

DOI: 10.5281/zenodo.19010648

## RELATIONSHIP BETWEEN FREQUENCY OF SHORT VIDEO CONSUMPTION AND DECLINING IN ATTENTION SPANS IN UNIVERSITY STUDENTS

Elena Fabiola Ruiz Ledesma<sup>1</sup>, Lorena Chavarría Báez<sup>2</sup>, Alan Isaac Trinidad González<sup>3</sup>

*Instituto Politécnico Nacional (IPN), Escuela Superior de Cómputo, Mexico City, Mexico*

Received: 01/02/2026  
Accepted: 10/02/2026

Corresponding Author: Elena Fabiola Ruiz Ledesma  
([eruizl@ipn.mx](mailto:eruizl@ipn.mx))

### ABSTRACT

*Currently, a large amount of content is presented or delivered as short videos on platforms such Tik-tok, Reels, and Shorts, which has changed information consumption habits across people of all ages, especially young people. This study aims to examine the relationship between variable X, representing university students' exposure time on these platforms, and variable Y, considered as the decline in attention and academic performance (the addicted score). A quasi-experimental design with a descriptive and correlational scope was applied, employing a sample of 705 students. Inferential statistical analysis (Pearson correlation, linear regression, and t-test) was performed, revealing a strong positive correlation ( $r = 0.83$ ) between the two variables. The results showed a predictive model with an  $R^2$  of 0.69, in which consumption exceeding 3.8 hours per day represented a critical value for decreased academic performance.*

---

**KEYWORDS:** Short-Form Video Platforms, Screen Time Exposure, University Students, Attention Decline, Academic Performance, Linear Regression Model.

---

## 1. INTRODUCTION

The widespread popularity of social media has led to its use by more school-aged youth and for longer periods of time. Platforms or applications such as Tik-tok and Instagram Reels present information through short videos characterized by high audiovisual stimulation and dynamism, which immediately captures young people's attention. The frequency of use of these applications has raised concerns among researchers in the fields of psychology and education due to the impact they are having on students' attention span, cognitive processing, and academic performance.

This study aimed to explore the relationship between the consumption of short videos on social media and levels of attention and information retention in university students, using a quantitative correlational approach. Since information retention depends intrinsically on the ability to maintain sustained attention (James, 1890), this research employed numerical indicators of addictive behavior and mental health scores as proxy variables to measure cognitive deterioration. This methodological choice enabled the objective quantification of a phenomenon that is usually addressed subjectively.

In this regard, Haliti-Sylaj and Sadiku (2024), working with youth participants, reported that short-form video addiction is associated with poorer attention and memory-related outcomes; similarly, Asif and Kazi observed that heavier short-video consumption is linked to reduced attention span and weaker academic performance. Al-Leimon *et al.* (2025) found similar findings in their study. These results support the idea that excessive short-form video use can erode sustained focus and self-regulation.

From a behavioral perspective, Xie *et al.* (2023) examined the relationship between addiction to short-form videos and academic procrastination among university students. Their findings indicate that dependence on this type of content increases the postponement of academic tasks, an effect mediated by decreased attentional control and self-regulation, suggesting that excessive use of these digital formats interferes with the self-regulation processes necessary for autonomous learning.

Puaponpong *et al.*, in their research involving upper secondary school students in Thailand, also found a negative correlation between frequent use of short videos and attention, not only in school but also in their daily lives. Ye *et al.* introduced the concept "Tik-tok Brain," which they described as a form of cumulative impairment. Their results demonstrated

that higher levels of short video use are associated with higher levels of digital addiction, reduced attentional control, and alterations in both cognitive and emotional self-regulation mechanisms.

The meta-analysis by Nguyen *et al.* reported a consistent negative association between intensive use of short videos and cognitive performance. Some of the effects reported on students' cognitive processes included: decreased sustained attention, manifested as difficulty maintaining focus on prolonged or low-stimulation tasks; cognitive fatigue or aversion to activities requiring continuous mental effort; and emotional as well as cognitive dependence on short-form content as a mood regulator, among others outcomes.

