

## The Rising Tide of Social Media Addiction among Higher Secondary Girls in Bangladesh and Its Relation to Socio-Demographic Factors

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### Abstract

*This study explores how common social media addiction (SMA) is among female higher secondary students in Bangladesh, and what socio-demographic factors are related to it. Using the Bergen Social Media Addiction Scale (BSMAS), the researchers collected data from 627 students in the Khulna and Rajshahi districts. Their findings show that 46.74% of respondents had mild addiction, 25.37% had moderate addiction, and only 4.78% had severe addiction, while 23.12% showed no addictive tendencies. The average BSMAS score was 15.15.04 ( $\pm 4.63$ ), with no significant differences by age ( $p = 0.967$ ). However, they found notable differences across socio-demographic factors: students from low-income families (earning 0-30,000 BDT/month) were more likely to be addicted. At the same time, those with stricter parental control had lower scores. Students in the arts/Humanities were more likely to be addicted than those in Science or Business. Interestingly, there were minimal differences between urban and rural areas, although students in co-educational institutions scored higher than those in girls-only colleges. Their qualitative insights revealed that wealthier students frequently utilized digital platforms for educational purposes, whereas lower-income respondents primarily relied on social media for recreation and social interaction. These findings challenge common assumptions about SMA severity in Bangladeshi adolescents, suggesting that while problematic use exists, extreme addiction is less common than expected. This study highlights the need for targeted interventions focusing on high-risk groups (Arts students, low-income families) and recommends college-based digital wellness programs, parental awareness campaigns, and policy measures to promote balanced social media use. However, their study has limitations, including geographical constraints and self-reporting biases. Future longitudinal and multi-regional studies are needed to validate these findings. This research contributes to our understanding of adolescent digital behavior in developing countries and informs culturally relevant strategies to mitigate the negative impacts of SMA.*

**Keywords:** Social media addiction, Bergen Scale, HSC Studying girls, Bangladesh, socio-demographic factors, digital wellness.

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## 1. Introduction

The impact of social media on individuals' daily lives, including their communication, leisure, and information-consumption practices, is undeniable. Social media addiction is an illness characterized by emotional dependence, difficulties in regulating screen time, and compulsive engagement with social media. Numerous physical and mental health issues have been linked to this addiction, which is particularly harmful to teenagers.

There is cause for concern regarding Bangladeshi girls' overall health due to their heavy use of social media in higher secondary level education. Case studies of this nature can be found in the districts of Khulna and Rajshahi, which are known for their educational institutions and increasing access to digital resources. Students' heavy social media usage can negatively impact their sleep, concentration, energy, and mental health. Additionally, excessive screen time may contribute to issues such as anxiety, depression, obesity, and eye strain. This study uses the Bergen Social Media Addiction Scale (BSMAS) to explore the extent of social media addiction among higher secondary girls in Khulna and Rajshahi districts and its impact on their general health status. Understanding these effects can help educators, parents, and policymakers develop strategies to promote a balanced and healthier lifestyle among young students.

The Bergen Social Media Addiction Scale (BSMAS; Andreassen et al., 2016) was adapted from the Bergen Facebook Addiction Scale (BFAS; Andreassen et al., 2012) and contains six items that reflect core addiction elements (Griffiths, 2005). The adaptation (BSMAS) involves replacing the word "Facebook" with "social media" only; social media is defined as "Facebook, Twitter, Instagram, and the like" in the instructions to participants. Psychometric data were evaluated using a sample of adolescents and adults (16-88 years) in Norway. In Bangladesh, the Bergen Social Media Addiction Scale has been validated and accepted by academicians (Naher et al., 2022) to assess social media addiction. Therefore, practicing this validation in the Bangla version of the Bergen Social Media Addiction Scale is logical.

### The Rationale of the Study

Recently, social media addiction has become a major public health concern, especially among teenagers (Andreassen, 2015). In Bangladesh, where internet use has surged, high school girls are being increasingly exposed to social media, sparking worries about addiction and its connection to socio-demographic factors (Akhter & Islam, 2022). Studies show that excessive social media use can cause anxiety, depression, poor grades, and disrupted sleep patterns (Kuss & Griffiths, 2017; Khan et al., 2020). However, there's a lack of research on how socio-demographic factors—like family income, parental education, and differences between urban and rural areas—affect social media addiction in adolescent girls in Bangladesh.

This study aims to address this gap by examining the increasing trend of social media addiction among girls in Bangladesh's higher secondary schools and its relationship to key socio-demographic factors. Gaining insight into these patterns is crucial for creating targeted

interventions, educational policies, and parental guidelines that promote healthier digital habits. Given Bangladesh's conservative social context, where girls face stricter online supervision than boys (Hossain et al., 2021), this research seeks to shed light on the unique challenges girls face regarding digital behavior. The findings will contribute to existing research on adolescent psychology and media consumption in Bangladesh, providing valuable insights for policymakers, educators, and mental health professionals.

