An Analytical Study of Social Media Usage and Mental Well-being Among College Students in Surat.

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Abstract:

This study focuses at how social media influences college students' mental health in Surat City, a city which is fast becoming more urbanised and has a high level of digital penetration. Social media sites like Instagram, WhatsApp, and Snapchat have become essential to student life in the contemporary "Digital Era," but there is still much disagreement over the psychological effects of these platforms. This study's main goal is to examine the connections between mental health indicators including anxiety, sadness, and self-esteem with social media usage habits, particularly duration and content kind. A structured questionnaire was given to a sample of 175 Surat college students as part of the quantitative methodology. Descriptive statistics and correlation analysis were employed to examine the gathered data using SPSS Software and MS Excel.

Introduction:

The emergence of social media has completely changed the 21st-century digital world, transforming it from a platform for basic networking into a major ecosystem that shapes young adults' social and psychological reality. As college students enter a crucial phase of identity formation and independence, social media has evolved from a supplementary tool to a "digital residence." These platforms present previously unheard-of chances for worldwide communication and information exchange, but they also bring with them complicated psychological stresses. This phenomenon is frequently based on the Social Comparison Theory, which holds that consuming carefully manicured, idealised lives on a regular basis creates a "perceived reality gap," which frequently lowers self-esteem and increases anxiety. The distinction between virtual involvement and mental health has grown more complicated as digital immersion becomes a requirement for social inclusion, calling for a thorough analytical investigation of this relationship.

The "mobile-first" revolution and the greatest youth population in the world in India are contributing factors to this digital transformation. The urge to create a "perfect" internet identity has increased the pressure on Indian college students to perform well academically. Instagram and WhatsApp are two-edged swords in a society that places a high value on social status and peer approval. While they offer crucial academic and social support, they also create an atmosphere that is conducive to FOMO (Fear of Missing Out) and "Digital Burnout." Concern regarding "Internet Addiction" and its association to sleep loss and psychological distress is on the rise nationwide. The majority of national data, however, frequently ignores the complex sociocultural dynamics of quickly growing Tier-2 cities in favour of generalising the experience of urban youth. As one of Gujarat's most important centres of education and the

economy, Surat offers a distinctive demographic environment for this kind of research. Students in the city are under a unique combination of stresses as a result of its transformation from a traditional mercantile centre to a contemporary global metropolis. Students in Surat confront a strongly communal yet increasingly digital culture, especially those enrolled in high-stakes professional courses.

A significant amount of active and passive social media engagement is encouraged by the "Instagram ability" of the local way of life, which includes both social celebrations and its renowned culinary culture. However, there is a dearth of empirical studies that examine the effects of these particular regional customs on the mental health of young people in Surat. The majority of the material now in publication is descriptive in nature, describing the extent of usage without critically examining how that use affects markers of mental health including academic stress, body dysmorphia, and social isolation.

Therefore, by offering a point of view on the relationship between social media use and mental health among Surat college students, this study aims to close this research gap. The research attempts to find particular behavioural patterns like passive browsing versus active content creation that serve as predictors for mental health consequences by going beyond basic usage statistics. Knowing about these relationships is essential for Surat's academic community as well as for educators, mental health specialists, and legislators. Fostering "Digital Wellness" among the city's future workforce becomes crucial as it continues to develop into a digital hub. Therefore, this study is an essential first step in estimating the psychological cost of connectedness and putting out a fair plan for integrating social media into Surat students' daily lives.

