

WHY DO STUDENTS USE FACEBOOK? AN ANALYSIS OF THE USAGE OF FACEBOOK IN THE LIGHT OF USES AND GRATIFICATION THEORY

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ABSTRACT

In this paper, we aim to examine the purpose and pattern of Facebook usage by students through investigating the frequency of using Facebook during the day, during week days and the number of times students' login to Facebook along with the length of time spent on using Facebook during a day. This study also intends to examine the source of gratification for using Facebook whether it be chat, friendship, post and comments, and others. Here in this study, we take the interactive use of Facebook to check what satisfies the users the most (connection gratification). This way, we will be able to contribute to the scientific knowledge through contributing the motives of Facebook usage of Pakistani students by examining the sample of students of Sindh University. Our study consists of six hypotheses for data analysis. In this study, we employ descriptive statistics (counts and frequencies) and non-parametric independent sample test and non-parametric One-way ANOVA for ranks. This study finds evidence that graduate students use Facebook more often than undergraduates. students mostly use Facebook to get satisfaction through post and comments which might gratify their needs for social approval and apprehension. Graduate students usually connect to Facebook in morning times i.e. 8 am- 12 pm. Female students are inclined to even pay more than Rs. 500 for using Facebook. When we look at the individual differences on the basis of qualification, graduate students are more willing to pay money for using Facebook. The study also suggests that the students who use Facebook for 5 minutes are lesser in number. The majority of students use Facebook for one hour or more in a day.

Keywords: Facebook usage, Frequency and pattern of usage, Uses and Gratification theory

INTRODUCTION

The creation of internet had no doubt started the concept of digital world, where people live a life other than their real life. In the start, internet was used just as a source of collecting information but later on, it became more than the source of information. Nowadays, we interact with other people through this media for various purposes; such as shopping, distance education, making friendships, working online and much more than that.

Since the inception of social networking sites, people started using these sites for making and maintain social connections. Facebook is among one of these social networking sites developed in 2004 initially with a purpose to fulfill the needs of networking among Harvard students. Later on, this site was made public and in no time it became the most famous social networking site used worldwide.

LITERATURE REVIEW

Uses and Gratification (U&G) theory

The theory of uses and gratification has long been employed since 1940s to analyze the impact of mass media on various subjects of the study (Ruggiero, 2000). This approach originated from the areas of communications research, where it was used to examine what attracts and retains the attention of audiences to a particular media (newspaper, radio) and the kinds of matters or topics that fulfilled their sociological and psychological needs (Cantril, 1942 cited in Ruggiero 2000). The concept of uses and gratification was first given by Herzogg (1944) (cited in Cho, de Zúñiga, Rojas, & Shah, 2003). As the word employs, the concept of uses and gratification theory states why people use some specific media and what satisfaction it gives to them so that they continuously keep using it. Later on, this theory was used for the analysis of the motives, usage pattern and impact of various media on subjects such as the impact of TV on children, impact of internet usage (Ruggiero, 2000). Earlier studies used this theory to examine the relationship between internet usage and gratification ((Cho, de Zúñiga, Rojas, & Shah, 2003; Stafford et al. 2004; Charney and Greenberg 2002; Larose, Mastro, & Eastin, 2008; Papacharissi & Rubin, 2000).

Similarly, earlier studies (e.g., (Hunt, Atkin, and Krishnan 2012; Joinson 2008; Raacke & Bonds-Raacke, 2008; Sheldon, 2008a, 2008b; Smock et al. 2011; Tosun 2012; Yang and Brown, 2013; Ryan, Chester, Reece, & Xenos, 2014; Park, Kee, & Valenzuela, 2009; Hollenbaugh & Ferris, 2014) also analyzed Facebook usage in the context of U&G theory.

Urista et al. (2009) employed focus groups methods to explore why young people use Facebook and MySpace and found that young people use Facebook and MySpace mainly for the purpose of gathering information, enjoyment and obtain psychological assurance for their activities and likes.