## Objectives of the Study

This study aims to explore the development of social media addiction among high school girls in Bangladesh and its relationship with socio-demographic factors. Several specific objectives of the study are outlined below:

1. To assess the prevalence of social media addiction among higher secondary school girls in Bangladesh.
2. To identify the most frequently used social media platforms among the target group.
3. To examine the relationship between social media addiction and socio-demographic factors such as age, family income, parental education, and residential location (urban vs. rural).

## Scope and Limitations of the Study

This study examines girls in the higher secondary level (aged 16-20) from the Khulna and Rajshahi districts in Bangladesh. It uses the Bergen Social Media Addiction Scale (BSMAS) to measure addiction levels tied to various socio-demographic factors, including family income, parental control, academic streams, and residential location. Although the research provides valuable insights into social media usage patterns, it has some limitations. These include its focus on only two districts, potential biases in self-reported usage data, and BSMAS's inability to distinguish between the effects of different social media platforms. The study's cross-sectional design also offers only a snapshot view, lacking longitudinal tracking, and doesn't include a control group (like male students). This may be influenced by conservative cultural norms, which could lead to underreporting of actual social media use. These limitations suggest that caution is necessary when generalizing the findings to other demographics or regions. Still, the study provides important baseline data for understanding adolescent female social media addiction within Bangladesh's educational context.

## Literature Review

### **Social Media Addiction: A Global Perspective**

Social media addiction (SMA) has emerged as a significant psychological and behavioral concern, especially among adolescents (Andreassen, 2015). The excessive use of platforms such as Facebook, Instagram, and TikTok has been associated with compulsive checking behaviors, withdrawal symptoms, and adverse effects on mental health (Kuss & Griffiths, 2017). Research indicates that adolescents are particularly susceptible due to their developmental need for social validation and peer interaction (Twenge & Campbell, 2018).

The Bergen Social Media Addiction Scale (BSMAS) has been widely utilized to assess SMA, highlighting six core criteria for addiction: salience, mood modification, tolerance, withdrawal, conflict, and relapse (Andreassen et al., 2017).

## **Social Media Addiction in Bangladesh**

In Bangladesh, internet usage has surged, with over 125 million users, many of whom are adolescents (BTRC, 2023). Research indicates that higher secondary students, especially girls, are increasingly engaging in prolonged social media use (Akhter & Islam, 2022). A study by Khan et al. (2020) found that 35% of adolescent girls in urban Dhaka exhibited signs of SMA, with Facebook and YouTube being the most addictive platforms. However, rural-urban disparities exist, with urban adolescents having higher addiction rates due to better internet access and smartphone availability (Hossain et al., 2021).

## **Socio-Demographic Factors Influencing Social Media Addiction**

### **Family Income and Economic Status**

Having a higher income tends to be tied to more smartphone ownership and internet access, which can lead to more time spent on social media (Islam et al., 2023). On the other hand, some research suggests that low-income teens may also use social media as a way to cope with stress and limited free time (Rahman & Begum, 2021).

### **Parental Education and Supervision**

Parents with higher education levels tend to monitor their children's internet usage more closely, thereby reducing SMA risks (Sultana et al., 2022). Conversely, a lack of digital literacy among parents in rural areas contributes to unregulated social media use (Ahmed & Hasan, 2020).

### **Urban vs. Rural Disparities**

Urban teenagers report higher smartphone addiction due to increased internet access and social pressures (Khan et al., 2020). In contrast, rural girls face restrictions from social and cultural norms; however, those with access show similar addiction patterns (Hossain et al., 2021).

### **Gender Differences in Social Media Use**

Adolescent girls in Bangladesh face more strict online monitoring than boys. Yet, they tend to spend more time passively consuming (e.g., scrolling, liking) rather than actively posting, which may increase their risk of addiction (Akhter & Islam, 2022). For these girls, social media can be an escape from restrictive offline environments, leading to dependency (Haque et al., 2023).

### **Psychological and Academic Consequences**

Heavy social media use is linked to anxiety, depression, sleep problems, and lower grades (Khan et al., 2020). Research on Bangladeshi college students showed that social media use is tied to fewer study hours and lower exam scores (Rahman et al., 2022).

## Research Gap

While global studies extensively cover SMA, few focus on Bangladeshi higher secondary girls, especially regarding socio-demographic factors. This study aims to bridge that gap by examining how family income, parental education, and urban-rural differences affect SMA in this demographic.

## METHODOLOGY

### Study Areas and Period

The study was conducted in the Rajshahi and Khulna districts, spanning from July 2024 to April 2025.

### Nature of the Study

This research employs a mixed-methods sequential explanatory design, reflecting the perspectives of Morgan (1998) and Creswell et al. (2003). It highlights the importance of various facets of data analysis, such as the sequence of collection and analysis, as well as the points in the research process where both data types converge and are synthesized. In this work, quantitative and qualitative data are used successively to enhance one another.

