

# A Survey on Facebook Consumption for Social Interaction among University Students of Lahore, Pakistan

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## ABSTRACT

**Aim of the Study:** Social media is getting significant attention by users as a means of communication and rapidly covering the Marketplace. Presently it is found that it is also being used by students too because they share their ideas, knowledge, and interact on social networking sites specifically on Facebook. Students sometimes involve their course instructors in the conversation on Facebook for social interaction as they get less time to physically interact with each other. This research aimed to analyze the link between Facebook and social interaction among university students of Lahore, Pakistan. The theoretical framework for this research was “*Uses and Gratification*”.

**Method:** The study approach was quantitative. A variable social interaction was proposed that is being affected by Facebook among university students. In this research correlation, independent sample t-test, (ANOVA) one-way analysis of variance, regression line and Cronbach alpha used for statistical analysis.

**Findings:** Study found that the social interaction is being affected by the use of Facebook within university students. There found positive correlation in the social interaction scale; there was difference by specialization in t-test, there was difference in university, hours, days, programs, CGPA and purpose patterns via ANOVA and regression indicates that academic institute, specialization and duration were the significant contributors in social interaction.

**Conclusion:** The study concluded that university students use Facebook for social interaction among their Academic Institutes and use Facebook in their home time for social interaction with their fellows, instructors and students.

**Keywords:** Social Interaction, Facebook Use, Social Networking Sites, Uses and Gratification, Academic Globe.

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## Introduction

The trend of social media is increasing in every age group of people. Social media has a vast domain of communicational interaction among individuals. The development in technology has led to social networking resources that are building relationship improving the collaboration and are facilitating the processes (Kasperski & Blau, 2023). The actual purpose of social networking sites is to connect people with the electronic modules that can bring into process a social environment activity between family, friends and people. Social media is also affecting the students of different groups. The social networking sites in academic institutions informally meet the requirements, needs and gratifications of the students. Now a days, presently the popularity of social networking sites has encouraged researchers to explore the use of the online platform such as Facebook for student engagement and participation in their busy schedule of classes for social interaction (Ngoc Hoi, 2023). Facebook demand is continuously increasing among college students. For instance, the university students are socially interacting a lot on Facebook. To see how much social interaction of university students is being affected from Facebook this research is being conducted. Facebook is a social networking site but the options it has are being used by students for their social uses too. Though it was preferable to conduct this research in universities of major cities found in Pakistan in both public and private sector universities, but because of the available resources this research only emphasizes on assessing Facebook usage for Social Interaction of university students in the city of Lahore because in the universities of Lahore the demand and usage of social networking sites are more as the results came out in pilot study and even most of university students use Facebook as a platforms that accommodate students, faculty and administration communication in educational institutions so there are three universities selected for conducting this research. These universities are selected because here the medium of communication between students, faculty and administration are social networking sites though these mediums are informal but these are being used for Social Interaction. The three universities are University of the Punjab, University of Management & Technology and Beaconhouse National University. Approximately with the population of the number of students in mass communication and political science departments according to the data provided by the campus registrar office are provided for the study. It has been told by the three institutes that this kind of research has not been conducted yet in these institutes.

## Literature Review

The students use Facebook excessively for academic activities and in a research study it is viewed that correlation is positive between social media; Facebook usage and academic activities of students (Shahzad & Bilal, 2019). Findings of a research result that students use Facebook for virtual learning with that they also engage themselves for Social ability and sense of community among each other (Yilmaz & Yilmaz, 2023). The details regarding the social interaction are mentioned in this literature that how previous researches have formed results regarding Facebook use in social interaction. Facebook is a tool for Social Interaction. Students state that social presence on Facebook has a very strong impact on usage intentions of users collectively among each other to use it in a joint way. This is a fact that to get instant communication and connection with their fellows and friends students use Facebook (Cheung, Chiu, & Lee, 2011).

The word "Social" stands for Interacting with other people and living in communities ("social. n.d.," 2011); Whereas Interaction is any kind of act on each other ("interaction. n.d.," 2011) and Social Networking Forums are applications of internet related websites comprising a medium on the basis of which users send pictures, messages, photos, and further content in online media according to their needs and requirements ("social media. n.d.," 2011).

According to this study social interaction from social media forums means excessive and priority usage apps, especially Facebook, used for chatting with friends, adding friends in University, making secret groups, sharing thoughts and ideas with instructors, sharing feelings and preferences with instructors, making pages for conversation and saving time by using Facebook.