Review of literature:

Name of Author	Objective	Type of Data	Sample Size & Sampling Technique	Statistical Tools	Finding
Mudunna, C., Tran, T., Antoniades, J., Chandradasa,	Finding existing national mental health policies, plans, programs, and	Secondary	8 Countries	evaluated using the relevant WHO Checklists	In particular, the evaluation promotes for adolescent-focused policies created through

M., & Fisher, J. (2025).	laws in South-East Asia, evaluating their commitment to international standards, and reviewing how teenagers are included in these documents were the objectives.				direct youth engagement rather than high-income nation benchmarks, and it urges South-East Asia to implement immediate, context-specific mental health legislation and provide resources appropriately.
Bashir, H., & Bhat, S. A. (2017)	The current study aims at investigating how social media impacts mental health.	Secondary	23 Research paper	-	While social media's detrimental effects pose a particular danger to the psychological health of younger generations, ongoing research is crucial for addressing the mental health epidemic it has generated.
Braghieri, L., Levy, R. E.,	Estimates of how social media affects	Secondary	-	-	Social media's global rise has contributed to a

& Makarin, A. (2022)	mental health using a unique natural experiment				young mental health crisis driven by adverse social comparison, prompting regulators and tech corporations work urgently together to lessen these pervasive psychological effects.
Zewude, G. T., Natnael, T., Woreta, G. T., & Bezie, A. E. (2025).	This study analyzes how social capital (SC) and mindfulness serve as mediators in the relationships between SMA, IA, and MH among Ethiopian college and high school students.	primary	2633	-	The study shows that despite internet addiction and social media use severely compromise students' mental health, their effects can be minimized and general wellbeing enhanced by growing social capital and mindfulness using multimodal therapies.

Kaur, R., & Bashir, H. (2015).	The current study aims at investigating Impact of Social Media on Mental Health of Adolescents.	Secondary	-	-	Adolescents' growing consumption of social media services like Facebook has benefit like connecting with others and learning, but it also offers mental health hazards like stress and cyberbullying, so it's crucial to provide guidance, supervision, and balanced use.
Deepa, M., & Priya, V. K. (2020).	This study analyzes how impact of social media on mental health of students.	primary and secondary	90		According to the study's findings, students who concentrate their online activities over personal relationships are more likely to suffer from anxiety and depression when they use social media frequently, which can be

					described as multi-platform engagement and more than four hours of screen time per day.
Feng, T., Wang, B., Mi, M., Ren, L., Wu, L., Wang, H., ... & Wang, X. (2025).	By analyzing the network traits of social media addiction, mental health disorders, and academic burnout, this study seeks to identify core symptoms that can inform improved psychological interventions and student performance in the digital age	primary	432		By mapping important risk and protective factors, this study uses interdisciplinary network analysis to identify depression as the major core node connecting academic burnout, mental health problems, and social media addiction. It also provides a strategic framework for clinical interventions.
Manohara, M. G. R. K., Sandunika, A. G. G., & Kulathunga,	Examine how social media use affects Sri Lankan undergraduates'	primary	140	SPSS	There is an urgent need for concentrated mental health interventions, as

W. M. S. S. K.	mental health.• Depression symptoms as assessed by the Patient Health The correlation between the Questionnaire-9 (PHQ-9) score and the hours spent on social media				indicated by research on Sri Lankan undergraduates that shows a statistically significant positive link between social media usage and depression symptoms as evaluated by the PHQ-9.

Objectives:

- To analyze gender differences in the usage pattern of major social media platforms among college students.
- To examine age-wise differences in social media engagement patterns, including passive scrolling and posting of original content.
- To examine whether social media usage significantly affects psychological conditions such as nervousness, excessive worrying, low mood, fatigue, loneliness, and emotional distress among college students.
- To analyze gender-based differences in routine social media behaviours such as checking social media immediately after waking up, responding to notifications instantly, and using social media before sleep.

Hypothesis :

- H_{01} (Null Hypothesis):

  Social media usage does not have a significant effect on psychological conditions among college students in Surat.
- H_{11} (Alternative Hypothesis):

  Social media usage has a significant effect on psychological conditions among college students in Surat.

- H_{02} (Null Hypothesis):

  There is no significant difference between male and female students in routine social media behaviours before sleep.

- H_{12} (Alternative Hypothesis):

  There is a significant difference between male and female students in routine social media behaviours before sleep.

Methodology:

Research Design

The study adopts a descriptive and analytical research design to examine social media usage patterns and their impact on mental well-being among college students in Surat.

