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INFLUENCE OF EDUCATIONAL FACTORS ON SOCIAL MEDIA USE AND SLEEP PROBLEMS AMONG UNDERGRADUATES

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The widespread integration of social media into the academic and personal lives of undergraduate students has raised increasing concerns regarding its influence on sleep health and daily functioning. The present study examines the impact of educational stream, year of study, and college context on social media use and sleep-related problems among undergraduate students. A stratified random sample of 400 students aged 18–20 years was drawn from degree and B.Tech colleges in Rajahmundry, Andhra Pradesh. Standardized tools assessing social media and sleep quality were administered along with a biographical data sheet. The findings indicate that social media use is significantly associated with increased daytime dysfunction, restlessness, difficulty initiating sleep, reduced sleep adequacy, and lower optimal sleep. Students from professional courses, particularly B.Tech programs, and those in higher years of study, showed greater engagement with social media and gaming, accompanied by more pronounced sleep disturbances. Gender-wise analysis revealed higher social media influence among male students, while sleep-related problems were more evident among female students. Gaming addiction emerged as a strong predictor of sleep disturbance, frequent nighttime awakenings, and daytime sleepiness. Various dimensions of Facebook addiction—especially mood modification, tolerance, and conflict—were closely linked with poor sleep quality, suggesting that emotionally driven and compulsive digital engagement disrupts healthy sleep patterns. Overall, the findings highlight that excessive digital media use, shaped by educational demands and institutional context, extends beyond bedtime habits and significantly affects sleep quality and daytime functioning. The study emphasizes the need for educational institutions to promote balanced social media use, digital well-being awareness, and healthy sleep practices to support the psychological and academic well-being of undergraduate students.

Keywords: Social Media, Sleep Quality, Gaming Addiction, Facebook Addiction, Young Adults, Screen Time, Digital Media, Education And Undergraduates

INTRODUCTION

Social media is increasingly shaping the present generation of youth in ways that are both powerful and unpredictable. What began as a platform for communication and entertainment has now become deeply embedded in everyday life, influencing how young people think, interact, learn, and relax. For today's undergraduate students, social media is no longer optional or occasional; it has become an inseparable part of daily routine.

With the growing integration of technology into education, social media is now widely used as a tool for learning, collaboration, and academic engagement. Students rely on digital platforms for accessing study materials, communicating with peers and teachers, completing assignments, and staying informed. As students progress through different stages of education, their exposure to and dependence on social media steadily increases, blending academic demands with personal and social usage. This combined usage often results in extended screen time and constant online engagement.

While social media offers educational benefits, its excessive and continuous use raises concerns about its impact on health and well-being, particularly sleep. The evolving role of social media across the educational journey may influence daily routines, rest patterns, and recovery processes. Irregular schedules, late-night engagement, and mental stimulation associated with online platforms can interfere with healthy sleep habits.

Education, therefore, plays a crucial role in the evolution of social media use. The nature of academic workload, digital learning requirements, and course structure may shape how and how much students engage with social media.



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Understanding this relationship is essential to examine how educational context contributes to social media use and associated sleep problems among undergraduate students. The present study focuses on exploring this interaction between education, social media engagement, and sleep-related difficulties.

the continuous and excessive use of social media has raised concerns regarding its impact on students' health and well-being, particularly sleep. Sleep is a vital biological process essential for cognitive functioning, emotional regulation, and academic performance. Several studies have reported that increased social media use, especially during late-night hours, is associated with delayed sleep onset, reduced sleep duration, frequent awakenings, and poor sleep quality (Cain & Gradisar, 2010; Scott & Woods, 2018). Psychological factors such as fear of missing out (FoMO), emotional arousal, and compulsive checking behaviors further disrupt healthy sleep patterns among young adults.

the overall exposure to social media has significantly increased throughout the course of education, making prolonged screen engagement a routine aspect of student life (Kaplan & Haenlein, 2010; Boyd & Ellison, 2007).

