Wi-fi use Pattern of Students in Tamil Nadu Agricultural University

Hema B, Shantha Sheela M, Deepthi V and Jyothi V

Tamil Nadu Agricultural University, Coimbatore

ABSTRACT

To know the wi-fi use pattern of the students in Tamil Nadu Agricultural University (TNAU), an exploratory research was conducted involving 112 Under Graduate (UG) and 35 Post Graduate (PG) students. Place and distance of internet access; time of internet use; search engine and e-mail ID used; frequency of checking e-mails; hours/day use of internet , academic & personal e-mails received and sent were studied. Majority of the UG (89.29%) and PG (74.28%) students accessed internet from hostel. UG (72.32%) and PG (71.43%) students accessed wi-fi internet from a distance less than 0.1 KM. UG (31.25%) students used internet during night while an equal proportion of 22.86 per cent each of the PG students used internet at evening and late night. UG (54.46%) and PG (80.00%) students used firefox search engine to browse internet. UG (88.39%) and PG (65.72%) students used gmail. UG (44.64%) students used internet 1 to 2 hrs per day, while PG (34.29%) students used 3 to 4 hrs per day.

Key words : Pattern, Wi-fi.

In this age of information and communication technology, the use of the Internet by students has become the norm in all fields of education. Agriculture field is not exempted from this trend. The craving for the internet stems from its central role in information and communication technology with access to free online journals, magazines, and other information resources anytime and from anywhere for academic and research purposes. To give such an advantage to the students, Tamil Nadu Agricultural University (TNAU) is completely enabled with wi-fi internet connectivity. Students can make use of this opportunity in the departments, hostels and round the campus. At this juncture a study was conducted to know the Wi-fi use pattern of the Under Graduate (UG) and Post Graduate (PG) students in the university.

MATERIAL AND METHODS

The study was conducted in Tamil Nadu Agricultural University (TNAU) to know the wi-fi use pattern of students. Exploratory research design was used to gain a deep insight into the topic. One hundred and twelve (112) UG students and thirty five (35) PG students were sampled for the study. Profile characteristics; place and distance of internet access; time of internet use; search engine and e-mail ID used; frequency of checking e-mails; hours/day use of internet, academic & personal e-mails received and sent were considered for the study. Profile characteristics *viz.,* gender, mode of stay, experience in using internet and type of laptop owned were studied. A pre-tested questionnaire was established among the respondents. Frequency and percentage were calculated.

Gender of the respondent was studied in terms of male or female. Mode of stay was operationalised as the place where the student resides for convenience to attend the college. This was measured in terms of hosteller and day scholar. Experience in using internet was operationalised as the past experience if any in using internet and was measured in terms of experience possessed before joining TNAU and after joining TNAU. Type of laptop owned was operationalised as the company of laptop owned by the respondent and was measured in terms of HP, Dell, Sony, HCL, Samsung, Lenova and Apple.

Place of internet access was operationalised as the place where the student use internet and was studied in terms of hostel, department, library browsing centre and others. Distance of internet access was operationalised as the distance from which the student use internet and was studied in terms of <0.1 KM, 0.1 to 0.25 KM, 0.25 to 0.50 KM, 0.50 to 0.75 KM, 0.75 to 1 KM and >1KM. Time of internet use was operationalised as the time the respondent usually

used internet in a day and was measured in terms early morning (3 to 6 AM), morning (6 to 9 AM), day time (9 AM to 4 PM), evening(4 to 6.30 PM), night(6.30 to 10 PM) and late night(10 to 12 PM).

Search engine was operationalised as a drive to search for documents on the worldwide and was studied in terms of firefox, google chrome, internet explorer, firefox & google chrome, opera and safari. E-mail ID was operationalised as the electronic identification code used to access mails and was studied in terms of gmail, yahoo, rediff, yahoo & gmail and gmail & rediff. Frequency of checking e-mails was operationalised as the number of times the respondent checks e-mails and was studied in terms of whenever free in a day, daily, once in two days, weekly, monthly, rarely and never.

Hours/day use of internet was operationalised as the duration the respondent utilise internet for various purposes and was studied in terms of <1hr, 1 to 2hr, 3 to 4hr, 5 to 6hr, 7 to 8hr and >8hr. Academic & personal e-mails received and sent was operationalised as the number of academic and personal e-mails the respondents receives and sends in a day.

