

Social Media Use and Information-Sharing Behavior among University Students: A Developing Country Perspective

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Abstract

Social media is becoming an increasingly important source of information, affecting students' social and academic lives. This study examines the use of social media and information-sharing behavior among university students in developing countries. The present research focuses on how students use social media for education, entertainment, and social connection with their classmates, and on how these platforms influence students' information-sharing behaviors. This study employed a quantitative method to investigate social media use and information-sharing behavior among university students at select universities in Bangladesh. A structured questionnaire was distributed to 420 students selected via convenience sampling, yielding 300 responses. Descriptive statistics were used to summarize the data, while inferential statistics were employed to examine relationships between variables. The results show that students in developing countries primarily use social media for social interaction, entertainment, and occasionally for academic purposes. Popular platforms include Facebook, WhatsApp, and Instagram, where many students share information to stay informed, maintain social connections, and access educational content. However, concerns regarding misinformation and privacy were raised. This study highlights how infrastructural limitations, socio-cultural dynamics, and the digital divide impact social media engagement, providing valuable insights for educators and policymakers. In the future, further research is needed to investigate the complex dynamics of university students' use of social media and information-sharing practices in developing nations.

Keywords: Social media, Information sharing, University students, Developing countries, Academic use

1. Introduction

Social media has become an integral part of everyday life, especially for young adults, functioning as a primary platform for communication, collaboration, and information sharing. It has reshaped the way individuals interact, learn, and express themselves. In higher education, social media is increasingly recognized as a powerful educational tool, offering

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innovative ways to engage students, enhance learning, and promote peer-to-peer knowledge sharing. This shift has become even more pronounced in the wake of the COVID-19 pandemic, which accelerated the global move towards digital learning environments [1]. During this period, platforms such as Facebook, WhatsApp, and YouTube served as vital educational lifelines, facilitating remote learning and fostering student engagement [2].

Globally, more than 3 billion people use social media platforms [3]. These platforms, initially designed for social interaction, have evolved into multifunctional tools that are integrated into users' academic and professional lives. Social media ecosystems now include wikis, messaging apps, microblogging, video sharing, and educational communities—all built upon Web 2.0 technologies [4]. In developing countries like Bangladesh, social media has played a significant role in democratizing access to information and providing students with new avenues for educational advancement, particularly when traditional resources are limited [5].

However, this increasing reliance on social media is not without complications. University students, who are among the most active users of social media, face a range of challenges. These include privacy risks, distractions from academic work, misinformation, and negative impacts on mental health [6][7][8]. Furthermore, the socio-economic and infrastructural limitations common in developing countries—such as unstable internet connectivity and lack of access to digital devices—worsen the digital divide and restrict equitable engagement with online platforms [9]. Despite the growing academic and social relevance of social media, a significant research gap persists in understanding the nuanced ways in which university students in developing countries, such as Bangladesh, engage with these platforms, particularly in their information behavior and academic lives. While previous studies have predominantly focused on technologically advanced contexts, few have examined how digital inequality and socio-cultural factors shape students' online engagement in resource-constrained settings.

This study contributes to filling that gap by examining not only the types and purposes of social media use among Bangladeshi university students, but also the motivational, academic, and social implications of such use. Importantly, it highlights how digital divides—driven by limited infrastructure, financial barriers, and uneven access to technology—affect students' ability to benefit equally from social media. By focusing on decision-making, perceived benefits and drawbacks, and challenges specific to developing contexts, this study offers a more inclusive understanding of the role of social media in higher education.

2 Literature review

Social media platforms have transformed how individuals—especially university students—communicate, share information, and engage with academic content. According to the Uses and Gratifications Theory (UGT), users actively select media to fulfill specific needs such as information-seeking, social interaction, or entertainment, making it a valuable lens for understanding students' academic motivations and behaviors online. In educational contexts, students utilize platforms such as Facebook, WhatsApp, and YouTube to collaborate, access learning materials, and stay informed [10]. However, in developing countries, the nature of social media use is shaped by contextual challenges that reflect structural inequality. Bako and Ugwuanyi [11] highlighted that Nigerian students often face limited access to internet services, insufficient devices, and poor digital literacy. This reflects Digital Divide Theory, which explains disparities in access and ability to benefit from digital technologies, particularly relevant for students in low-resource environments like Bangladesh. Hussain et

al. [12] and Nasrullah and Khan [13] found that although social media can support learning, it often distracts students through misuse or overuse, thereby negatively affecting academic performance.

