THE PARADOX OF HUMAN SUBMISSIVENESS TO ARTIFICIAL INTELLIGENCE DESPITE BEING THE CREATORS OF TECHNOLOGY

Sulasa T.J[1], Dr. Ramesh Kumar[2]

[1]Research Scholar, Lovely Professional University, Phagwara, Punjab, India
[2] Assistant Professor, Lovely Professional University, Phagwara, Punjab, India
(Email: [1]sulasa_tj@yahoo.co.in, [2]ramesh26092@lpu.co.in)

Abstract

The paradox of human submissiveness to Artificial Intelligence, despite being the creators of technology, has been a subject of scientific investigation and discourse. One notable publication that explores this topic is "The Paradox of Technological Advances and Human Nature" by Jie Lu and David J. Bryce, published in the Journal of Business Research in 2017. The article argues that humans have a natural tendency to rely on and trust technology, which can lead to submissiveness to AI despite being the creators of it.Lu and Bryce's research suggests that human beings have a cognitive bias called the "automation bias," where they tend to over-rely on automated systems, even when they have the ability to perform a task manually. This cognitive bias can explain why humans may be submissive to AI, as they may feel that the AI is more capable or trustworthy than themselves. Moreover, the authors suggest that the rapid pace of technological advancement has created a sense of novelty and excitement in humans, leading to a desire to adopt new technology quickly without fully considering its potential impact on their lives. This can also contribute to human submissiveness to AI.

In conclusion, the paradox of human submissiveness to AI despite being the creators of technology, is a complex phenomenon that requires further investigation and discussion. Lu and Bryce's research sheds light on some of the underlying cognitive biases and societal factors that may contribute to this paradox.

Keywords: Artificial Intelligence, Human submissiveness, Creator of Technology,Psychology,Law, Transparency and Accountability, Bias and Discrimination

1. Introduction

The paradox of human submissiveness to AI, despite being the creators of the technology, raises significant questions about the future of mankind. In this chapter, we will provide an overview of this paradox and its potential outcomes. The rise of AI has brought numerous benefits, such as improved healthcare and increased business efficiency. As AI becomes more integrated into our daily lives, concerns are growing about human submissiveness to AI, given that humans are the creators of this technology. This paradox prompts us to examine the role of humans in shaping AI's future and the potential consequences of our increasing reliance on it. We will explore the causes of this paradox, its implications for society, and the ethical considerations surrounding AI development. Responsible innovation is crucial to

ensure that AI benefits humanity as a whole. As technology advances, more people are relying on AI for various tasks. AI, from voice assistants to autonomous systems, has the potential to revolutionise our lives. However, a paradoxical trend is emerging, with humans becoming increasingly submissive to AI despite being its creators. This paradox raises crucial questions about AI's role in society and its impact on human behaviour and decision-making. In this chapter, we will delve into the paradox of human submissiveness to AI and introduce key concepts for further discussion.

Chapter 1.1: The Psychology of Submissiveness in Human-AI Interaction: Understanding the Drivers and Implications of Passive Behaviours

To understand why humans are becoming increasingly submissive to AI, we must first examine the psychology of submissiveness. According to social psychologist Stanley Milgram, people have a natural tendency to obey authority figures, even if it means going against their own moral compass. This phenomenon, known as the Milgram experiment, has been replicated in numerous studies and has important implications for our relationship with technology. When presented with an AI system that appears to have authority and expertise, humans may be more likely to follow its recommendations, even if they are flawed or contradictory. Submissiveness to AI can be seen as a psychological phenomenon in which individuals willingly accept the authority of AI systems and willingly comply with their directives, even in situations where they conflict with their own beliefs or preferences. This phenomenon has become increasingly prevalent with the widespread adoption of AI technology in various areas of our lives, such as healthcare, finance, and transportation. One psychological explanation for submissiveness to AI is the concept of social influence. Social influence refers to the process by which people's attitudes, beliefs, and behaviours are shaped by the influence of others. In the case of AI, people may be influenced by the perceived authority and expertise of the AI system, as well as the convenience and efficiency it provides.

