

QUALITY OPTIMIZATION OF THE FACEBOOK IN ACCESS IMPACTS OF THE ACADEMIC PERFORMANCE ON THE UNIVERSITY STUDENTS

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Abstract: The most common social media platform is Facebook social network. Apart from IT experts and professionals, social media is used by the people from every walk of life. When it comes to the users of social media, students are not an exception. Using social media is one of the main online activity of students, since it is easier for them to formulate a group and share study material and assignments with each other. Students are busy in the peers in educational institutes for the enhancement of the skills of learning for improving the learning experience. However, the academic performance of university students may suffer due to excessive use of social media. This study will investigate the impact of social media usage on the academic performance of university students. In this case, has potential to distract young learners around academics and to develop a distraction to undergraduate students at university. The current study requires the data to be taken from the original subjects in the method of quantitative type. To accomplish this research, a comprehensive questionnaire is going to be developed and subjective tests are going to be performed to collect user data. Finally, results are collected and analyzed using statistical packages.

Keywords: Social Media Platform, Facebook Social Network, Impacts Educational Institutes

I. INTRODUCTION

Excessive use of social media has been observed in our country for last many years. The most common social media platform is Facebook social network. Apart from IT experts and professionals, social media is used by the people from every walk of life. When it comes to the users of social media, students are not an exception. Using social media is one of the main online activity of students, since it is easier for them to formulate a group and share study material and assignments with each other. Students are busy in the peers in educational institutes for the enhancement of the skills of learning for improving the learning experience. However, the academic performance of university students may suffer due to excessive use of social media. This study will investigate the impact of social media usage on the academic performance of university students. In this case, has potential to distract young learners in the area of academics and to develop a distraction to undergraduate students at university. The current study requires the data to be taken from the original subjects in the method of quantitative type. To accomplish this research, a comprehensive questionnaire is going to be developed and subjective tests are going to be performed to collect user data. Finally, results are collected and analyzed using statistical packages. This thesis defines a study to determine ‘Facebook’ as a social network which provides a base for developing relationship between different group of students and technologies in use in an academic area. Essentially, it is important to study whether “The influence Facebook on the performance of academic side” is significant among the students at University. This section provides an introduction and background of Community networking. Facebook has an important part in the among the routine of the students who are in university, it is able to create a key concept and maintain a meaningful part in the sector of education.

A. Social Media: Social media plays a significant part in interconnected network for connecting the people internationally through web services. It has been very useful part of our daily social life. On order to share the information, connect people and much more. The social media is used for several purposes such as Marketing, Education and so on. One of the most important applications of social media commonly used is Facebook. The electric technology has been emerged very fast since last two decades. The internet-based technology has interconnected the people through email as well as social media. Furthermore, the social media is expected to solve the problems related to academics by using online events such as delivery of the courses remotely courses that enhance the learning opportunities of the students. the learning responsibility of the students, higher grade expectations of students in the examinations, the Social media has several advantages as well as threats concerned with its usage. Social media increased the learning

as well as teaching methodologies. The social media facilitates the teachers as well as students to exchange and produce the activity of learning like syllabus material, notes, reports, assignments, tests and much more by utilizing the social media for resolving the problems in the education.

B. Social Networks: The Social networks provide the services created on the web. Several applications have been created. Social network is based on the web. Several web applications are made of exchanging the ideas among the internal and external communities for building the specialized links. The frequent use of social network for creating the relationship with the people to exchange the ideas. There are many interactive groups of peoples who uses social network for the common interest of any organization. The term network is concerned with mode of communication through the persons who can communicate easily on social sites for discussing asking with each other. When the people are creating the relationships with each other. As a social network part, the creation of profile must be needed.

C. Social Networks in Education: The social media like Facebook is very popular and widely used in the community specifically in education field where the age of every gender is available for creating the relationships with each other. Every time, the student of every age takes part in the social network. The educational information is exchanged among the thousands of students that interact with each other for the common interests. It is not employed for that purpose, but it is commonly utilized for the purpose of documentation. Social network is familiar mode of information and to educate the students. The social network is a reliable source for learning latest ideas for sharing around the society. The performance of academics is one of the important roles of student that is commonly worked over the several years. There is no doubt that the recent usage of the social network has been impacted the academic performance with the help of advanced technology. The adoption of electronic technology in several aspect has been increased for re-furnishing the environment as well as integrating the effective process of learning like users of library, faculty users as well as admin users. The social networks are very essential technology as an online tool. The Facebook is one of the emerging and popular social networks since last decade. The Facebook impacts the different activities of the students.

