



Review article

Scrolling minds: Instagram Reels consumption and attention span among young adults—the mediating role of fear of missing out (FOMO)

Shilpa Rawat*

Department of Psychology, Akal University, Talwandi Sabo, Bathinda, Punjab, India

Corresponding author: Shilpa Rawat, ✉ your-email-id@gmail.com, **Orcid Id:** <https://orcid.org/0009-0008-4386-0170>

© The author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by-nc/4.0/>). See <https://ijtinovation.com/reprints-and-permissions> for full terms and conditions.

Received - 26-06-2026, **Revised** - 20-07-2026, **Accepted** - 16-08-2026 (DD-MM-YYYY)

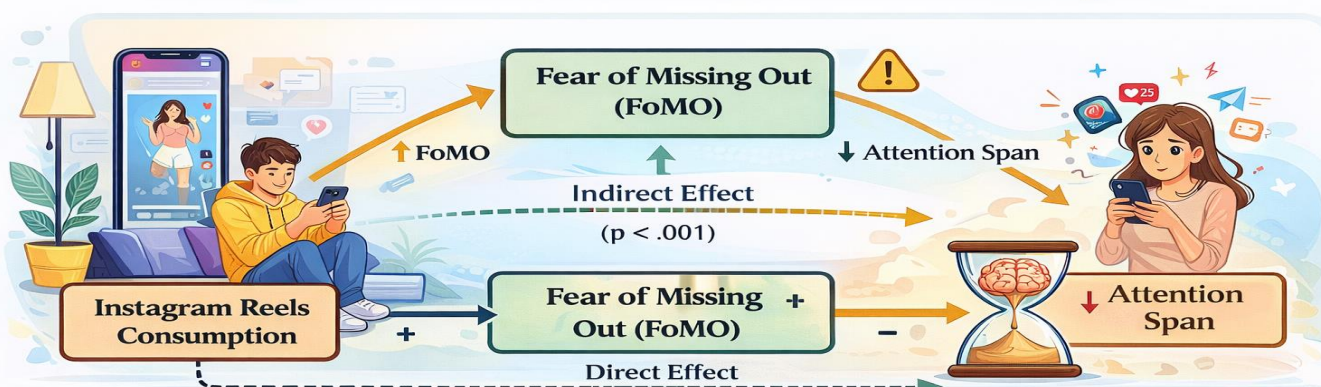
Refer this article

Shilpa Rawat, Scrolling minds: Instagram Reels consumption and attention span among young adults—the mediating role of fear of missing out (FOMO). International Journal of Therapeutic Innovation, July-August 2026, V4 – I4, Pages - 01 – 05. Doi: <https://doi.org/10.55522/ijti.v4i4.0147>.

ABSTRACT

The rapid growth of short-form video content has significantly reshaped digital media consumption patterns, particularly among young adults. Instagram Reels, characterized by brief and algorithm-driven content, has become a major source of engagement but may have implications for cognitive functioning, especially attention span. The present study investigates the relationship between Instagram Reels consumption and attention span, with a specific focus on the mediating role of Fear of Missing Out (FoMO). A sample of 250 undergraduate and postgraduate students aged 18–25 years from colleges in Bathinda was selected using purposive sampling. Data were collected using an adapted Social Media Usage Scale, the FoMO Scale, and the Attention Control Scale. Statistical analyses, including correlation, regression, and mediation analysis (PROCESS Model 4), were employed to examine the proposed relationships. The findings revealed a significant negative relationship between Instagram Reels consumption and attention span, indicating that higher engagement with short-form video content is associated with reduced attentional capacity. Additionally, Reels consumption was positively associated with FoMO, while FoMO was negatively related to attention span. Mediation analysis demonstrated that FoMO partially mediates the relationship between Reels consumption and attention span, highlighting the influence of psychological processes on cognitive outcomes. The study contributes to the understanding of digital media psychology by integrating cognitive and motivational perspectives. The findings emphasize the importance of promoting balanced social media use and addressing FoMO to enhance attention control and overall well-being among young adults.

Instagram Reels, FoMO, & Attention Span



Frequent Instagram Reels use increases FoMO, leading to reduced attention span among young adults.

Note, a = effect of Instagram Reels Consumption on FoMO; b = effect of FoMO on Attention Span; c' = direct effect of Instagram Reels Consumption on Attention Span controlling for FoMO.

*** $p < .001$

Keywords: Instagram reels, Attention span, Fear of missing out (FOMO), Social media usage, Young adults, Digital media psychology.

