



Impact of Short-form Videos low and high users on Attention Lapses and Working Memory in among adolescents and adult: A comparative study.

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ABSTRACT

The increasing popularity of short form videos. SFV platform has significantly changed how people consume daily social media platforms and this shift has growing rapidly concern about its impact on cognitive abilities of the humans. SFV platform also deliver very short form videos that is lasting for about few seconds and combined with fast visual changes with continue scrolling and personalised preferences by the algorithm. Such repeated exposure to small short and highly stimulating content may affect our crucial cognitive functions, specially attention and working memory. So in this study, we investigate how attention lapses and working memory differ between individual who use SFV a lot and those who use it much less. We used a questionnaire a quantitative comparative designed recruiting 152, adolescent and adults between the age of 15 to 50. This participants were divided into two group based on their daily SFV usage, low use group under one hour per day and high use group 3 or more hours per day. We measure attention lapse using the cognitive failure, questionnaire and assist working memory with a standardised MWQ mind wandering questionnaire self report scale. The result of independent sample T test shown that the high SFV group has significantly more attention lapse and more difficulty with working memory, then the low use group. Just findings suggest that regular use of short form video is closely tight to weaker tentional control and reduced working memory. Overall, this results add to the growing body of research on digital media and its impact on how we think and process information offering new evidence about cognitive risk of frequent SFV we use.

KEYWORDS: Short-form video, Attention lapses, Working memory, Mind wandering, Cognitive functioning, Social media usage

I. INTRODUCTION

Background of the study

In the recent years, digital technology has grown at a very fast pace and changing how we access information and interact with social media. Among all this new forms of digital media, individual come across short form videos platforms have been extremely popular among people. This platforms like TikTok, Instagram, reuse and YouTube short spotlight, Snapchat offer, short and quick videos that people engaged through fast changes, endless scrolling, and their own personalised content preferences, because of this, many people are using this platform every day from teenagers to adults. They are easy to access and keep people entertain. Also at the same time there are growing worries about how they might affect our thinking, specially when we talk about Attention and working memory.

Short form videos often give us information in a very quick bite-size way. They encourage us to shift focus often because every few second content changes. Unlike traditional TV shows or books which ask for longer focus compare to SFV, it rely on quick burst of novelty. This constant flow might affect how we control our attention and how we remember things. If you keep shifting from one thing to another, it might make it harder to stay focused or keep track of information, specially when the task is required of a lot of concentration.

Also on top of that this platform give us a sense of revert. We get a little rush. Every time we see something new. The more we use them the more we comeback because the app always show something we like over time. This habit might shape how we think specially in how we pay attention and how we hold information in mind, that's why it's really important to understand how regular short form video usage might affect our cognitive skill, specially when we talk about attention in working memory.

Attention lapse

Attention is a key mental skill that help us focus on. What matters and ignore distractions. It's crucial for doing well in school at work and every day life. Still, attention is it something we have all the time, sometimes we lose focus and this moments are called attention laps attention laps happen when we suddenly lose focus often because we get distracted or our mine wanders, this laps can really effect how well we do task, specially when we need to concentrate for a long time.

When we use digital media a lot, specially this short videos reels, we tend to switch attention quickly. Our brain get used to constant changes and so it become harder to keep focus on one thing at a long period. People who spent a lot of time on this platform might become more easily distracted, and have more difficulty staying on one task. This could lower how well they perform, not just in studies, but in every day activities.

Working Memory

Working memories, another important thinking skill. It helps us keep information in mind for a short time, so we can use it when we are working on a task. It plays a big role in things like problem-solving, learning, new information, and staying organised, but when we use digital media heavily, specially when we talk about short intense burst of content. It might affect our working memory when we keep switching attention. So often it puts more pressure on our brain. It becomes very hard to keep bits of information in mind and that might slowdown how well we process new task, so to really understand the effect of short form video we need to look closely at how it relate to working memory. When people watch this fast video regularly, they might struggle more to keep small pieces of information in their head. While working as a result, their ability to solve problems and remember instruction can get weaker. That's why it really important to study how this kind of media use might affect us over time, so we can see if this patterns really do slowdown or thinking skills and what we can do about it

Problems statement

In today's time, short form, video platforms like Instagram reel, and YouTube shorts, etc have become very popular, specially among young people. Many individuals spend a lot of time watching this video because they are short entertaining an easy taxes. So this platform continuously provide new content which make it difficult for user to stop watching as a result, people may spend several hours scrolling short videos without realising how much time has passed.

