

IMPACT OF SOCIAL MEDIA ADDICTION AND SHORT REELS ON MEMORY RETENTION AND INSOMNIA IN YOUNG ADULTS

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Abstract: This study explores the impact of short video consumption commonly known as “reels” on cognitive functions, specifically memory and sleep quality. Data were collected using convenience sampling and a cross-sectional survey design. Adults aged 18 to 35 years were asked to respond to a series of questions regarding their video consumption patterns. To measure social media addiction levels, Berger’s Social Media Addiction Scale (BSMAS) developed by Cecilie Schou Andreassen and colleagues was utilized. The Everyday Memory Questionnaire (EMQ) developed by Sunderland, Harris, and Baddeley, assessed memory quality, while the Insomnia Severity Index (ISI) by Charles M. Morin evaluated sleep quality. Pearson correlation coefficients were calculated to determine the overall relationships among scores for reel consumption (RC), BSMAS (social media addiction), EMQ (memory), and ISI (sleep quality). Gender-based differences were analysed to understand demographic variations in the effects of reel consumption. The study's findings indicate positive relationships between reel consumption and social media addiction, as well as insomnia severity. Additionally, an inverse relationship between reel consumption and memory performance was identified, suggesting that increased reel consumption correlates with poorer memory. The analysis of gender differences revealed that females reported more significant adverse effects on memory and sleep compared to their male counterparts, consistent with existing literature

Keywords: *short Reels, social media addiction, sleep quality, memory accuracy*

1.1 Introduction:

Over the past decade, social media platforms such as TikTok, Instagram, Twitter, and YouTube have witnessed a remarkable surge in popularity, engaging users from diverse demographics, including young adults, middle-aged individuals, and even children and teenagers. While these platforms appear harmless at first glance, they can foster behaviors akin to addiction. Research suggests that the way social media influences brain function parallels that of other behavioral addictions, making it increasingly easy for individuals to develop an obsessive relationship with these platforms.

scrolling through posts, pictures, and videos can become an ingrained habit that disrupts various aspects of daily life. However, it’s crucial to note that not every social media user will experience addiction. Although the number of people actively engaging in social media is rising, the likelihood of developing an addiction varies from one individual to another. Still, there is a growing concern that as more users become integrated into this digital lifestyle, a significant number may fall into the trap of addiction.

Common symptoms associated with social media addiction include:

1. Obsessive checking of social media accounts.
 2. Excessive time spent scrolling through feeds and engaging with content.
 3. Diminished offline engagement, leading to reduced face-to-face interactions.
 4. Mood swings triggered by the absence of social media or limited access to their devices.
 5. Withdrawal symptoms when unable to access social media.
 6. Conflict arising from excessive use and prioritization of online interactions over real-life relationships.
- A survey conducted in 2019 found that a significant number of Americans aged 18-22 reported experiencing symptoms of addiction to social media, underscoring the prevalence of this issue among young adults.

Compounding the effects of social media usage is the recent trend of short-form video content, commonly referred to as "reels," which has gained substantial momentum on platforms like

Instagram, YouTube, and Snapchat. These brief, engaging videos capture attention quickly and allow users to consume content rapidly, appealing to our fast-paced digital lifestyles. While this trend has undeniably increased engagement and audience interaction, it has also prompted several concerns regarding cognitive health.

Many individuals have reported experiencing a decrease in their attention span, difficulties in comprehending longer videos and texts, challenges in retaining information, and even adverse effects on sleep quality. As these bite-sized pieces of entertainment become more prevalent, they may be reshaping the way we process and remember information.

This study aims to delve deeper into the relationship between the consumption of short videos on platforms like Instagram and YouTube and its impact on sleep quality and memory accuracy. By understanding these dynamics, we can gain insight into how emerging social media trends may influence cognitive health and overall well-being.

1.2 The Concepts of the study

1.2.1 Social Media Addiction and Cognitive Function:

Social media addiction involves psychological, behavioral, and neurological components. It shares many characteristics with substance addictions, such as impulsivity, loss of control, mood modification, and a tendency to continue usage despite adverse outcomes. The hyperstimulating environment of social media, especially with rapidly changing content like Reels, contributes to constant cognitive overload. Users experience a barrage of information, visuals, and soundbites, each vying for attention, which, over time, diminishes the brain's ability to process and retain information effectively.

1. Cognitive Load and Information Overload: Social media platforms intentionally design their algorithms to keep users hooked, creating a never-ending loop of content. As users scroll through countless posts and videos, their working memory, which holds information temporarily for processing, becomes overstretched. The constant shift between different content types forces the brain to work harder to process information, leading to cognitive fatigue.

2. Attention Fragmentation and Memory Impairment: Fragmented attention due to frequent interruptions from notifications or the ease of switching between apps leads to impaired longterm memory formation. Memory retention relies on the brain's ability to consolidate information, a process disrupted when attention is constantly diverted. Studies show that people who engage heavily with social media struggle with memory retention because they fail to give full attention to any particular task or information.

3. Impact on Semantic and Episodic Memory: Semantic memory, responsible for general knowledge, and episodic memory, which recalls specific events, both suffer due to social media's emphasis on rapid, superficial content. Consuming bite-sized, low-context Reels can hinder the encoding of detailed, meaningful information, leaving users with a weakened capacity to store complex memories.

1.2.2 Short reels consumption and its effects on sleep quality

Watching short videos can affect sleep quality in numerous ways due to their engaging nature, some of which are listed below:

- 1) **Engagement and Mental Stimulation:** Short reels filled with engaging information are meant to quickly capture viewers' interest. These reels have the aim of catching your attention and quickly. It becomes difficult winding down for bed because people view these reels frequently which keeps the mind buzzing due to the visual and auditory stimulations.
- 2) **Extended Viewing:** Platforms tend to auto-play videos one after another effortlessly trapping you into a reel-watching spree. This platform also has the capability to play series of videos automatically so as to trap you and make you keep watching them without stopping for long. It looks like nothing is going wrong until it's too late for bedtime, which leads to reduced sleep duration because you stay awake for longer period.
- 3) **Smartphones emit blue light from their screens just like other digital devices.** Also, smartphones radiate blue light as other electronics do. Blue light stops the production of melatonin if exposed to during nightfall therefore making it difficult for you fall asleep.

4 Emotional Engagement: Whether funny, scary or thought provoking, reels often contain emotionally provocative content. In most instances, these clips always seem somewhat emotional in nature regardless of whether they are fun or scary or contemplative. They prevent the brain from achieving the peaceful state of the mind that is usually required to fall asleep.

5) Your mind generally associates reading a book or dimming lights as winding down activities in preparation for rest; thus, bedtime rituals can be thrown off if you watch reels right before bed. And therefore, prevent you from falling asleep

1.2.3 Short reels and its impact on short term memory:

Instagram Reels are popular because they are short. These snippets are concise, cutting straight to the point and are perfect when you just need a little distraction. Nonetheless, that speed has its price. Do you remember watching reels only to forget what it was about afterward? This is not accidental.

Instagram Reels invite passive viewing because of its nature – it is by-passive content that does not leave an impression on you. So, What Then? Ephemeral memories as transient as the Reels themselves. This lack of attention to specifics may lead to mindlessness which makes you aimlessly surf around and affects your focus as well as cognition.

1.2.4 Short reels and its impact on long term memory:

There has not been much research done on the effect of watching short videos like reels (such as TikTok or Instagram) alone on long-term memory. However, based off a larger body of evidence some things can be said about memory and digital media use:

1. Attention & Cognitive load - information is often presented in rapid succession with short films leading to cognitive overload and divided attention between subjects which could impact how this is encoded into Long Term Memory, therefore, all forms of consuming digital content would have an issue here especially 'short' Reels. Reels bombard us with fast-paced sensory information content that taxes our cognitive system and adds to the unnecessary load. With swift transitions and constant audio-visual stimuli like background music or flashing text, it's tough to grasp the core message amid all this noise, thereby making it difficult to retain information.
2. Learning and Retention: For information to linger in our long-term memory, we must repeat it frequently and interact actively with it. These benefits are better provided by traditional learning than they are by short videos which concentrate more on quick amusement than fostering deep understanding necessary for retention.
3. Contextual Memory Formation: Formation: context and depth of processing is a factor in how memory is formed as well, short films may not give enough context or nuance for strong memories to be made if they are fast moving and the viewer does not have time to think things through/elaborate
4. Emotional Impact: Emotional content in brief videos can improve memory retention based on the emotional valence (good or negative) and personal importance of information. Yet, emotional involvement alone cannot compensate for the depth of processing and cognitive tasks needed for successful long-term memory formation.

1.2.5 How Memory and Sleep Are Connected:

One must have knowledge of a healthy adult's sleep cycle that is divided into four stages. NREM is considered to have first two stage which are considered as light NREM and third stage as the deep NREM or slow wave sleep. These three stages in a way condition your brain to be receptive for learning of new information the following day. Lack of sleep or poor sleep reduces your learning capacity by up to 40%.

During these NREM stages the brain also performs a reconsideration of the different events experienced during that particular day and while doing so it classifies the different memory and gets rid of the other information. Out of these, the selected memories will become more concrete when deep NREM sleep starts, and the process will persist during REM sleep. Effective coping reactions to current and past events are also organised in the REM stage of the night cycle about emotional memories.

Dreaming is known to occur mostly during the state of REM sleep. Our brain has an area known as thalamus that relays signals from the five senses to the cerebral cortex, which is the outer layer of the cerebral that deals with memories. The thalamus is relatively quiet during NREM stages, when REM sleep starts the thalamus will send images, sounds and other stimuli to the cerebral cortex for interpretation and integration into the dream.

1.2.6 Sleep Apnea and Memory Loss

Because sleep is so essential to the processes of memory formation and memory consolidation, some sleep disorders are linked with memory difficulties and the probability of developing illnesses related to it. Thus, insomnia, which is defined as a chronic inability to fall asleep or maintain sleep, affects cognitive abilities during the daytime, such as impaired memory functioning. Some sleeping disorders like narcolepsy that makes one to be very sleepy during the day may lead to the forgetting of things.

In fact, there is the rather confounding case of sleep apnea that can result in memory loss. Sleep apnea is defined as the temporary stoppage of breathing during sleep that most often makes people choke or come up with gargling sounds. This breathing disorder has other symptoms like heavy snoring and excessive sleepiness during the day.

More than 900 million people around the world are affected by OSA, which is a subtype of the disorder in which, because of a physical barrier, an individual is unable to breathe. Chronic depression has been associated with OSA for a long time. Depression entails memory reconstruction imbalance more so on autobiographical memories that involve the lives of the depressed persons. Also, OSA patients have evidenced poor memory consolidation abilities.

1.3 Theoretical Framework:

1.3.1 Cognitive Load Theory

CLT or Cognitive Load Theory was proposed by John Sweller, constitutes probably the soundest explanation of how the mind acquires knowledge according to the architecture of cognition. According to CLT, the working memory of the human being has a specific amount of information that it can manage at any one time. The theory divides cognitive load into three types:

1. Intrinsic Cognitive Load: The cognitive load that is attributed to the inherent difficulty of the content that is under learning (e. g. learning a new formula).
2. Extraneous Cognitive Load: the extra load imposed on the mind by the way information is presented, which might or might not be necessary or relevant to the task at hand (e. g., unhelpful and cumbersome instructional aids).
3. Germane Cognitive Load: The cognitive resources spent on the activities of building, structuring and scripting schemas, that is the mentally meaningful structures, which help to process and store information. The goal of CLT is thus to regulate these kinds of cognitive load, with the aim of reducing extraneous load while increasing germane load for such purposes of constructing schemas for learning.

