

The Impact of Social Networking Sites on College Students: A Survey Study in West Bengal

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Abstract

With technological progress in the past few decades, the digital era of blended technologies of communication has made efficacious improvement across the globe. Social networking sites or SNSs have had a major influence in this respect. The paper tried to analyze empirically the overriding immense impact of SNSs on the student community which has transformed their ways of learning and interacting and has bestowed a collective benefit on them. The paper delved deep into which aspects of scholastic performance of college students did the SNSs academically, socially, and behaviourally effect. Primary data were used in the study and a descriptive research design was carried out with a formalized questionnaire. A structured questionnaire with 25 items was designed to determine the factors of social networking sites that had an impact on the college students. On the basis of systematic random sampling technique, a sample of 200 students as respondents was selected from different colleges of West Bengal. Statistical analysis was executed with exploratory factor analysis and confirmatory factor analysis. Structural equation modeling was performed through AMOS-20 on the proposed conceptual model. The prime findings of the study showed that most of the factors identified brought positive development among the students. Behavioural aspects of students, as discussed in the study, did not have any impact on the comprehensive performance of the students. The study is of prominent importance as the managements of colleges can help students to augment their academic activities by providing a platform for SNSs which would also help them to socialize, associate, cooperate, and mix with the student fraternity as well as with the bigger world, thereby solidifying their overall accomplishments.

Keywords : social networking sites ; college students ; academic, social, and behavioural aspects

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Marshall McLuhan, a philosopher of communication theory said that the new electronic independence recreates the world in the image of a global village. This electronic independence to a greater extent depends upon the Internet. It has emblazoned the lives of people across the world by staying connected, disseminating cognizance, and escalating skills, thus making people global citizens. If we look at the student community today, we shall find that recent technological advances have touched their ways of life in a varied manner - the way they think, communicate, behave, and collaborate. Students are now viewed as digital natives. They prefer digital discussions, instant messaging, shared resources, professional learning networks, blogs, and a lot more. In such a situation, social networking sites or SNSs offer them a platform for expression, learning, connecting, and building academic competence. A survey conducted by Pew Research Centre stated that 78% of

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the college students spent time on Facebook, Twitter, and Instagram (Pew Research Internet Project, 2013). The world of SNSs has grown in such a way that the changes undergone have shown an interesting pattern. As per Chandel, Sethi, and Mishra (2017), population of Internet users in India would reach a huge number of over 500 million by 2018 as the second largest population of global Internet users. In the present scenario, social networking sites have appeared as an interactive communication tool which helps to link friends and a large audience (Yadav, 2017). Social networking sites help to create a social image through impression management and quick electronic word-of-mouth interaction (Shimpi, 2018). Students have been much more conscious about their career and further studies. Apart from books and materials, students rely on participative style of learning. Thus, SNSs have endorsed both active and collaborative learning. Sharing seems to be an essential criterion in studies. Hence, the role of SNSs has been elevated. However, SNSs have probable negative effects too. Too much banking on these sites provides an easy access to different kinds of materials, thus reducing their learning and research capabilities. The considerable amount of time which is invested by students on the sites causes a decrease in academic performance and concentration upon studies. Students are now on the verge of replacing human interactions, thus decreasing human development.

Literature Review

Social media today has acquired wider acceptance among students and is seen as an effective communication tool for learning and conducting interactive sessions simultaneously. Studies revealed that the impact of social media in enhancing education has been highly significant. Studies and opinions have brought forward four major advantages which social media has upon higher education. These include enhanced relationships, improved learning motivation, ability to get personalized course material, and developed collaborative abilities. Usman (2015), in his study, statistically revealed that students were eager to use social networking sites or SNS as a tool to support their educational activities. The study showed that SNSs had a positive impact on sharing knowledge among students through audio conferencing and web conferencing. Even some instructional games had an impact on sharing knowledge among them. His study showed that students were fervent at sharing their ideas and views through online group discussions, instant messaging, and group chats. The findings of the study conducted by Timm and Perez (2010) showed that students relied on SNSs to a great extent for communicating and sharing information with online friends.

Social networking has actually brought a sense of collaboration and sharing among students to upraise and upgrade their educational quality. Social media has a profound impact on students of higher education. It has been widely used by the higher education institutes as it significantly contributes to their academic development through collaborative work, knowledge sharing, effective discussions, and explored professional connections that enable them to seek job opportunities (Boateng & Amankwaa, 2016). Academic practitioners and managements of various colleges have pushed education beyond the border. They have focused on the benefits of social media that helps students to emerge with new ideas, skills, and notions. Social networking sites provide a platform where students come up with their opinions and verdicts. It enriches their educational efforts and results in higher level of engagement in learning (Srivastava, 2012). SNSs are an efficacious tool in reinforcing the education system among the students. They play an active role in socializing and networking along with providing a unique learning experience. They have also proven to be a time-saving method to interact and participate with others. SNSs have been utilized by the students to form groups without any obstacle of time and space and help them to connect with each other, clear their doubts, think together on research activities, and become more integrated (Mhunpiew & Purayidathil, 2015). Social media has helped the students in knowledge creation (Dabbagh & Kitsantas, 2011).