Another explanation is the concept of cognitive dissonance. Cognitive dissonance refers to the discomfort that arises when an individual holds conflicting beliefs or values. In the case of AI, individuals may experience cognitive dissonance when they recognize the limitations or errors of the AI system, but still rely on its recommendations or decisions. To resolve this discomfort, individuals may rationalize their submissiveness to AI by attributing the errors or limitations to external factors, such as technical glitches or insufficient data. Overall, the psychology of submissiveness to AI highlights the complex interplay between human cognition and technology. While AI can offer significant benefits, it is important for individuals to maintain critical awareness of its limitations and potential biases

Chapter 1.2:The Illusion of Control: Analysing the Effects of Human Submission to AI on Autonomy and Agency

Another key factor contributing to human submissiveness to AI is the illusion of control. As humans, we have a natural desire to feel in control of our environment and our decisions. However, AI systems can create an illusion of control that is both comforting and deceptive. This illusion of control is created when humans are presented with a user interface that allows

them to interact with an AI system in a way that feels intuitive and familiar. However, behind the scenes, the AI system may be making decisions based on complex algorithms and data sets that are beyond human comprehension. The illusion of control is a cognitive bias that refers to the tendency for people to overestimate their ability to control outcomes in situations they actually have no control over. This phenomenon can be observed in the context of our growing relationship with and submission to artificial intelligence (AI). As AI becomes more integrated into our daily lives, we often tend to trust it to act in our best interests. This false trust can lead to a false sense of control over technology and one's own life. One example of this control illusion can be seen in the growing use of virtual assistants such as Siri or Alexa and can perform a wide range of tasks, from setting reminders and sending messages to playing music and controlling smart home devices. Users may feel like they are in control of their environment, when in reality they are merely relying on the AI to execute their commands. Similarly, in industries like finance and healthcare, AI algorithms are being used to make decisions that were once made by human experts. While these algorithms can be incredibly accurate, they are not infallible, and there is always a risk of errors or biases creeping in. Overall, while AI has the potential to greatly enhance our lives, we must be mindful of the illusion of control and recognize that there are limits to our ability to predict and control the outcomes of AI-powered systems. It's important to maintain a healthy dose of scepticism and be aware of the risks.

Chapter 1.3: Investigating Human Bias and the Potential for Discrimination in AI Fairness

With the continuous advancement of artificial intelligence (AI) systems, their role in decision-making processes related to employment, lending, and various critical aspects of life becomes increasingly prominent. However, if these systems are constructed using biased data or flawed algorithms, they have the potential to perpetuate inequality and discrimination. Complicating matters further, people's conflicting preferences for AI can exacerbate these issues as individuals often accept AI advice without critically examining the underlying ideas or potential biases. In this chapter delve into the exploration of human bias, the possibility of discrimination, and the significance of ensuring AI fairness in order to mitigate these challenges.

Human bias encompasses the inherent preferences, prejudices, or inclinations individuals possess, whether consciously or unconsciously, which can impact their decision-making processes. When developing AI systems, it is essential to recognize and address the potential biases present in the data used for training. Failure to do so can result in biased AI algorithms, leading to unfair outcomes and perpetuating existing disparities in society.

1.3.1 Types of Human Bias

Several types of human bias can influence the fairness of AI systems. These include:

◊ Confirmation Bias: Occurring when individuals seek or interpret information in a way that confirms their pre-existing beliefs or assumptions, confirmation bias can reinforce existing biases within AI systems.

- ◊ Selection Bias: This bias emerges when the data used to train AI systems is not representative of the broader population, leading to skewed results and inaccurate predictions.
- ◊ Stereotyping Bias: Stereotyping bias involves relying on generalizations or stereotypes about certain groups of people, which can lead to discriminatory treatment and unfair outcomes when integrated into AI algorithms.

1.3.2 Impact of Human Bias on AI Systems

When human bias infiltrates AI systems, it can magnify existing inequalities and introduce new forms of discrimination. For instance, biased hiring algorithms might favour specific demographics, perpetuating the underrepresentation of marginalized groups in the workforce. Similarly, lending algorithms influenced by discriminatory practices can limit access to financial resources for disadvantaged communities. Therefore, it is crucial to identify, address, and mitigate human bias in AI systems to ensure fairness and avoid perpetuating discrimination. Potential for Discrimination in AI Systems

Discrimination can arise when AI systems, whether intentionally or unintentionally, treat individuals or groups unfairly based on characteristics such as race, gender, age, or other protected attributes. Discriminatory outcomes can result from biased training data, flawed algorithms, or a lack of diversity and inclusivity in the development process.

1.3.3 Biased Training Data

AI systems heavily rely on large datasets for training, and if these datasets are biased or incomplete, the resulting algorithms may exhibit discriminatory behaviour. For example, if historical employment data predominantly features male candidates, an AI system trained on such data may unintentionally favour male applicants in future hiring processes.

1.3.4 Flawed Algorithms

Even with unbiased training data, algorithms themselves can contribute to discrimination. Biases can appear in an algorithm due to the weighting of certain features or optimization goals set during the algorithm's design phase. It is important that these algorithms are carefully studied and improved to ensure that they do not perpetuate discriminatory practices.