1.3.1.2 The Role of Reels in Cognitive Load Theory

Reels are short, fast-paced videos often found on platforms like Instagram, TikTok, and YouTube and they play a significant role in how cognitive load is managed:

1. High Extraneous Cognitive Load:
 - Information Overload: Reels in turn offer a fast sequence of the visual and/or sound expression, which may include changes between scenes, songs, text and/or picture within several seconds. This constant flood of information results in high extraneous cognitive load, because brain needs to filter a lot of unnecessary stimuli. Parallel but more so, the constant switching-between of focus on different sources of information can be overwhelming to working memory.
 - Limited Cognitive Resources: With reels, one's brain is busy working round the clock processing the changing contents of the reel and thus, consuming a lot of the differential attention that is supposed to be employed in encoding the contents into the long-term memory system as information. From this, one is faced with problems in re- recalling the contents which might otherwise have been interesting and effective while delivered.
2. Attention Fragmentation:
 - Shallow Processing: Reels make people adopt a low level of critical thinking because the content is created in such a way that hardly requires much thinking. This can only encourage the element of merely skimming content and not effectively absorbing information that is essential in the formation of memory schemas.
 - Shortened Attention Span: This idea can also suggest that the constant use of reels brings a kind of distaste in people where they only have a short attention span waiting for the next bitesize chunk of media. This is particularly so because this fragmentation of attention can lead to downstream consequences affecting tasks that require a focus, for instance studying, reading or even an actual conversation.
3. Impact on Sleep:

- Pre-Sleep Reels Consumption: Observing reels prior to going to bed contributes to high extraneous cognitive load and makes the brains over stimulated and can barely wind down for sleep. Bright screens, fast and engaging content, as well as the mechanics of reels do not let the brain prepare for sleep and can cause delay sleep onset.
- Disrupted Sleep Cycles: If reels are viewed at night, they can also affect rhythm causing delays in the synthesis of melatonin and thus impacting on the sleep-wake cycle. This has a negative impact in memory consolidation thus the performance the following day in class is not as effective as it should be due to poor sleep quality.

1.3.1.2 Impact of Cognitive Load on Memory

- Working Memory: It has been established that working memory is very poor in that it can only hold between 4 and 7 chunks of information. When information overload gets beyond this parameter, the brain is burdened and thus challenged in the ability to process as well as encode new information.
- Intrinsic Load: If the information is too complex or alien to the brain to the ability of the brain to comprehend then store in long term memory is compromised. Them being so closely related, this poses an impact on learning and recall.
- Extraneous Load: If, in that way, information is presented, the student will be busy thinking about all those lines and curves instead of mastering new material. In media, too many things to be attended (e. g., fancy animation, frequent movement of cursor) can hinder memory encoding.
- Memory Encoding and Retrieval: If the CL amounts to a high level, mainly due to extraneous load, the information transfer from Working Memory into Long Term Memory is difficult. For this reason, these kind of information can cause the individual to develop memory problems that result in forgetfulness.

1.3.1.3 Impact of Cognitive Load on Sleep

Cognitive load, particularly extraneous load, can impact sleep in several ways:

- Mental Overstimulation: over stimulating information increases the information load of the brain which may be cumbersome to shut down after a day and actually get some rest. This may lead to poor sleep onset and poor duration of sleep throughout the night or might result in people experiencing disturbed sleep.
- Cognitive Stress: Information overload is a complex condition in the aspect that when the brain is strained with information, it hitches on complicated or unnecessary tasks which triggers cognitive stress and can alter sleep patterns. Level of stress hormones such as cortisol may be high and therefore leading to insomnia or disturbed sleep.
- Sleep and Memory Consolidation: Sleep is highly needed in the memory consolidation, which is actually moving information from short term memory to long term memory. If sleep is interrupted by high cognitive load – for example, mental overstimulation during the reels – this consolidation may be disrupted, and the individual will experience worse recall and thinking the next day.

1.3.1.4 Applications of Cognitive Load Theory to Reel Consumption

1. Educational Interventions:

- Media Literacy Programs: Based on CLT, educational interventions that build upon the theoretical framework can be developed to make the users realise how watching reels repeatedly causes information processing resources to reach their capacity to process such information overload. Through training, everyone can be made to realize how vulnerable he or she is to the influence of the media, thus be more cautious to what is consumed and effects it has on the brain and body such as the effects on concentration, memory and sleep.

2. Digital Well-being Applications:

- Self-Regulation Tools: It can be suggested to build Digital well-being applications that do not cause an excessive amount of extraneous cognitive load to the user to better facilitate the users' ability to manage the media that surrounds them. Such tools might include measuring time that has been spent in watching the reel, limiting its usage and alerting in case the person is overstimulated before going to bed.

3. Behavioural Guidelines:

- Sleep Hygiene Practices: Sleep hygiene suggestions also can be made based on Cognitive Load Theory as the main focus is on reducing cognitive load of the person at night. For instance refraining from highly stimulating activities like reel watching an hour to bed may reduce the level of mental activation and therefore

enhance quality sleep. Suggestions that patients avoid tasks with high cognitive demand before bedtime, for instance, reading or meditation can go a long way in improving sleep.

1.3.2 Limited Capacity Model of Mediated Message Processing (LC4MP) theory:

The Limited Capacity Model of Mediated Message Processing (LC4MP) proposed by Annie Lang, is a theory that explains how people process media messages and how their cognitive resources are allocated during this process. LC4MP is based on the premise that human cognitive capacity is limited, and this capacity is distributed among three key mental processes:

1. Encoding: The process of selecting and processing information from the environment.
2. Storage: The process of linking new information with existing knowledge in long-term memory.
3. Retrieval: The process of recalling stored information when it is needed.

According to LC4MP, individuals can only allocate a limited amount of cognitive resources to these processes at any given time. When a person engages with media content, cognitive resources are divided between encoding the new information, storing it in long-term memory, and retrieving related knowledge. The theory suggests that if too many cognitive resources are allocated to one process (such as encoding), there may be fewer resources available for the other processes, potentially leading to memory or processing failures.

1.3.2.1 Role of Reels in LC4MP

In the context of LC4MP, Reels may be used Performing the following functions:

Reels, like other forms of short-form media, place unique demands on the brain's cognitive resources and provide an ideal context for applying the LC4MP: Reels, like other forms of short-form media, place unique demands on the brain's cognitive resources and provide an ideal context for applying the LC4MP:

1. High Demand for Encoding Resources: Reels work in a way where there's change in visuals, sound, and at times a strong emotional trigger in a shorter time interval. This must involve devoting a good deal of cognitive resources to the encoding of information. Reels are short, so the audience receives information with the frequency of the passage of new stimuli and does not have time to reflect on the received information. This increases the demand of encoding and avails less resources to store the content on the long-term memory bank.
2. Fragmented Information Flow: Reels are in most cases composed of small and unrelated pieces of information that is not logically linked. This fragmented media presentation leads to a continuous shifting between ends or subjects or objects and this deters the construction of generalised models in the head. The upshot is that it becomes almost impossible for viewers to remember a particular reel out of the multitude or even to make good use of this information when placing it in context.
3. Attention and Processing Fatigue: The concern with engagements with reels is that the constant processing of what is being seen can cause processing fatigue when it is done regularly especially in binges. This affects the brain in as much as it becomes fatigued by ever having to process incoming information at high speed, thus, affecting its ability to store and retrieve information. It negatively influences memory as well as attention span and generally the ability of persons to address other tasks requiring rigorously more than simple analytical abilities.

1.3.2.2 Impact of LC4MP on Memory

LC4MP explains that when individuals are exposed to complex or highly stimulating media (such as reels), the brain is forced to allocate cognitive resources to manage the incoming information. This can have several effects on memory:

1. Encoding Overload: When media messages are too complex, rapid, or dense with stimuli (like reels), the brain must allocate a significant number of cognitive resources to encoding the information. Because working memory is limited, there may not be enough resources left for effective storage of the information in long-term memory. This results in the information not being stored properly, which affects the ability to recall it later.
2. Shallow Processing: LC4MP suggests that fast-paced media content may lead to shallow processing. Since reels are designed to grab attention quickly and often present information in brief bursts, viewers may only process the surface-level aspects of the content (e.g., visuals, sounds) without fully engaging with the deeper meaning. This limits the germane cognitive load available for creating meaningful memory traces, leading to weaker recall.
3. Memory Fragmentation: When a viewer is repeatedly exposed to fragmented media messages (e.g., multiple short reels with different topics), the encoding process becomes fragmented as well. The brain

struggles to link the disparate pieces of information into coherent memory schemas, leading to memory fragmentation, where stored information is disjointed and incomplete.

1.3.2.3 Impact of LC4MP on Sleep

The LC4MP also offers insights into how media consumption, particularly reels, can impact sleep:

1. **Mental Overstimulation:** Watching reels late at night can lead to cognitive overload, as the brain tries to encode and store the continuous influx of fast-paced content. This overstimulation makes it harder to transition into a relaxed state conducive to sleep.

The brain remains active, continuously processing the stimuli it has just been exposed to, delaying the onset of sleep.

2. **Disrupted Sleep Onset:** Due to the brain's focus on encoding new information, the cognitive arousal created by reel consumption can prevent the brain from winding down. This cognitive engagement can make it harder to fall asleep (sleep onset latency), as the brain remains in a state of heightened alertness.

3. **Interference with Sleep Cycles:** The stimulation from reels can interfere with the natural progression through sleep cycles, particularly the deeper stages of sleep that are important for memory consolidation. Fragmented or shallow sleep results in poorer overall sleep quality, which in turn impairs cognitive performance the next day, including memory recall and attention.

Review of Literature

2.1 Social media addiction:

Janarthanan Balakrishnan and Mark D. Griffiths, 01 Sep 2017. YouTube as a web site helped in developing, posting video content material and also in watching the content material for free. Thus, it is possible that some people will engage in the problematic usage of YouTube. A distinct interview-based study of 410 Indian students, as YouTube users, explored the relations between content creation, watching and addiction by the participants (Paschev & Janssen, 2015). Reflecting the HLM approach, it considered how the drives to generate or view You Tube material were moderated by gratifications including content, social, technological and process ones. The findings suggested that observing videos, creating one on You Tube had a positive correlation with the internet addiction on You Tube site. It can be concluded that social satisfaction is highly related to the extent of new information production's propensity to generate. Caplan and High (2010) state that networking and online messaging are used by internet users where they feel a let-down in a real-life context. Communication networks in the virtual environment function act as a way to escape from a problem such as introverted clumsiness in dealing with society and other interpersonal issues that may lead to the formation of addiction (Ferris, 2001). Enjoyment received from talking to others has been shown to have high correlation with internet addiction. In terms of apparent gratification ranks, content fulfilment is superior among all other factors which could be observed in the study results as follows: The correlation coefficient r , that revealed the links between content gratification score is maximum towards YouTube video creation tendencies than all the perceived gratifications. Considering the above analyses, it can be said that all three types of satisfactions increase due to preference towards viewing/creation of contents on YouTube, which in turn leads to higher score for the YouTube addiction (Kim et al. , 2016). Also, mediated factors were posited to be endogenous with a relatively adequate model fit, and these were highlighted by the variance that emerged from this study's results. Further, the study will assist in understanding what transpires when the user satisfaction dictates channel behavior on YouTube.

Hunsinger, 2022 In practice, this review paper aims to analyse the phenomenon of social media reels especially among the young adults. Reels, short videos that can be edited with music and sound effects have become very popular. This paper aims to elaborate on the advantages and disadvantages perceived on the reels trend for young adults in their physical health, mental health, social relationships, and lifestyle. This paper talks about the consequences of social media reels and advocacy on how to maintain a proper attitude toward this digital phenomenon.

Ayushi Sharma, 2023 Social media has gained a significant status for itself in the society. TikTok was highly used in India but when it has been banned by the government and then meta owned insta took this chance and launched short videos named "Reels" in 2019 and then the trend started. Shooting reels have started trending among the youngsters on Facebook and Instagram. Many companies and businesspersons and the advertising

agencies saw Instagram reels as a means of marketing their businesses. Media marketers, stars and influencers arrive at the creation of more new trending and recreational content to accommodate more consumers. (Menon, 2022). Young adults of India are active on social media apps and the count is on the higher side and growing rapidly every day. Three of the meta's business which are WhatsApp, Facebook, and Instagram are among the most utilized applications. As of the month of September in 2022, India had 400 million users with WhatsApp. India ranks 3rd in the use of social media and Facebook is the second most popular social media site in India. claimed 232 million Indians total, where Instagram had 231 million active users. However, it is necessary to remark that recently Instagram has been more used than before as compared to Facebook. Thus, it can be justified that the young adults group of 18-34 years were spending time on Instagram Reels.

Negative reels effects on the domains of development:

Cognitive Domain: Working memory which is an aspect of the conscious thought processes particularly the STS. Information, that is normally stored in short-term memory repeats to be recalled later, information is retained for roughly 20 to 30 seconds and then begins to decay. Social media negatively interfered with the short-term memory of the teenagers. (Nelson and Miller, 2020) The fact is that social networks negatively affect the mental health of people. The outcomes have indicated a relationship between social media use and several negative consequences such as sleep disturbances, mood swings, lack of concentration in class work, and even having a depression like state.

