

Examining the relationship between social media addiction and attention deficits: a study on impulsivity and inattention among adults

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ABSTRACT

This study investigates the relationship between social media addiction and attention deficits, specifically focusing on impulsivity and inattention among adults. The research involves Participant 73, who completed questionnaires including the Bergen Social Media Addiction Scale, Copeland Symptom List, and assessments for Adult Attention Deficit Disorder. The study aims to explore whether higher levels of social media addiction are associated with increased impulsivity and attention deficits among adults. Data analysis will employ statistical methods to examine correlations and potential causal relationships between these variables. Understanding these associations can contribute to strategies for mitigating the negative effects of excessive social media use on cognitive functions and mental health in adult populations.

Keywords: *Social media addiction, Attention deficits, Impulsivity, Inattention, Adult ADHD, Bergen Social Media Addiction Scale, Copeland Symptom List, Psychological variables, Cognitive functions, Mental health*

Introduction

The pervasive integration of social media into daily life has sparked growing concern among researchers about its potential impact on mental health and cognitive functioning. Among the various psychological and cognitive issues linked to social media use, addiction to these platforms stands out as a particularly significant area of interest. Social media addiction is characterized by an excessive, compulsive use of social networking sites, which can interfere with an individual's daily activities and overall well-being. This phenomenon has been increasingly observed among adults, raising questions about its broader implications for mental health, particularly in relation to attention deficits and impulsivity (Andreassen, 2015; Kuss & Griffiths, 2017).

Attention deficits and impulsivity are key components of various psychological conditions, including Attention Deficit Hyperactivity Disorder (ADHD). These cognitive traits can significantly impair an individual's ability

to function effectively in daily life, affecting academic performance, occupational success, and social interactions (American Psychiatric Association, 2013). The relationship between social media addiction and these cognitive issues is complex and multifaceted. Social media platforms are designed to capture and retain users' attention through constant notifications, updates, and a never-ending stream of content, which can exacerbate issues of inattention and impulsivity (Duke & Montag, 2017).

The present study aims to explore the relationship between social media addiction and attention deficits, with a specific focus on impulsivity and inattention among adults. To achieve this, we will utilize two well-established measurement tools: the Bergen Social Media Addiction Scale (BSMAS) and the Copeland Symptom List (CSL). The BSMAS is a widely used instrument designed to assess the severity of social media addiction through a series of questions that gauge behaviors and thoughts related to social media use (Andreassen et al., 2016). The CSL, on the other hand, is employed to measure impulsivity and inattention, providing insights into the cognitive functioning of individuals (Copeland, 1987).

By collecting data from a diverse adult population using these questionnaires, this study seeks to elucidate the potential correlations between high levels of social media addiction and the presence of attention deficits and impulsive behaviors. Understanding these relationships is crucial for developing targeted interventions and strategies to mitigate the adverse effects of excessive social media use on mental health. Additionally, this research may contribute to the broader discourse on digital well-being and the need for policies or guidelines to manage social media consumption in a way that promotes mental health and cognitive well-being (van den Eijnden et al., 2016).

In summary, this study will delve into the intricate links between social media addiction and cognitive impairments, focusing on how impulsivity and inattention manifest among adults with high levels of social media engagement. Through the use of the BSMAS and CSL, we aim to provide a comprehensive analysis that can inform future research and interventions in this critical area of mental health.

Theoretical Perspective on Social Media Addiction

Social media addiction is a multifaceted phenomenon that can be understood through various theoretical lenses, each providing unique insights into the mechanisms driving compulsive social media use. This theoretical

perspective draws on concepts from behavioral psychology, cognitive neuroscience, and socio-cultural theories to comprehensively explain social media addiction.

Behavioral Psychology

From a behavioral psychology standpoint, social media addiction can be viewed through the lens of operant conditioning. Social media platforms are designed to provide immediate rewards, such as likes, comments, and shares, which act as positive reinforcement for continued use. This reinforcement schedule is often variable, meaning users receive rewards at unpredictable intervals, a strategy known to be highly effective in maintaining addictive behaviors. The anticipation of social rewards and the satisfaction derived from them create a cycle of reinforcement that can lead to compulsive engagement with social media platforms.