Moreover, research shows that students' social media behavior varies significantly—some use it actively for academic networking, while others engage passively or for non-academic purposes. This aligns with findings from Brailovskaia et al. [14] and Tibber and Silver [15], who reported increased risks of anxiety and depression among students who used social media passively, particularly under stress, such as during the COVID-19 pandemic. The influence of social media on academic performance is complex and multidimensional. On the one hand, it enhances collaborative learning, supports peer interaction, and fosters the sharing of educational resources [16]. These behaviors are often underpinned by Social Capital Theory, which explains how relationships and community networks foster knowledge exchange and trust. Online platforms can therefore serve as informal learning communities that facilitate students' academic growth.

On the other hand, excessive or unfocused use can distract students and detract from their academic focus [13]. Social Capital Theory also suggests that not all interactions generate value—weak or superficial ties may dilute academic engagement, and the quality of peer interactions is critical. According to Al-Maatouk et al. [17], the nature of social media interactions—whether collaborative or shallow—directly influences students' academic satisfaction. Junaidi et al. [18] emphasized the role of content quality in driving meaningful engagement. However, Bashir et al. [19] found that factors such as privacy concerns and trust significantly affect students' willingness to share academic content, thereby limiting effective knowledge exchange in digital settings. Information sharing on social media is influenced by factors such as digital access, perceived usefulness, and institutional or peer support. In line with the Digital Divide Theory, Shahid et al. [20] observed that rural students often face barriers, such as unstable internet and device unavailability, which limit their participation in online academic exchanges. These limitations highlight how infrastructural inequities shape not only access to content but also the ability to contribute to academic discourse.

Similarly, Hamid et al. [21] emphasized that cultural norms and technology literacy influence how students search for and evaluate academic information. Media literacy acts as a mediating variable—students with stronger digital competencies are more likely to critically assess and use information effectively. Students from lower-income backgrounds or marginalized regions may lack access to the infrastructure needed to fully leverage social media for academic success. This gap is compounded by varying levels of media literacy, which affects how effectively students navigate digital content [22][23]. Social media offers both opportunities and risks for university students. On the positive side, it enhances communication between students and instructors, supports blended learning, and helps build virtual academic communities [24]. However, concerns around privacy, misinformation, and mental health are prevalent. Students may experience increased anxiety due to social comparison and digital overload [6][7]. Disinformation on social platforms further complicates decision-making and can lead to misconceptions [25]. These challenges underscore the importance of media literacy and content verification in academic settings, particularly where misinformation may disproportionately impact students with limited digital skills.

Rahman et al. [26] and Apuke [27] highlighted that students from disadvantaged backgrounds face structural barriers—such as device scarcity and poor connectivity—that limit their participation in digital academic spaces. While research often focuses on widely used platforms like Facebook and WhatsApp, there is limited exploration of newer or

education-specific platforms in low-income countries [28]. Similarly, while studies emphasize benefits such as trust and collaboration [29], fewer studies investigate emerging issues such as academic dishonesty, AI-generated content, or data privacy violations [30]. This literature review demonstrates that while social media offers significant educational benefits for university students, particularly in developing countries, challenges such as digital inequality, misinformation, and psychological risks complicate its use. Theoretical frameworks such as UGT, Social Capital Theory, and Digital Divide Theory offer valuable insights into these dynamics. There is a pressing need to investigate how social media influences academic life in contexts characterized by socio-cultural and technological limitations—a gap that this study aims to address through its research questions.

3. Research objectives and questions

The objectives of this study are;

RO1: To identify the most commonly used social media platforms among university students and examine their perceived academic and social impacts.

RO2: To investigate the relationship between the purposes of social media usage and students' perceptions of its positive and negative effects.