METHOD

Aim

The present study was conducted to see the Influence of Educational Factors on Social Media Use and Sleep Problems among Undergraduate students.

Participants

The study sample consisted of 400 undergraduate students aged between 18 and 22 years. Among them, 211 were enrolled in degree courses and 189 were pursuing B.Tech programs. A stratified random sampling method was used to ensure adequate representation from both educational streams.

Tools

The Bergen Facebook Addiction Scale

The Bergen Facebook Addiction Scale, developed by Dr. Cecilie Andraessen and her colleagues, was used to measure the addiction levels of the sample. The scale consists of 18 items and it provides a measure of salience, mood modification, tolerance, withdrawal, conflict. The items are particularly sensitive to the more cognitive symptoms than to the somatic symptoms.

The Social Media Addiction Scale

The Social Media Addiction scale, developed by Arsian and Kirik, was used to measure the addiction of the sample. The scale consists of 25 items which measure the emotional and behavioural symptoms.

The Game Addiction Scale

The Game Addiction Scale was given, developed by Lemmens et.al was also used to measure the addiction of the sample. It consists of seven items and it provides a measure of emotional, cognitive and behavioral symptoms.

The Sleep Quality Scale

The sleep quality scale, developed by Chul Shin et.al. It Consisting of 28 items, the SQS evaluates six domains of sleep quality: daytime symptoms, restoration after sleep, problems initiating and maintaining sleep, difficulty waking, and sleep satisfaction.



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The Medical Outcome Study Survey Scale

The medical outcome study survey scale was developed by Anitha Stewart, John E. Ware. The scale consists of 12 items, it has 6 domains: sleep disturbance, snoring, sleep awakening and short head, sleep adequacy, somnolence, optimal sleep.

Procedure and Data Analysis

The questionnaires were administered in small groups within college classrooms after explaining the purpose of the study and obtaining informed consent. Students were encouraged to respond honestly, and confidentiality was assured. The collected data were analyzed using SPSS (Version 20.0). Descriptive statistics, independent sample t-tests, and Pearson correlation coefficients were used for analysis.

RESULTS AND DISCUSSION

The results regarding the influence of two educational groups (Degree and B.Tech) on social media (SMAS, GAS, FBAS,) are presented in Table 1. More significance is found on factors FB salience, mood, tolerance, and conflict. More mean scores are found in degree students in all significant factors.

No significance is found in factors like social media, game addiction, fb withdrawal, fb relapse. The mean scores for the degree group are more in game addiction, fb withdrawal, and relapse, and the mean scores for B.Tech are more in social media.

Tables 1: Education and Social Media Factors

Sub scale	Mean / S.D.	Degree (N=211)	B.Tech (N=189)	t
Social media	Mean	61.2085	64.0741	-1.742
	S.D.	17.20615	15.69608	
Game addiction	Mean	14.9526	14.8624	.148
	S.D.	6.06219	6.12825	
Fb salience	Mean	6.0047	5.2698	2.736**
	S.D.	2.72641	2.64096	
Fb mood	Mean	6.3649	5.6243	2.624**
	S.D.	2.97361	2.67009	
Fb tolerance	Mean	6.2085	5.3704	3.022**
	S.D.	2.91697	2.62969	
Fb withdrawal	Mean	5.9479	5.4868	1.811
	S.D.	2.53398	2.54869	



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Fb conflict	Mean	6.0616	5.2381	3.011**
	S.D.	2.76733	2.69780	
Fb relapse	Mean	6.6872	6.4286	.941
	S.D.	3.04674	2.43892	

Note: * = $p < .05$; ** = $p < .01$

The results regarding the influence of two educational groups (Degree and B.Tech) on sleep factors are presented in Table 2. More significance is found in factors sleep restoration, sleep satisfaction, snoring and sleep awakening, and optimal sleep. B.Tech students have higher mean scores in all the significant factors except optimal sleep. Degree students have more mean in optimal sleep.

