

Impact of Artificial Intelligence among Youth

Patel Priti A.

*Ph. D. Research scholar, Department of sociology, Maharaja Krishnkumarsinhji Bhavnagar University,
Bhavnagar*

doi.org/10.64643/IJIRTV12I8-190274-459

Abstract- Every aspect of contemporary life is being revolutionized by artificial intelligence (AI), from communication and entertainment to work and education. AI is more than simply a technology to today's kids; it is a daily companion that influences social behavior, learning habits, goals, and decision-making. AI-driven platforms like chatbots, virtual assistants, learning apps, social media algorithms, and automation systems have the greatest impact on youth, who are the fastest consumers of digital tools. The good, negative, and societal effects of AI on young people are examined in this essay.

Keywords: Youth, psychological characteristics, and artificial intelligence.

I. INTRODUCTION

AI is a major transformative force in the 21st century, profoundly influencing youth due to their high digital engagement. Integrated AI tools (e.g., social media algorithms, learning platforms) shape their lifestyles, education, and thought processes, offering benefits like personalized learning and new career opportunities. However, AI also presents significant risks concerning data privacy, digital addiction, misinformation, job displacement, and negative impacts on critical thinking, communication, and mental health. Understanding this multidimensional impact is vital for developing responsible AI policies and promoting its ethical use among youth.

WHAT IS AI?

Artificial Intelligence (AI) refers to the capability of machines and computer systems to perform tasks that typically require human intelligence, such as understanding language, recognizing images, solving problems, learning from experience, and making decisions. AI works by using complex algorithms, large datasets, and computational power to mimic

human cognitive functions. It enables computers to analyze information, identify patterns, and improve their performance over time without being explicitly programmed for every task. Today, AI is integrated into various technologies that we use daily such as voice assistants, social media algorithms, recommendation systems, chatbots, self-driving cars, medical diagnosis tools, and automated machines. By processing information faster and more accurately than humans, AI is transforming industries, improving efficiency, and creating new possibilities in education, healthcare, business, and communication. However, as AI grows more powerful, it also raises important questions related to privacy, ethics, job displacement, and responsible use. Overall, AI represents a significant step toward machines that can think and learn, shaping the future of society in profound ways.

PROBLEM STATEMENT

AI is reshaping youth behaviors, learning, careers, and social interactions, offering new opportunities while also creating risks like dependency, privacy issues, and digital inequality. Understanding these mixed effects is crucial for ensuring AI supports youth empowerment.

OBJECTIVES OF THE STUDY

1. To examine the positive impacts of Artificial Intelligence on youth.
2. To analyze the negative impacts of AI on youth.
3. To analyze the sociological implications of AI on youth identity, behaviors, and relationships.

- ✓ **Research Type:** The research study that is being presented is of the qualitative research type.

- ✓ Information sources: Data is gathered from two primary sources. Both primary and secondary sources Secondary data is information gathered for other purposes but utilized for study. Secondary sources are used in this investigation. For which articles, books, periodicals, research papers, and the Internet have served as documentary sources.
- ✓ Methods of Research: Descriptive and exploratory research methodologies provide the basis of the study that is being presented. This study's primary goal is to understand how artificial intelligence affects young people.

II.REVIEW OF LITERATURE

1. Hwang, Chen, and Xie (2020): Personalized learning and adaptive tutoring systems (ITS) are the main applications of AI, according to their systematic evaluation of AI in Education (AIEd) research. By filling in individual knowledge gaps and customizing content, they demonstrate how these systems greatly increase student engagement and academic accomplishment.
2. Sharma et al. (2025): Their systematic review of AI in adolescent mental health care covers tools like AI-based conversational agents and risk prediction models. While noting benefits like accessibility, they maintain a cautious stance, stressing the need for continued research on efficacy, ethical standards, and human oversight due to the lack of genuine human empathy in AI interventions.
3. Zhang (2025) focuses on the cognitive danger, contending that when students rely too much on AI for synthesis and analysis, deep integration of Generative AI (GenAI) can structurally challenge and possibly undermine critical thinking. Zhang promotes a complementary approach in which AI strengthens analytical reasoning rather than impedes it.

POSITIVE IMPACTS OF AI ON YOUTH

(A) Educational Enhancement:

AI has profoundly enhanced youth education by making it personalized, interactive, and accessible. AI platforms and tools (like intelligent tutoring and adaptive software) customize content based on individual needs, offer real-time feedback, and enable anytime/anywhere access to resources, particularly benefiting underserved youth. Additionally, AI automates administrative tasks for teachers, freeing them to focus on creative, student-centered instruction. Overall, AI makes learning more engaging, inclusive, and efficient through features like simulations and accessibility tools.

