Social Media's Effect on Academic Performance and Cyber Crime Awareness Among Tribal Students

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Introduction

The pervasive impact of social media on every aspect of life is undeniable. Platforms like Facebook and Twitter connect us with loved ones, keep us informed about current events, and facilitate content creation for vast audiences. From sharing documents to posting photos and videos, social media fosters collaboration and community building. However, this ubiquitous digital landscape has also given rise to a staggering increase in cybercrime, posing a significant challenge to online security. Despite its numerous benefits, social media's dark side underscores the need for users to be informed and vigilant in this dynamic digital age.

Tribal students, representing a diverse range of Indigenous communities, bring unique cultural perspectives and experiences to higher education. However, they also face distinct challenges that can impact their academic success. These challenges often arise from historical, socio-economic, and educational disparities prevalent in many Indigenous communities. Tribal students may experience a cultural disconnect in mainstream educational institutions, where curricula and teaching methods do not always reflect their cultural heritage or values.

The educational journey of tribal students is often marked by obstacles such as limited access to quality primary and secondary education, financial constraints, and a lack of academic support systems sensitive to their cultural needs. Additionally, tribal students may encounter feelings of isolation and marginalization within predominantly non-Indigenous institutions, which can further hinder their academic progress. These

challenges can lead to lower retention and graduation rates among tribal students compared to their non-Indigenous peers.

Cybercrime is the term for any illegal activity that is executed on a computer or other Internet-connected device. It can be perpetrated by lone individuals or small groups with limited technical expertise, as well as by highly organized transnational criminal organizations with skilled developers and specialists. Most cybercrimes are motivated by financial gain. Cybercriminals can use networks or computers to spread malware, pornography, viruses, and other illicit data. Cybercriminals engage in various activities to make money, such as identity theft and resale, accessing bank accounts, and using credit cards fraudulently (Brush et al., 2021).

Cyber law awareness is particularly crucial for tribal students, given the growing reliance on digital platforms for educational and personal purposes. Understanding cyber law is essential to navigate the complexities of online interactions, protect personal information, and avoid legal issues related to online behavior.

Review of Literature

The primary goal of a literature review is to systematically examine and compare previous research, both theoretical and empirical, to provide a thorough and nuanced understanding of the current state of knowledge within a specific field. It involves critically evaluating and integrating existing studies to offer valuable insights into the chosen topic.

Singhmar (2023) examines the transformative influence of social media on tribal communities, particularly those in rural Adivasi areas. The study reveals how platforms like Facebook, Twitter, and YouTube empower these communities to share their culture, rights, and traditional knowledge with a wider audience. By bridging the rural-urban divide, social media facilitates the spread of indigenous knowledge, thereby advancing tribal interests and preserving cultural heritage. Through a qualitative analysis of social media content, including posts from the Ministry of Tribal Affairs and tribal groups, Singhmar demonstrates the platform's role in shaping tribal realities amidst rapid technological change.

Kaur and Saini (2022) point to the growing risk of cyberbullying faced by youth in India due to the increased use of social networking platforms. The incidence of cyberbullying continues to rise every year, with severe negative effects.To combat this online menace, the Indian Government has established various helplines, complaint boxes, and cyber cells and enacted stringent legal provisions to curb online offences, especially for children and women who require assistance.

Verma and Kushwaha (2021) examined cybercrime awareness among 100 secondary school students in Lucknow, India, investigating the impact of gender and school management type. A quantitative study using a Likert scale and independent sample t-tests revealed no significant differences in cybercrime awareness between male and female students or government and self-finance schools. The study, limited to Lucknow, emphasizes the need for further research to identify other factors influencing adolescent cybercrime awareness.

Talukdar and Mete (2021) explored how social media has influenced the cultural and economic practices of tribal communities in four West Bengal districts. Their research, conducted through a survey of 500 participants from 115 households and employing a standardized questionnaire, investigated the influence of these digital platforms on the lives of tribal people. The study established a strong correlation between social media use and shifts in how tribal communities practice their traditional customs. Furthermore, it highlighted the platform's role in altering traditional occupations, suggesting a potential link between the integration of digital technology into the economic fabric of these communities.