### Sampling Procedure

This study examines girls at the HSC level, using a clustered sampling method via a questionnaire survey conducted across twelve colleges in the Khulna and Rajshahi districts. These areas are significant, situated at the country's northern and southern extremes, respectively.

### Data Collection Methods

Data were collected through a questionnaire survey, Focus Group Discussions (FGDs), and Key Informant Interviews (KIIs).

Table 1: Data Collection Matrix

Data Collection Techniques	Respondents	Sampling technique	Sample Size	To achieve objectives
Questionnaire survey	Six colleges from Rajshahi District and six colleges from Khulna District	Cluster	627	1, 2 & 3
Focus Group Discussion (FGD)	Education Specialist, Society Analysts, Girl Student's Guardian, College Governing Committee Representatives	Purposive	36	1, 2 & 3
Key Informant Interviews (KII)	Head of the Educational Institute, Education Specialist, Sociologists as Academics, Psychologist as a Counselor, Society Observer	Purposive	23	1, 2 & 3
Total Respondents			686	

## Data Analysis Techniques

For the research study, various statistical methods were used to understand the mental health patterns in this population. The survey questionnaire's quantitative data was summarized using descriptive statistics, including frequency distributions, means, medians, standard deviations, and crosstabs. Correlation analyses revealed connections between variables, such as the relationship between socioeconomic status (including exam results, general health, and extracurricular activities) and mental health indicators (depression, anxiety, stress, and overall health). Regression analysis was also employed to investigate the impact of various factors on mental health outcomes. For example, the study examined the impact of socioeconomic variables and demographic factors on mental strain.

## Ethical Consideration

Researchers assured respondents that their data from the questionnaire survey would be stored securely and kept confidential. In contrast, with the consent of expert interviewees, their names and identities are included in the research report's appendix. Their insights, comments, and perspectives improved the research quality, as noted in the in-text citations. For the case studies, a pseudonym is used instead of the original name to maintain confidentiality and prevent exact identification.

## RESULT AND DISCUSSION

For this part of the study, we have analyzed a range of data types. We conducted Key Informant Interviews with selected educational institutions and experts. The study also includes focus group discussions (FGDs) with heads of educational institutions, education specialists, sociologists, psychologists who serve as counselors, and social observers.

### Severity Level-wise BSMAS Total Score Analysis

Table 2: Higher Secondary Girls' Category-wise BSMAS Total Score

Severity Level	Score Range	Number of Students	Percentage (%)
No Addiction	6-11	145	$(145/627) \times 100 \approx 23.12\%$
Mild Addiction	12-17	293	$(293/627) \times 100 \approx 46.74\%$
Moderate Addiction	18-23	159	$(159/627) \times 100 \approx 25.37\%$
Severe Addiction	24-30	30	$(30/627) \times 100 \approx 4.78\%$

The table presented above reveals that mild addiction is the most prevalent category (46.74%), indicating that nearly half of the students demonstrate signs of problematic social media use without severe dependence. A significant portion (25.37%) falls into the moderate addiction range, signifying that they experience some level of social media dependence that may interfere with their daily lives. Severe addiction is the least common (4.78%), but this group may require intervention due to a strong compulsion toward social media use. About 23.12% of students show no addiction, meaning they use social media in a balanced way

without a significant negative impact. However, it may be challenging to obtain an accurate picture if addiction is assessed based on category-based severity. In that case, addiction should be identified based on individual scores. The figure below can be analyzed.