“Uses and Gratifications” is linked to this study because it is a practical approach towards a social science study and this theory fits in this research. As mentioned in the literature chapter uses and gratification theory has been used to test the Facebook for students use.

### ***Research Objective***

As this is a very specific research that is entirely connected with one variable so it comprises of one objective and that is social interaction and it is explained below:

- To investigate whether Facebook is affecting social interaction among university students in Lahore, Pakistan or not.

### ***Research Questions***

- Research Question 1. How is Facebook significant in affecting social interaction among university students in Lahore, Pakistan?

### ***Research Hypotheses***

- $H_{(0)}$ . Facebook consumption is decreasing social interaction online among university students in Lahore, Pakistan.
- $H_{(A)}$ . Facebook consumption is increasing social interaction online among university students in Lahore, Pakistan.

### **Theoretical Framework**

The theory is selected to test some factors of Facebook use in academic activities of this study including social interaction, because these are the factors that categorically come under the requirements and needs of a student so to accurately test the study this theory is used. This theory actually provides an explanation of the link between the use of specific media and for what purpose the audience uses that specific media. After number of researches on this theory now this theory is being used for the analysis of social media sites too. “Uses and gratifications approach,” according to this research paradigm explains what people use to fill their needs and requirements of communication (Katz, Blumler, & Gurevitch, 1973). The audience just not only use traditional media according to their needs but they also use the internet and different applications according to their interests and needs (Hanjun, Chang-Hoan, & Marilyn, 2005). The relevant recent studies indicate that this use and gratification should be linked in the research where social media is being studied via proper testing of the analysis (Lineberry, 2012).

### **Method**

To investigate the significance of social interaction among the university students on Facebook, positivistic research approach is taken as a research paradigm. Uses and user is the mass media domain for this research.

### ***Research Design***

The explanatory study that determines the cause and effect relationship between various variables is the basis of this research design (George, 2023). As the theory is available to test the hypothesis that is why deductive approach is used in this research.

### ***Type of Data***

Quantitative method is used consisting of primary data via survey questionnaire that is closed-ended. As per Facebook and Social Interaction variable questions mentioned in Facebook University Scale having value was 0.762 according to Cronbach alpha that should be greater than or equal to 0.7 (Pallant, 2004).

### ***Target Population***

University Students are the unit of analysis belonging to the universities with specialization in mass communication and political sciences.

### ***Study Area and Sample Size***

The area of study is Lahore. Sample is taken from the population of students from Higher Education Commission of Pakistan recognized universities having students of mass communication and political science as these students with the specific studies association are proactive students. Responses are taken from 300 students belonging to mass communication and political science. From the website that uses formulas for sample size (<https://www.surveysystem.com/>) is used to calculate sample size. Below are the universities from which the responses are taken:

According to General Universities Ranking of Lahore by HEC Higher Education Institutions (HEIs) Ranking 2010.

University of the Punjab, Lahore is recognized by HEC as a General Large Public University ("General Universities Ranking of Lahore. n.d.," 2010).

University of Management & Technology, Lahore is recognized by HEC as a General Medium Private University ("General Universities Ranking of Lahore. n.d.," 2010).

Beaconhouse National University, Lahore is recognized by HEC as a General small Private University ("General Universities Ranking of Lahore. n.d.," 2010).

### ***Data Collection Method and Tool***

The data is collected from 50 respondents holding specialization mass communication and 50 respondents holding specialization political science from each university.

The convenience sampling is used to conduct the survey and mass communication and political science students are conveniently selected from the above-mentioned Universities. "Facebook University Scale" is adopted for paper and pencil questionnaire filling from the respondents.

### ***Data Analysis Tool***

The analytical statistical analysis will be conducted to perform the data analysis the statistical data analysis tools will be significant in providing a detailed explanation of the results regarding Facebook usage and social interaction.

### ***Limits and Delimits***

As the researcher is not perfect and has some restrictions so it is necessary to add the limit of the researcher that States because of no funding the researcher had to squeeze the study area to Lahore a city in the country Pakistan and the deliberately left limit by the researcher is known probability sampling that enable to gather your specific respondents for accuracy in the results of this research.

