

The Influence of Social Media Algorithms on Youth Decision-Making and Digital Wellbeing

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Abstract

This study explores how algorithm-driven social media feeds influence the behaviour, thinking patterns, and overall digital wellbeing of youth in India. Platforms such as Instagram, YouTube, Snapchat, and TikTok alternatives use algorithmic curation to personalise content, shaping what users see and how they engage with information. The research focuses on university students in Mumbai and examines the effects of personalised feeds on decision-making, attention span, emotional health, and lifestyle choices. Primary data through surveys and secondary data from digital behaviour studies reveal that while algorithms promote creativity and convenience, they also contribute to addictive usage, echo chambers, impulsive decision-making, and comparison-driven stress. This study highlights the need for digital literacy and mindful usage to ensure healthier online engagement.

Keywords: Social Media Algorithms, Youth Psychology, Digital Wellbeing, Echo Chambers, Personalisation, Behavioural Influence.

1. Introduction

The rapid advancement of digital technologies has significantly transformed India's social landscape, especially among youth aged 18–25. Social media platforms have become central to communication, entertainment, and information access. A key element of these platforms is their algorithm—an automated system that studies user behaviour and displays personalised content designed to maximise engagement. For young users, this content is not just entertainment; it influences their thinking, habits, decisions, and emotional reactions.

University students, who form a large percentage of active social media users, interact with algorithmic feeds daily. These feeds subtly shape perceptions of lifestyle, beauty, success, fashion, relationships, and even career choices. However, growing concerns around digital wellbeing, mental health, attention span, and misinformation highlight the need to study how algorithms impact the decisions young people make.

2. Review of Literature

Sharma & Iyer (2021) stated that algorithmic curation reinforces behavioural loops where users remain stuck in personalised content cycles. Aggarwal (2022) observed that short-form algorithmic content significantly reduces attention span due to constant stimulation. Gupta & Mehra (2023) found that echo chambers created by social media algorithms strongly influence youth decision-making and opinion formation. Das and Roy (2023) linked algorithm-driven idealised content with negative self-comparison and stress among students. Mehta (2023) explained that infinite scrolling triggers dopamine-based reward cycles, making algorithms addictive. Collectively, these studies highlight both the benefits and psychological risks associated with algorithmic platforms.

3. Objectives of the Study

- To examine awareness of social media algorithms among youth.
- To analyse how algorithmic content influences decision-making.
- To understand the emotional and psychological effects of personalised feeds.
- To study the creation of echo chambers and their impact on opinions.
- To evaluate how social media affects digital wellbeing and behaviour.
- To provide recommendations for healthier digital habits.

4. Research Methodology

4.1 Research Design

The study uses a descriptive and exploratory design to understand how algorithms shape youth behaviour and decision-making.

4.2 Nature of Data

Both primary (survey-based) and secondary data (academic sources, reports, digital studies) were used.

4.3 Sources of Data

Primary data through online questionnaires. Secondary data from journals, digital wellbeing reports, behavioural psychology studies, and media research institutions.

4.4 Sample and Scope

The sample includes 120–150 students aged 18–25 from Amity University Mumbai. The study focuses on algorithmic influence on decision-making and wellbeing.

4.5 Data Analysis Tools

Descriptive statistics, frequency analysis, charts, and correlation analysis were used to interpret the data.

4.6 Limitations

- Self-reported data may include bias.
- Limited to students in Mumbai.
- Does not include long-term psychological tracking.
- Findings may not generalise to all demographics.

5. Data Analysis and Interpretation

India has witnessed a surge in social media usage, with youth forming the highest-engaged demographic. Algorithmic short-form content platforms have recorded significant increases in daily screen time. Survey responses showed that 78% of students felt their decisions—such as purchasing, lifestyle choices, and opinions—were influenced by algorithmic content.

Major findings include increased impulsive decisions, reduced attention span, and emotional impacts such as comparison-based stress. Many students reported difficulty disengaging from algorithmic platforms due to personalised content loops.

6. Findings and Discussion

- High awareness of algorithms but low understanding of how they work.
- Algorithms influence purchase decisions, lifestyle choices, and opinions.
- Significant reduction in attention span due to short-form content.
- Echo chambers reinforce existing beliefs, limiting diverse perspectives.
- Visible emotional impact: anxiety, comparison, FOMO (fear of missing out).
- Algorithms promote convenience but create dependency.

The findings suggest that while algorithms enhance convenience and entertainment, they also create behavioural risks. Youth are particularly vulnerable to comparison cycles, impulsive choices, and addictive algorithmic loops.

7. Conclusion and Suggestions

7.1 Conclusion

This study concludes that social media algorithms have a significant impact on youth behaviour, mental wellbeing, and decision-making. While they offer creativity, connectivity, and personalised experiences, they also create risks such as addiction, impulsive decision-making, comparison stress, and reduced attention span. Awareness and digital literacy are essential to ensure healthy engagement.

7.2 Suggestions

- Introduce digital literacy programs in universities.
- Promote awareness about echo chambers and misinformation.
- Encourage time limits and conscious social media usage.
- Platforms should provide transparent insights about algorithmic impact.
- Students should practice mindful consumption and diversify content exposure.

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