A STUDY ON IMPACT OF AI ON YOUTH IN MUMBAI

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ABSTRACT

Artificial intelligence can make machines and computer smarter, it can perform various tasks which require human knowledge and intelligence like taking prompt decision, reasoning, problem-solving and learning. Youth mean the period of your life when you are young, especially the period between childhood and maturity. This study aims to analyze the impact of artificial intelligence (AI) among young individuals in areas such as education, skill development, and employment. The research is based on primary data collected through a structured questionnaire from 50 respondents selected using random sampling. The data was analyzed using percentage and graphical methods. The study finds that AI has positively contributed to personalized learning, skill development, and career opportunities for youth.

Keywords: *Artificial Intelligence (AI), Youth, Education, Employment, Skill development*

1. INTRODUCTION

In today's complex and dynamic environment, understanding Artificial Intelligence (AI) and its usage is crucial for today's youth. AI refers to the technology that enables computers and machines to perform tasks that require human intelligence, such as problem-solving, decision-making, reasoning, and learning (Russell & Norvig, 2021). This paper focuses on the impact of AI on youth, defined as individuals between the ages of 15 and 24 (United Nations, n.d.), in Mumbai.

AI empowers youth by personalizing education, boosting critical thinking through interactive tools, enhancing career readiness with new skills, fostering global connections, supporting mental well-being, and enabling creative problem-solving for complex challenges like peacebuilding and climate change (Verma & Lall, 2025). AI platforms like Google Gemini/Meta AI, AI Chatbots, Chat GPT, AI image & Creativity Tools, and AI learning & Homework Helpers are widely used by youth today for learning, completing project works, assignments, solving problems or case studies, creating posters, presentations, and videos, designing social media content, resume building, and interview preparation.

2. REVIEW OF LITERATURE

Agarwal et al. (2025) highlighted the increase in usage of AI after the COVID-19 pandemic in 2020, particularly in the field of education. This paper explored how students use generative AI with the help of qualitative research, especially among high school students. Findings reveal that respondents were benefited by AI when they got stuck with assignments and were unsure how to begin any task.

Choudhari (2025) aimed to highlight both positive and negative consequences of AI in the development of youth. This paper also examined the interaction of AI technology and the evolving mindset of youth. Findings reveal that as AI continuously evolves, it is critical for both developers and educators to work together to design AI systems that prioritize ethical guidelines, mental well-being, and the promotion of diverse viewpoints.

Gupta and Asthana (2025) studied the relationship between humans and machines, which emphasized a collaborative system that enhances human capabilities rather than replacing them. It also considered the ethical implications of large-scale adoption of AI, including issues about data privacy, algorithmic bias, and accountability. Findings reveal that AI is transforming industries, improving efficiency, and enhancing daily life through its application in healthcare, education, finance, and more.

Khotkar et al. (2025) examined the impact of AI on youth, focusing on education, employment, mental health, and social interactions. Findings reveal that AI has some positive impacts on education and has also contributed to employment creation in IT fields.

Sharma et al. (2025) explored the growing concern of over-reliance on AI among students for academic tasks, highlighting the potential decline in problem-solving skills and independent thinking. Findings suggest that while AI is beneficial, educators must set boundaries to foster genuine learning.

Verma et al. (2025) explored how the youth of Jhansi use AI and the dependence of youth on AI in daily aspects of life. This study investigates the use of AI in daily life of youth, focusing on its usage in education, banking,

social media, entertainment, and marketing. Findings reveal that respondents are consistently and actively using AI in their everyday life.

OBJECTIVES OF THE STUDY

1. To study the level of awareness of Artificial Intelligence among Youth in Mumbai.

2. To analyze the impact of Artificial Intelligence on Youth in Mumbai.

RESEARCH METHODOLOGY:

This study is grounded in primary data gathered through a meticulously crafted, structured questionnaire, specifically targeting the youth demographic in Mumbai. A sample size of 50 respondents, evenly split between males (25) and females (25), was carefully selected using a convenience sampling approach. The questionnaire is designed to comprehensively assess respondents' awareness and perceptions of Artificial Intelligence (AI), the sources through which they gain knowledge about AI, and the diverse ways in which they utilize AI in various aspects of their daily lives, including education, social media, entertainment, and other relevant domains.