**Individual score-based Social Media Addiction**

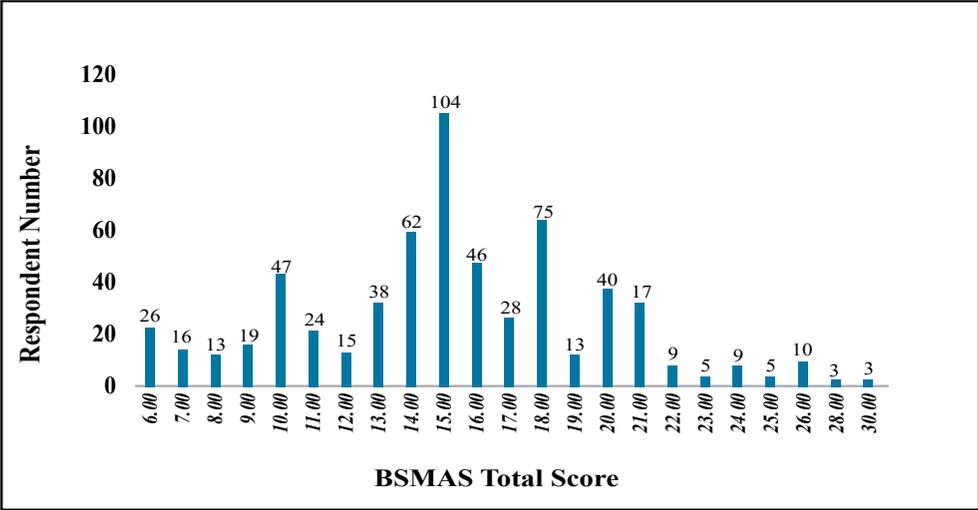


Figure 1: BSMAS Total Score based on Individual Score

This figure explores the mean and median of BSMAS total scores, which are 15.04 and 15.00, respectively. Among the total respondents, 69.86 percent fall below the moderate and severe levels of addiction. The general perception is that most girls at the higher secondary level are severely addicted to social media, based on the total time spent on these platforms. However, this perception is not accurate from a psychological perspective. After calculating the Bergen social media addiction scale, it was found that 30.15 percent of girls fall into the moderate and severe categories of social media addiction. Although this number is not negligible, it is below the assumed threshold. Regarding these findings, some guardians opine that,

When our children use social media, we often perceive their usage as an addiction. However, it is not appropriate to make a general judgment about this. It is necessary to assess it from a psychological perspective. If they do not become addicted even after prolonged use, they can benefit in many ways from social media. Through this, they can discover various learning opportunities, and if they utilize them effectively, it can lay the foundation for a promising career (FGD 1: GSG 1, 3 & 5).

## Age Group-wise Social Media Addiction

Table 3: Age-Wise BSMAS Total Score

Age of the Respondent	Number of Respondents	Minimum	Maximum	Mean	Std. Deviation
16	32	6.00	30.00	15.1875	6.08773
17	255	6.00	30.00	14.9765	4.75869
18	284	6.00	28.00	15.0246	4.35071
19	46	6.00	26.00	15.5000	4.90691
20	10	10.00	18.00	14.8000	2.09762

The table examines several aspects related to the total BSMAS score among higher secondary girls in the Khulna and Rajshahi districts. The first point is Mean Scores Across Age Groups. The mean BSMAS scores for all ages range from 14.80 to 15.50, showing minimal variation. The 19-year-olds have the highest mean score (15.50), indicating a slightly higher tendency for social media addiction in this group. Conversely, the 20-year-olds have the lowest mean score (14.80); however, the sample size is relatively small ( $N = 10$ ), which makes the result less reliable.

The second point is the standard deviation of the total score (variability of scores). The highest variation is found in 16-year-olds (6.09), suggesting greater dispersion in responses. In contrast, the lowest variability among 20-year-olds (2.10) indicates more consistency in responses. Overall, the standard deviations are moderate, indicating that while there are variations in individual social media addiction scores, these variations remain within a reasonable range.

The third aspect to consider is the range of scores. The minimum score recorded among all age groups is 6, indicating that some respondents exhibit minimal signs of social media addiction. Conversely, a maximum score of 30 indicates pronounced signs of social media addiction in specific individuals. Notably, this highest score decreases slightly with age, suggesting a minor decline in extreme social media addiction tendencies over time. However, the data does not highlight any significant trends related to age, as the average scores remain relatively stable across all categories. Adolescents aged 16 to 19 years exhibit greater variability in their BSMAS scores, potentially due to differences in their social media habits and psychological influences.

Now, the question is whether the BSMAS total score varies with age level. Thus, the hypothesis can be framed as follows:

**Null (H<sub>0</sub>):** There is no difference in social media addiction among the higher secondary girls' different age groups.

**Alternative (H<sub>1</sub>):** There is a difference in social media addiction among higher secondary girls in different age groups.

Here, the significance level is  $p = 0.5$ , which is two-tailed.

Table 4: Test of Homogeneity of Variances among the Respondents according to age groups

Test of Homogeneity of Variances			
BSMAS Total Score			
Levene Statistic	df1	df2	Sig.
3.451	4	622	.008

A one-way between-groups analysis of variance (ANOVA) was used to investigate the impact of age levels (16, 17, 18, 19, 20) on social media addiction. Inspection of the skewness, kurtosis, and Shapiro-Wilk statistics indicated that the normality assumption for the dependent variable (Social Media Addiction) was not violated. Levene’s statistic was nonsignificant,  $F(4, 622) = 3.45, p = .01$ ; thus, the assumption of homogeneity of variance can be assumed.

Table 5: Test of ANOVA among the Respondents according to age groups

ANOVA					
BSMAS Total Score					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.088	4	3.022	.140	.967
Within Groups	13380.661	622	21.512		
Total	13392.750	626			

Here, the correspondence p-value of ANOVA is 0.97, which is greater than 0.5, which is  $p > .05$ . Thus, there is no statistically significant difference in social media addiction scores among the age groups of the higher secondary girls in Khulna and Rajshahi districts.