Attention and working. Memory are very important. Cognitive function attention help individual to focus on task while working memory, help it holding and using information later on for a short period of time. This function are necessary for learning and completing every day task. However, frequent

exposure to fast changing and high stimulation content will affect our brains ability to focus for longer period. Individuals who use short form videos, platforms excessively may experience more distraction, difficulty, concentrating, and problem in remembering information.

Although many studies have examine the effect of digital media and Screen Time, but fewer studies have specifically focused on short for video usage. Also, limited research has compared individual who use short form video a lot with those who use them less. Therefore, it is important to examine whether high short form video uses is associated with greater attention lapse and working memory or not.

Research questions

The present study was conducted to answer the following questions:

- Q.Is there a difference in attention lapse between high and low short form video users?
- Q.Is there a difference in working memory between high and low short form video users?
- Q.Do individual who use short form video more frequently, experience, greater attention, and working memory problems?
- Q.Is short form video usage related to cognitive functioning in adult and adolescence?

Rational of the study

Short form video usage has increased rapidly in recent years. Many people, specifically students and young adults spend a significant amount of time watching short videos daily. So this videos are designed in such a way that keeps the user engaged for longer period of time through the continuous scrolling and fast content changes which pulls the attention of the user.

Attention and working memory are essential for academic performance and daily life functioning. Whether it is for young teenagers students or the adults. If this cognitive functions are affected, it will influence learning, concentration and productivity of the individual. Since short form videos provide constant stimulation. It is important to understand whether frequent use of this platform affects attention or memory.

Most research has focused on general social media use or Screen Time, but short form videos are different because of their fast phases and continues content delivery. There is a limited research examining the specific impact of short form video usage on cognitive functioning.

Therefore, the presence study was conducted to compare individual with high and low short for video uses in terms of attention, lapse, and working memory. This study helps in understanding whether excessive short form video usage is related to cognitive difficulties.

Significance of the study

The presence study is important because short-term video users has become a very common part of our daily life. Many students spend several hours watching short videos which may affect their ability to concentrate and remember information this study will help us understanding how short form video usage is related to attention and working memory and the findings may help student become more aware of how excessive video uses can affect their cognitive functioning. This study also useful to researcher and psychologist as it adds to the existing knowledge about digital media cognitive functioning. This may help in understanding the possible cognitive effect of excessive short form video usage. So in addition to this, the findings may encourage individual to develop healthier digital habit and manage their screen time more effectively.

Scope of the study

The present study focus on exhibiting attention lapse , relation, short for videos, usage, it compares individual who use short form video platform frequently with those who use them less. The study was conducted among young, adolescent and adults and used questionnaire to measure attention laps and working memory along with short form video, use it self report.

The study examine the relationship between the short form, use and cognitive functioning at one point in time. It does not examining long-term effect.

OBJECTIVE

Objective of the study

The use of short form video platform is increased rapidly specially among young teenagers and adults. This platform provide continues and fast changing content which may influence cognitive functioning so attention and working memory at two important cognitive processes which help individual to concentrate, learn and perform daily life functioning and task effectively, so excessive engagement with salt form videos. Content may interfere with this processes.

Therefore, the presence study was conducted with the following objectives

- >To examine the level of attention labs among individual with different level of short form video usage.
- >To examine the level of working memory, difficulty among individuals with different level of chat video usage.
- >To compare attention lapses between high short form, video user and low short form video users
- >To understand the cognitive impact of habitual short form, video usage, and attention and working memory functioning.

The study mainly focus on identifying whether individual who spend more time using short form, video platform, experience, greater cognitive difficulty compared to those who use them less frequently.

