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The Influence of TikTok Short-Form Videos on Attention Span and Study Habits of Students in College of Vocational Studies IPB University

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A B S T R A C T	**A R T I C L E I N F O**
Short-form videos have surged in popularity on social media platforms, captivating users with engaging content in brief durations. However, their impact on attention span can pose challenges such as frustration and reduced concentration on longer tasks. The aim of this study is to investigate the impacts of short-form videos on the attention span and study habits of students enrolled in the College of Vocational School Studies IPB University and to suggest effective strategies for mitigating the negative effects. Through questionnaires and interviews, the research explores TikTok video consumption frequency, perceived consequences of accessing abundant information effortlessly, and influence on academic learning. The study discovered that participants spent approximately 1-2 hours each day watching short-form videos and acknowledged their consequences. They reported feeling less concentrated in their study habits and recognized a correlation between watching short-form videos, attention span, and study habits.	

1. INTRODUCTION

Social media has become an essential part of many individuals' lives, particularly among younger generations. It acts as a platform to connect people globally, share

entertaining content, stay updated with news, create videos, and even monetize everyday activities. Currently, around 4.9 billion users worldwide, which constitutes approximately 85% of the world's 5.27 billion mobile phone users, engage with social media platforms (Shewale, 2024). This widespread embrace of social media has generated interest in investigating its effects, particularly on demographics such as college students. As a result, habitual smartphone use can lead to patterns of compulsive behavior, such as frequently checking the device, engaging in context-dependent actions, and quickly accessing dynamic content. These behaviors can contribute to the formation of habits in users (Oulasvirta et al., 2012).

With the rise of traditional social media platforms like Facebook, YouTube, and Instagram, offering diverse global entertainment options, a new trend in social media consumption has emerged in recent years. In 2018, Musical.ly transformed into TikTok, a platform where users share short-form videos typically lasting 1 to 5 minutes, featuring concise content and clear themes (Yang et al., 2022). This format caters to users' desire for quick access to information without significant time investment, reflecting a preference for succinct yet engaging content in today's fast-paced digital landscape (Liu et al., 2021). Short-form videos have surged in popularity worldwide, illustrating the widespread appeal of immediate gratification and rapid consumption of diverse media content. Research on short-form videos highlights their fragmented structure, brief durations, diverse content, personalized recommendations, and immersive engagement, explored through theoretical models on addiction to such content (Huang et al., 2021; Liu et al., 2021; Qin et al, 2022; Ye et al., 2022). This trend signifies a significant shift in how users interact with and consume media on social platforms.

Short videos have significantly influenced the way people engage with social media, both positively and negatively (Chen et al., 2020). On the positive side, these clips provide a convenient and enjoyable method for users to access content in today's fast-paced environment. On the other side, this trend also indicates a shift towards content that caters to the diminishing attention spans prevalent in today's digital era (Junco & Cotton, 2012). The excessive use of TikTok short-form video platforms may have a negative impact on students' attention span and study habits. Previous studies have found that the extensive utilization of digital social media could potentially impact the typical growth of teenagers' brains, leading to potential effects on their attention span and cognitive development, encompassing aspects such as attention, memory, and learning capabilities (Crone & Konijn, 2018; Farchakh et al., 2020). Additionally, the 2019 Internet Trends Report showed that mobile short-form videos have made users spend more time on their smartphones (Dai et al, 2021). These research findings support the notion that TikTok's short-form videos, with their quick and easily digestible content, can contribute to a shorter attention span. 000000 Moreover, the fragmented nature of these videos has been observed to potentially trigger intense activation of the brain's pleasure centers in a brief period (Tian et al., 2023), leading to a significant release of dopamine (Di Chiara, 2000; Wise & Robble, 2020). Prolonged exposure to such intense pleasure and elevated dopamine levels may foster deeper engagement and heightened user desires, potentially impacting dopamine enzyme activity and the availability of dopamine transporters (Weinstein & Lejoyeux, 2015; Weinstein, 2010). This dual effect underscores a significant shift in how users interact with and consume media on social platforms, combining immediate content consumption with potential neurological implications.

Attention span is essential for individuals to maintain focus on a task without getting distracted (Fillmore, 2015). It plays a crucial role in one's ability to concentrate when needed, which is necessary for achieving goals and completing tasks effectively. This span can vary widely among individuals and is influenced by numerous factors such as interest

in the task, its complexity, environmental factors, and the individual's physical and mental state. In a digital age where people frequently are bombarded with information, there are concerns that our collective attention span might be shortening.