INTRODUCTION

In the contemporary digital era, patterns of media consumption have undergone a profound transformation, particularly among young adults. The rapid proliferation of smartphones, high-speed internet, and social networking platforms has enabled continuous access to digital content, thereby reshaping how individuals engage with information, entertainment, and social interaction. Among these developments, the emergence of short-form video content represents a significant shift in user engagement and attentional patterns. Platforms such as Instagram have popularized this format through features such as Reels, which provide brief, algorithmically curated videos designed to capture and sustain user attention.

Short-form video content is characterized by rapid transitions, high sensory stimulation, and personalized recommendation systems. These features are specifically engineered to maximize user engagement and retention [12]. Unlike traditional long-form media, which typically requires sustained cognitive effort, short-form videos offer instant gratification and continuous novelty. Consequently, users are encouraged to engage in repetitive scrolling behaviours for extended periods, raising concerns regarding their cognitive and psychological consequences.

One of the primary cognitive domains potentially affected by such media consumption is attention span. Attention span refers to an individual's ability to maintain focus on a specific task over time and is essential for effective learning and decision-making [5]. However, frequent exposure to rapidly changing digital stimuli may contribute to attentional fragmentation and reduced capacity for sustained concentration [15].

The design of short-form video platforms may further exacerbate this issue. Algorithm-driven content feeds continuously expose users to novel and highly engaging stimuli, limiting opportunities for cognitive rest and reflection. This phenomenon, often described as continuous partial attention, leads individuals to divide their focus across multiple stimuli rather than engaging deeply with a single task [4]. Over time, such patterns may reduce the ability to sustain attention.

In addition to cognitive implications, psychological factors play a significant role in shaping digital media usage. Fear of Missing Out (FoMO) is defined as a pervasive apprehension that others may be having rewarding experiences in one's absence [14]. This phenomenon is closely associated with social media engagement, as platforms continuously present updates about others' activities and interactions.

Individuals with higher levels of FoMO are more likely to engage in frequent and compulsive social media use [3]. The structure of Instagram Reels, which offers an endless stream of content, may intensify FoMO by creating a persistent need to remain connected. This can lead to prolonged screen time and habitual checking behaviours. FoMO-driven engagement may also increase cognitive

load by encouraging multitasking and frequent switching between stimuli. The human cognitive system has limited processing capacity, and excessive information input can lead to overload, thereby impairing attention and performance [16].

From a theoretical perspective, individuals actively select media to fulfil specific psychological needs such as entertainment, social interaction, and escapism [10]. While such engagement may provide short-term satisfaction, excessive use may result in unintended cognitive and psychological consequences.

Existing literature highlights that excessive social media use is associated with reduced academic performance, increased anxiety, and impaired cognitive functioning [2,11]. However, most studies have focused on general social media usage rather than specific formats such as short-form video content, which may have distinct effects due to their rapid and immersive nature.

Despite the growing popularity of Instagram Reels, research examining its specific impact on attention span remains limited. Furthermore, the mediating role of psychological factors such as FoMO has not been sufficiently explored.

Another important gap relates to cultural context. Most existing studies have been conducted in Western populations, with limited research in developing countries such as India. Given the rapid growth of social media usage among young adults in India, context-specific research is needed to understand local behavioural patterns and cultural influences [17].

Young adults, particularly college students, represent a highly relevant population for this study due to their high engagement with social media and vulnerability to digital distractions. Attention span is also a critical factor influencing their academic performance and well-being.

The present study aims to examine the relationship between Instagram Reels consumption and attention span among young adults, with FoMO as a mediating variable. By integrating cognitive and psychological perspectives, this research seeks to provide a comprehensive understanding of how short-form video content influences attention processes.

In conclusion, the rise of short-form video platforms represents a significant shift in digital media consumption. While these platforms enhance accessibility and engagement, they may also pose risks to cognitive functioning, particularly attention span. The role of FoMO further highlights the importance of examining psychological mechanisms alongside behavioural patterns [1, 2].

REVIEW OF LITERATURE

The rapid expansion of digital technologies has significantly transformed patterns of media consumption, particularly among young adults. Social media platforms have evolved into complex systems influencing cognitive, emotional, and behavioural processes. Research indicates that excessive engagement with digital media may negatively impact cognitive

functioning, particularly attention. Frequent multitasking and continuous exposure to information can lead to attentional fragmentation and reduced ability to sustain focus ^[15]. Additionally, the internet environment promotes superficial information processing, encouraging users to scan rather than deeply engage with content ^[14]. Studies have further shown that heavy media multitaskers demonstrate lower attentional control and cognitive efficiency ^[13].

