

WHO DECIDES?

ARTIFICIAL INTELLIGENCE AND THE CHANGING NATURE OF HUMAN BEHAVIOUR

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Abstract:

In the rapidly developing era of AI (Artificial Intelligence) major changes are observed in society, from helping humans to changing and influencing the decision-making of the human. The way AI is influencing the human to make decisions according to the algorithms, suggestions and behaviour. Which is affecting the overall primary human-driven decision-making to dependency on technological intelligence. This revolution raises the important query regarding self-rule, responsibility and the revolving role of humans in this era.

The primary objective of this study is to observe how AI is gradually changing the way human behaves and take independent decisions with or without the help of Artificial Intelligence. Which identifies the pros and cons of the technology over the human behaviour and decision-making process, and simultaneously explores the ethical implications increasing due to the dependency on the intelligent systems.

The study reveals both quantitative and qualitative method showing relevant information has been collected from people's choices, research papers, and online sources related to artificial intelligence, human behaviour, and ethics. Aiming to understand behavioural patterns and ethical concerns from human-AI interactions.

The findings indicate that due to continuous AI-human interactions, the accountability and the responsibility among the human is gradually changing, which is leading towards high dependency on AI, which regulates algorithms, suggestions, and choices. The results show that there is a need for conscious human control over decision-making and the responsible use of AI, to ensure that the increase in technological advancement supports, rather than replaces, human decision-making abilities.

Keywords: *Artificial Intelligence, human behaviour, Algorithmic influence, Decision making, Ethical Responsibility*

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Introduction:

In recent times, AI (Artificial Intelligence) has come a very long way; what was once considered a concept of science fiction is now an integral part of everyday life. AI is now used in all fields, such as education, medicine, politics, and overall society, and the actual meaning and definition have blurred due to its various uses. It is often described as the machine that works on command; others define it as the algorithmic structure that mimics the human based on the data provided by processing large amounts and generating outputs. From sorting the data and voice recognition to

assisting in human decision-making. AI has expanded its functional scope across multiple domains.

To a major extent, it's seen to have positive results, but now it can be observed that AI is having an adverse effect on the nature of human behaviour. But the question arises here: what is the actual meaning of the sentence "Changing Nature of the Human Behaviour", often highlighted in a health context (including a perspective aligned with the WHO-related research themes on health behaviour) refers to the adaptive, gradual, and in some cases rapid changes due to the complex interplay of the biological and psychological

factors, which are further influenced by the sociocultural factors.

To understand how technological advancements work, it is considered that we have to understand how they collect data and process it. AI collects data through web scraping and crawling, user interaction logs, and API integration; through such methods, AI gradually influences the nature of human behaviour through algorithms and personalization further to their decision-making. This leads to greater perfection and quicker results, solving the difficult data and helping to create an analysis of it.

Statement Of Problem:

Despite the widespread adoption of artificial intelligence, there remains a limited understanding of how continuous reliance on AI systems influences human behaviour and independent decision-making. The increasing delegation of choices to algorithmic-driven systems raises concern regarding human autonomy, accountability, and ethical responsibility, highlighting the need for systematic examination.

This paper attempts to showcase how the role of AI has expanded beyond automation to influence human choices.

Research Objective

Primary Objective:

- To examine the influence of artificial intelligence on human behaviour and decision-making processes.

Secondary Objective:

- To study the extent to which individuals rely on AI-based systems while making everyday decisions.
- To analyse whether continuous use of AI affects independent human judgement.

Research Question:

1. How frequently do individuals use AI-based applications in their daily lives?

2. To what extent do people rely on AI recommendations while making decisions?
3. Does reliance on AI influence independent human decision-making abilities?
4. How does AI impact human autonomy and accountability in decision-making processes?
5. What are individuals' perceptions regarding the ethical implications of AI-driven decision-making?