D. Problem Statement and Objectives: The current study is the identify the usage and impact of the social site in the university students. It is necessary to analyze Facebook as a social site for student's perspective. The Facebook has been emerged since year 2004 till today. The Facebook played very significant role in the life of every individual, but it has also suffered the education of the students. The Facebook is very common among the university students. It is considered as a main activity of students. The University Students use to browse Facebook while the timing of study and the course work is badly suffered. It looks that the students are giving more priority to social sites more than their studies. The concentration is a major element for the successful student. While social site reduces the concentration of students from studies. The motive of the current study is to explore the pros and cons of social media in the sense of university student's concentration. The results of this research will contribute to the awareness among the students, teachers, universities and individuals about the appropriate usage of Facebook.

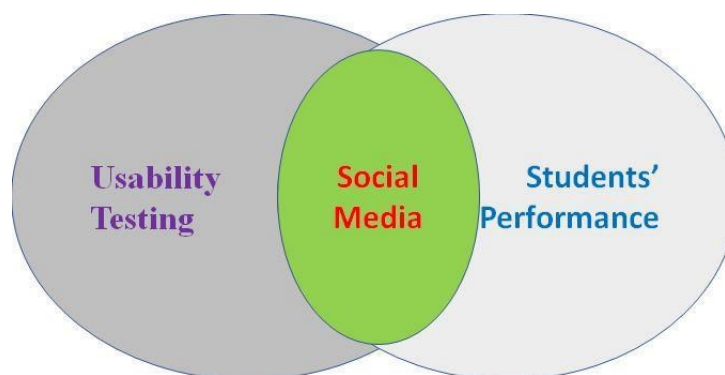


Fig 1: Usability of social media on the performance of students

The figure 1 shows the relationship between the usability of social media in the context of the academic performance of students.

II. RESEARCH STRUCTURE

The Internet was introduced of ARPANET in 1967. The Internet has been very common around the globe due the introduction of world wide web. The user of the internet has been dramatically increased since 1990s to date. The internet provides many services such world wide web, instant message, electronic mail, social networking and much more. Today, the major usage of Facebook is to communicate with each other. The people share information quiet easily as compared to manual communication. It is one of the sources of information for communication. Teachers commonly use the social sites as well students for different purposes such as learning purpose, interacting with each other for social friendship and so on. In the field of education, the technology has changed ways of doing the things. The Technology provides the students to learn effectively, and it enables the teachers to teach effectively the rapid growth of information and communication technology has changed the social life of every individual.

A. History and Development of Facebook: The Facebook was introduced by Mark Zuckerberg. It was introduced at Harvard University during the February 2004. The Facebook was openly allowed to use by anyone in 2006. Many people joined social network site Facebook for sharing information and communication with each other. The Facebook allows the people to connect with each other, create the relationship, to show their information to other. It allows the people to share the images, videos, posts, to comment on someone's posts, to like someone post, to play games, to create the groups for different purposes and much more. The researchers contributed a lot to explore the impacts of the social network sites on an individual as well the university level students. The authors [1] proposed that the modern technologies won't to provide the facilities to CMC embrace debates between the user of internet., the correspondence of email as well as online database. However, as technological emerge, therefore, to do new varieties of CMC. The latest audio-visual aid technologies to supply much more functionalities than simply using text-based tools. Authors [2] proposed that social network sites were distinctive type of information sharing as an outcome of they formed associations between individuals and supported the common backgrounds as well as same interests. The unknowns who explored same look and thoughts became connected and type of relationships that may preferably be engaged. [3]–[5] found that social networks have started to get popularity much more among users due to availability of internet. Before 2000, different social networking

sites were created for finding the friends. The commonly used services were Friendster. Its motive was to connect the friends and to connect the friend of friend with each other. It enabled the user to search the people and have relationship between them. The quantity of social networking sites has been dramatically increased since last 15 years. However, these social sites impacted the capabilities of students. Authors [6] surveyed on and Facebook and academic performance in Nigeria University. According to them we 2.0 is a latest tool for enhancing the user's communication channels that enables to discover different clusters of the data to refine new information. Authors [7] found that the information and communication technology has been widely used in the field education by using web 2.0 services. According to the authors. The teachers as well as the students are taking part in the collaborative thinking skills.