Raacke and Bonds-Raake 2008 analyzed the survey data with MANOVA and noticed there were no significant differences in meeting the needs of male and female users. According to their study, students on average were spending almost 3 hours on social networking sites both Facebook and MySpace daily.

Their study also found support for the fact that students use Facebook to obtain information, making new friends and keep in touch with existing friends. On the other hand, Verduyn et al., (2015) observed the negative effects of using Facebook on the respondents.

Our study aims to examine the motives, frequency, length and first preference of using Facebook from the perspective of U&G theory by looking at the patterns of use and gratification gained.

Patterns of Facebook Usage

We examine the purpose and pattern of Facebook usage by investigating the frequency (how often students login to Facebook during the day, during week days and in a one day how many times they login to Facebook), Length of Usage (how much time they spend on using Facebook during a day and what part of day they access Facebook), and the source of gratification (chat, friendship, post and comments, and others). Here in this study, we take the interactive use of Facebook to check what satisfies the users the most (connection gratification).

Significance of the Study

This study covers the areas of usage of social networking site of Facebook in terms of how it affects the students in universities. It will help in analyzing how our students use their time as

they are the future of our nation. This study will provide the important information to universities about students and how educational institutes can use this social networking site for their educational purposes as most of the students are online nowadays and have Facebook accounts.

RESEARCH QUESTIONS

This research will attempt to answer the following research questions:

1. Is there a significant difference between undergraduate and postgraduate students regarding purpose of using Facebook?
2. Is there a significant difference between undergraduate and postgraduate students regarding time spent during usage of Facebook?
3. Is there a significant difference between undergraduate and postgraduate students regarding preference of activity during the usage of Facebook?

RESEARCH OBJECTIVES

The main objectives which this study aims to achieve are given below:

1. To investigate the education differences in relation with the amount of time spent for using Facebook.
2. To examine the frequency of Facebook usage among students
3. To examine the length of use of Facebook among students
4. To investigate the education differences in relation with students' preferences for using Facebook.

RESEARCH HYPOTHESES

The hypotheses for this research are given as under:

H1: Undergraduate students use Facebook more often than graduate students during weekdays.

H2: Undergraduate students use Facebook more often than graduate students during weekends.

H3: More graduate students login to Facebook each day than undergraduate students.

H4: Post and comment is the most favorite activity among graduate students on Facebook.

H5: Graduate students are more inclined towards connecting to Facebook in the morning than undergraduate students.

H6: Undergraduate students are more willing to pay charges for connecting the Facebook than graduate students.

RESEARCH METHODOLOGY

The survey consists of close-ended questions. Five Point Likert-scale questionnaire was used for collection of primary data. One hundred thirty seven graduate and undergraduate students participated in the survey. Students were at first inquired whether they have Facebook account or not. Only a few of them did not have account on Facebook. Most of the students had Facebook accounts and were active users of this social networking site. So only those students who have Facebook account were asked to fill the survey. For this study, we have adopted the questionnaire from Aghazamani (2010). Aghazamani (2010) has investigated the motives of using Facebook for studying the Swedish students' attitudes. In this study, we

explore the purpose of Facebook usage through analyzing the frequency, timing and preferences of Facebook by Pakistani students. The sample for our study consists of graduate and undergraduate students of University of Sindh, Pakistan. This way, we will be able to contribute to the scientific knowledge through contributing the motives of Facebook usage of Pakistani students by examining the sample of students of Sindh University. Our study consists of six hypotheses for data analysis. In this study, we employ descriptive statistics (counts and frequencies) and non-parametric independent sample test and non-parametric One-way ANOVA for ranks. For data analysis, we have used Statistical Package for Social Science (SPSS 24).