RESULTS AND DISCUSSION

The results and discussion are presented under following sub headings as given below

1. Profile characteristics
2. Place and distance of internet access
3. Time of internet use
4. Search engine and e-mail ID used
5. Frequency of checking e-mails
6. Hours/day use of internet
7. Academic & personal e-mails received and sent

1. Profile characteristics

It is observed from Table. 1 that a little more than three fifth of the UG students were female (75.89%) and the remaining were male (24.11%). Among the PG students nearly half were female (48.58%) and the remaining were male (51.42%). Majority of the UG (91.07%) and cent percent of the PG students were hostellers while the remaining UG (8.93%) students were day scholars. 56.25 per cent UG and 91.42 per cent PG students had experience of using internet before joining TNAU while the remaining UG (43.75%) and PG (8.58%) students learnt to use internet after joining TNAU.

Among the UG students, less than half of the respondents owned laptops of Dell (45.54%), followed by HP (23.21%), Sony (11.61%), Apple (9.82%), Lenova (8.04%) and 0.89 per cent each possessed Samsung and HCL laptops. PG students possessed HP (31.42%), followed by Dell (28.58%), Sony (22.86%) and Apple (17.14%) laptops. Students purchased laptops of different companies based on their choices of configuration, variation in prices, differences in appearance, attraction towards a particular company, etc.

2. Place and distance of internet access

The place and distance of internet access by the students is presented in Table 2. Among the UG students majority of them accessed internet from hostel (89.29%), followed by library browsing centre (4.46%), department (3.57%), and 2.68 per cent accessed from other places. Among the PG students nearly three fourth of the students accessed internet from hostel (74.28%), followed by library browsing centre (17.14%), department (5.72%), and 2.68 per cent accessed from other places. Greater proportion of the UG and PG students accessed internet from hostels either before or after the college working hours.

A little less than three fourth of the UG students accessed wi-fi internet from a distance less than 0.1 KM (72.32%), followed by 0.1 to 0.25 KM (10.71%), 0.25 to 0.50 KM (2.68%), 0.5 to 0.75 KM (5.36%), 0.75 to 1 KM (8.04%) and greater than 1 KM (0.89%). A little less than three fourth of the PG students accessed wi-fi internet from a distance less than 0.1 KM (71.43%), followed by 0.1 to 0.25 KM (17.14%) and 0.25 to 0.50 KM (11.43%). Both UG and PG students mostly accessed internet from a near distance from the internet hub as the connectivity and speed would be fast and good. The findings are in accordance with that reported by Chelsen (2011).

3. Time of internet use

UG students used internet during night (31.25%), followed by evening (28.57%), morning (17.86%), late night (9.82%), day time (7.14%) and early morning (5.36%). While an equal proportion of 22.86 per cent each of the PG students used internet at evening and late night, followed by early morning (17.14%), morning (14.29%), and an equal proportion of 11.43 per cent each used internet at

Table 1. Profile characteristics of the respondent students.

Category	UG (n=112)		PG (n=35)	
	No	%	No	%
Gender				
Female	85	75.89	17	48.58
Male	27	24.11	18	51.42
Mode of stay				
Hosteller	102	91.07	35	100.00
Day scholar	10	8.93	—	—
Experience in using internet				
Before joining TNAU	63	56.25	32	91.42
After joining TNAU	49	43.75	3	8.58
Type of laptop owned				
Dell	51	45.54	10	28.58
Hp	26	23.21	11	31.42
Sony	13	11.61	8	22.86
Apple	11	9.82	6	17.14
Lenova	9	8.04	—	—
HCL	1	0.89	—	—
Samsung	1	0.89	—	—

Table 2. Place and distance of internet access by the respondent students.

Category	UG (n=112)		PG (n=35)	
	No	%	No	%
Place of internet access				
Hostel	100	89.29	26	74.28
Department	4	3.57	2	5.72
Library browsing centre	5	4.46	6	17.14
Any other place	3	2.68	1	2.86
Distance of internet access				
<0.1 KM	81	72.32	25	71.43
0.1 to 0.25 KM	12	10.71	6	17.14
0.25 to 0.50 KM	3	2.68	4	11.43
0.50 to 0.75 KM	6	5.36	—	—
0.75 to 1 KM	9	8.04	—	—
>1KM	1	0.89	—	—

Table 3. Distribution of respondent students according to the time of internet use.