Authors in [8] found that the excessive usage of social network sites on of dangerous for the young generation today. Though social networking sites has been created for the battement of genal public but most of the students are spending their time on Social site that results in very negative. The authors in [9]–[11] conducted research on social media. According to the authors, the social network sites has adopted to address the online activity challenges that engaged the students' body. Authors in [12]–[14] proposed that the Facebook facilitates the teachers as well as students to publish their several learning activities like the material of class, assignments, syllabus, notes. According to the authors, the social network sites opened the new doors of learning and encouraged the students to learn collaboratively. The social website such as twitter, Facebook and Myspace and so on are mostly used for two basic purposes such as entertainment and communication. Due to this reason, there is no healthy environment for the children and ultimately children suffer from several problems. Furthermore, the children are switching to the restricted content.

III. METHODOLOGY

A. Research Design

This research is totally based on quantities research. Moreover, this research is a no excremental and theoretical in nature. This research based on a survey for finding the relationship between dependent as well as independent variables. The survey has been conducted on the students of two big Universities of Sindh Province i-e University of Sindh. In order to validate the findings, the secondary data has been gathered from renowned Journals, Research Articles as we as from different textbooks. The quantitative collection of data has been taken from huge samples using the methodology based in survey. This research may be known as research of field as the investigator is collecting the data from the actual subjects in a quantitative method. The data in this research has been collected and converted in the numerical for of the data, therefore the research can be able to identify the statistical relationship between different factors.

B. Population and Sample Design

The number of populations is based on 800 students from Sindh and 700 Students from University of Sindh Jams-horo. For getting the size of population, strata have been used from a book. The sample is shown through a sample of students enrolled in the universities. The following mathematical equation is used through which makes this study easier for finding the accurate number of questioner distribution.

$$Formula\ of\ Sample\ size\ (n) = \frac{students\ enrolled\ in\ each\ university}{sum\ of\ all\ enrolled\ in\ universites\ (N)} \times 375$$

Table No. 02: Sample size Distribution.

Name of University	Sample Size
Sindh Agriculture University Tandojam	700
University of Sindh Jamshoro	800
Total	1500

C. Research Questionnaire: The questionnaire of the research has been created is basically based on the literature as well as current survey and previous studies. The questions are designed by Likert scale (5 scales), interval decisions and questions based on yes or no questions. For validate the findings, the distribution of the Questionnaire has been divided in four different concerned to the information of the variable.

D. Data Analysis: The data has been kept in the spreadsheet of MS Excel initially with the help of SPSS. Furthermore, the SPSS was implemented for performing the analysis of data in the survey. The Descriptive data as well as inferential data has been implemented for determining the results. The questions of the research have been tested by using Pearson correlation coefficient. Variables are statistically tested to determine positive or negative correlation exists between the variables or not.

E. Results: Based on the methodology a comprehensive set of data has been collected. A careful consideration has been given to the way data has been collected. Especially, focus was kept on quality rather than quantity of the data. A few of data sets of subjects have been removed which were incomplete and or subjective responses were un unclear. We thought of removing that data sets which were creating ambiguity for the readers. Additionally, complementary things/gifts were also distributed among all the subjects who participated in this research work. Articles which were distributed among all subjects included ball point pens, ink pens, year calendars, book stickers, chocolates, tin pack cold drinks, small size books/diaries etc. Furthermore, results have been carefully evaluated and statistically analyzed

before presenting them in this thesis work. Some careful considerations have been kept while developing graphs and every detail has be double checked before incorporating them into this research thesis work.

Next chapter contains detailed result along with the possible explanations as required to interpret the data properly.

IV. RESULTS AND DISCUSSIONS

This section presents results, under different subheads which are self-explanatory.

A. Descriptive statistics and analysis of research questions

Presentation of demographic data analysis of research questions:

This presentation shows the Distribution of sample N=1500 respondents from the selected Universities. It is important to convey that out of 1000 students/subjects from Sindh University Jamshoro 800 subjects participated in this research study. Furthermore, out of 1000 students from Sindh only 700 Students participated. Following table presents the consolidated results.

Table No. 3 Presentation of Demographic Characteristics.