Literature Review:

Several studies have explored how artificial intelligence influences human behaviour across different domains. Benvenuti et al. (2023) focus on the role of AI in education and behavioural development. Their study highlights that AI-based systems, such as intelligent tutoring tools, can enhance skills like critical thinking and problem-solving. However, the authors also caution that excessive reliance on AI may affect how individuals learn and think independently, emphasizing the importance of ethical and balanced use of AI in human development.

Fang et al. (2025) examined how interactions with AI chatbots affect users' psychosocial behaviour. Their longitudinal study shows that while AI chatbots may temporarily reduce loneliness, higher and prolonged usage is associated with increased emotional dependence, reduced social interaction with real people, and problematic usage patterns. This research highlights that frequent reliance on AI systems can subtly alter human emotional behaviour and decision-making tendencies.

Rayhan (2023) provides a broader perspective on the impact of artificial intelligence on human behaviour in areas such as social interaction, decision-making, employment, and privacy. The study notes that AI improves efficiency and decision-making accuracy but also raises concerns about over-reliance, reduced critical thinking, and algorithmic bias. The paper emphasizes that dependence on AI recommendations may weaken independent human judgment over time

Verma et al. (2023) empirically analyzed the impact of AI on human behaviour and well-being. Their findings suggest that while AI enhances convenience and productivity, it also contributes to reduced human interaction, increased dependency on machines, and ethical challenges related to autonomy and accountability. The study underlines the need for guiding principles to ensure that AI development benefits human society without negatively affecting behavioural patterns

Schmidt and Kissinger, in *The Age of AI and Our Human Future*, argue that the growing influence of artificial intelligence extends beyond efficiency to shaping human judgment and behaviour. The authors highlight concerns related to declining human autonomy, accountability, and ethical responsibility as decision-making increasingly shifts toward AI systems. This perspective provides a conceptual foundation for examining AI's influence on human decision-making behaviour.

Overall, existing literature highlights both positive and negative impacts of artificial intelligence on human behaviour. However, limited empirical research examines how continuous dependency on AI affects human autonomy and independent decision-making, justifying the need for the present study.

Research Methodology :

Research Design:

The present study adopts a descriptive research design to examine the influence of artificial intelligence on human behaviour and decision-making, which helps in understanding perception, attitudes, and behavioural patterns of individuals towards AI-based systems.

Source of Data:

The study is based on the primary and secondary data, where primary data was directly collected from respondents using a structured questionnaire, while secondary data was obtained from the research papers,

book and academic articles related to AI and human behaviour.

Sample Size and Sampling Method:

The study was conducted using a sample size of 80 respondents. The respondents were selected using a convenience sampling method, as it allowed easy access to participants from different age groups and educational backgrounds.

Data Collection Tool:

Data was collected using a structured questionnaire consisting of closed-ended questions based on the five-point Likert scale. The questionnaire mainly focuses on the AI usage, reliance on AI for decision making, behavioural changes, autonomy and ethical perceptions related to AI.

Method of Data Analysis:

The collected data was analysed using descriptive statistical tools such as percentages analysis, mean and standard deviation. These tools were used to interpret respondents' perceptions and to understand the overall impact of artificial intelligence on human behaviour and decision-making.

Limitations of the Study:

The study is limited to a sample of 80 respondents selected through convenience sampling. The findings are based on self-reported data, which may involve personal bias. Therefore, the results may not be generalized to the entire population.

Scope of the Study:

The study focuses on understanding the influence of artificial intelligence on human behaviour and decision-making among selected respondents. It examines perceptions related to AI usage, autonomy, and ethical considerations.