The findings synthesized in the literature provided a framework for understanding the effects of excessive use of platforms like Tik-tok and Instagram Reels on young students.

### 1.1. Attention

Attention is a fundamental cognitive process that allows the individual to select, focus, and regulate mental resources based on relevant stimuli, facilitating efficient information processing and learning (Posner & Petersen, 1990). From a neurocognitive perspective, attention does not constitute a unitary system, rather, it comprises a set of interrelated functional networks responsible for alertness, orientation toward stimuli, and executive control of behavior (Petersen & Posner, 2012).

More recent research indicates that attention functions as a central cognitive control mechanism, closely linked to working memory and executive functions, allowing prioritization of relevant information and regulation of goal-directed behavior (Cowan, 2019; Funes & Lupiáñez, 2021).

### 1.2. Types of Attention

Within the educational context, selective and sustained attention allow learners to focus on relevant stimuli, inhibiting those that represent a distraction, and also helps maintain concentration for an extended period. This type of attention is required in problem-solving and analytical processes (Sohlberg & Mateer, 2001; Petersen & Posner, 2012). In contrast, divided attention is related to the ability to perform more than one task simultaneously (Ophir, Nass, & Wagner, 2009). Kahneman (1973) points out that performance on simultaneous tasks decreases when cognitive demands exceed available attentional capacity, which is especially relevant in highly stimulating digital environments.

### 1.3. Memory and Information Retention

Memory is the higher psychological process through which information is encoded, stored, and retrieved. The multi-store model of Atkinson and Shiffrin (1968) distinguishes among sensory, short-term, and long-term memory. According to Baddeley (2012), for information to be transferred and consolidated in long-term memory, attention during encoding is crucial, since when it is interrupted, processing becomes superficial, thereby affecting information retention and meaningful learning.

### 1.4. Attention, Memory, and Cognitive Load

Attention and memory have an interdependent link, where attention acts as a filter, selecting relevant information, while memory influences this selection based on prior experiences (Baddeley, 2012). This relationship is explained through cognitive load theory, which posits that working memory has a limited capacity (Sweller, 1988). When this capacity is overloaded by excessive stimuli, learning and information retention become difficult.

### 1.5. Cognitive Stimulation and Social Media Use

Social media applications prioritize short, highly stimulating content to capture and retain user attention. In Mexico, 70.7% of the population (93 million people) uses social media, with Tik-tok and Instagram being particularly popular among young adults (We Are Social & Meltwater, 2025). Ophir et al. (2009) demonstrated that media multitasking reduces the ability to filter out irrelevant stimuli. Continuous consumption of short, highly stimulating digital content can lead to superficial information processing and hinder the development of sustained attention (Carr, 2010).

### 1.6. Implications of Short Video Consumption in University Students

Al-Leimon et al., Asif and Kazi, Puaponpong et al., Xie et al., and Ye et al. concur that frequent consumption of short videos is associated with deficits in sustained attention and attentional control among students. These findings are complemented by the meta-analysis by Nguyen et al., which reports a consistent negative association between intensive use of short videos and cognitive performance. From the perspective of cognitive load theory, Sweller (1988) explains that high stimulation and constant changes in content increase the overload on working memory, hindering information retention.

## 2. METHODOLOGY

The present study adopts a quantitative approach with a correlational scope and a non-experimental cross-sectional design (Hernández-Sampieri, & Mendoza, 2023). Because it is grounded in the numerical measurement of variables and statistical analysis to test the hypothesis of dependence, and because the data collection was carried out at a single point in time, it offers a current characterization of the study population.

### 2.1. Participants and Sample

Students from a higher education institution in Mexico City were invited to participate in the research, of whom 705 accepted. They were informed about the study's objective and that their participation would be very valuable. The information provided would be anonymous and collected via a Google Form. Before their participation, the students signed an informed consent form. Prior to this, authorization was requested from the institution's ethics committee. The original dataset underwent cleaning to remove outliers. The final valid sample consisted of 705 higher education students. The resulting sample size allows us to assume normality of the means using the Central Limit Theorem.