RO3: To explore how different motivations and purposes for using social media influence students' decisions and experiences, including both benefits and challenges.

Based on the objectives, the study seeks to answer the following research questions:

RQ1: What popular social media platforms are used by university students regularly, and what is the perceived impact of this usage?

RQ2: Is there any significant relationship between the purpose of social media usage and how it impacts life positively and negatively?

RQ3: Is there a significant relationship between the purpose of social media usage and the perceived positive or negative impacts on students' lives?

4. Methodology

The target population for this study comprises undergraduate and graduate students from the Faculty of Arts across five selected public universities in Bangladesh. These universities include the University of Dhaka, Jahangirnagar University, and Jagannath University (all located in the Dhaka Division), Rajshahi University in the Rajshahi Division, and Chittagong University in the Chittagong Division. The total student population across these universities is approximately 2,800. This study employed a combination of stratified sampling and purposive sampling to ensure representation across geographic and institutional strata.

The population was divided into three strata based on geographical divisions (Dhaka, Rajshahi, and Chittagong). Each stratum represents a significant region of Bangladesh, reflecting the diversity of public universities in the country. Within each stratum, universities were selected to represent institutional diversity and accessibility. For instance, three universities were chosen from Dhaka Division (due to its higher concentration of public universities), and one each from the Rajshahi and Chittagong Divisions. Universities within each stratum were selected purposively, based on relevance to the research objectives, institutional prominence, and accessibility for data collection. This method ensured that institutions with significant academic activity in the arts and social sciences were included, aligning with the study's focus. To determine the minimum required sample size, Slovin's Formula was applied. The formula is given below:

$$n = \frac{N}{1 + Ne^2}$$

Where n is the sample size, N is the total population, and e is the confidence level, using the above formula to calculate the sample size (n) for the study, where: Population, N = 2800; Confidence level, e = 95% = 0.05;

$$\text{Sample size, } n = \frac{2800}{1 + 2800 \times 0.05^2} = 349.5 \approx 350$$

Therefore, the sample size fit for this study is 350. However, to ensure the survey's accuracy, we sent the questionnaire to 450 students. Among 450, only 300 valid responses were used in the analysis. This represents a 66.67% response rate from the target sample, which is considered robust for social science research. Data were collected using a structured questionnaire, distributed via Google Forms to 450 students across the five universities. The response details are shown below in Table 1.

Table 1. Population and sample size

Name of the university	Division	Targeted Population	The Google Form was sent to the users	Usable responses received from the users
University of Dhaka	Dhaka	1300	220	169 (56.3%)
Jahangirnagar University	Dhaka	400	43	22 (7.3%)
Jagannath University	Dhaka	400	67	40 (13.3%)
Rajshahi University	Rajshahi	380	81	56 (18.7%)
Chittagong University	Chittagong	320	39	13 (4.3%)
Total		2800	450	300

In this study, a questionnaire was chosen as the primary instrument for data collection. The questionnaire was carefully structured into sections that explored specific factors relevant to the study's objectives and questions. A five-point Likert scale was used to assess participants' responses. This scale allowed respondents to express their agreement or disagreement with the statements presented, ranging from "strongly disagree" to "strongly agree." Using this scale ensured that the collected data would yield nuanced insights into participants' views, making it a robust tool for analyzing the research questions. The questionnaire was reviewed and refined to strengthen content and face validity. It was distributed to 450 students across five public universities, and their feedback — including suggestions, corrections, observations, and recommendations — was carefully considered and incorporated before the final survey was conducted. During the final study, these 300 students were included. The overall Cronbach's Alpha of 0.936 indicates a very high level of internal consistency among the items in the survey or measurement tool. Generally, a Cronbach's Alpha above 0.7 is acceptable, while values over 0.9 suggest excellent reliability. This high alpha value signifies that the items in the research are highly correlated and effectively measure the same

underlying concept. A Cronbach's Alpha ranging from 0.806 to 0.902 demonstrates good internal consistency for the individual construct, indicating that the items related to the study's purpose measure the same concept reliably in Table 2.