Chapter 1.4: The Importance of Transparency and Accountability in Mitigating Human Submissiveness to AI

To mitigate the potential negative outcomes of the paradox of human submissiveness to AI, it is important to ensure that AI systems are developed in a transparent and accountable manner. This means that developers and policymakers must be transparent about the data and algorithms used to train AI systems, and that there must be mechanisms in place to hold those responsible for the decisions made by these systems. Additionally, it is important to promote a culture of critical thinking and independent decision-making, to ensure that humans are not blindly following the recommendations of AI systems without questioning their underlying assumptions and biases.

Chapter 1.5: legal Implications of the paradox of human submissiveness to AI

Despite humanity being the creators of technology, it is a complex issue with significant legal implications. as a language model. One of the key legal implications of this paradox is the potential liability of AI systems for their actions. As artificial intelligence systems become increasingly common and complex, it is important to determine who is responsible for damage or harm caused by these systems. Laws have traditionally held people accountable for their actions, but with the increasing autonomy of AI systems, this may not be possible. To address this issue, it is important to establish clear guidelines and rules for the development and use of AI systems. Another legal consequence is the potential impact on intellectual property rights. As the AI system becomes more advanced, you can create your own creations such as music, literature, and works of art. You must decide who owns the copyrights or patents for these creations and how they can be protected. Additionally, the increased use of AI systems may raise privacy and data protection concerns. As these systems become more integrated into our lives, they will inevitably collect huge amounts of personal data that may be potentially necessary to take appropriate steps to protect personal privacy and to handle this data responsibly and ethically. In conclusion, that the paradox of subjecting people to AI despite the fact that they are the creators of technology has serious legal consequences. Politicians, lawyers and scientists must work together to establish clear guidelines and rules to address these issues and ensure that AI systems are developed and used in a responsible and ethical manner.

Chapter 1.6: The Potential for Human Submissiveness to AI in the Future: A Science-Based Perspective

A Science-Based Perspective " Artificial intelligence (AI) has the potential to automate many tasks and make them more efficient, but it is unlikely that it will fully replace human work or dominate scientific writing. While AI can perform certain tasks better and faster than humans, I still lack the creativity, intuition, and empathy that are unique to human beings. There are certain tasks that require a human touch, such as complex problem-solving, critical thinking, and decision-making. In addition, many jobs require interpersonal skills, such as empathy, persuasion, and negotiation, which AI is currently unable to replicate. When it comes to scientific writing, AI can assist in tasks such as literature review and data analysis, but it is unlikely to fully replace human authors. Writing requires creativity, originality, and a deep understanding of the subject matter, which are difficult for AI to achieve. While AI-generated writing may be useful in certain applications, it is unlikely to completely replace human-written content. Overall, AI has the potential to enhance and augment human work, but it is unlikely to fully replace or dominate it. Human beings and AI have different strengths and weaknesses, and by working together, they can achieve more than either could on their own . One of the most immediate and visible impacts of AI on society is its effect on the workforce. As AI systems become more sophisticated, they have the potential to replace human workers in a wide range of industries, from manufacturing to finance to healthcare. The paradox of human submissiveness to AI may accelerate this trend, as humans become increasingly reliant on AI systems for decision-making and task completion. This could result in significant job losses and a shift in the balance of power between workers and employers.

Chapter 1.7: The Legal Implications of Human Submission to AI: Examining Liability, Responsibility, and Accountability

The increasing reliance on AI systems also raises important legal implications. As AI systems become more advanced and more integrated into our daily lives, questions arise about who is responsible when something goes wrong. For example, if an autonomous vehicle causes an accident, who is liable? Is it the manufacturer of the vehicle, the programmer of the AI system, or the person who was in control of the vehicle at the time of the accident? One of the key legal implications of submissiveness to AI is liability. If an AI system makes a decision that leads to harm or loss, who is responsible for that harm? If the decision-maker is merely following the AI's recommendations without questioning them, are they still liable? This issue becomes even more complex when we consider the fact that AI systems can learn and evolve over time, making it difficult to predict their behaviour or identify who is ultimately responsible for any negative outcomes. Another legal implication of submissiveness to AI is privacy. As AI systems collect and analyse vast amounts of data, they can potentially infringe on individuals' privacy rights. For example, if an AI system makes decisions based on sensitive personal information, such as race, gender, or sexual orientation, it could result in discrimination or bias, which is illegal in many jurisdictions. Furthermore, there is a growing concern about the potential for AI systems to infringe on intellectual property rights. If an AI system is designed to create original works of art or literature, for example, who owns the copyright to those works? If an AI system is used to generate new inventions or ideas, who is entitled to the patent rights? These are complex legal questions that are still being debated by policymakers and legal experts. In summary, submissiveness to AI raises a host of legal implications that must be carefully considered as AI systems become more prevalent in our lives. These implications range from liability and privacy to intellectual property rights and beyond, and they require a comprehensive legal framework to ensure that the benefits of AI are realized while minimizing any negative consequences