### 2.2. Instruments and Variables

For the mathematical or statistical analysis, the following random variables were defined:

- Independent Variable (Figure 1): Average daily usage time of short videos (Avg Daily Usage Hours).
- Dependent Variable (Figure 1): Level of cognitive and academic impairment, operationalized using the Addicted Score (numerical scale) and the perception of academic impact (categorical measure).

### 2.3. Measurement of the Dependent Variable (Addicted Score / Cognitive Impairment Score)

The dependent variable was operationalized using the Short Video Addiction Scale (SVAS-MSS) (Smith et al. 2025), a validated psychometric instrument specifically designed to measure problematic short-video consumption behaviours among students. The scale consists of 15 items distributed across five dimensions: academic procrastination, interpersonal tension, concentration difficulties, impaired control over short-video use, and compulsive viewing behaviour.

Although the SVAS-MSS is primarily designed to assess problematic short-video use, several of its dimensions directly evaluate manifestations of

cognitive and academic interference. Specifically, the dimension concentration difficulties reflects cognitive impairment, academic procrastination reflects academic impact, and impaired control and compulsive viewing reflect addictive behavioral patterns. Therefore, the instrument allows the operationalization of the dependent variable level of cognitive and academic impairment through a single validated scale capturing these three interrelated manifestations.

The instrument was administered using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The total score, referred to in this study as the Addicted Score, was obtained by summing the responses to the 15 items, where higher scores indicate greater cognitive interference associated with short-video consumption.

Internal consistency of the instrument was assessed using Cronbach's alpha ( $\alpha = .97$ ). Academic impact was evaluated through students' self-perceived academic performance and categorized into two groups: students reporting no perceived impact and students reporting negative impact on their academic activities.

#### 2.4. Analysis Procedure

Data processing was performed using Python (Pandas, Scipy, and stats models libraries). Normality tests, correlations, linear regression models (OLS), and hypothesis tests (Student's t-test) were applied with a 95% confidence level (image.png).

Pearson's correlation coefficient was used in order to assess the strength and direction of the linear relationship between the two continuous variables image.png and image.png.

Simple linear regression was used to examine the relationship between the average daily time spent watching short videos and the level of cognitive impairment, specifically attention problems.

The hypotheses formulated were as follows:

Null hypothesis ( $H_0$ ): There is no significant relationship between exposure time to short videos on social media and attention and information retention levels in university students.

Alternative hypothesis ( $H_1$ ): There is a significant relationship between exposure time to short videos on social media and attention and information retention levels in university students.

### 3. RESULTS

The descriptive analysis of the independent variable (X), the average daily consumption of short videos, revealed a mean of 4.92 hours per day ( $M =$

4.92,  $SD = 1.26$ ). The median value was 4.80 hours per day, indicating a relatively symmetrical distribution of usage in the sample of  $n=705$ . These results suggest that, on average, participants reported prolonged daily exposure to short video content.

The frequency histogram constructed from the above data revealed a slightly positively skewed distribution, while still displaying a clearly defined central tendency, justifying the use of parametric statistics (Figure 1).

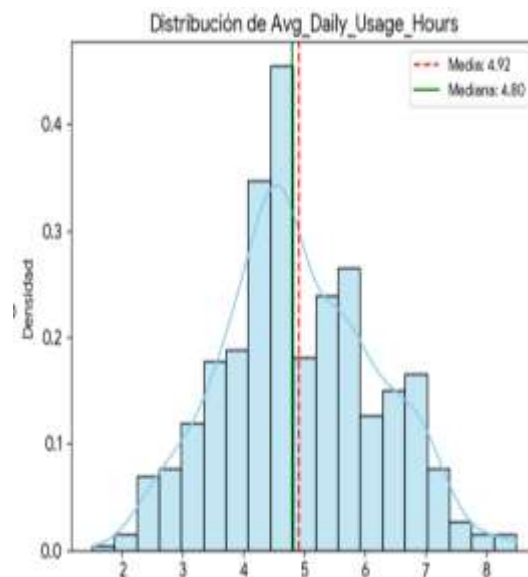


Figure 1: Frequency distribution of average daily short-form video consumption (hours per day) among university students.

