



RESEARCH ARTICLE

ANALYSIS OF TIME UTILIZATION PATTERN AND EFFECT OF INTERNET USAGE BY AGRICULTURAL GRADUANDS

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ABSTRACT

The social media promotions over time have created an effect in the learning behaviour of students. Therefore, an attempt has been made to find out the usage of social media and how it affects the learning behaviour of the students undergoing under-graduation in agriculture with the objectives of finding the extent of usage of social networking sites by the undergraduate students and the effect of internet usage on students learning pattern. The study was conducted at Agricultural college and Research Institute, Killikulam. The final year and third year B.Sc (Agri) students are the respondents for the study. A total of 187 students were contacted for the study. The study revealed that the variables, accessibility to internet, and internet usage exhibited a positive and significant relationship with the effect of internet usage at five percent and ten percent level of probability respectively.

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INTRODUCTION

Information and communications technology (ICT) has created a shift in the learning behaviour of students. It has developed a space its users for seamless access to information. Social networking media is a media that is widely used to access the information on various aspects. Scholars in many fields have begun to investigate the various angles of Social Networking Sites. Many studies have been conducted around the world to investigate how these sites may influence issues of identity, privacy, social capital, youth culture, education and interpersonal relationships. Ezeah *et al.* (2013) in their study found out that students use social media for purposes of getting entertainment, education/information. Acheaw and Larson (2015) in a study revealed that majority of the respondents had mobile phones which also had Internet facility on them and had knowledge of the existence of many media sites. The social media promotions over time have created an effect in the learning behaviour of students. Therefore, an attempt has been made to find out the usage of social media and how it affects the learning behaviour of the students undergoing under-graduation in agriculture with the following objectives:

- i) To find out the extent of usage of internet by the undergraduate students.

- ii) To find out the aspirations of the students for their future career
- iii) To study the effect of internet usage on students learning pattern.

MATERIALS AND METHODS

The study was conducted at Agricultural college and Research Institute, Killikulam. The final year and third year B.Sc (Agri) students are the respondents for the study. A total of 187 students were contacted for the study. A structured questionnaire was used to collect data.

FINDINGS AND DISCUSSION

Based on the responses given by the third and final year students of the Agricultural College, data was compiled and analysed and the results are presented below.

Age of the respondents

The distribution of the respondents based on the age is as follows

It is seen from table 1 that most of the students fall under the age of 20 (39.04 percent) and the age of the students range from 17 to 23 years.

Table 1. Distribution of the students based on their age

Age of respondents	No	%
17	4	2.14
18	12	6.42
19	31	16.58
20	73	39.04
21	51	27.27
22	8	4.28
23	8	4.28
Grand Total	187	

The gender-wise distribution of the students is presented in Table 2.

Table 2. Distribution of the students based on gender

S. No	Gender	No	%
1	Female	102	54.55
2	Male	85	45.45

It is evident from the table that more than half of the students (54.55 percent) are female and 45.45 percent of the students are male. Hence it can be concluded that female students outnumbered the male students.

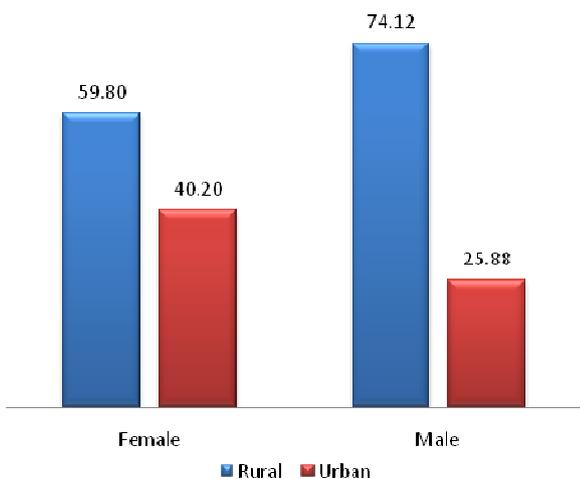
Rural/ Urban background

The genderwise distribution of the respondents based on their rural or urban background is presented in Table 3.