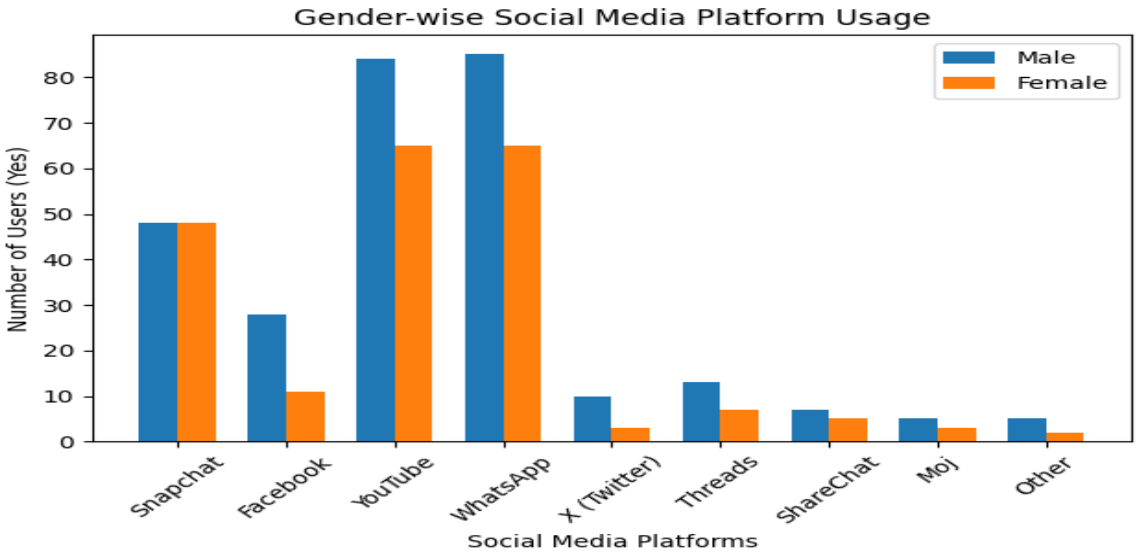
Population and Sample with Data Collection

The target population of the study comprised college students in Surat. A total of 175 students were selected as the sample using the convenience sampling technique. Among the respondents, 98 were male and 77 were female. The study was based on primary data collected directly from the participants through a structured questionnaire. The responses were measured using a Likert scale to assess students' social media usage patterns and psychological well-being.

Statistical Tools Used

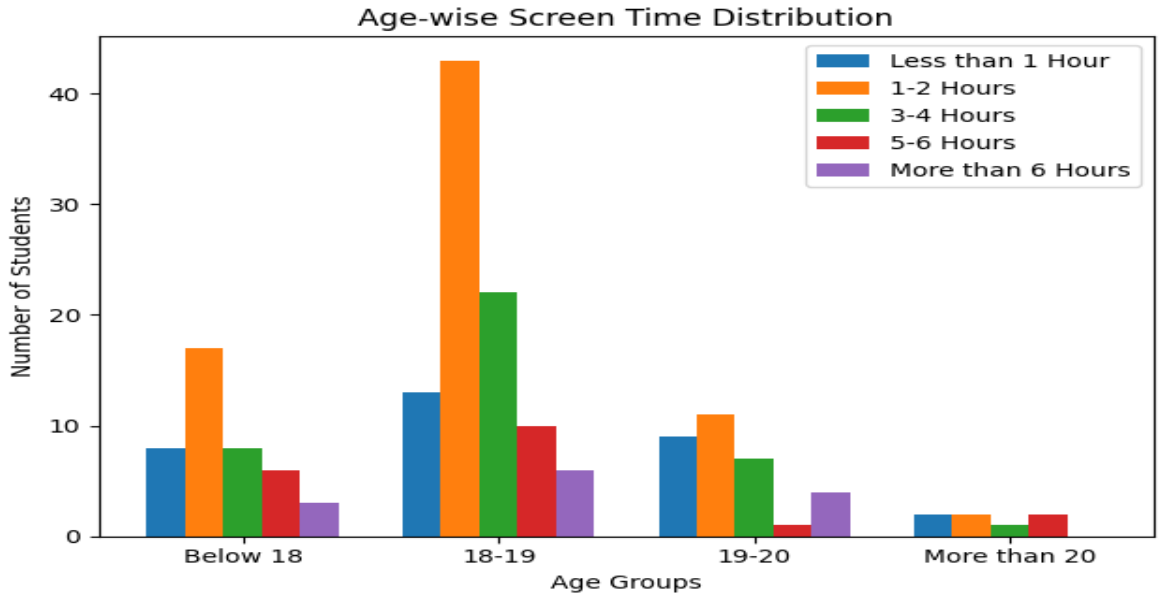
The data were analyzed using percentage analysis, a One-Sample t-test, and One-Way ANOVA. Percentage analysis was applied to examine gender-wise platform usage and age-wise social media behaviour patterns. The One-Sample t-test was used to determine whether the mean psychological distress scores significantly differed from the neutral benchmark, and all variables were found to be statistically significant at the 5% level ($p = .000$). One-Way ANOVA was conducted to examine gender-based differences in habitual behaviours such as checking social media after waking up, responding to notifications immediately, and using social media before sleep.