RESULTS

In this study, we used descriptive survey research design for preliminary results. To check whether data is normally distributed, we obtained the results of Shapiro-Wilk test (Shapiro & Wilk, 1965). After test, this study found that data were not normally distributed. Therefore, non-parametric test of independent samples (Mann-Whitney U were used to test our hypotheses as the nature of our variables was ordinal) (Nachar, 2008). Depending on the nature of our hypotheses, we also used Non-parametric One-way ANOVA using Kruskal-Wallis Test to examine closely the differences between two groups.

Hypotheses Testing

H1: Undergraduate students use Facebook more often than graduate students during weekdays.

Table 1. Time spent on Facebook during the weekdays by students

Qualification/ education	Time spent on Facebook during the weekdays			Total
	Maximum 5 minutes	Maximum one hour	more than one hour	
Graduate	12	21	16	49
Undergraduate	20	42	27	89
Total	32	63	43	138

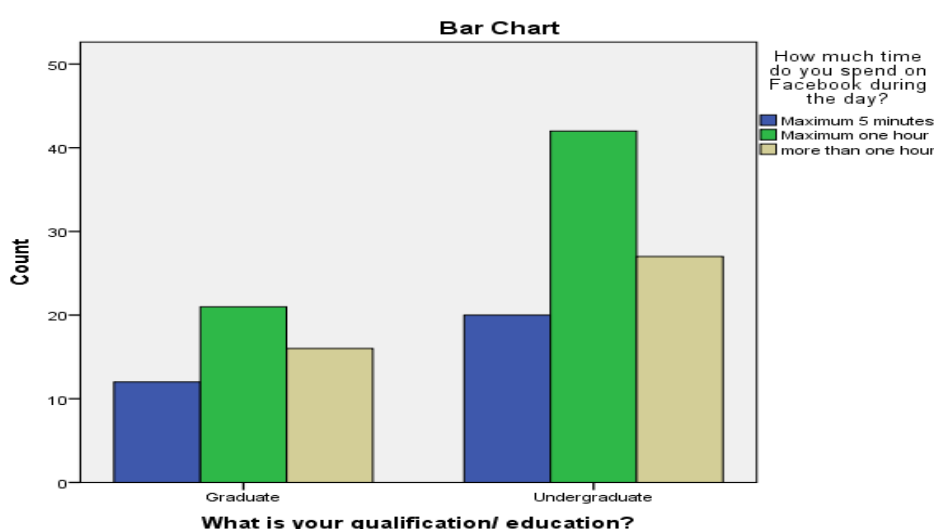


Figure 1. Time spent on Facebook during the weekdays by students

The above given table and chart depicts that out of total 138 sample, 89 undergraduate students and 49 graduate students use Facebook during the weekdays. Out of 63 respondents, 42 undergraduates and 21 graduates use Facebook for maximum one hour during weekdays. 43 respondents use Facebook for more than one hour during the weekdays, where 16 respondents belong to graduate group and 27 respondents are from undergraduate category. Out of 138 students, only 32 respondents use Facebook for maximum 5 minutes during the day.

Table 2. Ranks of students' Time spent on Facebook during the weekday

	Qualification/ education	N	Mean Rank	Sum of Ranks	Mann- Whitney U	p-value
Time spent on Facebook during the weekday	Graduate	49	69.67	3414.00		
	Undergraduate	89	69.40	6177.00		
	Total	138			2172.000	.968

The results of Mann-Whitney test show the mean rank for graduate students is slightly higher that is .27 and is insignificant which shows an insignificant relationship between education and the time of the day spent by student on Facebook. By looking at the p-value, we can state that we can retain the null hypothesis.

H2: Undergraduate students use Facebook more often than graduate students during weekends.