Chapter 1.8: Exploring Ethical Considerations of Human Submission to AI: Understanding the Risks and Implications

Finally, we must consider the ethical implications of our increasing submissiveness to AI. As AI systems become more sophisticated, they may be used to make decisions that have significant ethical implications, such as who gets hired for a job or who receives medical treatment. It is important to consider the potential biases and unintended consequences of these decisions, and to ensure that AI systems are developed in an ethical and transparent manner. As artificial intelligence (AI) continues to advance, it's becoming increasingly important to ensure that its development and deployment is done in an ethical manner. Here are some key ethical considerations that should be taken into account when creating AI systems:

- ◊ Fairness and bias: AI systems should be designed to be fair and unbiased, with equal treatment for all individuals regardless of their race, gender, age, or other characteristics. This means that algorithms should be thoroughly tested to identify and eliminate any biases that may exist in the data used to train them.

- ◊ Transparency and explain ability: AI systems should be transparent and explainable, meaning that their inner workings and decision-making processes should be easy to understand and explain. This is particularly important for high-stakes applications such as healthcare and criminal justice, where decisions made by AI systems can have serious consequences.
- ◊ Privacy and data protection: AI systems should be designed with privacy and data protection in mind. This means that they should adhere to strict data protection regulations and be designed to minimize the collection and use of personal data whenever possible.
- ◊ Accountability and responsibility: Those responsible for developing and deploying AI systems must be held accountable for their actions. This means that they should be transparent about their decision-making processes, and take responsibility for any negative outcomes that result from the use of their systems.
- ◊ Safety and security: AI systems should be designed to be safe and secure, with appropriate safeguards in place to prevent accidental or intentional harm. This includes ensuring that they are resilient against cyber-attacks and other forms of interference.

Overall, ethical considerations should be at the forefront of AI development and deployment, with the goal of creating AI systems that are beneficial to society and aligned with human values. As artificial intelligence (AI) becomes more advanced, there are growing concerns about the legal implications of submitting to AI decision-making. Submissiveness to AI can be defined as a situation where human decision-makers rely heavily on AI-based systems to make decisions without questioning their outputs or taking into account their limitations.

Chapter:1.9 The Impact of Human Submission to AI on Society: Opportunities and Challenges

Beyond the impact on the workforce, the increasing submissiveness to AI could have broader implications for society as a whole. As humans become more reliant on AI systems for decision-making, they may lose the ability to think critically and independently. This could lead to a society where individuals are less engaged in the political process and less likely to challenge authority or question the status quo. Additionally, the increasing reliance on AI could exacerbate existing inequalities, as those with access to the most advanced systems gain a competitive advantage over those without. One of the most immediate and visible impacts of AI on society is its effect on the workforce. As AI systems become more sophisticated, they have the potential to replace human workers in a wide range of industries, from manufacturing to finance to healthcare. The paradox of human submissiveness to AI may accelerate this trend, as humans become increasingly reliant on AI systems for decision-making and task completion. This could result in significant job losses and a shift in the balance of power between workers and employers.

2. Conclusion

The paradox of human submissiveness to AI presents both opportunities and challenges for the future of mankind. While AI systems have the potential to revolutionise many aspects of

our lives, there are also risks associated with becoming overly reliant on these systems. To ensure that the benefits of AI are realised without sacrificing our autonomy and freedom as individuals, it is important to promote transparency, accountability, and critical thinking in the development and deployment of these systems. By doing so, we can work towards a future where humans and AI coexist in a way that benefits us all. The paradox of human submissiveness to AI is a complex and multifaceted issue that requires careful consideration. By examining the psychology of submissiveness, the illusion of control, the legal implications, and the ethical considerations, we can begin to understand the impact that AI will have on our society and our individual lives. It is important that we continue to explore these issues and work to develop AI systems that are transparent, ethical, and accountable, in order to ensure that the benefits of this technology are realised without sacrificing our autonomy and freedom as individuals.