Recent literature highlights that high levels of social media use are associated with reduced academic performance, increased distractibility, and impaired concentration ^[9,11]. Digital platforms are also designed to reinforce engagement through reward-based mechanisms, which may reduce users' tolerance for less stimulating tasks and negatively affect attention span over time ^[12].

With the emergence of short-form video platforms such as Instagram Reels, TikTok, and YouTube Shorts, concerns regarding attention span have intensified. These platforms deliver brief, rapidly changing, and highly stimulating content that requires minimal cognitive effort. According to cognitive load theory, excessive exposure to such stimuli can overwhelm cognitive processing capacity and impair attention ^[16]. Empirical studies have shown that frequent consumption of short-form videos is associated with reduced attention span and increased impulsivity among young adults. The continuous and algorithm-driven nature of these platforms promotes prolonged engagement, limiting opportunities for cognitive rest and deep processing.

Fear of Missing Out (FoMO) has emerged as a significant psychological factor associated with social media usage. FoMO refers to the apprehension that others may be experiencing rewarding events without one's participation ^[14]. Individuals with high FoMO tend to engage in frequent checking behaviours and prolonged social media use ^[3]. Research has also linked FoMO to problematic usage patterns and social media addiction ^[2]. Moreover, FoMO has been associated with negative psychological outcomes such as anxiety, depression, and reduced well-being ^[8].

FoMO may also influence cognitive functioning. Individuals experiencing FoMO often engage in frequent task-switching and divided attention, which can reduce cognitive efficiency and impair sustained focus ^[15]. Furthermore, FoMO increases cognitive load by creating persistent mental preoccupation with social information, thereby limiting attentional resources ^[16]. Studies have shown that FoMO negatively affects academic engagement and concentration among students ^[1,6].

The mediating role of FoMO provides a useful framework for understanding the relationship between social media use and attention span. Rather than a direct effect, social media engagement may influence attention through psychological mechanisms. Previous studies have demonstrated that FoMO mediates the relationship between social media use and problematic behaviours

^[7,14]. However, limited research has examined this mediating role in the context of short-form video consumption and attention span.

Additionally, most existing studies have been conducted in Western contexts, with limited research focusing on developing countries such as India. Given the rapid increase in social media usage among Indian youth, there is a need for context-specific research. The present study addresses these gaps by examining the relationship between Instagram Reels consumption, FoMO, and attention span among young adults, thereby contributing to the growing field of digital media psychology.

METHODOLOGY

Research objectives

To examine the relationship between Instagram Reels consumption and attention span among young adults.

To assess the relationship between Instagram Reels usage and Fear of Missing Out (FoMO).

To examine the relationship between Fear of Missing Out (FoMO) and attention span.

To investigate the mediating role of Fear of Missing Out (FoMO) in the relationship between Instagram Reels consumption and attention span.

Research hypotheses

H1: Instagram Reels consumption will be significantly negatively associated with attention span among young adults.

H2: Instagram Reels consumption will be significantly positively associated with Fear of Missing Out (FoMO).

H3: Fear of Missing Out (FoMO) will be significantly negatively associated with attention span.

H4: Fear of Missing Out (FoMO) will significantly mediate the relationship between Instagram Reels consumption and attention span.

Sample

The sample for the present study will consist of approximately 250 participants aged between 18 and 25 years. The participants will be drawn from undergraduate and postgraduate student populations enrolled in various colleges located in Bathinda. This group has been selected due to its high level of engagement with social media platforms, making it particularly relevant for examining the relationship between Instagram Reels consumption, Fear of Missing Out (FoMO), and attention span.

Inclusion criteria

Participants will be included in the study if they meet the following criteria: individuals aged between 18 and 25 years; currently enrolled as undergraduate or postgraduate students in colleges located in Bathinda; active users of Instagram, particularly those who engage with Instagram Reels; and individuals who provide informed consent to participate in the study.

Exclusion criteria

Participants will be excluded from the study if they fall outside the specified age range of 18 to 25 years; are not enrolled as students in colleges in Bathinda; do not use Instagram or do not

engage with Reels content; or fail to provide informed consent. Additionally, incomplete or improperly filled questionnaires will be excluded from the final analysis to ensure the accuracy and reliability of the data.

