

WhatsApp Usage Frequency by University Students: A Case Study of Sindh University

ISSN (e) 2520-7393
ISSN (p) 2521-5027
Received on 23rd Oct, 2017
Revised on 27th Nov, 2017
www.estirj.com

Zahoor Hussain¹, Rameez Mahesar², Raza Hussain Shah¹, Nasir Ahmed Memon¹,

¹ *IICT, University of Sindh, Jamshoro.*

² *Department of Media and Communication Studies University of Sindh, Jamshoro*

Abstract: This paper explains the WhatsApp usage level among the students, their periods choice to use WhatsApp, their times surfing WhatsApp and to know how much ratio of the respondents use WhatsApp. Survey technique was used in this study for which 300 students of 1st to 4th years from three categories as BS, MSC and MA programs were selected as samples in university of Sindh. Through data analysis we reached at the result as 220 respondents use while the rest of 60 respondents do not use WhatsApp. According to time spending on using WhatsApp, after leaving 60 respondents not using WhatsApp, it was revealed that major proportion of respondents (100) out of 220 consume time in between 16 and 30 minutes. According to selection of period for using WhatsApp, the majority of the respondents (130) select period of night. With regarding the routine of using WhatsApp, the major proportion of the respondents (143) was known to have been using WhatsApp daily. Huge segment of the respondents (125) use WhatsApp in their hostels in terms of placement preferences. Those who use WhatsApp on daily basis were known to have been using their WhatsApp account more than four times a day.

Keywords: WhatsApp, Social media, Internet, Frequency of Usage.

1. Introduction

Without an iota of doubt, Internet plays a constructive role in getting the countries in touch with one another globally. In this technology based world, now people are getting the demands and fulfilling their desires just after they turn their fingers on the computer and surf the internet. With the passage of time, people are now more and more involving them in surfing Internet. It has been using as the key medium in one's life. It has now placed almost media online. Thus, the number of people surfing it, now a days, is rapidly increasing. In the last year of 2016, according to Internet Live Stats it was estimated that the Internet had its 3,424,971,237 users around the globe [1]. Internet development has tremendously converted conventional media into digital media and one of the most rapidly growing tools of communication is social media. The use of social media technologies is penetrating within professional as well as personal lives due to which now everyone can communicate, share, participate, and form a network online that can help him in disseminating his or her own content [2]. Undoubtedly, a rapid growth of technology has tremendously helped the people to use their social media accounts easily. Around the globe, now, the social media has been surfing by the people with different ways. They visit the globe sooner than later. Every institution, organization, corporation and industry, across the globe, has been introducing itself by technology for a good deal of time. Technology is now being utilized within these rostrums. Social media comprises many of its types as Facebook, WhatsApp, LinkedIn, Twitter, Yahoo, Gmail, Hotmail, Skype, Messenger and many others too. These all the social media tools help people in many purposes like sharing the videos and pictures, chatting for different purposes, getting in touch with news and updates and teaching as well as learning at most. Through all social media tools one can read and listen the news around the

globe more frequent and easier than that of traditional media like newspapers as well as other press material. Now a days, universities has been reached the realization that students should use social media to cope with their learning needs and the trend of this type almost exactly will be more faster to grow as that of those Internet users evolve their familiarity with the number of technologies –cum-resources being accessible and available online greatly[3]. This paper is outlined as follows. Section 2 outline related research background work, section 3 presents working literature review. In section 4 define the objective of study. Section 5 discusses problem statement. Section 6 discuss limitations of study. Section 7 present materials and methods. The last section provides conclusions and future work.

2. Research Background WhatsApp

WhatsApp, as an electronic device-cum-chat application being used with discrepant types of programs was set up in 2009 by two ex-Yahoo employees Brian Acton and Jan Koum. This Internet based- communication device allows users who have installed this application to send and receive text messages with one another. It duplicates the text experience via the push notifications [4]. It sponsors the message types in a great deal, from the texts to pictures towards the audio files too. Riyanto (2013) has argued in his study that it (WhatsApp) encourages its users to surf their Internet connection to convey their messages to one another [4]. It is a chat application for Smart phones and mobile phones which are becoming popular rapidly. Besides, WhatsApp is present for all the Smart phones and mobile phones [5]. It involves not only conveying the text messages but also files, videos, audio media messages, message broadcasting and their location surfing collective mapping features (Riyanto, 2013)[6]. Riyanto (2013) has told that those who surf WhatsApp get its (WhatsApp) advantages to send the messages to their friends aboard by

not paying the hefty amount of international texting costs that befalls conventional communications [7]. Rolfe (2013) has discussed that a main cause towards the prominence of such kinds of applications is that they collectively permit their users to send their messages with one another having not paying hefty amount of fees against their text messages [8].