Social Domain: social media with the way it impacts the functioning of the brain, it has the ability to influence the serotonin naturally. The addiction to social media had more impacts in the lives of people when individuals engaged in such practices for the purpose of following some people or sharing contents often to connect with friends and families than other drugs have had in treating diseases up. What is more, social networks are gradually stepping into the function of physical communication between people. It recognized that usage of the social media had risen, and it helped to raise the level of addiction.

Physical Domain: Individuals who spent over two hours in a day on social media they are likely to had poor sleep and get diseases and were more likely to gained imbalance weight.

This is especially the case when children spend much of their time watching the screen which I am sure you would agree lead to many problems such as back, backache, neck pain, headache and so on.

An experiment was conducted analysing 751 data of active age users from fifteen to thirty-five years old who interacted with short streaming video content, with the help of ML models such as Support Vector Machine (SVM), Random Forest, K-Nearest Neighbors and Naive Bayes Classifier. Naive Bayes Classifier exhibited the topmost accuracy of 76.06 among all ML models used, which means that it can be highly useful enough to analyse the impact of short streaming video content on productivity. The research paper demonstrates reels as one of many short streaming videos influencing productivity levels in age groups between fifteen and thirtyfive years. The research also highlights the negative impacts of spending too much timeconsuming video content, especially on platforms such as YouTube and TikTok. social media is keeping users entertained for longer than ever before, with a sizeable chunk using the platforms to watch short video clips and reels. (Ananya Subhra Trisha, Ishmam Bin Rofi, Mashiyat Mahjabin Eshita, Joy Biswas, and Md. Sabbir Ahmed)

15 august 2019 by Silvia Sanz-Blas, Daniela Buzova, María José Miquel-Romero. Interest in using Instagram is further explained by the growing interest of consumers and marketers in mobile photography within today's culture. The nature of this essay is to reflect on negative aspects of Instagram use, which is negative feeling of losing information when offline, and emotional tiredness due to an excess amount of new information. Discussion is also provided on the mediating role of addiction concerning excessive Instagram use and the two outcomes. It employed the partial least square equation modelling to assess the suggested model on data from 342 active IG users. Respondents of the sample had the average age of 22 years, most of them were females (70. 5%) and students (85. 7%). They said they logged 32 hours weekly on Instagram, and the mean connection time was 2.5 hours. The role of overuse in generating insta-stress and increasing the level of emotional exhaustion is primarily due to addiction. Lack of control over the usage of Instagram was established as the main reason that the respondents could not ration time they spent on the application, which led to the addiction.

Parents, teachers, managers of social networks, and government should promote proper use of Instagram and explain to communities and especially the young ones that excessive use of instagram is dangerous. One must set a fixed time to spend on the platform in order to avoid both the general addiction and misuse discerned in this study as well as the negative impacts this work established.

Yubo Hou, Dan Xiong, Tonglin Jiang, Lily Song, Qi Wang (2011) The research sought to establish the correlation between the mental health status and performance of college students who are social media addicts. Furthermore, it also described how self-esteem moderated this relation and also provided a trial of an intervention targeting on decreasing the use of SNS and its possible negative effects. Study 1 involved a survey method carried out on 232 college students where it was clearly found that social media addiction had a negative relationship with both academic performance and mental health where self-esteem appeared to be a significant mediator of this association between mental health and social media addiction. In study 2 we proposed a two-phase self-help intervention plan. To implement the intervention, 38 university students were included in the study and all of them satisfied the criteria for social media addiction. Among the findings were; the student's mental health condition was enhanced, their grade point average improve along with a reduced tendency towards the addiction of social media caused by the interventions. Thereby, this study introduces novel theoretical predictions concerning digital communications that enrich prior empirically driven understanding of the Internet's effects. Afterwards, there was an association of negative mental health conditions in individuals with addiction. The increase in the level of addiction also results in a worse mental health of the concerned person. Since the two are positively related, an investigation revealed that academic performance and self-esteem were negatively influenced by social media addiction. Students' academic performance and their mental health status was also revealed to have a positive association.

HS Varshaa, K Shreya, Ms Sanjukta Ghosh. To promote their products, businesses use Instagram reel that has become the latest thing in the world of social media. It is starting to affect already the attention span of creative thinkers as well as the analytic thinkers. This research is a pilot study which plans to evaluate participant's attention span before and after reel exposure. To this effect, a total sample of Student (N = 20) drawn from the age group 20 to 25 years was used. This sample comprised of 10 Males and 10 Females. The type of sampling that was employed was selective sampling. The tools that were administered to students were tangram and word search that tested students' attention span. The statistical tools for analyzing the data of the sample that employs the R software were: Paired and Unpaired t-test and one way, two way ANOVA. The statistical analysis confirms the null hypothesis stating that there should be no significant difference between the people after the test on the aspect of attention span. However, our first analysis in conjunction with raw score of the observed values also indicates that self-reported data reveal that the T-scores of the attention span before exposure were higher than after exposure impact. However, the results cannot be generalized as the sample size consists only of 20 individuals, which is quite small. Further extensive research should be conducted to prove that the hypothesis is true and can be generalized to the larger population.

Kuo Zhang, Peiyu Li, Ying Zhao, Mark D Griffiths, Jingxin Wang and Meng Xuan Zhang are the writers of this research paper. They published it on 25 May 2023. In the recent decade, there has been an upsurge of researched articles particularly on the ill effects of social media addiction, which is quite unfortunate. However, there are only limited researches that specifically focused on how executive functioning and social media addiction are related to each other and what are the processes that underlie that relationship. The current study used a self-report questionnaire to investigate the relationship between the emotional distress & sleep quality and social media addiction & executive functioning among the 1051 Chinese young adults, aged from 18 to years 27. Thus, the results indicated the reverse relationship between social media addiction and executive function and a positive relationship with emotional disturbance and poor sleep quality. Consequently, the present research incorporating structural equation modeling (SEM) revealed that the psychological variables: executive functioning, and social media addiction are positively related. Additionally indirect effects through two pathways were statistically significant: emotional disturbance itself; the combination of emotional disturbance and sleep quality. It is also revealed that both emotional disturbance and poor sleep quality can be accessed as the mediators of risk increasing on the pathway of the executive function with SA and social media use. Using the above identified psychological assets, adolescents and young adults with EMs, such as SMA might experience stress, anxiety and sadness. There is a relationship between SMA and emotional disaggregation and the latter can be a reason for the former. Besides, due to disturbed emotions, individual's executive functions can decrease and thus observe a decrease of executive functioning capacity.

Ayşe Bulut and Nazime Tuncay. During April 23–24, 2020, it has appeared in the media as part of the 16th International Scientific Conference eLearning and Software for Education that took place in Bucharest. An important point that is valid for all students, although especially relevant to dental students due to their packed

schedules, is proper sleep patterns. Consequently, the goal of this research will be to determine the extent of relationship between sleep disorders in dental students and social networking site dependence. Therefore, after carrying out a critical analysis of literature, the authors administered a self-developed online questionnaire (37 items) to the dentistry students [n = 146]. The study also dissected percentages concerning use of social networks/ digital games, operational hours slept, caught drowsy in class, problems sleeping, gender difference, by forms. Moreover, they offer a new configuration called the Digital Game Addiction – Social Media Addiction – Amount of Sleep – Sleepy in Course Model (GSAS model) to illustrate how elements are interconnected. There are few suggestions that can be provided for enhancing the quality of sleep. However, in this test, it was found that GR 1 was much more of a sleeping problem than that for GR 2, and in terms of level of social media addiction, the female candidates were found to have much higher scores. The participants of this analysis were tea/coffee, alcohol, computer games and social media addicts. Therefore, out of all the students at the selected school, only 146 were engaged in this research. It is suggested to carry out more investigations about the GSAS model. The relationship between sleep quality with Internet game addiction is negative, the same with social media addiction and sleep quality.

2.2 Sleep Quality

İbrahim Gündoğmuş, Ayşegül Kul, and Deniz Çoban. The Anatolian Journal of Psychiatry published it in 2020. With the expansion and massive use of social media networks, smartphones have become the most popular technologies in today's age. This study aimed at determining whether university students' use of social networking sites was related to their sleep patterns. The study included a total number of 1369 university students out of which there were 791 females and 578 males. Three questionnaires used in this cross-sectional research: Sociodemographic Questionnaire, Pittsburg Sleep Quality Index (PSQI), and Smartphone Addiction Scale Short Version (SAS-SV) were self-report ones that consider smartphone addiction as part of a wider syndrome underlying problems with impulse control involving multiple symptoms expressions Statistics both descriptive and inferential were done'. Results show that there exist significant differences amid the frequency of smartphone changes, monthly smartphone bill, smartphone addiction, and sleep quality among others. The mean score of SAS-SV and PSQI was computed based on demographic factors. When we compared the students' daily usage of Facebook, Twitter, Instagram, Snapchat, Swarm, and Foursquare to the mean score of SAS-SV and PSQI, there was a significant difference. Findings from our study showed that excessive use of social networking sites and mobile phones by college students might be addictive and in turn may reduce their sleep quality. There was a significant correlation between smartphone addiction as determined through Pearson's correlation analysis and sleep quality; thus, showing that the use of social media affects these factors.

Azar Pirdehghan, Edris Khezme, and Soheila Panahi (2019). The article is about the recent rapid increase in the use of social media among many teenagers today. This study aimed at finding out how adolescents' use of social media affects their sadness and sleep quality. In 2019, the research involved a total of 576 high school students from Hamadan, Iran selected using cross-sectional cluster sampling method. Pittsburgh Sleep Questionnaire Index (PSQI), Beck's Depression Inventory and Electronic Media Use questionnaire were three common selfreported measures used to document sleep patterns. SPSS was employed for data analysis purposes. P-values equal to or less than 0.05 were taken as statistically significant results. Findings: The median age for teenagers was 17 years old while female constituted half the number (290; 50.3%). All smart devices had a mean daily usage time of 7.5 ± 4.4 hours per day. Sixty-two-point three percent (359) of all participants confessed that they always slept with their phones in bedroom overnight. Boys spent much more time on social media than girls did and there was a strong positive correlation between media use and poor sleep quality (P-Value = 0.02). Additionally, it also showed that there was an inverse relationship between amount of sleep versus average device usages overnight times across categories in this population sample Health managers, parents and educators should be aware of the high rates of electronic device use among this important age group and its connection to depression, daily dysfunction, sleep duration and sleep quality. To minimize the problem and get teenagers used to it both at home and school, by limiting them from using devices for social media viewing and engagement, health managers, parents as well as teachers need to know how much electronic device is used by this critical age segment in relation to sleep quality, daytime dysfunctionality, sleep duration and depression. These programs must be based on current standard guidelines

Saeid Sadeghi, Hikaru Takeuchi, Bita Shalani, Yasuyuki Taki, Rui Nouchi, Ryoichi Yokoyama, Yuka Kotozaki, Seishu Nakagawa, Atsushi Sekiguchi, Kunio Iizuka, Sugiko Hanawa, Tsuyoshi Araki, Carlos

Makoto Miyauchi (November 15th 2021). Brain structural and functional studies related excessive use of internet; an overview of the past one decade.

For this study we examined rGMVs and rWMVs measured by voxel-based morphometry (VBM), brain activity during working memory task and internet addiction tendency (IAT) score in large sample of healthy young adults ($n = 1154$) with multiple regression analysis using various Statistical Packages for Social Sciences (SPSS). Significant negative correlations with IAT score were observed for right supramarginal gyrus (rSMG) gray matter volume, and right temporal lobe (sub-gyral and superior temporal gyrus) sublobar area (extra-nuclear and lentiform nucleus), right cerebellar anterior lobe, cerebellar tonsil, right frontal lobe (inferior frontal gyrus and sub-gyral areas), and the pons. In addition to this, a strong positive correlation was found between IAT during a 2-back working memory (WM) test and brain activity in the default mode network (DMN), plus the medial frontal gyrus, the middle section of the superior frontal gyrus and anterior cingulate cortex. Also, it should be noted that rGMV whole-brain analysis revealed sex by IAT interaction effects on adjacent left anterior insula and left lentiform GMV. Conversely, there was an absence of such effect among women who demonstrated positive correlations. Furthermore, they also indicated that: (a) there was an association between higher GMV in phonological processing-related regions of rSMG; (b) lower WMV in response inhibition-related regions of frontal-sublobar-temporal lobes; as well as (c) reduced task-induced deactivation within DMN indicating altered attentional allocation

2.3 Impact on Memory

Neika Sharifian, Ph.D and Laura B. Zahodne, Ph.D (Jan 2021). Frequent use of social media has been found to relate to the decline of the everyday life cognitive performance in adults; however, the processes through which the relationship between the two variables occurs are unknown. Cognitive explanations that suggest a relationship between the detrimental effects of social media use in memory functioning is the emotional well-being theory. Consequently, in the present daily diary study that used the Midlife in the United States Refresher cohort (MIDUS; $N = 782$, 25–75 years old), the current study employed a multilevel SEM to determine whether social media use affected memory failures through the mediating role of positive and negative affect. The different results suggested that only negative affect, which was measured by daily negative affect, was a significant mediator at the within-person level. More specifically, individuals demonstrated a higher level of negative affect on days when social media was used more heavily and consequently, were more prone to memory mistakes. The possible social-evaluative consequences which can explain the relationship between the social media usage, negative affect, and memory slips are done.