Table 3. Distribution of the students based on Rural/ Urban background

S. No	Female	% of total	Male	% of total	Total	%
Rural	61	32.62	63	33.69	124	66.31
Urban	41	21.93	22	11.76	63	33.69
Total	102		85		187	

Fig 1 Genderwise distribution of the respondents based on their rural urban and background



It can be inferred from the Table 3 that most of the students are from rural background (66.31 percent) out of which 32.62 percent are female and 33.69 percent male. Fig 1 shows the percentage of students from within the male group and female group who come from the rural and urban background separately. From the figure it could be concluded that from among the male students 74.12 percent have come from the

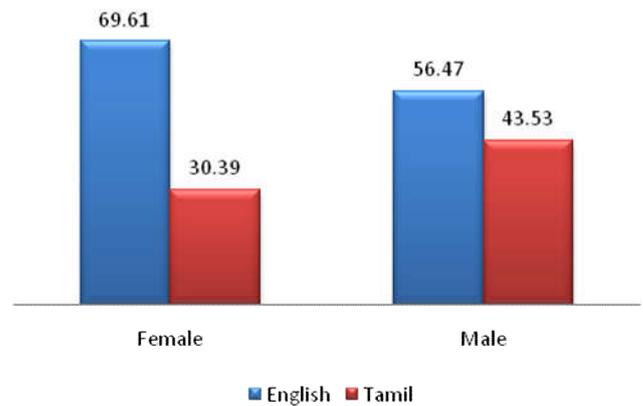
rural background and the percentage of female students from rural background is 59.80 percent. Hence the comparison within the groups have shown that a higher percentage of male as well as female students have come from the rural background and the percentage is found to be higher from among the male students separately.

Fig Distribution of the students based on medium of instruction:

S. No	Female	% of total	Male	% of total	Total	%
English	71	37.97	48	25.67	119	63.64
Tamil	31	16.58	37	19.79	68	36.36

It is evident from the table that most of the students had English as their medium of instruction during their plus two. A majority of female students (37.97 percents) had English as their medium of instruction. The rest of the students studied in Tamil medium.

Fig 2 Genderwise distribution of respondents based on the medium of instruction



It could be seen from the fig 2 that from among the female students 69.61 percent had their schooling from English medium and 30.39 percents only had the regional language Tamil as their medium of instruction. From within the male students also a majority of 56.47 percents had English as their medium of instruction during their schooling. The percentage share of male students coming from Tamil medium is 43.53 percent which was found to be higher when compare to the female students which is only 30.39percent.

Possession of communication gadget

Table 7. Distribution of students based on the possession of communication gadget

Gadgets	Female	%	Male	%	Total	%
Mobile	32	17.11	26	13.90	58	31.02
Android	50	26.74	41	21.93	91	48.66
Iphone	6	3.21	1	0.53	7	3.74
Ipad	1	0.53	0	0.00	1	0.53
BB/Smart	9	4.81	0	0.00	9	4.81
No gadgets	4	2.14	17	9.09	21	11.23

Majority of the students possess android phones (31.66) followed by simple mobile phones (31.02 percent). 11.23 percent of the students do not possess any gadget for communication. They make use of the college computer centres for accessing information.

Accessibility to Internet

Table 6. Accessibility to internet by the students

S. No	Female	%	Male	%	Total	%
Internet Access	91	48.66	62	33.16	153	81.82
Not access	11	5.88	23	12.30	34	18.18

The table shows that 81.82 percents of the students have access to internet and only 18.18 percent do not have accessibility to internet.

Personal accessibility to internet is an important factor responsible for using internet. From fig 3 the gender wise distribution of respondents having personal accessibility to internet either through mobile or network connections was found to be higher within the female students. It could be inferred that most of the students in the campus had personal accessibility to internet.

Fig 3 Genderwise distribution of respondents based on their accessibility to internet

