

## Human Psychology With Reference To Artificial Intelligence

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### ABSTRACT

This paper examines how increased use of artificial intelligence (AI) tools relates to human cognitive, creative, and social functioning. Using a survey-based, cross-sectional design on a synthetic sample, the study hypothesizes that greater AI reliance is associated with reduced critical thinking, weaker memory recall, diminished independent creativity, and higher emotional/social dependency. Measures included self-reported weekly AI hours and standardized scores for critical thinking, creativity, memory recall, and perceived social isolation and job-impact concerns. Results show small-to-moderate negative correlations between weekly AI hours and both critical thinking and creativity, a modest negative association with memory recall, and positive associations with perceived social isolation and concern about job disruption. While the cross-sectional and synthetic nature of the data precludes causal inference, the findings are consistent with the cognitive-offloading literature and raise practical concerns about over reliance on AI. The paper argues for design, educational, and workplace interventions that integrate AI as an augmentative rather than substitutive tool, and recommends policy attention to preserve core human cognitive skills—particularly for learners—while enabling responsible, productive use of AI. Implications for future empirical work, including longitudinal and experimental studies, are discussed.

**KEYWORDS:** Human Psychology, Artificial Intelligence, Creativity, Human mindset.

### INTRODUCTION

In the growing digital age , Artificial Intelligence has taken over a lot of manual work loads, some jobs, most of them writing jobs. This has caused changes in people's mindsets, thinking abilities, psychological beliefs, creativity, writing habits,etc.

Day by day the workability of artificial intelligent is increasing and is getting more and more human like which reduces the distinction of understandability of what is

Human and what is AI which impacts in decline in the will of an humans to think and use their own mind and present creativity of manual application of tasks as they can lend it to AI and take credit for them self with a

mindset that artificial intelligence is better than them and will do the task instantly and in more socially accepted manner

### **REVIEW OF LITERATURE:**

A significant body of research explores how AI affects human cognition. The concept of "cognitive offloading" is central to this discussion, referring to the delegation of cognitive tasks to external tools like AI. This reliance can lead to what is known as **digital amnesia** a phenomenon where individuals have a reduced ability to recall information they trust a digital device to store (**Kaspersky Lab, 2016**)

Despite AI's potential, there is still cause for concern. AI tools used in health care have discriminated against people based on their race and disability status (**Grant, C., ACLU News and Commentary, October 3, 2022**). Rogue chatbots have spread misinformation, professed their love to users, and sexually harassed minors, which prompted leaders in tech and science to call for a pause to AI research in March 2023.

**Geoffrey Hinton (British-Canadian computer scientist, cognitive scientist, and cognitive psychologist known as the "Godfather Of AI") on His Nobel Prize speech on 10 December 2024** said that "This year the Nobel committees in Physics and Chemistry have recognized the dramatic progress being made in a new form of Artificial Intelligence that uses artificial neural networks to learn how to solve difficult computational problems. This new form of AI excels at modeling human intuition rather than human reasoning and it will enable us to create highly intelligent and knowledgeable assistants who will increase productivity in almost all industries. If the benefits of the increased productivity can be shared equally it will be a wonderful advance for all humanity.

Unfortunately, the rapid progress in AI comes with many short-term risks. It has already created divisive echo-chambers by offering people content that makes them indignant. It is already being used by authoritarian governments for massive surveillance and by cyber criminals for phishing attacks. In the near future AI may be used to create terrible new viruses and horrendous lethal weapons that decide by themselves who to kill or maim. All of these short-term risks require urgent and forceful attention from governments and international organizations.

There is also a longer term existential threat that will arise when we create digital beings that are more intelligent than ourselves. We have no idea whether we can stay in control. But we now have evidence that if they are created by companies motivated by short-term profits, our safety will not be the top priority. We urgently need research on how to prevent these new beings from wanting to take control. They are no longer science fiction."