Hypothesis of the study

Based on the previous research, finding and theoretical understanding the following hypothesis, where formulated:

Null Hypothesis

- **H1:** there will be no significant differences in attention labs between high short form video and low short form video users
- **H2:** there will be no significant difference in working memory difficulties between high short video user, low short form video user

Alternative hypothesis

- **H1:** high shot from video user will show significantly greater attention labs compared to low shot from video users
- **H2:** high short form video user will show significantly greater working memory difficulties compared to the low shot from video user.

This hypothesis are based on assumption that frequent exposure to rapidly changing digital content with negatively influence, attention, stability, and working memory functioning

II. LITERATURE REVIEW

Digital media and attention

In the last decade, digital media usage has increased very rapidly. The growth is immense and it has changed the way people use their retention in daily life. So digital media platform provide very quick and users are very constantly exposed to notification alerts and changing content. Because of this, the attention system is required to frequently shift from one stimulus to another. This continuous to exposure to rapid changing information that may influence attention, stability and concentration.

A study conducted by Eyal Ophir, Clifford Nass, and Anthony D. Wagner (2009) examine differences between heavy and light media task. The results show that the heavy media user had poor attention compared to light users. They found it heavy user had more difficult in ignoring irrelevant information and wear more easily. Distracted this suggest that frequent media exposure may we can filtering ability. Similarly, Cain and Mitroff (2011) also found that the individual who were expose to higher level of media assured, reduced cognitive control, and impaired attention filtering. This individual were more likely to get distracted by irrelevant stimuli when a person is repeatedly exposed to fast changing digital content., the brain may become more sensitive to novelty rather than sustained focus attention over time. This may reduce the ability to concentrate on task, which required continues attention, such as studying or reading may be other daily life functioning.

This finding suggests that the excessive digital media use may negatively influence attention functioning and may increase distractibility and attentional instability among the individuals.

Social media and cognitive control

Social media platform are design in such a way that they keep user engaged for longer period of time. This platform use personalise recommendation, notification, reward based mechanism such as like, comment, and continues content feeds. This feature make the platform highly engaging and difficult to disengage from.

Cognitive controls referred to ability of a person to regulate attention and behaviour. According to the task demands. It helps individual to focus on relevant information and ignore distractions. However, excessive use of social media may interfere with this ability

Rosen et al. (2014) found that increase technology usage was associated with reduced attention control and increase distractibility. Individual who use technology more frequently showed more difficulty in maintaining focus on task. So similarly Wilmer Sherman and Chein (2017) reported that excessive smart phone use and digital media use was associated with impaired when an executive functioning, including attention regulation and cognitive control.

The reward base structure of social media platform, rainforest repeated usage. When individuals receive rewarding stimuli frequently, their attention system becomes more responsive to external stimulation. This may reduce the ability to maintain focus on task which requires sustained attention over time, excessive engagement with social media may weaken attentional control mechanism and increase cognitive interference.

This finding suggest that excessive social media usage may negatively affect cognitive control and attention functioning.

Short form video and cognitive processing

Short form video platforms presents unique type of digital media exposure. This platforms provide videos which are very short and duration and rapidly change. User scan, scroll continuously and watch multiple videos within a short period.. this creates an environment where attention is constantly shifting. Unlike traditional media is requires sustained engagement, short form video platform, promote brief and repetitive attention engagement. This may reduce the brain's ability to maintain attention for longer period of time, so frequent exposure to rapidly changing content may condition the brain to expect constant stimulation rather than focus for a long time..

Zhang, chen, and zhao (2021) founded excessive short from video usage, was associated with reduce executive functioning and poor cognitive performance. Individual who spent more time on short form video platform showed lower attention stability and reduce cognitive efficiency.

Experimental findings also suggest the rapid presentation of digital stimuli may reduce cognitive persistence when individual are repeatedly exposed to fast changing stimuli they may develop lower tolerance for task requiring sustained attention overtime. This may reduce attention, stability, and cognitive control.