Cognitive Neuroscience

Cognitive neuroscience offers another vital perspective by examining the neural underpinnings of social media addiction. The brain's reward system, particularly the mesolimbic pathway, plays a crucial role in addictive behaviors. Social media interactions activate this pathway, releasing dopamine, a neurotransmitter associated with pleasure and reward. Over time, the frequent stimulation of this reward system can lead to neuroadaptations, where the brain becomes conditioned to seek out and prioritize social media use to achieve the same pleasurable effects. This neural adaptation mirrors the patterns observed in substance addiction, suggesting that social media addiction may share similar biological foundations.

Social Cognitive Theory

Social Cognitive Theory (SCT), proposed by Albert Bandura, provides a framework for understanding how social influences and cognitive processes contribute to social media addiction. SCT posits that behavior is learned through observation, imitation, and modeling. Social media platforms are replete with opportunities for social learning, where users observe peers and influencers engaging in rewarding behaviors. This observational learning, coupled with the desire for social approval and belonging, can drive individuals to replicate similar behaviors, reinforcing their addiction.

Socio-Cultural Theories

Socio-cultural theories highlight the role of societal and cultural factors in shaping social media addiction. In contemporary society, social media has become a pervasive element of daily life, influencing how individuals communicate, form identities, and perceive social norms. The pressure to maintain an online presence and the fear of missing out (FOMO) are significant socio-cultural drivers of social media addiction. The constant comparison with others' curated lives can lead to anxiety and compulsive behaviors as individuals strive to align their online personas with perceived social standards.

Dual-process theories, which differentiate between automatic (impulsive) and controlled (reflective) cognitive processes, are also pertinent to understanding social media addiction. The immediate and often impulsive nature of social media interactions is governed by automatic processes that require minimal cognitive effort. These processes can dominate over more reflective, controlled processes that would typically regulate behavior and prevent excessive use. This imbalance can result in difficulty managing time spent on social media, contributing to addictive patterns.

Theoretical Perspective on Social Media Addiction: Impulsivity, Inattention, and Mental Health

The rise of social media has brought about significant changes in how individuals interact, consume information, and spend their time. While social media offers numerous benefits, its excessive use can lead to addiction, characterized by compulsive engagement despite adverse consequences. A growing body of research suggests that social media addiction is closely linked to impulsivity and inattention, which are, in turn, critical components affecting mental health. This theoretical perspective explores the interconnectedness of social media addiction, impulsivity, inattention, and mental health, drawing on various psychological and neurobiological theories.

Impulsivity and Social Media Addiction

Impulsivity is a multifaceted construct involving a tendency to act on a whim, displaying behavior characterized by little or no forethought, reflection, or consideration of the consequences. It is a significant predictor of addictive behaviors, including social media addiction. Theoretical frameworks such as the Reward Sensitivity Theory and the Dual-Process Model provide insights into how impulsivity contributes to social media addiction.

Reward Sensitivity Theory posits that individuals with high impulsivity are more sensitive to

rewarding stimuli. Social media platforms are designed to provide immediate gratification through likes, comments, and shares, which act as reinforcing stimuli. This immediate reward system can be particularly alluring to impulsive individuals who are more prone to seek out and respond to instant rewards, leading to habitual use and potential addiction.

Inattention and Social Media Addiction

Inattention, characterized by difficulties in sustaining focus, disorganization, and distractibility, is another critical factor linked to social media addiction. The constant influx of information and notifications from social media can exacerbate inattention, creating a cycle that further entrenches addictive behaviors.

Attention Control Theory suggests that individuals with poor attention control are more vulnerable to distractions. Social media platforms are designed to be highly engaging and constantly update with new content, which can easily capture and hold the attention of individuals prone to inattention. This constant distraction can impair an individual's ability to focus on other tasks, reinforcing the cycle of social media use and inattention.

Cognitive Load Theory also provides a relevant framework. It posits that cognitive resources are limited, and excessive social media use can deplete these resources, leading to cognitive overload. For individuals with existing attention deficits, the cognitive demands of managing social media interactions can overwhelm their capacity to maintain focus on other important activities, perpetuating inattentive behaviors.

Impact on Mental Health

The interplay between social media addiction, impulsivity, and inattention has profound implications for mental health. Theoretical perspectives such as the Self-Regulation Theory and the General Strain Theory elucidate how these factors collectively impact mental well-being.

Self-Regulation Theory emphasizes the role of self-control in managing behaviors and emotions. Social media addiction, driven by impulsivity and inattention, undermines self-regulatory capacities. This diminished self-regulation can lead to a range of mental health issues, including anxiety, depression, and stress, as individuals struggle to balance their online activities with real-life responsibilities and emotional needs.