Research done by Goel and Singh (2016) showed that graduates were willing to use social networking sites that provided supplementary information for their curriculum and was of great utility. The research also highlighted that students had a positive approach towards social networking sites in improving academic performance.

Morollo (2014) showed that students admitted that SNSs had adequately helped them in their studies, but there were other factors too on which their academic performance depended. A study conducted by Junco, Heiberger, and Loken (2011) revealed a surprising conclusion that students of Twitter group secured greater GPAs and higher scores than the other group who were non users. A research conducted on students and universities by Amin, Mansoor, Hussain, and Hashmat (2016) showed that they commonly used Facebook and Twitter to prepare their assignments, and it had become a routine work to access the sites which influenced their academic performance positively. Students reached out to more respondents by emailing the questionnaire while coordinating a research activity ; communicated and shared information & materials on a daily basis and augmented their learning skills. Moreover, communication pertaining to those of changing class schedule, academic events, and notifications kept the students updated and connected. On the same line, the study found that social networking sites acted as a medium for networking among classmates, teachers, mentors, and colleagues.

Online recruitment has emerged as a unique way for attracting potential candidates. SNSs provide a great opportunity for companies to get in touch with potential talents. SNSs act as an effective and time saving tool to approach employers. A survey showed that 94% of recruiters were currently using LinkedIn to find suitable candidates for their companies. Organizations progressively use YouTube for the purpose of sharing information about themselves, and mostly they upload videos showing off the personality of their workplaces. Users are a lot more prone to share a video than to share text. If companies persuade the sharing of their videos, they will reach even more potential hires (Hada & Gairola, 2015).

A significant change has been noted in teaching and learning activities in the modern era of strategic learning and practices. SNSs have become a prevalent medium for collaboration between a student and a teacher not only within a defined time, but also beyond that defined time. Facebook and other SNSs are ubiquitous in everyday life, seeping into educational environments, and leaving educators little choice but to explore how it is best to incorporate SNS tools into teaching and learning (Madge, Meek, Wellens, & Hooley, 2009). Sometimes, it was seen that teachers themselves participated in SNSs and groups to be a part of the learning culture and nourished and built the student group. The studies of researchers revealed that a sense of community in online learning environment contributed to student motivation and increased learning (Rovai, 2002). A sense of community is also closely associated with interactions. Researchers have also shown that a sense of community helps to reduce feelings of isolation and facilitates learning by making more resources available in the form of other learners from whom learners can seek help. Although the social networking sites act as a means for collaboration, alliance, and participation, they also restrict interactions. People having smart phones often prefer to interact with people online than to take a call or talk personally. The process seems to be easy, simple, and effective and people also prefer it. As the amount of time users spend on social networking sites continues to grow, their interactions with other offline content tends to decrease, which means that most of their socializing and socialization occurs within the glow of a computer or phone screen (Pew Research Internet Project, 2013). Chandra Johnson related it to the act of children exploring the world within their own eyes, compared to looking at the same things in a picture. The two can never be equaled. Since there is no face to face interaction, the real expression cannot be noted, and hence, after a time, expressions deaden. People start losing friends and families in due course of time. The growth of SNSs has showed significant changes in the personal lives of the users. SNSs have led to people expressing their emotions and verdicts through technological communication rather than expressing it in person (Wang, Chen, & Liang, 2011).

SNSs offer public sharing of thoughts and personal stuff, which may create some grave issues. A research study conducted by Gross and Acquisti in 2005 on 4000 Facebook profiles of Carnegie Mellon University students found threats arising from the personal information which they shared on the sites. This information could be used to estimate a person's social security number and finding sensitive information. With SNSs, it has become easy to target one another. Cyber bullying is one of such forms, and SNSs have made it worse for the victims. Such open access to private life has opened up risks of being attacked. The victims are vulnerable online, and the insults made towards them are deadlier because of the computer masked faces and the majority of the insults, tweets, and taunts