Finding suggest that excessive short form video usage may negatively influence attention functioning and cognitive processing.

Attention lapse and mind wondering

Attention labs referred to the temporary failure of maintaining attention on a task. This laps may result in distraction, mind, wondering, and sometimes cognitive errors so attention lapse are very common in daily life and may affect academic performance and task efficient.

Donald Broadbent and and colleagues (1982) develop the cognitive failure, questionnaire to measured attention, laps, and cognitive failure in daily life high score on this questionnaire, indicate greater attention and stability and cognitive difficulties.

Ralph et al. (2014) found that individuals who engaged in higher level of multimedia multitasking reported greater attention laps.. this individual experience, more frequent distraction and reduced greater attention stability. Frequently switching between digital stimuli may train the brain to shift attention rapidly rather than sustained focus.

When the attention system become adapted to rapid switching, individuals experience, increased mind, wondering, and reduce task engagement. This may negatively affect cognitive performance and daily functioning.

Finding suggest that excessive digital media use may increase attention, labs and reduce attention stability

Working memory and screen exposure

Working memory is an important cognitive function which allow individual to temporary store and process information. It plays a very important role in learning decision-making and reasoning. Working memory also help individual to maintain focus on a task and manage cognitive demands. Whatever the task requires

Alan baddelay (2000) explain that working memories, essential for cognitive functioning and executive control. Any disruption in working memory may affect overall cognitive performance.

Uncapher and Wagner (2018) founded heavy media multitasker shot poor working memory performance compared to light media user. This individuals had more difficulty in retaining and processing information.

Similarly, Ward et al. (2017.) found that even the presence of smartphones, reduce cognitive capacity and working memory.. when individual are exposed to the digital devices, their cognitive resources may become divided, and this will reduce their ability to perform the cognitive task smoothly or effectively.

Frequent exposure to rapidly changing, digital content will increase cognitive load and attention interference, this may reduce working memory, efficiency and impaired information processing, overtime, digital media usage negatively affect working memory function of the individuals.

Research Gap

Although many previous studies has examined that effect of digital media usage and cognitive functioning, several important gaps to exist. Most of the earlier research has focused on general digital media use social media use or smartphone usage. However, short form video platform represent a unique type of media exposure, this platform provide very brief fast, changing and highly stimulating content which encourage continue scrolling and prolonged engagement. Because of this unique characteristics, short form video usage may have different cognitive effects compared to the other form of digital media.

Another important gap is that many previous studies have mainly examine correlation between media usage and cognitive functioning. While this studies shows relationship between variables. They do not clearly compare individuals with different level of short form video usage. Direct comparison between high user and low user is important to understand whether high exposure is associated with greater cognitive difficulties.

In addition, relatively few studies have examine attention, labs and working memory together in relation to short form video usage. Attention working memory are closely related to cognitive processes and both are essential for cognitive functioning.. attention help individual focus on relieving information while working memory help in processing and retain that information. Any disruption is this process may negatively affect learning, academic performance, and daily life functioning.

Therefore, there is a need to specifically examine differences between high and low short form video user on attention, labs, and working memory. The present study attempts to address this gap by comparing individual based on their level of short form video usage. This will help in better understanding the cognitive impact of habitual short form video engagement and contribute to the existing literature in this area.

III. RESEARCH METHODOLOGY

Research design

The presence study used a quantitative comparative research design to examine differences in attention, labs, and working memory between high and low users of short form video. A quantitative design was used because the study involves measurement of cognitive variables using standardise questionnaire and stational analysis of numerical data..

A comparative design was considered suitable because the main objective of the study was to compare to groups of individual based on their level of short form video usage. The independent variable in the study was short form, video usage level, which consisted of two groups : high usage and low usage. The dependent variable where attention, laps and working memory difficulties.

This research was designed appropriate because it helped in identifying whether individual with high short form video usage showed greater attention, lapse and working memory difficulties.

Participants

The study initially included 152 participant participants were Young teenager and adult within the age of the range. 15 to 50 years. Both male and female participant were included in the study. Participant were recruited through online platform.