To ensure the representativeness and diversity of the respondent pool, demographic variables such as age, education level, and gender are meticulously considered and accounted for in the sampling strategy. This enables the researchers to capture a rich and nuanced dataset that reflects the multifaceted experiences and perspectives of Mumbai's youth.

The collected responses will undergo rigorous analysis to identify patterns, correlations, and differences across various demographic groups, employing both qualitative and quantitative analytical techniques as appropriate. Throughout the research process, utmost attention will be devoted to upholding stringent ethical guidelines, safeguarding respondent confidentiality, and ensuring the integrity and reliability of the data.
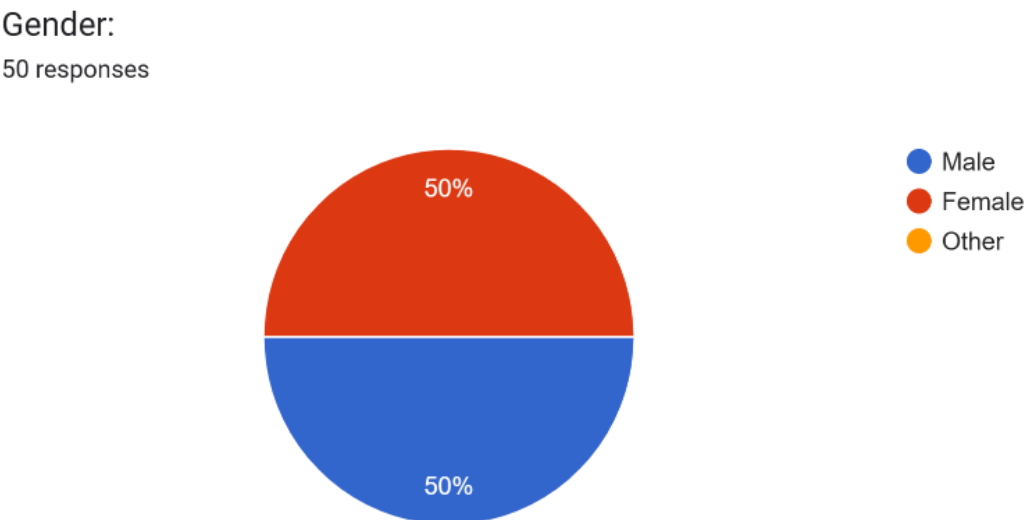
The overarching goal of this study is to comprehensively assess the impact of AI on Mumbai's youth, delving into its influence on their learning processes, social interactions, mental health, and overall well-being. By shedding light on the complex interplay between AI and youth development, this research aims to provide actionable insights and informed recommendations for policymakers, educators, and other stakeholders, ultimately fostering the effective and responsible adoption of AI technologies among young people in Mumbai and beyond.

3. Limitations

The study's limitations stem from its narrow focus on the Mumbai region, potentially limiting the applicability of findings. Additionally, sampling bias arises from the use of random convenience sampling, affecting the representativeness of the participant pool. Addressing these limitations is vital for ensuring the study's findings accurately reflect the impact of AI on Youths in Mumbai and beyond.
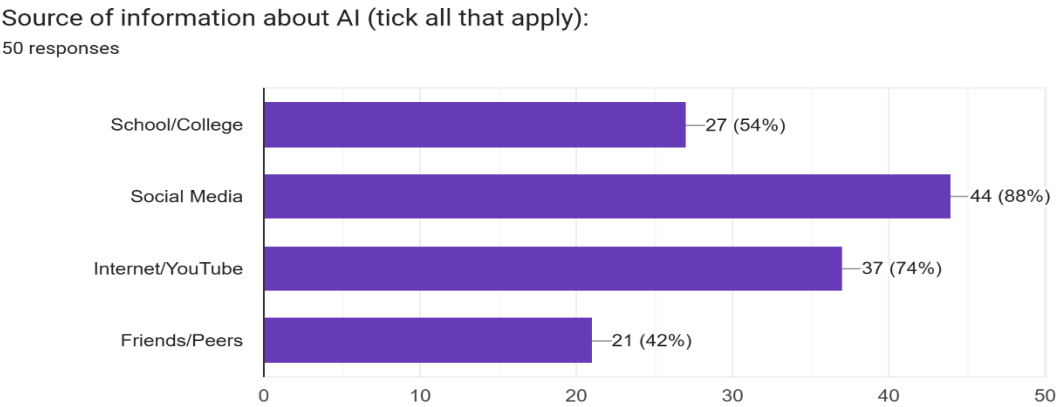
4. Finding and Analysis