go on without repercussions. With the emergence of social networks, there is now a specific focus on social aspects of trust. Social networks have fostered individual connectivity and have helped people to personalize their own communities (Sherchan, Nepal, & Paris, 2013). Studies have revealed that people have developed substantial trust on SNSs. Trust is more likely to emerge among strong ties, presumably due to greater emotional bonds, better knowledge and understanding, and the development of common ways of thinking and communication (Levin & Cross, 2004). Students in these cases have now become a cause of concern. SNSs provide young people with a space to work out identity and status, make sense of cultural cues, and negotiate public life. Free from adult regulation, young people's articulation and expression of various parts of their identity to their friends and others support critical peer based sociality (Boyd, 2007). Such processes of socialization are essential for psycho social development at a time when many young people are consolidating their identities, pulling up roots from their family, striving for independence, and are developing new types of relationships (Cobb, 1995). Livingstone (2008) in her study observed that the youth centered social networks that consist of self constructed pages are one of the important segments of managing their own identity, lifestyle, and social relationships. She also stated that such SNSs have helped in gaining confidence in an ego identity that is autonomous and socially valued (Livingstone, 2008). Studies have shown that people who are active online are likely to be active in group activities. The Pew Research Center found that 80% of Internet users participated in groups, and students made an effective use of it. In crisis situations like the Haiti earthquake or Mumbai attacks, there were more broadcast based information sharing activities, where the users pushed information out to many users which was not directed towards one specific user (Hughes & Palen, 2009). Revere and Kovach (2011) reflected in their study that social online networking sites provided a 'continuous stream of information' to the students. Social media helps out students to follow professional societies and organizations. These also facilitate students in contributing their opinions and verdicts on different issues of discussions and questions across a network. All of these activities enrich their learning experience and enable individual knowledge management.

Some studies have highlighted the disadvantages of SNSs. Kuppuswamy and Narayan (2010) stated that SNSs grabbed total attention and concentration of students and diverted their time towards non educational and inappropriate actions and time killing by random searching. Olowu and Seri (2012), in a study conducted on students of different universities, found that students' use of SNS even pointed towards obsession. They ranked this as their 'top priority' and connected to it more in order to feel satisfied. A study conducted by Dau (2015) showed that students of tertiary institutions in Nigeria spent excessive time on SNSs, which affected their productivity. He concluded that the danger posed by exposing too much information online cannot also be overemphasized and that students should be careful. Gok (2016) conducted a survey which highlighted that SNSs degraded socialization and habits of the students which diminished their personal productivity.

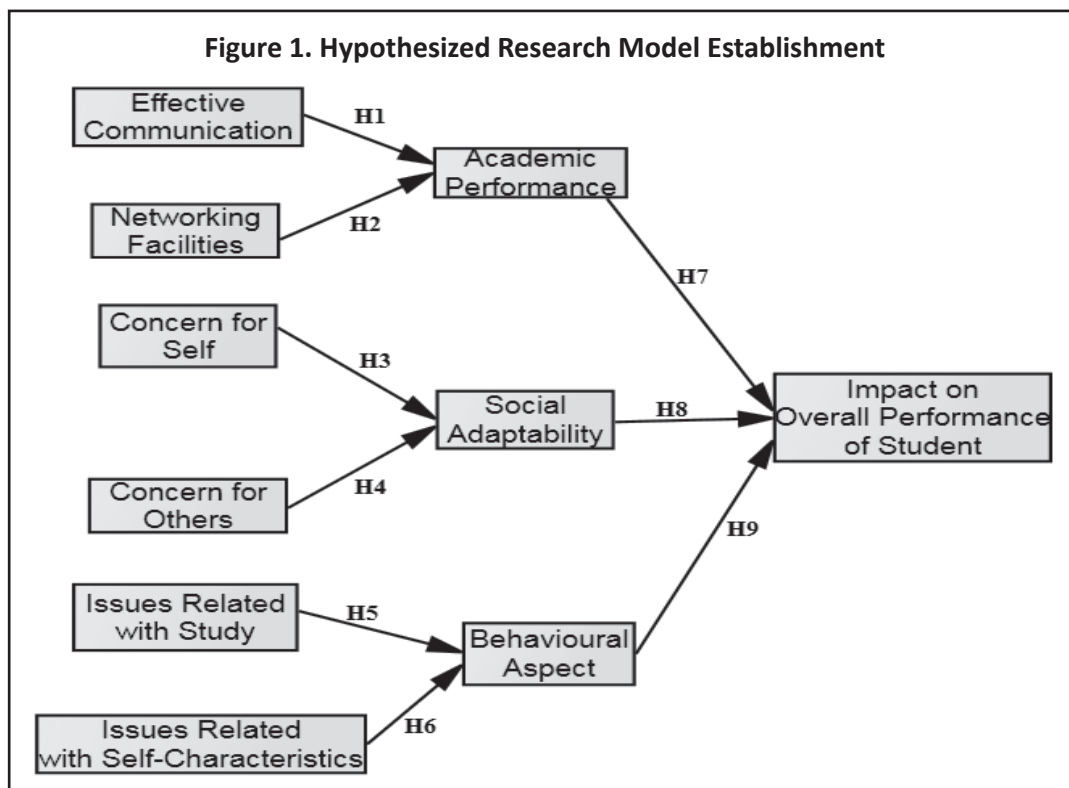
Research Gap

It is clear from the literature review that there have been inadequate studies conducted in India as well as West Bengal relating to the impact determination of social networking sites on college students through empirical analysis. Most of the studies have mainly emphasized the influences of social networking sites on demographic profile. Previous studies were also executed theoretically with graphical representations and the results were not proved empirically through statistical tools. Previous studies conducted by researchers emphasized several dimensions in different contexts, but all important factors related to the study were not highlighted in any of the studies.