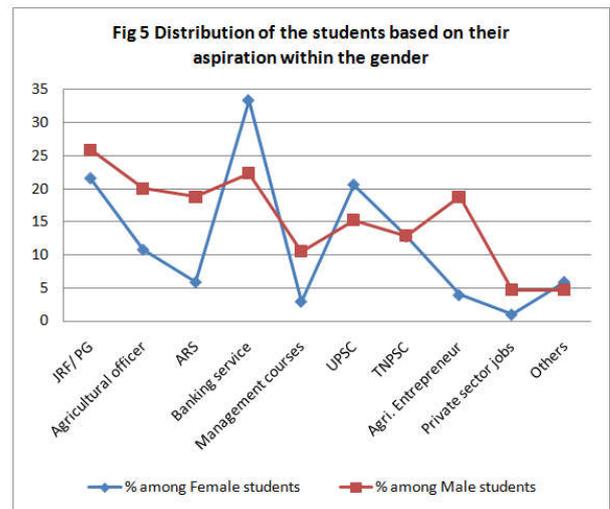
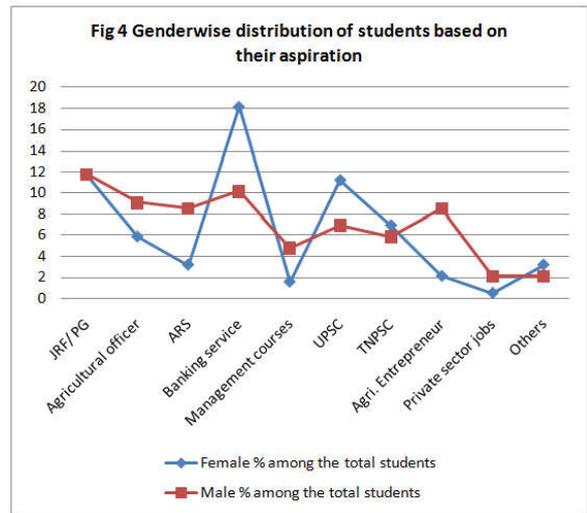
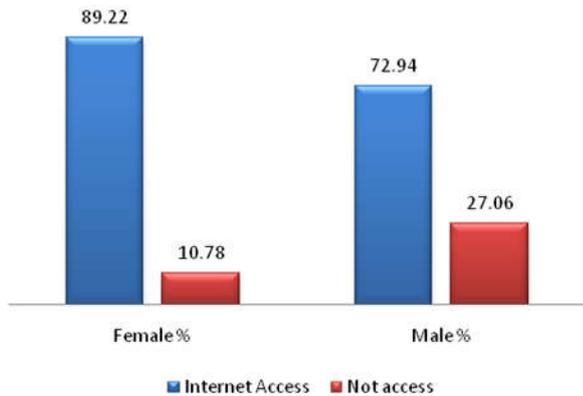


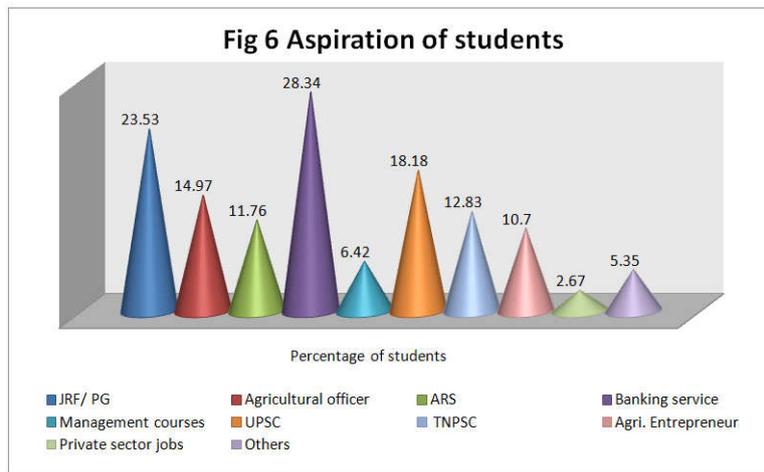
Table 8. Distribution of students based on their aspiration

Aspiration	Female	Female % among the total students	% among F	Male	Male % among the total students	% among male	Total	Total %
JRF/ PG	22	11.76	21.57	22	11.76	25.88	44	23.53
Agricultural officer	11	5.88	10.78	17	9.09	20.00	28	14.97
ARS	6	3.21	5.88	16	8.56	18.82	22	11.76
Banking service	34	18.18	33.33	19	10.16	22.35	53	28.34
Management courses	3	1.60	2.94	9	4.81	10.59	12	6.42
UPSC	21	11.23	20.59	13	6.95	15.29	34	18.18
TNPSC	13	6.95	12.75	11	5.88	12.94	24	12.83
Agri. Entrepreneur	4	2.14	3.92	16	8.56	18.82	20	10.70
Private sector jobs	1	0.53	0.98	4	2.14	4.71	5	2.67
Others	6	3.21	5.88	4	2.14	4.71	10	5.35

Aspiration of the students

This study investigated how the students perceive about their future careers. Variations existed between the careers options of students who aspired to jobs and expected to pursue higher education which is presented in the table. From among the female students it is evident from the table that most of the girl's students wanted to go for banking jobs followed by UPSC jobs. Most of the students wanted to pursue higher studies. A majority of 22.35 percent of the male students wanted to go for banking service while 33.33 percent of the female students wanted to go for banking service. Since there are a lot of opportunities in this sector and since the students want a job security they opt for this sector.