2.1 What is WhatsApp?

The origin of the word “WhatsApp” is “what’s up” an English phrase. Its meaning is something new that is usually asked as to what is update. It is an instant messaging application which offers the users, surfing Internet connection, having an access to share videos, audio, images and written messages as well. The inexpensiveness of this application places WhatsApp as a great and cheap alternative to Short Message Service (SMS) messaging, which can remarkably be expensive when it is used outside one’s country because of the wandering charges; the online interaction made immediate by WhatsApp instant messaging promotes combined mobile learning. Learners can easily share data and news and updates, have their own queries being quickly replied, increase the knowledge and produce class involvement via WhatsApp instant messaging. Mixed learning can highly be prompted by the WhatsApp instant messages [9].

2.2 WhatsApp Uses

It can be used as an exclusive tool in improving the language skill of the learners and can also provide them with chances to opine themselves in an open environment [10]. This kind of technology can too increase the learners’ active participation in the EFL classroom [11]. Lauricella and Kay have resulted that the main persuasions against surfing this instant messaging application might reserve the time, tackle the issues, bring ease and access towards its use. Text messaging seems to be the most likeable tool of communication towards the learners with regarding to communicate with both the instructors and peers [12]. It is known that both the instant messaging and text are helpful and useful means of increasing the learner’s communication with their teachers as instructors and peers at higher education [13].

2.3 WhatsApp Functions

This kind of cheap application has its variety of the functions; it persuades the learners to learn more and more, it encourages the students to have communication with their peers, it conveys the new and fresh information, it also arranges the class, it makes students able to be updated, it saves the time in a good deal, and strengthens the efficiency by recalling the students as to what to do and what they want to carry to class.

2.4 WhatsApp as a Mobile Technology Application

WhatsApp “instant messaging” is one of the most popular applications of mobile technology. It is a cross-platform messaging application which allows its users to easily share messages in real time even not paying any paucity of amount for SMS [14]. It is an integrated device which can meet at the variety of the devices comprising of smart phones, tablets and personal digital assistants. All who surf

these electronic devices can easily communicate and message with one another via many of the mediums such as; audio and video messages, images and text as well. Owing to WhatsApp messenger surfs the do internet data plan as web browsing and emailing, there is no extra cost against communicating with one another and messaging. Besides, the basic messaging WhatsApp users can produce groups which includes up to 30 members, which allows them to be busy in communication and discussion fora. WhatsApp has another important aspect that is called an Offline messaging. It means that all messages being conveyed while the device is going off or if it is found outside the coverage domain are quickly and automatically being saved and it is recoverable when the network coverage is being restored or when the device is found to be turned on (Bere, 2012)[15]. At final stage, it works via phone numbers and address books of users. Though, it does not need to memorize the user’s name and password.

3. Literature Review

Preceding researches had matched that WhatsApp offers an easier and simpler way of communication than voice calls amongst the people who hail from different age groups and especially the students. WhatsApp application was more adjustable in meanwhile diverse segments relatively its ease of usage and accessibility, efficacy, authenticity, and cost-effective has very greatly persuaded the students. They now have been using it for variety of their purposes and spend the larger amount of their time particularly by weekends, in exchanging their own updates and they partly obtain the social media sites for exchanging their academic stuffs, even they are able to be deemed in the data stored and in terms of their clandestine. Students surf WhatsApp to tell their areas, information concerning their course and secret information sharing etc. [16]. In today’s digital-cum-technology age, Students are involved in surfing the internet based their social networking sites like WhatsApp, Facebook, Twitter, LinkedIn and many more. They can be called dependant on their social media sites in terms of their entertainment, communication and especially educational activities. They are highly inclined to the use of their individual social media in that they easily access to the smart phones, iPad, tablets, iPhones, BlackBerry, and laptops connected to the internet [17]. With the passage of time, social media usage is increasing among the students [18].