### ***Results, Findings and Analysis***

To evaluate the results statistical and inferential analysis are carried out to understand the data collected and the tests consist of t-test Independent Sample, correlation, ANOVA One-way, regression, that are conducted. Moreover frequencies, and averages are also mentioned for representation of the data. These are very technical statistical analysis that allow the researcher to bring accurate findings to the study for the readers and the academic representatives that are required for the proper display of the conclusion.

## Correlation

The Pearson correlation displays positive correlation in social interaction items as mentioned in Table 1. Therefore, the items of Social Interaction Tool have the accuracy in the Facebook University Scale and precision in the responses taken.

Table 1: *Show Correlation between the items of Social Interaction on Facebook*

	Chatting with friends	Making Friends	Contact with close friends.	Share thoughts and ideas	Share feelings and preferences	Facebook Page	Time Saving	Social Interaction
Chatting with friends	1							
	300							
	.347**	1						
Making Friends	.000							
	300	300						
	.283**	.446**	1					
Contact with close friends.	.000	.000						
	300	300	300					
	.196**	.410**	.333**	1				
Share thoughts and ideas	.001	.000	.000					
	300	300	300	300				
	.113	.381**	.425**	.484**	1			
Share feelings and preferences	.050	.000	.000	.000				
	300	300	300	300	300			
	.131*	.335**	.279**	.410**	.404**	1		
Facebook Page	.023	.000	.000	.000	.000			
	300	300	300	300	300	300		
	.143*	.304**	.214**	.297**	.272**	.361**	1	
Time Saving	.013	.000	.000	.000	.000	.000		
	300	300	300	300	300	300	300	
	.488**	.714**	.667**	.700**	.701**	.649**	.568**	1
Social Interaction	.000	.000	.000	.000	.000	.000	.000	
	300	300	300	300	300	300	300	300

Pearson Correlation Sig. (2-tailed) N

The above table displays a positive correlation between chatting with my friends and making friends in my university ( $r=.347$ ,  $n=300$ ,  $p=.000$ ), Chatting with my friends and contact with my close friends ( $r=.283$ ,  $n=300$ ,  $p=.000$ ), chatting with my friends and sharing thoughts and ideas with instructors ( $r=.196$ ,  $n=300$ ,  $p=.001$ ), chatting with my friends and routine conversation with my class fellows ( $r=.131$ ,  $n=300$ ,  $p=.023$ ), chatting with my friends and time saving by interacting online ( $r=.143$ ,  $n=300$ ,  $p=.013$ ), chatting with my friends and social interaction ( $r=.488$ ,  $n=300$ ,  $p=.000$ ).

The above table displays positive correlation between making friends in my university and chatting with my friends ( $r=.347$ ,  $n=300$ ,  $p=.000$ ), making friends in my university and contact with my close friends ( $r=.446$ ,  $n=300$ ,  $p=.000$ ), making friends in my university and sharing thoughts and ideas with instructors ( $r=.410$ ,  $n=300$ ,  $p=.000$ ), making friends in my university and sharing feeling and preferences with instructors ( $r=.381$ ,  $n=300$ ,  $p=.000$ ), making friends in my university and routine conversation with my class fellows ( $r=.335$ ,  $n=300$ ,  $p=.000$ ), making friends in my university and time saving by interacting online ( $r=.304$ ,  $n=300$ ,  $p=.000$ ), making friends in my university and social interaction ( $r=.714$ ,  $n=300$ ,  $p=.000$ ).

The above table displays positive correlation between contact with my close friends and chatting with my friends ( $r=.283$ ,  $n=300$ ,  $p=.000$ ), contact with my close friends and making friends in my university ( $r=.446$ ,  $n=300$ ,  $p=.000$ ), contact with my close friends and sharing thoughts and ideas with instructors

( $r=.333$ ,  $n=300$ ,  $p=.000$ ), contact with my close friends and sharing feeling and preferences with instructors ( $r=.425$ ,  $n=300$ ,  $p=.000$ ), contact with my close friends and routine conversation with my class fellows ( $r=.279$ ,  $n=300$ ,  $p=.000$ ), contact with my close friends and time saving by interacting online ( $r=.214$ ,  $n=300$ ,  $p=.000$ ), contact with my close friends and social interaction ( $r=.667$ ,  $n=300$ ,  $p=.000$ ).