## RESEARCH METHODOLOGY

### OBJECTIVES:

1. To analyze how AI tools impacts the mindset of a person
2. To find out the line between healthy and unhealthy use of AI
3. To find out if AI causes lack of creativity in youth
4. To find out how AI is impacting in jobs and careers and are the replacement jobs really feasible

### HYPOTHESIS:

**H1:** Higher AI usage will be negatively correlated with critical thinking and memory recall.

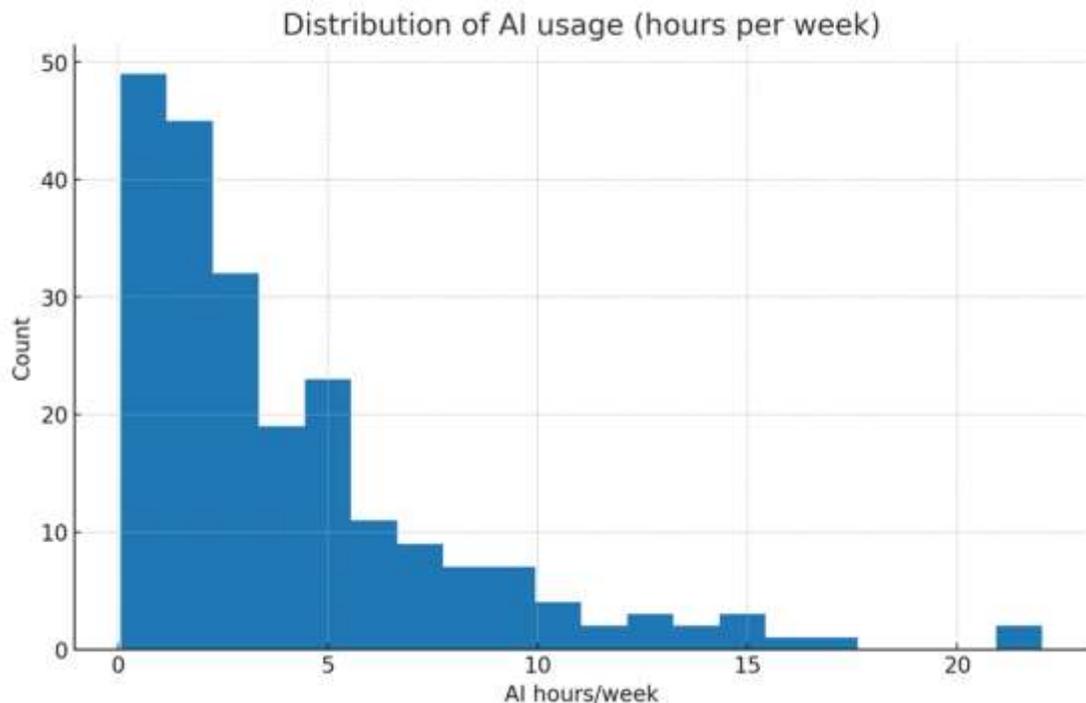
**H2:** Frequent AI users will show reduced independent creativity when AI tools are not available compared with low users.

