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The Effect of Social Media Addiction on Attention Span and Aggression among University Students

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Abstract

*Social media now permeates every aspect of everyday life, impacting social relationships, communication, and information gathering. On the other hand, worries are raised about how social media addiction could influence attention spans and aggression. This research aims to explore the relationship between social media addiction, attention span, and aggression among university students, considering the growing prevalence of social media use and its implications for mental health. University students were included in the research. The Aggression Questionnaire (AGQ), the Mindful Attention Awareness Scale (MAAS), and the Social Media Addiction Scale (SNAS) were used as assessment instruments. Correlation analyses were performed in order to under the relationship between social media addiction, attention span, and aggression. The findings revealed a significant negative correlation between SNAS and MAAS ($r = -.391^{**}$, $p < .001$), suggestive of a possible decline in mindful attention awareness in people with an increased addiction to social networking. Moreover, a positive correlation was found between SNAS and AGQ ($r = .488^{**}$, $p < .001$), indicating that a greater propensity to engage in violent behavior, especially online, may be associated with an increased addiction to social networking. MAAS has negative correlation with AGQ ($r = -.322^{**}$, $p < .001$) that indicates that the person with high level of mindfulness are less likely to engage in aggressive behavior. Furthermore, the association between aggressiveness and social media addiction is favorable, underscoring the significance of treating violent behaviors linked to social media addiction.*

Keys words: Social Media Addiction, Mindful, Attention span, Aggression, Effect of Media

Background

In the current digital era, social networking is become a necessary part of our everyday existence impacting how we communicate, connect with one another, and get information. In addition to completely changing the dynamics of interpersonal connections Concerns over social media's potential influence on people's behavior and mental processes have arisen as a result of its widespread use. (Kuss & Griffiths, 2017). According to Hussain et al. (2023), in their study on the association between internet addiction level of adolescents and parental parenting style, significant correlations were found between certain parenting styles and the extent of internet addiction among adolescents. Specifically, they found that internet has significant role

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on adolescents (Hussain et al., 2023). The rising incidence of social media addiction and its possible effects on users' attention spans and levels of aggression are two such areas of worry. A third of people on the planet used social media as of January 2016, demonstrating the exponential expansion of this medium (Hawi & Samaha, 2017). Governments, political parties, nonprofit organizations, medical facilities, academic institutions, and others are drawn to the dynamic usage and interactions of social media. Businesses and organizations are using social media to expand their client base and market share as more people use social media networks on a daily basis. Social media is widely used by businesses in the European Union (EU) for a variety of reasons, including employment choices, product development, public relations, marketing, and customer support. Additionally, a lot of businesses and individuals use social media networks to expand their reach and enhance their reputation and identity. At the same time, people are using social media more frequently in their daily lives, which is leading to addiction and unsettling mental and physical issues for users in the long run (Baccarella et al., 2018). Virtual worlds including online games, chat rooms, homepages that resemble rings built of web pages, electronic bulletin boards, and social networking programs are used by people to communicate online. Users can use virtual lives on Facebook, Twitter, Google Plus, My Space, YouTube, LinkedIn, Tagged, Badoo, Xing, Orkut, Pinterest, WhatsApp, Viber, Snapchat, LINE, Pinterest, LinkedIn, Telegram, Blackberry Messenger, and Kakao Talk as a means of escaping from everyday life and interacting with others (Vannucci et al., 2017).

Although social media platforms have advantages and disadvantages, our primary concern is the harm they do to individuals, especially when it comes to addiction, since users who exhibit behavioral symptoms of addiction regardless of their circumstances are of particular concern. (Pellegrino et al., 2022). As far as we can tell, social media addiction is defined as compulsive use of social media sites that exhibits signs of behavioral addiction. Among the symptoms are salience, tolerance, conflict, withdrawal, relapse, and mood regulation. (Peng & Liao, 2023). The studies on social media addiction found that although withdrawal, negative effects, and obsession are all obvious signs of addiction, the validity of social media addiction remains debatable (Stănculescu & Griffiths, 2022). Additional studies on social media research Measuring tools for social media addiction have not been created or validated, despite the fact that major behavioral addiction symptoms—tolerance, withdrawal, conflict, salience, relapse, and mood modification—are displayed by social media users. (Peng & Liao, 2023).

Studies have indicated that aggression has a negative impact on mental health. (Newman et al., 2023). Likewise, young people's mental health issues are brought on by verbal aggressiveness (Polcari et al., 2014). Aggression, on the other hand, has a negative correlation with wellbeing and mental health. It might be argued that verbal aggressiveness is more appropriate on social media since it takes place there instead of in person. Therefore, by reducing emotional engagement during conversation, people may react aggressively more frequently, which may be linked to social media addiction (Howe & Cionea, 2021).