### Location-wise Respondents’ Social Media Addiction

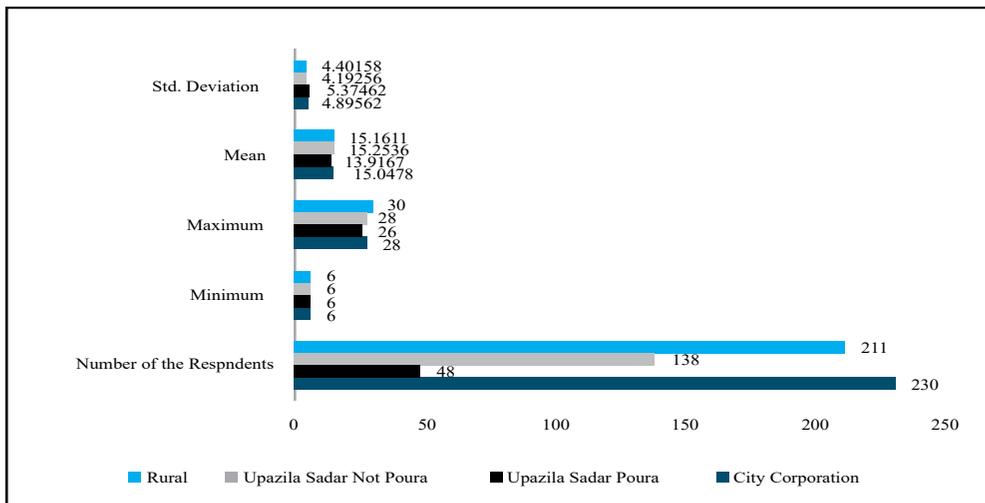


Figure 2: Location-Wise BSMAS Total Score of the Respondents

The figure presents the BSMAS (Bergen Social Media Addiction Scale) total scores categorized by the location of higher secondary girls' colleges. Comparing mean scores provides valuable insights into the variations in total scores. Upazila Sadar Poura students have the lowest mean BSMAS score (13.92), indicating lower social media addiction than students in other locations. Upazila Sadar Not Poura has the highest mean score (15.25), suggesting slightly higher levels of addiction. City Corporation (15.05) and Rural (15.16) respondents have nearly identical mean scores, indicating comparable social media engagement across these locations.

Variations in scores (standard deviation) can be used to understand differences among respondents. The highest variation is in Upazila Sadar Poura (5.37), indicating that responses in this group are more spread out. The lowest variation is in Upazila Sadar Not Poura (4.19), suggesting a more consistent pattern in social media usage. City Corporation (4.90) and Rural (4.40) display moderate variability.

Understanding the minimum and maximum scores among higher secondary girls provides further insight into the issue. The minimum score (6.00) remains uniform across all locations, indicating that some individuals in every area report low levels of social media addiction. The maximum score is highest in rural areas (30.00), showing that some rural students experience extreme social media addiction. City Corporation and Upazila Sadar Not Poura both have a maximum score of 28.00, while Upazila Sadar Poura registers the lowest maximum score (26.00).

City Corporation (Urban) and rural areas have nearly identical mean scores (15.05 and 15.16). This suggests that social media addiction does not significantly differ between urban and rural students. Students in Upazila Sadar Poura have the lowest mean score, possibly indicating less exposure to digital devices or stricter parental and educational controls in these areas. The Upazila Sadar Not Poura group has the highest mean, but the difference is small and insignificant. There is higher variation in smaller groups: the 48 respondents in Upazila Sadar Poura exhibit the highest standard deviation (5.37), indicating that some students in this group are significantly more or less addicted than others. Larger groups, such as City Corporation (230 respondents) and rural areas (211 respondents), tend to have more stable and consistent scores.