No significance is found in factors like day dysfunction, difficulty falling asleep and getting up, maintaining sleep and sleep disturbances, sleep adequacy and somnolence. The mean scores for the degree group are more in difficulty falling asleep, maintaining sleep, and sleep adequacy, and mean scores for B.Tech are more in day dysfunction, difficulty getting up, sleep disturbances, and somnolence.

Tables 2: Education and Sleep Factors

Sub scale	Mean / S.D.	degree (N=211)	B.Tech (N=189)	t
Day dysfunction	Mean	26.8578	28.1905	-1.769
	S.D.	6.71804	8.17727	
Restoration	Mean	9.4645	1.2857	-3.137**
	S.D.	2.59531	2.63020	
Difficulty asleep	Mean	8.0995	7.8254	1.080
	S.D.	2.35525	2.68292	
Difficulty getup	Mean	6.6588	6.8677	-.992
	S.D.	1.97536	2.21178	
Satisfaction	Mean	7.3697	8.4497	-4.625**
	S.D.	2.38164	2.28638	
Difficulty maintaining	Mean	4.3081	4.1058	1.179
	S.D.	1.59310	1.81290	
Sleep disturbance	Mean	10.3886	10.396	-.033



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	S.D.	2.58027	2.45517	
Snoring	Mean	3.1327	3.3915	-2.464**
	S.D.	1.10902	.99206	
Sleep awakening	Mean	2.7962	3.1429	-3.405**
	S.D.	1.06511	.97070	
Sleep adequacy	Mean	4.8768	4.8624	.093
	S.D.	1.62246	1.46669	
Somnolence	Mean	8.2417	8.3386	-.445
	S.D.	2.31833	2.03732	
Optimal sleep	Mean	7.7962	7.3915	3.049**
	S.D.	1.44788	1.20510	

Note: * = $p < .05$; ** = $p < .01$

The correlation results regarding the influence of course (B.A. and B.Com, B.Sc., B.Tech IT and B.Tech N-IT) on social media (SMAS, GAS, and FBAS) are presented in table-3. More significance is found in factors FB salience, mood, tolerance, and conflict. B. A and B.Com students' shows are more mean scores in all significant factors.

No significance is found in factors social media, game addiction, fb with drawl, fb relapse. The mean score for sub-factors which have no significance is higher for BA and BCom in FB withdrawal, relapse. For B.Tech IT are more difficulties getting up, snoring.

Table 3: Course and Social Media Factors

Sub scale	Mean / S.D.	BA and BCOM (N=117)	BSc (N=95)	BTech IT (N=108)	BTech nIT(N=80)	F
Social media	Mean	61.0085	62.0316	64.0000	63.5250	.737
	S.D.	16.91586	17.83103	14.84688	16.70062	
Game addiction	Mean	15.0085	15.0842	15.1574	14.2250	.432
	S.D.	6.10045	6.06816	6.10219	6.12935	
Fb salience	Mean	6.1282	5.8632	5.2778	5.2375	2.746*
	S.D.	2.66374	2.78526	2.64693	2.67309	



Fb mood	Mean	6.4103	6.3895	5.6296	5.5125	2.812*
	S.D.	2.92184	3.07459	2.7226 7	2.54575	
Fb tolerance	Mean	6.4017	6.0421	5.4074	5.2250	3.916**
	S.D.	2.93628	2.89870	2.6263 8	2.60950	
Fb withdrawal	Mean	6.0256	5.9368	5.4074	5.4875	1.559
	S.D.	2.57462	2.50026	2.4912 4	2.61444	
Fb conflict	Mean	6.2479	5.8947	5.2037	5.2000	3.793**
	S.D.	2.94169	2.51156	2.7437 6	2.65483	
Fb relapse	Mean	6.9402	6.4211	6.4259	6.3750	1.013
	S.D.	2.95159	3.12702	2.3609 1	2.57729	