Hypotheses Development

☞ **H1:** Effective communication through social networking sites positively influences academic performance of the students.

- ✎ **H2** : Networking facilities through social networking sites positively influence academic performance of the students.
- ✎ **H3** : Self concern in the usage of social networking sites positively influences social adaptability of the students.
- ✎ **H4** : Concern for others in the usage of social networking sites positively influences social adaptability of the students.
- ✎ **H5** : Issues related with studies with respect to social networking sites do not influence behavioural aspects of the students.
- ✎ **H6** : Issues related with self-characteristics with respect to social networking sites negatively influence behavioural aspects of the students.
- ✎ **H7** : Academic performance affected by social networking sites positively influences overall performance of the students.
- ✎ **H8** : Social adaptability through social networking sites positively influences overall performance of the students.
- ✎ **H9** : Behavioural aspects get changed due to social networking sites, which negatively influence the overall performance of the students.



Research Methodology

Both primary and secondary data were used for establishing our model. The hypothesized research model (Figure 1) has been theoretically described by literature review. For survey, a questionnaire was formed with

related items. Some constructs and items were taken directly from previous studies, and few probable items were added in this study. A 5 - point Likert scale was used for measuring the responses of the students. The respondents were from randomly selected different colleges in West Bengal. First of all, simple random sampling was used for selecting the colleges and then systematic random sampling technique was taken for selecting the sample elements from each college ; 200 responses were collected for this study. The survey period was from September 15, 2017 to February 15, 2018.

Analysis and Results

Structural equation modeling (SEM) by AMOS 20.0 has been used for this research in terms of developing the model and establishing the hypotheses. Through measurement and structural model, validity and model fitness have been judged here. Exploratory factor analysis with the help of SPSS 21 explains the questionnaire validation through data reduction.

Here, KMO and Bartlett's Test (Table 1) shows the appropriateness of exploratory factor analysis. The overall

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.795
Bartlett's Test of Sphericity	Approx. Chi-Square	5794.380
	Df	528
	Sig.	< 0.001

Table 2. Overall Reliability Statistics

Cronbach's Alpha	N of Items
0.723	25

Table 3. Results of Factor Analysis - Rotated Component Matrix^a

	Rotated Component Matrix ^a									
	Component									
	SOCIAL_ ADAPT	BEH_ ASPECT	EFF_ COMM	ISSUES_ STUDY	ISSUES_ CHAR	CONCERN_ OTHER	NET WORKING	ACA_ PER	CONCERN_ SELF	OVER_ PER
q6	.890	-.010	-.028	.125	-.021	.001	.214	-.089	-.043	-.006
q4	.863	-.051	-.010	.140	.006	.031	.309	-.105	-.065	.004
q7	.840	.032	-.065	.092	.083	-.067	.025	-.267	-.044	-.042
q5	.793	-.116	-.046	.202	.085	-.034	.154	-.327	-.070	.040
q19	-.081	.888	.061	-.044	.117	.079	.010	.080	.110	.132
q17	-.030	.863	-.058	-.135	.079	.094	-.032	.024	.028	.090
q20	.018	.859	-.027	-.125	.013	.175	-.051	.089	-.010	.156
q18	-.022	.846	-.003	-.039	.163	.101	-.009	.091	-.021	.177
q27	-.034	-.026	.913	.008	.059	-.035	-.031	.016	.123	.068
q24	.038	.032	.900	.024	.086	-.043	.042	-.027	.156	.073
q25	.019	-.063	.837	-.020	-.094	.131	-.051	-.027	.125	.019
q26	-.181	.035	.803	.072	.179	-.110	.009	.103	.189	.000
q9	.112	-.093	.031	.949	-.019	.012	.038	-.105	.026	.026

q10	.172	-.115	.003	.901	-.038	.017	.063	-.066	-.006	.072
q8	.176	-.113	.044	.865	-.011	-.039	.101	-.180	-.031	.007
q29	.044	.110	.096	-.067	.901	.224	-.017	.007	.092	.060
q30	.075	.124	.054	-.086	.877	.284	.022	.007	.044	.070
q28	.019	.123	.060	.067	.854	.188	.010	.003	.044	.097
q15	-.035	.159	.005	-.025	.204	.904	.040	.017	.108	.020
q14	.015	.156	-.004	-.004	.200	.901	.039	.062	.042	.060
q16	-.056	.130	-.053	.028	.350	.779	.059	.035	-.070	.071
q12	.173	-.007	-.011	-.048	.024	.020	.918	-.184	.043	-.015
q11	.256	-.078	.035	.097	.010	-.026	.844	-.075	-.089	-.111
q13	.164	.011	-.057	.162	-.015	.137	.793	-.158	.043	.084
q1	-.224	.057	-.013	-.075	-.012	.020	-.100	.909	.073	.024
q3	-.254	.080	.027	-.082	.007	.079	-.141	.801	.012	.033
q2	-.196	.167	.038	-.259	.042	.006	-.225	.771	.059	-.083
q33	.040	.076	.183	-.059	-.089	.148	.047	-.048	.845	-.052
q32	-.166	-.030	.193	.001	.162	-.079	-.038	.050	.839	.134
q31	-.080	.055	.239	.051	.119	.017	-.016	.150	.830	.144
q22	-.013	.152	.117	.015	.170	.034	-.019	.001	.053	.906
q21	-.049	.244	-.004	.099	.100	-.119	.030	.096	.135	.795
q23	.046	.154	.049	.003	-.035	.227	-.043	-.099	.021	.775
% of Variance Explained	10.045	10.044	9.620	8.302	8.244	7.944	7.479	7.446	6.962	6.824