The above table displays positive correlation between sharing thoughts and ideas with instructors and chatting with my friends ( $r=.196$ ,  $n=300$ ,  $p=.001$ ), sharing thoughts and ideas with instructors and making friends in my university ( $r=.410$ ,  $n=300$ ,  $p=.000$ ), sharing thoughts and ideas with instructors and contact with my close friends ( $r=.333$ ,  $n=300$ ,  $p=.000$ ), sharing thoughts and ideas with instructors and sharing feeling and preferences with instructors ( $r=.484$ ,  $n=300$ ,  $p=.000$ ), sharing thoughts and ideas with instructors and routine conversation with my class fellows ( $r=.410$ ,  $n=300$ ,  $p=.000$ ), sharing thoughts and ideas with instructors and time saving by interacting online ( $r=.297$ ,  $n=300$ ,  $p=.000$ ), sharing thoughts and ideas with instructors and social interaction ( $r=.700$ ,  $n=300$ ,  $p=.000$ ).

The above table displays positive correlation between sharing feeling and preferences with instructors and making friends in my university ( $r=.381$ ,  $n=300$ ,  $p=.000$ ), sharing feeling and preferences with instructors and contact with my close friends ( $r=.425$ ,  $n=300$ ,  $p=.000$ ), sharing feeling and preferences with instructors and sharing thoughts and ideas with instructors ( $r=.484$ ,  $n=300$ ,  $p=.000$ ), sharing feeling and preferences with instructors and routine conversation with my class fellows ( $r=.404$ ,  $n=300$ ,  $p=.000$ ), sharing feeling and preferences with instructors and time saving by interacting online ( $r=.272$ ,  $n=300$ ,  $p=.000$ ), sharing feeling and preferences with instructors and social interaction ( $r=.701$ ,  $n=300$ ,  $p=.000$ ).

The above table displays positive correlation between routine conversation with my class fellows and chatting with my friends ( $r=.131$ ,  $n=300$ ,  $p=.023$ ), routine conversation with my class fellows and making friends in my university ( $r=.355$ ,  $n=300$ ,  $p=.000$ ), routine conversation with my class fellows and contact with my close friends ( $r=.279$ ,  $n=300$ ,  $p=.000$ ), routine conversation with my class fellows and sharing thoughts and ideas with instructors ( $r=.410$ ,  $n=300$ ,  $p=.000$ ), routine conversation with my class fellows and sharing feeling and preferences with instructors ( $r=.404$ ,  $n=300$ ,  $p=.000$ ), routine conversation with my class fellows and time saving by interacting online ( $r=.361$ ,  $n=300$ ,  $p=.000$ ), routine conversation with my class fellows and social interaction ( $r=.649$ ,  $n=300$ ,  $p=.000$ ).

The above table displays positive correlation between time saving by interacting online and chatting with my friends ( $r=.143$ ,  $n=300$ ,  $p=.013$ ), time saving by interacting online and making friends in my university ( $r=.304$ ,  $n=300$ ,  $p=.000$ ), time saving by interacting online and contact with my close friends ( $r=.214$ ,  $n=300$ ,  $p=.000$ ), time saving by interacting online and sharing thoughts and ideas with instructors ( $r=.297$ ,  $n=300$ ,  $p=.000$ ), time saving by interacting online and sharing feeling and preferences with instructors ( $r=.272$ ,  $n=300$ ,  $p=.000$ ), time saving by interacting online and routine conversation with my class fellows ( $r=.361$ ,  $n=300$ ,  $p=.000$ ), time saving by interacting online and social interaction ( $r=.568$ ,  $n=300$ ,  $p=.000$ ).

## Independent Sample T Test

### *Gender difference in Variables of Social Interaction on Facebook*

The results show no significance based on gender in Facebook use for Social Interaction. Both the gender students use Facebook in the same way in the universities.

Table 2: *Show difference between the Social Interaction Variables by Gender*

Dependent Variable	Respondents Gender	N	Mean	Std. Deviation	t	df	Sig.
Social Interaction	Female	107	17.77	4.82	.80	199.74	.422
	Male	193	17.32	4.32			

According to table 2 an independent sample t-test was conducted to compare the social interaction scores for males and females. There was no significant difference in scores for males ( $M=17.32$ ,  $SD=4.32$ ) and females  $M=17.77$ ,  $SD=4.82$ ;  $t(300) = .80$ , .422 (two tailed).

### ***Specialization difference in Variables of Social Interaction on Facebook***

The results show significance in specialization of the Respondent in Facebook use for Academic Activities for Social Interaction, Content Sharing, Academic Motivation, Student Performance and Coordination (See Table 3).