Data Analysis



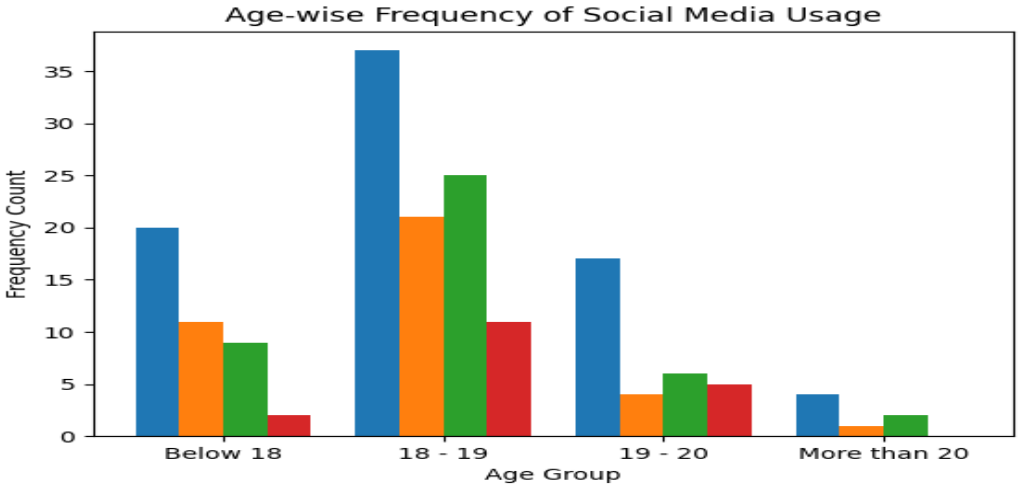
The data show that YouTube and WhatsApp are the most widely used platforms among both male and female students, with a very high number of users in each group. Snapchat is moderately popular among both genders, while Facebook has comparatively lower usage, especially among females. Platforms such as X (Twitter), Threads, ShareChat, Moj, and other apps have very limited usage among students. Overall, there is no major gender gap in the usage of major platforms like YouTube and WhatsApp, though slight differences can be observed in Snapchat and Facebook usage.

		Screen Time					
		Less than 1 Hour	1 - 2 hour	3 - 4 Hour	5 - 6 Hour	More than 6 Hour	Total
Age	Below 18	8	17	8	6	3	42
	18 - 19	13	43	22	10	6	94
	19 - 20	9	11	7	1	4	32
	More than 20	2	2	1	2	0	7
Total		32	73	38	19	13	175