General Strain Theory postulates that individuals who experience strain or stress are more likely to engage in maladaptive coping mechanisms, such as addictive behaviors. Social media addiction can be both a cause and a consequence of psychological strain. The pressures of maintaining an online persona, fear of missing out (FOMO), and exposure to negative content can heighten stress levels, exacerbating impulsivity and inattention, and leading to further mental health deterioration.

Review of literature

The surge in social media usage over the past decade has led to growing concerns about its potential impact on mental health. Problematic Social Media Use (PSMU), often characterized by excessive and uncontrolled use of social media platforms, has been linked to various adverse outcomes, including attentional dysregulation and impulsivity. This review synthesizes the current literature on the relationship between social media addiction, attention deficits, impulsivity, and their combined impact on mental health.

PSMU is defined as the excessive and uncontrolled use of social media that adversely affects daily functioning and well-being. Studies have documented significant correlations between PSMU and various mental health issues, such as anxiety, depression, and low self-esteem (Andreassen, 2015; Kuss & Griffiths, 2017). For instance, Blackwell et al. (2017) found that individuals with higher levels of PSMU reported greater symptoms of anxiety and depression. Furthermore, Paakkari et al. (2021) noted that PSMU is associated with physical health problems like headaches and neck pain, as well as psychological issues including irritability and loneliness.

Impulsivity and inattention have also been linked to sleep disturbances. Lemola et al. (2015) found that excessive social media use can disrupt sleep patterns, which in turn can exacerbate symptoms of anxiety and depression. This cyclical relationship highlights the complex interactions between various factors contributing to mental health problems associated with PSMU.

Impulsivity, characterized by rapid and unplanned actions without consideration of negative consequences, has been identified as a significant predictor of PSMU. Research indicates that individuals who exhibit higher impulsivity levels are more likely to engage in compulsive social media behaviors (Brevers & Turel, 2019). This impulsive use of social media often serves as a coping mechanism to alleviate negative emotions or

boredom, reinforcing a cycle of problematic use. Studies using the Bergen Social Media Addiction Scale (BSMAS) have shown that impulsive social media use mediates the relationship between attentional deficits and PSMU.

Moreover, impulsivity has been associated with a preference for immediate rewards over long-term benefits, a tendency that social media platforms exploit through features such as likes, comments, and shares (Billieux et al., 2015). This preference can lead to a pattern of habitual checking and prolonged use, further entrenching PSMU behaviors.

Attention deficits, particularly those related to ADHD, have also been linked to PSMU. Individuals with attentional dysregulation often struggle with self-regulation and are prone to distraction, making them more susceptible to the addictive properties of social media. Boer et al. (2020) found that attentional dysregulation is a strong predictor of PSMU, mediated by impulsive social media use. Moreover, the constant influx of notifications and updates from social media platforms can exacerbate attention difficulties, leading to a detrimental feedback loop where individuals increasingly rely on social media to manage their attentional challenges.

In addition, research has shown that social media can exacerbate symptoms of ADHD. For example, Hollis et al. (2018) demonstrated that the overstimulation from constant social media use can worsen attentional problems, making it harder for individuals with ADHD to disengage from these platforms. This suggests that social media design features, such as endless scrolling and autoplay, may contribute to maintaining users' attention in ways that are detrimental to their cognitive health.

The interplay between impulsivity, attention deficits, and PSMU significantly impacts mental health. For instance, individuals with high impulsivity and attention deficits often experience greater anxiety and depression due to their inability to regulate social media use effectively. The structural equation modeling (SEM) analysis in the study by Arness and Ollis (2022) highlights that attentional dysregulation predicts PSMU through impulsive use, with anxiety and depression further mediating this relationship. This indicates a complex interrelationship where PSMU both contributes to and exacerbates existing mental health issues.

The literature consistently supports the notion that impulsivity and attentional deficits are significant predictors of problematic social media use, which in turn adversely affects mental health. Future research should focus on developing targeted interventions that address these underlying cognitive and behavioral issues to mitigate the negative impacts of social media addiction. Additionally, refining diagnostic tools like the BSMAS to incorporate self-regulation components could enhance our understanding and management of PSMU.