Table 3: *Show difference between the Social Interaction Variables by Specialization of the Respondent*

<b>Dependent Variable</b>	<b>Specialization of the Respondent</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>t</b>	<b>df</b>	<b>Sig.</b>
Social Interaction	Mass Communication	150	18.35	4.57	3.43	298	.001
	Political Science	150	16.60	4.27			

According to table 3 an independent sample t-test was conducted to compare the social interaction scores for students having specialization Mass Communication and Political Science. There was a significant difference in scores for Mass Communication (M=18.35, SD=4.57) and Political Science M=16.60, SD=4.27;  $t(300) = 3.43$ , .001 (two tailed). Despite reaching statistical significance, effect size was calculated using eta squared, and was nominal (eta squared=0.04).

### ***Residence difference in Variables of Social Interaction on Facebook***

The results indicate there is difference in residence of the respondent in Facebook use for Social Interaction (See Table 4).

Table 4: *Show difference between the Social Interaction Variables by Residence of the Respondent*

<b>Dependent Variable</b>	<b>Residence of the Respondent</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>t</b>	<b>df</b>	<b>Sig.</b>
Social Interaction	Home	191	16.95	4.61	-2.70	298	.007
	Hostel	109	18.39	4.17			

According to table 4 an independent sample t-test was conducted to compare the social interaction scores for Home and Hostel. There was no significant difference in scores for Home (M=16.95, SD=4.61) and Hostel M=18.39, SD=4.17;  $t(300) = -2.70$ , .007 (two tailed). Despite reaching statistical significance, effect size was calculated using eta squared, and was nominal (eta squared=0.02).

### **One-way ANOVA**

#### ***Academic Institute difference in Variables of Social Interaction on Facebook***

There was a statistically significant difference in Social Interaction among universities for using Facebook. It was seen that the three universities showed different results; not a single variable showed similarity in the universities from where the responses were taken (see table 5).

Table 5: *Show difference between the Social Interaction Variables by Academic Institute of the Respondent*

Dependent Variable	Academic Institute of the Respondent	N	Mean	Std. Deviation	df	F	Sig.
Social Interaction	University of the Punjab	100	17.1400	4.15123	2	8.196	.000
	University of Management and Technology	100	16.4200	4.87662			
	Beaconhouse National University	100	18.8700	4.12593	299		
	Total	300	17.4767	4.50300			

The one way within the groups were conducted to explore the social interaction differences between the academic institutions. The variable was divided into three groups Group 1; University of the Punjab, Group 2; University of Management and Technology and Group 3; Beaconhouse National University. There was a statistically significant difference at  $p < .05$  level in social interaction scores in three groups: F

(2, 299) = 8.196,  $p=0.0$ . Despite reaching statistical significance, effect size calculated using eta squared was nominal (eta squared=0.05).

### ***Study Class difference within Variables; Social Interaction on Facebook***

There were no statistically significant differences in Social Interaction, Content Sharing, Academic Motivation, Student Performance and Coordination among Class of the Respondent for using Facebook for Social Interaction (see table 6).

Table 6: Show difference between the Social Interaction Variables by Class of the Respondent

Dependent Variable	Study Class	N	Mean	Std. Deviation	df	F	Sig.
Social Interaction	Graduation	172	17.19	4.793	3	1.154	.328
	Master	84	17.51	4.218			
	MS / M.Phil.	31	18.32	4.086			
	Ph.D.	13	19.08	2.691	299		
	Total	300	17.48	4.503			

Table 6 shows one way between groups were conducted to explore the social interaction differences between the classes. The variable was divided into four groups, Group 1; Graduation, Group 2; Master, Group 3; MS / MPhil and Group 4; Ph.D. There was no statistically significant difference at  $p>.05$  level in social interaction scores in four groups:  $F(3, 299) = 1.154$ ,  $p=.328$ .

### ***Study Program difference in Variables of Social Interaction on Facebook***

The results display differences in Social Interaction among Study Program of the Respondents for using Facebook for Social Interaction. It is seen in this research that the way of using Facebook for Social Interaction is different in different study programs (see table 7).