Anyira and Udem (2020) found that most students use Facebook daily, mainly for social interaction, but this usage negatively impacts their reading habits. The researchers suggest using social media in education and improving mobile access to resources to mitigate these effects.

Kauser and Awan (2019) studied the influence of social media on academic achievement, finding that while students view it as a useful tool for studying, its pervasive use also negatively impacts their academic

performance. The research focused on 300 final-year graduate students in Vehari district, using a 40-statement questionnaire.

Casal (2019) suggests that social media involvement, regardless of educational background, can benefit academic achievement. Understanding social media usage can therefore provide valuable insights. Casal's research also indicates that the communities formed during a course via social media are not stable communities of practice. As a result, Casal suggests that course design should consider three levels of instruction for social media participation: novice, intermediate, and advanced.

Stephen and Pramanathan (2015) investigated the increasing prevalence of Social Networking Sites (SNS) among Scheduled Tribe (ST) students at the National Institute of Electronics and Information Technology (NIELIT) in Itanagar, Arunachal Pradesh. The study revealed that platforms like YouTube, Facebook, and WhatsApp have become integral to students' daily lives, serving as virtual hubs for communication, learning, and social interaction. YouTube and Facebook were the most popular platforms, with frequent daily use reported by the majority of respondents. While students actively engaged with SNS, the research highlighted a notable gap in understanding privacy implications and information sharing practices. Additionally, the study underscored the multifaceted role of SNS, including communication within interest groups, information exchange, and multimedia sharing.

Objectives of the Study

The study aims to:

1. Investigate the effect of social media on tribal students' academic performance.
2. Explore tribal students' concerns regarding social media privacy policies.
3. Determine tribal students' awareness of cyber law and various cybercrimes.

Hypotheses of the Study

H_{01}: There is no significant gender difference in perceptions of social media's impact on academic performance.

H_{02}: There is no significant gender difference in awareness of social media privacy policies.

H_{03}: There is no significant difference in the levels of awareness about different types of cybercrime related to social media.

Scope and Methodology

The study focuses on undergraduate and postgraduate tribal students from the 2023-24 session at Mohanlal Sukhadia University, Udaipur, Rajasthan. We selected three university colleges: University College of Science, University College of Commerce and Management Studies, and University College of Social Sciences and Humanities. A purposive sample of 50 students was taken from each college, resulting in a total of 150 undergraduate and postgraduate tribal students.

Data collection involved semi-structured interviews and observations to gain in-depth insights into tribal student experiences regarding social media use. The collected data was meticulously tabulated, and appropriate conclusions were drawn through hypothesis testing. Basic statistical tools such as percentages, frequencies, and the chi-square test were utilized to analyze the data and test the formulated hypotheses.

Analysis of Data

Study Population Characteristics

As shown in Table 1, the sample comprised 150 respondents, with 57.33% male and 42.67% female. The majority of participants (86%) were aged 18-22, indicating a focus on young adults. Most students were undergraduates. Notably, the Scheduled Tribes were most represented in the sample.

Table 1. Study Population Characteristics

Category	Subcategory	Number of Respondents	Percentage (%)
Gender	Male	86	57.33
	Female	64	42.67
Age Range	18-22 years	129	86.00
	22 +years	21	14.00
Education Level	Undergraduate	124	82.67
	Postgraduate	26	17.33
Caste	General	6	4.00
	Backward Castes	9	6.00
	Scheduled Castes	43	28.66
	Scheduled Tribes	92	61.33

Influence of Social Media on Tribal Students' Academic Performance

Table 2 presents the distribution of tribal students' perceptions regarding the impact of social media on their academic performance. A significant proportion (36%, n=54) of tribal students perceived both positive and negative effects, while 17.33% (n=26) reported a negative impact and 12.67% (n=19) indicated a beneficial effect. A smaller group (5.33%, n=8) reported no discernible impact.