Table 2. Reliability of the research

	Cronbach's Alpha	No of Items
Overall	0.936	52
	Cronbach's Alpha	N of Items
Purpose	0.806	10
Sharing information	0.803	8
Impacts positively	0.902	8
Impacts negatively	0.839	8
Challenges faced	0.840	9
Privacy protection	0.876	9

5. Analysis and interpretation

The data were collected over four weeks (from April 2 to April 30, 2024). For data collection purposes, a Google form link (https://docs.google.com/forms/d/e/1FAIpQLSd0zZ5xSyHxUPfiLPsd1wiYTtaMqyVd0QGB8vk_qGY9bQCFA/viewform?usp=sf_link) was sent among the graduate and undergraduate students via email, WhatsApp, Messenger, and Telegram. We sent this form to 450 students and ultimately received 300 usable responses from the participants who shared their opinions about social media use and information-sharing behavior. The data collected throughout the study were examined using sequences and simple percentages, which were displayed in tables. Specifically, version 25 of the Statistical Package for the Social Sciences (SPSS) software was used to analyze the data. Descriptive statistics were used to summarize the data, while inferential statistics were used to examine relationships between variables.

5.1. Demographic information

A total of 300 respondents completed the survey. Of the participants, 145 (48.3%) are male, and 155 (51.7%) are female. The demographics of the respondents indicate that more females than males participated in this study. The majority of students, i.e., 239 (79.7%), had an undergraduate degree, while only 61 (20.3%) of the graduates participated in the study. The table also demonstrates that most students, i.e., 269 (89.7%), use their smartphones to access social media for the first time. This study also reveals that 56 respondents (18.7%) are between 16 and 20, 233 respondents (77.7%) are between 21 and 25, and 11 respondents (3.7%) are between 26 and 30. Research has shown that students aged 21-25 spend more time on social media than students of other ages. Social media networks: The digital age of science and technology has given rise to an increased number of social media platforms. The most popular platforms are excellent for their instructional needs.

Table 3: Demographic information

Variables		Frequency	Percent
Gender	Male	145	48.3%
	Female	155	51.7%
Study Level	Undergraduate	239	79.7%
	Graduate	61	20.3%
Device	Smartphone	269	89.7%
	Laptop	29	9.7%
	Desktop	1	0.3%
	Others	1	0.3%
Age Category	16-20 Years	56	18.7%
	21-25 Years	233	77.7%
	26-30 Years	11	3.7%
Total		300	100%

5.2. Social media platforms that students use regularly

With 284 responses, Facebook is the most often-used platform. This represents 19.0% of all responses and 94.7% of cases, indicating that nearly all respondents utilize Facebook. WhatsApp comes in second place with 264 responses, accounting for 17.7% of all responses. 88.0% of respondents reported using WhatsApp, demonstrating its widespread use. Using 216 replies (14.5%), YouTube is used by 72.0% of the population polled. With 171 responses, Instagram is also commonly used, accounting for 11.4% of responses and 57.0% of situations. The table also shows that 47.7% of respondents use ChatGPT, which accounts for 143 responses, or 9.6% of all responses. LinkedIn is used less frequently, with 87 replies (5.8% of the total and 29.0% of cases), compared to the other social media platforms. Moderate engagement is seen on Pinterest and Snapchat, with 18.0% of instances and 69 responses (4.6%) and 23.0% of cases, respectively. MOOCs received 63 responses, or 4.2% of the total, and were utilized by 21.0% of the respondents. Duolingo receives 52 (3.5%) responses from users, or 17.3% of the total. 15.7% of respondents use TikTok, with 47 responses (3.1%). Reddit has the lowest engagement rate, with only 8.3% of instances and 25 answers (1.7% of all answers). Others, used by 6.3% of the population, had 19 responses (1.3%).