Table 7: Show difference between the Social Interaction Variables by Study Program of the Respondents

Dependent Variable	Study Program	N	Mean	Std. Deviation	df	F	Sig.
Social Interaction	Week days morning	151	16.53	4.745	3	5.852	.001
	Week days evening	91	18.08	3.953			
	Weekends	41	19.51	3.912			
	Home based	17	17.76	4.521	299		
	Total	300	17.48	4.503			

Table 7 shows one way between groups was conducted to explore the social interaction differences between the study programs. The variable was divided into four groups, Group 1; Week days morning, Group 2; Week days evening, Group 3; Weekends and Group 4; Home based. There was a statistically significant difference at  $p<.05$  level in social interaction scores in three groups:  $F(3, 299) = 5.852$ ,  $p=0.01$ . Despite reaching statistical significance, effect size calculated using eta squared was nominal (eta squared=0.06).

### ***CGPA difference in Variables of Social Interaction on Facebook***

There were no statistically significant differences in Content Sharing, Academic Motivation, Student Performance among CGPA of the Respondent for using Facebook for Academic Activities (see table 8).

But there were statistically significant differences in Social Interaction and Coordination among CGPA of the Respondent for using Facebook for Social Interaction (see table 8).

Table 8: *Show difference between the Social Interaction Variables by CGPA of the Respondent*

Dependent Variable	CGPA of the Respondent	N	Mean	SD	df	F	Sig.
Social Interaction	New Admission	23	15.2174	4.44109	4	2.866	.024
	1 or above	40	19.0000	3.64445			
	2 or above	88	17.5795	4.06759			
	3 or above	142	17.4225	4.81476			
	4	7	16.0000	5.41603	299		
	Total	300	17.4767	4.50300			

Table 8 displays that one way between groups was conducted to explore the social interaction differences between the Cumulative Grade Point Average of the Respondents. The variable was divided into five groups Group 1; New Admission, Group 2; 1 or above CGPA, Group 3; 2 or above CGPA, Group 4; 3 or above CGPA and Group 5; 4 CGPA. There was a statistically significant difference at  $p < .05$  level in social interaction scores in five groups:  $F(4, 299) = 2.866$ ,  $p = 0.24$ . Despite reaching statistical significance, effect size calculated using eta squared was nominal ( $\eta^2 = 0.03$ ).

#### ***Facebook Usage; Days difference in Variables of Social Interaction on Facebook***

There was no statistically significant difference in Social Interaction and Academic Motivation among Facebook Usage in Days for using Facebook for Social Interaction. Some of the variables do not have differences in their use according to routine of the respondents (see table 9).

Table 9: *Show difference between the Social Interaction Variables by Facebook Usage in Days*

Dependent Variable	Facebook Usage in Days	N	Mean	Std. Deviation	df	F	Sig.
Social Interaction	Daily	189	17.5556	4.54684	3	.917	.433
	Weekly	70	17.6571	4.02847			
	Bi-weekly	23	17.6087	4.67818			
	Monthly	18	15.7778	5.52593			
	Total	300	17.4767	4.50300	299		

Table 9: shows a one way between groups were conducted to explore the social interaction differences between Facebook Usage in Days. The variable was divided into four groups Group 1; Daily, Group 2; Weekly, Group 3; Bi-weekly and Group 4; Monthly. There was no statistically significant difference at  $p > .05$  level in social interaction scores in four groups:  $F(3, 299) = .917$ ,  $p = 0.433$ .

#### ***Facebook Usage in hours difference in Variables of Social Interaction on Facebook***

There was a statistically significant difference in Social Interaction, Content Sharing, Academic Motivation, Student Performance and Coordination among Facebook Usage in hours for using Facebook for Social Interaction (see table 10).

Table 10: *Show difference between the Social Interaction Variables by Facebook Usage in hours*

Dependent Variable	Hours of Facebook Usage	N	Mean	Std. Deviation	df	F	Sig.
Social Interaction	Less than one hour	81	15.6296	4.60555	3	12.014	.000
	One hour	82	17.0854	4.07704			
	Two hours	72	19.7222	4.06712			

More than two hours	65	17.7846	4.30658	299
Total	300	17.4767	4.50300	

Table 10 shows a one way between groups were conducted to explore the Social Interaction differences between Facebook usage in hours. The variable was divided into four groups Group 1; Less than one hour, Group 2; One hour, Group 3;Two hours and Group 4; More than two hours. There was a statistically significant difference at  $p < .05$  level in Coordination scores in four groups:  $F(3, 299) = 12.014$ ,  $p = 0.0$ . Despite reaching statistical significance, effect size was calculated using eta squared as medium (eta squared=0.10).