Participation in the study was voluntary. Informed consent was obtained from all the participants before data collection. Participants were informed about the purpose of the study and confidentiality of their responses was assured. No personal identifying information was collected and anonymity was maintained throughout the study.

For the purpose of statistical comparison, using independent sample T test, participants were divided into two groups based on their daily short form video uses duration, the final sample consistent of 96 participants.

>Low usage group: 54 participant reported using short form video platform for less than one hour per day

>High usage group: 42 participants who reported using short form video platform for three or more hours per day

This two group represented individual with clearly different level of short form video exposure.

Participants who regularly use short form video platforms, such Instagram, YouTube shorts and similar application where included in the study participant who reported neurological disorder neuro developmental disorder or severe psychological condition where excluded as this condition could affect cognitive functioning and influence the result

Sampling method

The presence study used purpose of sampling and convenience sampling method.

Convenient sampling was used because participant selected based on their accessibility and willingness to participate. Online platform made it easier to reach participant and collect data efficiently within the available time and resources.

Purpose of sampling was used to categories participants into high usage and low usage group based on their reported daily short form, video usage duration. This method and share data up to group default meaningfully in their level of exposure.

The sampling approached was appropriate for present study because the main objective was to compare individual based on their level of short form video usage. It allowed the researcher to select participant who made the specific criteria required for the study.

Tool used

The presence study use the following instruments to measure the main variable interest

1.Cognitive failure, questionnaire CFQ

The cognitive failure, questionnaire CFQ was developed by Donald broadbent and his colleagues in 1982. This questionnaire was used in present study to access attention lapse in daily life. The CF Q is a self report measured consisting of 25 items. This items SS common cognitive failure related to attention, perception, and memory in everyday situation.

Participant were required to date each item based on how often they experience such failures.

The response are given in a likert type scale indicating frequency. Higher total score on the CF Q indicates greater attention, labs, and more frequent cognitive failure, whereas lower score indicate better attention control.

The CF Q has been widely used in cognitive and clinical psychology research and has shown good reliability and validity across different studies. Because of its established psychometric properties, it was considered suitable for measuring attention lapse in the present study.

2•Working memory measure

Working memory was assessed using a self-report working memory scale dis scale, measure common difficulties in memory functioning. Particularly problem related to retaining information for short periods, organising information, and mentally manipulating information when performing task.

The item in the scale reflects every day working memory, failure, such as getting instructions, losing track or information while performing task are difficulty holding few information in mind. Participants were supposed to respond to each item based on their personal experiences.

Higher course on this scale indicates greater working memory difficulties, whereas lower school indicates better working memory functioning. This measure was selected because it helped in understanding the subjective working memory problem in daily life situations.

3•Short form video use scale

Short form video usage for assessed using self report, usage questionnaire. Were asked to report their average daily duration of engagement, which short form video platform such as Instagram reel, YouTube short, and similar applications.

Based on reported usage duration, participants were classified into two groups

Low usage group: user who report using platform for less than one hour per day

High usage group: user who reported using platform for more than three or more hours per day

This classification help clearly distinguish between individual with low and high exposure to short form video content. It allowed meaningful comparison of cognitive functioning between the two group.

Procedure

Data for the present study, we are collected using an online questionnaire platform. The online method was selected because it allowed easy access to participant made the data collection process, more convenient and efficient.. participant were contacted through the online platform and personal networks

Before beginning the questionnaire, participant provided with a brief description of the study, and the purpose of the study was explained clearly, and the participants were informed that their participation was completely volunteered. They were also informed that their in responses would remain confidential and would be used only for academic research purposes. Informed consent was obtained from all participants before the proceed with the questionnaire.

The questionnaire consist of multiple sections. The first section included basic demographic information such as age and gender. The second section exist short form video usage where participant reported their average daily used duration of platform such as Instagram reel and YouTube. This information was used to classify participant into low usage and high use. The third section included company failure, questionnaire, which measured attention laps in everyday life participant respondent each item based on their personal experiences. The fourth section included the working memory measure which assess difficulties related to retaining and manipulating information..