Table 2. Effect of Social Media on Academic Performance

Perception	Male	Female	Total	Percentage (%)
Beneficial Effect	11	8	19	12.67
Negative Effect	15	11	26	17.33
Both Positive & Negative Effect	54	43	97	64.67
No Impact	6	2	8	5.33
Total	86	64	150	100

The Chi-square test was conducted to examine whether there is a significant difference in the perceptions of social media's effect on studies between males and females. The results are as follows:

Chi-Square Statistic   :   1.1342

P-Value   :   0.7688

Degrees of Freedom   :   3

The Chi-Square Statistic of 1.1342 indicates the degree of difference between the observed and expected frequencies.The P-Value of 0.7688 is significantly higher than the common significance level of 0.05.

Since the p-value is greater than 0.05, we fail to reject thenull hypothesis 1. This suggests that there is no significant difference in perceptions of social media's effect on studies between males and females.

Negative Effect of Social Media on Concentration Ability

As shown in Figure1, over half (56.67%) of the respondents agreed that social media has a negative impact on their concentration ability (14.67% absolutely concur, 42.00% partially agree). Only a small percentage (4.67%) strongly disagreed, while 6.00% partially disagreed and 32.67% expressed no opinion.
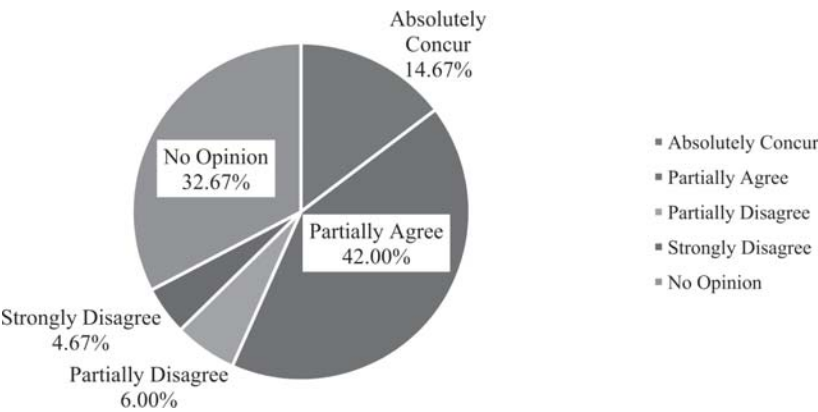

Figure 1. Negative Effect of Social Media on Concentration Ability

Awareness About Social Media Privacy Policies

The data from Table 3 indicates that a slight majority of respondents (51.33%) read and understand social media privacy policies, with 50% of males and 53.13% of females in this category. However, a notable

26% only partially understand these policies, predominantly males (34.88%) compared to females (14.06%). Additionally, 22.67% of respondents ignore the privacy policies altogether, with a higher percentage of females (32.81%) doing so compared to males (15.12%).

Table 3. Awareness About Social Media Privacy Policies

Perception	Male	Female	Total
Read and understand	43	34	77
	(50.00%)	(53.13%)	(51.33%)
Read but not fully understand	30	9	39
	(34.88%)	(14.06%)	(26.00%)
Ignore	13	21	34
	(15.12%)	(32.81%)	(22.67%)

The Chi-square test was conducted to examine whether there is a significant difference in the awareness about social media privacy policies between males and females. The results are as follows:

Chi-Square Statistic　　:　　11.2575

p-value　　　　　　　　:　　0.0036

Degrees of freedom　　:　　2

The Chi-Square Statistic of 11.2575 indicates a significant difference between the observed and expected frequencies. The P-Value of 0.0036 is significantly lower than the common significance level of 0.05.

Since the p-value is less than 0.05, we reject the null hypothesis 2. This suggests that there is a significant difference in the awareness about social media privacy policies between males and females.