The Figure 4 and 5 represents the distribution of the students based upon their aspiration genderwise and within gender. It is seen from the figure that a similar pattern was observed genderwise and within gender. It is evident from the table 8 that a majority of the students aspired for banking service (28.34%) followed by perusing post-graduation or JRF (23.53%). 18.18 percent of the students aspire to pass through the UPSC exams and undertake the top administrative jobs. Very meagre percent of the students opted for private sector jobs. It is very interesting to find out that 10.70 percent of the students opt for Entrepreneurship in agri business. 11.76 percent of the students aspired to become Agricultural Research Scientists while 6.42 percent wanted to join management schools.

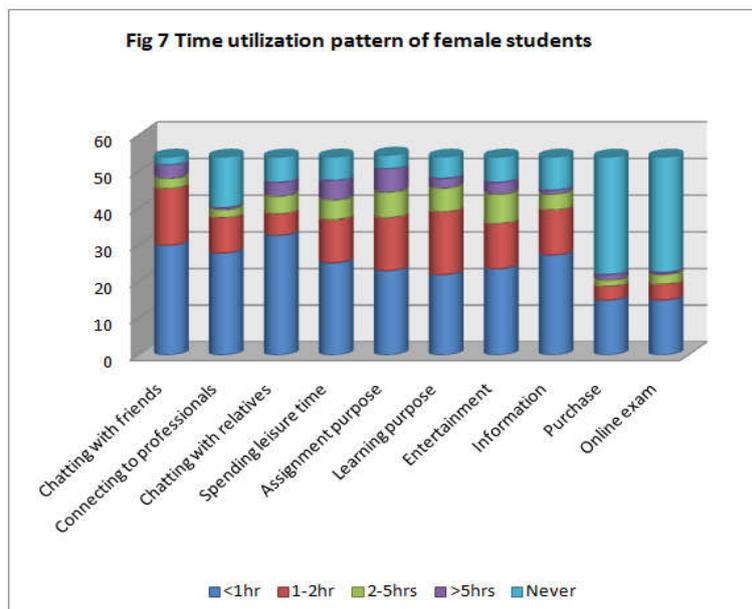


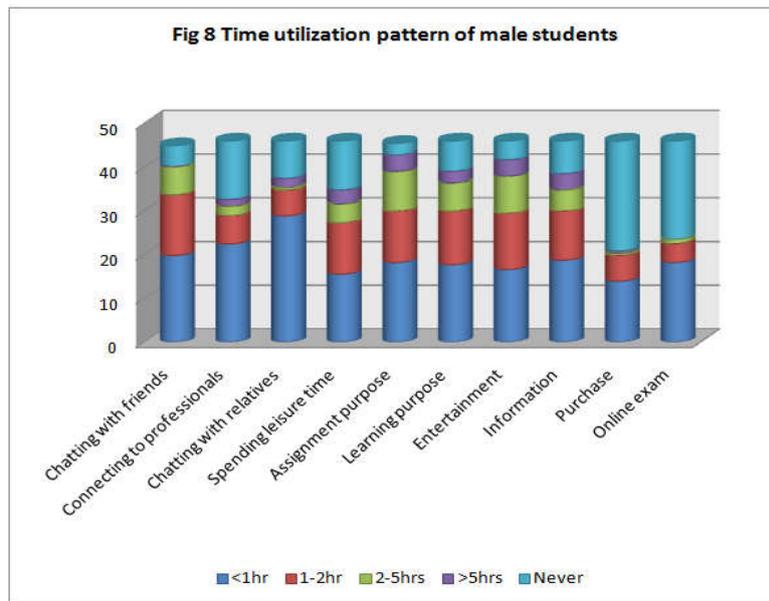
Time utilization pattern of internet by female students in a day