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Table 4. Fit Indices of Confirmatory Factor Analysis for Structural Model

Fit Index	Acceptable Threshold Levels	Structural Model Values
χ^2/df (Chi-square / degree of freedom)	Values less than 3	1.189
RMSEA (Root mean-square error of approximation)	Values less than 0.06	0.031
GFI (Goodness of fit index)	Values greater than 0.90	0.980
AGFI (Adjusted goodness of fit index)	Values greater than 0.90	0.938
NFI (Normed fit index)	Values greater than 0.90	0.937
CFI (Comparative fit index)	Values greater than 0.90	0.988

Cronbach's alpha (Table 2), which is greater than 0.70, indicates the acceptable range of reliability. The variables (factor loading of above 0.5) have created 10 different factors, which are revealed in the rotated component matrix. These extracted factors explain a total of 82.911 % of the variation (Table 3).

The fitness indices were judged and then the hypotheses were tested. Confirmatory factor analysis (CFA) was performed for determination of the impact of social networking sites on college students in West Bengal. Here, the fit indices (Table 4) of structural model (Figure 2) show the acceptable range and indicate a good model fit.

Higher standardized regression estimates (more than 0.7) indicate higher reliability of items. Construct reliabilities (CR) which are more than 0.7 also show the internal consistency among the items. In the perspective of the measurement model, the following conditions can prove the convergent and discriminant validity

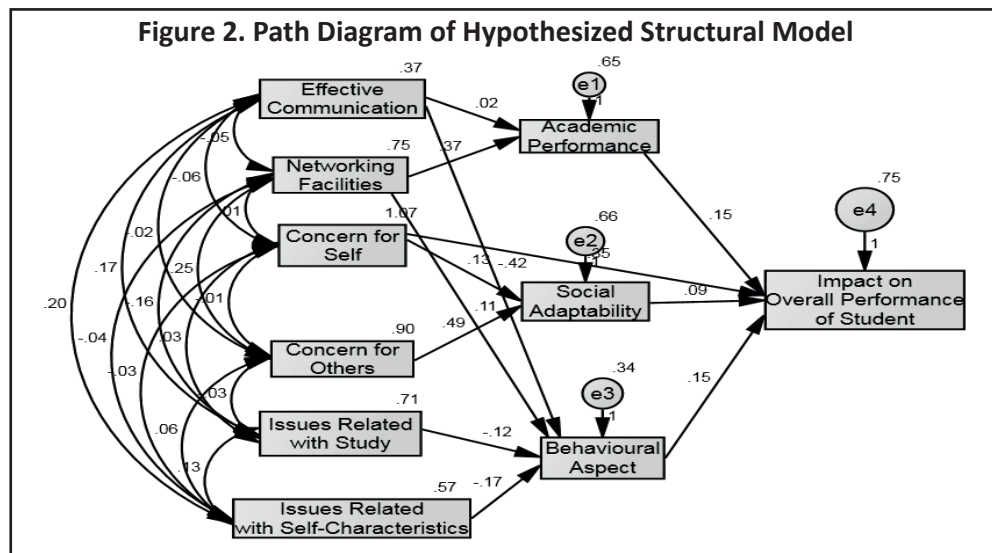


Table 5. Squared Correlations Between Factors in the Measurement Model

Factors	SOCIAL_ADAPT	BEH_ASPECT	EFF_COMM	ISSUES_STUDY	ISSUES_CHAR	CONCERN_OTHER	NET_WORKING	ACA_PER	CONCERN_SELF	OVER_PER
SOCIAL_ADAPT	0.873									
BEH_ASPECT	0.078	0.876								
EFF_COMM	-0.012	-0.432	0.845							
ISSUES_STUDY	-0.057	-0.363	0.296	0.915						
ISSUES_CHAR	0.046	-0.370	0.449	0.177	0.819					
CONCERN_OTHER	0.410	0.103	-0.064	-0.037	0.080	0.898				
NETWORKING	0.245	0.205	-0.127	-0.194	-0.117	0.264	0.849			
ACA_PER	0.117	-0.016	-0.022	0.063	-0.067	0.013	0.267	0.793		
CONCERN_SELF	0.076	0.037	-0.064	0.055	0.004	-0.034	0.024	0.088	0.839	
OVER_PER	0.151	0.192	-0.181	-0.011	-0.044	0.080	0.095	0.107	0.373	0.822

Note : *Diagonal elements are average variance extracted (AVE).