People require social support in order to feel loved, cared for, and respected by friends and family, as well as to combat unfavorable life events and lower stress levels while boosting happiness. People discuss their personal issues, unpleasant experiences, and emotions with others in an effort to find social support and solutions (Zhao et al., 2021). Despite the fact that new technologies typically improve people's quality of life, case studies from psychiatrists and related research on addiction prevention also highlight the fact that excessive use of these technologies can lead to new issues. An individual's mental health may be negatively impacted by a lack of real social support, which can result in depressive and anxious sentiments.

(Pellegrino et al., 2022). Stressors that university students must deal with include pressure from their coursework as well as other challenges in life, such as moving away from home, taking care of oneself, and finding new friends. (Hussain, Rana, et al., 2023). Because of this, students could use social media excessively as a means of unwinding and forgetting about their daily problems.

Other factors contributing to increased social media use include feeling more at liberty online and the diversity of social media use on mobile devices (Brailovskaia et al., 2019). Our research attempts to add to the knowledge on social media addiction and its possible effects on users' attention spans and levels of aggression among university students.

Literature Review

Elnur Rustamov & Matanat Aliyeva (2023) looked at how aggression affects the relationships between social media addiction and adolescent wellbeing. 1354 minors were involved in the study; 808 of them were female and 546 of them were male. The participants' average age was 14.12 (SD= 1.51). The Warwick-Edinburgh Mental Wellbeing Scale, the Buss Perry Aggression Questionnaire, and the Bergen Social Media Addiction Scale were used to collect the data. (Umer et al., 2022). The results of the study demonstrated that violence has a major mediating role in the relationship between social media addiction and mental health. Thus, it can be said that among those who are addicted to social media, rage is a poor indicator of mental health. (Rustamov et al., 2023).

Asma, Raja, and Assad Rahman (2022) investigated the link between teenage internet addiction and aggressive conduct. In September 2023, 157 students from different Haripur municipal schools and colleges, including Aarti Shukla and Mustafa Nadeem Kirmani, were included in the sample of 200 individuals, aged 15 to 19, in order to investigate the effect of internet addiction on aggressiveness. Issue V, Volume IX. The research indicates a clear link between internet addiction and aggressiveness. (Shukla & Kirmani).

Phan (2023) investigated the impact of social media on upcoming economists. What impact has social media had on the perception of attention span among Swedish high school economics students? This study uses a qualitative deductive method and in-depth interviews to examine how social media affects high school students' attention spans. The survey, which involved students from various socioeconomic backgrounds and social media usage patterns, discovered that although students valued interesting information, they were also worried about addiction and continual diversions. Customized strategies are needed to balance social media with schoolwork, and the research highlights the significance of study areas, timing, and self-discipline. But several students found it difficult to put their studies ahead of social media, which resulted in worry and decreased output. (Hussain, Iqbal, et al., 2023). To prioritize academics while promoting healthy habits, setting limits, and encouraging responsible social media usage, educators, parents, and students must work together to implement integrated efforts that address the complicated link between social media and attention spans. The results also emphasize how crucial it is to use certain strategies and treatments to deal with the particular problems associated with managing social media in high school. (Phan, 2023).

Shukla & Kirmani (2023) A cross-sectional research design was used to investigate the effects of internet addiction on teenage aggressiveness and attention span. The study involved 60 adolescents, with 30 each, and used socio-demographic data. The internet addiction test, Child Behavior Checklist (CBCL), and Digital Memory Test were used to assess the participants' behavioral and emotional problems, aggression levels, and working memory. The data was

analyzed using SPSS 26 software program using T-test, finding significant correlations between the variables (Hussain, Razaq, et al., 2023). The findings demonstrated how an adolescent's conduct, hostility, and attention span are impacted by internet addiction. There is a strong correlation between internet addiction, behavioral issues, and attention span as online addiction is associated with emotional behavior issues and violence in real life. In the study, parental support and advice were also taken into account. (Shukla & Kirmani).

Aim of the Study

This study aims to evaluate the effect of social media addiction on attention span and aggression among university students.

Objectives

- 1) The relation of social media addiction with attention span and aggression among university students.
- 2) The connection of attention span with aggression.
- 3) The attention span levels and aggressiveness of females and males having social media addiction.

Hypothesis

There will be no significant relationship between aggression, attention span and social media addiction among university students.

Methodology Design

For this study, a cross-sectional research approach was adopted.

Sample

For the current study, 280 students from Quetta's government and private institutions—147 males and 133 women—were selected using a convenient sampling method.