On the other side, Study habits encompass a range of behaviors and strategies aimed at optimizing the learning process. Effective study habits involve engaging with the material in a deliberate and effortful manner, often involving strategies such as summarizing, self-testing, and active participation (Walck-Shannon, E., Rowell, F, S. and Frey, F, R., 2021). However, in an environment where attention spans are potentially dwindling, maintaining these desirable study habits becomes increasingly challenging. Distractions from digital devices and constant notifications may disrupt study sessions, making it harder for individuals to engage with the material effectively.

Research conducted by Junco and Cotton (2012) found that the frequent use of social media platforms is associated with decreased attention span and increased distraction. This suggests that students who spend excessive time watching short-form videos on TikTok may struggle to maintain focus and retain information during studying. This can lead to difficulties in comprehending and retaining information from traditional learning resources, such as textbooks or in-class lectures. Another investigation found that excessive use of short-form videos not only had a direct impact on academic procrastination but also exerted an indirect influence on academic procrastination through attentional control (Xie et al., 2023). According to the temporal motivation theory, individuals are inclined to prioritize tasks that provide immediate rewards when time is restricted while delaying those associated with more distant rewards (Steel, 2007). Therefore, the short and engaging nature of TikTok's videos aligns with this theory, as it satisfies the desire for immediate gratification and quick information. As a new and widespread form of social media with unique features, short-form videos may more easily lead to addiction and have negative effects on users. Consequently, the issue of short-form video addiction has become a significant area of interest, prompting numerous studies across various disciplines (Hasan *et al.*, 2018; Huang *et al.*, 2022; Liu *et al.*, 2021; Ye *et al.*, 2022; Zhang *et al.*, 2019). Given these findings, it is crucial to further explore and address the potential negative impacts of short-form video consumption, particularly among students, to promote healthier media usage habits and improve academic outcomes.

This study aims to investigate the impact of TikTok short-form videos on users' attention span and study habits of students enrolled in the College of Vocational School Studies IPB University and to suggest effective strategies for mitigating the negative effects.

2. METHODS

In this research, qualitative methods were employed, utilizing a shared Google form distributed via social media platforms such as Instagram and WhatsApp. A total of 31 students from the College of Vocational School Studies at IPB University participated by completing the questionnaire. The students were categorized into three groups based on their year of entry: 2021, 2022, and 2023, reflecting enrollment in the mentioned college during these years. Data collection occurred between February 25th and March 7th, 2024, covering two main sections: the use of the TikTok application and study habits, as well as the impact of TikTok application use on study habits.

Qualitative research occurs within naturally occurring settings and uses a deployment model to draw out deeper meanings from real-world scenarios or specific investigations conducted by researchers (Ugwu & Eze, 2023). Utilizing questionnaires provided a

comprehensive overview of the participants, aiding in understanding more about their experiences and perceptions (Eyisi, 2016). By administering a questionnaire, the researchers were able to explore the participants' interactions with TikTok qualitatively, focusing on their attitudes and motivations.

The questionnaire comprised 22 questions, exploring various aspects of TikTok usage habits and their effects. The questionnaire utilized a linear scale with 5 points, multiple-choice, checkboxes, and text-based answers. Following data collection, analysis was conducted in tabular format to facilitate clear description and interpretation of the findings. These research methods focused on obtaining a comprehensive understanding of how TikTok usage influenced study habits among the participants.

3. RESULTS AND DISCUSSION

The results and discussion of this study will explore the use of the TikTok application in the daily lives of students at the College of Vocational Studies IPB University, as well as the perceived impacts of consuming short-form video content on attention span and study habits. We conducted a qualitative study through online questionnaires and in-person interviews to gain a broader understanding. Here are the survey results we obtained regarding when the students began using the TikTok application.

Table 1. Distribution of TikTok Adoption Timeline

Year	No.	Percentage (%)
2018	2	6.5
2019	8	25.8
2020	7	22.6
2021	4	12.9
2022	6	19.4
2023	4	12.9
Total	**31**	**100.0**

Table 1 shows usage patterns of TikTok among students at College of Vocational Studies IPB University. There has been a noticeable increase in TikTok use, particularly in 2019(25.8%) and 2020(22.6%). This reflects a growing preference for the platform, likely influenced by evolving social media trends and platform enhancements. The widespread adoption underscores TikTok's popularity as a key socializing and content-sharing channel for students.