## Spending Time-based Respondents' Social Media Addiction

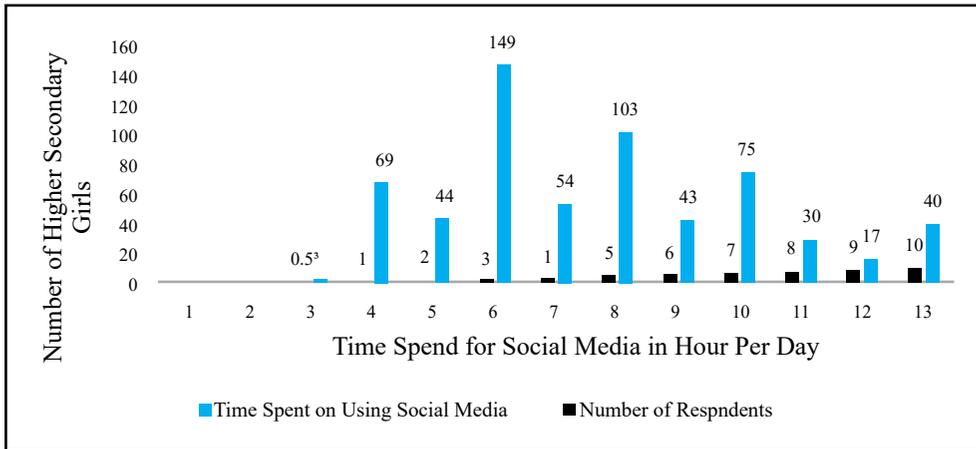


Figure 3: Respondents' Social Media Addiction Based on Spending Time

The figures show that most respondents (149) spend 3 hours daily on social media. The second highest group (103 people) spends 5 hours online. Seventy-five respondents spend 7 hours, indicating another significant cluster. Very few respondents (3 people) spend just 0.5 hours online. On the other hand, 40 respondents spend 10 hours a day on social media, demonstrating heavy use. Overall, the general trend of social media usage indicates that the number of respondents peaks at 3 hours and then fluctuates. A decline is noted after 5 hours, but some respondents continue using social media for longer durations (e.g., 40 respondents spend 10 hours online).

## Academic Stream-wise Respondents' Social Media Addiction

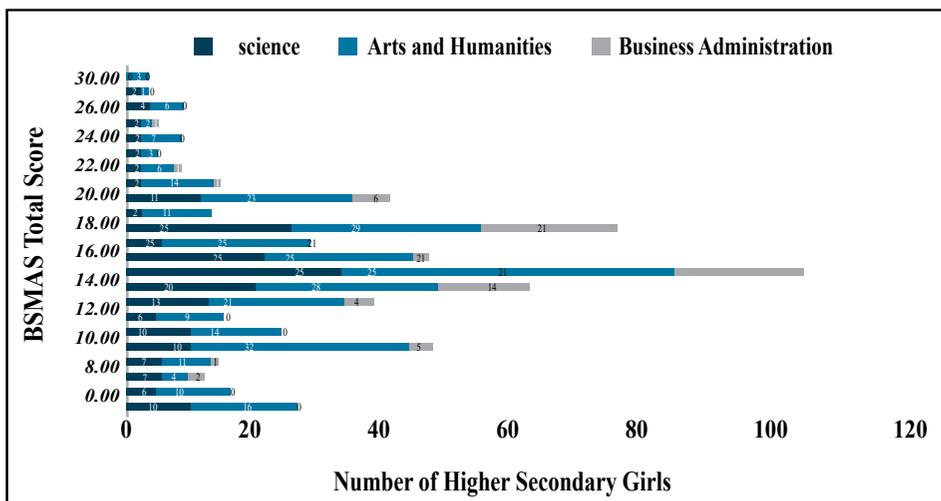


Figure 4: Academic Stream-wise Respondents' Social Media Addiction Score

The figure indicates that students majoring in Arts and Humanities exhibit the most significant risk of social media addiction, with a majority falling into the high-score category. In contrast, Science students display more balanced social media engagement, resulting in fewer extreme scores. Additionally, Business Studies students demonstrate signs of mild addiction, though they report fewer severe instances.

### Parental Control-wise Respondents' Social Media Addiction

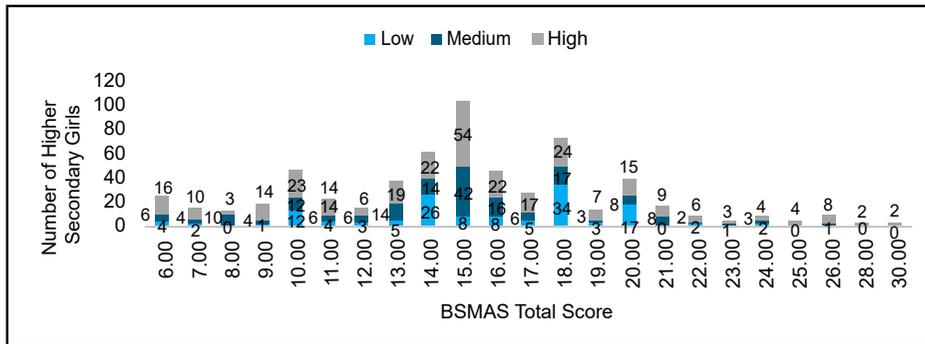


Figure 5: Parental Control-wise Higher Secondary Girls' Social Media Addiction

The figure above indicates that students experiencing low parental control are more likely to have elevated social media addiction scores. Medium levels of parental control resulted in a more balanced approach to social media usage, although instances of high scores still occurred. Conversely, high parental control does not eliminate the risk of social media addiction, as a considerable number of students continue to achieve high scores.