Tools

- 1) **Socio-demographic Details:** Through the use of a self-made proforma, the researchers collected sociodemographic data. This information included details such as age, gender, education level, time spent on social media, marital status, family income, the type of family, relationship with family members and concern about anger.
- 2) **Social Networking Addiction Scale (SNAS):** The social networking addiction scale (SNAS) was utilized, with the authors' consent, to gauge students' addiction to social media. This questionnaire is developed by M.G. Shahnawaz & Usama Rehman and consists of 21 statements in which each item is rated on 7-point Likert scale (where 1= strongly disagree, 2= disagree, 3= somewhat disagree, 4= neutral, 5= somewhat agree, 6= agree, 7= strongly agree) with the total score ranging from 21 to 147. The total is obtained by taking the sum of all the questions. Any score above 84 signifies addiction (Shahnawaz & Rehman, 2020).
- 3) **Mindful Attention Awareness Scale (MAAS):** This scale was used to measure the attention span among the students. Permission was taken from the authors. This questionnaire is developed by Kirk Warren Brown & Richard M Ryan. This scale is a 15-item, 6-point questionnaire (where 1= almost always, 2= very frequently, 3= somewhat frequently, 4= somewhat infrequently, 5= very infrequently, 6= almost never). We score it by simply taking the mean of all the questions. A higher score indicates more attention (Brown & Ryan, 2003).
- 4) **Aggression Questionnaire (AGQ):** After getting permission from the authors, Buss-

Perry aggression questionnaire was used to measure the level of aggression among the students. The scale was developed by Arnold Buss and David Perry. This self-report questionnaire is composed of 29 items that is rated on 5-point Likert scale (ranging from 1 = extremely uncharacteristic of me to 5 = extremely characteristic of me). Two items in the scale are reverse scored. The scale consists of 4 factors which are Physical Aggression (9 items whose score range from 9-45), Verbal Aggression (5 items with score ranging from 5-25), Anger (7 items that range from 7-35) and Hostility (8 items whose score range from 8-40). The total score is calculated by adding the scores of all the items (with scores ranging between 29 and 145). Higher score indicates higher aggression (Mostafaei et al., 2014).

Procedure: Participants in this study were older than 18, representing both genders and age groups. They were told of the objective of the study and consent forms were given to participants and data was gathered from self-rated surveys social media Addiction Questionnaire, Aggression and Attention span Questionnaire were given and Study Description Instructions. The procedures outlined in each handbook for gathering data were adhered to. To get the findings, the data was gathered and sorted in accordance with the study's inclusion criteria.

Ethical Considerations

- 1) The participants received guarantees that their information would be kept private, and that no information would be shared without prior consent.
- 2) Every participant gave their informed permission.
- 3) The participants were told that if they required psychological assistance, they may get in touch with the researcher.
- 4) We obtained permission from all reputable writers to utilize the surveys.

Result

Sample table N was described in this session regarding age, gender, education level, time spent on social media, marital status, family income, the type of family, relationship with family members and concern about anger in order to comprehend the characteristics of the sample so that analysis could be carried out. The following table covers the following topics: age, gender, education level, time spent on social media, marital status, family income, the type of family, relationship with family members and concern about anger.

Table 1: Demographic Characteristics of Participants (N=280).

	F	%
Gender		
Female	133	47.5
Male	147	52.5
Marital Status		
Single	255	91.1
Married	22	7.8
Engaged	3	1.1
Education		
BS	252	90
MS	27	9.6
PhD	1	0.4
Family System		
Joint	150	53.6
Nuclear	130	46.4
Marks Satisfaction		

	F	%
Unsatisfied	9	3.2
Somewhat unsatisfied	23	8.2
Neutral	82	29.3
Somewhat Satisfied	67	23.9
Satisfied	99	35.4
Relationship with siblings		
Unsatisfied	6	2.1
Somewhat Unsatisfied	9	3.2
Neutral	64	22.9
Somewhat Satisfied	50	17.9
Satisfied	151	53.9
Relationship with father		
Unsatisfied	3	1.1
Somewhat Unsatisfied	16	5.7
Neutral	36	12.9
Somewhat Satisfied	45	16.1
Satisfied	180	64.3
Relationship with mother		
Unsatisfied	2	0.7
Somewhat Unsatisfied	12	4.3
Neutral	31	11.1
Somewhat Satisfied	36	12.9
Satisfied	199	71.1
Family views about anger		
Unsatisfied	41	14.6
Somewhat Unsatisfied	41	14.6
Neutral	100	35.7
Somewhat Satisfied	54	19.3
Satisfied	44	15.7
Participant views about anger		
Unsatisfied	31	11.1
Somewhat Unsatisfied	34	12.1
Neutral	104	37.1
Somewhat Satisfied	58	20.7
Satisfied	53	19

Note: F = Frequency ; % = Percentage.