Table 3. Time spent on Facebook during the weekend

Qualification/ education	Time spent on Facebook during the weekdays			Total
	Maximum 5 minutes	Maximum one hour	more than one hour	
Graduate	3	13	27	6
Undergraduate	5	34	42	8
Total	8	47	69	14

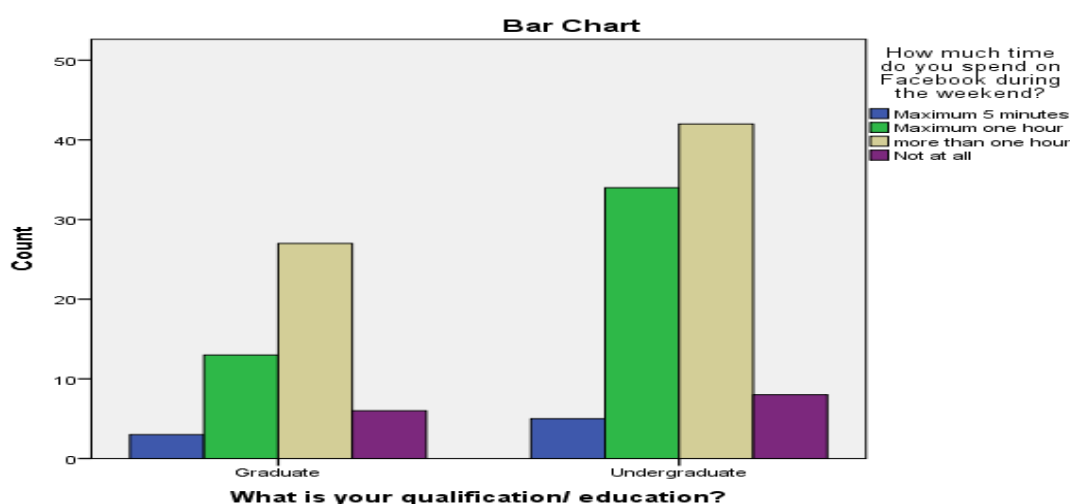


Figure 3. Time spent on Facebook during the weekend

Our sample consists of total 138 students; there are 49 graduates and 89 undergraduates in our study. Out of 49 graduates, 3 of them spend maximum 5 minutes on Facebook during the weekend, 13 students spend maximum one hour, 27 of them use Facebook more than one hour while only 6 of them does not spend time on Facebook. From 89 undergraduates, only 5 of them spend maximum 5 minutes, 34 students use maximum one hour while majority of

students that is 42 students spend more than one hour. Only 8 students don't spend time on Facebook. So, from total 138 students during the weekend following have spent the time in different time period, 8 student has used maximum 5 minutes, 47 students has spent maximum one hour while majority of students that is 69 students has spent more than one hour and 14 students do not use Facebook at all on weekends. From this we can observe that there are very few students who do not use Facebook at all on weekends. A negligible number of students use Facebook for 5 minutes which indicate that students spend an hour or more on Facebook usually.

Table 4. Ranks of students' time spent on Facebook during the weekend

	Qualification/ education	N	Mean Rank	Sum of Ranks	Mann- Whitney U	p-value
Time spent on Facebook during the weekend	Graduate	49	74.46	3648.50		
	Undergraduate	89	66.77	5942.50		
	Total	138			1937.500	.246

From the table of mean rank and test statistic, we found that mean rank of graduate students is higher i.e. 74.46. On the other hand, the mean rank of undergraduate students is 66.77. From the results obtained from individual sample test weekend ($U=1937.500$, $p=.246$), we conclude that we cannot reject the null hypothesis.

H3: More undergraduate students login to Facebook each day than graduate students.