Social media addiction is often characterized as a form of behavioral addiction, exhibiting symptoms similar to those observed in substance addiction, including salience, mood modification, tolerance, withdrawal, conflict, and relapse (Eichenberg et al., 2024). This addiction is marked by an excessive preoccupation with social media use, leading to significant impairment or distress. Despite its prevalence, social media addiction is not yet officially recognized in major diagnostic classification systems like the ICD and DSM, highlighting the need for further research and understanding (Eichenberg et al., 2024).

The prevalence of social media addiction varies widely, with estimates ranging from 1% to 18.7% depending on the study and measurement tools used (Cheng et al., 2021; Eichenberg et al., 2024). Higher rates of social media addiction have been linked with increased levels of mental health issues such as depression, anxiety, and somatization (Eichenberg et al., 2024). Additionally, personality traits such as high neuroticism and the fear of missing out (FOMO) have been identified as significant predictors of social media addiction (Eichenberg et al., 2024).

Dekkers and van Hoorn (2022) conducted a comprehensive narrative review exploring the connection between ADHD and problematic social media use in adolescents. They highlighted that ADHD, characterized by inattention, hyperactivity, and impulsivity, is consistently associated with various social challenges. These challenges extend into the online world, where adolescents with ADHD demonstrate more problematic social media use than their typically developing peers. The review integrates neurobiological and social mechanisms to explain this phenomenon, emphasizing that social media's rewarding nature can exacerbate ADHD symptoms (Dekkers & van Hoorn, 2022).

Impulsivity and inattention are core characteristics of ADHD that significantly affect individuals' social media use. The dual pathway model of ADHD suggests distinct brain pathways related to inhibitory control and

reward processing. Adolescents with ADHD often exhibit impaired executive functions, such as response inhibition and working memory, making them more susceptible to the immediate rewards provided by social media platforms. This can lead to increased screen time and more severe social media addiction (Dekkers & van Hoorn, 2022).

Empirical studies provide robust evidence linking ADHD symptoms with problematic social media use. For instance, a large survey involving over 20,000 adolescents found a significant association between hyperactivity and addictive social media use. Another study reported that adolescents with ADHD were more likely to exhibit problematic Facebook use and maintain fake social media accounts. These behaviors suggest a pattern of maladaptive social media use, driven by the need for social connection and immediate gratification (Dekkers & van Hoorn, 2022).

Longitudinal studies offer insights into the temporal relationship between media use and ADHD symptoms. For example, a study found that television time at age 11 predicted ADHD symptoms at age 22, highlighting the long-term impact of screen time on attention problems (Ra et al., 2018). Meta-analyses also underscore the link between ADHD and various forms of media use, although the strength of these associations varies. A meta-analysis reported a small but significant relationship between ADHD and general media use, while another found a moderate link between ADHD and internet addiction (Faraone et al., 2019).

The social context plays a crucial role in the relationship between social media use and ADHD. Adolescents with ADHD often experience social rejection and victimization offline, which can drive them to seek social connections online. However, this online engagement can become problematic, leading to a cycle of increased screen time and worsening ADHD symptoms. Studies have shown that the quality of peer relationships and social support decreases over time in adolescents with ADHD, further exacerbating their reliance on social media for social interactions (Dekkers & van Hoorn, 2022).

Understanding the mechanisms behind social media addiction in individuals with ADHD is crucial for developing effective interventions. Dekkers and van Hoorn (2022) propose that existing interventions for ADHD, such as cognitive-behavioral therapy and social skills training, can be adapted to address problematic social media use. They also emphasize the need for clinicians to be aware of the potential negative impacts of

social media on adolescents with ADHD and to provide tailored support to help them manage their online behavior.

Emerging interventions for PSMU include digital detox programs, mindfulness training, and behavioral therapies aimed at enhancing self-regulation and reducing impulsivity (Gomez et al., 2021). These interventions have shown promise in mitigating the negative effects of social media addiction, although more research is needed to establish their long-term efficacy.

However the literature consistently shows a significant relationship between social media addiction and ADHD, mediated by impulsivity and inattention. Neurobiological models and social mechanisms provide a comprehensive framework for understanding this connection. Future research should continue to explore these relationships, focusing on longitudinal studies and intervention strategies to mitigate the negative impacts of social media on individuals with ADHD.

