

**The Impact of Short-Form Video Consumption on Attention Span, Memory Retention, and Academic Performance Among Undergraduates of State Universities in Sri Lanka.**

**RESEARCH PROPOSAL**

**By**

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# 01.Background Study

Nowadays, the short-form video platforms, including Tik Tok, Instagram Reels, and YouTube Shorts, play a central role in the media consumption of young people in the modern digital environment. The videos are between fifteen and sixty seconds long, and they are made to capture the attention immediately, as they have rapid scenes-switching, bright images, catchy sound, and personalization with the help of algorithms (Paltaratskaya,2023). Even though these platforms can be entertaining and even lead to micro-learning, their layout promotes fragmented and passive consumption, which may interfere with more intricate thinking.

Through the Cognitive Load Theory (Sweller,1988), the human working memory has a restricted capacity to store and process a given amount of information at a given time. The repetitive scrolling of short videos presents a variety of visual and auditory information at once, which causes extraneous cognitive load that overwhelms the ability of the mind to concentrate well. In the working memory model developed by Baddeley (2000), this overload is experienced by the phonological loop (or the auditory information) and the visuospatial sketchpad (or the visual information) leaving very little time to encode meaningful information. This leads to the brain becoming unable to effectively organize and store new information, which reduces the efficiency of short-term memory and long-term memory formation (PsychFuel,2023).

Furthermore, the dopamine-based feedback loops constitute the core of a short-video platform and continuously reinforce a user interactivity. Every like, comment or video is a little burst of satisfaction and it boosts the desire to scroll further (Medrano, 2022). With time, such conditioning causes the brain to desire novelty and immediate gratification and slowly reduces sustained attention, the basis of complex academic tasks like critical reading, understanding, and critical thinking (Hollis and Was, 2016; Firth, Torous, and Firth, 2020).

This problem becomes more topical in Sri Lanka. As the number of users of social media has reached more than 8.2 million actives as of 2025 (DataReportal,2025), with the greatest number of users falling in the 18-24 age bracket (DataReportal,2025), university students are one of the most digitally engulfed population groups. Short videos are usually consumed by many undergraduates during their breaks or at late hours without them usually realizing that such practices are disrupting their capacity to retain information, focus in lecture rooms or grasp academic reading materials (PsychFuel,2023).

To make matters worse are the concerns of privacy and security, which act as moderating elements and further stress the cognitive resources. When the users learn about data surveillance and algorithmic observation, as well as being exposed to fake news, they make a mental trade-off between entertainment and information security, which is what Dinev and Hart (2006) refer to as privacy calculus. This constant background assessment causes a diversion of the mental energy to content processing, causing what Kaplan (1995) refers to as a state of continuous partial attention. Not only does such divided attention interfere with working memory, but it also encourages surface interaction with information which is the exact reverse of deep processing that is required to achieve long-term learning and understanding (Bartlett, 1932; Otto,2025).

Whenever users are insecure about misinformation or manipulation over the internet, they are more likely to be guided by intuitive and fast judgment as opposed to critical and analytical thinking (Petty and Cacioppo,1986). Such a move towards heuristic processing can decrease the quality of decision-making and the critical thinking skills- skills that are necessary to be successful in academics and in the workplace.

Although evidence of the use of short-form videos is extensive among the Sri Lankan undergraduates, there is a lack of empirical evidence regarding the impact of the digital behavior in question on the essential cognitive processes, including working memory, memory retention, reading comprehension, and decision-making. The knowledge of such interactions is crucial because such mental abilities are the direct sources of academic achievements, concentration and intellectual development of students in the long run.

