

From Digital Consumption to Skill Development: Examining the Factors Influencing Undergraduate Students' Participation in Free Online Learning Opportunities

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Abstract—Students today have easy access to free online courses, certificate programmes, video tutorials, and learning platforms. Many of these resources can help them build useful skills for better jobs. Yet a large number of students still spend most of their time on social media watching short videos and reels for entertainment. They use these platforms far more than they use free learning materials. Very little research has looked at why this happens, especially among undergraduate students in India. This study uses a quantitative survey to understand the reasons behind this behaviour. The findings can help teachers and institutions find better ways to encourage students to use free learning resources and develop practical skills.

Keywords— digital consumption, short-form videos, free online learning, skill development, undergraduate students, learning motivation, career awareness, self-directed learning

I. INTRODUCTION

1.1 Background of the Study

Digital technology has changed education in many ways. With the internet, smartphones, and online platforms, students can now learn almost any skill from anywhere. They only need a device and an internet connection. Platforms such as Coursera, edX, Udemy, Google Career Certificates, Microsoft Learn, YouTube, SWAYAM, and NPTEL offer many free or low-cost courses. These platforms help students gain technical knowledge and employability skills.

Even with so many free resources available, many students do not use them regularly. Instead, they spend long hours on Instagram Reels, YouTube Shorts, and similar short-video apps. Continuous scrolling keeps them entertained but reduces their interest in longer learning tasks. As a result, many students remain under-skilled and find it harder to get good jobs. This study looks at the psychological,

behavioural, and educational reasons why students prefer entertainment over skill development.

1.2 Problem Statement

Many digital platforms offer free courses, certificates, and skill-development programmes. Completing these programmes can improve a student's job chances. However, a large number of students do not make full use of these opportunities. They spend more time watching short entertainment videos than studying structured online courses. Completing a course needs focus and regular effort, which many students find difficult to maintain. This gap between available resources and actual use is the main problem this study addresses.

1.3 Research Gap

Earlier studies have looked at social media use, online learning, motivation, and employability skills. Most of them study these topics separately. Very few studies explain why students ignore free, high-quality learning resources even when they are easily available. There is also limited research that connects digital entertainment habits, short-video use, learning motivation, career awareness, and skill-development behaviour among Indian undergraduate students. This study tries to fill that gap by examining these factors together.

1.4 Need of the Study

Employers today look for practical skills, problem-solving ability, and a habit of continuous learning. Degrees alone are no longer enough. Although many free learning opportunities exist, student participation is still low. Possible reasons include heavy entertainment use, weak time management, low motivation, and limited career awareness. Understanding these reasons can help colleges, teachers, and policymakers design better support

programmes. The study will also add useful knowledge to research on digital habits and skill development in Indian higher education.

1.5 Research Objectives

The main aim of this study is to understand why many undergraduate students do not use free online learning opportunities fully. The specific objectives are:

- RO1. To study the digital habits of undergraduate students.
- RO2. To examine the link between short-form video use and skill-development behaviour.
- RO3. To check how learning motivation affects students' intention to learn new skills.
- RO4. To study the effect of career awareness on students' use of free online learning resources.
- RO5. To explore the relationship between self-directed learning and skill-development behaviour.
- RO6. To propose a simple model that explains what helps students move from digital entertainment to active skill learning.

1.6 Research Questions

The following research questions guide the study:

- RQ1. Why do many undergraduate students not fully use free online learning opportunities?
- RQ2. How does watching short-form entertainment videos affect students' skill-development behaviour?
- RQ3. How does learning motivation influence students' participation in online learning?
- RQ4. Does career awareness encourage students to use free online resources for skill development?
- RQ5. What factors most strongly motivate undergraduate students to keep learning new skills through digital platforms?

1.7 Significance of the Study

This study has both academic and practical value.

- 1. Academic value: It adds to existing research on self-directed learning, online learning, and digital habits by combining these areas in one framework.
- 2. For students: The findings can help students become more aware of their online habits and encourage better use of free learning resources.

- 3. For teachers: Teachers can use the results to design activities that support self-directed learning and reduce digital distraction.
- 4. For institutions: Colleges can improve skill-development programmes, career guidance, and digital awareness sessions.
- 5. For policymakers: The study can provide evidence to support policies that promote digital literacy, lifelong learning, and employability skills.