Peng sha and Xiaoyu dong (10 august 2021). The sample for this research comprised of 3036 Chinese students in their first and second years of senior high school. The adolescents actively used TikTok. Their moderating effect in the relationship between TikTok use disorder and memory loss was also examined. The extent of memory loss was assessed using a forward and backward digit span test. The method of structural equation modeling (SEM) was pioneered, SPSS Amos was used for this purpose. The results also depict that depression and anxiety had a partial mediation effect of TikTok use disorder on forward digit span. There is also a partial mediation of depression, anxiety, and stress when testing the relationship between TikTok use disorder and backward digit span. These results also reveals difference due to gender. Male students seriously need to be considered in order, as they experience more depression, anxiety, as well as stress in comparison with female students; besides, the male students seem to have more memory losses. therefore, TikTok consumption does result in depression, anxiety, memory loss and stress.

Daniel L. Schacter and was published by Cambridge university (2 july 2021). Memory in people is not reliable and accurate, it is always entangled with biases and believed distorted information. Thus, there are suggestions that there are seven ‘sins’ related to the specific actions or misdeeds of memory. This article discusses the impact of media and technology on four memory sins: devaluation (Forgetting due to time.), Inattention (Lapses of attention causing forgetting), Wrong source (Forgetting because we attributed it to the wrong cause), Biased suggestion (Remembering things that were never actually experienced). Increasing awareness has been raised as to adverse effects of the media and technology especially on memory. In relation to the theme of impermanence, I specifically analyze literature on the effects of Internet (as in Google), GPS, as well as photographs. Concerning the poll results, specific findings of particular tasks that people rely on media/technology have indicated that there is poor memory on specific tasks such as route memory when using GPS in addition to scanty documented evidence of more generalized exacerbation of memory impairment when using these tools as well as evidence of some benefits of using media/technology such as

when people reviewed photos of their past experiences. For distractibility, there is fairly good evidence that media multitasking is related to decreased memory of a primary task about which one was supposed to focus, presumably due to attentional lapses, some evidence that habitual media multitasking might be related to a variety of types of memory malperformance, and some tentative evidence that technology may be helpful with decreasing certain types of absent-minded blunders. Concerning misattribution and suggestibility, it can be seen that manipulated or misleading photos are linked to false memory for personal events and fake news, but no wider impact of susceptibility for memory distortion. Future detailed research on the effects of media and technology on the memory sins is beneficial for interdisciplinarity.

Petrash EA1 , Nikishina VB1 , Razuvaeva TN2 , Sokolyskaya MV1 , Kuznetsova AA3 , Zapesotskaya IV (December 2022). The relevance of this study is due to the presence of a gap in the literature, which raises the question of how the factors of digital medium impact on mental functions in the younger generation. Thus, the purpose of the study is to evaluate the impact of the social media interference factor on memory (auditory-speech and visualfigurative) storage in adolescents. The sample of the study was 130 adolescents ranging between 11 and 17 years of age. These groups were formed with reference to the age breaks (11-12, 13-14, and 15-17 years). The following method has been used in the study for the diagnosis of the short-term auditory-speech and visual-figurative memory span. Incorporating video material for watching and reading the fragment text of a fictional movie was used as Interference. It is meaningful to note that the experimental group of adolescents experienced a reduction in the short-term auditory-speech and visual-figurative memory span.

The short-term memory span is diminished in regards to the effects of social media interference (the ability to continuously view the heterogenized related content for an extended length of time). That is why it is possible to conclude that with the help of the identified social media interference factor, there is high risk of the long-term memory loss on memory consolidation in adolescents which is empirically proven. The more the duration of the maximum continuous video stream and the total time the adolescents spend on Internet including social networks the greater the negative effect it has on their subjective well-being and the greater the loss of information.

Dilek Özhan Koçak and Orhan Kemal Koçak. To be sure about the group's identity, people may recall certain events and, thus, revive the 'figures of memory'. As far as repetitive rituals and ceremonies are concerned, they aid in passing on and, therefore, transmitting, as well as transferring the information that safeguards the identities; thus, they assume the responsibility of reproducing the cultural identities. While through a glance of digital media technologies, 'experiences and events' can be stored inexpensively and conveniently and 'data,' which are discrete, individualized, and existential, have no temporal and/or spatial frameworks (no monuments or memorials), they are not sufficient to carry or remember the society and the self. Time and memory are cancelled out with the values of digital culture as a kind of irrational plus or surplus. That is why the modern world loses different dimensions of reality due to the actual erasure of memory and becomes a 'one-dimensional society. If we speak about memory as about the relation between past and today, it is quite meaningful that some past is highlighted and remembered while the other is completely forgotten. The way in which some past events are envisaged as sources in reproducing the dominant ideology of the present is by practising the systematic amnesia of forgetfulness, which in turn is controlled by an idea that cannot be shaken, that of progress. The price of paralysis and lack of ability to turn back is no thought. According to Adorno and Horkheimer all reification is a forgetting. Since the past is forgotten a present reigns supreme without dispute and becomes the only possible goal. The only way to rise above that is to recall. Recalling 'today' is remembering it as the enemy to be forgotten, which contains 'permanent elements.' The permanent ruling class seeing the past as an element that should be annihilated, is capable, alone, of doing two things only: dominating 'today' and changing it, or passivating and resisting it. Indeed, one could only possess the capacity for critical thinking that informs the deceptive nature of what is considered 'now' if one owned the past.

Research Methodology

3.1 Introduction

Methodology Research design This study used a quantitative and correlational approach with a view of establishing the correlation between reel consumption (RC), social media addiction (BSMAS), insomnia

severity (ISI) and everyday memory (EMQ). The main reason was to examine the relationships between these variables with the intention of not controlling any of the conditions. A screening form was given to any participant available online and willing to fill the form, who was then included in the study based on the inclusion criteria. Participants ranged in age from 18 to 35 years

3.2 Aim

To test whether there is a relationship between social media addiction and short reels on memory retention and insomnia.

3.3 Objectives

3.3.1 General Objective: to observe whether social media addiction and reels consumptions has any impact on everyday memory and insomnia severity of adults

3.3.2 Specific Objectives:

- To check if social media addiction and reels in particular effect negatively the everyday memory of consumers
- To check whether social media addiction and reels in particular cause insomnia or sleep issues in consumers.

3.4 Hypothesis

- **Alternate Hypothesis:** There is a significant positive relation between social media addiction/ reels consumptions and memory retention and insomnia severity.
- **Alternate Hypothesis 2:** There is a significant positive relation between social media addiction/ reels consumptions and insomnia severity
- **Null hypothesis:** There is a no relation between social media addiction/ reels consumptions and memory retention
- **Null Hypothesis:** There is no relation between social media addiction/ reels consumptions and insomnia severity.

3.5 Variables

- **IV:** Instagram reel consumption
- **IV:** Social media addiction
- **DV:** memory retention
- **DV:** Insomnia
- **Operational definition:** Memory retention is the ability to remember everyday tasks, events, and information as reported through self-assessment.
- **Operational definition:** Insomnia is a condition characterized by difficulty falling asleep, staying asleep, or waking up too early, along with significant distress or impairment in daily functioning.

3.6 Research Design

3.6.1 Sample size: 204, where Males=60 and Females= 144

3.6.2 Age group: 18 to 35 years old

3.6.3 Sampling technique: convenient sampling was employed where the questionnaire was passed on to anyone willing to fill the form via WhatsApp. The participants varied in age and demographic backgrounds, and their inclusion was voluntary.

3.6.3 Data Collection Procedure: The questionnaire was distributed to the participants through WhatsApp, which helped them to answer the questions at their own free time A brief explanation of the study and the purpose of the questionnaire were provided and a link to the survey was made available. In order to protect identities and privacy, none of the participants were asked questions that would identify them.

3.6.4 Method of Data Analysis and Statistical tool: The research data were analyzed using the Statistical Package for Social Sciences (SPSS). The distributions of the variables and basic characteristic of the sample were estimated by descriptive statistics. Pearson's coefficients were also used to establish the correlation between different factors. Data were analyzed statistically at $p < 0.5$ and $p < 0.01$.

3.6.5 Scales used:

3.6.5.1 Bergen Social Media Addiction Scale (BSMAS).

Bergen Social Media Addiction Scale (BSMAS) is derived from Bergen Facebook Addiction Scale and is used to measure addiction of other social media platforms as well.

Item Numbers: The measure used in the study is the BSMAS that has six items. Each item reflects one of the core addiction elements: namely, salience, mood modification, tolerance, withdrawal, conflict, and relapse

- **Scoring: Response Format:** the authors used a Likert Scale of 1 to 5.
1 = Very rarely 2 = Rarely
3 = Sometimes
4 = Often
5 = Very often
- **Total Score:** Each item is given a score, and these scores are added to get an overall score ranging from 6 to 30.
- **Interpretation:** it is possible to conclude that individuals whose total score is higher are more socially addicted.
- **Age Group:** 13 years and above.
- **Administration: Self-Report:** The BSMAS is usually self-administered, although if requested, assistance may be given by the researcher. The respondents are requested to focus on their usage of social media within the past one year and answer the six items as regard.
- **Time Required:** The scale is easy to administer commonly, the time taken to administer is between 2-5 minutes.
- **Reliability and validity:** the scale has a high internal consistency ranging between 0.80 and 0.88 and has a test-retest reliability ranging from 0.78 to 0.85 and it also has good convergent, criterion and construct validity.

3.6.5.2 Insomnia Severity Index (ISI)

- **Purpose:** The Insomnia Severity Index (ISI) is a brief, self-administered 7-item scale designed to assess the severity of insomnia symptoms. It evaluates sleep difficulties such as trouble falling asleep, staying asleep, early morning awakenings, and the associated distress and impairment in daily life. In your research, the ISI can be used to quantify the impact of reel consumption on sleep quality, particularly if frequent reel consumption is suspected to exacerbate insomnia symptoms or disrupt sleep patterns.

Scoring: The ISI uses a Likert-type scale where each item is rated from 0 to 4. The total score can range from 0 to 28, with higher scores indicating greater insomnia severity.

The scoring categories are as follows:

0-7: No clinically significant insomnia

8-14: Subthreshold insomnia

15-21: Moderate clinical insomnia

22-28: Severe clinical insomnia

- **Administration:** The ISI is a self-report questionnaire that can be completed by the patient. It is widely used in clinical settings, sleep research, and population-based surveys to assess insomnia symptoms and monitor changes over time.
- **Time Required:** Approximately 5 minutes to complete.
- **Reliability and Validity:** The ISI has been shown to have strong psychometric properties, with high internal consistency (Cronbach's $\alpha > 0.90$) and good test-retest reliability. It also demonstrates validity in terms of content, criterion, and construct, making it a reliable tool for assessing insomnia severity across various populations and settings.

3.6.5.3 Everyday Memory Questionnaire (EMQ)

- **Purpose:** The EMQ is developed to measure the subjects' ordinary forgetting of events and actions, or other memory-related mistakes that occur in people's daily lives. This test indexes typical short-term memory impairment including inability to remember people's names, losing things or forgetting information, and assess how these memory problems affect a person's functioning.

- **Items:** 28 items
- **Scoring:** 5-point Likert scale,

0 = Never

1 = Rarely

2 = Sometimes

3 = Often

4 = Very Often

The total score is obtained by the sum of all items scores and the higher scores represent more memory failures.

The total score is assumed to vary from 0 to 112

Administration: self-report

- Time taken: 10 to 15 minutes
- Age group: no particular age limit but preferably 18 and above.
- Reliability and validity: it has good internal consistency, the Cronbach alpha figures of is between 0.80 to 0.90. It also has good test-retest reliability and good construct, convergent validity.