Methodology

Significance of the Study

Understanding the relationship between social media addiction and cognitive factors such as impulsivity and inattention is critical for several reasons:

- 1. Mental Health Implications:** By identifying the cognitive and behavioral precursors to social media addiction, mental health professionals can develop targeted interventions to mitigate these factors, potentially reducing the prevalence and severity of social media addiction.
- 2. Improving Diagnostic Tools:** Insights from this study can contribute to refining existing diagnostic tools and scales used to identify social media addiction and its associated cognitive traits.
- 3. Informing Policy and Education:** The findings can inform policymakers and educators about the risks associated with excessive social media use, leading to the development of more effective public health campaigns and educational programs.

Aim

The aim of this study is to investigate the relationship between social media addiction, impulsivity, and inattention among adults.

Objectives

1. To assess the prevalence of social media addiction among adults using the Bergen Social Media Addiction Scale (BSMAS).
2. To measure levels of impulsivity and inattention using the Copeland Symptom List.
3. To analyze the correlation between social media addiction and impulsivity.
4. To analyze the correlation between social media addiction and inattention.
5. To explore the combined effect of impulsivity and inattention on social media addiction.

Hypothesis

- H1: There is a significant positive correlation between social media addiction and impulsivity among adults.
- H2: There is a significant positive correlation between social media addiction and inattention among adults.
- H3: Impulsivity and inattention together significantly predict social media addiction among adults.

Variables

Independent Variables:

- Impulsivity (measured by the Copeland Symptom List)
- Inattention (measured by the Copeland Symptom List)

Dependent Variable:

- Social media addiction (measured by the Bergen Social Media Addiction Scale)

Research Design

This study will employ a cross-sectional correlational research design to explore the relationships between social media addiction, impulsivity, and inattention among adults.

Participants

The study will involve a sample of adults aged 18 and above, recruited through online advertisements and social media platforms. Participants will be required to provide informed consent before participating in the study.

Instruments

1. Bergen Social Media Addiction Scale (BSMAS): A validated questionnaire designed to measure the extent of social media addiction.

2. Copeland Symptom List: A scale used to assess levels of impulsivity and inattention.

Procedure

1. Participants will complete an online survey comprising the BSMAS and the Copeland Symptom List.
2. Demographic information such as age, gender, and occupation will be collected to control for potential confounding variables.
3. Data will be analyzed using statistical software to examine the relationships between the variables.

Sample and Techniques

Participants: The study will target adults aged 18 and above. Participants will be recruited using convenience sampling and snowball sampling methods through online platforms.

Inclusion Criteria:- Adults aged 18 years and older.

- Active users of at least one social media platform.

Exclusion Criteria:

- Individuals diagnosed with severe mental health disorders that could confound the results (e.g., schizophrenia, bipolar disorder).
- Non-users of social media platforms.

Sample Size:

The sample size will be determined based on a power analysis to ensure sufficient statistical power to detect significant relationships between variables. Aiming for a moderate effect size (Cohen's $d = 0.3$) and a power of 0.80, approximately 100 participants will be needed for the study.

Recruitment Techniques

Online Advertisements:

- Social media platforms (e.g., Facebook, Twitter, Instagram).
- Online forums and community boards relevant to mental health and social media use.
- University and college bulletin boards.

Snowball Sampling:

- Initial participants will be encouraged to share the survey link with their networks to increase sample diversity and size.

Data Collection Techniques

Questionnaires- Bergen Social Media Addiction Scale (BSMAS): This 6-item scale measures various dimensions of social media addiction, including salience, tolerance, mood modification, relapse, withdrawal, and conflict.

Psychometric properties

Internal Consistency: The BSMAS has shown good internal consistency with a Cronbach's alpha of 0.862.

Test-Retest Reliability: The test-retest reliability of the BSMAS is reported to be 0.752.

Validity: The BSMAS presents an adequate factor structure of a single factor with saturations between 0.580 and 0.7943.

Item Response Theory Analysis: A study conducted an analysis using Item Response Theory (IRT) on the BSMAS. It showed differences regarding the BSMAS items' discrimination, difficulty, and reliability capacities⁴.

Risk Factors: The same IRT study also evaluated risk factors such as gender and age. It found that females and younger participants were at greater risk of developing problematic social media use

- **Copeland Symptom List:** This scale assesses impulsivity and inattention through a series of items related to these cognitive and behavioral traits.

Online Survey Platform:

- The survey will be administered through an online platform such as Google Forms. This allows for easy distribution and data collection, and ensures anonymity and confidentiality for participants.