Table 5. Times connect to Facebook during the day by students

Qualification/ education	Times connect to Facebook during the day		Total
	More than one time	Only one time	
Graduate	34	15	49
Undergraduate	66	23	89
Total	100	38	138

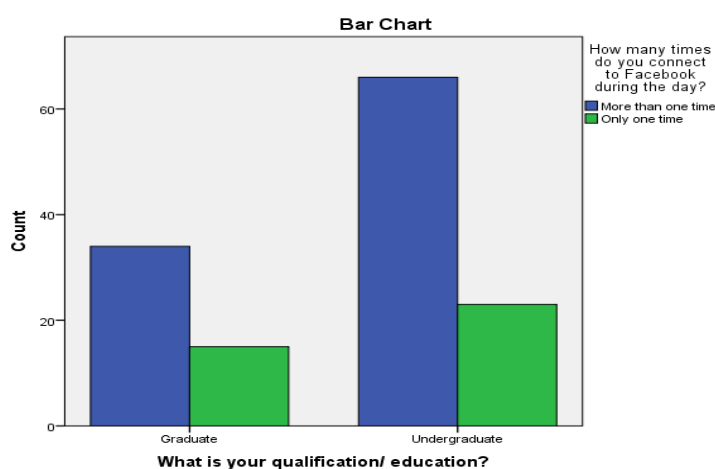


Figure 3. Times connect to Facebook during the day by students

Table and chart gives information about the qualification and how many times the students have connected to Facebook during the day. From total 49 graduates, 34 of them connect to

Facebook more than one time but only 15 graduates connect only one time. Out of 89 undergraduates majority of them that are 66 connect more than one time during the day while only 23 of them connect only one time on Facebook during the day. From this chart it is drawn that out of the sample of 138 students, most of them e.i. 100 students connect to Facebook more than one time during the day whereas only 38 students connect to Facebook only once a day.

Table 6. Ranks of students as per times connect to Facebook during the day

	Qualification/ education	N	Mean Rank	Sum of Ranks	Mann- Whitney U	p-value
Times connect to Facebook during the day	Graduate	49	71.62	3509.50		
	Undergraduate	89	68.33	6081.50		
	Total	138			2076.500	.563

From the table of mean rank and test statistic, we found that mean rank of undergraduate students is lower than graduate students. From the table given above, it can be established that graduate students connect more often to Facebook during the day ($U=2076.500$, $p=.563$). The mean rank is higher but p-value is insignificant. Therefore, we infer that we cannot reject the null hypothesis. This study shows that graduate students spend more time on Facebook than undergraduate students during weekends.

H4: Post and comment is the most favorite activity among graduate students on Facebook.

Table 7. First preference for using Facebook usually by students

Qualification/ education	First preference for using Facebook usually				Total
	Chat	Friendship	Other	Posts and comments	
Graduate	9	14	13	13	49
Undergraduate	23	10	17	39	89
Total	32	24	30	52	138

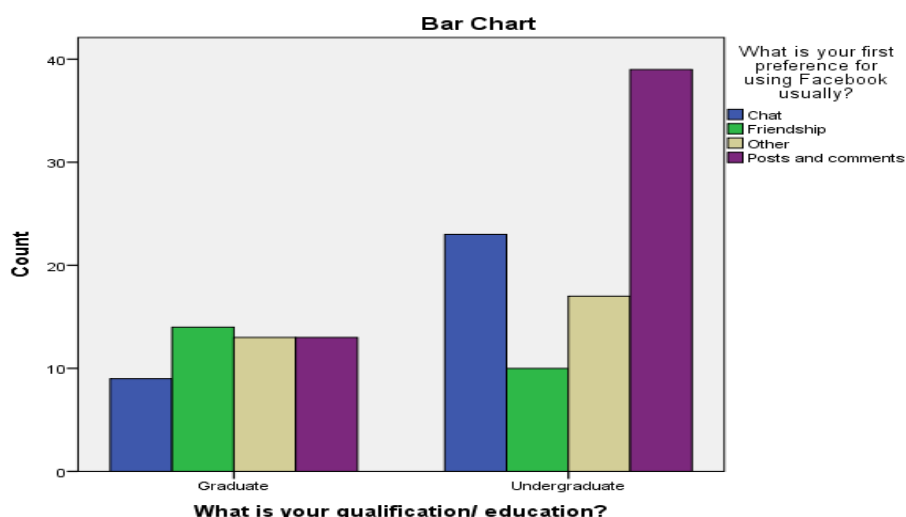


Figure 4. First preference for using Facebook usually by students

The above chart and table shows the detail about education and the first preference for using Facebook usually. From total 49 graduate students 14 students have preferred friendship, 13