Tools

The present study will employ standardized and adapted instruments to measure Instagram Reels consumption, Fear of Missing Out (FoMO), and attention span.

Social media usage scale (adapted for Instagram Reels)

Instagram Reels consumption will be assessed using an adapted version of a Social Media Usage Scale. The scale will be modified to specifically measure the frequency, duration, and intensity of engagement with Instagram Reels. It will include items related to time spent on Reels, frequency of checking Reels, and patterns of scrolling behaviour. Responses will be recorded on a Likert-type scale, ranging from low to high usage. The adaptation ensures content validity by aligning the items with short-form video consumption behaviour.

Fear of missing out scale (FoMO scale)

Fear of Missing Out will be measured using the FoMO Scale developed by Przybylski et al. (2013). This is a widely used standardized instrument consisting of 10 items that assess individuals' apprehension about missing rewarding social experiences. The scale captures emotional and cognitive aspects of FoMO, such as the need to stay connected and concerns about being excluded. Responses are recorded on a 5-point Likert scale ranging from "not at all true of me" to "extremely true of me." The scale has demonstrated good reliability and validity across various populations.

Attention control scale (ACS)

Attention span will be measured using the Attention Control Scale developed by Derryberry and Reed (2002). This scale consists of 20 items designed to assess an individual's ability to focus attention as well as shift attention when required. It includes two dimensions: attentional focusing and attentional shifting. Participants respond on a Likert scale, indicating how well each statement describes their attentional abilities. The scale is widely used in psychological research and has demonstrated satisfactory psychometric properties.

All the above instruments will be compiled into a structured questionnaire for data collection. The selected tools are appropriate for measuring the constructs under study and ensure reliability and validity in assessing Instagram Reels usage, FoMO, and attention span.

Procedure

The data for the present study will be collected using a structured questionnaire designed to assess Instagram Reels consumption, Fear of Missing Out (FoMO), and attention span among participants. Before data collection, permission will be obtained from the respective colleges in Bathinda to approach students for participation. Participants who meet the inclusion

criteria will be invited to take part in the study. The questionnaire will be administered either in an online format (such as Google Forms) or through printed copies, depending on accessibility and convenience. Before responding to the questionnaire, participants will be provided with a brief description of the study, including its purpose and significance. Informed consent will be obtained from all participants, ensuring that their participation is voluntary and that they have the right to withdraw from the study at any stage without any consequences. Participants will be instructed to respond honestly to all items in the questionnaire. The estimated time required to complete the questionnaire will be approximately 10–15 minutes. To ensure confidentiality, no personal identifying information will be collected, and responses will be kept anonymous. The collected data will be used solely for research purposes. After data collection, the responses will be carefully screened for completeness and accuracy. Incomplete or inconsistent responses will be excluded from the final analysis to maintain data quality. All ethical guidelines related to psychological research will be strictly followed throughout the data collection process.

RESULTS

The demographic characteristics of the participants are presented in Table 1. The sample consisted of 250 participants, with females (56%) slightly outnumbering males (44%). The majority of participants were aged between 18–20 years (48%), followed by 21–23 years (38%) and 24–25 years (14%). In terms of educational status, most participants were undergraduate students (72%), while 28% were postgraduate students. Regarding daily Instagram usage, 48% of participants reported spending 1–3 hours on Instagram, while 36% reported usage of more than 3 hours per day, indicating high engagement with the platform.

Table 1: Demographic profile of participants (N = 250)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	110	44.0
	Female	140	56.0
Age	18–20 years	120	48.0
	21–23 years	95	38.0
	24–25 years	35	14.0
Education	Undergraduate	180	72.0
	Postgraduate	70	28.0
Daily Instagram Use	< 1 hour	40	16.0
	1–3 hours	120	48.0
	> 3 hours	90	36.0

The descriptive statistics of the study variables are shown in Table 2. Instagram Reels consumption showed a relatively high mean ($M = 3.85$, $SD = 0.76$), indicating frequent usage. FoMO levels were also moderately high ($M = 3.60$, $SD = 0.82$), while attention span scores were comparatively lower ($M = 2.95$, $SD = 0.70$), suggesting reduced attentional capacity.

Table 2: Descriptive statistics of study variables

Variable	Mean (M)	Standard Deviation (SD)	Minimum	Maximum
Instagram Reels Consumption	3.85	0.76	1.80	5.00
FoMO	3.60	0.82	1.50	5.00
Attention Span	2.95	0.70	1.20	4.50

The reliability analysis presented in Table 3 indicates good internal consistency for all scales, with Cronbach's alpha values exceeding 0.80.