Table 6. Measurement Model Results

Constructs/ Factors	Variables	Standardized Regression Estimate	Construct Reliability (CR)	Average Variance Extracted (AVE)	Maximum Shared Variance (MSV)	Average Shared Variance (ASV)
Behavioral Aspect (BEH_ASPECT)	q3	0.846	0.908	0.768	0.187	0.061
	q2	0.86				
	q1	0.921				
Effective Communication (EFF_COMM)	q4	0.88	0.909	0.713	0.202	0.059
	q7	0.801				
	q5	0.832				
	q6	0.863				
Issues Related with Study (ISSUES_STUDY)	q8	0.892	0.939	0.838	0.132	0.033

	q9	0.947				
	q10	0.906				
Issues Related with Self-Characteristics (ISSUES_CHAR)	q11	0.795	0.860	0.671	0.202	0.044
	q12	0.867				
	q13	0.794				
Concern for Others (CONCERN_OTHER)	q14	0.909	0.926	0.807	0.168	0.030
	q15	0.916				
	q16	0.869				
Networking Facilities (NETWORKING)	q17	0.834	0.911	0.720	0.071	0.036
	q18	0.845				
	q19	0.868				
	q20	0.847				
Academic Performance (ACA_PER)	q21	0.798	0.835	0.629	0.071	0.013
	q22	0.851				
	q23	0.725				
Concern for Self (CONCERN_SELF)	q24	0.871	0.905	0.705	0.139	0.018
	q27	0.878				
	q25	0.786				
	q26	0.819				
Social Adaptability (SOCIAL_ADAPT)	q28	0.839	0.905	0.762	0.168	0.031
	q29	0.889				
	q30	0.889				
Impact on Overall Performance of Students (OVER_PER)	q31	0.876	0.861	0.675	0.139	0.029
	q32	0.827				
	q33	0.758				

(Field, 2009 ; Hair, Black, Babin, & Anderson, 2010).

- (i) AVE > 0.5,
- (ii) CR > AVE,
- (iii) MSV < AVE,
- (iv) ASV < AVE.

On the other hand, if AVE values are greater than the corresponding squared inter-construct correlation (SIC), it proves the discriminant validity. Here, this threshold condition has been achieved (Table 5 & Table 6).

🔗 Path Analysis for Hypotheses Testing and Research Findings (refer to Table 7):

(1) H1 - Effective communication through social networking sites positively influences academic performance of the students : The structural model supports this hypothesis. The path coefficient is significant ($p < 0.05$) statistically and it has the expected positive sign (+ 0.023), which means that the hypothesis H1 is accepted. In this era where people are termed as global citizens, students' education is no more restricted to books. SNSs provide an ample scope for students to rely on shared educational resources and professional guidance with just one click.

Table 7. Path Analysis of Structural Model

Measurement Path			Hypothesis	Estimate	S.E.	C.R.	P	Assessment
ACA_PER	←	NETWORKING	H2	.374	.066	5.639	***	Supported
BEH_ASPECT	←	ISSUES_STUDY	H5	-.118	.054	-2.199	.028	Supported
BEH_ASPECT	←-	ISSUES_CHAR	H6	-.170	.061	-2.770	.006	Supported
BEH_ASPECT	←	NETWORKING	New	.114	.049	2.318	.020	Supported
ACA_PER	←	EFFEC_COMM	H1	.023	.094	.239	.011	Supported
SOCAL_ADAPT	←	CONCERN_SELF	H3	.131	.056	2.349	.019	Supported
SOCAL_ADAPT	←-	CONCERN_OTHER	H4	.493	.061	8.129	***	Supported
BEH_ASPECT	←	EFFEC_COMM	New	-.421	.079	-5.309	***	Supported
OVER_PER	←	ACA_PER	H7	.152	.071	2.141	.032	Supported
OVER_PER	←	SOCAL_ADAPT	H8	.087	.066	1.315	.049	Supported
OVER_PER	←-	BEH_ASPECT	H9	-.154	.087	1.781	.075	Not Supported
OVER_PER	←	CONCERN_SELF	New	.351	.060	5.829	***	Supported

They come to know the facts and figures from a couple of reliable sources, and information to them becomes prominent and enriched, which in turn becomes a prerogative for the student class in augmenting academic performance.

(2) H2 - Networking facilities through social networking sites positively influence academic performance of the students : The p - value for the path coefficient from networking facilities to academic performance of the students is positive (+ 0.374) and significant ($p < 0.001$), indicating that the hypothesis H2 is accepted. More the students come in contact with peers and teachers beyond the defined college hours, more is the level of coordination and learning. SNSs provide a platform to remain connected to their mentors, teachers, and friends simultaneously, and this enhances a group study and discussion as well as gives them a podium for sharing ideas and clarifying doubts.