Note: * = $p < .05$; ** = $p < .01$

The correlation results regarding the influence of course (B.A and B.Com, B.Sc., BTech IT and BTech N-IT) on sleep factors are presented in Table 4. More significance is found in factors sleep restoration, satisfaction, sleep awakening, and optimal sleep. B.Tech IT students show higher mean scores in sleep restoration and satisfaction. B.Tech NIT students have higher mean scores in sleep awakening, and optimal sleep is seen more in B.A and B.Com

No significance is found in factors day dysfunction, difficulty falling asleep, getting up, difficulty maintaining sleep disturbance, snoring, sleep adequacy, and somnolence. The mean score for sub-factors which have no significance is higher for B.A and B.Com in sleep adequacy. For BSc are more difficulties falling asleep, maintaining, and disturbances. For B.Tech IT are more difficulties getting up, snoring. For BTech N-IT are more day dysfunction, sleep disturbances, and somnolence.

Table 4: Course and Sleep Factors

Sub scale	Mean S.D.	BA and BCOM (N=117)	BSc (N=95)	BTech IT (N=108)	BTech nIT(N=80)	F
Day dysfunction	Mean	26.2991	27.5053	28.1944	28.2500	1.597
	S.D.	6.53276	6.89260	8.1360 6	8.31424	
Restoration	Mean	9.4359	9.4947	10.4722	10.0500	3.760**
	S.D.	2.60763	2.56355	2.7359 1	2.51023	
Difficulty asleep	Mean	7.8974	8.4316	7.8519	7.6875	1.520



	S.D.	2.42965	2.25338	3.00720	2.15591	
Difficulty getup	Mean	6.4615	6.8421	7.0556	6.6875	1.603
	S.D.	2.05753	1.79429	2.33556	2.09033	
Satisfaction	Mean	7.2137	7.5895	8.5741	8.2625	7.536**
	S.D.	2.48037	2.24317	2.23064	2.38000	
Difficulty maintaining	Mean	4.1709	4.4737	4.1852	4.0000	1.197
	S.D.	1.59358	1.58344	1.91476	1.67634	
Sleep disturbance	Mean	10.1026	10.6737	10.2407	10.6875	1.412
	S.D.	2.60432	2.51566	2.64353	2.17927	
Snoring	Mean	3.1453	3.1158	3.4259	3.3500	2.124
	S.D.	1.07691	1.14727	.97830	1.02005	
Sleep awakening	Mean	2.7009	2.9053	3.1389	3.1625	4.761**
	S.D.	1.06888	1.05259	.92179	1.03659	
Sleep adequacy	Mean	4.9402	4.8105	4.8889	4.8125	.168
	S.D.	1.65722	1.57976	1.49350	1.44164	
Somnolence	Mean	8.3333	8.0737	8.3519	8.3875	.405
	S.D.	2.32676	2.30744	2.14570	1.89265	
Optimal sleep	Mean	7.8376	7.7579	7.3519	7.4250	3.351**
	S.D.	1.40784	1.49265	1.20989	1.20940	

Note: * = $p < .05$; ** = $p < .01$

The correlation results regarding the influence of year (1, 2, and 3) social media factors (SMAS, GAS, and FBAS) are presented in Table 5. More significance is found in social media, games, Facebook withdrawal, and conflict. More mean scores for significant factors are observed 2nd year, have social media, high mean scores and GA, FB withdrawal, and conflict having high mean scores in 1st year students.

No significance is found in the remaining sub-factors like FB salience, mood, tolerance, and relapse. The mean scores for non-significant factors for 1, 2, and 3 years are found. FB salience, mood and tolerance and relapse are more in the 1st year. FB mood is more in the 3rd year.