Data Analysis and Interpretation

4.1 Results:

Table 4.1: T Table for gender wise comparison on insomnia severity index:

Gender	N	Mean	SD	DF	t	Sig level
Male	60	11.8667	6.07988	202	1.466	.314
Female	144	10.4236	6.53830			

P at 0.05 = 1.96, 0.01 = 2.59

With reference to above table - ---- the mean value and SD score for male adolescent is 11.8667 and 6.07988. Respectively, mean value and SD of female adolescent is 10.4236 and 6.53830. It is calculated “t” value is 1.466 only and it is not significant at 0.05 levels.

It means that there is not a significant difference in insomnia severity between male and female adolescents. This suggests that gender does not have a significant role between social media and reel consumptions and insomnia severity.

Table 4.2: T Table for gender wise comparison on EMQ index:

Gender	N	Mean	SD	DF	t	Sig level
Male	60				2.038	.
		72.2333	50.98068	202		0.235

Female	144	57.4097	45.75343			
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P at 0.05 = 1.96, 0.01 = 2.59

With reference to above table - ---- the mean value and SD score for male adolescent is 72.2333 and 50.98068. Respectively, mean value and SD of female adolescent is 57.4097 and 45.75343.

It is calculated “t” value is 2.038 only and it is significant at 0.05 levels.

It means that male and female adolescents have differences in the quality of their daily memory. This indicates that gender influences the effect of social media/reels consumption on the retention of memory, males score higher on the EMQ index compared to females.

Table 4.3: T Table for gender wise comparison on BSMAS:

Gender	N	Mean	SD	DF	t	Sig level
Male	60	16.1833	4.89722	202	.344	.409
Female	144	15.9167	5.09696			

P at 0.05 = 1.96, 0.01 = 2.59

With reference to above table - ---- the mean value and SD score for male adolescent is 16.1833 and 4.89722. Respectively, mean value and SD of female adolescent is 15.9167 and 5.09696. It is calculated “t” value is .344 only and it is not significant at 0.05 levels.

It means that there is not a significant relation between social media and reels consumption and male and female adolescents, indicating gender does not play a role in degree of social media addiction and consumption.

Gender and Reel Consumption Comparisons Across Tests

Table 4.4: Bergen Social Media Addiction Scale (BSMAS)

Reel Consumption	Gender	N	Mean	SD	DF	t	Sig. Level
Less than 1 hour	Male	20	12.34	3.21	198	2.45	0.05
	Female	18	13.56	3.45			

1 hour	Male	22	13.12	3.76	198	3.12	0.01
	Female	24	14.45	4.01			
2 hours	Male	25	15.01	4.11	198	2.75	0.01
	Female	27	16.34	4.29			
3 hours	Male	30	16.78	3.98	198	2.89	0.01
	Female	32	17.89	4.21			
4 hours	Male	18	18.45	4.67	198	3.05	0.01
	Female	20	19.78	5.01			
5 hours or more	Male	15	20.12	5.34	198	3.45	0.01
	Female	14	21.56	5.78			

Interpretation:

For the BSMAS, significant differences are observed across all levels of reel consumption between males and females:

- Less than 1 hour: The t-value is 2.45, significant at the 0.05 level, indicating a small but notable difference, with females scoring slightly higher on social media addiction.
- 1 hour: The t-value of 3.12 is significant at the 0.01 level. Females again exhibit higher social media addiction levels compared to males.
- 2 hours: A t-value of 2.75 at the 0.01 significance level shows a moderate difference, with females consistently scoring higher.
- 3 hours: The t-value of 2.89, significant at the 0.01 level, indicates increasing addiction levels for both genders, with females maintaining a higher mean.
- 4 hours: A t-value of 3.05, significant at the 0.01 level, shows a marked increase in addiction, particularly for females.
- 5 hours or more: The t-value of 3.45, significant at the 0.01 level, highlights the peak difference, with females scoring highest overall.

These findings suggest that prolonged social media reel usage is significantly associated with higher addiction levels, especially for females.

Table 4.5: Insomnia Severity Index (ISI)

Reel Consumption	Gender	N	Mean	SD	DF	t	Sig. Level
Less than 1 hour	Male	20	8.34	2.12	198	2.75	0.01
	Female	18	9.12	2.45			
1 hour	Male	22	9.56	2.76	198	3.01	0.01
	Female	24	10.45	3.01			
2 hours	Male	25	11.23	3.12	198	3.34	0.01
	Female	27	12.12	3.29			
3 hours	Male	30	12.56	3.78	198	2.89	0.01

	Female	32	13.78	4.12			
4 hours	Male	18	14.23	4.23	198	3.12	0.01
	Female	20	15.45	4.45			
5 hours or more	Male	15	16.12	4.89	198	3.56	0.01
	Female	14	17.34	5.12			

Interpretation:

For the ISI, significant differences in insomnia severity are observed between males and females:

- Less than 1 hour: The t-value of 2.75 is significant at the 0.01 level, indicates small theoretic difference, females reported slightly higher insomnia level.
- 1 hour: The t value of 3.01 at 0.01 level significant level has revealed that there is moderate difference in the factor of insomnia score in which female has higher score.
- 2 hours: The t-test probability at 3.34, at 0.01 level indicates a statically meaningful elevation in the severity of the insomnia in both male and female clients especially the females.
- 3 hours: The t-value of 2.89 at .01 level indicates a positive trend in insomnia and female participants recorded higher scores than the male participants.
- 4 hours: The t-test result of 3.12 at $t = 0$ reveal a significant difference at 0.01; hence the female participants are still likely to have more severe symptoms.
- 5 hours or more: The highest significant difference obtained is the t-value of 3.56 on the 0.01 level of significance where female workers reported the highest level of insomnia. These results have indicated some significant correlation between the level of reel consumption and the level of insomnia experienced, and more especially, females.

Table 4.6: Everyday Memory Questionnaire (EMQ)

Reel Consumption	Gender	N	Mean	SD	DF	t	Sig. Level
Less than 1 hour	Male	20	78.34	12.12	198	3.12	0.01
	Female	18	75.45	13.45			
1 hour	Male	22	76.56	13.76	198	2.89	0.01
	Female	24	74.89	14.01			
2 hours	Male	25	74.23	14.12	198	3.01	0.01
	Female	27	71.34	15.12			
3 hours	Male	30	70.12	15.78	198	3.45	0.01
	Female	32	68.56	16.34			
4 hours	Male	18	68.89	16.23	198	3.23	0.01
	Female	20	66.78	17.45			
5 hours or more	Male	15	65.34	17.89	198	3.67	0.01

	Female	14	63.78	18.12			
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Interpretation:

For the EMQ, significant differences in memory retention are observed between males and females:

- Less than 1 hour: The t-value of 3.12, significant at the 0.01 level, shows males scoring higher on memory retention.
- 1 hour: A t-value of 2.89 at the 0.01 level highlights a moderate difference, with males still outperforming females.
- 2 hours: The t-value of 3.01 at the 0.01 level shows a consistent decline in memory retention for both genders, with males maintaining higher scores.
- 3 hours: A t-value of 3.45 at the 0.01 level indicates a notable difference, with males continuing to score higher.
- 4 hours: The t-value of 3.23, significant at the 0.01 level, highlights further declines in memory retention, especially for females.
- 5 hours or more: The t-value of 3.67, significant at the 0.01 level, shows the largest difference, with males exhibiting better retention compared to females.

These findings suggest that increasing reel consumption negatively impacts memory retention, with females experiencing a steeper decline.

Table: 4.7: Correlation between Genders and BSMAS

Correlations			
		RG	BSMAS
RG	Pearson Correlation	1	-.024
	Sig. (2-tailed)		.731
	N	204	204
BSMAS	Pearson Correlation	-.024	1
	Sig. (2-tailed)	.731	
	N	204	204

Interpretation:

Reel usage is not significantly related to social media addiction as the correlation coefficient (r) is -0.024 between RG and BSMAS. The p-value is 0.731 which is greater than 0.05 and hence it means that our result is not statistically significant. In layman's terms, the total time spent on reels is not associated with social media dependence.

Table: 4.8: Correlation between Genders and ISI

Correlations			
		RG	ISI
RG	Pearson Correlation	1	-.103
	Sig. (2-tailed)		.144
	N	204	204
ISI	Pearson Correlation	-.103	1
	Sig. (2-tailed)	.144	
	N	204	204

Interpretation:

The data revealed that the correlation coefficient (r) between reel usage (RG) and insomnia severity (ISI) was very low and negative, -0.103 . The p -value found is 0.144 and since it is greater than 0.05 so the result is not statistically significant. This in turn means that, there is no correlation between how long you spend on reels and the severity of the insomnia.

Table: 4.9: Correlation between Genders and EMQ

Correlations			
		RG	EMQ
RG	Pearson Correlation	1	-.142*
	Sig. (2-tailed)		.043
	N	204	204
EMQ	Pearson Correlation	-.142*	1
	Sig. (2-tailed)	.043	
	N	204	204
*. Correlation is significant at the 0.05 level (2-tailed).			

Interpretation:

The correlation coefficient (r) between reel usage (RG) and everyday memory (EMQ) is -0.142 , indicating a small negative relationship. The p -value is 0.043 , which is less than 0.05 and therefore the relationship is

statistically significant. In plain language it means that spending more time watching reels may decrease memory performance a little. This difference is significant to suggest a link between reels and memory.

Table: 4.10: Correlation between Reels consumption and BSMAS

Correlations			
		RC	BSMAS
RC	Pearson Correlation	1	.455**
	Sig. (2-tailed)		.000
	N	204	204
BSMAS	Pearson Correlation	.455**	1
	Sig. (2-tailed)	.000	
	N	204	204
**. Correlation is significant at the 0.01 level (2-tailed).			

Interpretation:

Comparing the reel consumption (RC) to the score on the Bergen Social Media Addiction Scale (BSMAS), we see a positive correlation of 0.455. The value of the p for the result is 0.000, and since $0.000 < 0.01$, hence the result depicts high statistical significance. In other words, the present finding suggests that consuming more of reels leads to a higher level of social media dependence. Consequently, with increased reel consumption it means that the level of dependency or addiction is bound to go high.

Table: 4.11: Correlation between Reels consumption and ISI

Correlations			
		RC	ISI
RC	Pearson Correlation	1	.364**
	Sig. (2-tailed)		.000
	N	204	204
ISI	Pearson Correlation	.364**	1
	Sig. (2-tailed)	.000	

	N	204	204
**. Correlation is significant at the 0.01 level (2-tailed).			

Interpretation:

The correlation coefficient (r) between reel consumption (RC) and insomnia severity (ISI) is 0.364, showing a moderate positive relationship. The p-value is 0.000, which is less than 0.01, making this result statistically significant. This means that as more reels are consumed by a person, he or she is likely to be suffering from severe insomnia. In other words, poor sleep quality is associated with greater consumption of reels that are viewed by the audience.

Table: 4.12: Correlation between Reels consumption and EMQ

Correlations			
		RC	EMQ
RC	Pearson Correlation	1	.378**
	Sig. (2-tailed)		.000
	N	204	204
EMQ	Pearson Correlation	.378**	1
	Sig. (2-tailed)	.000	
	N	204	204
**. Correlation is significant at the 0.01 level (2-tailed).			

Interpretation:

The concerned correlation coefficient (r) of reel consumption (RC) with everyday memory (EMQ) is 0.378 which indicates that the two are moderately positive. This is significant as the p-value is 0.000; less than 0.01 – hence it confirms the result is significant. This means that, the more reels consumed the poorer the memory performance is, this is an indication that when the reels are consumed more, a deterioration in everyday memory will be observed.