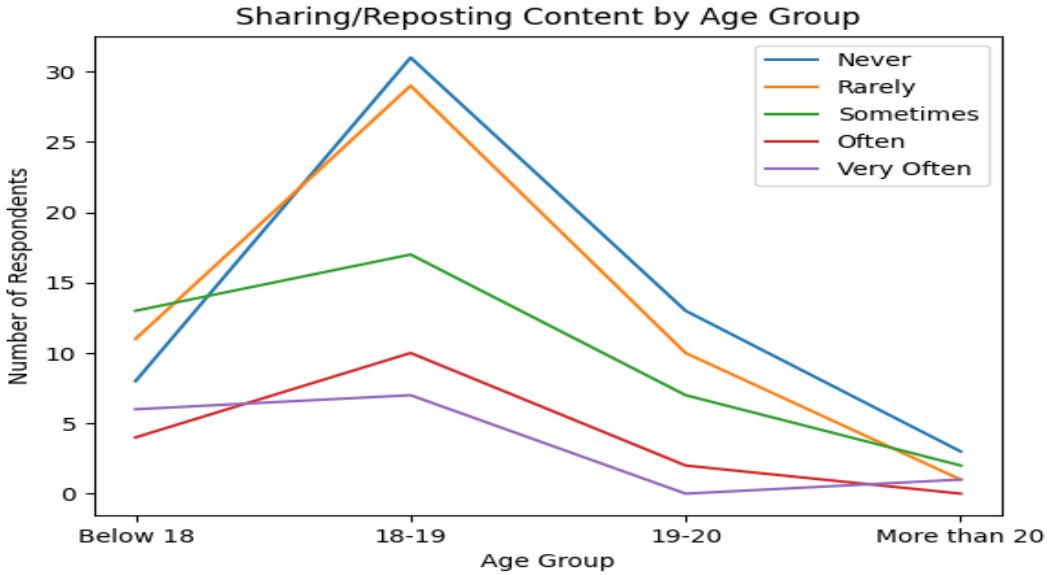
The data indicate that most students fall in the 1–2 hours daily screen time category (73 out of 175), making it the most common usage pattern across all age groups. The 18–19 age group (94 students) shows the highest overall social media engagement, particularly in the 1–2 hours and 3–4 hours ranges. Moderate usage (3–4 hours) is also noticeable, while comparatively fewer students spend more than 5 hours per day. Overall, social media usage appears highest among students aged 18–19, with limited heavy usage across all age groups.

		Frequency				
		Only few times a day	once in every hour	every 15-20 minuts	Almost Constantly	Total
Age	Below 18	20	11	9	2	42
	18 - 19	37	21	25	11	94
	19 - 20	17	4	6	5	32
	More than 20	4	1	2	0	7
Total		78	37	42	18	175



The table shows that most students use social media only a few times a day (78 students), making it the most common frequency pattern. However, a considerable number also check social media every 15–20 minutes (42 students), indicating frequent engagement. The 18–19 age group demonstrates the highest level of activity across all categories, including almost constant usage. Overall, moderate but regular social media checking is common among students, particularly in the 18–19 age group.

		Sharing Reposting content					
		Never	rarely	Some times	often	Very often	Total
Age	Below 18	8	11	13	4	6	42
	18 - 19	31	29	17	10	7	94
	19 - 20	13	10	7	2	0	32
	More than 20	3	1	2	0	1	7
Total		55	51	39	16	14	175



The table indicates that most students either never (55) or rarely (51) share or repost content, suggesting limited active content distribution. A moderate number of students share content sometimes (39), while only a small proportion do so often or very often. The 18–19 age group shows the highest participation across all categories, reflecting comparatively greater engagement. Overall, reposting behaviour among students tends to be occasional rather than frequent.