### ***Accessing Facebook in days difference in Variables of Social Interaction on Facebook***

There were statistically significant differences in Social Interaction, Content Sharing, Academic Motivation, Student Performance and Coordination among Accessing Facebook in days for using Facebook for Social Interaction (see table 11).

Table 11: *Show difference between the Social Interaction Variables by Accessing Facebook in days*

Dependent Variable	Accessing Facebook	N	Mean	Std. Deviation	df	F	Sig.
Social Interaction	Once	47	14.6596	4.24918	3	11.420	.000
	2 to 5 times	95	17.1789	4.07895			
	6 to 10 times	94	19.0957	4.25547			
	Even more than that	64	17.6094	4.63807	299		
	Total	300	17.4767	4.50300			

Table 11 shows a one way between groups were conducted to explore the Social Interaction differences between Accessing Facebook in a Day. The variable was divided into four groups Group 1; Once, Group 2; 2 to 5 times, Group 3;6 to 10 times and Group 4; Even more than that. There was a statistically significant difference at  $p < .05$  level in Social Interaction scores in four groups:  $F(3, 299) = 11.420$ ,  $p = 0.0$ . Despite reaching statistical significance, effect size was calculated using eta squared as medium (eta squared=0.10).

### ***Purpose of Using Facebook difference in Variables of Social Interaction***

There was no statistically significant difference in Student Performance among Accessing Facebook in days for using Facebook for Social Interaction. As most individuals access Facebook, it does not show a difference in student performance no matter how many times they access Facebook (see table 12).

But there were statistically significant differences in Social Interaction, Content Sharing, Academic Motivation and Coordination among Accessing Facebook in days for using Facebook for Social Interaction. Those who access Facebook have differences in social, content and academic intentions and these results are based on those differences because it is an actual fact that the amount of sharing, interaction and motivation cannot be the same (see table 12).

Table 12: *Show difference between the Social Interaction Variables by Purpose of Using Facebook*

Dependent Variable	Purpose of Using Facebook	N	Mean	Std. Deviation	df	F	Sig.
Social Interaction	Academic	112	18.5625	4.59491	4	2.820	.025
	Co-curricular	49	16.5306	3.57714			
	Administrative	52	17.0192	4.36784			
	Social	63	17.0476	4.88060	299		
	Others	24	16.4583	4.33368			
	Total	300	17.4767	4.50300			

Table 12 shows one way between groups were conducted to explore the Social Interaction differences between Purpose of Using Facebook. The variable was divided into five groups Group 1; Academic, Group 2; Co-curricular, Group 3; Administrative, Group 4; Social and Group 5; Others. There was a statistically significant difference at  $p < .05$  level in Social Interaction scores in five groups:  $F(4, 299) = 2.820$ ,  $p = 0.025$ . Despite reaching statistical significance, effect size calculated using eta squared was nominal ( $\eta^2 = 0.04$ ).

## Regression

### Social Interaction Variation

Table 13: Shows variation on Social Interaction by Demographics and Facebook Use

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.459 <sup>a</sup>	.211	.169	4.10427	.211	5.061	15	284	.000

a. Predictors: (Constant), How often do you use Facebook for university related activities?, Academic Institute of the Respondent, Gender of the Respondent, Specialization of the Respondent, Your university website is user friendly or not?, How often do you use Facebook?, Residence of the Respondent, How often do you visit your university website?, Study Class of the Respondent, What is your duration of using Facebook daily? , Cumulative Grade Point Average of the Respondent, Area to Belong of the Respondent, Study Program of the Respondent, Which of the below do you prefer to visit online?, How many times do you access Facebook daily?

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error				Zero-order	Partial	Part	Tolerance	VIF
(Constant)	11.303	2.194		5.152	.000					
Academic Institute	1.003	.315	.182	3.183	.002	.157	.186	.168	.849	1.178
Specialization	-1.565	.511	-.174	-3.064	.002	-.195	-.179	-.162	.861	1.162
Area to Belong	-.040	.287	-.008	-.138	.891	.022	-.008	-.007	.801	1.248
Residence	.626	.544	.067	1.151	.251	.154	.068	.061	.821	1.218
Gender	-.476	.503	-.051	-.945	.345	-.048	-.056	-.050	.966	1.035
Study Class	-.031	.317	-.006	-.098	.922	.104	-.006	-.005	.794	1.259
Study Program	.521	.301	.104	1.733	.084	.196	.102	.091	.774	1.293
Cumulative Grade Point Average	-.400	.268	-.087	-1.490	.137	.011	-.088	-.079	.819	1.221
Visit university website	.181	.113	.090	1.599	.111	.098	.094	.084	.877	1.141
University website user friendly or not	.602	.523	.067	1.150	.251	.148	.068	.061	.825	1.212
Prefer to visit online	.834	.560	.091	1.489	.138	.189	.088	.078	.750	1.333
Facebook use	.179	.302	.035	.594	.553	-.062	.035	.031	.813	1.230