### Nature of the Institute-Wise Respondents' Social Media Addiction

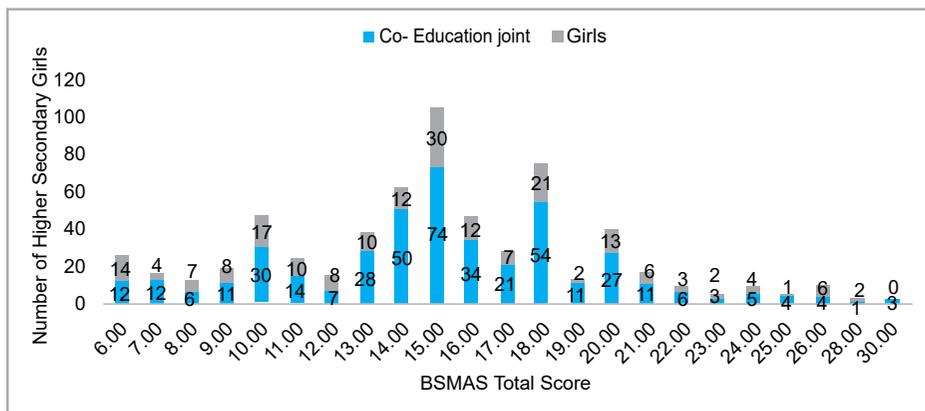


Figure 6: College Nature-wise Respondents' Social Media Addiction

This figure categorizes the BSMAS (Bergen Social Media Addiction Scale) scores based on whether students attend co-educational (joint) or girls-only colleges. The analysis aims to identify differences in social media usage patterns between these groups. It reveals that girls in co-educational colleges show significantly higher BSMAS scores (e.g., at 15, 18, and 14, the gap between the groups is the widest). Conversely, girls in girls-only colleges exhibit relatively lower social media addiction scores, with fewer students scoring above 20.

**Familial Income-wise Respondents’ Social Media Addiction**

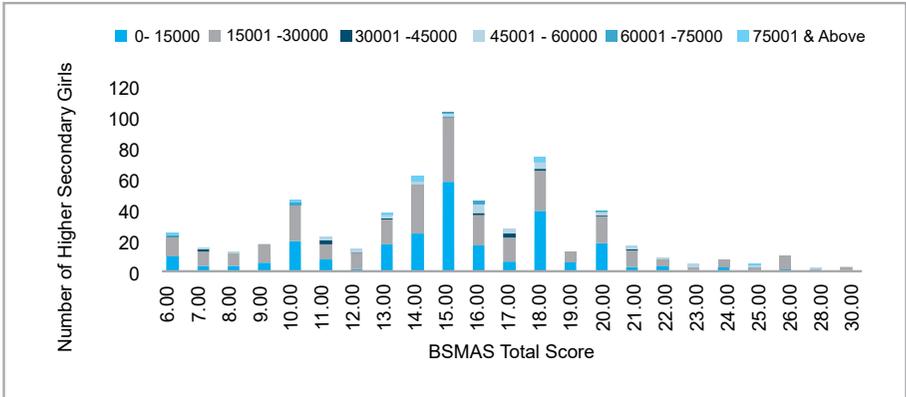


Figure 7: Familial Income-wise (Cluster) Respondents’ Social Media Addiction

This table categorizes BSMAS (Bergen Social Media Addiction Scale) Total Scores according to parents’ income levels. The analysis examines whether family income affects social media usage trends among higher-secondary girls. The majority of students with high social media usage (BSMAS > 15) belong to lower-income groups (0 - 30,000).

Middle-income groups (30,001 - 60,000) exhibit significantly lower counts across all score ranges. Higher-income groups (60,001 and above) show minimal or no representation in high BSMAS scores, indicating a lower dependency on social media. Students from lower-income groups (0-30,000) display the highest social media dependency. Students from both middle and upper-income brackets have significantly lower BSMAS scores. At BSMAS, scores above 20 are scarce, and students from higher-income groups are few.

However, a question arises: Why do lower-income students have higher social media addiction scores? One reason may be a lack of alternative recreational activities. Students from lower-income families may spend more time on social media due to limited access to extracurricular activities, such as sports, reading, and travel. They may interact, engage, and relax on social media more than through any other form of digital entertainment. Furthermore, lower-income families may have fewer adults supervising their children’s social media use, as parents in these households often work longer hours. Conversely, why do pupils from wealthier backgrounds tend to have lower BSMAS scores? Students with more disposable income may spend less time on social media and more time pursuing hobbies, sports, private coaching, and travel. Regarding this, some key informants opine that,

Parents from wealthier backgrounds are more likely to monitor and limit their children’s screen time. Additionally, the availability of digital alternatives may also play a significant role in this case; wealthier students may use the internet more for education, skill development, and career-related activities than for social media (HEI 1 & HEI 3; SAA 1; PAC 1).