The table below shows the presents participants' characteristics including mean, standard deviation, minimum, maximum.

Table 2: Mean and Standard Deviation of the Participants for Demographic Characteristics.

Participants Characteristics			N=250		
	M	SD	Mini	Max	
Age		21.5	2.44	16	33
Family income		172989	321576	20000	3000000
Birth order		2.65	1.8	1	12
Siblings		4.6	2.2	1	12

Note: M= Mean, SD= Standard Deviation, N= Total Participants, Mini= Minimum, Max=Maximum.

The result indicates the age with M=21.5, SD=2.44 (Mini=16, Max= 33), family income M=172989, SD=321576(Min=20000 and Max=3000000), birth order M=2.6, SD= 1.8(Mini=1 and Max=12), and siblings M=4.6, SD=2.2 (Mini=1, Max=12).

Hypothesis 1: *There will be no significant relationship between aggression, attention span and social media addiction among university students.*

Table 3: Correlation Study of Variable

Variables	SNAS	MAAS	AGQ
SNAS	1	-.391**	.488**
MAAS		1	-.322**
AGQ			1

Note: SNAS= Social Networking Addiction Scale (SNAS), MAAS= Mindful Attention Awareness Scale (MAAS), AGQ= Aggression Questionnaire (AGQ), **. Correlation Is Significant at the 0.01 Level.

SNAS has negative correlation with MAAS ($r = -.391^{**}$, $p < .001$) and positive correlation with AGQ ($r = .488^{**}$, $p < .001$) that indicates that the negative correlation implies that as social networking addiction increases, individuals may experience a decrease in mindful attention awareness. This suggests that excessive engagement with social media platforms may hinder one's ability to focus on the present moment and engage in activities with full awareness. Social media, with its constant stream of notifications, updates, and information, can create an environment that promotes distraction. This constant distraction may make it challenging for individuals to cultivate mindfulness, leading to a reduced ability to be fully present in their offline, real-world experiences and positive correlation suggests that as social networking addiction increases, there may be a tendency for individuals to exhibit more aggressive behaviors, particularly in the online realm. Social networking sites may give rise to a variety of aggressive behaviors, such as unpleasant remarks, cyberbullying, and physical altercations. The positive correlation implies that that people with social networking addictions could be more prone to participate in or encounter these kinds of hostile activities online. MAAS has negative correlation with AGQ ($r = -.322^{**}$, $p < .001$) that shows the positive link implies that practicing mindfulness promotes an inactive awareness of one's thoughts and feelings. This implies that those who have greater levels of MAA would be less prone to respond impulsively or violently to stimuli in both online and offline environments.

Discussion

This research offers an insight into how social media addiction affects university students' attention span and aggression. The results of this study show a strong relationship between university students' attention span, aggression, and social media addiction. The negative correlation between Social Networking Addiction and Mindful Attention Awareness suggests that people may experience a decline in mindful attentive awareness as their addiction to social networking grows. This implies that spending too much time on social media might make it more difficult to pay attention to the here and now and participate in activities fully consciously. Social media's never-ending barrage of notifications, information, and updates fosters a distracted atmosphere that makes it difficult for people to practice mindfulness and be totally present in their offline experiences.

Moreover, the positive correlation between SNAS and Aggression shows that people may have a propensity to behave more aggressively as their addiction to social networking grows, especially when it comes to online interactions. Aggression takes many forms on social media sites; these include confrontations, nasty remarks, and cyberbullying. The positive correlation implies that people with social networking addictions could be more prone to participate in or encounter these kinds of hostile activities online. The negative correlation between MAAS and AGQ suggests that engaging in mindfulness training encourages a passive awareness of one's thoughts and emotions. Higher mindfulness practitioners could be less inclined to respond rashly or violently to stimuli in both online and offline environments. This finding emphasizes

the potential protective role of mindfulness in mitigating aggressive tendencies associated with social media addiction. The results align with existing literature that links social media addiction to negative outcomes, such as decreased attention span and heightened aggression (Shukla & Kirmani). The research included in the literature review lends more credence to the idea that social media addiction might have an adverse effect on mental health, with aggressiveness serving as a mediating factor in the association between adolescent mental health and social media addiction (Rustamov et al., 2023). The study advances knowledge of the intricate relationships among university students' social media addiction, attention span, and violence. These findings have ramifications for mental health practitioners, legislators, and educational institutions. University students' mental health may benefit from interventions that minimize aggressiveness associated with online interactions and encourage thoughtful social media use. (Hussain, Hassan, et al., 2023).

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