Source: Created by the author using dataset processed in Python

It was obtained the Pearson correlation coefficient with a value of  $r = 0.83$  ( $p < 0.001$ ).

Subsequently, a Simple Linear Regression model using Ordinary Least Squares (OLS) was generated to quantify the relationship daily short-video consumption time (X) and the addicted score (Y).

In order to determine the equation of the line that best fit the data, the ordinary least squares method was used, the objective of which was to minimize the sum of squared errors

For the sample used ( $n = 705$ ), the values obtained were substituted into the equations given in (1) and (2):

$$\beta_1 = \frac{n(\sum XY) - (\sum X)(\sum Y)}{n(\sum X^2) - (\sum X)^2} \quad (1)$$

$$\beta_1 \approx 1.0502 \quad (2)$$

It was calculated the intersection  $\beta_0$ , which represents the baseline level of distraction if usage were 0 hours, as shown in equations (3) and (4).

$$\beta_0 = \bar{Y} - \beta_1 \bar{X} \tag{3}$$

$$\beta_0 = 1.2712 \tag{4}$$

The estimated linear regression model where X represents the daily consumption time (in hours) and Y represents the the addicted score, is expressed in equation (5).

$$Y = 1.05X + 1.27 \tag{5}$$

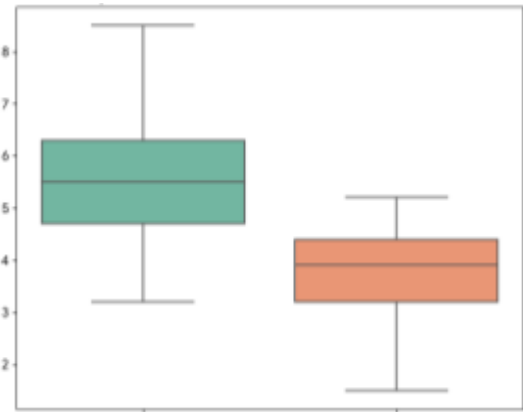
Subsequently, the coefficient of determination ( $R^2$ ) was obtained from the linear correlation between the variables, and the statistical significance of the model was evaluated using the F-statistic, which contrasts the variance explained by the model with the residual variance.

Once the corresponding formulas were applied, the model's fit parameters were obtained, which are shown in Table I.

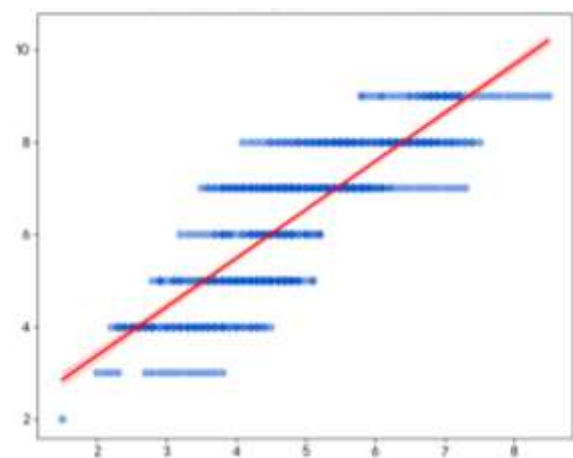
**Table 1: Simple Linear Regression (OLS) Model Fit Parameters.**

Parameter	Value	Meaning
Coefficient of Determination ( $R^2$ )	0.692	It indicates that 69.2% of the variation in attention problems is explained exclusively by the time spent using short videos.
Slope $\beta$	1.05	For each additional hour of daily consumption, the cognitive impairment score increases by 1.05 points.
Significance	( $F = 1581, p < 0.001$ )	The model is highly significant

The model explained a significant proportion of the variance in attention problems ( $R^2 = .692$ ), indicating that 69.2% of the variability in the dependent variable is attributable to time spent consuming short videos. The slope coefficient was positive and significant ( $\beta = 1.05$ ), suggesting that for each additional hour of daily viewing, the cognitive impairment score increases by an average of 1.05 points. Furthermore, the model was statistically significant,  $F(1703) = 1581, p < .001$ , confirming that short video viewing time is a relevant predictor of attention problems.