### Previous (SSC) Result-wise Social Media Addiction

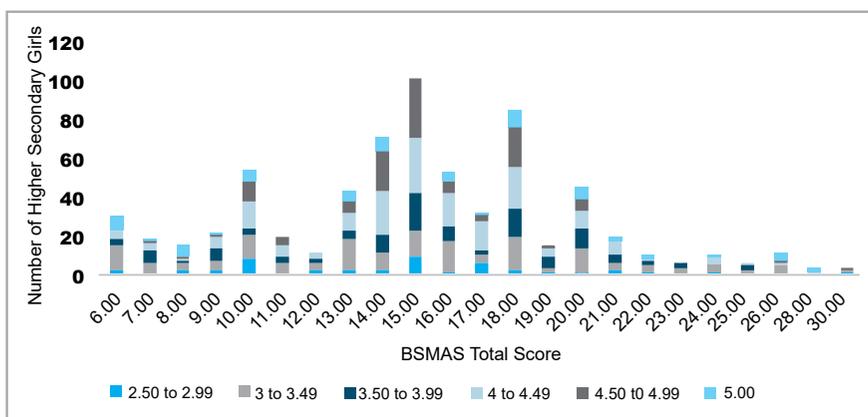


Figure 1: SSC Result-wise Respondents’ Social Media Addiction

Students with moderate to high SSC scores (3.50 to 4.99) exhibit the highest levels of social media engagement, as indicated by the peak in the BSMAS 14-18 range. In contrast, those with the lowest SSC scores (2.50 to 2.99) demonstrate minimal social media addiction, likely influenced by external factors such as parental control and limited access. While even the highest-performing students (SSC 5.00) are active on social media, their extreme addiction scores are lower, suggesting they may practice better time management. Mid-to-high-performing students (3.50 to 4.99) are most engaged. Although the highest scorers (SSC 5.00) control their usage more effectively, they remain engaged. Conversely, the lower scorers (2.50 to 2.99) display less involvement.

### Conclusion

This study provides a thorough examination of social media addiction among higher secondary girls in the Khulna and Rajshahi districts of Bangladesh, taking into account socio-demographic factors like age, location of institutions, and levels of addiction severity. The results reflect public observations, revealing that most students are addicted to social media. It uncovers that while 46.74% of the students show mild addiction, only 4.78% are classified as severely addicted. This indicates that, despite the widespread use of social media, the incidence of extreme addiction remains relatively low.

An age-based analysis indicates no significant differences in addiction levels among various age groups, as evidenced by ANOVA results ( $p > 0.05$ ). Nonetheless, individuals aged 19 exhibit slightly elevated mean addiction scores, implying that the dynamics of social media usage may evolve with the transition into adulthood and corresponding lifestyle changes. The comparison based on geographical location reveals that students residing in Upazila Sadar Not Poura areas exhibit the highest levels of social media addiction. In contrast, those in Upazila Sadar Poura areas demonstrate the least engagement. Disparities in digital access, educational environments, and lifestyle practices may contribute to these variations.

While social media is often linked to academic disruptions and mental health issues, some students and guardians argue that it can serve as a beneficial resource for learning and career growth when used appropriately. This highlights the importance of a balanced approach that prioritizes digital literacy, parental guidance and oversight, along with self-regulation techniques, to ensure social media acts as an asset rather than a drawback in the lives of higher secondary girls.

## **Policy Recommendation**

### **Educational Institute-Based Digital Wellness Programs**

Implement mandatory digital literacy courses that focus on time management and responsible use of social media.

Establishing peer mentoring systems where low-BSMAS students guide their peers.

Introducing screen-free periods during school hours to encourage students to participate in offline activities.

### **Parental Guidance Initiatives**

Creating community workshops (especially in rural areas) to educate parents about:

- Setting reasonable screen time limits
- Recognizing early addiction symptoms
- Alternative recreational activities

Developing straightforward monitoring tools for low-income parents with limited digital skills

### **Targeted Interventions for High-Risk Groups**

Extra counseling programs available for:

- Arts/Humanities students showing higher addiction tendencies
- Students from low-income families (0-30,000 BDT monthly income)
- Co-educational institution attendees

## **Academic Integration Strategies**

Integrating social media time management into current study skills curricula.

Developing reward systems for students who uphold academic performance while minimizing social media use.

## **Future Research Direction**

### **Longitudinal Studies**

Tracking the same cohort throughout higher education to understand the progression of addiction.

Comparing addiction patterns in urban and rural areas over the course of 3-5 years.

### **Platform-Specific Analysis**

Examining addiction differences among Facebook, TikTok, and Instagram users

Looking at how people consume content (whether they're just scrolling or actively creating)

### **Neuropsychological Correlates**

Exploring cognitive impacts by examining:

- Attention span measurements
- Sleep quality assessments
- Academic performance tracking

### **Cross-Cultural Comparisons**

Comparing findings from neighboring countries (India, Pakistan) with similar cultural contexts.

Analyzing the differences between Muslim-majority and non-Muslim-majority educational systems.

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