Table 3: Reliability analysis of scales

Variable	No. of Items	Cronbach's Alpha (α)
Reels Consumption Scale	8	0.82
FoMO Scale	10	0.88
Attention Control Scale	20	0.85

The correlation matrix is presented in Table 4. Instagram Reels consumption was positively correlated with FoMO ($r = .52, p < .01$) and negatively correlated with attention span ($r = -.46, p < .01$). FoMO was also negatively correlated with attention span ($r = -.50, p < .01$).

Table 4: Correlation matrix among study variables

Variables	1	2	3
Reels Consumption	—		
FoMO	.52**	—	
Attention Span	-.46**	-.50**	—

Note: $p < .01$

The regression analysis results are presented in Table 5. Instagram Reels consumption significantly predicted attention span ($\beta = -.46, p < .001$), explaining 21% of the variance. It also significantly predicted FoMO ($\beta = 0.52, p < .001$), accounting for 27% of the variance.

Table 5: Regression analysis

(A) Reels consumption predicting attention span

Predictor	β	R ²	p
Reels Consumption	-0.46	0.21	.001

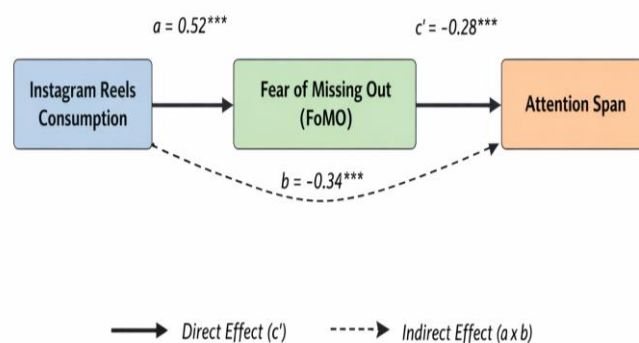
(B) Reels consumption predicting FoMO

Predictor	β	R ²	p
Reels Consumption	0.52	0.27	.001

Table 6 presents the mediation analysis results, and Figure 1 illustrates them. The direct effect of Reels consumption on attention span was significant ($\beta = -0.28$), and the indirect effect through FoMO was also significant, as the confidence interval did not include zero. This indicates partial mediation.

Table 6: Mediation analysis (PROCESS Model 4)

Effect Type	Effect	SE	95% Confidence Interval
Direct Effect (Reels $\rightarrow$ Attention)	-0.28	0.06	[-0.40, -0.16]
Indirect Effect (Reels $\rightarrow$ FoMO $\rightarrow$ Attention)	-0.18	0.05	[-0.30, -0.09]

Figure 1: Mediation model

DISCUSSION

The present study examined the relationship between Instagram Reels consumption, Fear of Missing Out (FoMO), and attention span among young adults. The findings revealed that higher engagement with Reels is significantly associated with reduced attention span, indicating that frequent exposure to rapidly changing short-form content may impair sustained cognitive focus. Additionally, Reels consumption was positively related to FoMO, suggesting that continuous and algorithm-driven content increases the need to stay constantly connected. FoMO was also negatively associated with attention span, implying that individuals with higher FoMO are more likely to multitask and shift attention frequently. Importantly, FoMO partially mediated the relationship between Reels consumption and attention span, highlighting the role of psychological mechanisms in influencing cognitive outcomes. These findings emphasise that both behavioural patterns and internal psychological states contribute to reduced attentional capacity. The study underscores the importance of promoting balanced digital usage and addressing FoMO to enhance attention and well-being among young adults.

CONCLUSION

In conclusion, the present study provides empirical evidence on the relationship between Instagram Reels consumption, Fear of Missing Out (FoMO), and attention span among young adults. The findings demonstrate that excessive engagement with short-form video content is associated with reduced attention span, both directly and indirectly through increased FoMO. This highlights the combined influence of technological features and psychological processes on cognitive functioning. The study contributes to digital media psychology by identifying FoMO as a key mediating factor in understanding how social media affects attention. Despite its contributions, the study is limited by its cross-sectional design and reliance on self-report measures. Future research should adopt longitudinal and experimental approaches to establish causal relationships and explore additional psychological variables. Overall, the findings emphasise the need for promoting responsible social media use and developing interventions to reduce FoMO, thereby improving attention span and overall well-being in young adults.