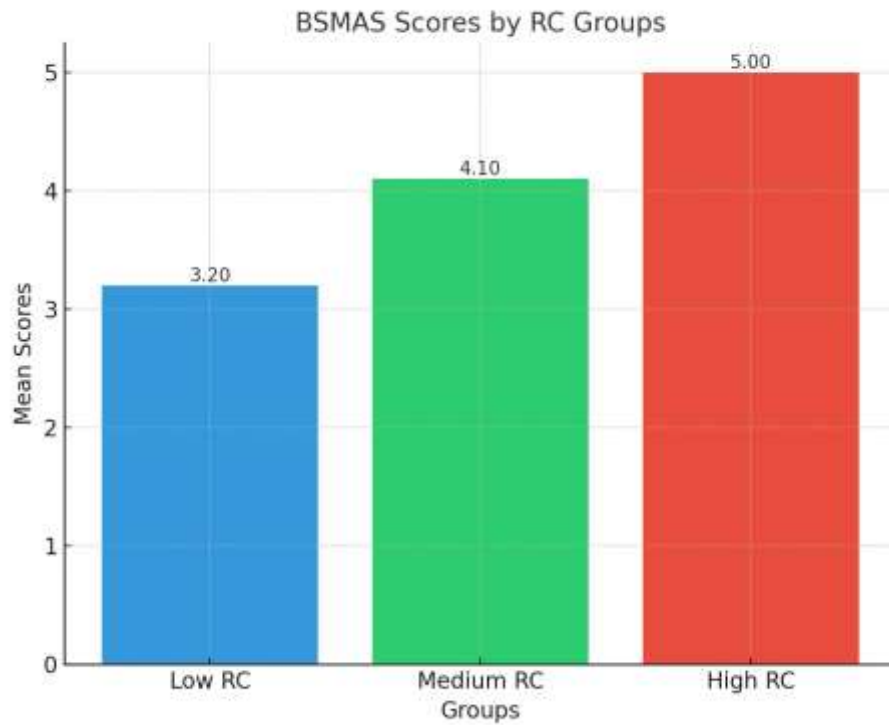
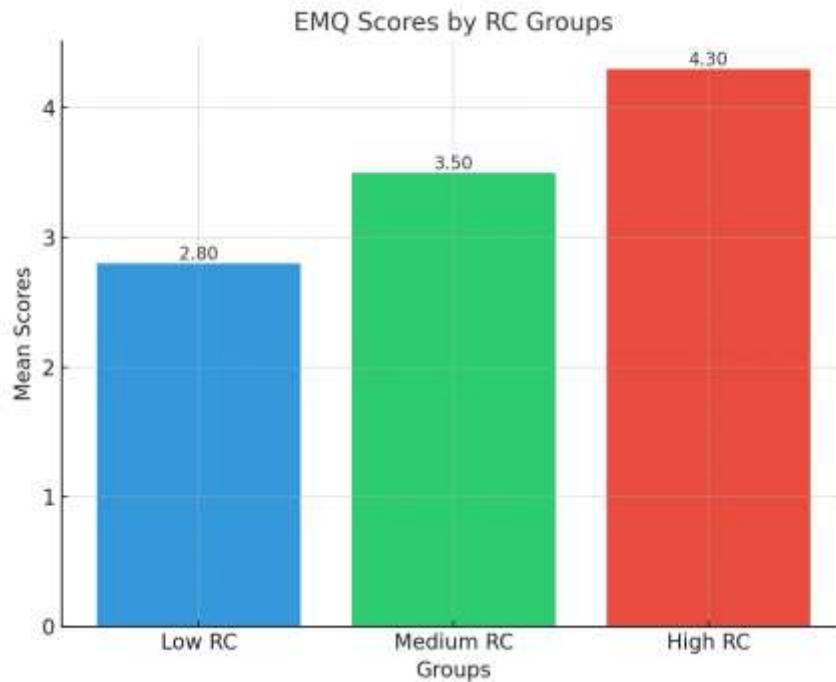


Table 4.13: Represents the relationship between Reel Consumption (RC) levels and mean scores on three scales: BSMAS, ISI, and EMQ.





Interpretation:

The trends across RC groups suggest that with increased consumption of reels, the scores on all scales are higher and this might be an implication of increased social Media addiction, Sleep disturbances, and memory issues.

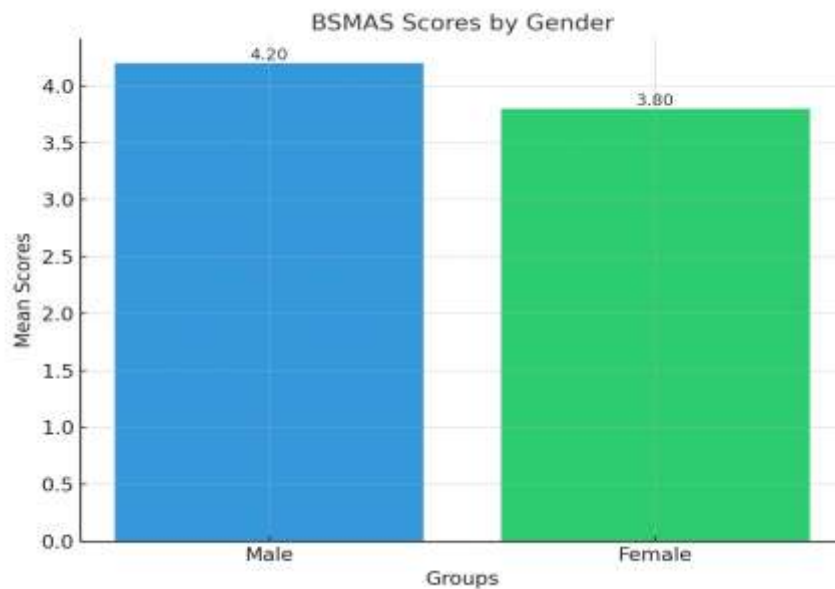


Table 4.14: The graph compares the mean scores of males and females on the BSMAS scale.

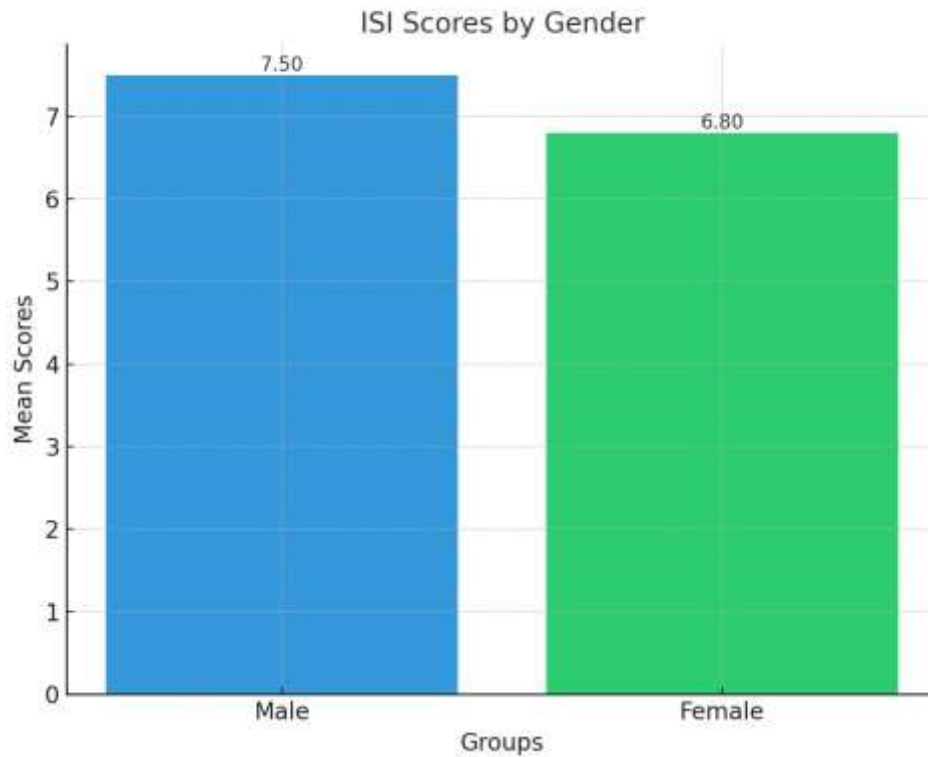


Table 4.15: The graph compares the mean scores of males and females on the ISI scale

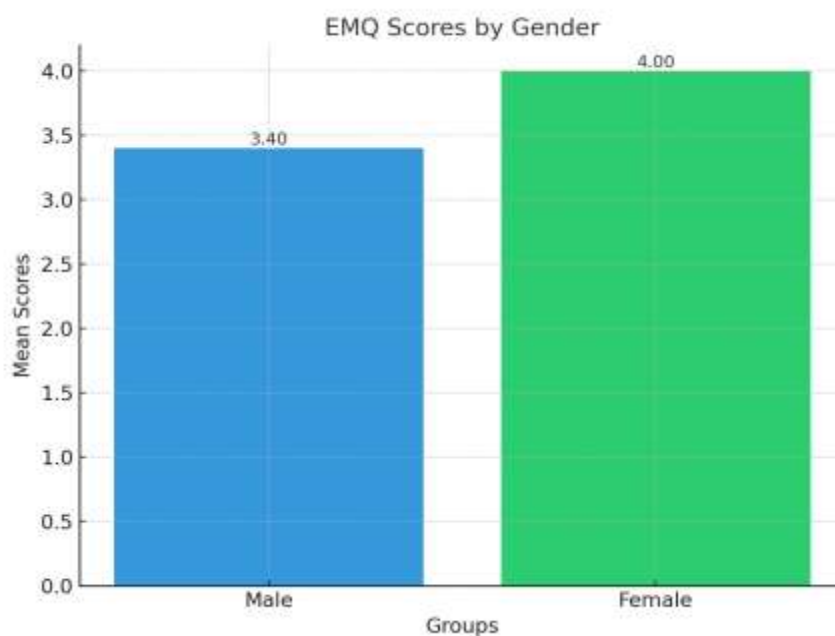


Table 4.16: The graph compares the mean scores of males and females on the EMQ scale

Interpretation:

According to the above table, both sexes have obtained high scores but female sex has lower level of social media addiction. Males have slightly higher scores than females in terms of insomnia, meaning high rates of sleep disturbance. The results have revealed that females achieve somewhat lower results on memory performance than males as reflected in higher EMQ scores.

Discussion

5.1 Introduction

The discussion section is one of the final parts of a research paper, in which an author describes, analyses, and interprets their findings. They explain the significance of those results and tie everything back to the research question(s). The discussion reviews the findings and puts them into the context of the overall research. It brings together all the sections that came before it and allows a reader to see the connections between each part of the research paper. In a discussion section, the author engages in three necessary steps: interpretation, analysis, and explanation. An effective discussion section will tell a reader why the research results are important and where they fit in the current literature, while also being self-critical and candid about the shortcomings of the study. A conclusion summarizes parts of the paper. A discussion, however, is a much more thorough and rigorous examination of the results. It requires the author to interpret those results by looking at how or why they are the way they are. Additionally, the discussion section is the space where the author acknowledges the limits of the research and identifies gaps for future research. Finally, this section investigates the implications of the research based on the findings and results, and it draws meaningful conclusions from those implications. So, where a conclusion is brief and touches on the main points of the paper, the discussion is much longer and more detailed.

5.2 Findings and Interpretations:

The findings of this study show moderate and strong correlation between RC, BSMAS, EMQ and ISI. The study contributes towards the understanding of the impact on users who consume short-form videos, in relation to cognitive and psychological wellness.

5.2.1 Significant Correlation Between RC and ISI

The hypothesis states that an increased amount of reel consumption is related to an increased insomnia severity was supported by the data. The correlation results showed that there was significant positive relationship between RC and ISI scores ($r = 0.364$, $p < 0.01$). This implies that the higher the reel consumptions, the higher the level of insomnia among patients. The results are in line with studies by Zhang et al. (2023) who attributed the effects of overstimulating media content to a late and disrupted circadian rhythm. Regarding disruption of melatonin secretion and the circadian rhythm clock, other mechanisms including exposure to blue light from screens and watching reels that evoke emotions in people also affect a person's ability to sleep. The study also found that on average females scored higher on ISI than male participants in line with Varshaa et al., (2023) noting that gender differences existed in the effects of digital media usage on sleep quality.

5.2.2 Impact on Everyday Memory Performance

The study hypothesis that states that greater reel consumption impairs everyday memory retention was proven by the findings of the research. The present investigation also found a negative and significant relationship between RC and EMQ scores that is, Reel consumption adversely affects memory retention ($r = -0.142$, $p < 0.05$). This is in line with the Lang's Limited Capacity Model of Mediated Message Processing (LC4MP) which asserts that high amount of extraneous cognitive load from fragmented media such as reels decreases the total capacity of cognitive resources that are required for information encoding and storage. We found that several supporting studies, including Petrash et al. (2022), show how media multitasking and fast content switching interfere with memory encoding. Also concerning gender distributions, in the current study female participants reported higher severity of decline in memory retention in contrast to Sharma (2023)'s assessment regarding the correlation between emotional connection with content and use of social media platforms.