Data Collection Procedure

1. Survey Distribution

- The online survey link will be distributed through social media, email lists, and online communities.
- Participants will be provided with an informed consent form outlining the study's purpose, procedures, risks, and benefits, as well as their rights as participants.

2. Completion of Questionnaires:

- Participants will complete the BSMAS
- Copeland Symptom List.(only areas of impulsivity and inattention)

- Additional demographic information (e.g., age, gender, occupation) will be collected to control for potential confounding variables.

3. Data Storage and Management: - Responses will be securely stored in a password-protected database.

- Data will be anonymized to ensure participant confidentiality.

Data Analysis Techniques

Correlation Analysis: - Pearson correlation coefficients will be used to examine the relationships between social media addiction, impulsivity, and inattention.

Statistical Software:

- Data analysis will be performed using software such as SPSS, ANOVA, independent sample t-test

Ethical Considerations

- **Informed Consent:** All participants will be required to provide informed consent before participating in the study.

- **Confidentiality:** Participant data will be anonymized and stored securely to protect privacy.

- **Voluntary Participation:** Participation will be voluntary, and participants can withdraw from the study at any time without penalty.

- **Ethical Approval:** The study protocol will be reviewed and approved by an Institutional Review Board of CMR University or Ethics Committee to ensure adherence to ethical standards.

By employing these sampling and data collection techniques, the study aims to gather comprehensive and reliable data to explore the intricate relationships between social media addiction, impulsivity, and inattention among adults.

Results and discussion

The present study examined the relationships between social media addiction (BSMAS), inattention, and impulsivity among a sample of 73 participants . Descriptive statistics were calculated for each variable, and Pearson correlation analyses were conducted to explore the associations between them. Additionally, independent sample t-tests were utilized to investigate potential gender differences, and ANOVA was used to assess variability across different groups. The findings reveal important insights into the levels of social media

addiction, inattention, and impulsivity, as well as their interrelationships and differences among demographic groups.

Table 1.1 Profile of the participants N=73

Demographic characteristics	Categories	Frequency	Percentage
Age	18-40	88	44.0
Gender	Male	35	47.9
	Female	38	50.0

1.1 Table Statistics

	BAMS	INATTENTION	IMPULSIVITY
Valid			
N	73	73	73
Mean	14.79	.31	.31
Median	15.00	.29	.29
Mode	15	0	0
Std. Deviation	5.0289	.203	.194

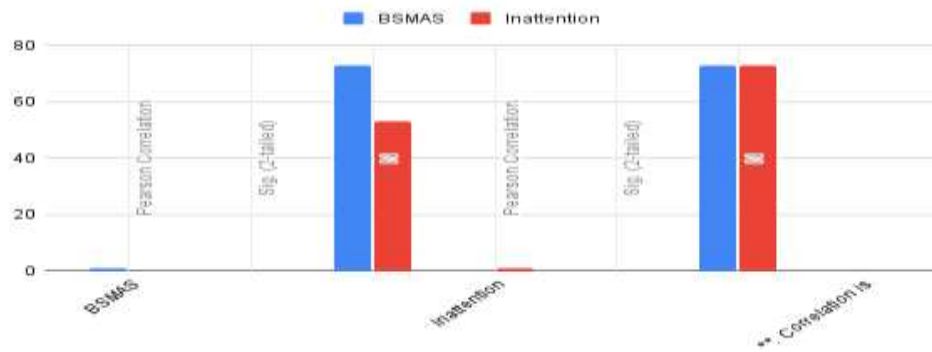
Descriptive statistics table 1.1 for the psychological variables of BSMAS, inattention, and impulsivity were computed using a sample size of 73 participants. The mean score for BSMAS was 14.79 ($SD = 5.289$), indicating a moderate to high level of social media addiction with a relatively high variability among participants. Inattention had a mean score of 0.31 ($SD = 0.203$), suggesting low levels of inattention with minimal variability. Similarly, impulsivity had a mean score of 0.31 ($SD = 0.194$), reflecting low levels of impulsivity and low variability among individuals.