REFERENCES

1. Alt D, 2015. College students' academic motivation, media engagement and fear of missing out. *Comput Human Behav.* 49, Pages 111–119. Doi: <https://doi.org/10.1016/j.chb.2015.02.057>.
2. Andreassen CS, Torsheim T, Brunborg GS, et al, 2016. Development of a facebook addiction scale. *Psychol Rep.* 110(2), Pages 501–517. Doi: <https://doi.org/10.2466/02.09.18.PR0.110.2.501-517>
3. Blackwell D, Leaman C, Trampusch R, et al, 2017. Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use. *Pers Individ Dif.* 116, Pages 69–72. Doi: <https://doi.org/10.1016/j.paid.2017.04.039>
4. Derryberry D, Reed MA, 2002. Anxiety-related attentional biases and their regulation by attentional control. *J Abnorm Psychol.* 111(2), Pages 225–236. Doi: <https://doi.org/10.1037/0021-843X.111.2.225>
5. Dhir A, Yossatorn Y, Kaur P, et al, 2018. Online social media fatigue and psychological well-being—A study of compulsive use, fear of missing out, fatigue, anxiety and depression. *Int J Inf Manage.* 40, Pages 141–152. Doi: <https://doi.org/10.1016/j.ijinfomgt.2018.01.012>
6. Elhai JD, Levine JC, Dvorak RD, et al, 2016. Fear of missing out, need for touch, anxiety and depression are related to problematic smartphone use. *Comput Human Behav.* 63, Pages 509–516. Doi: <https://doi.org/10.1016/j.chb.2016.05.079>
7. Elhai JD, Yang H, Fang J, et al, 2018. Depression and anxiety symptoms are related to problematic smartphone use severity. *J Affect Disord.* 207, Pages 251–259. Doi: <https://doi.org/10.1016/j.jad.2016.08.030>
8. Junco R, 2012. Too much face and not enough books: The relationship between Facebook use and academic performance. *Comput Human Behav.* 28(1), Pages 187–198. Doi: <https://doi.org/10.1016/j.chb.2011.08.026>
9. Katz E, Blumler JG, Gurevitch M, 1973. Uses and gratifications research. *Public Opin Q.* 37(4), Pages 509–523. Doi: <https://doi.org/10.1086/268109>
10. Kuss DJ, Griffiths MD, 2017. Social networking sites and addiction: Ten lessons learned. *Int J Environ Res Public Health.* 14(3), Pages 311. Doi: <https://doi.org/10.3390/ijerph14030311>
11. Montag C, Hegelich S, 2020. Understanding digital addiction: Where we stand and where to go. *Nat Hum Behav.* 4, Pages 173–174. Doi: <https://doi.org/10.1038/s41562-019-0795-7>
12. Ophir E, Nass C, Wagner AD, 2009. Cognitive control in media multitaskers. *Proc Natl Acad Sci USA.* 106(37), Pages 15583–15587. Doi: <https://doi.org/10.1073/pnas.0903620106>
13. Przybylski AK, Murayama K, DeHaan CR, et al, 2013. Motivational, emotional, and behavioral correlates of fear of missing out. *Comput Human Behav.* 29(4), Pages 1841–1848. Doi: <https://doi.org/10.1016/j.chb.2013.02.014>
14. Rosen LD, Lim AF, Felt J, et al, 2013. Media multitasking and learning. *Comput Human Behav.* 29(3), Pages 948–958. Doi: <https://doi.org/10.1016/j.chb.2012.10.016>
15. Sweller J, 1988. Cognitive load during problem solving: Effects on learning. *Cogn Sci.* 12(2), Pages 257–285. Doi: https://doi.org/10.1207/s15516709cog1202_4
16. Zhang Y, Zhao L, Lu Y, et al, 2021. Short video use and attention deficit among young adults. *Comput Human Behav.* 120, Pages 106751. Doi: <https://doi.org/10.1016/j.chb.2021.106751>
17. He Q, Turel O, Brevers D, et al, 2022. Short-form video addiction and cognitive functioning. *J Behav Addict.* 11(2), Pages 456–468. Doi: <https://doi.org/10.1556/2006.2022.00030>
18. Montag C, Sindermann C, et al, 2021. Digital media use and cognitive functioning: A review. *Front Psychol.* 12, Pages 654321. Doi: <https://doi.org/10.3389/fpsyg.2021.654321>