Table 2. Frequency of TikTok Video Consumption

Frequency	No.	Percentage (%)
Very Rarely	6	19.4
Rarely	4	12.9
Occasionally	3	9.7
Frequently	11	35.5
Very Often	7	22.6
Total	**31**	**100.0**

The information provided in **Table 2** illustrates the distribution of TikTok video consumption among students at College of Vocational Studies IPB University. The findings indicate that the largest percentage of students, around 11(35.5%) respondents, mentioned they frequently consume TikTok videos. Additionally, 7(22.6%) respondents stated that they watch TikTok videos very regularly. A smaller proportion of students seem to have less frequent interaction with TikTok videos, with 4(12.9%) participants

and 3(9.7%) participants reporting rare or very rare viewing habits. In contrast, the majority of students (58.1%) stated that they watch TikTok videos often or very frequently, indicating substantial engagement with the platform.

To find out how often they use the TikTok application, **Table 3** provides an overview of the duration they spend daily using the application.

Table 3. Daily TikTok Usage

Duration (hour)	No.	Percentage (%)
< 1	10	32.3
1 - 2	13	41.9
2 - 5	7	22.6
> 5	1	3.2
Total	**31**	**100.0**

The data presented in **Table 3** illustrates the daily usage patterns of TikTok among a group of 31 participants. A noteworthy finding is that a substantial portion, 10(32.3%), used TikTok for less than one hour each day, suggesting that many users have relatively brief interactions with the platform. In contrast, the largest proportion, consisting of 13(41.9%) of the sample, spent between one and two hours on TikTok daily indicating a moderate level of engagement. Furthermore, 7(22.6%) used TikTok for two to five hours per day, demonstrating more intensive use of the platform. Only a small proportion, specifically 1(3.2%), reported using TikTok for over five hours daily which may reflect either an unusual usage pattern or highly dedicated segment within the user base. These findings highlight the diverse usage patterns and levels of engagement among TikTok users.

This aligns with results from other social media platforms. For example, research by Kircaburun and Griffiths shows that there is a wide range of social media usage, with many users spending short periods on these platforms while a smaller but significant group spends extensive amounts of time daily. Their study suggests that around 40% of users spend between one to two hours on social media each day, which corresponds to the moderate engagement seen in the present study on TikTok usage (Kircaburun & Griffiths, 2019).

Table 4. TikTok Usage Timing Preferences

Time	No.	Percentage (%)
Morning	1	3.2
Afternoon	3	9.7
Evening	4	12.9
Night	23	74.2
Total	**31**	**100.0**

Table 4 presents findings on the favored time for using TikTok among a group of 31 participants, highlighting notable differences in user patterns across the day. A minority of the respondents, just 1(3.2%), favors accessing TikTok in the morning. This minimal proportion suggests that mornings may not be an optimal period for TikTok activity, potentially influenced by typical morning schedules such as getting ready for work or school. In contrast, the afternoon sees a slight increase in usage with 3(9.7%) participants preferring this time. This could suggest a modest uptick in activity perhaps during lunch breaks or as a form of midday leisure. TikTok usage becomes more significant during the evening, with 4(12.9%) of users actively using the platform at this time. This could be

attributed to individuals having more leisure time to explore and interact with content once their daily responsibilities are fulfilled. The most notable finding is that the majority of TikTok users, 23(74.2%) prefer to use the app during nighttime. This significant percentage may be due to users having more free time and fewer alternative activities, making it an ideal period for prolonged interaction with the platform. The inclination towards nighttime usage implies that TikTok functions as a substantial source of entertainment and relaxation at the close of each day.

Table 5. Preferred Duration of TikTok Videos

Duration (sec)	No.	Percentage (%)
< 30	4	12.9
30 - 60	23	74.2
60 - 180	3	9.7
180 - 300	1	3.2
> 300	0	0.0
Total	**31**	**100.0**