have selected both other with posts and comments, and 9 have chosen chat. Out of 89 undergraduate students majority of 39 students have preferred posts and comments, 23 have selected chat, 17 have chosen other and 10 have agreed on friendship. Finally, from all 138 students majority of the students that are 52 students preferred posts and comments, 32 students selected chat, 30 students have selected other and 24 students agreed on friendship. From another perspective, graduate students prefer Facebooking for friendship. On the other hand, the preferred activity of undergraduate students for using Facebook is post and comments.

Table 8. Ranks of students First preference for using Facebook usually

	Qualification/ education	N	Mean Rank	Sum of Ranks	Mann- Whitney U	p-value
First preference for using Facebook usually	Graduate	49	64.56	3163.50		
	Undergraduate	89	72.22	6427.50		
	Total	138			1938.500	.263

From the table of mean rank and test statistic, we found that mean rank of undergraduate students is higher than graduate students. From the table given above, it can be established that undergraduate students connect more often to Facebook during the day ($U=1938.500$, $p=.263$). The mean rank is higher but p-value is insignificant. From the results obtained from above analysis, we conclude that we cannot reject the null hypothesis. This study shows that graduate students spend more time on Facebook than undergraduate students during weekends.

Table 9. Ranks of Students First preference for using Facebook usually

First preference for using Facebook usually	N	Mean Rank	Chi- Square	df	p-value
Chat	32	74.59			
Friendship	24	53.75			
Other	30	64.10			
Posts and comments	52	76.75			
Total	138		9.463	3	.023

The results of Kruskal–Wallis test mean rank for post and comments are higher than mean rank is 76.75 with a chi-square (9.463; p-value .023) than other activities preferred on Facebook. Chat is the second most preferred activity of students for using Facebook and Friendship is the last preferred activity for using Facebook by students.

H5: Graduate students are more inclined towards connecting to Facebook in the morning than undergraduate students.

Table 10. Times typically connect to Facebook

Qualification/ education	Time spent on Facebook during the weekdays			Total
	Maximum 5 minutes	Maximum one hour	more than one hour	
Graduate	4	5	40	49
Undergraduate	23	28	38	89
Total	27	33	78	138