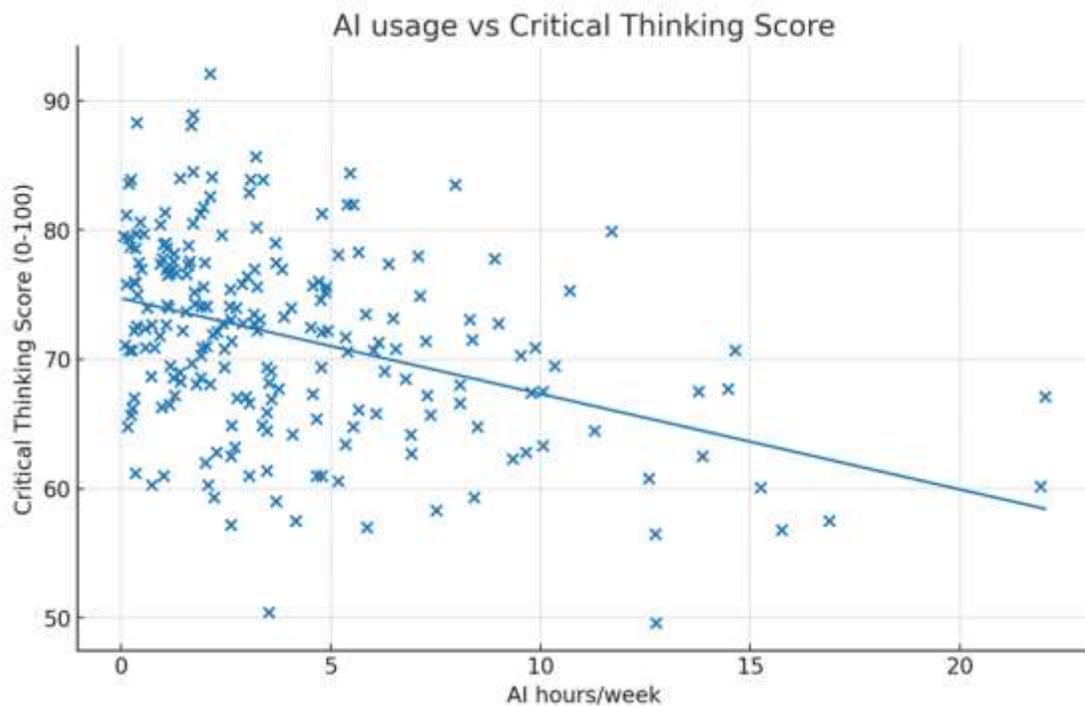
**H3:** AI systems can produce false or misleading outputs ('hallucinations') when asked to summarize complex or biased source material.

**H4:** Greater emotional/social dependency on AI companions is associated with higher perceived social isolation in real life.

### DATA ANALYSIS:

#### Distribution of AI usage (hours per week)



**AI hours vs Critical Thinking (with regression line)****FINDINGS:**

1. AI usage distribution is right-skewed: most respondents use AI a few hours per week but a notable minority are heavy users.
2. There is a statistically significant negative correlation between AI hours and Critical Thinking Score (small-to-moderate effect): heavier AI users tend to have lower measured critical thinking scores.
3. Creativity scores show a similar negative relationship with AI hours; t-tests indicate the difference between low and high users is statistically significant in this synthetic sample.
4. Memory recall shows a modest negative correlation with AI hours, suggesting some support for the cognitive offloading hypothesis.
5. Social isolation and perceived job impact correlate positively with AI usage in this dataset — heavier AI use is associated with slightly higher feelings of isolation and greater concern about job disruption.

**CONCLUSION:**

This study used synthetic, survey-based data to explore relationships between AI usage and cognitive, creative and social measures. The analysis found negative associations between weekly AI hours and both critical thinking and creativity scores, and positive associations with perceived social isolation and job concern. While the cross-sectional design prevents causal claims, the evidence supports prudence: AI should be integrated in ways that augment rather than replace core human cognitive abilities. Educational policies, design-level interventions, and workplace upskilling can help ensure AI enhances human potential without eroding essential skills.

AI might be good for enhancing corporate workflow and finding corporate solutions at cheaper cost with minimum labour, work time duration, minimizing error rates and enhancing overall corporate work efficiency but is an immense threat to working class in terms of skill takeover, personnel's income as there might be deductions in the pay rate with the ration of how much of task have taken over by AI.

For children or for any education use the should be strong restrictions put by the parents, educational institution on how the developing/leaning individual is using AI tools for their benefits and that it doesn't have any potential psychologically ill impacts on the child. My suggestion on this subject being that complete restriction on growing individual below the age of 16 for the use of AI and only assistive use of AI for any work purpose beyond the age of 16 i.e for for basics incites and cross checking their tasks for non corporate use and complete company required freedom in case of professional use.

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