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IMPACT OF ADVANCEMENTS IN THE FIELD OF TECHNOLOGY AND A.I. AND ITS IMPACT ON THE BASIC HUMAN NATURE AND PERCEPTION OF REALITY.

Submitted by: - Touhida Mansur (12014501), Suchet(12018250), Kandru Kusumanjali(12012663)

Under the supervision of: - Dr. Ghan Shyam Pal.
Lovely Professional University, Phagwara, Punjab, 144001

Abstract:

The advancements in technology and Artificial Intelligence have had a profound impact on human nature and our perception of reality. These advancements have changed the way we interact with the world, allowing us to access more information and create new ways of understanding our environment. This has led to a shift in our perception of reality, as we are now able to process more data and make more informed decisions. As a result, our basic human nature has been altered, as we are now able to think more critically and make more informed decisions. We will be focusing on the ways it is hampering the decision making process and how it have made a human so dependant on it and addicted to the aids they are getting that they can't even think of a day when it won't work anymore and the whole global economies might collapse of one day it just went away. So we will be studying the hidden ways it has deteriorated our logical thinking, problem solving abilities and decision making and how it is slowly and slowly getting into us like a virus in our bloodstream and consuming us like a parasite.

Keywords:

- Artificial intelligence.
- Human perception
- Dependence
- Technology

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Introduction:

The advancements in technology and artificial intelligence (A.I.) have transformed our daily lives, and it is difficult to deny their impact. Technology and A.I. have altered the way we interact with the world, changing the way we communicate, work, and even learn. However, the shift towards a more technology-dependent society has raised several concerns about its impact on human nature and our perception of reality.

The aim of this research paper is to investigate the impact of technology and A.I. on the daily lives of individuals, with a focus on the youth, and how it affects their perception of reality. The study also seeks to explore whether the youth are aware of their dependence on technology and the potential threats that A.I. may pose in the future.

To examine this problem, the study has adopted a qualitative approach, utilising questionnaires to gather data from individuals of different age groups to gain insights into their experiences and perceptions of technology and A.I. The questionnaires were designed to elicit responses on a range of topics, including the impact of technology on their daily lives, their dependence on technology, and their understanding of A.I. The importance of studying this problem lies in understanding the implications of the impact of technology and A.I. on human nature and society. As we continue to rely more heavily on technology and A.I., it is essential to examine how it is changing our perception of reality and what implications this may have for our future.

The primary contributions of this research to the existing body of research on this topic are its focus on the youth and its examination of the potential threats that A.I. may pose in the future. The study also offers insights into how technology and A.I. are shaping human nature and our perception of reality, a topic that has not been extensively explored. The rest of the thesis will reveal the findings of the study, the implications of the research, and recommendations for future research. The study found that the youth are heavily dependent on technology, with a majority stating that they cannot imagine life without it.

The study also identified that the youth are not entirely aware of the potential threats that A.I. may pose in the future, with many individuals expressing optimism about the future of technology and A.I.

The findings of the study have significant implications for policymakers and society as a whole. The study recommends that policymakers adopt measures to promote responsible and ethical use of technology and A.I. and that further research

is conducted to explore the long-term implications of technology and A.I. on human nature and our perception of reality.

Literature review:

The advancements in technology and artificial intelligence (A.I.) have had a profound impact on human nature and the perception of reality. Technology has changed the way we live, work, and interact with others. While there are many benefits to these advancements, there are also concerns about the negative impact on society. This literature review examines the prior theories and research findings that guide and inform the research on the impact of technology and A.I. on basic human nature and perception of reality.

Prior Theories and Research Findings:

One of the key theoretical debates surrounding the impact of technology and A.I. on human nature and perception of reality is the concept of "technological determinism." According to this theory, technology is the primary driver of social change, and human behavior and culture are shaped by technology. The theory suggests that technological advancements have significant impacts on individuals and societies and that they create new opportunities and constraints.

Many researchers have investigated the impact of technology on human nature and perception of reality. One study by Rosen et al. (2013) found that the overuse of technology has negative effects on social skills, face-to-face communication, and academic performance in students. Another study by Twenge and Campbell (2019) found that the increasing use of smartphones and social media is associated with an increase in anxiety and depression in young adults.