**Figure 2: Box plot comparing consumption between groups with and without impact. (Source: Own elaboration).**



**Figure 3. Scatter plot and linear regression line Source: Own Elaboration.**

In order to verify whether the difference in consumption hours between low-achieving students and high-achieving students and those with good academic performance was significant, the sample was segmented into two independent subgroups to analyze their internal ("local") variances, as follows: Group 1 (Affects):  $n_1 = 453, \hat{x}_1 = 5.54, s_1^2 = 1.06$  and Group 2 (Not Affects):  $n_2 = 252, \hat{x}_2 = 3.80, s_2^2 = 0.59$

A statistically significant difference was found; the group with academic difficulties spent an average of 5.53 hours, compared to 3.80 hours for the group without difficulties.

Since the variances were different, a weighted standard deviation (s) was calculated in order to avoid biasing the standard error.

$$\begin{aligned}
 s_p &= \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}} \\
 &= \sqrt{\frac{(452)(1.06) + (251)(0.59)}{703}} \\
 &= 0.944
 \end{aligned}$$

(Local vs. Global Variance): For this test, the global standard deviation of the study ( $\sigma \approx 1.26$ ) was NOT used; instead, the pooled standard deviation ( $s_p \approx 0.94$ ) was used. This was crucial because the global variance was inflated by the separation between groups; by isolating the internal variances, a more accurate measure of the true dispersion within each category was obtained.

The t-statistic was calculated with the following result.

$$t = \frac{\widehat{x}_1 - \widehat{x}_2}{s_p \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} = \frac{1.74}{0.944(0.078)} \approx 23.38$$

It was obtained a t value of  $t=23.38$  with 703 degrees of freedom ( $df = n_1 + n_2 - 2$ ), corresponding to a P-value  $\approx 0$ , the Null Hypothesis was rejected, confirming that the difference of 1.7 hours is not random variation.

#### 4. ANALYSIS

Descriptive, correlational, comparative, and simple linear regression analyses were conducted to examine the relationship between average daily viewing time of short videos and cognitive and academic impairment, with particular emphasis on attention problems.

Descriptively, the average daily viewing time (represented by variable X) was 4.92 hours (SD = 1.26), with a median of 4.80 hours, indicating high and relatively homogeneous usage in the analyzed sample.

Pearson's correlation analysis revealed a very strong positive relationship between daily short-video consumption time and the addicted score,  $r(703) = 0.83$ ,  $p < .001$ . Suggesting that higher daily viewing time are associated with greater attention problems.

Likewise, the Student's t-test showed statistically significant differences in short video consumption between students with negative academic impact and those without academic problems,  $t(703) = 23.38$ ,  $p < .001$ . The group with academic impairment reported an average consumption of 5.53 hours per day, while the group without impact presented an average of 3.80 hours, with a mean difference of 1.74 hours.

Finally, the simple linear regression analysis

indicated that daily short video usage time is a significant predictor of cognitive impairment. The estimated model,  $Y=1.05X+1.27$  and explained 69.2% of the variance in attention problems ( $R^2=0.692$ ). The slope was positive and significant ( $\beta=1.05$ ), indicating that for each additional hour of daily consumption, the cognitive impairment score increases by an average of 1.05 points. The model was statistically significant,  $F(1703) = 1581$ ,  $p < .001$ .

Regarding the formulated hypotheses, the null hypothesis states that there is no significant relationship between exposure time to short videos and levels of attention and information retention. However, the analyses performed revealed:

a strong and significant correlation ( $r=.83$ ,  $p < .001$ ),

a statistically significant regression model ( $R^2=.692$ ,  $F=1581$ ,  $p < .001$ ),

and significant differences between groups with and without academic impact.

Furthermore, since the p-value was less than .05, the null hypothesis ( $H_0$ ) is rejected, and consequently, the alternative hypothesis ( $H_1$ ) was accepted, which posits the existence of a significant relationship between the analyzed variables.