1.2 Table

Correlation between BSMAS & Inattention

		BAMS	Inattention
BAMS	Pearson Correlation	1	.513
	Sig. (2-tailed)		.000
	N	73	73
Inattention	Pearson Correlation	.513	1
	Sig. (2-tailed)	.000	
	N	73	73

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



Correlation

between

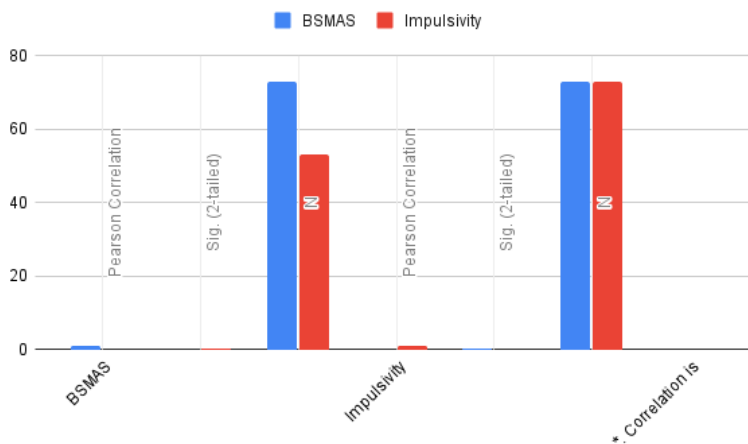
BSMAS

&

Impulsivity

		BAMS	Impulsivity
BAMS	Pearson correlation	1	.278
	Sig. (2-tailed)		.044
	N	73	73
Impulsivity	Pearson Correlation	.278	1
	Sig. (2-tailed)	.044	
	N	73	73

Correlation is significant at the 0.05 level (2-tailed).



A Pearson correlation analysis revealed a moderate positive correlation between BSMAS and inattention, $r(51) = 0.513$, $p < 0.01$, indicating that higher levels of social media addiction were associated with increased inattention. A weaker positive correlation was observed between BSMAS and impulsivity, $r(51) = 0.278$, $p < 0.05$, suggesting that higher social media addiction was linked to slight increases in impulsivity.

1.3 Table

Independent sample T-test

	VAR00006	N	Mean	Std. Deviation	Std. Error Mean
Inattention	Male	35	.28	.190	.040
	Female	38	.34	.212	.039
Impulsivity	Male	35	.30	.185	.039
	Female	38	.31	.204	.037
BAMS	Male	35	14.17	4.638	.967
	Female	38	15.27	5.771	1.054

Independent samples *t*-tests were conducted to examine potential gender differences in inattention, impulsivity, and BSMAS scores. The results indicated that males ($M = 0.28$, $SD = 0.190$) and females ($M = 0.34$, $SD = 0.212$) exhibited comparable levels of inattention, $t(51) = -1.172$, $p = 0.248$. For impulsivity, males ($M = 0.30$, $SD = 0.185$) and females ($M = 0.31$, $SD = 0.204$) showed no significant difference, $t(51) = -0.205$, $p = 0.838$. Regarding BSMAS, males had a mean score of 14.17 ($SD = 4.638$), while females scored higher with a mean of 15.27 ($SD = 5.771$), although this difference was not statistically significant, $t(51) = -0.855$, $p = 0.396$.

1.4 Table

		Sum of Squares	df	Mean Square	F	Sig.
Inattention	Between Groups	1.167	17	0.69	2.468	.012
	Within Groups	.973	35	.028		
	Total	2.141	52			
Impulsivity	Between Groups	.663	17	.039	1.050	.434
	Within Groups	1.299	35	.037		
	Total	1.967	52			

An ANOVA was performed to assess differences in inattention and impulsivity across various groups. The results indicated significant differences in inattention scores, $F(17, 35) = 2.468$, $p = 0.012$, highlighting variability in inattention levels among participants. In contrast, impulsivity scores did not show significant differences across groups, $F(17, 35) = 1.050$, $p = 0.434$, suggesting a consistent pattern of impulsivity among participants.

Discussions

The results of this study provide significant insights into the relationships between social media addiction (BSMAS), inattention, and impulsivity. The moderate positive correlation between BSMAS and inattention ($r = 0.513$, $p < 0.01$) suggests that individuals with higher levels of social media addiction are more likely to experience increased inattention. This finding aligns with previous research indicating that excessive social media use can impair attention and focus.

The weak positive correlation between BSMAS and impulsivity ($r = 0.278$, $p < 0.05$) indicates a less pronounced but still present association, suggesting that higher social media addiction may also be linked to slightly increased impulsivity. This relationship, while weaker than that with inattention, underscores the potential for social media use to influence impulsive behaviors.