Findings / Results

1. Frequency of AI Usage: The average score for how often people use AI-based applications is 4.30, with a standard deviation of 0.88. This shows that respondents use AI tools quite often. The low

- standard deviation indicates that there is a consistent pattern, meaning AI has become a regular part of daily life.
2. **Reliance on AI Recommendations:** The level of reliance on AI recommendations has an average of 3.64 and a standard deviation of 1.31. This reflects a moderate to high level of dependence on AI systems, with some differences in how much individuals rely on AI for decision-making.
 3. **Following AI Over Personal Judgment:** The average score for following AI-generated suggestions when they differ from personal judgment is 3.01 (SD = 1.01). This suggests a neutral view, indicating that respondents neither fully accept nor completely reject AI recommendations. They maintain a balance between AI input and personal reasoning.
 4. **Influence of AI Compared to Human Advice:** The influence of AI compared to advice from people has an average score of 3.14, with a standard deviation of 1.02. This indicates that AI has a moderate effect on decision-making but does not surpass human opinions and social advice.
 5. **Change in Thinking Before Making Decisions:** The effect of AI on thinking patterns shows an average of 3.29 and a low standard deviation of 0.68. This indicates that respondents generally agree that AI has influenced how they think before making decisions, with little variation in responses.
 6. **Impact on Independent Decision-Making:** The view that frequent AI use has decreased independent decision-making ability has an average of 3.19 (SD = 1.01). This suggests some concern among respondents about relying on AI and its impact on independent judgment.
 7. **Confidence in Decision-Making Without AI:** Respondents' confidence in making decisions without AI help shows a high average score of 3.93 with a standard deviation of 0.76. This means that even with frequent AI use, respondents largely feel confident in their own decision-making skills.
 8. **Human Responsibility and Ethical Concerns:** The belief that humans should be accountable for decisions influenced by AI has an average of 3.39 (SD = 0.68). Concerns about less accountability due to heavy reliance on AI show an average of 3.37 (SD = 0.69). These results show respondents are aware of their ethical responsibilities and accountability.
 9. **Need for Ethical Guidelines and Limits on AI:** The need for ethical guidelines to manage AI-driven decision-making has an average of 3.49 and a standard deviation of 0.65, indicating strong agreement among respondents. Similarly, the belief that AI systems should have limits on their influence has an average of 3.44 (SD = 0.74), highlighting support for responsible use of AI.
 10. **Overall Impact of AI on Human Decision-Making Behaviour:** Overall, the impact of AI on human decision-making behaviour shows a moderate to strong influence, reflected in similar average values across different measures. The findings suggest that while AI greatly aids in decision-making, respondents still prioritise human autonomy, ethical responsibility, and independent judgment.
- Discussion and Conclusion :**
- Discussion:**
- The study's findings show that artificial intelligence is widely used and plays an important role in helping humans make decisions. Respondents rely on AI recommendations to a moderate extent, indicating that AI acts mainly as a support tool instead of replacing human judgment. These results are consistent with existing research that points out the advantages of AI in boosting efficiency and the dangers of relying too much on it.
- The current study's results are consistent with past research showing how artificial intelligence is

increasingly influencing human behavior and decision-making. The findings, which are similar to those of the Verma et al. (2023) study, show that although AI improves efficiency and convenience, over-reliance may diminish independent human judgment and accountability. The current study's finding of a moderate reliance on AI systems is corroborated by Rayhan's (2023) emphasis that algorithmic recommendations can subtly affect decision-making patterns. Additionally, the arguments made by Schmidt and Kissinger (2021), who emphasize the necessity of human oversight in AI-assisted decision-making, align with the worries about diminishing human autonomy and ethical responsibility. These comparisons imply that the current study's conclusions are in line with previous research and highlight the significance of using artificial intelligence responsibly and sensibly. The study also uncovers worries about the decline in independent decision-making and ethical responsibility due to constant interactions with AI systems. This supports earlier studies that stress the need for human oversight, accountability, and ethical guidelines in decisions assisted by AI. Overall, the results suggest a balanced relationship between AI support and human autonomy.

Conclusion:

The study concludes that artificial intelligence greatly impacts human behavior and decision-making by improving efficiency and offering support for decisions. However, relying too much on AI can influence independent thought and responsibility. Still,

individuals value human judgment and back ethical guidelines to manage AI use.

In conclusion, AI should serve as a helpful tool rather than a replacement for human decision-making. Using it responsibly and maintaining human control are crucial to ensure that technological progress enhances, rather than undermines, human independence.

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