Participants were instructed to read each item carefully and then respond. Honestly, they were also instructed to complete all items without keeping any questions and entire process. Took approximately 15 to 20 minutes to complete.

After the data collection was completed, all responses were reviewed carefully. Incomplete responses and responses that did not meet the inclusion criteria were excluded from the final analysis. Participants where then classified into low and high short form video uses group based on their reported uses duration. The final sample used for comparative analysis consist of 96 participants.

Confidentiality and anonymity of all participant strictly maintain throughout the study. No identifying information was collected and the data were used only for research purposes.

Statistical analysis

Analysis was conducted to examining whether there were significant differences between high and low short form video user in terms of attention lapse, and working memory.

First, descriptive statistics were calculated for both groups. This included the mean and standard deviation for attention lapse and working memory scores. This statistics helped in understanding a general pattern of cognitive functioning in both the high usage and low usage group.

To examine group differences and independent sample t test was used. This test was appropriate when comparing the main scores of the two independent groups on continues variables. In the presence, the independently t test was used to compare high and low short form video user on attention lapses, and working memory.

The independent variable in the analysis was short for video usage level, which had two groups: low usage and high usage. The dependent variables were attention lapses, and working memory.

The level of statistical significance was set at $P < .05$. This means that if the obtained P value was less than .05., the difference between the groups was considered statistically significant.

This level of commonly used in psychological research is determined whether observed differences are likely due to chance or reflect real difference between groups.

The use of independent sample T test allowed objective comparison between the two groups and help determine whether higher shortage was associated with greater attention, labs and working memory difficulties.

IV. RESULTS

The presence study examine whether there are differences in attention, labs and working memory between individual who use short-term videos at low level and those who use them at high-level. So for this purpose, participants were divided into two group based on the daily usage of short form videos in which the low usage group included individual who deposited using short form videos platform for less than one hour per day and the high usage group, including individual dose who reported using this platform for more like three hours or more per day. An independent sample T test was conducted to compare the two groups on attention lapse and working memory scores.

The descriptive statistics showed a clear difference between the group in attention lapses. The low usage group.(N=54) had lower attention lapse scores ($M=2.11, SD=0.68$), while the high usage group(N=42) had high scores($M=3.02, SD=0.91$). This means that individual who use short form video platform are frequently reported more problems related to attention in their daily life. The independent sample T test confirmed that this difference was statistically significant, $t(94)=-5.42, p<.001$. This indicates that the difference between the groups was not due to chance, and high short-form video user experienced significantly greater attention lapses compared to low users.

A similarly pattern was observed in working memory scores. The low usage group reported lower working memory difficulties ($M=2.05, SD=0.61$), whereas the high usage group reported higher working memory difficulties ($M=2.89, SD=0.84$). This suggests that individuals who spent more time on short-firm video platforms experienced more problems related to retaining and managing information. The independent samples t-test showed that high short form video user had significantly, $t(94) = -5.54, p < .001$. This finding shows that high short form video user had significantly greater working memory difficulties compared to low usage individuals.

Overall, the results clearly shows that individuals with higher short form video usage reported more cognitive difficulties in both attention and working memory. The negative t-values indicate the direction of difference between the groups, showing that the high usage group had higher cognitive difficulty scores compared to the low usage group.

These findings supports the hypothesis of the present study. It suggests that increased use of short form video platforms is associated with greater attention lapses and working memory problems. This means that individuals who spend more time watching short form videos may experience reduced cognitive efficiency in important areas such as attention and memory.

Table 1 presents the means scores, standard deviations, and t-test results for both groups.