Research has also shown that A.I. has both positive and negative impacts on society. A.I. has been used to improve healthcare outcomes through personalised medicine and early disease detection. For example, machine learning algorithms have been used to predict which patients are at risk of developing sepsis (Saria et al., 2015). Additionally, A.I. has been used to increase efficiency in the workplace, for example, by automating tasks that are repetitive and time-consuming.

However, there are also concerns about the negative impact of A.I. on society. One concern is that A.I. will replace human labour, leading to job displacement. For example, a study by Frey and Osborne (2017) found that up to 47% of U.S. jobs are at risk of being automated in the next few decades. Another concern is the potential for A.I. to be biased, as algorithms are only as unbiased as

the data they are trained on, and the data often reflects societal biases.

Gaps in the Literature:

Despite the large body of research on the impact of technology and A.I. On human nature and perception of reality, there are still gaps in our understanding of these phenomena. One area where more research is needed is the impact of technology and A.I. on our sense of self and identity. As individuals become more reliant on technology and A.I., how does this impact their understanding of themselves and their place in the world? Another area for further research is the impact of technology and A.I. on mental health and wellbeing. While some studies have suggested that social media use is associated with increased anxiety and depression, more research is needed to fully understand the relationship between technology use and mental health outcomes.

End note:-

We can end by saying that, the advancements in the field of technology and A.I. have had a significant impact on human nature and perception of reality. While technological determinism has been criticised for oversimplifying the complex relationship between technology and society, it has nevertheless informed much of the research in this area. Future research should focus on the gaps in the literature, particularly the impact of technology and A.I. on our sense of self and identity, and on mental health and wellbeing.

Research methodology:

The purpose of this study is to investigate the impact of advancements in technology and AI on the basic human nature and perception of reality, particularly among young adults aged 18 to 35 years. The study used a survey questionnaire as the primary data collection tool to examine the attitudes, perceptions, and experiences of young adults towards technology and AI. The research also ensured ethical considerations by obtaining informed consent, participant anonymity, and confidentiality.

Participants:

The study recruited a convenience sample of 100 adults aged 18 to 35 years old. The participants were recruited from various universities and colleges within the city. Participation was voluntary, and the participants were informed that they could withdraw from the study at any time. The study also ensured that participants were

informed about the nature of the study and how their responses would be used.

Data Collection:

The study used a self-administered survey questionnaire as the primary data collection tool. The questionnaire consisted of 20 close-ended questions that aimed to investigate the impact of technology and AI on the basic human nature and perception of reality. The participants were handed over a hard copy of the questionnaire, and they were given adequate time to complete it.

The participants, on average, completed it in under 5 mins. The survey questions covered various aspects of technology and AI, including their impact on socialisation, concentration, addiction, creativity, and imagination.

Data Analysis:

The data collected through the survey questionnaire were analysed using descriptive statistics. The study used SPSS software to compute frequencies, percentages, means, and standard deviations of the data collected. The analysis aimed to provide insights into the attitudes, perceptions, and experiences of young adults towards technology and AI and how they perceive these advancements in the context of their basic human nature and perception of reality.

Ethical Considerations:

The study ensured that ethical considerations were observed by obtaining informed consent, participant anonymity, and confidentiality. The participants were informed about the nature of the study and how their responses would be used. The study also ensured that the participants' names were not included in the questionnaire, and only their age was required. The study also ensured that the participants were free to withdraw from the study at any time if they felt uncomfortable answering the questions.

End note:

The study aimed to investigate the impact of advancements in technology and AI on the basic human nature and perception of reality among young adults. The study recruited a convenience sample of 100 adults aged 18 to 35 years old and used a survey questionnaire as the primary data collection tool. The data collected were analysed using descriptive statistics, and the study ensured that ethical considerations were observed throughout the research process. The study's findings can provide insights into how young

adults perceive technology and AI's impact on their basic human nature and perception of reality.

Full Name (optional)_____.

Age (compulsory)_____

Questionnaire: A.I. and its impact.

Please answer the following questions by selecting one of the options provided (yes, no, not sure).