Table 4. Social media platforms that students use regularly

Social media	Responses		Percent of Cases
	N	Percent	
Facebook	284	19.0%	94.7%
WhatsApp	264	17.7%	88.0%
LinkedIn	87	5.8%	29.0%
You-tube	216	14.5%	72.0%
ChatGPT	143	9.6%	47.7%
MOOC	63	4.2%	21.0%

Duolingo	52	3.5%	17.3%
Instagram	171	11.4%	57.0%
Snapchat	69	4.6%	23.0%
Pinterest	54	3.6%	18.0%
TikTok	47	3.1%	15.7%
Reddit	25	1.7%	8.3%
Others	19	1.3%	6.3%
Total	1494	100.0%	498.0%

5.3. Impact of social media

Most respondents (N = 278; 92.7%) believe that social media affects their academic performance, while a small percentage (N = 22; 7.3%) report no impact. This implies that most participants believe social media has a significant effect on their academic performance. More than half of the participants (51.3%) believe that social media has a substantial impact on their information behavior. A smaller percentage (N=33; 11%) feel that the effect is negligible, while another 107 (34.7%) think it has a significant impact on them. The fact that only 3% of respondents said social media had no influence suggests that social media is a significant factor in how most users engage with and consume information. The majority (65.7%) of participants have made decisions based on information from social media. Smaller percentages (18.3%) have not relied on social media for decision-making, and 16% are uncertain about their use of social media. This indicates that social media is a substantial source of information that significantly influences decision-making for many users. Nearly all respondents (288, 96%) have experienced challenges while using social media, with only 12 (4%) reporting no issues.

Table 5. Impact of social media

		Frequency	Percent
Social media affects your academic performance	No	22	7.3%
	Yes	278	92.7%
Influences of social media usage on Information behaviour	A great deal	154	51.3%
	Somewhat	104	34.7%
	Very little	33	11.0%
	Not at all	9	3.0%
Made decisions based on information obtained through social media	No	55	18.3%
	Yes	197	65.7%
	Not sure	48	16.0%
Challenges faced during social media usage	No	12	4.0%
	Yes	288	96.0%
	Total	300	100%

5.4. Purpose of social media usage

The chi-square test is used to identify whether there is a significant relationship between two categorical variables. In this case, it evaluates the association between different activities (e.g., socializing, networking, entertainment, and academic purposes). The p-value (Sig.) determines if these relationships are statistically significant, with a threshold of 0.05. A p-

value of less than 0.05 indicates that the association is statistically significant and unlikely to be due to random chance. Socializing with friends or family (Chi-square: 3.307, Degrees of freedom (Df): 4, p-value (Sig.): 0.508). There is no significant relationship between socializing and the tested variable. The p-value is more significant than 0.05, suggesting that any observed differences are likely due to chance—networking with professionals (Chi-square: 5.781, df: 4, p-value: 0.216). No significant link was identified between professional networking and the variable. The high p-value (> 0.05) indicates that any differences are likely due to chance. Sharing information or news (Chi-square: 11.480, Df: 4, and p-value: 0.022). This activity has a significant relationship with the variable, as indicated by the p-value of 0.022. The variable likely influences how people share information or news—entertainment (Chi-square: 2.287, Df: 4, and p-value: 0.683). No significant relationship was found between entertainment activities and the variable, given the high p-value (0.683). Academic purposes (Chi-square: 6.867, Df: 4, and p-value: 0.143). There is no significant relationship between using platforms for educational reasons and the variable, as indicated by the p-value exceeding 0.05.

Raising awareness for social issues (Chi-square: 10.284, Df: 4, and p-value: 0.036). This is a statistically significant result, with a p-value of 0.036. The variable likely impacts how individuals raise awareness for social causes. Finding job opportunities and career advice (Chi-square: 7.380, Df: 4, and p-value: 0.117). No significant association exists between job-related activities and the variable, as indicated by the p-value > 0.05 . Building a personal brand or online identity (Chi-square: 6.528, Df: 4, and p-value: 0.163). No significant relationship exists between personal branding efforts and following celebrities and influencers (Chi-square: 10.503, Df: 4, p-value: 0.033). This result is statistically significant, with a p-value of 0.033, indicating a strong association between the following influencers and the variable and making new connections globally (Chi-square: 16.449, Df: 4, p-value: 0.002). This is the most statistically significant finding, with a p-value of 0.002, showing a substantial link between making global connections and the variable.