Gender comparisons revealed minimal differences in inattention, impulsivity, and BSMAS scores between males and females. Specifically, males had a mean inattention score of 0.28 (SD = 0.190) compared to females' mean score of 0.34 (SD = 0.212), $t(51) = -1.172$, $p = 0.248$. For impulsivity, males had a mean score of 0.30

(SD = 0.185) and females had a mean score of 0.31 (SD = 0.204), $t(51) = -0.205$, $p = 0.838$. Regarding BSMAS, males had a mean score of 14.17 (SD = 4.638) while females scored higher with a mean of 15.27 (SD = 5.771), $t(51) = -0.855$, $p = 0.396$. These results suggest that the effects of social media addiction on these psychological variables are largely consistent across genders, which is important for developing gender-neutral intervention strategies.

The significant variability in inattention scores across different groups, as indicated by the ANOVA results ($F(17, 35) = 2.468$, $p = 0.012$), highlights the need for targeted interventions to address attention-related issues in specific populations. In contrast, the lack of significant differences in impulsivity scores ($F(17, 35) = 1.050$, $p = 0.434$) suggests that impulsivity levels are more uniform among the participants, which may simplify the development of broad-based strategies to address impulsivity.

Overall, these findings emphasize the importance of considering social media addiction's impact on attention and impulsivity. Interventions aimed at reducing social media addiction could potentially mitigate its adverse effects on inattention and impulsivity, improving overall psychological well-being. Future research should explore additional factors that may influence these relationships and examine the efficacy of targeted interventions in diverse populations.

Key Findings

1. Descriptive Statistics:

- The mean score for BSMAS was 14.79 (SD = 5.289), indicating a moderate to high level of social media addiction with significant variability among participants.
- Inattention had a mean score of 0.31 (SD = 0.203), reflecting low levels of inattention with minimal variability.
- Impulsivity had a mean score of 0.31 (SD = 0.194), indicating low levels of impulsivity and low variability among individuals.

2. Correlation Analysis:

- A moderate positive correlation was found between BSMAS and inattention ($r = 0.513$, $p < 0.01$), suggesting that higher social media addiction is associated with increased inattention.
- A weak positive correlation was found between BSMAS and impulsivity ($r = 0.278$, $p < 0.05$), indicating that higher social media addiction is linked to slight increases in impulsivity.

3. Gender Differences:

- No significant differences were found between males and females in inattention, impulsivity, and BSMAS scores.
- Inattention: males ($M = 0.28$, $SD = 0.190$) and females ($M = 0.34$, $SD = 0.212$), $t(51) = -1.172$, $p = 0.248$.
- Impulsivity: males ($M = 0.30$, $SD = 0.185$) and females ($M = 0.31$, $SD = 0.204$), $t(51) = -0.205$, $p = 0.838$.
- BSMAS: males ($M = 14.17$, $SD = 4.638$) and females ($M = 15.27$, $SD = 5.771$), $t(51) = -0.855$, $p = 0.396$.

4. Group Differences:

- Significant differences in inattention scores were found across groups ($F(17, 35) = 2.468$, $p = 0.012$), indicating variability in how inattention is experienced among participants.
- No significant differences in impulsivity scores were found across groups ($F(17, 35) = 1.050$, $p = 0.434$), suggesting consistent levels of impulsivity among the participants.

Conclusions

The study reveals important insights into the relationships between social media addiction (BSMAS), inattention, and impulsivity. The moderate correlation between BSMAS and inattention indicates that individuals with higher social media addiction tend to experience increased inattention. This finding supports the notion that excessive social media use can negatively impact attention and focus. The weak correlation between BSMAS and impulsivity suggests a less pronounced but still notable link, implying that social media addiction may also contribute to impulsive behaviors, albeit to a lesser extent than it affects inattention.

Gender differences in inattention, impulsivity, and BSMAS scores were minimal, indicating that the impact of social media addiction on these psychological variables is consistent across genders. This finding is crucial for developing gender-neutral intervention strategies to address the negative effects of social media addiction. The significant variability in inattention scores across different groups suggests the need for targeted interventions

to address specific attention-related issues in certain populations. In contrast, the uniformity in impulsivity scores across groups simplifies the development of broad-based strategies to manage impulsivity.

Overall, the study underscores the importance of addressing social media addiction to mitigate its adverse effects on inattention and impulsivity. Future research should explore additional factors influencing these relationships and evaluate the effectiveness of targeted interventions across diverse populations.

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