(3) H3 - Self concern in the usage of social networking sites positively influences social adaptability of the students : The structural model supports this hypothesis. The path coefficient is ($p < 0.05$) statistically significant, and it has the expected positive sign (+ 0.131), which means that the hypothesis H3 is accepted. Students using SNSs today are well aware of their values, thoughts, and ideas and know what they are expecting. They are concerned about the way they make friends and share their personal achievements and attainments through these sites. In dealing with these sites, on the one hand they become socialized and on the other hand, they become more alert regarding their own social image. While interacting with so many people, they become more sentient and try only to make the connections purposive, thus becoming compos mentis.

(4) H4 - Concern for others in the usage of social networking sites positively influences social adaptability of the students : The p - value for the path coefficients from concern for others to social adaptability of the students is positive (+0.493) and significant ($p < 0.001$), indicating that the hypothesis H4 is accepted. Students are not only aware of their selves, but are also equally concerned about others. SNSs are used by students as an instrument to put forward their statements regarding alarming issues to make people aware. They also use these as a medium to express their concern for families and friends. Moreover, instances of appreciation as well as somber facts are also highlighted to raise the awareness of people.

(5) H5 - Issues related with studies with respect to social networking sites do not influence behavioural aspects of the students : The structural model supports this hypothesis. The path coefficient is significant ($p < 0.05$) statistically, and it has the expected negative sign (-0.118), which means that the hypothesis H5 is accepted. Students accessing SNSs often find themselves engrossed in it, thus giving up adequate time for studying. They do interact with peers, but things related to studies quite often do not get significance in their online discussions. However, that does not affect their behavioral aspects. Students, as seen, are often behaviorally decent, genteel, and modest, even if they are not fruitful at all with study-related matters that are affected by SNSs issues. Behavioural aspect is seen as a different aspect for the students and the views, expressions, and opinions that they exhibit through SNSs have no significant relation with a change in behavior.

(6) H6 - Issues related with self-characteristics with respect to social networking sites negatively influence behavioural aspects of the students : The structural model supports this hypothesis. The path coefficient is significant ($p < 0.01$) statistically and it has the expected negative sign (- 0.170), which means that the hypothesis H6 is accepted. SNSs have their own effects on the students which may cause students to become introvert and reluctant in nature.

(7) H7 - Academic performance affected by social networking sites positively influences overall performance of the students : The p - value for the path coefficient from academic performance to overall performance of the students is positive (+ 0.152) and significant ($p < 0.05$), indicating that the hypothesis H7 is accepted. SNSs provide immense guidance, direction, knowledge, and information to students to study well. The sharing of knowledge, great extent of communication, and uninterrupted platform for exploring new ideas and facts makes an overall academic performance improvement among the students.

(8) H8 - Social adaptability through social networking sites positively influences overall performance of the students : The structural model supports this hypothesis. The path coefficient is significant ($p < 0.05$) statistically and it has the expected positive sign (+ 0.087), which means that the hypothesis H8 is accepted. Students, while accessing SNSs, become more concerned about themselves and their thoughts and expressions. Students come to know a lot about individual feelings, group mentalities, and social aspects that help them in improvement of their own selves from every sphere. Moreover, socializing through these sites shows them exactly how they are expected to be as a human being and as a person as a whole.

(9) H9 - Behavioural aspects get changed due to social networking sites, which negatively influence the overall performance of the students : The p - value for the path coefficient from behavioural aspects get changed due to social networking sites to overall performance of the students is negative (-0.154) but non-significant ($p > 0.05$), indicating that the hypothesis H9 is not supported. Students may think that usage of social networking sites by them is not beyond the extensive level in West Bengal. Since respondents were students, they did not feel that behavioral aspects get changed due to social networking sites, which had an impact on their overall performance as students.

In this study, we have tried to create a unique model to fulfill our objectives. So, it is evident that similar types of studies were not found from the previous literature, but different parts of the research model were collected from the previous studies, which have been discussed properly in the literature review segment. These parts of the research model have been stated clearly through the hypothesis statements. After that, we used statistical analysis to prove these hypotheses. From the Table 7, we can easily understand that all hypotheses except H9 are supported by the empirical analysis.

Discussion and Conclusion

The findings of this study reveal that social networking sites have a significant and positive relationship with students' academic performance and social adaptability, but have a negative relationship with behavioural aspects. The basic aim behind conducting this study was to check the effect of social networking sites on overall performance of the students. The results of this study support most of the previous findings except the relationship between behavioural aspects and overall performance of the students. In a few cases, the routine habits of students due to excessive use of social networking sites can create some issues related with studies (academic performance) and self-characteristics, which negatively impact the behavioural aspects of students. This survey research also reveals that the students were inclined towards a collaborative learning process through the group pages and preferred to use social networking sites for educational attainment and social adaptation. Effective positive influences of social networking sites on college students as per our study should be realized by the administration of the colleges and they should allow the access to social networking sites as per their discretion only for the purpose of learning activities and socialization among students.

