

An Analytical Study on the Influence of Short Video Consumption on Sustained Attention among Students

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Abstract: *This analytical study examines the influence of short video consumption on sustained attention among students. With the rapid rise of platforms such as Instagram Reels, YouTube Shorts, and similar short-form video applications, students are increasingly exposed to brief, highly stimulating digital content. While these platforms offer entertainment and educational value, concerns have emerged regarding their potential impact on students' concentration and academic performance. The study adopts a descriptive and correlational research design using a structured questionnaire administered to 54 respondents selected through stratified random sampling. Statistical tools such as Percentage Analysis, Chi-Square Test, ANOVA, and Garrett Ranking were employed to analyse the data. The findings indicate that although short video consumption is widely prevalent among students—particularly those aged 19–21 years—there is no statistically significant difference in attention levels based on demographic variables or usage patterns. However, broader digital distractions such as frequent notifications and multitasking behaviours were identified as contributing factors to reduced concentration. The study emphasizes the importance of balanced and mindful digital usage to support sustained academic focus.*

Keywords: Short video consumption, Sustained attention, Students, Academic concentration, Digital distraction, Social media platforms, Instagram Reels, YouTube Shorts, Stratified random sampling, Percentage analysis, Chi-square test, ANOVA, Garrett ranking technique, Multitasking behavior, Smartphone usage, Digital notifications, Academic performance.

I. INTRODUCTION

The evolution of digital technology has significantly transformed the media consumption habits of students. Short-form video platforms have emerged as one of the most dominant forms of digital engagement. These platforms provide brief, visually stimulating, and algorithm-driven content that captures attention within seconds and encourages continuous scrolling. Unlike traditional academic activities that require prolonged concentration—such as reading textbooks, attending lectures, and preparing assignments—short videos deliver instant gratification and rapid content transitions. Sustained attention, defined as the ability to maintain focus on a task over an extended period, is essential for effective learning and academic achievement. The increasing exposure to fast-paced digital content has raised concerns about whether such habits may influence students' attentional capacities. This study seeks to investigate whether frequent short video consumption affects students' ability to maintain sustained attention in academic settings. It provides empirical insights into how modern digital behaviours intersect with cognitive functioning.



OBJECTIVES OF THE STUDY

- To explore behavioural changes in learning habits caused by regular exposure to short videos.
- To identify the factors that motivate students to spend time on short video platforms.

STATEMENT OF THE PROBLEM

The rapid growth of short-form video platforms has significantly altered students' digital habits. While these platforms offer entertainment and educational content, their design promotes rapid attention shifts, continuous scrolling, and constant stimulation. Academic success, however, depends heavily on sustained attention and deep cognitive engagement. Despite widespread discussions about declining attention spans in the digital era, there is limited empirical research specifically examining the relationship between short video consumption and sustained attention among students. This study addresses this research gap by investigating whether the increasing habit of short video consumption influences students' concentration and academic engagement.

SCOPE OF THE STUDY

The study focuses on students in higher secondary schools and colleges, particularly those aged 18–24 years. It examines patterns of short video usage, including daily screen time, frequency of application access, and purpose of viewing (entertainment or educational). The research is geographically limited to a selected sample of 54 respondents and relies primarily on survey-based data. It does not examine long-term neurological changes or conduct experimental laboratory testing. The study concentrates exclusively on short-form video platforms and does not broadly analyse other digital media forms such as gaming or long-form streaming services.

II. RESEARCH METHODOLOGY

Research Design:

The study adopts a descriptive and correlational research design.

Research Approach:

A quantitative approach was used to collect and analyze numerical data.

Population of the Study:

Students enrolled in higher secondary schools and colleges.

Sample Size:

The sample size of the study is 54.

Sampling Technique:

Stratified Random Sampling was used to ensure representation across age, gender, and educational levels.

Sources of Data:

Primary Data: Structured questionnaire

Secondary Data: Journals, books, and previous research studies

Statistical Tools Used:

Percentage Analysis

Chi-Square Test

ANOVA (Analysis of Variance)

III. REVIEW OF LITERATURE

Liu, Li, and Wang (2023)¹⁹ investigated the relationship between short-video addiction and executive functioning among adolescents. Their findings revealed that heavy users demonstrated lower sustained attention capacity. Participants performed poorly on executive control and cognitive flexibility tasks. Frequent urges to check video feeds indicated compulsive engagement patterns. Higher daily consumption was associated with reduced attentional stability. Algorithm-driven reinforcement mechanisms promoted repetitive viewing behavior. The study identified measurable



cognitive deficits linked to excessive short-video use. Sustained focus weakened as usage intensity increased. The research highlights implications for students' academic concentration and performance.

Zhao, Huang, and Sun (2024)²⁰ examined the longitudinal cognitive effects of short-form video exposure among students. Their study reported a gradual decline in sustained attention scores among heavy users over time. Participants experienced noticeable reductions in academic concentration. Frequent scrolling behavior was associated with increased cognitive fatigue. Excessive short-video engagement contributed to difficulties in attention control. The findings suggested that prolonged exposure may reshape attentional habits. The authors highlighted potential long-term educational consequences. They recommended digital literacy and structured usage policies in academic settings. The research offers recent empirical evidence on the impact of short-video platforms on sustained attention.