Figure 1. Gender-wise Responses

Source: Self Complied.

The data from 25 male and 25 female youth revels that almost all of them are aware about AI.
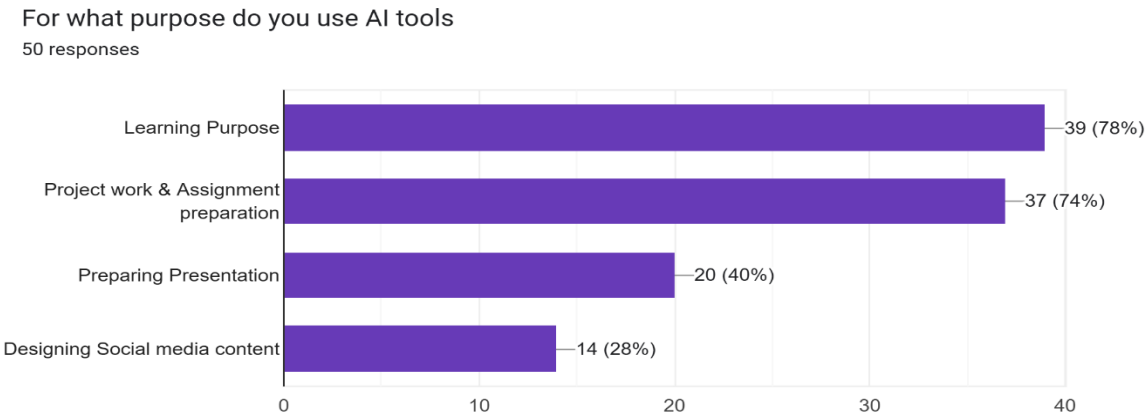
Figure 3. Source of information about AI

Source of information about AI (tick all that apply):
50 responses

Source: Self Complied.

The major source providing awareness about AI are social media (88%), Internet/YouTube (74%) and School and Colleges (54%).
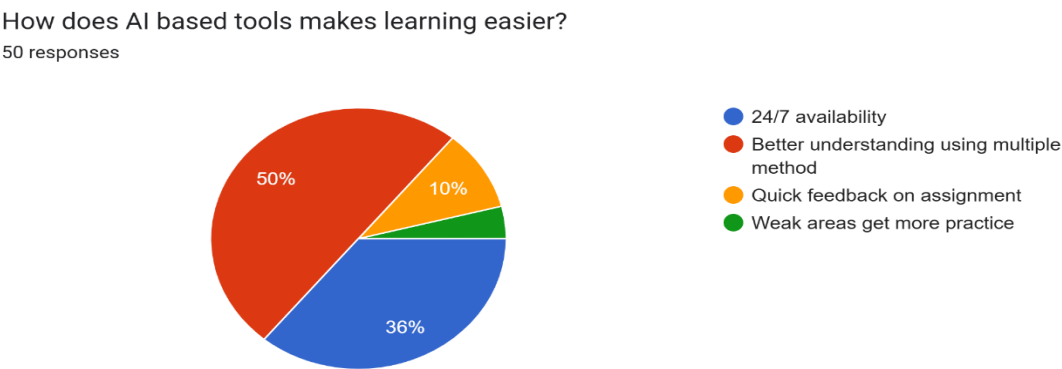
Figure 3. For what purpose AI tools are been used

For what purpose do you use AI tools
50 responses

Source: Self Complied.