Demographic Characteristics	Sample Size	Result In Percentage
Male	N = 1500	73.33%
Female	400	26.67%
Age Group		
Less than or equal to 18 Years Old	980	65.33%
19-21 years	119	7.93%
22-24years	96	6.4%
25 years or above	305	20.33%
Undergraduate Level		
Class	Sample Size N =1500	%
First Year	800	53.3%
Second Year	400	26.6%
Third Year	200	13.3%
Fourth Year	100	6.6%
GPA-wise Participants		
1.5 - 2.0 CGPA	101	6.73%
2.1 -2.5 CGPA	478	31.86%
2.6 - 3.0 CGPA	456	30.4
3.1 - 3.5 CGPA	435	29
3.6 - 4.0 CGPA	30	1.4

B. Facebook users in universities



Fig 2 Facebook User

According to survey results, nearly 92% of students are using Facebook. Whereas 8% of students have no Facebook accounts due to unavailability of the Internet and personal computer.

C. Multiple Facebook account holder user:

According to university survey results, many students have more than one Facebook accounts. During the initial survey it was found out that there any instances where one person was using multiple Facebook accounts. Therefore, it was thought to encompass this detail with the questionnaire.

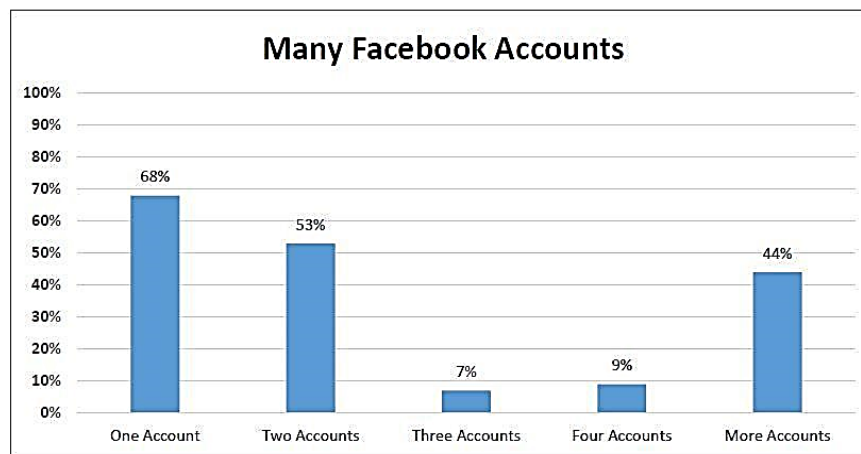


Fig 3: Multiple Facebook Account

D. Facebook affects study timing

Academic performance is independent variable of this study. As per literature survey, Facebook affects study timings. Additionally, relevant result shows that (68%) of the students shown a positive response. According to them, the Facebook is affecting the study timing. On the other hand (32%) of respondents showed negative responses which clearly shows that there is no any significant impact of use of Facebook on their study timings.

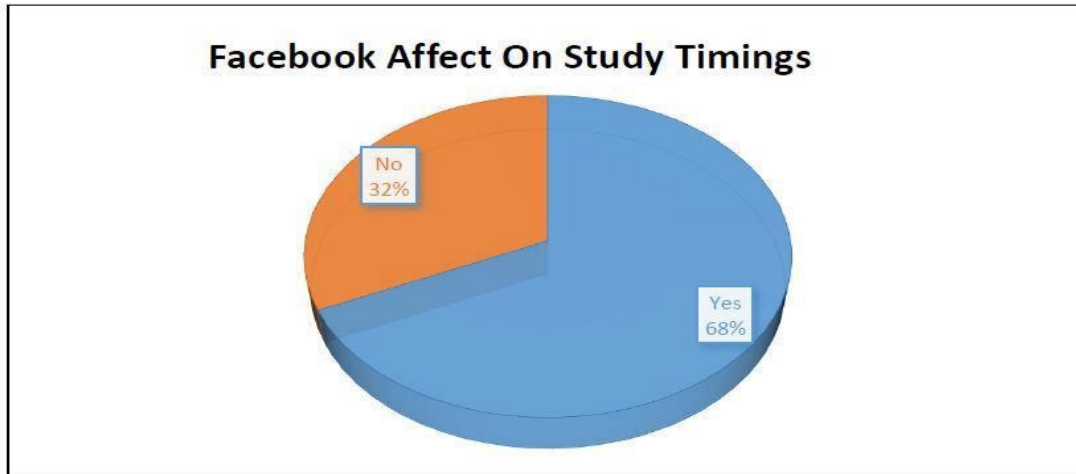


Fig 4: Facebook affects study Timing

As per results obtained through questionnaire, 64% of students communicate with teachers on Facebook for their academic purpose. On the other hand, 36% of respondents communicated that they do not contact their teachers through Facebook.