S. No	Purpose	Frequency per day									
		<1hr		1-2		2-5		>5		Never	
		NO	%	NO	%	NO	%	NO	%	NO	%
1	Chatting with friends	56	29.95	29	15.51	5	2.67	7	3.74	4	2.14
2	Connecting to professionals	52	27.81	18	9.63	4	2.14	1	0.53	26	13.90
3	Chatting with relatives	61	32.62	11	5.88	9	4.81	7	3.74	13	6.95
4	Spending leisure time	47	25.13	22	11.76	10	5.35	10	5.35	12	6.42
5	Assignment purpose	43	22.99	27	14.44	13	6.95	12	6.42	7	3.74
6	Learning purpose	41	21.93	32	17.11	12	6.42	5	2.67	11	5.88
7	Entertainment	44	23.53	23	12.30	15	8.02	6	3.21	13	6.95
8	Information	51	27.27	23	12.30	8	4.28	2	1.07	17	9.09
9	Purchase	28	14.97	7	3.74	3	1.60	3	1.60	60	32.09
10	Online exam	28	14.97	8	4.28	5	2.67	1	0.53	59	31.55

Time utilization pattern of internet by male students in a day

S. No	Purpose	Frequency per day									
		<1hr		1-2		2-5		>5		Never	
		NO	%	NO	%	NO	%	NO	%	NO	%
1	Chatting with friends	37	19.79	26	13.90	12	6.42	0	0	9	4.81
2	Connecting to professionals	42	22.46	12	6.42	4	2.14	3	1.60	25	13.37
3	Chatting with relatives	54	28.88	11	5.88	1	0.53	4	2.14	16	8.56
4	Spending leisure time	29	15.51	22	11.76	8	4.28	6	3.21	21	11.23
5	Assignment purpose	34	18.18	22	11.76	17	9.09	7	3.74	5	2.67
6	Learning purpose	33	17.65	23	12.30	12	6.42	5	2.67	13	6.95
7	Entertainment	31	16.58	24	12.83	16	8.56	7	3.74	8	4.28
8	Information	35	18.72	21	11.23	9	4.81	7	3.74	14	7.49
9	Purchase	26	13.90	11	5.88	1	0.53	1	0.53	47	25.13
10	Online exam	34	18.18	8	4.28	2	1.07	0	0.00	42	22.46





It is evident from the table that a majority of 6.42 percent of the female students are using SM for Assignment purpose for more than 5 hrs per day and this is followed by 5.35 percent for Spending leisure time. 8.02 percent are spending 2-5 hrs for Entertainment and 17.11 percent are spending 1-2 hrs for Learning purpose. The students are spending less than one hour for all the purposes from chatting to online exams. Majority do not go for Purchasing and Online exam.

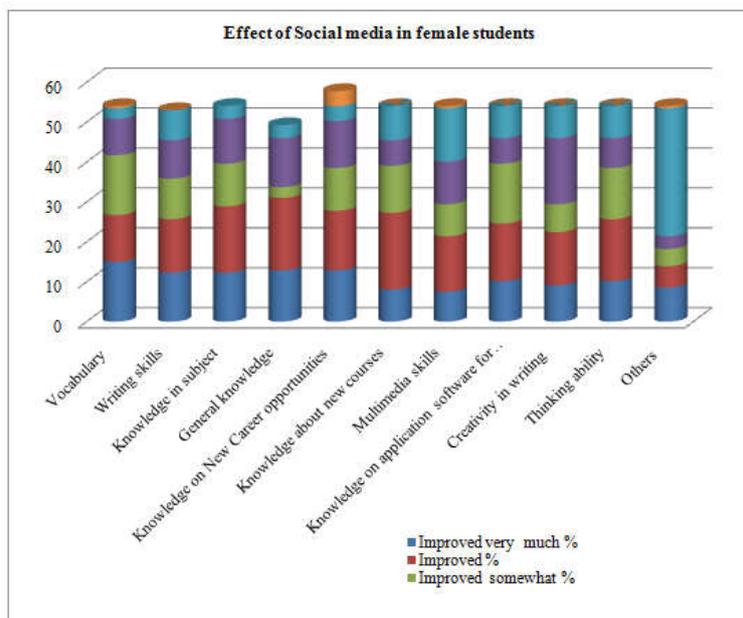
It is evident from the table that a majority of 5.35 percent of the students use internet for Spending leisure time. 9.09 percent are spending 2-5 hrs for assignment purpose followed by 8.56 percent for Entertainment. 12.83 percent spent 1-2 hrs for entertainment and 12.30 percent for Learning purpose. The students are spending less than one hour for all the purposes from chatting to online exams. Majority of 25.13 and 22.46 percent of the male students never use internet for Purchasing and Online exam.