IV. DATA ANALYSIS AND INTERPRETATION

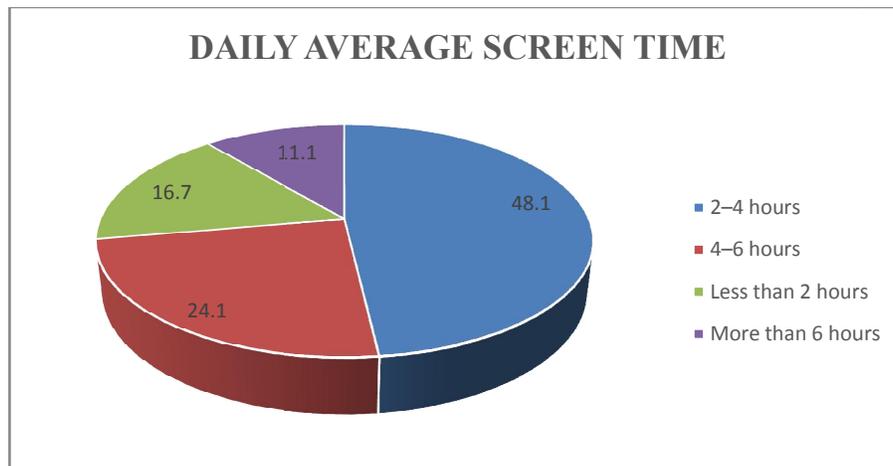
DAILY AVERAGE SCREEN TIME OF THE RESPONDENTS

Table-1.1

DAILY AVERAGE SCREEN TIME	NO OF RESPONDENTS	PERCENTAGE
2-4 hours	26	48.1
4-6 hours	13	24.1
Less than 2 hours	9	16.7
More than 6 hours	6	11.1
TOTAL	54	100

DAILY AVERAGE SCREEN TIME OF THE RESPONDENTS

Chart-1.1



INTERPRETATION

Out of 54 respondents taken for the study, majority 48.1% of the respondents spend 2-4 hours daily on-screen time, 24.1% spend 4-6 hours, 16.7% spend less than 2 hours, and 11.1% spend more than 6 hours.

Majority 48.1% of the respondents spend 2-4 hours daily on-screen time.

CHI-SQUARE

LEVEL OF STUDY *TIME OF WATCHING SHORT VIDEO

HYPOTHESES

Null Hypothesis (H₀):

There is no significant association between the Gender and time of watching short video under study. The level of study and time of watching short video are independent of each other.

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Alternative Hypothesis (H₁):

There is a significant association between the Gender and time of watching short video under study. The level of study and time of watching short video are not independent of each other.

Table Showing the Chi-Square Analysis of the Association between level of study and time of watching short video

Table-1.2

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.531 ^a	9	0.140
Likelihood Ratio	12.215	9	0.201
N of Valid Cases	54		

INTERPRETATION

Since the p-value (0.140) of the Pearson Chi-Square test is greater than the 0.05 level of significance, the null hypothesis (H₀) is accepted. This indicates that there is no statistically significant association between the level of study and time of watching short video under study. The variations observed in the time of watching short videos across different levels of study are not strong enough to establish a meaningful relationship. Although the Likelihood Ratio shows a value of 0.201, the Pearson Chi-Square value is considered for final interpretation. Therefore, the differences identified are likely due to random variation rather than a true relationship.

It has been concluded that the level of study has no significant association with the time of watching short video among the respondents.

ANOVA

TIME OF WATCHING * STUDY IMPACT

HYPOTHESES

Null Hypothesis (H₀):

There is no significant difference in the impact on study based on the time of watching short videos.

Alternative Hypothesis (H₁):

There is a significant difference in the impact on study based on the time of watching short videos.

Table Showing the Anova analysis of impact of study of the students from time of watching short video

Table-1.3

ANOVA					
Impact on study					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.482	3	0.494	0.441	0.725
Within Groups	56.018	50	1.120		
Total	57.500	53			

INTERPRETATION

Since the p-value (0.725) is greater than the 0.05 level of significance, the null hypothesis is accepted. This indicates that there is no significant difference in the impact on study based on the time of watching short videos. The variations in study impact are mainly within groups rather than between groups. Hence, the observed differences are not statistically meaningful and are likely due to random variation.

It has been concluded that there is no significant difference in the impact on study among respondents based on the time of watching short videos.



V. CONCLUSION

The study concludes that short video consumption is widely prevalent among students, particularly undergraduates aged 19–21 years. Most students primarily use short video platforms for entertainment and stress relief rather than academic purposes. Statistical analysis using Chi-Square and ANOVA tests indicates no significant difference in attention levels or academic impact based on short video usage patterns. This suggests that short video consumption alone may not directly reduce sustained attention. However, broader digital distractions such as multitasking, frequent notifications, and general social media usage appear to contribute more significantly to reduced concentration. Therefore, the issue is not solely short video consumption but overall digital behaviour. Balanced and mindful usage of digital platforms remains essential for maintaining academic focus and cognitive well-being.

REFERENCES

- [1]. Liu, H., Li, X., & Wang, R. (2023). Short-video addiction and executive function deficits. *Addictive Behaviours Reports*, ISSN: 2352-8532, 18, 100513.
- [2]. Zhao, X., Huang, J., & Sun, L. (2024). Longitudinal effects of short-form video exposure on sustained attention. *Computers & Education*, ISSN: 0360-1315, 197, 104761.
- [3]. *Research Methodology and Techniques* – C.R.Kothari
- [4]. *Research Methodology* – O.P.Agarwal
- [5]. <https://www.google.com>
- [6]. <https://www.reserachgate.net>
- [7]. <https://www.shodhganga.inflibnet.ac.in>