There is a question in the survey form that whether Facebook is useful for enhancing the academic performance of students. As per results obtained, nearly 58% students responded that Facebook is not useful for the performance of students while 42% students responded that Facebook is useful for the uplifting the performance of students.

The results were collected on the basis of daily usage. Here are some interesting results. According to collected results, 12% of the students are using Facebook less than one hour while 16% of the students reported that they are using Facebook between 1 to 3 hours in a day. (10%) of respondents declared that they use Facebook 3 to 6 hours per day, (7%) of students are using Facebook 6 to 14 hours per day, moreover, (51%) of students declared that using Facebook 14 + hours per day and (9%) do not use Facebook in a day. The details results are presented in the following graph.

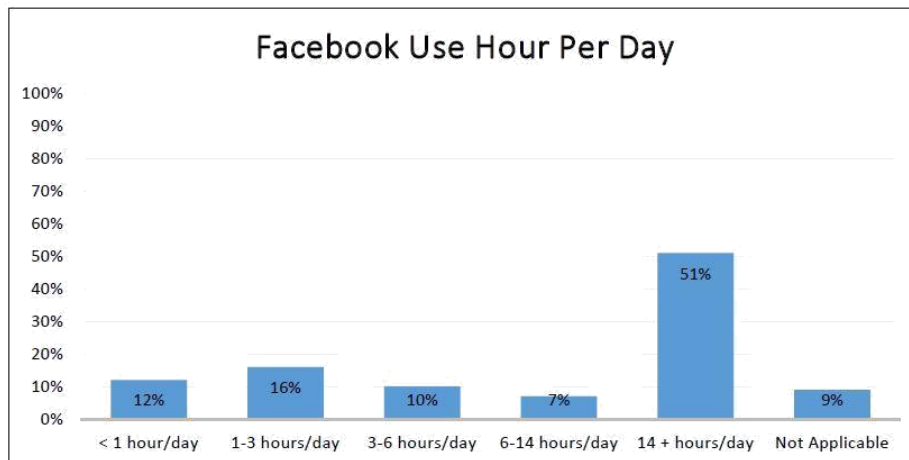


Fig 5: Facebook usage Hours Per day

The usage of computer or mobile maybe harmful for the eyes, it may create headache or some other health issues. In order to find the effects of Facebook on the health of university students, a question related to the health of students was included in the questioner. According the 71% of students, the Facebook does not affect on the health while 29% students agreed that Facebook affects the health of user.

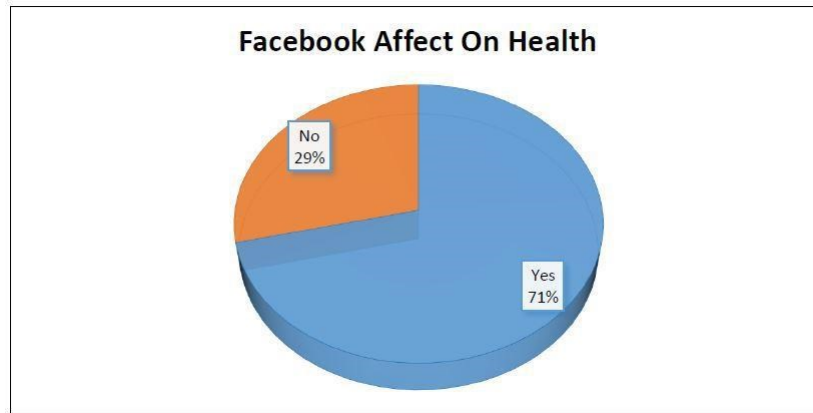


Fig 6: Effects of Facebook on health

It is important to find out how Facebook affects health. It was noted that some health issues maybe faced by the students in the case of using Facebook in access. According to the collected results from university students, (47%) of students reported that their eyesight is suffered due to excessive usage of Facebook. While (13%) of students reported that Headache issue is common while using Facebook, (10%) of respondents has Stress, (2%) students are facing depression issues and (28%) of students have sleeping disorder due to excessive usage of Facebook. The result is shown in the form of graph as below.