From the figure we can conclude that mostly the students spend less than 1 hr in browsing internet for various purposes. Mostly they chat with friends relative and to connect to professionals here to their teachers. There are some people who never use internet for any of the purposes. A considerable amount of time was spent on getting information and learning purpose. Male students spent a higher share of time on online exams compared to female students. purchase of books and other materials also is done through internet by some of the students.

It is evident from the table that 14.97 percent have improved very much in vocabulary and 13.37 in writing skills. The students Knowledge in subject, General knowledge and Knowledge on New Career opportunities, Knowledge about new courses, Multimedia skills, Knowledge on application software for downloading study materials, Creativity in writing and thinking ability have improved. 3.74 percent have gone down in Knowledge on New Career opportunities, multimedia skills (0.53%) and vocabulary (0.53%).

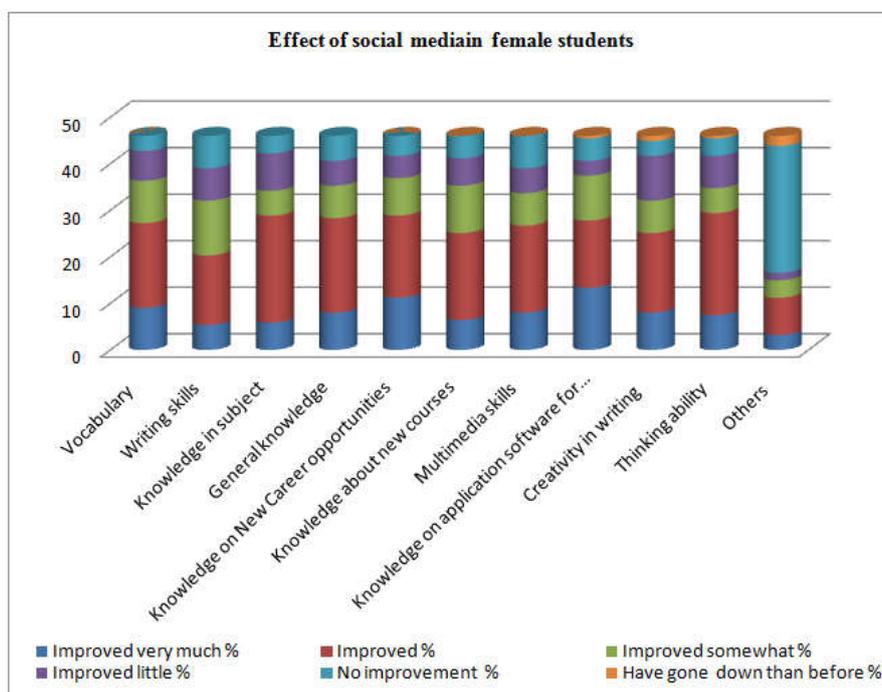
Table 18. Effect of social media for academic purposes by female students

S.No	Purpose	Effect of social media in female students											
		Improved very much		Improved		Improved somewhat		Improved little		No improvement		Have gone down than before	
		NO	%	NO	%	NO	%	NO	%	NO	%	NO	%
1	Vocabulary	28	14.97	22	11.76	28	14.97	17	9.09	5	2.67	1	0.53
2	Writing skills	23	12.30	25	13.37	19	10.16	18	9.63	14	7.49	0	0
3	Knowledge in subject	23	12.30	31	16.58	20	10.70	21	11.23	6	3.21	0	0
4	General knowledge	24	12.83	34	18.18	5	2.67	23	12.30	6	3.21	0	0
5	Knowledge on New Career opportunities	24	12.83	28	14.97	20	10.70	22	11.76	7	3.74	7	3.74
6	Knowledge about new courses	15	8.02	36	19.25	22	11.76	12	6.42	16	8.56	0	0
7	Multimedia skills	14	7.49	26	13.90	15	8.02	20	10.70	25	13.37	1	0.53
8	Knowledge on application software for downloading study materials	19	10.16	27	14.44	28	14.97	12	6.42	15	8.02	0	0
9	Creativity in writing	17	9.09	25	13.37	13	6.95	31	16.58	15	8.02	0	0
10	Thinking ability	19	10.16	29	15.51	24	12.83	14	7.49	15	8.02	0	0
11	Others	16	8.56	10	5.35	8	4.28	6	3.21	60	32.09	1	0.53