Table**1**

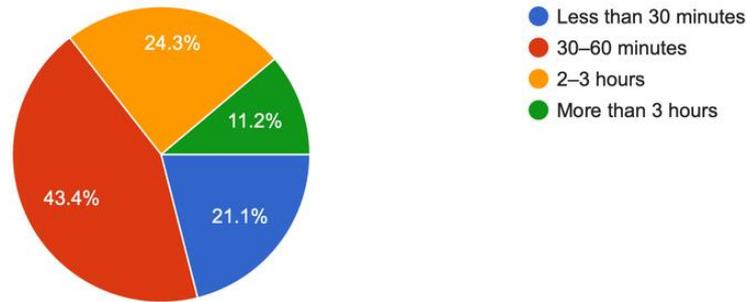
Independent Samples t-test Comparing Low and High Short-Form Video Users on Attention Lapses and Working Memory

Variable	Group	n	Mean	SD	t	df	p
Attention Lapses	Low Usage	54	2.11	0.68	-5.42	94	< .001
	High Usage	42	3.02	0.91			
Working Memory	Low Usage	54	2.05	0.61	-5.54	94	< .001
	High Usage	42	2.89	0.84			

Note: Higher scores indicate greater cognitive difficulties.

On average, how much time do you spend watching short-form videos per day?

152 responses



Cognitive Lapse Scores by Short-Form Video Usage

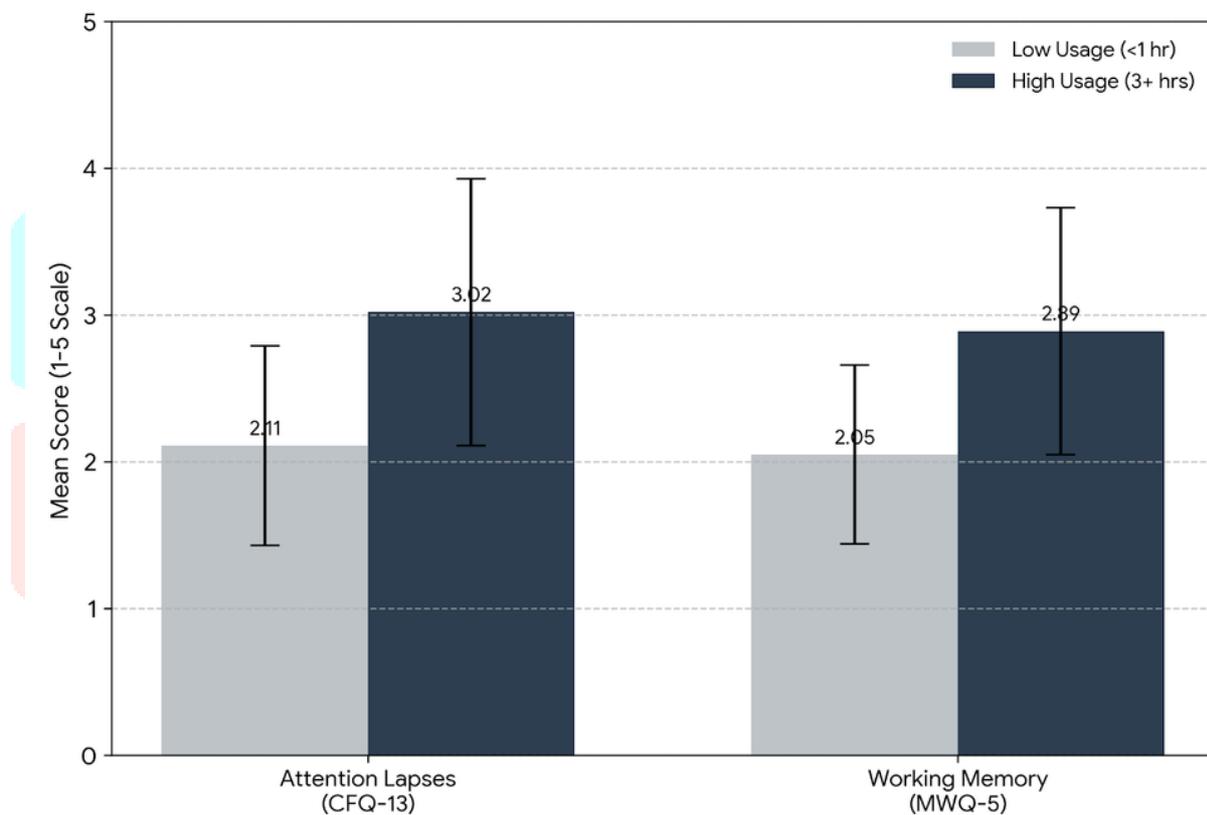


Figure 1. Mean scores for Attention Lapses (CFQ-13) and Working Memory failures (MWQ-5) categorized by daily short-form video consumption. Error bars represent ± 1 standard deviation.