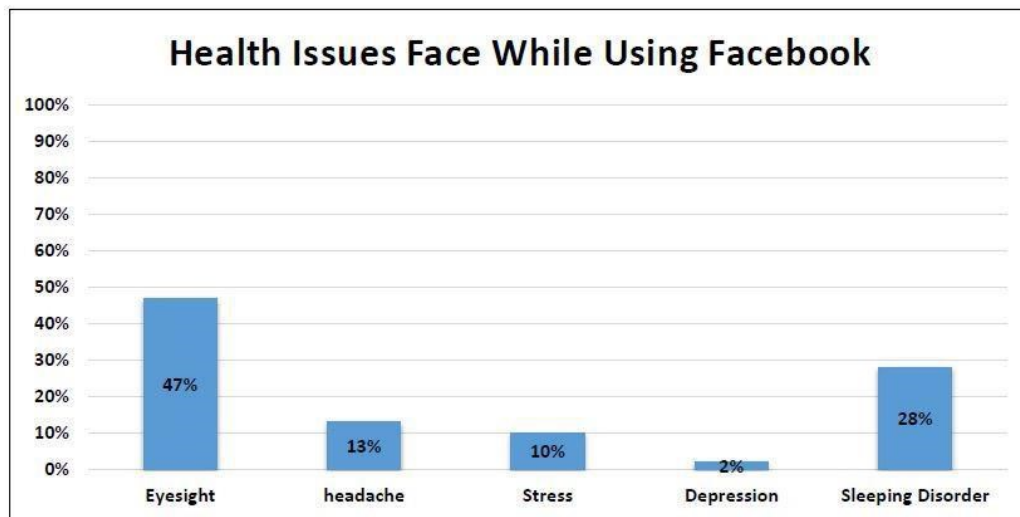


Fig 7: Effects of Facebook on health

Majority of students responded that they often forget to do homework while they use the Facebook extensively. According to the collected results, 72% of students miss/ignore their assignments, on the other hand 28% students responded that their assignment does not suffer due to the usage of Facebook. Following Figure shows the result.

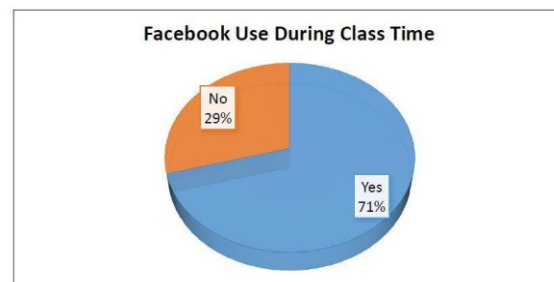
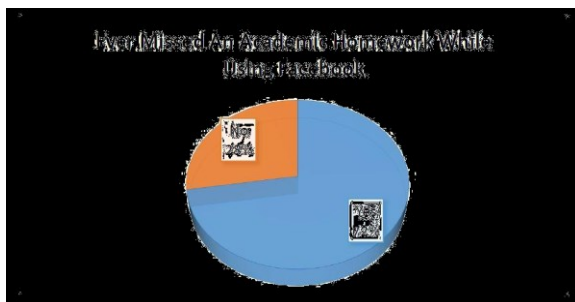


Fig 8: Assignment Missing Problems due to Facebook usage

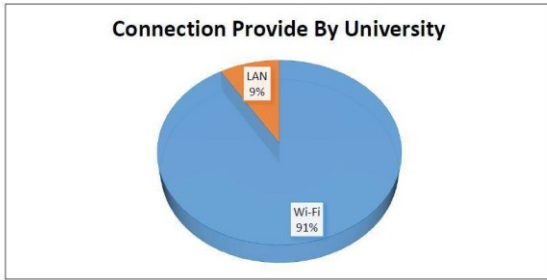


Fig 10: Internet Connection provided by Universities

Fig 9: Facebook usage during class timing

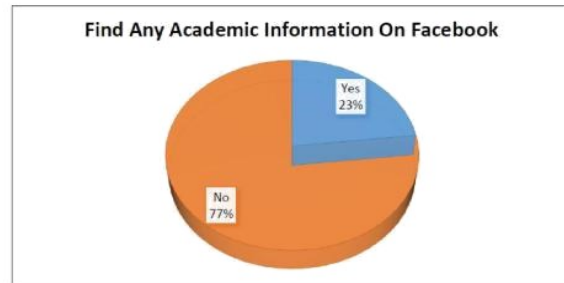


Figure 11: Academic Information on Facebook

During the class timings some students use Facebook. The Percentage of such users is given in Figure 9. It was also surveyed that the university is providing the Wi-Fi internet connectivity to the students. The %age of internet connections provided by the University is (91%) and (9%) of connections are provided on Local Area Network by using ethernet. While comparing the activities of Facebook usage in class, most of the students indicated that they are using Facebook in the class timings. The %age of those student was (71%) and (29%) of students reported that they are not using Facebook in the class timings. According to the respondents, (77%) responded that they did not find any information related with academic interest on Facebook and (23%) responded positively. The Facebook is being used by students for different purposes like finding the friends, chatting, sharing the posts like images, videos, or any other data, discussing in the groups and playing the games. The following figure shows the activities performed in Facebook.