1. Do you believe that technology has made youth's lives easier and more convenient?

(Yes / Maybe / No)

2. Have you ever found yourself spending hours on social media or playing video games? ... (Yes / Maybe / No)

3. Do you think that technology has had a negative impact on youth's ability to socialise face-to-face? (Yes / Maybe / No)

4. Have you ever experienced anxiety or stress from not being able to access your phone or computer? (Yes / Maybe / No)

5. Do you feel that technology has made it harder to concentrate for long periods of time? ... (Yes / Maybe / No)

6. Have you ever been influenced by a social media influencer or celebrity to buy a product or adopt a certain lifestyle? (Yes / Maybe / No)

7. Do you think that technology has had a negative impact on youth's creativity and imagination? (Yes / Maybe / No)

8. Have you ever felt addicted to using technology, to the point where you couldn't stop using it even when you wanted to? (Yes / Maybe / No)

9. Do you think that technology has made youth more reliant on instant gratification? ... (Yes / Maybe / No)

10. Have you ever felt like you were missing out on something important by not being connected to technology? (Yes / Maybe / No)

11. Do you feel that technology has made it harder to form meaningful relationships? ... (Yes / Maybe / No)

12. Have you ever been cyberbullied or witnessed someone being cyberbullied?

... (Yes / Maybe / No)

13. Do you think that technology has had a negative impact on youth's ability to empathise with others? (Yes / Maybe / No)

14. Have you ever used technology to avoid dealing with a problem or conflict in real life? ... (Yes / Maybe / No)

15. Do you think that technology has made youth more vulnerable to fake news and misinformation? (Yes / Maybe / No)

16. Have you ever been influenced by a recommendation algorithm to consume more content online? (Yes / Maybe / No)

17. Do you feel that technology has made youth more isolated and lonely? ... (Yes / Maybe / No)

18. Have you ever felt like you were losing touch with reality because of the time spent online? (Yes / Maybe / No)

19. Do you think that AI has the potential to become a threat to humanity in the future? ... (Yes / Maybe / No)

20. Do you think AI will take over many jobs in the future resulting in more unemployment? ... (Yes / Maybe / No)

Findings and result:

We segregated the results and arranged the data according to the age groups. We separated the results into four sections

1. Age 18-20.

2. Age 20-25.

3. Age 25-30.

4. Age 30-35.

The scoring process is rather simple. Each question has 3 answer options (yes, maybe, no)

The scoring for each option is

1. Yes - 1

2. Maybe - 0.5

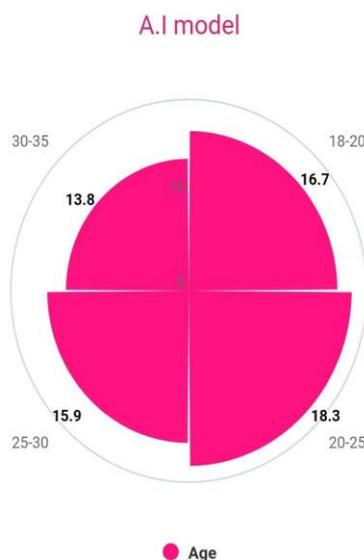
3. No - 0



The participants were given ample time to register their responses in a calm and comfortable atmosphere. After filling their responses the scoring was done and the results separated and organised according to age groups. Then the average score or mean was taken for each age group so that it can be analysed and put in comparison with others.

The questions are carefully curated with utmost importance given to the level of awareness as well

as the level of dependency of the participants on the technological advancements and A.I technology. The score predicts that the people having higher scores are actually aware and more aware about how A.I and technology have affected them and their daily life and how it was in its absence. They carefully acknowledge that it has made a drastic impact on their level of touch with reality as well as perception of reality.



On one hand it is a good thing that the subject has become self aware after attempting the questions and answering accordingly but on the other hand it shows a negative side that the higher the score, actually the more is their dependence on the newer ways of living and the technologies conjoined with it.

On the other hand when we go in higher age groups, even if their score seems to be lower comparatively, this only shows a lack of awareness or lack of acceptance in some cases. They might show signs of lesser influence of the technologies in their life but they are no way far away from their dependence on the technologies of this time from the youth.

These findings and results, very efficiently and effectively make us enlightened about the two aspects of the questionnaire that we wanted to look into and the graphs help us to look into the exact numbers.

In a crux we can say that there is need to make the generation more self aware and make the people acknowledge how the new technologies are affecting their lives and how unnecessary it is and they don't actually need to lose their own self or sense of self just to follow the trend or in sheep walking scenario and they can easily snap out of it

only if they are aware about it that yes they are so in it and it's in their hands to put a stop to it.