Timings	UG (n=112)		PG (n=35)	
	No	%	No	%
Early morning (3 to 6 AM)	6	5.36	6	17.14
Morning (6 to 9 AM)	20	17.86	5	14.29
Day time (9 AM to 4 PM)	8	7.14	4	11.43
Evening(4 to 6.30 PM)	32	28.57	8	22.86
Night(6.30 to 10 PM)	35	31.25	4	11.43
Late night(10 to 12 PM)	11	9.82	8	22.86
Total	112	100.00	35	100.00

Table 4. Search engine and e-mail ID used by the respondent students .

Category	UG (n=112)		PG (n=35)	
	No	%	No	%
Search engine used				
Firefox	61	54.46	28	80.00
Google chrome	15	13.39	4	11.42
Internet explorer	6	5.36	—	—
Firefox & Google chrome	21	18.75	2	5.72
Opera	6	5.36	—	—
Safari	3	2.68	1	2.86
e-mail ID used				
Gmail	99	88.39	23	65.72
Yahoo	6	5.36	6	17.14
Rediff	—	—	—	—
Yahoo & gmail	7	6.25	5	14.28
Gmail & rediff	—	—	1	2.86

day time and night as presented in Table 3. Time of internet usually depends on convenience. Only a minor proportion of UG and PG students used internet during day time.

4. Search engine and e-mail ID used

A little more than half of the UG students used firefox (54.46%), followed by firefox & google chrome (18.75%), google chrome (13.39%), an equal proportion of 5.36 per cent each used internet explorer & opera, while 2.68 per cent used safari. While 80.00 per cent of the PG students used firefox, google chrome (11.42%), firefox & google chrome (5.72%) and safari (2.86%). Majority of the UG students used gmail (88.39%),

followed by yahoo & gmail (6.25%) and yahoo (5.36%). Among the PG students the use of e-mail ID pattern was gmail (65.72%), followed by yahoo (17.14%), yahoo & gmail (14.28%) and gmail & rediff (2.86%) as shown in Table 4. The findings are in accordance with that reported by Rajeev *et al.* (2006).

5. Frequency of checking e-mails

UG students check e-mail whenever they are free in a day (62.50%), followed by daily (16.96%), once in two days (13.39%), weekly (3.57%) an equal proportion of 1.79 per cent each checked monthly and rarely. While the PG students checked e-mails daily (48.58%), followed by

Table 5. Distribution of respondent students according to the frequency of checking e-mails.

Category	UG (n=112)		PG (n=35)	
	No	%	No	%
Whenever free in a day	70	62.50	10	28.58
Daily	19	16.96	17	48.58
Once in two days	15	13.39	7	20.00
Weekly	4	3.57	1	2.84
Monthly	2	1.79	—	—
Rarely	2	1.79	—	—
Never	—	—	—	—
Total	112	100.00	35	100.00

Table 6. Distribution of respondent students according to the Hours/day use of internet.

Category	UG (n=112)		PG (n=35)	
	No	%	No	%
<1hr	36	32.14	1	2.86
1 to 2hr	50	44.64	11	31.43
3 to 4hr	16	14.29	12	34.29
5 to 6hr	8	7.14	8	22.86
7 to 8hr	2	1.79	2	5.71
>8hr	—	—	1	2.86
Total	112	100.00	35	100.00

whenever they are free in a day (28.58%), once in two days (20.00%) and weekly (2.84%) as represented in Table 5. The findings are in accordance with that reported by Chelsen (2011).

6. Hours/day use of internet

The per day usage of internet by UG students reported was 1 to 2 hr (44.64%), followed by <1 hr (32.14%), 3 to 4 hr (14.29%), 5 to 6 hr (7.14%) and 7 to 8 hr (1.79%). Among the PG students it was 3 to 4 hr (34.29%), followed by 1 to 2 hr (31.43%), 5 to 6 hr (22.86%), 7 to 8 hr (5.71%), while an equal proportion of 2.86 per cent each fell in the categories of <1 hr and >8 hr usage as depicted in Table 6. It usually depends on the need and necessity. The findings are in accordance with Rajeev and Amritpal. (2006).