Table 5: Year of Study and Social Media Factors

Sub scale	Mean / S.D.	1 (N=146)	2 (N=119)	3(N=135)	F
Social media	Mean	61.6438	65.6639	60.8222	3.092*
	S.D.	17.39827	15.49974	16.25123	
Game addiction	Mean	15.5479	15.4538	13.7407	3.822*
	S.D.	6.01731	6.37759	5.76267	
Fb salience	Mean	5.9178	5.4286	5.5778	1.159
	S.D.	2.77055	2.52973	2.78714	
Fb mood	Mean	6.0411	5.9496	6.0444	.044
	S.D.	2.77644	2.80087	3.00216	
Fb tolerance	Mean	6.1712	5.5630	5.6444	1.905
	S.D.	2.85358	2.76368	2.79249	
Fb withdrawal	Mean	6.2329	5.5462	5.3481	4.756**
	S.D.	2.59453	2.43473	2.52545	
Fb conflict	Mean	6.1438	5.2941	5.4963	3.562*
	S.D.	2.82352	2.49865	2.86219	
Fb relapse	Mean	6.9110	6.4706	6.2741	1.954
	S.D.	2.85976	2.47641	2.91017	

Note: * = $p < .05$; ** = $p < .01$

The correlation results regarding the influence of year (1, 2, and 3) on sleep factors are presented in Table 6. More significance is found in satisfaction, somnolence, and optimal sleep. 2nd years have high mean scores in sleep satisfaction. 3rd students have high mean scores in somnolence. 1st years have high mean scores in optimal sleep.

No significance is found in the remaining sub-factors like day dysfunction, sleep restoration, difficulty falling asleep and getting up, maintaining sleep, disturbances, snoring, awakening, and adequacy. The mean scores for non-significant factors for 1, 2, and 3 years are found. Sleep adequacy is more in the 1st year. Day dysfunction and snoring are more common in the 2nd year. Sleep restoration, difficulty falling asleep and getting up, maintaining sleep, and disturbances upon awakening are more common in the 3rd year. This is evident by the results that the mean scores for the 3rd year are all sleep factors.



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Table 6: Year of Study and Sleep Factors

Sub scale	Mean / S.D.	1 (N=146)	2 (N=119)	3(N=135)	F
Day dysfunction	Mean	27.4795	27.5966	27.4000	.022
	S.D.	7.28647	7.67819	7.51536	
Restoration	Mean	9.6575	9.6723	10.2222	2.008
	S.D.	2.68184	2.52482	2.67567	
Difficulty asleep	Mean	8.0205	7.5546	8.2815	2.709
	S.D.	2.47879	2.26131	2.72811	
Difficulty getup	Mean	6.5479	6.8319	6.9185	1.211
	S.D.	1.94788	2.16802	2.16503	
Satisfaction	Mean	7.4384	8.2017	8.0741	4.057**
	S.D.	2.39244	2.33826	2.39598	
Difficulty maintaining	Mean	4.3767	4.0252	4.2000	1.408
	S.D.	1.65317	1.67970	1.76534	
Sleep disturbance	Mean	10.2329	10.4454	10.5185	.487
	S.D.	2.66792	2.25380	2.58252	
Snoring	Mean	3.1918	3.3025	3.2815	.419
	S.D.	1.07841	1.07004	1.04132	
Sleep awakening	Mean	2.8630	2.9916	3.0370	1.071
	S.D.	1.07402	1.07747	.94953	
Sleep adequacy	Mean	5.0205	1.4395	4.8222	1.177
	S.D.	1.63778	1.39285	1.57815	
Somnolence	Mean	7.9658	8.3293	8.6074	3.066*
	S.D.	2.42804	2.09087	1.95126	
Optimal sleep	Mean	7.6918	7.3277	7.7556	3.688*



	S.D.	1.35221	1.22895	1.4271 7	
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Note: * = $p < .05$; ** = $p < .01$

The correlation between colleges (Govt. Degree, B.Tech Private Degree and B.Tech) and social media factors (SMAS, GAS, and FBAS) is presented in Table 7. More significance is found in social media, FB salience, mood, tolerance, and conflict. More mean scores of significant factors are found. Social media is high for private. B.Tech. FB salience, mood are high in private Degree. FB tolerance, conflict are seen more in the government degree.