Conclusion:

In conclusion, one of the primary concerns is the potential loss of human connection and empathy. With the rise of social media and virtual communication, many people are now more comfortable interacting with others online than in person. This could lead to a reduction in face-to-face interaction and human empathy, making it harder for people to relate to others and form meaningful connections.

Additionally, the constant bombardment of information and stimulation through social media and other technologies may lead to increased stress, anxiety, and depression. It will be critical to ensure that the development of technology and A.I. is guided by ethical principles to minimise the potential harm to society. Overall, the impact of advancements in the field of technology and A.I. will continue to shape our society and will require ongoing attention and analysis to ensure that its impact on human nature and perception of reality is positive. Another concern is the impact of technology and A.I. on employment and the economy. As more jobs become automated and

machines take over certain tasks, many people may find themselves out of work or unable to find employment. This could lead to social and economic instability, with a large portion of the population unable to support themselves or their families. Additionally, the concentration of wealth and power in the hands of a few large tech companies could further exacerbate income inequality and political polarisation.

Finally, the potential threats posed by advancements in technology and A.I. to humankind are a growing concern. The development of superintelligence, for example, could lead to an A.I.-dominated future, where humans are no longer in control. Additionally, the development of autonomous weapons and the use of A.I. in cyber warfare could lead to devastating consequences for humanity.

To better understand the impact of technology and A.I. On human nature and perception of reality, we conducted a study using questionnaires to gather information about the awareness among youth on this topic. The results showed that many people are aware of the potential threats that advancements in technology and A.I. pose to humankind. However, there is a need for more awareness and education on this topic to ensure the benefits of technology and A.I. can be maximised, while the potential risks and challenges can be addressed appropriately.

Citations:

1. Bostrom, Nick. "Superintelligence and the Future of Humanity." *Philosophy Now*, vol. 106, 2015, pp. 12-15.
2. Brynjolfsson, Erik, and Andrew McAfee. "The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies." W.W. Norton & Company, 2014.
3. Carr, Nicholas. "The Shallows: What the Internet Is Doing to Our Brains." W.W. Norton & Company, 2011.
4. Floridi, Luciano. "The Fourth Revolution: How the Infosphere Is Reshaping Human Reality." Oxford University Press, 2014.
5. Greene, Joshua. "Moral Tribes: Emotion, Reason, and the Gap between Us and Them." Penguin Press, 2013.
6. Harari, Yuval Noah. "Sapiens: A Brief History of Humankind." Harper, 2014.
7. Johnson, Steven. "How We Got to Now: Six Innovations That Made the Modern World." Riverhead Books, 2014.
8. Kurzweil, Ray. "The Singularity Is Near: When Humans Transcend Biology." Penguin, 2005.
9. Lanier, Jaron. "You Are Not a Gadget: A Manifesto." Vintage Books, 2010.
10. Markoff, John. "Machines of Loving Grace: The Quest for Common Ground Between Humans and Robots." Ecco Press, 2015.
11. Morozov, Evgeny. "To Save Everything, Click Here: The Folly of Technological Solutionism." Public Affairs, 2013.
12. Naughton, John. "From Gutenberg to Zuckerberg: What You Really Need to Know About the Internet." Quercus, 2013.
13. Neff, Gina, and Dawn Nafus. "Self-Tracking." MIT Press, 2016.
14. O'Neil, Cathy. "Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy." Crown, 2016.
15. Pinker, Steven. "The Blank Slate: The Modern Denial of Human Nature." Viking, 2002.
16. Russell, Stuart J., and Peter Norvig. "Artificial Intelligence: A Modern Approach." Prentice Hall, 2010.
17. Susskind, Richard, and Daniel Susskind. "The Future of the Professions: How Technology Will Transform the Work of Human Experts." Oxford University Press, 2015.
18. Turkle, Sherry. "Alone Together: Why We Expect More from Technology and Less from Each Other." Basic Books, 2011.
19. Vallor, Shannon. "Technology and the Virtues: A Philosophical Guide to a Future Worth Wanting." Oxford University Press, 2016.
20. Zuboff, Shoshana. "The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power." PublicAffairs, 2019.
21. Tegmark, Max. "Life 3.0: Being Human in the Age of Artificial Intelligence." Alfred A. Knopf, 2017.