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Feeling nervous anxious or on edge	175	2.0286	1.27950	.09672
Worrying too much about different things	175	2.3886	1.40110	.10591
Feeling down depressed or hopeless	175	2.0571	1.27177	.09614
Feeling tired or having little energy	175	2.1371	1.30584	.09871
I feel anxious or stressed if I am unable to check my social media	175	2.2914	1.23208	.09314
My mood often drop after I spend a long time scrolling through feeds	175	2.4857	1.29924	.09821
I feel lonely or left out when I see friends posting without me	175	2.2171	1.36405	.10311

The results show that students report moderate levels of psychological distress related to social media usage. The highest mean score is for mood dropping after long scrolling (2.48), followed by excessive worrying (2.38) and stress when unable to check social media (2.29). Other feelings such as nervousness, tiredness, loneliness, and low mood also show noticeable mean values around 2. Overall, the findings indicate a measurable impact of social media on students' emotional well-being.

	t	df	Sig. (2-tailed)	Mean Difference
Feeling nervous anxious or on edge	20.973	174	0	2.02857
Worrying too much about different things	22.552	174	0	2.38857
Feeling down depressed or hopeless	21.398	174	0	2.05714
Feeling tired or having little energy	21.65	174	0	2.13714
I feel anxious or stressed If I am unable to check my social media	24.603	174	0	2.29143
My mood of ten drops after I spend a long time scrolling through feeds	25.309	174	0	2.48571
I feel lonely or left out when I see friends posting without me	21.502	174	0	2.21714

The One-Sample t-test results show that all psychological variables are statistically significant ($p = 0.000 < 0.05$). This indicates that students' feelings of anxiety, worrying, low mood, fatigue, stress when unable to check social media, mood decline after scrolling, and loneliness are significantly different from the neutral benchmark. Therefore, social media usage has a significant impact on students' psychological well-being.

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
I check social media immediately after waking up	Between Groups	.717	1	.717	.317	.574
	Within Groups	391.420	173	2.263		
	Total	392.137	174			

I check notifications as soon as they appear	Between Groups	2.909	1	2.909	1.504	.222
	Within Groups	334.519	173	1.934		
	Total	337.429	174			
I use social media in bed before going to sleep	Between Groups	4.365	1	4.365	1.745	.188
	Within Groups	432.812	173	2.502		
	Total	437.177	174			

The ANOVA results show that there is no significant gender difference in habitual social media behaviours such as checking social media after waking up ($p = .574$), checking notifications immediately ($p = .222$), and using social media before sleep ($p = .188$). Since all p-values are greater than 0.05, the differences between groups are statistically insignificant. This indicates that these routine social media habits are similar across both gender groups.

Results/Discussion:

- Platform Usage: YouTube and WhatsApp are the most widely used platforms, Snapchat has moderate usage, and X (Twitter), Threads, ShareChat, and Moj show very low usage.
- Primary Platform Preference: WhatsApp and Instagram are the main go-to platforms, especially among the 18–19 age group.
- Screen Time: Most students spend 1–2 hours daily on social media, with the 18–19 age group showing the highest engagement.
- Usage Frequency: The majority use social media a few times a day, though many check it every 15–20 minutes.
- Engagement Behaviour: Students mostly engage in passive scrolling, rarely share or repost content, and use direct messaging more frequently than posting.
- Psychological Impact: All psychological variables are statistically significant ($p = .000$), indicating anxiety, mood decline, stress, and loneliness linked to social media use.
- Gender Differences: No significant gender differences were found in habitual behaviours such as checking social media after waking up or before sleep ($p > 0.05$).
- Social media usage is widespread among college students, especially in the 18–19 age group.
- Students engage more in passive consumption rather than active content creation.
- Psychological distress indicators show significant association with social media usage.
- Habitual checking behaviour appears similar across genders.
- Overall, while usage patterns are common and moderate, psychological effects are statistically significant and noteworthy.

Conclusion:

The study concludes that social media usage is highly prevalent among college students, particularly in the 18–19 age group. Platforms such as YouTube, WhatsApp, and Instagram dominate usage patterns, with most students spending 1–2 hours daily and engaging primarily in passive scrolling rather than active posting. The findings reveal that social media usage has a statistically significant impact on students' psychological well-being, contributing to feelings of anxiety, mood decline, stress, and loneliness. However, no significant gender differences were observed in habitual usage behaviours. Overall, while social media serves as an important communication and entertainment tool, its measurable psychological effects highlight the need for balanced and mindful usage among students.

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