Table 5 presents important findings regarding user engagement patterns on the platform. The data indicates a strong preference for shorter videos, with a dominant 23(74.2%) of the respondents favoring videos that last between 30 and 60 seconds. This preference underscores the platform's core appeal of quick, digestible content that can be consumed easily in brief moments anytime. Videos shorter than 30 seconds were preferred by only 4(12.9%) participants, suggesting that while there is an appetite for very short content, most users prefer a slightly longer experience that perhaps allows for more narrative development or entertainment value within the confines of TikTok's short-form video format. The preference drops significantly for videos lasting 60 to 180 seconds, with only 3(9.7%) of users opting for this range. Videos of 180 to 300 seconds are even less favored, with just 1(3.2%) of participants showing interest in such durations, and no participants (0%) preferred videos longer than 300 seconds. This outcome is similar to research indicating that short-form videos are usually shorter than 15 minutes, mostly ranging between 1 and 5 minutes (Yang *et al.*, 2022). They contain brief content with a distinct theme, allowing users to quickly access information without dedicating considerable time and effort. This sharp decline indicates a potential threshold for engagement, where longer videos may fail to retain the attention of users accustomed to the platform's typically succinct content.

Following the collection of data regarding the preferred length of TikTok videos, **Table 6** provides information on the importance participants place on quickly receiving the desired information, rated on a scale from 1 (very unimportant) to 5 (very important).

Table 6. Importance of Obtaining Information Quickly While Using TikTok

Scale	No.	Percentage (%)
1	2	6.5
2	4	12.9
3	9	29
4	9	29
5	7	22.6
Total	**31**	**100.0**

A small percentage, 2(6.5%), rated this factor as very unimportant (scale point 1), suggesting a minimal concern for speed in accessing information. A similar percentage, 4(12.9%), rated it slightly more important at scale point 2, indicating that while speed is not critical, it has some level of importance to these users. The majority of participants,

however, rated the importance as higher. Both scale points 3 and 4 saw equal preferences, with 9(29%) of participants each rating these points, indicating a significant number of users find it moderately to quite important to receive information quickly. This could reflect a user's expectation for efficient information delivery, aligning with the fast-paced nature of content consumption on TikTok. The second highest rated category was scale point 5, where 7(22.6%) viewed the speed of obtaining information as very important. This segment of users likely values immediate access to information, which can enhance their viewing experience or support decision-making processes driven by TikTok content.

Table 7. Ease of Obtaining Desired Information on TikTok

Scale	No.	Percentage (%)
1	1	3.2
2	0	0.0
3	6	19.4
4	15	48.4
5	9	29
Total	**31**	**100.0**

Apart from the importance of speed in getting the desired information, **Table 7** shows how easy it is for participants to get information through the TikTok application using a scale from 1 (very difficult) to 5 (very easy). The distribution of responses provides insights into user experiences regarding information accessibility on the platform.

At the lower end of the scale, a small fraction of users, 1(3.2%), found it very difficult to obtain the information they wanted, indicating that for a few, the platform may not effectively meet their informational needs. Interestingly, no participants rated the ease of obtaining information as slightly difficult (scale point 2), suggesting that difficulties in accessing information are not commonly experienced among this group. A moderate number of users, 6(19.4%), rated the ease as neutral (scale point 3), neither difficult nor easy. This indicates a segment of the user base that finds the platform functional but perhaps not optimized for their information retrieval needs. The majority of participants perceived the platform as facilitating relatively easy access to information, with 15(48.4%) rating it as easy (scale point 4) and 9(29%) as very easy (scale point 5). These figures suggest that TikTok is generally effective in providing users with the information they seek, making it a user-friendly environment for most.

Table 8. Typical Study Times Among Students

Scale	No.	Percentage (%)
Morning	8	25.8
Afternoon	1	3.2
Evening	4	12.9
Night	18	58.1
Total	**31**	**100.0**

The analysis of TikTok usage timing preferences on **Table 4** and typical study times among students on **Table 8** reveals potentially significant overlaps that might impact students' academic performance. From **Table 4**, we see a clear preference for TikTok usage during night hours, with a significant 23(74.2%) of participants choosing this time. This preference for nighttime engagement suggests that students are heavily involved with the platform during these hours.

Comparatively, **Table 8** shows that a majority of students, 18(58.1%) participants, also prefer to study during the night. This overlap between preferred study times and peak TikTok usage indicates that students are likely dividing their attention during critical study hours, which could detract from their ability to study effectively.

The data also shows some level of activity on TikTok during the evening (12.9%) and afternoon (9.7%), times which coincide with lower but still significant study activity among students (12.9% in the evening and 3.2% in the afternoon). The morning appears to be the least preferred time for both TikTok usage (3.2%) and studying (25.8%), although the latter still captures a quarter of the respondents indicating some dedication to morning studies.