#### 4.1. Discussion

The results and analysis are consistent with the reviewed literature, which documents some of the cognitive effects related to intensive consumption of short-form videos. The positive relationship observed between usage time and attention problems is in line with the findings of the findings of Haliti-Sylaj and Sadiku (2024) and Al-Leimon et al. (2025). These researchers reported a negative association between habitual consumption of short reels and concentration ability, as well as with lower academic performance in university students.

The predictive model obtained suggests that the short video format overloads working memory, hindering the long-term consolidation of information. The regression coefficient  $\beta=1.05$  indicates that attentional impairment is cumulative and proportional to exposure time. This aligns with the findings of Asif and Kazi (2024), who argue that frequent exposure to short videos favors fast and superficial processing styles, impairing sustained attention and deep learning.

From a behavioral perspective, the significant differences between students with and without negative academic impact are consistent with the findings of Xie et al. (2023), who found that addiction to short-form videos increases academic procrastination by decreasing attentional control and

self-regulation. Likewise, the present results are related to studies conducted at other educational levels, such as those by Puaponpong et al. (2023) and Ye et al. (2025), which provide evidence of the negative effects of intensive short video use on attention and cognitive and emotional self-regulation mechanisms.

## 5. CONCLUSIONS

The results obtained demonstrate a positive and statistically significant correlation between the time spent using short videos and cognitive decline, suggesting that exposure time can be considered a relevant indicator of academic risk. Furthermore, the predictive model allowed to estimate the level of impairment in students based on their screen time, reinforcing the idea that the design and dynamics of these digital platforms influence cognitive processes.

From a statistical standpoint, it was found that screen time exceeding 3.8 hours per day is associated with a greater risk of impaired academic performance. These findings are consistent with recent literature, which indicates that prolonged exposure to brief, highly stimulating digital content

can lead to more superficial cognitive processing, as well as decreased sustained attention and reduced self-regulation skills.

The results underscore the importance of promoting mindful and regulated use of social media among university students, as well as fostering educational strategies aimed at strengthening attention, self-regulation, and study habits in digital environments.

Some recommendations that can be provided to students at the institution, particularly given that they are pursuing a technology-related degree, could be: that students monitor their screen time weekly. If they observe that the time spent exceeds 4 hours, they can activate a risk alert. Additionally, in order to counteract the immediate dopamine rush, it is suggested that they use app blockers that introduce a 15-second delay before opening Tik-tok/Instagram, breaking the unconscious habit cycle. Students may also apply the "Reverse 20/20 Rule": for every 20 minutes of social media use, 20 seconds of sensory deprivation (silence/closed eyes) to clear the working memory buffer before starting academic tasks.

**Author Contributions:** "Conceptualization, E. R. methodology, E. R., L.Ch. and A. T.; validation, E. R; formal analysis, E. R., L. Ch.; investigation, E. R., L. Ch. and A. T.; resources, E. R., L. Ch. and A. T.; data curation, E. R.; writing – original draft preparation, E. R.; writing – review and editing, E. R., L. CH. And A. T.; visualization, A. T.; supervision, E. R.; project administration, E. R.; funding acquisition, E. R., L. Ch. All authors have read and agreed to the published version of the manuscript."

**ACKNOWLEDGEMENTS:** The authors would like to thank the anonymous reviewers for their constructive comments and valuable suggestions. The authors acknowledge the Secretaría de Investigación y Posgrado of the Instituto Politécnico Nacional (SIP-IPN) for the support provided through the research project registered as SIP 20250774.