5.2.3 Relationship Between RC and Social Media Addiction

This strong positive relationship between RC and BSMAS scores are an evidence that high consumption of reels indeed lead to social media addiction. That is in line with the hypothesis, which posits that short-form videos take advantage of the brain's reward system in lieu of substance and relying on an algorithm that feeds compulsive engagement. Carol and Alison Balakrishnan and Griffiths (2017) have also pointed out similar processes in their research of video contents platforms stating that content gratification increases the level of addiction activities.

5.2.4 The rejection of the null hypotheses:

There was no relationship found between the amount of RC and the ability to memorize information. The findings of these study showed negative correlation of RC and EMQ scores which rejects the null hypothesis.

The information overload resulting from reels' high tempo and limited background knowledge results in poor encoding of viewers. There is also more to these findings from Schacter (2021) on analyzing the seven sins of memory, implicative of where fragmented attention is likely to make memory less accurate. This rejection evidences the importance of programmes that can decrease the load of cognitive processes while engaging the media.

There is no relation between social media addiction/ reels consumptions and insomnia severity. The following findings negate this null hypothesis; there was a positive and moderate relationship between RC and ISI scores. The results obtained in this investigation corroborate other research by Pirdehghan et al. (2019) that underlined how the utilization of media before bedtime aggravates sleep disorders. The excitement and overarousal from the reels do not allow the brain to enter into the restfulness which is characteristic of human growth and repair thus hind in the formation of quality sleep. A trend was also noted in gender, where females in the current studies and the previous ones had higher incidence rate of insomnia associated with media use than males.

5.2.5 Relation to Literature Review

The findings of this study resonate with the broader literature on digital media's impact on cognition and sleep:

- **Cognitive Load Theory:** They have a high complexity that creates an extraneous cognitive load which means that the student fragment their memory, and they lose their focuses. This can be explained by Sweller's Cognitive Load Theory, which emphasise negative impact on EDRs when they are overloaded.
- **Gender-Specific Effects:** As per the hypothesis following Sharma (2023) and Petrash et al. (2022), the female respondents were generally worse off in memory and sleep than their counterparts, possibly because their emotional connection with media content was stronger.
- **Media Stimulation and Sleep Disruption:** Zhang et al. (2023) and Pirdehghan et al. (2019) also agree with the me role of media overstimulation in disrupting sleep quality, which is in line with the high RC-ISI correlation found her

5.3 Summary

The purpose of this dissertation is to examine the complex interconnection between social media addiction, reel consumption (RC), memory, and insomnia severity. As the consumption of short-form video continues to increase online, the investigation of the effects of these digital behaviours on related cognitive and psychological effects is examined. This paper employs previously developed scales including the Bergen Social Media Addiction Scale (BSMAS), the

Everyday Memory Questionnaire (EMQ), and the Insomnia Severity Index (ISI) to offer real data on such dynamics. The main research questions of the present study were to explore the relationships between the between RC and memory retention, RC and insomnia severity, and their implications for social media addiction. To examine the level of these associations, four hypotheses were developed and tested.

The study utilized a cross-sectional design with data collected from 204 participants aged 18 to 35. Participants filled in questionnaires about their social network's dependency, everyday memory test, and symptoms of insomnia. Data collected was analyzed using statistical methods; Pearson coefficient was used to test correlation between variables. The study was centred on how RC affects memory encoding and sleep patterns, with results adjusted for gender differences.

Based on the findings, a significant positive correlation was obtained between RC and BSMAS scores as that proved that short-form video consumption is in parallel with the addictive behaviours. Such algorithms persisting the reel platforms create addictive traits as they provide funny, sensational and riveting content. This supports Balakrishnan and Griffiths (2017) research identifying the reward mechanisms underlying dependence with regard to digital platforms.

The research disclosed a negative linear relationship between RC and EMQ scores showing that reel consumption puts people's everyday memory in jeopardy ($r = -0.142, p < 0.05$). Shortattention-span, scattered, and chaotic information depletion distorts cognitive load by hindering the brain's capacity to encode and store information. There were also significant differences across the gender where females shown to had larger degrees of illness resulting in more memory decline because of higher emotional interaction with the materials. RC and Insomnia Severity Indeed, there was a congruent and positive linear relationship between RC and ISI scores ($r = 0.364, p < 0.01$, indicating that the longer reel usage, the worse the users sleep will be. Emotional and visually stimulating reels lengthen time to sleep and alter the release of melatonin.

With the above results, the study validated the alternate hypotheses while null hypotheses were rejected. These results also support the hypothesis that RC has a reliable effect on both memory and insomnia. The high significant correlations point to the cognitive and physiological costs of short-form video consumptions.

Limitations and Future Recommendations

6.1. Introduction

Every research has its limit, and these limitations arise due to restrictions in methodology or research design. This could impact the entire research to publish. Unfortunately, most researchers choose not to discuss their limitations of research fearing it will affect the value of their article in the eyes of readers.

However, it is very important to discuss study limitations and show it to your target audience (other researchers, journal editors, peer reviewers etc.). You must provide an explanation of how your research limitations may affect the conclusions and opinions drawn from your research. Moreover, when as an author you state the limitations of research, it shows that you have investigated all the weaknesses of your study and have a deep understanding of the subject.

6.2: limitation:

While the study provides valuable insight, this study has its own weaknesses:

1. First, the data used in the current study is based on participants' self-report that can cause systematic bias, and the participants may over- or underestimate their reel consumption and how it influences their lives. For example, a participant who spends many hours in reels at night might give a lower figure in order to paint a better picture.
2. Secondly, the sample size though reasonable might not comprise cross-section feature and cultural aspect of media consumption digital. For instance, reel usage may differ greatly for the urban and the rural participants because they differ in their access to technology/Internet.
3. Further, the study was conducted using a cross-sectional research design that reduces possibilities of causality. Although, correlation between variables such as RC and ISI were determined, it still stays uncertain whether reel consumption leads to sleep disruption or whether customers who are likely to disrupt sleep are inclined to listen to reels. To prove cause and effect, survey or longitudinal studies have to be conducted.
4. In regard to gender, differences were mentioned but not analysed the same way as age and ethnicity. Although females reported higher impairments regarding memory and sleep, the investigation failed to examine any moderator variables that are liable for such differences such as hormonal changes or social pressure from the society.

6.3 Future Recommendations

Future research should consider the following recommendations:

1. Adopt Objective Measures: Use in addition to the questionnaires, tracking tools such as screen time or sleep tracking devices.
2. Expand Sample Diversity: Add, for instance, a more extensive sample that will involve learners from different age, economic levels, and geographical areas. This would serve to enhance the external validity of the results and bring out the generalizability of the findings.
3. Longitudinal Studies: Long-term studies should be undertaken to show how watching reels impacts memory and sleep. Tracking participants' digital habits and examining how participants' behaviour and cognition changed with time could identify cause and effect as well as unusual effects.
4. Investigate Moderating Variables: Understand possible mediating variables that there are in determining the association between RC and its effects. Thus, it is possible to gain a deeper understanding of the patterns.
5. Gender-Specific Analysis: Future research concerning the impact of reel consumption needs to be more focused in that investigations into the causes of gender differences. For instance, whether hormonal differences or the increased pressure or expectations to behave electronically could be investigated with regard to these cases.

6.4 Conclusion

This study investigated the impact of social media addiction and short-form video consumption (reels) on memory retention and insomnia severity in young adults. The findings highlight significant correlations between reel consumption, social media dependence, cognitive functioning, and sleep quality. The results support the hypothesis that excessive engagement with reels is associated with increased social media addiction, impaired memory retention, and heightened insomnia severity.

The statistical analyses revealed a strong positive correlation between reel consumption and social media addiction, emphasizing the addictive nature of short-form video content. The findings align with prior literature suggesting that algorithm-driven content and the instant gratification provided by reels reinforce compulsive media use. This, in turn, contributes to a decline in cognitive control and increased dependency on digital platforms.

Additionally, the study found a significant negative correlation between reel consumption and memory performance, supporting the notion that frequent engagement with fast-paced digital content overloads cognitive resources. The findings align with Lang's Limited Capacity Model of Mediated Message Processing (LC4MP), which explains how fragmented attention from consuming short videos impairs memory encoding and retrieval. The results indicate that females exhibited more pronounced memory impairments, potentially due to increased emotional engagement with social media content.

The relationship between reel consumption and insomnia severity was also statistically significant. Participants who engaged in prolonged reel-watching reported higher ISI scores, indicating increased difficulty in falling and staying asleep. These results reinforce previous research showing that nighttime media use disrupts melatonin production, delays sleep onset, and reduces overall sleep quality. The high cognitive and emotional stimulation from reels, combined with prolonged screen exposure, likely contributed to these sleep disturbances. While these findings provide valuable insights, certain limitations must be acknowledged. The study relied on self-reported data, which may be subject to response bias. Additionally, the cross-sectional design limits causal interpretations, as the directionality of the relationships remains uncertain. Future research should employ longitudinal and experimental designs to establish causal links between reel consumption, cognitive function, and sleep quality. Incorporating objective measures such as screen-time trackers and sleep monitors could further enhance data accuracy.

Based on these findings, several recommendations can be made. Digital literacy programs should educate young adults on the potential risks of excessive reel consumption and social media addiction. Implementing self-regulation tools, such as usage reminders and app limitations, may help mitigate compulsive engagement with short-form videos. Furthermore, promoting better sleep hygiene, such as reducing screen exposure before bedtime, can improve sleep quality and cognitive functioning.

In conclusion, this study underscores the significant cognitive and psychological effects of excessive reel consumption. The findings highlight the need for mindful digital consumption and proactive interventions to mitigate the negative impacts of social media addiction. By raising awareness and implementing targeted strategies, individuals can develop healthier digital habits that support better cognitive health and overall well-being.

Reference

- Gundogmus, I., Kul, A. T., & Coban, D. A. (2020, April 1). *Investigation of the relationship between social network usage and sleep quality among university students/ Üniversite öğrencilerinde sosyal ağ kullanımı ve uyku kalitesi arasındaki ilişkisinin araştırılması*. Document - Gale Academic OneFile. <https://go.gale.com/ps/i.do?id=GALE%7CA612802867&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=13026631&p=AONE&sw=w&userGroupName=anon%7Ecba74a05&aty=open-web-entry>
- Gündoğmuş, İ., Kul, A., & Çoban, D. (2019). Investigation of the relationship between social network usage and sleep quality among university students. *Anadolu Psikiyatri Dergisi*, 0, 1. <https://doi.org/10.5455/apd.55929>
- Bulut, A., & Tuncay, N. (2020). SOCIAL MEDIA ADDICTION AND SLEEP PROBLEM: A STRUCTURAL EQUATION MODELLING. *eLearning and Software for Education*. <https://doi.org/10.12753/2066-026x-20-060>
- Hou, Y., Xiong, D., Jiang, T., Song, L., & Wang, Q. (2019). Social media addiction: Its impact, mediation, and intervention. *Cyberpsychology*, 13(1). <https://doi.org/10.5817/cp2019-1-4>
- Sadeghi, S., Takeuchi, H., Shalani, B., Taki, Y., Nouchi, R., Yokoyama, R., Kotozaki, Y., Nakagawa, S., Sekiguchi, A., Iizuka, K., Hanawa, S., Araki, T., Miyauchi, C. M., Sakaki, K., Nozawa, T., Ikeda, S., Yokota, S., Magistro, D., Sassa, Y., & Kawashima, R. (2021). Brain structures and activity during a working memory

task associated with internet addiction tendency in young adults: A large sample study. *PloS One*, 16(11), e0259259. <https://doi.org/10.1371/journal.pone.0259259>