Study reveals that most of the youth are using AI preliminary for learning purpose & for project work and assignment preparation and the secondary purpose is preparing presentations and designing social media content.
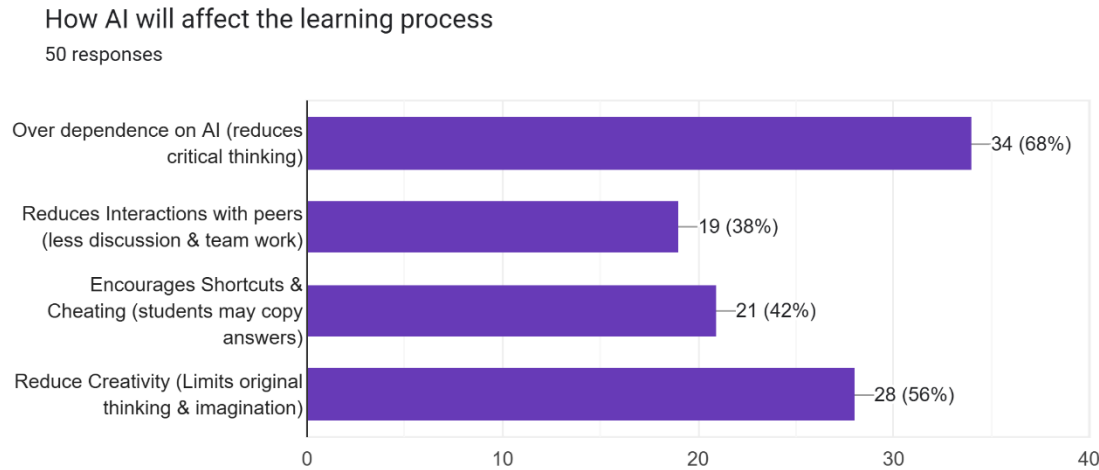
Figure 4. How does AI based tools make learning easier

How does AI based tools makes learning easier?
50 responses

- 24/7 availability
- Better understanding using multiple method
- Quick feedback on assignment
- Weak areas get more practice

Source: Self Complied.

Also, all the youth feels that AI makes learning much easier, this is because 50% of respondents think that AI provides multiple methods for better understanding and 36% of respondents feel that AI provides 24/7 facilities and remaining feels that it provides quick feedback and provides scope for more practices.

Figure 5. How AI will affect the learning process

How AI will affect the learning process
50 responses

Source: Self Complied.

On the other hand, 78% of respondents feel that AI has affected their learning process like they have become over dependent on AI and also, they don't discuss with each other due to which there is less discussion and less team work and also they lost their creativity thus youth lost their imagination and original thinking ability and at the same time AI provides short cuts which leads to cheating.

CONCLUSION

The analysis of data collected from 50 youths (25 males and 25 females) clearly indicates a very high level of awareness about Artificial Intelligence (AI) among the respondents. Social media, the internet/YouTube, and educational institutions emerge as the major sources of AI awareness, highlighting the strong role of digital platforms and formal education in spreading knowledge about AI. The findings reveal that youth primarily use AI for educational purposes such as learning, project work, and assignment preparation, while secondary uses include creating presentations and designing social media content.

Overall, AI is perceived as a valuable learning aid, as all respondents agree that it makes learning easier. This is mainly because AI offers multiple methods for better understanding, round-the-clock accessibility, quick feedback, and greater opportunities for practice. However, the study also brings out significant concerns. A large proportion of respondents feel that AI has negatively impacted their learning process by increasing over-dependence, reducing peer discussions and teamwork, and diminishing creativity, imagination, and original thinking. Additionally, the availability of shortcuts through AI is perceived to encourage cheating.

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