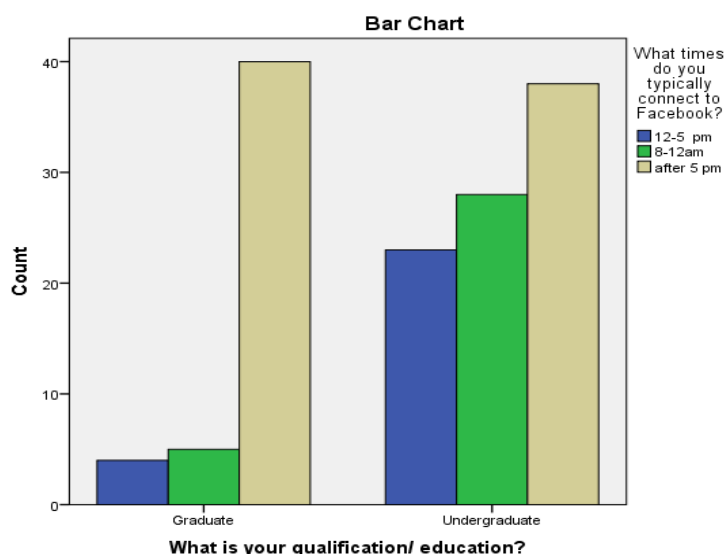


Figure 5. Times typically connect to Facebook

The above chart and table gives the information about qualification and time on which typically students connect to Facebook. From total 49 graduate students, greater number of graduates that are 40 agreed on after 5 pm to typically connect to Facebook, only 5 students have selected 8am-12 pm while the least 4 students have chosen the timing of 12-5 for using Facebook. Out of 89 undergraduate students, majority of the students (38) agreed typically on using Facebook after 5 pm, 28 students have chosen 8 am-12 pm time and 23 students have selected 12-5 pm. From the sample of 138 students, majority of the students represent those who use Facebook after 5 pm, 33 students use Facebook from 8 am-12 pm and the remaining 27 students use Facebook from 12-5 pm.

Table 11. Mann-Whitney test Ranks

	Qualification/education	N	Mean Rank	Sum of Ranks	Mann-Whitney U	p-value
Times typically connect to Facebook	Graduate	49	86.86	4256.00		
	Undergraduate	89	59.94	5335.00		
	Total	138			1330.000	.000

The results of Mann-Whitney test show that graduate students have higher mean rank 86.86 with (U=1330.000, p-value .000). The results strongly support the H#10.

Table 12. Kruskal-Wallis test Ranks

Times typically connect to Facebook	N	Mean Rank	Chi-Square	df	p-value
12-5 pm	27	81.00			
8am -12pm	31	84.47			
after 5 pm	77	56.81			
Total	135		21.926	2	.000

The results of Kruskal-Wallis test also support our hypothesis that mostly graduate students use Facebook in the morning from 8am-12pm where chi-square is 21.926 with p-value .000.

On other hand, if we look at the second preferred time when students use Facebook is 12-5pm. The least preferred time for using Facebook is after 5 pm.

H#6: Undergraduate students are more willing to pay charges for connecting the Facebook than graduate students.

Table 13. Willingness to pay a charge to login to Facebook

Qualification/ education	Willingness to pay a charge to login to Facebook			Total
	Maximum Rs.500	More than 500	No Charge	
Graduate	13	4	32	49
Undergraduate	30	13	46	89
Total	43	17	78	138