Table 6. Purpose of social media usage (chi-square test)

	Chi-square	Df	Sig. (2-tailed)
Socializing with friends or family	3.307	4	0.508
Networking with professionals	5.781	4	0.216
Sharing information or news	11.480	4	0.022
Entertainments	2.287	4	0.683
Academic purposes	6.867	4	0.143
Raising awareness for social issues	10.284	4	0.036
Finding job opportunities and career advice	7.380	4	0.117
Building a personal brand or online identity	6.528	4	0.163
Following celebrities and influences	10.503	4	0.033
Making new connections in the global world	16.449	4	0.002

5.5. Purpose vs. impacts positively and negatively

A value of 0.401 indicates a moderate positive correlation between the purpose of using social media and the perceived positive impacts of social media on life. This suggests that as

the purpose of social media usage increases, so does the perception of its positive effects. The p-value of 0.000 is significantly lower than the standard threshold of 0.05, which suggests that the observed relationship is statistically significant. This analysis suggests a significant correlation between the purpose of social media usage and the positive impact of social media on individuals' lives.

Table 7. Purpose vs. impacts positively and negatively

		Purpose		N	Sig. (2-tailed)
Spearman's Rho	Purpose	1	0.401	300	0.000
	Impacts positively	0.401	1		

5.6. Challenges faced when we use social media platforms

This data provides an overview of the various challenges that users encounter on social media platforms. The majority of respondents (77.7%) agree or strongly agree that they face information overload on social media. The mean score of 4.09 and a low standard deviation (SD) of 0.869 indicate that this is a widely recognized issue, with a strong consensus among users. Privacy concerns are significant, with 85.4% of respondents agreeing or strongly agreeing. The mean score is 3.97, and the SD is 0.758, reflecting a consistent level of concern about privacy among users. A considerable portion of respondents (61.6%) agree or strongly agree that cyberbullying and harassment are issues they encounter. The mean score of 3.72 and an SD of 0.831 suggest that this is a recognized problem, although opinions on its severity vary slightly more than those regarding privacy concerns. Fake news is a major challenge, with 83.4% of respondents agreeing that fake news and misinformation are prevalent on social media. The mean score is 4.13, and the SD is 0.799, indicating strong concern with some variation in the intensity of users' worries. Time management and social media distractions are significant concerns for 84.3% of respondents. With a mean score of 4.20 and an SD of 0.805, this issue ranks highest in terms of average concern, showing it's a common and serious challenge for users. Technical problems are also a concern, with 77% of respondents agreeing or strongly agreeing. The mean score of 3.97 and an SD of 0.801 indicate a consistent recognition of technical challenges on these platforms. Security Threats: 75.7% of respondents are concerned about security threats. The mean score is 3.92, and the SD is 0.791, reflecting that users are generally aware of and concerned about security risks on social media. The effect of social media on mental health is recognized by 74.4% of respondents who agree or strongly agree. The mean score is 3.96, with an SD of 0.845, indicating that, while this is a significant concern, there is slightly greater variability in opinions than for other issues. 69.3% of respondents recognize legal and ethical issues. The mean score of 3.86 and the highest SD among the listed issues (0.933) suggest that while many users are concerned, there is more variation in how strongly they feel about these issues. The data highlights that challenges such as time management, fake news, and information overload are significant concerns for social media users. Issues like privacy, security, and mental health impacts are also consistently important, while legal and ethical concerns show more variability in users' opinions.