Statistical significance for both domains was confirmed at $p < .001$.

As illustrated in Figure 1, the High Usage group (3+ hours/day) consistently reported higher frequencies of cognitive failures compared to the Low Usage group (hour/day). For attention lapses, the High Usage mean ($M=3.02$) was significantly higher than the Low Usage mean ($M=2.11$). A similar trajectory was observed in working memory scores, where heavy users scored 2.89 compared to 2.05 for light users. The clear separation between the bar heights visually supports the rejection of the null hypotheses.

V. DISCUSSION

The main aim of the present study was to examine whether individuals with high short form video usage differ from low usage individuals in term of attention lapses and working. The findings showed that high short form video users reported significantly greater attention lapses and working memory difficulties compared to low users. This suggests that increased engagement with short form video content may be associated with reduced cognitive efficiency.

One possible explanation for these findings is related to the nature of the short form video content. These platforms provide fast-moving, highly stimulating, and continuously changing content. Because of this, user are constantly exposed to new information within a short time. Overtime, this may reduces the brains ability to maintain attention on a single task for a longer duration. Individuals may become more used to short bursts of stimulation and may find it difficult to sustain attention on task that require longer focus, such as studying or reading.

The findings of the present study are consisted with previous research which has shown that frequent digital media exposure is associated with attentional difficulties. Research has shown that constant digital interruptions and frequent switching between media can reduce sustained attention and increase mental fatigue. Short form video platforms are design in a way that continuously provides new and engagement content, which may train the brain to expect constant stimulation. This may make it harder for individuals to maintain focus when such stimulation is not present.

Another explanation can be understood from the perspective of cognitive control. Cognitive control refer to the ability to regulate attention and ignore distractions. Frequent exposure to highly stimulating digital content may overload attentional system and reduces the ability to control distractions effectively. This may result in increased attention lapses in everyday activities, which was observed in the high usage group in the present study.

The present study also found significant differences in working memory between the two groups. Working memory is responsible for the holding and manipulating information for short periods. Individuals with high short form, video usage reported great working memory difficulties. This may be because constant exposure to rapidly changing content increases cognitive load and reduces the efficiency of memory processes. When individual frequently shift their attention, it becomes more difficult for the brain to detain and process information effectively.

Another possible reason is that short form video platform encourage massive consumption of content activities that require a lot of active thinking, example reading problem-solving or academic work where a short form video require absolutely minimum cognitive efforts, overtime reduce engagement in cognitively demanding activities may weaken attention and memory efficiency.

Additional fragmentation may also explain the findings. Individual are frequently exposed to short and rapidly changing content, their attention system made up to processing information in short segments. This may reduces their ability to maintain sustain attention for longer periods. As a result, they experience more attention lapses and working memory problem.

The findings of the present study consisted with previous literature which suggests that excessive digital media use is associated to reduce cognitive functioning. The result indicate that the high short form video usage negatively affect important community processor such as attention, working memory. This cognitive functions are essential for academic performance, daily life functioning and overall cognitive efficiency.

The present study has important implications as short form videos platforms are becoming increasingly popular, specially among individuals for studying or working or stay in home. It is important to understand their potential cognitive impact.. excessive use may contribute to attention problems and memory difficulties which can affect academic and professional performance.

Future research should examine this effects over longer period of time to understand whether this changes are temporary or long-term. It would be useful to examine whether reducing short form video uses can improve attention and working memory functions or not.

Overall, the presence that suggest the higher short form video usage is associated with a greater attention labs and working memory difficulties, highlighting the importance of digital media for maintaining cognitive health.

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