Observation has been expressed that there are many of the purposes behind the users’ approach to use social media, socialization is some users’ purpose, and whereas rest of the number of users surf it for their academic purpose in regarding fulfilment of classroom activities such as learning and teaching [19]. Yeboah Solomon Tawiah assessed that WhatsApp voice call is most preferred by the students. It happens more important to them and they have concluded that voice call is a preferred choice among students than text messaging [20]. Other studies also have found out that many universities and higher institutions have recently started using WhatsApp via their Smartphone in order to develop their communication through different forums, discussions and information sharing, for instance, text messaging, mobile social network and web based learning [21].

4. Objectives of the Study

This study examines the usage of WhatsApp mobile application among students of Sindh University, Jamshoro (Pakistan) region. The objectives of this study are:

- To investigate the intensity of WhatsApp uses among the students of Sindh University, Jamshoro (Pakistan).
- To identify the place of WhatsApp use by the students of Sindh University Jamshoro.
- To know what period of WhatsApp use by the students of Sindh University Jamshoro.
- To identify how often the students of Sindh University Jamshoro use WhatsApp.
- To ascertain the amount of time spent by students of Sindh University Jamshoro on WhatsApp.

5. Statement of the Problem

Now the social networking sites have billions or even uncountable users across the globe. The sites has made the world as a global village where all and sundry has an easy access to their neighbours in getting in touch with one another. Social networking sites, now, has named the world with integrated vehicle one. The advancement in technology has carried a tremendous popularity and growth in social networking sites which have derived the concerns within communication experts, school authorities and socio-psychological researchers towards the advantages and heavy risks to which undergraduates are facing, as they make them busy in online social networking to fill their information and social needs rather than they reach one another physically and have one to one communication. Pouring further the light over the dangers of social networking sites on verbal communication into their users, Sherry Turkle (2012), the founder and director of the MIT initiative on technology and self, has argued that the easiness towards the social networking sites provides the users with access to communicate with one another can detriment their interpersonal communication. Also, social networking sites have enabled people to see one another as objects before them. Moreover, addiction of surfing social networking sites can generate the thoughts of loneliness and can also grows the feelings of insensitivity to disconnection, according to John J. Cacioppo, a neuroscientist at the University of Chicago (Cacioppo, 2009). This study is concerning the trend of use of the sites, especially WhatsApp, what placement, period, routine and times the students prefer for using the WhatsApp.

6. Limitations of the Study

Limitation of this study will be that students who are going to be get as samples come for getting education in Sindh University from different kinds of families with having their different financial backgrounds. They, hence, have different capabilities in getting technological devices such as laptops, I-pads and even smart phones as well. Students from well-being families have better access as compare to that of those who are from worse off families to internet and more various gadgets and therefore are able to do more

online than those of their contemporary families. This study will be limited to students in Sindh University Jamshoro.

7. Material and Methods

7.1 Survey Tool Used: The data used for this research has been gathered by using 300 copies of the questionnaire which were administered to 300 students within university of Sindh (Jamshoro) 2017 academic session. The degree programs were used as BS, MSC and MA. According to the respondents' genders, 200 and 80 were males and females respectively (after not getting 20 copies back). The age bracket of the respondents was got from 17 to above 24 years. The questionnaire was distributed in Central Library (CL) and both male and female hostels in university of Sindh.

7.2 Data Collection: Demography: In this phase, the respondents are distributed according to their demographic identification such as age, gender, year of studies and degree programs.

Table.1. Distribution of respondents according to their age

Age	Frequency
Between 18 and 20	90
Between 21 and 22	105
Between 23 and 24	50
Above 24	35
Total	280

Table. 1. The table shows that respondents are stratified as the majority of the Respondents are of 21-22 age bracket, then 18-20, then 23-24 and finally are the above 24 aged.

Table no. 02. Distribution of respondents according to their gender:

Gender	Frequency
Male	200
Female	80
Total	280

Table.2. The table shows the distribution of the respondents according to their gender. In this study 200 are the Male respondents and the rest of the number 80 is of female respondents.