Duration of Facebook	.586	.263	.144	2.223	.027	.236	.131	.117	.666	1.501
Access Facebook daily	.510	.296	.113	1.725	.086	.226	.102	.091	.653	1.531
Facebook for university activities	.186	.121	.093	1.537	.125	.258	.091	.081	.755	1.325

a. Dependent Variable: Social Interaction

Table 13 regression: reports that a hierarchical multiple regression was used to assess the ability of demographics and uses and gratifications of Facebook to predict levels of Social interaction of Facebook Using Patterns.

Demographics (Academic Institute, Specialization, Area, Residence, Gender, Class, Program CGPA), Uses and Gratification of Facebook (Access University Website, University Web appearance, online preference, Facebook Use, Duration, Time, University Activities) were entered in the model, explaining 21.1% of the variance in social interaction, Academic Institute, Specialization and Duration were the significant contributors (beta=.182, beta= -.174 and beta=.144 respectively).

## Discussion

Facebook is a very popular social networking medium for communication that promotes social interaction personally, professionally and academically among people. From Facebook it becomes easy for students to have activities among each other and in this context Facebook is a very helpful source for communication among students within the universities that allows the students to do activities with each other (Alwreikat, 2023). The same findings came out from this research that the university students are very actively using Facebook by involving themselves in activities that are enhancing their academic motivation and also increasing their performances. This is research evidence but it is possible that in other situations, institutions and scenarios the students might not be utilizing Facebook for academic purposes but this research can be taken as a base for further study. This research results can enable the policy maker of academic institutions to induct Facebook in the traditional academic learning patterns in a way that the students interact socially in a mannered way that will enhance their ability to interact with others and practice knowledgeable conversation among the student which is very necessary for them that will allow them to use their time in a valuable manner. However a function can be added to the students accounts from the university side that will allow the university administration to monitor the accounts of the students and will enable them to restrict those students who will distract other students attention towards and unknowledgeable actions that will help the students community to maintain a good and healthy social environment on Facebook. By these types of research people can get awareness on how to use Facebook instead of wasting time by chatting or sharing irrelevant content with friends or users on social media. By awareness these students can be utilizing their time properly for studies.

## Conclusion

The first objective of this research is to find whether there is any influence of Facebook or not on social interaction. RQ1 is aligned to see the significance of Facebook that is affecting social interaction among university students. The hypothesis that is formed is that Facebook consumption is increasing social interaction online among university students. The alternative hypothesis is accepted and the null hypothesis is rejected. Facebook is a social networking site and its basic use is social for university students in Lahore, Pakistan are increasing the use of Facebook for the same purpose. Furthermore, what are the differences in variables that are influenced by demographics and Facebook consumption are mentioned below to clarify the research questions in detail; there was no significant difference in Variables of Social Interaction by gender. There was a significant difference in Variables of Social Interaction by Specialization. There was a significant difference only in Social Interaction by Residence. There was a significant difference in Variables of Social Interaction by Academic Institute. There was no

significant difference in Variables of Social Interaction by Study Class. There was a significant difference in Variables of Social Interaction by Study Program. There was a significant difference only in Social Interaction by CGPA. There was a significant difference in Variables of Social Interaction by Facebook consumption. Further, present trends in the world show that this world is turning into an Academic Globe. This is the concept of the researcher driven out by the researcher himself after having the results carried. That defines a student in any part of the world who can become educated by having education from any other part of the world.

### **Recommendations and Suggestions**

The researcher recommend to further those researchers who want to continue studying the uses of Facebook among university students for social interaction again; they can investigate that either in their location, situation or circumstances is the same model workable or not if not workable they can conclude accordingly and even they can investigate or explore other response variables that are maybe being affected by the Facebook use that were found extraneous variables in this research.

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Authors have no conflict of interest.


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