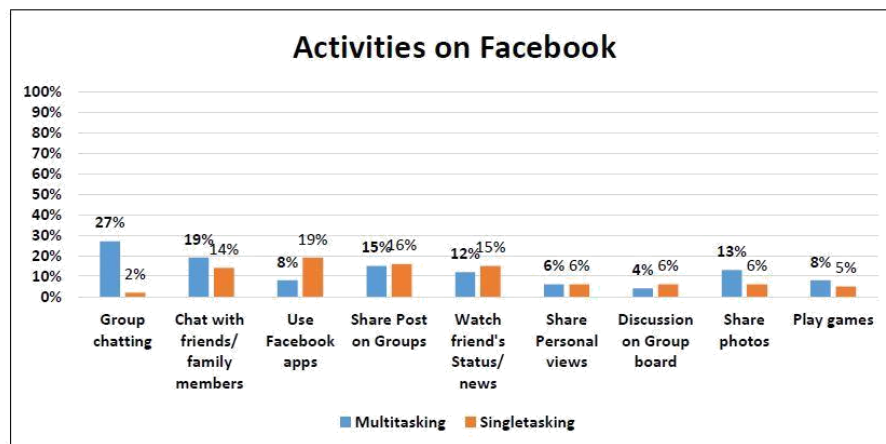


Fig 12: Activities of Students on Facebook

There are different activities performed by students on Facebook. Figure 12 presents the Facebook activities. It is very important to analyze the correlation among the independent as well as dependent variable. The current study has used the correlation method known as Bivariate method. This technique is implemented for finding the hypothesis among the relationships.

The correlation displays the Pearson correlation (p) that is leveled at 0.01 while another correlation Pearson is based on the method known as tailed Test Method that is used in SPSS for finding the relationship among two variables. The value r is the Pearson's coefficient. The current research displays the relationship among the variables having the value (R,P) where the r is identified with the positive or negatives ranging from (+1 to -1). If the value of r is 0.5 to .1 or from -0.5 to -0.1 that shows the strongest relationship among the two variables. If the value of is 0.8 to 0.5 or -0.3 to -0.5 then it shows an average relationship. On the other hand, if the value of is 0.1 to 0.3 or -.1 to -0.3 then it will be considered as much more weak or low relationship.

H0- Means that there is no relationship among the performance of students and the usage of Facebook.

H1- Means that there is a relationship among the performance of students and the usage of Facebook. When the relationship among Facebook and the academic performance is computed, the results (-0.417**) in the negative is shown that is indirectly proportional exists when the autonomous variable increase indirectly other dependent variable much decrease. The decrease as well as increase in the variables is a nature of students. In such case (**RQ1:** For checking out that what is the relationship among the Facebook and the academic performance of the student is? The results of the survey revealed that the relationship among the Facebook and the academic performance of the university student is examined on the student's nature. However, the usage of the Facebook by the students at university knockout the inverse effects on the performance of their academic side.

Facebook correlation with Health: H0- Means that it's no relationship among the students who are using Facebook and their health.

H1- Means that it's a relationship among the University student and health. Furthermore, research workout RQ2: to determine that how Facebook is impacting the academic performance of a student? The factor of the health may cause the academic performance of student measuring the health factor in relationship among the Facebook results are working out. On the relationship among independent as well as dependent variable outcomes (**0.200****) which is significantly negative correlation among the result of those two variables and that is showing that it is a very low correlation which pointed out the dependent variable increase and the decrease in independent variable. It means that the Facebook can affect the health of university students.

Regression Analysis and Analysis of Research Questions: The current research work is very simple as well as based on linear regression model that has been made in SPSS that uses the standard multiple linear regression for analyzing the independent variables at same time into the model. The analysis in this survey is implemented by using standardized coefficient beta as well R Squares for providing the transparency in dependent and independent variables are correlated according to relationship. Moreover, the current study is totally based on linear the analysis of multiple regression analysis for predicting the values of dependent variable through independent variables. The following give table represents the results in the form of summary.