Table.3. Distribution of respondents according to their study level

Studylevel	Frequency
BS	199
MSC	41
MA	40
Total	280

Table .3. In above table the respondents are shown according to level of their studies. Majority (199) of the respondents is of the BS level of studies, then (41) is of

MSC level studies and finally the number of respondents (40) is of MA level of studies.

Table .4. Distribution of respondents according to their year of the study

Year of the study	Frequency
1 st year	70
2 nd year	80
3 rd year	80
4 th year	50
Total	280

Table. The table is comprised of the study years of the respondents in four categories. The respondents studying in 2nd and 3rd years are in majority with having the number of 80 and 80 respectively. The respondents studying in 1st and 4th years are having the numbers of 70 and 50 respectively.

7.3 WhatsApp use data collection

In this section, the respondents are distributed according to their WhatsApp use, preferred placement for WhatsApp use, preferred period for their WhatsApp use and times to visit their WhatsApp use a day.

Table .5. Distribution of respondents according to their WhatsApp Use and not use

WhatsApp Use	Frequency
Yes	220
No	60
Total	280

Table5. The table 05 shows the respondents as to have been using WhatsApp or not. Therefore, it is shown in the above table that majority (220) of the respondents are explored to have been using WhatsApp and while the rest of 60 respondents are known to have not been using WhatsApp.

Table.6. Distribution of respondents according to their time spending on using WhatsApp daily

Time Spent	Frequency
Less than 15 minutes	50
Between 16 and 30 minutes	100
Between 31 and 45 minutes	25
An Hour	30
More than one hour	15
Total	220

Table 6. After cutting the 60 non users of the WhatsApp, remaining 220 respondents are distributed according to their time spending on using WhatsApp in the above table. Majority (100) respondents use their WhatsApp account in between 16 and 30 minutes, then second category of the 50

respondents is of those who surf WhatsApp for less than 15 minutes, then 30 respondents are those who surf their WhatsApp account for an hour, then 25 respondents are explored as to using their account between 31 and 45 minutes and finally it is explored that least number (15) is of those respondents who use WhatsApp more than one an hour.

Table.7. Distribution of respondents according to their selected periods of using WhatsApp

Period	Frequency
Morning	30
Afternoon	20
Evening	40
Night	130
Total	220

Table7. The table mentions the selected period of the respondents they use WhatsApp on. It is explored that the majority of the respondents (130) use WhatsApp at night, then on the second number of the respondents (40) is of those who use WhatsApp on the evening, then 30 respondents told that they use WhatsApp on morning and the rest of the 20 respondents use WhatsApp on afternoon.

Table.8. Distribution of respondents according to their routinely WhatsApp use

Routine use	Frequency
Daily	143
Alternate Day	25
Weekly	35
Fortnightly	10
Seldom	17
Total	220

Table no. 08. The table 08 shows the respondents' WhatsApp use on their routine. Majority of the respondents (143) told that they use WhatsApp on daily basis, and then the second major proportion of the respondents (35) is of those who use WhatsApp on weekly basis, then 25 respondents told that they use WhatsApp on every alternate day, 17 respondents told that they use WhatsApp on seldom basis and finally it was also known that the rest of the 10 respondents use WhatsApp on fortnightly basis.

Table.9. Distribution of respondents according to their places of WhatsApp use

Place of WhatsApp use	Frequency
Home	45
Campus	15
Hostel	125
Elsewhere	35
Total	220

The above Table.9 shows that the majority of the respondents (125) use WhatsApp on hotel, then second

major proportion is of those respondents (45) who use WhatsApp on their homes, then 35 respondents use their WhatsApp on elsewhere places when they get free and the final and little proportion (15) is of those respondents is of those who use WhatsApp on their campuses.

Table.10. Distribution of respondents according to their times of using WhatsApp daily?

Times of using WhatsApp on daily basis	Frequency
1	66
2	35
3	25
4	20
More than 4 times	74
Total	220

The above Table.10 mentions the times of the respondents they use their WhatsApp accounts on daily basis. It is noted that major proportion of the respondents (74) use their WhatsApp account more than 4 time on daily basis, then the second major proportion of the respondents (66) is of those who use WhatsApp once a day, then 35 respondents use their WhatsApp account two times a day, then 25 respondents use their WhatsApp account three times a day and the little and the last proportion is of those respondents who use their WhatsApp account four times a day.