(B) Career Opportunities:

AI is opening vast career opportunities for youth by driving demand for innovative digital skills in fields like data science, AI engineering, and cybersecurity. Young people who gain AI competencies access high-growth, high-salary professions across many sectors. AI also promotes entrepreneurship by enabling the creation of smart ventures and assists with career guidance, ultimately empowering youth to thrive in the digital economy.

(C) Improved Productivity:

AI significantly improves youth productivity by enabling them to complete tasks faster and smarter. AI tools automate repetitive work (e.g., summarizing, scheduling, research) and assist with tasks like coding, grammar checking, and data analysis. This efficiency allows students and young professionals to focus on creative and critical tasks, ultimately fostering a more productive and goal-oriented lifestyle.

(D) Empowerment & Inclusion:

AI plays a crucial role in empowering youth and promoting social inclusion by overcoming barriers of geography, disability, and language. AI tools provide equal learning and skill-building opportunities for disadvantaged youth. Specifically, AI-driven accessibility features (like screen readers and translation tools) enhance the independence and participation of differently-abled individuals. Furthermore, AI-based counseling and support systems foster a more inclusive environment,

ultimately integrating diverse groups of young people into the digital society.

III. NEGATIVE IMPACTS OF AI ON YOUTH

(A) Social & Psychological Issues:

AI contributes to significant social and psychological challenges among youth despite its benefits. AI-driven social media algorithms lead to digital addiction, excessive screen time, and reduced face-to-face interaction, causing social isolation and weakened real-world skills. Psychologically, curated content and filters negatively impact self-esteem, body image, and cause anxiety and stress. Recommendation algorithms can create echo chambers, and constant exposure to AI entertainment disrupts sleep and academic focus, intensifying youth's social and emotional vulnerabilities.

(B) Ethical & Privacy Concerns:

AI raises serious ethical and privacy concerns for youth due to extensive, often unaware, collection of personal data. This data collection exposes young people to risks of misuse and exploitation, especially because they often lack the necessary digital literacy. Ethically, AI algorithms can reinforce stereotypes and bias. Additionally, deepfakes and manipulated content threaten personal reputation and identity. Stronger regulations and responsible practices are necessary to protect youth in this data-driven environment.

(C) Employment Threats:

The rapid advancement of AI is causing growing employment concerns among youth, as automation increasingly replaces routine and manual tasks across industries. This shift creates uncertainty about job security and requires advanced technical skills, leading to a widening skill gap, especially for disadvantaged youth. The fear of job displacement causes anxiety and stress, emphasizing the need for balanced policies and training to prepare young people for the AI-driven future.

(D) Inequality and Digital Divide:

AI has intensified existing inequalities and widened the digital divide among youth, particularly across

economic, geographic, and digital literacy lines. While privileged youth benefit from AI tools and online opportunities, many others lack access to necessary devices, stable internet, or AI-enabled resources. This unequal access creates disparities in academic performance, career readiness, and digital participation, threatening to marginalize vulnerable youth and deepen socio-economic inequalities.

IV. SOCIOLOGICAL IMPACT OF AI ON YOUTH

(A) Changing Patterns of Socialization:

AI has significantly transformed youth socialization, replacing traditional face-to-face interactions with AI-mediated digital communication (social media, chatbots, virtual communities). This shift leads to more time spent with AI-curated content and superficial interactions, potentially reducing the quality of deep relationships and contributing to social isolation. While AI enables global connectivity, it also risks confining youth to echo chambers and increasing dependency on virtual validation, fundamentally reshaping their social belonging and behavior in a new hybrid digital-human social world.

(B) Transformation of Culture:

AI is significantly transforming youth cultural experiences and lifestyles by using personalized algorithms (in social media and streaming) to expose them to global trends and values, leading to a more homogenized, digitally-driven culture. Simultaneously, AI tools empower creative expression (art, writing), enabling new forms of self-representation. Challenges include reduced face-to-face socialization and potential erosion of local traditions. Overall, AI blends global influences with individual creativity and redefines social norms for young people.

(C) New Power Structures:

AI is reshaping societal power structures by concentrating influence in the hands of technology companies whose algorithms determine the content, visibility, and formation of online communities for youth. Traditional institutions are losing authority as young people increasingly rely on AI-mediated systems for education, guidance, and civic life. This

shift creates opportunities for increased global participation and activism but also risks algorithmic bias and opinion manipulation. Ultimately, digital literacy and access to AI tools are becoming the determinants of influence and power among the younger generation.

(D) Identity Formation:

AI plays a significant role in shaping youth identities by influencing their self-perception and world interaction. AI-powered platforms and systems expose young people to diverse trends, enabling self-expression through curated digital personas, avatars, and filters. While this allows for creativity and self-exploration, it risks leading to identity confusion, pressure to conform to online standards, and dependence on virtual validation. Overall, AI contributes to a hybrid form of identity formation, blending real-world experiences with digital influences.