Summary of Results: This study was conducted to survey a (convenience) random sample of $n= 1500$, students as gender (Male=73.33%, Female=26.67%) took part in research study from selected universities considering only undergraduate students. Participating students' age was ranging from (18-20) years. Within that range, majority (65.33%) of subjects were ranging from (19-21 years of age). Furthermore, (7.93%) students were of age group 22-24, (6.4%) students were 25 years age and (20.33) students were above 25 years of age. Out of this distribution (71%) students are Facebook users; it is significant usage and most popular site among all students in their social lives. The findings of the current study represent that majority of students are addicted of using Facebook as social networking website. Out of 100%, 92% students in universities have the account of Facebook and only 8% of students has no Facebook account due to unavailability of internet and computer or smart phone. According to this survey 67% of students have only one account while 15% of students reported that they two accounts and 13% of students reported that they have more than two Facebook accounts. The current research has presented that 68% of students are using Facebook more than 14 Hours in day and night. Moreover, the Facebook is used by the students for several purposes such as 27% of students said that they are using Facebook for chatting while 19% of students said that they are using Facebook for finding the new friends. On the other hand, 6% of students are using Facebook for discussion in groups, 8% of students are using Facebook for playing games and 13% of students are using Facebook for sharing the posts like images, videos, and other data. Nowadays, social media has been very important of the students' daily life that proves that students are significantly influenced by using social media and on students' academic performance. According to [2], The University students are always busy in using the social media. The observation has proved that students are using Facebook in the academic areas such class and libraries. It has been concluded in this research that the academic performance of the University students has been badly affected. According to the study conducted by [15] on the usage of Facebook in the Punjab University the students were compared the Facebook usage pattern with the levels of education of the undergraduate and postgraduate level. The Facebook is being used in our routine live and it has been observed that the Male students are more engaged in using Facebook than Female students. The Male students has been seen to create the relationship with the stingers.



V. CONCLUSION AND RECOMMENDATIONS

A. Conclusion

After the findings of the research regarding the usage of Facebook, it is clear to conclude that the that social media has been a need of everyone today in the society. The current study investigates the positive as well as the negative impacts of using Facebook on the academic performance of University Students. The Facebook plays a significant part in the uplifting the academic career and it makes a distraction among the University Students. On the other hand, many students are unknown from the disadvantages of using Facebook, the usage of Facebook in access impacts the academic performance on the university students. It does not only affect the academic performance of students but also very harmful for the health. The motive of this study was to bring the awareness among the University Students and to advise the students to manage the proper usage of Facebook specially in study timings. The current research total focused on the dependent variable that shown the results with the independent variables such as the multitasking, health, and the academic performance of students. The social networking site such as Facebook has a significant role in creating the relationships positively or negatively. The current study examined the relationship among the academic performance of university student with connection to Facebook. According to the collected results, 51% of students are passing their 14 hours on Facebook for different activities such as creating the relationships, sharing, and viewing the posts, liking the others posts, chatting, group discussion, playing games and much more, obviously it will affect the health as well as the academic performance of those students. On the other hand, the current study has proved that there is also a positive relationship of social media with students. The percentage of the students who are using Facebook positively is 44.7%. These students are using Facebook for their academic purpose such as viewing the education related videos, discussion on any academic related topic and much more. However, the disadvantages of using Facebook are more than the advantages of using Facebook. Finally, it is concluded that the usage of Facebook in excess effects the education system badly, it also affects the health of the students. One of the major limitations in the current study is that the design of current research is to identify the correlations among the usage of Facebook and the students. Statistically, Findings of the present study presents with ($p < 0.5$) significant level.

B. Recommendation

Based on this research study, following are some recommendations: Excessive usage of Facebook causes very low academic performance as well as health problems specially for eyesight. The students at the University must avoid such type of social media like Facebook at libraries, classrooms, departments and in the premises of Computer labs. The majority of university students are using Facebook while the timings of the class or during the study timings and in the result, they are not able to pay the attention towards their studies and they cannot concentrate in the lecture and finally their results are badly affected. The students of undergraduate level must pay attention towards their studies during the study timings with full dedication as needed by the students and they should not give the preference to the Facebook over study. It is strongly suggested to those students who are using Facebook in excess that they should reduce the usage of Facebook during the academic timings. They should decrease it as low as possible.

Based on this research study, following are important future work aspects. Future research may contain qualitative elements to present study for mixed methods.

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