# 02.Research Problems.

Although short-form video platforms have become popular around the world swiftly and the knowledge concerning the cognitive impact of such platforms has grown, there is a dire void in empirical studies regarding the effect of the platforms on the most important cognitive processes of undergraduate students in the state universities in Sri Lanka. Although the results of international studies have shown that the excessive use of short videos can lower attention, memory, and analytical thinking (Firth et al., 2020; Otto, 2025; Paltaratskaya, 2023), these results could not be directly used in a study of Sri Lanka, as there are significant differences in the digital infrastructure, media literacy, education culture, and regulatory measures. More to the point, there is still no research that evaluates the simultaneous impact of the use of short-form video on the four most directly related areas of cognition most relevant to academic success, which are working memory, memory retention, reading comprehension, and decision-making, in this particular student group.

This gap in knowledge is quite worrying considering the fact that the usage of social media is rife among the young people of Sri Lanka. By 2025, more than 8.2 million Sri Lankans are active users of social media with a majority of them being in the age group of 18-24 (DataReportal, 2025). To most undergraduates, short-form videos have ceased to be a mere thing to watch, but rather a daily routine and even a light learning device. The same, however, is incompatible with the cognitive basis of university learning: the ability to sustain attention, encode information, read analytically, and judge reflexively matches the short-video platform, which is optimized to prioritize fast visual stimuli, algorithms, and dopamine-driven reward systems (Medrano, 2022; Paltaratskaya,2023). In the absence of local evidence-based research, teachers and learners do not know how this behavior is disrupting the concept of attention, memory and achievement in practical situations at the university.

Another theoretical gap is in the awareness of the moderating effect of privacy and security issues. The majority of digital cognition studies consider content use as a separate phenomenon, which ignores the secondary mental load of surveillance anxiety, data profiling, and potential exposure to false information (Baruh et al., 2017; Lang, 2000). Students need to be more aware of being monitored online in Sri Lanka, where the overall privacy literacy and regulatory protection are still in its infancy. According to the Privacy Calculus Theory, (Dinev and Hart, 2006) such anxieties elicit unremitting thought and attention in which the user unconsciously weighs the dangers of data disclosure against the advantages of being online. This is a continuous mental bargaining that splits attention between the processing of content and self-protection that leads to what Ophir et al. (2009) describe as cognitive multitasking. In the long term, this multitasking can further enhance the adverse consequences of a short-video-consumption, as it decreases the efficiency of working memory and understanding (Ayres and Sweller,2014). However, this modulating factor has not been studied regarding the use of short-form video by Sri Lankan undergraduates.

The lack of such research has its far-reaching implications far beyond theory. In case indeed attention control, memory performance, and reasoning abilities are deteriorating due to the consumption of short videos, it might have adverse effects on academic performance, problem-solving skills, and future cognitive well-being. As an example, the inability to understand lectures or complex tasks may be experienced with the working memory overloaded with rapid audiovisual information (Baddeley, 2000). It may help to watch the short videos prior to sleep and decrease remembering information during revision (PsychFuel,2023). A critical writing and reading comprehension can be negatively affected by habitual superficial activity (Otto, 2025b). And security concerns might cause decision-making to take on an expediency-based route (Petty & Cacioppo, 1986), which diminishes the capability of students in an era of misinformation to process the information critically.

Insufficient evidence on Sri Lanka alone becomes a barrier to the ability of the educators, policymakers and institutions to formulate suitable intervention. In the absence of context-sensitive data, digital wellness, media literacy, and balanced technology use promotion programs become useless or culturally illogical. The strategies used in the West cannot be applied directly to the situation on the ground where such problems as use of shared devices, unstable internet-connection, and social attitudes toward data sharing are more common.

Thus, this study is aimed at solving an urgent and complex issue: a lack of empirical knowledge of the impact of short-form video use on the cognitive performance of undergraduates at universities in Sri Lanka under the state; and the moderating effect of privacy and security issues. It is important to fill this gap so that it would prove possible to create localized, evidence-based frames that could be used to maintain cognitive health, enhance academic outcomes, and shape effective digital behavior in the changing environment of higher education.

**References**

Paltaratskaya, V. (2023). Informing current models of time perception by looking at cognitive load during the use of short form video applications (SVAs) [Doctoral dissertation, University of Illinois at Urbana-Champaign].