Managerial Implications

The findings and results of the study have several implications for higher educational institutions relating to the development of new strategies to increase the overall performance of the college students through social networking sites. Higher educational institutions should focus on the viral usage of social networking sites by students which can affect the students' overall performance as well as the future and reputation of the institutions. In this regard, the college administrations can play a role in promoting effective educational networking among the students through SNSs.

Colleges can work in collaboration with different multiple international agencies to launch educational social networks where learning would become interesting by creating an engaging environment of learning. Colleges can utilize the SNSs as a learning management system that would not only involve online learning, but would enhance the learning process along with technological progress within classrooms, bringing new trends and better standards. Educational social networking sites can be launched so that the students can get access to up to date information that can be channeled towards the academic performance of the students. Social media can also become a quick channel of communication with their parents where online meetings can be held by the college authorities or mentors when required. Fund-raising activities can be initiated through social pages for seminars, conferences, and projects. When it comes to bagging a good project for the college, the students can use social media as a forum to get best information, extract data, and take advice from eminent researchers and experts in the related fields. It would help them to build a portfolio for their career and enrich their social credibility, thereby helping them to realize their full potential.

Though SNSs have gained popularity among the student community, students also become victims of the same. Excessive use of social media diverts their attention from their academic goals and diminishes their real human contact, making them introverts. Thus, college officials, teachers, mentors, and the overall management should promote the usage of SNSs in such a manner that can reshape the educational system where there can be exchange of ideas and collaborative interaction, which would bring out the creative qualities of the students. The institutional policies, environment, classes, faculties, and the administration can together bring a qualitative approach in usage of SNSs among the students so that they can explore collaboratively and bring development to their academic and social lives. This study would be useful for the managements of higher educational institutions to implement strategies tactfully for enhancing students' performance. The findings of this study are of substantial importance for parents, teachers, academicians, and managements of the educational institutions who are directly or indirectly related with the student community.

Limitations of the Study and the Way Forward

The following limitations should be considered when inferring the findings of the research paper : Few research papers which were not empirically proved were used in this study. Furthermore, we may have missed some important papers conducted in this field. Respondents' bias and reluctant attitudes may have an impact on the research findings.

Several future research scopes can cover many unexplored segments, like :

- (i) Researchers can find some other influential factors with related variables after extensive literature review which may affect the research model obtained in our study.
- (ii) This survey research can be executed in some other geographic regions in India. Also, researchers can deduce a comparative model between two regions.
- (iii) Extended studies can focus on the model regarding the impact of social networking sites on students on a pan - India level. Research can be carried out on the school students as well.
- (iv) A separate model can be created by taking the viewpoints of the parents and teachers as the respondents.
- (v) Research can also explore the research model by considering the influences of social networking sites on other demographic segments like house-wives, service-personal, self-employed, etc.

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Appendix

Constructs	Questions on Different Items
Behavioral Aspect (BEH_ ASPECT)	(q1): Students become more reluctant in nature. (q2): It affects the involvement of students in studies. (q3): Students do not become introvert.
Effective Communication (EFF_COMM)	(q4): It helps to share study materials. (q5): It helps to share ideas and knowledge oriented facts. (q6): It helps in discussion of assignments and projects. (q7): It helps to share announcements and notifications.
Issues Related with Studies (ISSUES_STUDY)	(q8): Adequate amount of time is given to studies. (q9): Students do not lose concentration in studies. (q10): It does not hamper maintaining class schedules.
Issues Related with Self-Characteristics (ISSUES_CHAR)	(q11): It does not limit face to face interaction. (q12): It gives open access to private lives. (q13): Trustworthiness begets blunders through SNSs.
Concern for Others (CONCERN_OTHER)	(q14): It helps to stay connected with family. (q15): It helps in sharing feelings and ideas for grave or admiring situations across the globe. (q16): It helps in posting of some acute social problems to alarm public or generate consciousness.
Networking Facilities (NETWORKING)	(q17): It helps to coordinate with classmates. (q18): It helps to coordinate with teachers. (q19): It helps to seek employment. (q20): It helps to synchronize with peers simultaneously.
Academic Performance (ACA_PER)	(q21): It helps to enrich performance in studies. (q22): It facilitates survey and research work. (q23): It helps to collaborate with peers and mentors.
Concern for Self (CONCERN_SELF)	(q24): It helps to make good friends having similar restored values. (q25): It helps in quick sharing of updated profile. (q26): It helps in sharing of one's own achievements and attainments. (q27): It helps to make oneself guarded up to a certain extent.
Social Adaptability (SOCIAL_ADAPT)	(q28): It helps to bring forth a strong connection with friends and families. (q29): It helps to project oneself in a protected manner socially. (q30): It helps to arouse consciousness among the public.
Impact on Overall Performance of Students (OVER_PER)	(q31): It renders academic potential and capability in students. (q32): It helps to highlight and raise alarm about critical issues socially. (q33): It helps to convey and reveal students' creative thoughts, opinions, and ideas.

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