Awareness of Cyber Law Related to Social Media

As shown in figure 2, a significant majority (77.33%) of the tribal students reported awareness of cyber law related to social media. However, a minority (22.67%) indicated they were not aware of cyber law.
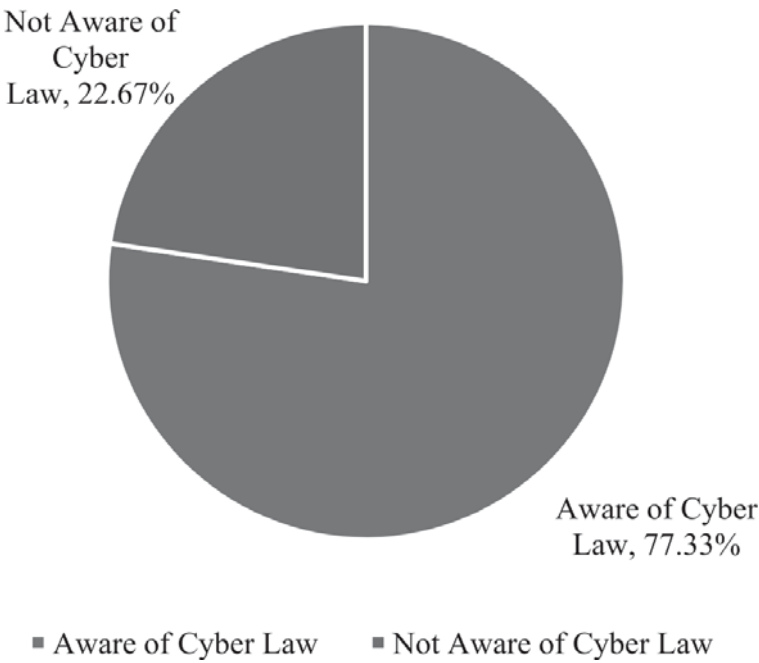
Figure 2. Awareness of Cyber Law Related to Social Media

Awareness about Cyber Crime Related to Social Media

The data in Table 4 reveals varying levels of awareness about different types of cybercrime related to social media among respondents. Cyber bullying shows a relatively high level of awareness, with 35.33% being aware and 26% being completely aware. In contrast, cyber grooming and smishing have the highest percentages of respondents who are not at all aware, at 36% and 57.33% respectively. Vishing and cyber-squatting also show significant unawareness, with 55.33% and 50.67% of respondents not being aware at all. While online sextortion has a notable 38.67% who are aware, phishing and ransomware show moderate awareness with around 22.67% and 25.33% aware respectively. Spamming shows a balanced awareness, with 26% aware and 28.67% completely aware.

Table 4. Awareness about cybercrime related to social media

Cyber Crime	Not at all aware	Slightly aware	Somewhat aware	Aware	Completely aware
Cyber Bullying	10 (6.67%)	34 (22.67%)	14 (9.33%)	53 (35.33%)	39 (26.00%)
Cyber Stalking	29 (19.33%)	31 (20.67%)	13 (8.67%)	39 (26.00%)	38 (25.33%)
Cyber Grooming	54 (36.00%)	24 (16.00%)	34 (22.67%)	23 (15.33%)	15 (10.00%)
Online Sextortion	29 (19.33%)	24 (16.00%)	19 (12.67%)	58 (38.67%)	20 (13.33%)
Phishing	57 (38.00%)	15 (10.00%)	15 (10.00%)	34 (22.67%)	29 (19.33%)
Vishing	83 (55.33%)	24 (16.00%)	10 (6.67%)	23 (15.33%)	10 (6.67%)
Smishing	86 (57.33%)	15 (10.00%)	5 (3.33%)	29 (19.33%)	15 (10.00%)
Spamming	34 (22.67%)	15 (10.00%)	19 (12.67%)	39 (26.00%)	43 (28.67%)
Ransomware	68 (45.33%)	5 (3.33%)	24 (16.00%)	38 (25.33%)	15 (10.00%)
Denial of Services (DoS) attack	63 (42.00%)	38 (25.33%)	15 (10.00%)	29 (19.33%)	5 (3.33%)
Data Breach	48 (32.00%)	19 (12.67%)	15 (10.00%)	39 (26.00%)	29 (19.33%)
Cyber-Squatting	76 (50.67%)	16 (10.67%)	19 (12.67%)	34 (22.67%)	5 (3.33%)

Chi-square Test Statistic and p-value:

Chi-Square Statistic   :   320.41

p-value   :   1.1876e-43

Degrees of freedom   :   44

The Chi-Square Statistic of 320.4078 indicates a very strong difference between the observed and expected frequencies. The P-Value of 1.1876e-43 is extremely low, far below the common significance level of 0.05.