7. Academic & personal e-mails received and sent

UG students reported that they do not receive any academic e-mails (38.39%), followed by 1 to 2 (35.71%), 3 to 4 (10.71%), 5 to 6 (9.82%) and an equal proportion of 2.86 per cent each reported that they received 7 to 8 and 9 to 10 academic e-mails. PG students reported that they do not receive any academic e-mails (17.14%), 1 to 2 (45.71%), 3 to 4 (11.43%), 5 to 6 (14.29%), an equal proportion of 2.86 per cent each reported that they received 7 to 8 & 9 to 10 academic e-mails and >10 e-mails(5.71%). UG students reported that they do not send any academic e-mails (58.93%), followed by 1 to 2 (28.57%), 3 to 4 (5.36%), 5 to 6 (1.79%), 7 to 8 (2.68%), 9 to 10 (1.79%) and >10 (0.89%). PG students reported that they do not send any academic e-mails (2.86%), 1 to 2 (42.86%), 3 to 4 (2.86%), 5 to 6 (34.29%), 7 to 8 (5.71%), 9 to 10 (8.57%) and >10 (2.86%).

UG students reported that they do not receive any personal e-mails (32.14%), followed by 1 to 2 (25.89%), 3 to 4 (10.71%), 5 to 6 (14.29%), 7 to 8 (3.57%), 9 to 10 (7.14%) and >10 (6.25%). PG students reported that they do not receive any

Table 7. Distribution of respondent students according to the academic and personal e-mails received and sent.

| Category | Academic e-mails received | | | | Academic e-mails sent | | | | Personal e-mails received | | | | Personal e-mails sent | | | |
| | UG | | PG | | UG | | PG | | UG | | PG | | UG | | PG | |
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
NIL	43	38.39	6	17.14	66	58.93	1	2.86	36	32.14	7	20.00	55	49.11	5	14.29
1 to 2	40	35.71	16	45.71	32	28.57	15	42.86	29	25.89	6	17.14	32	28.57	15	42.86
3 to 4	12	10.71	4	11.43	6	5.36	1	2.86	12	10.71	8	22.86	15	13.39	2	5.71
5 to 6	11	9.82	5	14.29	2	1.79	12	34.29	16	14.29	5	14.29	6	5.36	2	5.71
7 to 8	3	2.68	1	2.86	3	2.68	2	5.71	4	3.57	—	—	2	1.79	6	17.14
9 to 10	3	2.68	1	2.86	2	1.79	3	8.57	8	7.14	—	—	1	0.89	3	8.57
>10	—	—	2	5.71	1	0.89	1	2.86	7	6.25	9	25.71	1	0.89	2	5.71
Total	112	100	35	100	112	100	35	100	112	100	35	100	112	100	35	100

personal e-mails (20.00%), 1 to 2 (17.14%), 3 to 4 (22.86%), 5 to 6 (14.29%) and >10 (25.71%). UG students reported that they do not send any personal e-mails (49.11%), followed by 1 to 2 (28.57%), 3 to 4 (13.39%), 5 to 6 (5.36%), 7 to 8 (1.79%) and an equal proportion of 0.89 per cent each reported that they received 9 to 10 and > 10 e-mails. PG students reported that they do not send any personal e-mails (14.29%), 1 to 2 (42.86%) an equal proportion of 5.71 per cent each reported that they received 3 to 4 & 5 to 6 e-mails, 7 to 8 (17.14%), 9 to 10 (8.57%) and >10 (5.71%).

CONCLUSION

The research findings would enable the TNAU authorities to formulate strategies so as to provide a good, faster and high speed wi-fi internet to the students in the university. Students are more fascinated towards HP and Dell laptops, the university can invite various companies to organise fairs in the college campuses, where the students get opportunities to purchase laptops at choice. The university should invite such firms to participate in the fairs, who are ready to establish laptop service provider kiosks in the campus. Students mostly accessed internet from hostels, so the authorities should ensure that the connectivity and speed is good in and around the hostels. Students mostly accessed internet after 4 PM in the evenings after college working hours. So, care should be taken to provide uninterrupted internet connectivity with high speed during this time.

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