V. THEORETICAL PERSPECTIVE (SOCIOLOGICAL THOUGHT)

1. Structural Functionalism:

From the perspective of Structural Functionalism, Artificial Intelligence (AI) is analyzed as a social institution whose impact is twofold: promoting both stability and dysfunction within the societal system. Its functions are stabilizing, as AI enhances key social sectors namely education, communication, and employment thereby supporting social cohesion by efficiently preparing youth for their future productive roles in the economy. However, AI simultaneously introduces dysfunctions that disrupt traditional structures, including issues like digital addiction, inequality in access, and altered socialization patterns. Consequently, AI is viewed as a powerful force that ultimately necessitates adaptation and adjustment within the overarching societal system to maintain equilibrium.

2. Conflict Theory:

From the perspective of Conflict Theory, Artificial Intelligence (AI) is primarily a tool that reinforces and creates social inequalities as groups compete for power and resources. AI access is often uneven,

favoring affluent and urban youth while marginalizing low-income communities, which widens gaps in education, skills, and economic mobility. Furthermore, the theory emphasizes that AI algorithms may perpetuate systemic biases reflecting the values of powerful creators, and highlights how dominant technology corporations concentrate power by influencing youth behavior and aspirations. Therefore, AI is seen as empowering certain youth while simultaneously strengthening existing structural inequalities and social tensions.

3. Symbolic Interactionism:

From the perspective of Symbolic Interactionism, society and youth reality are understood through the meanings attached to symbols in daily life. AI-mediated environments (social media, chatbots) are where youth construct digital identities and relationships using symbolic communication. Symbols like "likes," followers, and digital badges heavily influence their self-perception, social status, and identity formation. The theory focuses on how youth interpret algorithmically curated content and co-construct their social reality through these micro-level interactions.

4. Postmodern Theory:

From the perspective of Postmodern Theory, AI contributes to society being fragmented and fluid by generating a diversity of experiences and identities for youth. AI platforms enable young people to experiment with multiple identities and access varied information, challenging traditional norms. The algorithmic personalization of content creates individualized realities and reflects postmodern concepts like decentralization and hyper-reality. However, this reliance also risks the blurring of fact and fiction and promotes digital echo chambers. Ultimately, AI is viewed as both a source of empowerment (offering freedom and creativity) and a source of uncertainty and fragmentation for youth.

VI. CONCLUSION

AI profoundly impacts youth across multiple dimensions (education, careers, culture). Positively, AI offers personalized learning, promotes creativity

and productivity, and enhances inclusion. Negatively, it poses risks to mental health (anxiety, isolation), and raises concerns about ethics, privacy, bias, and inequality. Maximizing benefits requires balanced usage, ethical regulation, and digital literacy to ensure AI serves as a tool for empowerment, not harm.

[10] Zhang, R. (2025). Application of AI in education and its influence on students' critical thinking. SHS Web of Conferences, 222, 01010.

REFERENCES

- [1] Ahmad, S. F., Han, H., Alam, M. M., Rehmat, M. K., Irshad, M., & Arraño-Muñoz, M. (2023). Impact of artificial intelligence on human loss in decision making, laziness and safety in education. *Humanities and Social Sciences Communications*, 10(1), 1–14.
- [2] Goel, A.K., & Polepeddi, L. (2016). Jill Watson, A virtual teaching assistant for online education, Georgia Institute of technology.
- [3] Hasse, A., Cortesi, S., Lombana-Bermudez, A., & Gasser, U. (2019). Youth and artificial intelligence: Where we stand. *Youth and Media*, Berkman Klein Center for Internet & Society.
- [4] Luckin, R., Holmes, W., Griffiths, M., & Pierson, R. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson.
- [5] Mansfield, K. L., Przybylski, A. K., et al. (2025). From social media to artificial intelligence: Improving research on digital harms in youth. *The Lancet Child & Adolescent Health*.
- [6] Sharma, G., Yaffe, M. J., Ghadiri, P., Gandhi, R., Pinkham, L., Gore, G., & Abbasgholizadeh-Rahimi, S. (2025). Use of artificial intelligence in adolescents' mental health care: Systematic scoping review of current applications and future directions. *JMIR Mental Health*, 12(5), e70438.
- [7] Shannon, H., Bush, K., Villeneuve, P., Hellemans, K., & Cunningham, C. (2022). Problematic social media use in adolescents and young adults: A systematic review. *Journal of Medical Internet Research*, 24(4), e29835.
- [8] UNESCO. (2023). *Artificial intelligence in education: Policy brief*. UNESCO Publishing.
- [9] U.S. Department of Education. (2023). *Artificial intelligence and the future of teaching and learning: A report on the use of AI in education*. Office of Educational Technology.