References

[1] Social perception in Human-AI teams: Warmth and competence predict receptivity to AI teammates Author links open overlay panel Alexandra M. Harris-Watson a, Lindsay E. Larson b, Nina Lauharatanahirun c, Leslie A. DeChurch d, Noshir S. Contractor d e

[2] ChatGPT and the Rise of Large Language Models: the new AI-driven Infodemic threat in Public Health Authorship: Luigi De Angelis1*, Francesco Baglivo1*, Guglielmo Arzilli1 , Gaetano Pierpaolo Privitera1,4, Paolo Ferragina2 , Alberto Eugenio Tozzi3 , Caterina Rizzo1

[3] Loving a “defiant” AI companion? The gender performance and ethics of social exchange robots in simulated intimate interactions J Leo-Liu - Computers in Human Behavior, 2023 - Elsevier

[4] Cognitive agility for improved understanding and self-governance: a human-centric AI enabler BJ Knox, S Sütterlin, R Lugo - … of Research on Artificial Intelligence …, 2023 - elgaronline.com

[5] Enactive Artificial Intelligence: Overcoming Male Gaze in Robot-Human Interaction I Hipolito, K Winkle, M Lie - arXiv preprint arXiv:2301.08741, 2023 - arxiv.org

[6] Potential History: reading artificial intelligence from indigenous knowledges R Bonaldo, ACB Pereira - History and Theory, 2023 - Wiley Online Library

[7] Barriers to artificial intelligence adoption in smart cities: A systematic literature review and research agenda AB Rjab, S Mellouli, J Corbett - Government Information Quarterly, 2023 – Elsevie

[8] Narrative Technique and the Individual Experience in a Saudi Novel: The Case of Abdul Aziz Al Mesheri's Saliha HA AI-Harshan - Journal of International Women's Studies, 2023 - vc.bridgew.edu

[9] [PDF] liberty.edu The Dark Web and Human Trafficking JK Graham - 2023 - digitalcommons.liberty.edu

[10] Natural conversations with a virtual being: How user experience with a current conversational AI model compares to expectations C So, A Khvan, W Choi - Computer Animation and Virtual …, 2023 - Wiley Online Library

[11] AI and Television L Barron - AI and Popular Culture, 2023 - emerald.com

[12] [HTML] Emotional Attachment to AI Companions and European Law

[13] C Boine - 2023 - mit-serc.pubpub.org
[14] "Which Agent is More Captivating for Winning the Users' Hearts?-Focusing on Paralanguage Voice and Human-Like Face Agent SY Lee - papers.ssrn.com
[15] A Representation of Malaysian Malay Women Identity from a Systemic Functional Perspective. SM Tan, J Tjin Ai Tan, GS Raj - GEMA Online Journal of …, 2023 - search.ebscohost.com
[16] [HTML] Consumer Consumption Behavioral Model for Business Intelligence Using Artificial Intelligence C Wang, Y Liu, H Zhou - Journal of the Knowledge Economy, 2023 - Springer
[17] [CITATION] The Threshold: Leading in the Age of AI N Chatrath - 2023 - Diversion Books
[18] Not Born of Woman: Gendered Robots H Shah, F Roberts - Gender in AI and Robotics: The Gender Challenges …, 2023 - Springe
[19] "He's a Machine—made So.": Rethinking Humanlike Robots in Issac Asimov's I, Robot H Chang - ANQ: A Quarterly Journal of Short Articles, Notes and …, 2023 - Taylor & Francis
[20] [BOOK] Hidden in White Sight: How AI Empowers and Deepens Systemic Racism
[21] CD Lawrence - 2023 - books.google.com
[22] Gender identity and influence in human-machine communication: A mixed-methods exploration W Liu, M Yao - Computers in Human Behavior, 2023 - Elsevier
[23] TL Rapp, WD Davis, LL Gilson… - Group & …, 2023 - journals.sagepub.com
[24] [PDF] Progression of Science and Regression of Human Species in Huxley's Brave New World R Bhatt, S Chanyal - ijoes.in
[25] Do You Mind? User Perceptions of Machine Consciousness AE Scott, D Neumann, J Niess… - … CHI Conference on Human …, 2023 - dl.acm.org
[26] [HTML] A paradigm shift from "human writing" to "machine generation" in personality test development: An application of state-of-the-art natural language processing P Lee, S Fyffe, M Son, Z Jia, Z Yao - Journal of Business and Psychology, 2023 - Springer
[27] Appreciation vs. apology: Research on the influence mechanism of chatbot service recovery based on politeness theory M Song, H Zhang, X Xing, Y Duan - Journal of Retailing and Consumer …, 2023 - Elsevier
[28] Understanding the Influence Discrepancy Between Human and Artificial Agent in Advice Interactions: The Role of Stereotypical Perception of Agency W Liao, YJ Oh, B Feng, J Zhang - Communication Research, 2023 - journals.sagepub.com