Given these findings, the significant alignment of high TikTok usage and primary study times during the night suggests a potential for distraction, which may hinder academic performance among students. To substantiate this hypothesis, **Table 9** and **Table 10** provide data that show a correlation between TikTok usage and study habits, as well as the potential for study distraction linked to the use of the app.

Table 9. Perceived Correlation Between TikTok Usage and Study Habits

Correlation	No.	Percentage (%)
Yes	22	71
No	9	29
Total	**31**	**100.0**

Table 9 illustrates the perceptions among students regarding the impact of TikTok usage on their study habits. A substantial majority, 22(71%), believe there is a correlation between their TikTok use and their study habits, indicating that these students are aware of the potential influence TikTok has on their academic behavior. In contrast, 9(29%) do not perceive any impact, suggesting a segment of the student population either manages to compartmentalize their social media usage and academic responsibilities effectively, or simply do not recognize any detrimental effects.

The data suggests that a significant proportion of students are cognizant of the potential distractions posed by TikTok, which might affect their ability to maintain effective study habits. This awareness could be pivotal for developing strategies to manage their time and focus more effectively, recognizing the need to potentially curb TikTok usage during crucial study periods. The insights from this table could inform educational strategies and personal management practices aimed at mitigating the disruptive impact of social media on academic performance.

Table 10. Perceived Correlation Between TikTok Usage and Study Distraction

Correlation	No.	Percentage (%)
Yes	26	83.9
No	5	16.1
Total	**31**	**100.0**

Table 10 presents data on the perceptions of students regarding the impact of TikTok usage on their ability to concentrate during study times. A substantial majority, 26(83.9%), of the respondents acknowledge a correlation between TikTok use and study distractions. This indicates that most students are aware of the potential negative effects TikTok can have on their focus and academic productivity. On the other hand, a smaller portion, 5(16.1%), does not perceive TikTok as a distraction, which might suggest they

either do not use TikTok in a way that interferes with their studies or are able to separate their social media activities from their academic responsibilities effectively.

Table 11. Understanding of Risks Posed by TikTok Videos on Attention Span

Scale	No.	Percentage (%)
1	1	3.2
2	5	16.1
3	11	35.5
4	11	35.5
5	3	9.7
Total	**31**	**100.0**

Table 11 explores the level of awareness among students regarding the risks that TikTok videos pose to their attention span. The data shows varied perceptions, with a scale from 1 (very unaware) to 5 (very aware). A small number, 1(3.2%), expressed very low awareness (scale point 1), indicating minimal concern or recognition of the potential impact of TikTok on their attention span. Meanwhile, 5(16.1%) and 3(9.7%) of participants scored their awareness at scale points 2 and 5 respectively, suggesting some students are either slightly aware or very aware of the risks. A significant portion of the students, 35.5% each (n=11 for both), rated their awareness at the midpoint (3) and moderately high (4) of the scale. This indicates a moderate to high level of understanding about the distraction potential of TikTok, acknowledging that it could affect their concentration and focus.

Relating these findings to **Table 5**, which examined the preferred duration of TikTok videos, we see that a large majority preferred videos lasting between 30 to 60 seconds. This preference for brief content may correlate with the awareness of attention span risks, suggesting that students might prefer shorter videos to mitigate the impact on their focus or simply because their attention span aligns better with shorter videos. The data from **Table 11** enhances the understanding from **Table 5**, providing a context that while students prefer short videos, they are also moderately aware of the cognitive risks associated with consuming such fast-paced, short-duration content on platforms like TikTok. This awareness and preference for shorter videos might be a strategy to manage or compartmentalize the distracting effects of the app, allowing students to engage with the content without severely impacting their attention span for other activities, including studying.

4. CONCLUSION

The comprehensive data analysis from the College of Vocational Studies IPB University provides clear insights into the impact of TikTok's short-form videos on the attention spans and study habits of students. The findings across multiple tables reveal a relationship between TikTok short-form video consumption, study habits, and attention span:

(i) A significant majority of students recognize a direct correlation between their TikTok usage and their study habits. Tables 9 and 10 reveal that a substantial portion of students—71% and 83.9% respectively—acknowledge that TikTok usage affects their study routines and leads to distractions. This recognition is critical as it underscores the need for strategies that help students manage their social media usage to maintain their academic performance.

(ii) Students also recognize the effect of TikTok's short-form video format on their attention spans, which heightens their desire for rapid information acquisition. This desire for quick information could potentially impact their ability to engage in deep, focused learning and retain information for longer periods.

5. AUTHORs' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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