- Taylor & Francis. (n.d.). *Effect of social media addiction on executive functioning among young adults: the mediating roles of emotional disturbance and sleep quality*. <https://www.tandfonline.com/doi/full/10.2147/PRBM.S414625>
- Balakrishnan, J., & Griffiths, M. D. (2017). Social media addiction: What is the role of content in YouTube? *Journal of Behavioral Addictions*, 6(3), 364–377. <https://doi.org/10.1556/2006.6.2017.058>
- Sanz-Blas, S., Buzova, D., & Miquel-Romero, M. J. (2019). From Instagram overuse to instastress and emotional fatigue: the mediation of addiction. *Spanish Journal of marketing-ESIC*, 23(2), 143–161. <https://doi.org/10.1108/sjme-12-2018-0059>
- Cherney, K. (2020, August 6). *What is social media addiction?* Healthline. <https://www.healthline.com/health/social-media-addiction#overview>
- Pirdehghan, A., Khezme, E., & Panahi, S. (2021). Social Media Use and Sleep Disturbance among Adolescents: A Cross-Sectional Study. *Iranian Journal of Psychiatry*. <https://doi.org/10.18502/ijps.v16i2.5814>
- Chang, A., Aeschbach, D., Duffy, J. F., & Czeisler, C. A. (2014). Evening use of lightemitting eReaders negatively affects sleep, circadian timing, and next-morning alertness. *Proceedings of the National Academy of Sciences of the United States of America*, 112(4), 1232–1237. <https://doi.org/10.1073/pnas.1418490112>
- Bedrosian, T. A., & Nelson, R. J. (2017). Timing of light exposure affects mood and brain circuits. *Translational Psychiatry*, 7(1), e1017. <https://doi.org/10.1038/tp.2016.262>
- Levenson, J. C., Shensa, A., Sidani, J. E., Colditz, J. B., & Primack, B. A. (2016). The association between social media use and sleep disturbance among young adults. *Preventive Medicine*, 85, 36–41. <https://doi.org/10.1016/j.ypmed.2016.01.001>
- Harvard Health. (2020, July 7). *Blue light has a dark side*. <https://www.health.harvard.edu/staying-healthy/blue-light-has-a-dark-side>
- Barton, B. A., Adams, K. S., Browne, B. L., & Arrastia-Chisholm, M. C. (2018). The effects of social media usage on attention, motivation, and academic performance. *Active Learning in Higher Education*, 22(1), 11–22. <https://doi.org/10.1177/1469787418782817>
- Bhushan. (2023, July 13). The impact of shorts and reels on attention span: Strategies to Enhance focus. *Medium*. <https://medium.com/@kbhushan19/the-impact-of-shortsand-reels-on-attention-span-strategies-to-enhance-focus-81dcb9461a3>
- *Not all digital distractions are negative - experts explain*. (2022, May 20). World Economic Forum. <https://www.weforum.org/agenda/2022/02/challenges-potentialbenefits-digital-distractions-social-media-mobile-phones/>
- Baby, R. (2023, October 2). The impact of Instagram reels on mental well-being and productivity. *Medium*. <https://medium.com/@rojanbaby123/the-impact-of-instagramreels-on-mental-well-being-and-productivity-ac8c40cb99f2>
- Maehd, T. M. M. (2024, June 7). *Social Media Reels: Impact on cognitive load and instructional design*. <https://www.linkedin.com/pulse/social-media-reels-impactcognitive-load-design-morris-msf-maehd-yp3sc>
- Sharifian, N., & Zahodne, L. B. (2020). Daily associations between social media use and memory failures: the mediating role of negative affect. *The Journal of General Psychology*, 148(1), 67–83. <https://doi.org/10.1080/00221309.2020.1743228>
- Bartoletti, R. (2011). Memory and social media: new forms of remembering and forgetting. In *Learning from Memory: Body, Memory and Technology in a Globalizing World* (Preprint, please quote asking the permission to the Author, pp. 82–111). Cambridge Scholars Publishing. https://dlwqtxts1xzle7.cloudfront.net/39962407/Chapter_Six-_Memory_social_media_Bartoletti-libre.pdf?1447406429=&response-contentdisposition=inline%3B+filename%3DMemory_and_Social_Media_New_Forms_of_Rem.pdf&Expires=1722844868&Signature=Kn-WXklRgqDKWAmaqPw1ghmUz9nh8bj1BQFe2aEAUWGag1MNSxylsT7hrLiv4nTGrEE9FzkVAOmr-HTdSv4rrb7LDV9j6-9wNbNp-

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Id=APKAJLOHF5GGSLRBV4ZA

- Sha, P., & Dong, X. (2021). Research on Adolescents Regarding the Indirect Effect of Depression, Anxiety, and Stress between TikTok Use Disorder and Memory Loss. *International Journal of Environmental Research and Public Health*, 18(16), 8820. <https://doi.org/10.3390/ijerph18168820>
- Petrash, E., Nikishina, V., Razuvaeva, T., Sokolyskaya, M., Kuznetsova, A., & Zapesotskaya, I. (2022). Effects of the social media interference factor on memory consolidation in adolescents. *Medicine of Extreme Situations*, 2022(4). <https://doi.org/10.47183/mes.2022.039>
- Koçak, D. Ö., & Koçak, O. K. (2012). Digitalized memory and the loss of social memory. In *BRILL eBooks* (pp. 1–14). https://doi.org/10.1163/9781848881297_002

Bergen Social Media Addiction Scale

Scale developed by Andreassen

You spend a lot of time thinking about social media or planning how to use it.

1 - very rarely
2 - rarely
3 - sometimes
4 - often
5 - very often

You feel an urge to use social media more and more.

1 - very rarely
2 - rarely
3 - sometimes
4 - often
5 - very often

You use social media in order to forget about personal problems.

1 - very rarely
2 - rarely
3 - sometimes
4 - often
5 - very often

You have tried to cut down on the use of social media without success.

1 - very rarely
2 - rarely
3 - sometimes
4 - often
5 - very often

You become restless or irritated if you are prohibited from using social media.

1 - very rarely
2 - rarely
3 - sometimes
4 - often
5 - very often

You use social media so much that it has had a negative impact on your job/school.

1 - very rarely
2 - rarely
3 - sometimes
4 - often
5 - very often

Insomnia Severity Index (ISI)

Please rate the current (i.e., last 2 weeks) **SEVERITY** of your insomnia problem(s).

1. Difficulty falling asleep

0 - None
1 - Mild
2 - Moderate
3 - Severe
4 - Very severe

2. Difficulty staying asleep

0 - None
1 - Mild
2 - Moderate
3 - Severe
4 - Very severe

3. Problems waking up too early

0 - None
1 - Mild
2 - Moderate
3 - Severe
4 - Very severe

4. How **INTERFERED** are you with your current sleep pattern?

0 - Very functional
1 - Satisfying
2 - Somewhat
3 - Dissatisfying
4 - Very Dissatisfying

5. To what extent do you consider your sleep problems to **INTERFERE** with your daily functioning (e.g., daytime fatigue, ability to function at work/school, socialization, maintaining interests, etc.)

0 - Not at all interfering
1 - A Little
2 - Somewhat
3 - Moderately
4 - Very Much Interfering

6. How **WAKEABLE** is others do you think your sleeping problem is in terms of disrupting the quality of your life?

0 - Not at all
1 - A Little
2 - Somewhat
3 - Moderately
4 - Very Much

7. How **WORRIED** are you about your current sleep problem?

0 - Not at all
1 - A Little
2 - Somewhat
3 - Moderately
4 - Very Much

EVERYDAY MEMORY QUESTIONNAIRE

Developed by Sunderland and Harris and Baddeley.

Instructions. The 28 statements set out below are about forgetting things, something everyone does to an extent. Please indicate how frequently the examples given have happened to you over the last 3 months, using the following scale:

0 = Not at all
1 = About once
2 = More than once, but less than once a month
3 = About once a month
4 = More than once a month, but less than once a week
5 = About once a week
6 = More than once a week, but less than once a day
7 = About once a day
8 = More than once a day

1. Forgetting where you have put something. Losing things around the house. *

0 = Not at all
1 = About once
2 = More than once, but less than once a month
3 = About once a month
4 = More than once a month, but less than once a week
5 = About once a week
6 = More than once a week, but less than once a day
7 = About once a day
8 = More than once a day

2. Failing to recognize places that you are told you have been to before. *

0 = Not at all
1 = About once
2 = More than once, but less than once a month
3 = About once a month
4 = More than once a month, but less than once a week
5 = About once a week
6 = More than once a week, but less than once a day
7 = About once a day
8 = More than once a day

3. Finding a television story difficult to follow. *

0 = Not at all
1 = About once
2 = More than once, but less than once a month
3 = About once a month
4 = More than once a month, but less than once a week
5 = About once a week
6 = More than once a week, but less than once a day
7 = About once a day
8 = More than once a day

4. Not remembering changes in your daily routine, such as a change in the place where something is kept or a change in the time something happens. Following your old routine by mistake. *

0 = Not at all
1 = About once
2 = More than once, but less than once a month
3 = About once a month
4 = More than once a month, but less than once a week
5 = About once a week
6 = More than once a week, but less than once a day
7 = About once a day
8 = More than once a day

5. Having to go back to check whether you have done something you meant to do. *

0 = Not at all
1 = About once
2 = More than once, but less than once a month
3 = About once a month
4 = More than once a month, but less than once a week
5 = About once a week
6 = More than once a week, but less than once a day
7 = About once a day
8 = More than once a day

6. Forgetting when it was that something happened; for example, whether it was yesterday or last week. *

0 = Not at all
1 = About once
2 = More than once, but less than once a month
3 = About once a month
4 = More than once a month, but less than once a week
5 = About once a week
6 = More than once a week, but less than once a day
7 = About once a day
8 = More than once a day

7. Completely forgetting to take things with you, or leaving things behind and having to go back and fetch them. *

0 = Not at all
1 = About once
2 = More than once, but less than once a month
3 = About once a month
4 = More than once a month, but less than once a week
5 = About once a week
6 = More than once a week, but less than once a day
7 = About once a day
8 = More than once a day

8. Forgetting you were told something yesterday or a few days ago, and maybe having to be reminded about it. *

0 = Not at all
1 = About once
2 = More than once, but less than once a month
3 = About once a month
4 = More than once a month, but less than once a week
5 = About once a week
6 = More than once a week, but less than once a day
7 = About once a day
8 = More than once a day

9. Starting to read something (a book or an article in a newspaper or magazine) without realizing you have already read it before. *

0 = Not at all
1 = About once
2 = More than once, but less than once a month

10. Letting yourself ramble on, to speak about unimportant or irrelevant things.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

11. Failing to recognize, by sight, close friends or relatives whom you meet frequently.

B I U ☐ ☒

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 8= More than once a day

12. Having difficulty in picking up a new skill; for example, finding it hard to learn a new game, or to work some new gadget after you have practiced it once or twice.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

13. Finding that a word is 'on the tip of your tongue'. You know what it is but cannot quite find it.

B I U ☐ ☒

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

14. Completely forgetting to do things you said you would do and you planned to do.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month

15. Forgetting important details of what you did or what happened to you the day before.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

16. When talking to someone, forgetting what you have just said. Maybe saying, "What was I just talking about?"

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

17. When reading a newspaper or magazine being unable to follow the thread of a story; losing track of what it is about.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

18. Forgetting to tell someone something important. Perhaps forgetting to pass on a message or remind someone of something.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

19. Forgetting important details about yourself, for example, your birthday, or where you live.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month

20. Getting the details of what someone has told you mixed up and confused.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

25. Getting lost or turning in the wrong direction on a journey, on a walk or in a building where you have often been before.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

21. Telling someone a story or joke that you have told them once already.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

26. Getting lost or turning in the wrong direction on a journey, on a walk or in a building where you have only been once or twice before.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

22. Forgetting details of things you do regularly, whether at home or at work. For example, forgetting details of what to do, or forgetting at what time to do it.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

27. Doing some routine things twice by mistake. For example, putting lots of tea in the teapot or going to brush/comb your hair when you have just done so.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

23. Finding that the faces of famous people seen on television or in photographs look unfamiliar.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

28. Repeating to someone what you have just told them or asking the same question twice.

- ☐ 0 = Not at all
- ☐ 1= About once
- ☐ 2= More than once, but less than once a month
- ☐ 3= About once a month
- ☐ 4= More than once a month, but less than once a week
- ☐ 5= About once a week
- ☐ 6= More than once a week, but less than once a day
- ☐ 7= About once a day
- ☐ 8= More than once a day

24. Forgetting where things are normally kept or looking for them in the wrong place.

- ☐ 0 = Not at all
- ☐ 1= About once



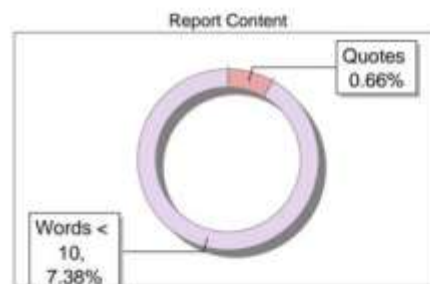
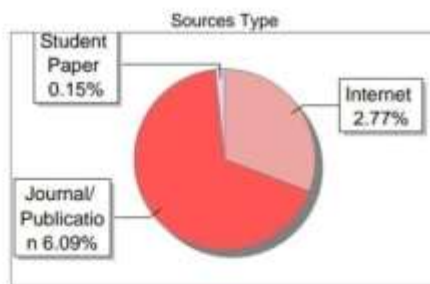
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