8. Conclusion

Now a days, Social media, since a good deal of time, has rapidly been entering into every sphere of life. It has now variety of shapes (Twitter, Facebook, Email, Yahoo, LinkedIn and WhatsApp) to work at the different platforms like Banks, Schools, colleges, hospitals and universities. People are now using these different social media tools for their variety of purposes. On every platform mentioned above, these tools have different usage frequency. Thus, the study was aimed at knowing the WhatsApp use, placement preference for WhatsApp use, period preference for WhatsApp, routine use for WhatsApp and times to use WhatsApp a day by students of Send University (Jamshoro). 300 copies of questionnaire were administered to students of both genders studying in three different degree programs as BS, MSC and MA. They were selected from 1st year to 4th years as the samples of this study. In back, 20 copies of the questionnaire could not be get. The rest of 280 copies we got as filled. This survey based study has revealed that 60 out of 280 respondents had not their WhatsApp accounts. The major chunk of the respondents with having no of 130 out of 220 prefers night as a selected period for their WhatsApp use. In terms of placement preference for using WhatsApp the most, it was disclosed that exorbitant number of the respondents (125 out of 220) prefers hostel for using their WhatsApp account. With regarding consuming minutes while using WhatsApp, the bulk number of the respondents (100 out of 220) consumes

time between 16 and 30 minutes while they use their WhatsApp account. And finally, for examining the times to visit WhatsApp account on daily basis, it was identified that the heavy number of the respondents (143 out of 220) visits their WhatsApp account for more than four times a day.

References

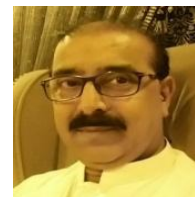
- [1] Hussain Z, Bhutto ZA, Rai G, Hussain M, Zaheer K. Statistical Analysis of Network Based Issues and Their Impact on Social Computing Practices in Pakistan. *Journal of Computer and Communications*. 18; 4(13):23.(2016)
- [2] Harsano, I. L. D., &Suryana, L. A. Factors Affecting the Use Bahviour of Social Media Using UTAUT2 Model. In *Proceedings of the First Asia-Pacific Conference on Global Business, Economics, Finance, and Social Sciences, Singapore* (pp. 1-3).(2014)
- [3] Andrews, T., Tynan, B. &Backstrom, K.Distance learners' use of non-institutional social media to augment and enhance their learning experience. In M. Brown, M. Hartnett & T. Stewart (Eds.), *Proceedings of ASCILITE – Australian Society for Computers in Learning in Tertiary Education Annual Conference 2012*. Australasian Society for Computers in Learning in Tertiary Education.. (2012).
- [4] Cotton, D. Rise of WhatsApp could slow Facebook's quest for mobile growth; little known in the U.S., WhatsApp has largely usurped SMS around the world. *Advertising Age*, 84, 23, 8-8. (2013).
- [5] Riyanto, A. English Language Learning Using 'WhatsApp Application'. Retrieved June 28, 2014, from <http://akhmadriyantoblog.wordpress.com/2013/07/21/english-language-learning-using-WhatsApp-application/>. (2013)
- [6] Hussain, Zahoor, et al. "E-Banking Challenges in Pakistan: An Empirical Study." *Journal of Computer and Communications* 5.02: 1.(2017)
- [7] Hussain, Zahoor, Et Al. "Impact of Wireless Communication Networks On Smart Grid & Electrical Power Distribution Systems of Electricity Infrastructure." *Science International* 28.5: 4959-4959.(2016)
- [8] Rolfe, W. (2013). Retrieved June 28,2014 from <http://blogs.wsj.com/digits/2013/06/20/whatsapp-surpasses-250-million-activeusers/>.(2014)
- [9] Bouhnik, D., &Deshen, M. WhatsApp goes to school: Mobile instant messaging between teachers and students. *Journal of Information Technology Education: Research*, 13, 217–231.(2014).
- [10] Rambe, P., &Chipunza, C. Using mobile devices to leverage student access to collaboratively-generated resources: A case of WhatsApp instant messaging at a South African University. In *International Conference on Advanced Information and Communication Technology for Education*. Amsterdam: Atlantis Press. (2013)
- [11] Baffour-Awuah, E. Institutional case-based study on the effect of research methods on project work in the curriculum of mechanical engineering programmes in Ghanaian polytechnics. *Journal of Education and Practice*, 6, 20–32.(2015)
- [12] Lauricella, S., & Kay, R... Exploring the use of text and instant messaging in higher education classrooms. *Research in-Learning-Technology*,from