Since the p-value is much less than 0.05, we reject the null hypothesis 3. This suggests that there is a significant difference in the levels of awareness about different types of cybercrime related to social media.

Findings

Major findings of the study are:

a) A majority (64.67%) perceived both positive and negative effects of social media on their academic performance.

b) Over half of the respondents (56.67%) agreed that social media negatively affects their concentration, with 14.67% strongly agreeing and 42.00% partially agreeing.

c) A slight majority (51.33%) of respondents claimed to read and understand social media privacy policies, with females showing a higher tendency to read but not fully understand the policies compared to males.

d) A significant majority (77.33%) of tribal students were aware of cyber laws related to social media, indicating a strong general awareness of legal issues.

e) Awareness varied significantly among different types of cybercrime. For example:

- High awareness of cyber bullying (35.33% aware, 26% completely aware).

- Moderate awareness for phishing (22.67% aware) and ransomware (25.33% aware).

- Low awareness of cyber grooming (15.33% aware, 10% completely aware) and smishing (19.33% aware, 10% completely aware).

Recommendations

Following are the recommendations based on the research.

- Educational programs focusing on the responsible use of social media should be universally implemented, emphasizing time management, critical evaluation of online content, and the importance of maintaining academic focus.
- Targeted educational campaigns should be developed to increase awareness and understanding of social media privacy policies, particularly focusing on female tribal students. These campaigns can include workshops, interactive sessions, and the integration of privacy education into the curriculum.
- Continuous education on cyber laws should be reinforced through regular updates, seminars, and the inclusion of cyber law education in school syllabi. This will ensure that all tribal students are equipped with the necessary legal knowledge to navigate the digital world safely.
- A comprehensive cybercrime awareness program should be implemented, covering all forms of cybercrime, with particular emphasis on lesser-known threats. Educational tools such as interactive modules, real-life case studies, and expert talks can help in raising awareness and equipping tribal students with the knowledge to protect themselves online.

Conclusion

This study reveals a complex interplay between social media, academic performance, and cyber law awareness among tribal students. While social media offers connectivity and information access, its negative impact on concentration and academic focus is evident. Gender disparities in understanding social media privacy policies are pronounced, with females more likely to disregard them. Although tribal students demonstrate general awareness of cyber laws, their knowledge of specific cybercrimes is inadequate. These findings underscore the urgent need for comprehensive educational interventions to promote responsible social media use, enhance privacy understanding, and improve cyber

law literacy. By addressing these issues, educational institutions can empower tribal students to thrive academically and digitally.

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Indigenous People and Ecology: Reflections upon Amitav Ghosh's
The Nutmeg's Curse: Parables for a Planet in Crisis

Arti Jain

Narratives related to Indigenous people have always offered new paradigms of thinking about the times of yore with different and altered vision. The contours of their portrayal in literature offer and create new versions of reality. The untold stories about Indigenous' struggles and survival have breathed in fresh waves of cultural identity, facets of colonialism, aspects of globalization, and impacts of industrialisation and most significantly the human-nature relationship.

Also the representation of indigenous people address the interpretations related to Mother-Earth, natural resource preservation, conservation of non-human forms of life. Representation of the concerns related to Indigenous people's life contributes as well as challenge the worldwide ideological interactions. This in turn influences the world of literature, as in the formation and literary explorations of postcolonial studies, indigenous literatures, environmental literature, green humanities, world literature, and eco-criticism etcetera.

The aforesaid perspectives are aptly addressed in the well-known historical fictions of the famous Indian writing in English diaspora author Amitav Ghosh. His well-researched fictions and non-fictions intertwine fact and fiction echoing the interlaced angles of globalization, colonialism, history, present day world and the generations.

To understand Geo Centrism, Naturalism and Collectivism one realizes the Trinity of: God, Nature and Indigenous people. The songs, rituals, culture and traditions of the Indigenous communities give prominent place to nature as their spiritual deity. In their life ecology plays an