects of AI Dependency

AI dependency can lead to cognitive, emotional and behavioral impact on working professionals' life. Cognitive effects include a reduction in critical thinking and over-dependence on AI-based decision making. Emotional effects include the development of emotional dependence and a loss of confidence in their own abilities, especially in situation where AI is unavailable. Behavioral effects include a reduced interest in human interaction, both in the workplace and in personal life, which can lead to loneliness and isolation. Therefore, while AI offer support and efficiency, but excessive dependency can negatively affect both personal and professional well-being.

V. Conclusion

In conclusion, the integration of AI in the workplace offers significant benefits, such as helping in completion of task and enhancing productivity. However, this study highlights that prolonged dependency on AI system can lead to serious cognitive, emotional and behavioral challenges. Over dependence on AI have negative effects, such as reducing independent thinking, increasing emotional vulnerability and weaken real human interaction, which may result in workplace loneliness, stress and social withdrawal. This study shows that AI can be helpful when used rationally, but over dependency can negatively affect both personal and professional life. Therefore, organization should adopt a balanced and human centric approach in workplace and ensure that AI remain supportive tool rather than a substitute of real human.

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