II. LITERATURE REVIEW

2.1 Introduction

Digital platforms have made quality learning materials widely available. At the same time, short-video apps have become a daily habit for many students. While technology can support learning, many students use it mainly for entertainment. Previous research has studied social media, online learning, motivation, and employability skills separately. Few studies have examined how these factors work together when students decide whether to use free skill-development resources. This review covers the main themes related to the present study.

2.2 Digital Consumption Habits

Digital consumption means the time students spend on smartphones, social media, streaming services, and other online apps. Research shows that productive use of digital tools can support learning, while heavy entertainment use can reduce concentration and study time. Many students switch between learning and non-learning activities, which makes it hard to stay focused on longer courses. Most existing studies treat digital use as either good or bad. In reality, students often use the same platforms for both purposes. Limited research has focused on undergraduate students in India or linked digital habits directly to skill development.

2.3 Social Media and Short-Form Video Consumption

Apps such as Instagram Reels, YouTube Shorts, and Facebook Reels are very popular among university students. These platforms are designed to keep users scrolling by offering quick rewards and personalised content. Studies suggest that heavy use of short videos can reduce attention span and make it harder for students to engage in longer learning tasks. Some research also points out that social media can support collaborative learning and professional networking

when used carefully. However, very few studies have linked short-video habits specifically to employability skill development or explained why students overlook free learning opportunities.

2.4 Online Learning Adoption

Online learning grew rapidly after COVID-19. Many universities and platforms launched MOOCs and digital certificates. Research shows that perceived usefulness, ease of use, and instructor support influence students' willingness to use online platforms. Even when courses are free, completion rates often remain low. Most studies focus on why students start online courses but give less attention to why many drop out before finishing. There is also limited work that includes digital distraction as a key factor.

2.5 Learning Motivation and Self-Directed Learning Motivation helps students acquire new knowledge and improve their skills. Self-directed learners plan, monitor, and evaluate their own learning. Studies consistently show that motivated students are more likely to complete online courses. Self-regulation and learner autonomy are also important for success in online settings. However, most research examines motivation on its own and does not look at how entertainment habits may lower motivation for skill development. Evidence from Indian undergraduate students is still limited.

2.6 Career Awareness and Employability Skills

Employers expect graduates to have both technical and soft skills. Career awareness has been linked to greater willingness to join internships, certification programmes, and online skill courses. Technology-supported learning can improve workplace readiness when students stay actively engaged. Most existing studies focus on institutional programmes rather than on students' own decisions about using free learning resources. Behavioural perspectives that connect career awareness with digital entertainment habits are still rare.

2.7 Overall Research Gap

Previous research has studied digital consumption, short-video use, online learning, motivation, self-directed learning, and employability as separate topics. Limited empirical work explains why undergraduate students continue to spend long hours on entertainment platforms even when free, high-quality learning resources are available. Very few

studies have tested an integrated model that includes all these factors together, especially in the Indian higher-education context. This study aims to address that gap.

III. HYPOTHESES

Based on the literature review, the following hypotheses are proposed:

- H1. Digital consumption habits have a negative effect on students' participation in free online learning.
- H2. Short-form video use has a negative effect on learning motivation.
- H3. Learning motivation has a positive effect on students' intention to develop skills.
- H4. Career awareness has a positive effect on participation in free online learning.
- H5. Self-directed learning has a positive effect on skill-development behaviour.
- H6. Learning motivation mediates the relationship between short-form video use and skill-development intention.
- H7. Self-directed learning mediates the relationship between digital consumption habits and skill-development behaviour.
- H8. Career awareness has a positive effect on learning motivation.

IV. CONCEPTUAL FRAMEWORK

The proposed framework links digital habits, psychological factors, and learning behaviour.

The main variables are organised as follows:

Independent variables: Online media consumption and short-video consumption.

Mediator variables: Learning motivation and self-directed learning.

Additional variable: Career awareness.

Dependent variable: Engagement in free online learning opportunities (skill-development behaviour).

In simple terms, heavy digital entertainment is expected to lower learning motivation. Higher motivation, stronger self-directed learning skills, and greater career awareness are expected to increase students' participation in free online learning.

V. RESEARCH METHODOLOGY

5.1 Research Design

This study uses a quantitative research design. It follows a deductive approach and a cross-sectional survey method.

5.2 Target Population and Sampling

The target population is undergraduate students enrolled in higher education institutions in India. Stratified random sampling will be used. The planned sample size is approximately 400–500 students.