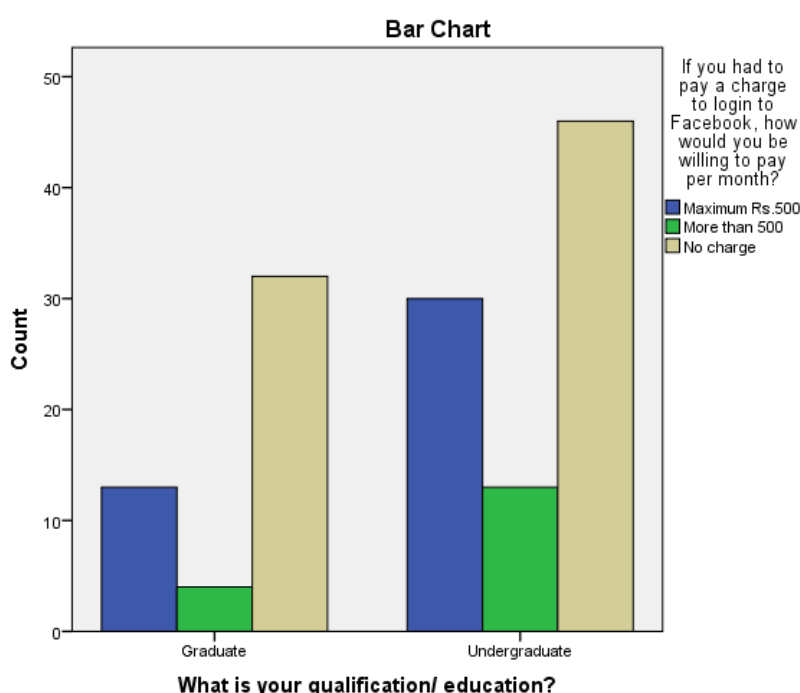


Figure 6. Willingness to pay a charge to login to Facebook

According to chart and table, it gives the detail about qualification and for logging into Facebook how much amount they are willing to pay for it. There are 49 graduates from which 32 graduates agreed on willing to pay no charge for logging on Facebook means they intend to use Facebook only when free. While 13 graduates have selected the option of paying maximum Rs 500 and only 4 graduates have chosen paying more than Rs 500. From total 89 undergraduates, 46 have chosen no charge to pay for log on to Facebook, 30 undergraduates agreed on Maximum Rs 500 and 13 have selected more than Rs 500. Out of 138 students, greater number of students agreed on no charge (showing they will be using Facebook when available for free), 43 students have selected Maximum Rs 500 and 17 students made selected to pay more than Rs500.

Table 14. Mann-Whitney Test Ranks for Willingness to pay a charge to login to Facebook

	Qualification/ education	N	Mean Rank	Sum of Ranks	Mann-Whitney U	p-value
Willingness to pay a charge to login to Facebook	Graduate	46	73.16	3365.50		
	Undergraduate	89	65.33	5814.50		
	Total	135			1809.500	.218

The results for Mann-Whitney test show that undergraduate students are less willing to pay charges for using Facebook than graduate students. The mean rank for graduate students is higher i.e. 73.16 with p-value .218 which suggest that we can retain null hypothesis.

CONCLUSION

In this paper, we studied the frequency of using Facebook during the day, during week days and the number of times students login to Facebook along with the length of time spent on using Facebook during a day. This study also examined the source of gratification for using Facebook whether it be chat, friendship, post and comments, and others. The results of this study reveal that graduate students use Facebook more often during weekdays. We can also find some evidence that it is the graduate students that use Facebook more often than undergraduates. When discussing whether graduates login to Facebook more often or undergraduates, the study found that graduates connect to Facebook more often. Among different activities to be undertaken on Facebook which help us understand the purpose of using Facebook, posts and comments are most preferred by undergraduates. This study found another important result that graduate students usually connect to Facebook in morning times i.e. 8 am- 12 pm. Female students are inclined to even pay more than Rs. 500 for using Facebook. When we look at the individual differences on the basis of qualification, graduate students are more willing to pay money for using Facebook. The study also suggests that the students who use Facebook for 5 minutes are lesser in number. The majority of students use Facebook for one hour or more in a day. From this we can conclude that there are very few students who do not use Facebook at all on weekends. A negligible number of students use Facebook for 5 minutes which indicate that students spend an hour or more on Facebook usually.

From our study, we conclude that graduate students are preferably using Facebook in the morning times (the times when classes at various universities take place). Even the purposes for which they are using Facebook is not very productive; most of their time they are making friendships, chatting, commenting and posting various things on the media. Therefore, this study concludes that students mostly use Facebook to get satisfaction through post and comments which might gratify their needs for social approval and apprehension. It might also give them the feeling of getting accepted in the society.

Policy Implications

Universities nowadays are very active on maintaining their Facebook accounts and sharing information through this media. However, there is a dire need of an analysis by these educational institutes and universities to examine how their usage affects students and what needs are fulfilled through this media. Governments and educational institutes should conduct survey researches on regular basis to find out if this media is positively affecting our youth. After research, serious steps should be taken to engage our graduates in productive ways. There is also need to examine how educational institutes can make their graduates highly efficient and employable in the market.

Limitations and Future Research

Considering the fact that nothing is perfect in the world, this study is not without certain limitations. First, we have collected the data for this research from a single university; future research might be conducted by obtaining data from a number of universities and the results can contribute to a diverse set of information. Second, future research can be conducted by adding more aspects of study life such as relevant courses, Facebook groups used for study and notes sharing purposes and extra-curricular activities i.e. their relationship with the usage of Facebook. Finally, future research may also examine the role of University and institute's page on Facebook and how does it make a university student to feel compulsory to keep in touch with your educational institute through maintaining a Facebook account.

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