<http://www.researchinlearningtechnology.net/index.php/rlt/article/view/19061>.Doi: 10.3402/rlt.v21i0.19061. (2013)

- [12] Lauricella, S., & Kay, R. Exploring the use of text and instant messaging in higher education classrooms. *Research in Learning Technology*, 21. from <http://www.researchinlearningtechnology.net/index.php/rlt/article/view/19061>.doi:10.3402/rlt.v21i0.19061.(2013)
- [13] Bouhnik, D., &Deshen, MWhatsApp goes to school: Mobile instant messaging between teachers and students. *Journal of Information Technology Education: Research*, 13, 217–231.. (2014).
- [14] WhatsApp. Retrieved June 28, 2017 from www.whatsapp.com. (2017)
- [15] Bere, A. A comparative study of student experiences of ubiquitous learning via mobile devices and learner management systems at a South African university. *Proceedings of the 14th Annual Conference on World Wide Web Applications: (4-17)*. Durban, South Africa: Cape Peninsula University of Technology.(2012).
- [16] Mathew Rincy Merlin, et al “Analyzing the use of WhatsApp and Twitter among the University Students”: *Biohouse Journal of Computer Science*, Volume 2: Issue 4. (July-August 2016)
- [17] Paul, J. A., Baker, H. M., & Cochran, J. D. Effect of online social networking on student academic performance. *Computers in Human Behavior*, 28(6), 2117-2127.(2012).
- [18] Shahzad, B., Alwagait, E., &Alim, S. Investigating the relationship between social media usage and students’ grades in Saudi Arabia: A mixed method approach. *Recent Advances in Electrical Engineering and Educational Technologies*, www.inase.org/library/2014/athens/bypaper/ELECT/ELECT-36.pdf. (2014).
- [19] Salvation, M., &Adzharuddin, N. A. The influence of social network sites (SNS) upon academic performance of Malaysian students. *International Journal of Humanities and Social Science*, 4(10 (1)), 131-137.(2014)
- [20] Y. Solomon Tawiah, AbdulaiAlhaji, and H. Emmanuel Nondzor, “Usage of WhatsApp and voice calls (Phone call): Preference of polytechnic students in Ghana”, in *Science Journal of business and Management*, Vol. 2, no.4, pp. 103-108.2014
- [21] Echeverria, A., Nussbaum, M., Calderon, J., Bravo, C., & Infante, C. (2011). Face-to face collaborative learning supported by mobile phones. *Interactive Learning Environment*, 19(4), 351-363. (Online) <http://ejournal.org/index.php/esj/article/viewFile/3909/3700> (2015).



Mr. Rameez Mahesar is working as an M.Phil. research scholar at Department of Media and Communication Studies University of Sindh, Jamshoro Pakistan. He has published number of articles in well known newspaper in Pakistan. His research of interest is print, electronic and social media.



Mr. Raza Hussain Shah is working as an Assistant Professor at IICT University of Sindh, Jamshoro Pakistan. Currently, he is perusing his PhD studies in Electronics at IICT. His research interest is in renewable energy and solar energy management.



Mr. Nasir Ahmed Memon is working as an Assistant Professor at IICT University of Sindh, Jamshoro Pakistan. He completed his M.Phil. In Information Technology University of Sindh. Currently, he is perusing his PhD studies are in Telecommunications at IICT. His research of interest is green communications.

About authors



Mr. Zahoor Hussain is a PhD Research scholar, in IICT at University of Sindh, Pakistan. He is also working as Network Engineer at University of Sindh. His research interests in Smart Energy Management, Smart Metering System, and Smart Power Grid. He has published many research papers in international and national HEC recognized journals.

Moreover, Mr.Zahoor Hussain is reviewer for many national international and international journals.