5.3 Data Collection

Primary data will be collected through a structured online questionnaire created with Google Forms. A five-point Likert scale will be used (1 = Strongly Disagree to 5 = Strongly Agree).

5.4 Variables

The main variables measured in the study are:

- Digital consumption habits
- Short-form video usage
- Learning motivation
- Career awareness
- Self-directed learning
- Skill-development behaviour

VI. QUESTIONNAIRE

Section A: Demographic Information

- Gender
- Age
- Year of study
- Course / Programme
- Daily smartphone usage
- Average daily social media usage

Section B: Digital Consumption Habits

1. I spend several hours daily on social media.
2. I often use my phone without a specific purpose.
3. Entertainment takes up most of my online time.
4. I frequently switch between different social media apps.
5. I find it difficult to reduce my screen time.
6. My digital usage affects my study schedule.

Section C: Short-form Video Consumption

7. I watch Instagram Reels daily.
8. I watch YouTube Shorts frequently.
9. Short videos take more time than I expect.

10. I prefer watching short videos over online courses.

11. I feel distracted after watching short videos.

12. I spend more time watching reels than educational videos.

Section D: Learning Motivation

13. I enjoy learning new skills.

14. I regularly search for educational content.

15. I believe learning improves my career chances.

16. I complete online learning activities on time.

17. I enjoy self-learning.

18. I stay motivated to improve my knowledge.

Section E: Career Awareness

19. I know which skills employers expect.

20. I regularly explore career opportunities.

21. I believe certifications improve employability.

22. I follow career-related content online.

23. I understand future job market trends.

24. I plan my career goals.

Section F: Self-directed Learning

25. I create my own learning schedule.

26. I monitor my learning progress.

27. I complete online courses independently.

28. I set personal learning goals.

29. I manage my learning time effectively.

30. I solve learning problems independently.

Section G: Skill Development Behaviour

31. I enrol in free online courses.

32. I complete online certification programmes.

33. I practise newly learned skills.

34. I regularly improve my technical skills.

35. I participate in online workshops.

36. I learn skills beyond my academic syllabus.

37. I use free learning platforms effectively.

38. I continuously update my professional skills.

VII. DATA ANALYSIS PLAN

Data will be analysed using IBM SPSS Statistics and SmartPLS 4.

7.1 SPSS Analysis

- Data cleaning
- Descriptive statistics
- Frequency analysis
- Mean and standard deviation
- Reliability analysis (Cronbach's Alpha)
- Exploratory Factor Analysis (EFA)
- Correlation analysis
- Multiple regression analysis

7.2 SmartPLS Analysis

Measurement model: Indicator reliability, Composite Reliability (CR), Average Variance Extracted (AVE), and Discriminant Validity (HTMT).

Structural model: Path coefficients, bootstrapping (5000 samples), R^2 , f^2 effect size, predictive relevance (Q^2), and mediation analysis.

VIII. EXPECTED RESULTS

The study is expected to show that:

- Heavy digital consumption has a negative effect on skill-development behaviour.
- Short-form video use reduces learning motivation.
- Career awareness encourages continuous learning.
- Self-directed learning improves participation in online learning.
- Learning motivation mediates the link between digital entertainment and skill development.
- Students with higher career awareness are more likely to complete free online certification programmes.

IX. DISCUSSION

The findings are expected to show that the main problem is not the lack of learning resources. The problem is how students choose to use digital technology. Short-form content offers quick entertainment with little effort, so many students prefer it over longer learning tasks. Low self-regulation, weak motivation, and limited career awareness further reduce participation in free courses. Higher education institutions may need to introduce mentoring, career guidance, digital well-being sessions, and simple reward systems for completing certifications. These steps can help students move from passive scrolling to more active skill building.

X. CONCLUSION

This study offers an integrated view of the factors that influence undergraduate students' use of free online learning opportunities. It links digital entertainment habits with motivation, self-directed learning, career awareness, and skill-development behaviour. The results can help colleges, teachers, and policymakers design practical interventions. Encouraging better digital habits, stronger career awareness, and regular self-directed learning can improve students' employability and support lifelong learning.

REFERENCES

- [1] *(Illustrative references. These should be replaced or expanded with the actual studies used in the literature review.)*
- [2] Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- [3] Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- [4] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- [5] Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Association Press.
- [6] Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.