Table 8. Challenges faced when we use social media platforms

Statement	Mean	SD	% Agree/Strongly Agree
Time management/distraction	4.20	0.805	84.3%
Fake news/misinformation	4.13	0.799	83.4%
Information overload	4.09	0.869	77.7%
Privacy concerns	3.97	0.758	85.4%
Technical issues	3.97	0.801	77.0%
Impact on mental health	3.96	0.845	74.4%
Security threats	3.92	0.791	75.7%
Cyberbullying/harassment	3.72	0.831	61.6%
Legal and ethical issues	3.86	0.933	69.3%

5.7. Challenges faced vs. impacts positively and negatively

There is no significant relationship between the challenges encountered while using social media and the positive impacts of social media on life. The Spearman's Rho value of 0.276 indicates a moderate positive correlation between the challenges faced while using social media and the perceived positive effects of social media on life. This implies that individuals who experience greater challenges may also perceive greater positive impacts from social media. A p-value of 0.000 is significantly lower than the conventional threshold of 0.05, suggesting that the observed relationship is statistically significant. This analysis indicates a significant relationship between the challenges faced while using social media and the positive effects of social media on individuals' lives. There is no significant relationship between the challenges encountered while using social media and the adverse effects of social media on life. A Spearman's Rho value of 0.527 indicates a strong positive correlation between the challenges encountered when using social media and the perceived negative impacts of social media on one's life. This suggests that individuals who face greater challenges are more likely to perceive more significant negative effects from social media. The p-value of 0.000 is significantly lower than the conventional 0.05 threshold, suggesting the observed relationship is statistically significant. This analysis reveals a significant correlation between the challenges encountered when using social media and the negative impacts it can have on individuals' lives.

Table 9. Challenges faced vs. impacts positively and negatively

		Challenges faced	Impacts positively	N	Sig. (2-tailed)
Spearman's Rho	Challenges faced	1	0.276	300	0.000
	Impacts positively	0.276	1		
Spearman's Rho	Challenges faced	1	0.527	300	0.000
	Impacts negatively	0.527	1		

6. Findings and discussions

The study's results revealed several significant findings. Three research questions were formulated to guide the study. The RQ1 examined the most commonly used social networking platforms among respondents, which are Facebook and WhatsApp, making them the most popular. Despite being relatively new, ChatGPT has experienced rapid growth in

usage, with nearly half of respondents reporting regular use. Reddit and TikTok also have a notable presence, though with comparatively smaller user bases. A large majority of respondents—278 out of 300 (92.7%)—believe that social media influences their academic performance. Only 22 participants (7.3%) do not think it affects their studies. When asked about decision-making, 197 participants (65.7%) acknowledged making decisions based on information from social media, indicating that it plays a major role in shaping their behavior.

In contrast, 55 participants (18.3%) denied being influenced, while 48 (16%) were unsure. Nearly all respondents—288 (96%)—reported facing challenges while using social media, suggesting that while these platforms are influential, they are also sources of difficulty in academic life. These findings suggest that social media is a double-edged sword: it significantly influences students' academic and personal decisions, but also presents challenges such as distraction and information overload.

The RQ2 survey revealed that a chi-square test showed significant associations between specific purposes of social media usage and its perceived impact. Specifically, the following purposes showed statistically significant relationships ($p < 0.05$): Sharing information, Raising social awareness, Following influencers, and Making global connections. For other purposes, such as socializing, networking, and academic use, no statistically significant relationships were observed. The chi-square test is used to determine if there's a significant relationship between two categorical variables. A p-value less than 0.05 indicates that the observed relationship is unlikely to be due to chance. A moderate positive correlation was found between the purpose of using social media and the perceived positive impacts on life (Spearman's Rho = 0.537, $p = 0.000$). This means that as the purpose or intensity of usage increases, so does the perceived positive effect. A weak positive correlation was also found between the purpose of use and perceived negative impacts (Spearman's Rho = 0.291, $p = 0.001$). This indicates a small but statistically significant relationship. The results suggest that greater engagement with social media for meaningful purposes (like awareness and global connection) is associated with higher perceived benefits. However, increased use is also slightly associated with a greater perception of negative impacts, such as distraction or stress.

The RQ3 observed that participants reported high levels of concern about the following issues: Information overload (Mean = 4.09), Time management and distraction (Mean = 4.20), Spread of fake news (Mean = 4.13), Privacy concerns (Mean = 3.97), Cyberbullying or harassment (Mean = 3.72), Technical issues (Mean = 3.97), Mental health impacts (Mean = 3.96) and Legal/ethical concerns (Mean = 3.86). A moderate positive correlation was found between the challenges faced and the perceived positive impacts (Spearman's Rho = 0.276, $p = 0.000$). This suggests that those who face more challenges may also recognize certain benefits from social media. A strong positive correlation was found between challenges faced and perceived negative impacts (Spearman's Rho = 0.527, $p = 0.000$), indicating that the more challenges students face, the greater the perceived negative consequences.