No significance is found in game addiction, FB withdrawal, and relapse. More mean for the non-significant sub factors is found. Game addition and FB withdrawal, relapse is found more in govt. Degree College.

Table 7: College Type and Social Media Factors

Sub scale	Mean / S.D.	GDC (N=110)	GBC (N=90)	PDC (N=101)	PBC (N=99)	F
Social media	Mean	62.0727	59.8556	60.4851	67.6869	4.652**
	S.D.	18.33416	15.32242	15.90573	15.23667	
Game addiction	Mean	15.0909	14.6667	14.9505	14.8889	.082
	S.D.	6.48859	5.59092	5.63272	6.56660	
Fb salience	Mean	5.9909	5.3556	6.0495	5.1616	2.777*
	S.D.	2.78428	2.60644	2.65848	2.69052	
Fb mood	Mean	6.4000	5.5556	6.4158	5.5960	2.858*
	S.D.	3.01738	2.61418	2.97411	2.66848	
Fb tolerance	Mean	6.3727	5.3111	6.0891	5.3636	3.645**
	S.D.	3.01330	2.61648	2.83231	2.61649	
Fb withdrawal	Mean	6.0727	5.6222	5.8812	5.2929	1.817
	S.D.	2.66031	2.68821	2.41366	2.38726	
Fb conflict	Mean	6.1727	5.1778	5.9901	5.2424	3.474**
	S.D.	2.72567	2.49304	2.79104	2.87881	
Fb relapse	Mean	7.1000	6.4889	6.2772	6.3333	1.991
	S.D.	3.03783	2.49604	3.00373	2.40323	

Note: * = $p < .05$; ** = $p < .01$



The correlation between colleges (Govt Degree, B.Tech, Private Degree and B.Tech) and sleep factors is presented in Table 8. More significance is found in sleep restoration, sleep satisfaction, difficulty maintaining sleep, snoring, sleep awakening, and optimal sleep. Sleep restoration and difficulty maintaining sleep are seen with higher mean scores in the government. B.Tech. Satisfaction, snoring, and sleep awakening are seen with higher mean scores in private B.Tech. Optimal sleep is seen in more mean scores in private degree.

No significance is found in day dysfunction, difficulty falling sleep and getting up, sleep disturbances, sleep adequacy and somnolence. More mean for the non-significant sub factors is found. Day dysfunction, difficulty getting up, sleep adequacy is more in govt. B.Tech college. Difficulty falling asleep is seen more in private degree college. sleep disturbances, somnolence is found more in private btech college.

Table 8: College Type and Sleep Factors

Sub scale	Mean / S.D.	GDC (N=110)	GBC (N=90)	PDC (N=101)	PBC (N=99)	F
Day dysfunction	Mean	27.2545	28.9333	26.4257	27.5152	1.855
	S.D.	7.37518	8.21317	5.92680	8.12701	
Restoration	Mean	9.5645	10.3111	9.2376	10.2828	3.896**
	S.D.	2.79723	2.88602	2.32873	2.40340	
Difficulty asleep	Mean	8.1091	7.9667	8.1386	7.6465	.808
	S.D.	2.47685	2.90079	2.23620	2.45911	
Difficulty getup	Mean	6.7818	6.9556	6.4752	6.8384	.937
	S.D.	2.00633	2.27300	1.88994	2.20254	
Satisfaction	Mean	7.4364	8.1111	7.3168	8.7374	8.025**
	S.D.	2.47752	2.27564	2.28880	2.27042	
Difficulty maintaining	Mean	4.2909	4.5444	4.3366	3.6970	4.547**
	S.D.	1.63867	1.87928	1.55098	1.65649	
Sleep disturbance	Mean	10.5364	9.9667	10.1881	10.8283	2.206
	S.D.	2.59384	2.70850	2.55622	2.14305	
Snoring	Mean	3.2273	3.2889	3.0297	3.4848	3.167*
	S.D.	1.09761	1.07311	1.11764	.90761	
Sleep awakening	Mean	2.6727	3.0889	2.9208	3.2020	5.310**