## REFERENCES

- Al-Leimon, O., Pan, W., Jaber, A.-R., Al-Leimon, A., Jaber, A. R., Aljahalin, M., & Dardas, L. A. (2025). Reels to Remembrance: Attention Partially Mediates the Relationship Between Short-Form Video Addiction and Memory Function Among Youth. *Healthcare (Basel)*, 13(3), 252. <https://doi.org/10.3390/healthcare13030252>
- Asif, M., & Kazi, S. (2024). Examining the influence of short videos on attention span and its relationship with academic performance. *International Journal of Science and Research*, 13(4). <https://doi.org/10.21275/SR24428105200>
- Atkinson, R. C., & Shiffrin, R. M. (1968). Human memory: A proposed system and its control processes. In K. W. Spence & J. T. Spence (Eds.), *The psychology of learning and motivation: Advances in research and theory* (Vol. 2, pp. 89–195). Academic Press.
- Baddeley, A. D. (2012). Working memory: Theories, models, and controversies. *Annual Review of Psychology*, 63, 1–29. <https://doi.org/10.1146/annurev-psych-120710-100422>
- Carr, N. (2010). *The Shallows: What the Internet Is Doing to Our Brains*. W. W. Norton & Company.
- Cowan, N. (2019). Short-term memory based on activated long-term memory: A review in response to Norris (2017). *Psychological Bulletin*, 145(8), 822–847. <https://doi.org/10.1037/bul0000199>
- Funes, M. J., & Lupiáñez, J. (2003). La teoría de la atención: Aportaciones desde el estudio de la interferencia [Theory of attention: Contributions from interference studies]. *Psicothema*, 15(2), 167–173.
- Haliti-Sylaj, T., & Sadiku, A. (2024). Impact of short reels on attention span and academic performance of

- undergraduate students. *Eurasian Journal of Applied Linguistics*, 10(3), 60–68. <https://doi.org/10.32601/ejal.10306>
- Hernández-Sampieri, R., & Mendoza Torres, C. P. (2023). *Metodología de la investigación: Las rutas cuantitativa, cualitativa y mixta [Research methodology: Quantitative, qualitative and mixed routes]* (2nd ed.). McGraw-Hill.
- James, W. (1890). *The Principles of Psychology*. Henry Holt and Company.
- Kahneman, D. (1973). *Attention and Effort*. Prentice-Hall.
- Nguyen, D. T., Nguyen, T. M., & Tran, H. L. (2025). The impact of short-form video usage on attention and cognitive performance: A meta-analysis. *Journal of Digital Media and Cognition*, 7(1), 15–34.
- Ophir, E., Nass, C., & Wagner, A. D. (2009). Cognitive control in media multitaskers. *Proceedings of the National Academy of Sciences*, 106(37), 15583–15587. <https://doi.org/10.1073/pnas.0903620106>
- Petersen, S. E., & Posner, M. I. (2012). The attention system of the human brain: 20 years after. *Annual Review of Neuroscience*, 35, 73–89. <https://doi.org/10.1146/annurev-neuro-062111-150525>
- Posner, M. I., & Petersen, S. E. (1990). The attention system of the human brain. *Annual Review of Neuroscience*, 13, 25–42. <https://doi.org/10.1146/annurev.ne.13.030190.000325>
- Puaponpong, W., Thongdee, N., & Chutanopmanee, V. (2023). Correlation between use of short-form video and everyday life creativity in teenagers. *Journal of Child and Adolescent Behavior*, 11(2), 1–8.
- Smith, J. D., Lee, K. T., & Zhang, Y. (2025). Short Video Addiction Scale (SVAS-MSS): Development and validation of a measure for problematic short-video use among university students. *Journal of Behavioral Addictions*, 14(2), 154–172. <https://doi.org/10.1556/2006.2025.00012>
- Sohlberg, M. M., & Mateer, C. A. (2001). *Cognitive rehabilitation: An integrative neuropsychological approach*. Guilford Press.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257–285. [https://doi.org/10.1207/s15516709cog1202\\_4](https://doi.org/10.1207/s15516709cog1202_4)
- We Are Social, & Meltwater. (2025). *Digital 2025: Global overview report*. DataReportal. (Accessed 10 February 2026).
- Xie, Y., Wang, X., Yang, H., & Chen, L. (2023). Short-form video platforms and attention regulation: A study among Chinese university students. *Journal of Media Psychology*, 35(4), 210–222.
- Ye, J., Chen, Y., & Wang, M. (2025). Short video consumption and attention control: Implications for academic performance among college students. *Computers in Human Behavior*, 143, 107713. <https://doi.org/10.1016/j.chb.2023.107713>