7. Conclusion

Several key insights can be drawn from the study findings. Regarding device usage, most students primarily access social media via smartphones, underscoring the trend of mobile-first engagement with digital platforms. The study also revealed a high concentration of respondents from the University of Dhaka, suggesting that the institutional context may influence the results. Facebook emerges as the most popular platform among students, followed by WhatsApp, YouTube, and Instagram. Most students perceive that social media has a negative impact on their academic performance. The influence of social media on

information behavior: The majority of respondents believe it has a significant impact on their information behavior.

Furthermore, a significant number of students have made decisions based on information sourced from social media, underscoring its influence on their decision-making. Regarding academic use, students view social media positively. However, there needs to be more agreement on its value for building a personal brand or online identity. The study highlights significant concerns about issues such as cyberbullying and mental health, as respondents agree that these are important issues. Other significant problems include the spread of misinformation and challenges related to time management. Privacy concerns are also prominent, with strong agreement on limiting personal information and managing privacy settings.

Nevertheless, the study found that although students are aware of privacy risks, they may not always take proactive steps to address them. The study highlights the significant impact of social media on students' academic and personal lives. While social media offers valuable benefits, such as networking opportunities and access to information, it also presents significant challenges, particularly regarding academic performance, privacy, and mental health. Based on the research, social media has a significant impact on users' information behavior and academic performance, often influencing their decision-making. However, social media use is often fraught with difficulties, suggesting that although these platforms have significant influence, they pose serious problems for their users. Constraints related to geography and culture: Since the study was limited to a single developing country, it is challenging to generalize the results to other areas with potentially dissimilar social, cultural, and technological environments. To fully comprehend the influence of social media use, it is essential to examine qualitative insights such as students' perceptions and emotional reactions to it. However, this may not have been possible due to the focus on quantitative metrics.

A more thorough understanding of regional differences could be attained in the future by comparing social media consumption trends among developing countries. Tracking how kids' social media usage changes over time, especially as access to technology increases, would also benefit from longitudinal studies. Further research into the role of specific social media platforms across various academic domains, as well as the growing prominence of platforms such as Telegram and TikTok, may yield a more comprehensive understanding. A deeper understanding of social media's impact on students can be gained by examining the connections between its use, mental health, and academic achievement.

Based on the research findings, the following recommendations are suggested:

- i. **Enhancing Digital Literacy:** Academic institutions should implement initiatives that help students assess the veracity of social media content by teaching them digital literacy.
- ii. **Expanding Internet Access:** To close the digital divide, governments and educational institutions should collaborate to make Internet access more affordable and reliable, especially in underserved areas.
- iii. **Leveraging Social Media for Education:** Educators can benefit from students' active use of social media by establishing online academic communities that foster peer-to-peer learning and knowledge sharing.

- iv. **Strengthening Misinformation Filters:** Social media companies should provide enhanced information verification tools to enable consumers to identify and effectively weed out false information.

7.1. Future research directions

These findings can inform future research and interventions to foster healthier, more effective social media use among university students. While this study offers valuable insights, it is not without limitations. The sample was geographically confined to Bangladesh, and the data collection was limited to quantitative survey responses. These constraints limit the generalizability and depth of understanding. Future research should incorporate qualitative methods to explore students' lived experiences, emotional reactions, and coping strategies related to their use of social media.

Additionally, conduct longitudinal studies to track how social media behavior and its effects on academic performance evolve, and undertake comparative studies across regions or countries to understand the cultural and technological factors that shape social media's impact. Likewise, examine the intersections between social media use, mental health, and academic achievement across different academic disciplines. These directions contribute to a more comprehensive understanding of social media's evolving role in higher education, guiding both policy and practice.

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