	S.D.	1.18173	1.04553	.91305	.89191	
Sleep adequacy	Mean	4.8818	4.9444	4.8812	4.7778	.189
	S.D.	1.66855	1.56047	1.5829 5	1.37437	
Somnolence	Mean	8.3636	7.9333	8.0891	8.7273	2.468
	S.D.	2.43720	2.17648	2.1684 0	1.85064	
Optimal sleep	Mean	7.7909	7.5111	7.8119	7.2727	3.691**
	S.D.	1.49062	1.24742	1.4050 8	1.15898	

Note: * = $p < .05$; ** = $p < .01$

Gaming addiction demonstrates a strong influence on sleep health, especially among students enrolled in professional and technology-oriented courses where prolonged screen exposure is common. Higher levels of gaming addiction are linked with *greater sleep disturbance, frequent nighttime awakenings, and reduced sleep adequacy, leading to persistent daytime sleepiness. These patterns may be more pronounced among students in advanced years of study, who often face increased academic pressure, irregular schedules, and greater autonomy in media use within college settings.

A similar trend is observed across various Facebook addiction components, including salience, mood modification, tolerance, withdrawal, conflict, and relapse. These dimensions show consistent negative relationships with sleep adequacy, nighttime awakenings, and overall sleep quality. Students who rely on social media for emotional regulation or who engage compulsively with these platforms appear to be at greater risk for sleep problems. Such behaviours may be reinforced by the academic and social environment of colleges, where constant connectivity is often normalised and sometimes encouraged for educational purposes.

Taken together, these findings suggest that excessive engagement with social media and gaming among undergraduate students is not limited to bedtime habits but extends into poorer sleep quality, reduced alertness, and impaired daytime functioning, which may negatively affect academic performance. The influence of educational stream, year of study, and institutional context highlights the need to view digital media use as a broader lifestyle issue rather than an isolated behaviour.

Overall, the results reflect a broader pattern in which problematic digital media use is closely linked to disrupted sleep and reduced daytime alertness across different educational settings. These findings support growing concerns about excessive screen-based activities in college environments and underline the importance of awareness programs, curriculum-level interventions, and institutional policies that promote balanced media use and healthy sleep practices among undergraduate students.

FINDINGS

The present study reveals a clear relationship between educational factors, digital media use, and sleep problems among undergraduate students. Significant differences were observed across educational stream, course type, year of study, and college environment, indicating that academic context plays an important role in shaping students' social media behavior and sleep health.

With respect to educational stream, degree students showed significantly higher levels of Facebook addiction components such as salience, mood modification, tolerance, and conflict, whereas B.Tech students reported relatively higher overall



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social media use. In terms of sleep, B.Tech students experienced greater issues related to sleep restoration, satisfaction, snoring, and nighttime awakenings, while degree students reported better optimal sleep.

Analysis based on course type showed that BA and B.Com students exhibited higher Facebook addiction traits, whereas B.Tech IT students reported better sleep restoration and satisfaction. Optimal sleep was highest among BA and B.Com students, suggesting variations in sleep quality across academic disciplines.

Differences were also evident across years of study. Second-year students showed higher overall social media use, while first-year students reported higher gaming addiction and Facebook withdrawal and conflict. In terms of sleep, second-year students experienced greater sleep satisfaction, third-year students reported higher daytime sleepiness (somnolence), and first-year students demonstrated better optimal sleep.

Regarding college type, private B.Tech students showed the highest overall social media use, while Facebook addiction components varied across government and private institutions. Sleep-related differences were also significant, with private B.Tech students reporting higher sleep satisfaction and awakenings, and private degree students demonstrating better optimal sleep.

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