Effect of social media for academic purposes by male students

S. No	Purpose	Effect of social media in male students											
		Improved very much		Improved		Improved somewhat		Improved little		No improvement		Have gone down than before	
		NO	%	NO	%	NO	%	NO	%	NO	%	NO	%
1	Vocabulary	17	9.09	34	18.18	17	9.09	12	6.42	6	3.21	0	0
2	Writing skills	10	5.35	28	14.97	22	11.76	13	6.95	13	6.95	0	0
3	Knowledge in subject	11	5.88	43	22.99	10	5.35	15	8.02	7	3.74	0	0
4	General knowledge	15	8.02	38	20.32	13	6.95	10	5.35	10	5.35	0	0
5	Knowledge on New Career opportunities	21	11.23	33	17.65	15	8.02	9	4.81	8	4.28	0	0
6	Knowledge about new courses	12	6.42	35	18.72	19	10.16	11	5.88	9	4.81	0	0
7	Multimedia skills	15	8.02	35	18.72	13	6.95	10	5.35	13	6.95	0	0
8	Knowledge on application software for downloading study materials	25	13.37	27	14.44	18	9.63	6	3.21	9	4.81	1	0.53
9	Creativity in writing	15	8.02	32	17.11	13	6.95	18	9.63	6	3.21	2	1.07
10	Thinking ability	14	7.49	41	21.93	10	5.35	13	6.95	7	3.74	1	0.53
11	Others	6	3.21	15	8.02	7	3.74	3	1.60	51	27.27	4	2.14



Relationship between independent variables and effect of use of internet

Variables	'r' value	Regression Co – efficient	standard Error	't' value	Sig.
Age of the students(X1)	.097	3.235	1.508	2.146	.033
Rural or urban background(X2)	-.012	.071	1.609	.044	.965
Medium of instruction(X3)	-.108	-1.598	1.763	-.907	.366
SSLC Marks(X4)	-.055	-1.045	1.526	-.685	.494
HSC Marks(X5)	.040	1.265	.880	1.438	.152
Type of School(X6)	-.008	.610	.989	.617	.538
Present OGPA(X7)	.035	-.119	1.150	-.104	.917
Father's Occupation(X8)	-.042	-.218	.502	-.434	.665
Income of Family(X9)	-.108	.001	.706	.002	.999
Accessibility to internet(X10)	.192**	5.165	1.934	2.670***	.008
Internet usage(X11)	.227**	.184	.060	3.094**	.002

R square = 0.128

F value = 2.314

a = 22.035

It is evident from the table 19 that the male students have improved in vocabulary, writing skills. The students Knowledge in subject, General knowledge and Knowledge on New Career opportunities, Knowledge about new courses, Multimedia skills , Knowledge on application software for downloading study materials, Creativity in writing and thinking ability have improved. 1.07 percent has gone down in creativity writing, Knowledge on application software for downloading study materials (0.53%) and thinking ability (0.53%). In contrast to female students the male students have not gone down in vocabulary. The male students have improved very much in getting Knowledge on application software for downloading study materials.

It is seen from the table that two out of the eleven variables viz., accessibility to internet (X10), and internet usage (X11) exhibited a positive and significant relationship with the effect of internet usage at five percent and ten percent level of probability respectively. The table indicates that the coefficient of determination (R²) for the respondents was 0.128. Thus all the variables together explained for 12.8 percent of variation in the effect of internet usage. The prediction equation fitted has been given below

$$Y_1 = 22.035 + 3.235(X_1) + .071(X_2) - 1.598(X_3) - 1.045(X_4) + 1.265(X_5) + 0.610(X_6) - 0.119(X_7) - 0.218(X_8) + 0.001(X_9) + 5.165(X_{10}) + 0.184(X_{11})$$

It could be inferred that for every unit increase in accessibility of internet (X10) and internet usage (X11) there is an increase of 5.165 units and 0.184 units increase in effect caused by it.

Conclusion

This exploratory investigation results indicate that college students were likely to be affected by social media. Social media is attractive; it not only provides college students another world to make friends, also provides a good way to release pressure. This research also indicates that an approach is needed to better balance the relationship between social media and academic study. Therefore, college students should think more about the balancing equation of social media and academics. Our research indicated that most college students would prefer to use social media and spend many hours checking social media sites. Social networking is definitely affecting students' efficiencies as well as their grades. Hence, educators need to be concerned about these problems and try to find better ways to solve these problems.

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