A STUDY TO ANALYZE IMPACT OF WHATSAPP ON EMOTIONAL HEALTH OF SOCIETY

M. Mangla*, S. Ambarkar, R. Akhare

Computer Department, Lokmanya Tilak College of Engg. , Mumbai, India

ABSTRACT

With an enormous growth in the users for social media, it becomes vital to understand its impact on the society. This paper is a contribution in this direction by analyzing the impact of social media on the emotional health of its users. The paper, in particular, focuses on the impact of WhatsApp usage. The preliminary objectives of this study is to examine potency use of WhatsApp messenger in community. in the study, the survey was performed on subjects from diverse age group, geographical locations and qualification background so that no specific parameter dominates the analysis. The survey concluded that WhatsApp has significantly controlled the manner of communication and has also influenced the emotional health of human beings to a great extent. Some findings of this study are eye opening and thus alarms to have a disciplined usage of WhatsApp in order to avoid its adverse effect on the emotional health of its users.

KEYWORDS: Human needs; emotional health; whatsApp; social media; context-based search

1.0   INTRODUCTION

With the exponential advancement in the world of technology (Fredricksen, 2013), we are coming up with better and smarter electronic gadgets and application on the frequent basis. It will not be incorrect if we say that nowadays humans have become the slave to the electronic gadgets. Rather than humans operating these devices, humans are being controlled and driven by a smart handheld gadgets.

This upgradation has rigorously influenced each aspect of human life including communication. the channels of communication has revamped from postal letters upto Short messaging service (SMS). SMS was prevalent during 2011 as around 7.8 trillion SMS were sent signifying the importance and need of SMS

---

*Corresponding author : manglamona@gmail.com

during that decade. Recently mobile communication revolutionised the way of communication using MIM (mobile instant messaging) service.

Now personal messaging services have further been broadened to group communication using various applications like facebook, twitter, disqus and WhatsApp etc. Among various communication platforms, WhatsApp and Facebook are popular communication applications because of its availability on hand-held devices and convenience. WhatsApp and Facebook do not compete with each other as both have different characteristics (A. Quan-Haase, 2010). Although both provide similar kind of facilities but gives a different kind of user experience. While Facebook has asynchronous communication, the most exciting and fascinating feature for the popularity of WhatsApp is its synchronous and acknowledge enabled communication. Another major factor that impacts the popularity of WhatsApp is its capability of a private communication, thus giving a sense of relatedness and belongingness. The convenience calls for a hefty cost which is borne by the user, its impact on the lifestyle. The magnitude of this impact is not known to its users and ultimately at a point, a user gets addicted to its usage. WhatsApp has recorded a dramatic growth of an increase of up to 1 million users per day, reaching a number of 600 million users in 2014 (Olson, Oct 2014) (E. Karapanos, 2016). On the contrary, also there are some dispirited instances available in literature where WhatsApp was used in domestic issues, unfortunate but true (Chigunwe) (Uhlein) thus showing the negative side of technology on the interpersonal relations and emotional health of society.

This paper performs a survey for the influence of WhatsApp on its users. The motive behind selecting WhatsApp for this survey is its ability for personal as well as group communication. Another reason is its convenience in sharing all kind of media files (image, video, text etc.). The decline in tariff for mobile data plans has further boosted the usage of WhatsApp.

2.0 THE MOTIVATION OF THIS STUDY

Now days, we find increase in cases dealing with psychological issues in our surrounding. this increase in psychological issues, motivates us to analyze various factors influencing emotional health of afflicted people. Here, we have chosen excessive and undisciplined usage of communication applications as

a prime dominating factor for our study which greatly influences emotional health. the reason for selection of this factor is its controllability when used in a disciplined manner.

According to statistics from 2007 available, according to South East Asia Mobile communications, mobile penetration rate was 114%. The major part of the population carrying mobile devices is the young generation of each country. mobile penetration rate is still growing exponentially and thus contemplates to have corrective measures and control its usage especially among young generation (Ariff, 2014).

Moreover, with the advancement in the technology and introduction of 3G and 4G, the usage of mobile phones is unbounded. Mobile phones are capable of making calls, chatting, multimedia, financial transaction point, camera and what not. As in this paper, we focus on impact of group communication with help of social media on mobile devices. in order to perform this study, we have chosen WhatsApp as a result of its synchronous and acknowledge enabled communication, which gives its users a sense of spontaneity.

While there exist many benefits of WhatsApp, it has some adverse effects also. WhatsApp has unparalleled popularity among its users for its convenience for group communication. however, this unconstrained group communication has a negative side also. there are numerous instances in the literature where fake news has spread like a wildfire over WhatsApp (Hartmann, 2006) (Oliveira, 2013). Moreover, WhatsApp has also proved to be a popular tool to destroy image and reputation of an individual or competitors by providing fake pieces of evidence.

Thus it is evident that WhatsApp heavily disrupts our professional and social life (Montag, 2015). Additionally exorbitant usage of WhatsApp results into a kind of addiction which also disturbs physical health of its users. Thus in order to assess the influence of WhatsApp on its users and their lifestyle, authors have executed this survey.

The current paper has been organized into sections. Section I gives the brief introduction to the topic and related findings have been discussed in section II. Section III gives the findings of the current research and thus quantifies the effect of WhatsApp on its users. The conclusion of the research has been discussed in section IV.

3.0   RESEARCH BACKGROUND

During literature survey, it is observed that numerous findings are presented by various researchers on the usage of social media. These researchers have considered various social media platforms to assess the influence of social media on day to day life. In the literature, the foremost communication platform influencing the society at large is identified to be WhatsApp. Hence this work also discusses significant impact of WhatsApp in various domains. The complete estimate of the effect of WhatsApp is nearly impossible, so authors have selected some severely afflicted areas e.g Belief system of mankind, business world, education etc. for the study.

There exist many findings that give an alarming impact of social media on personal relations. Nowadays humans excessively use WhatsApp and social media to express their emotions and publicly display degree of personal connectedness and friendship (Chambers, 2013). Many instances are available in the literature that states WhatsApp being the sole reason for disruption in the family. Some divorce cases are also filed citing WhatsApp as the prime reason for their separation. All these incidents are alarming and represent the quantum of the influence of WhatsApp on personal and family life of its users. It must be taken as a wake-up call and the usage of WhatsApp should be controlled to control the damage reaching beyond the limit.

Authors in (Hinson, 2008) have provided a three-year-long international survey for the impact of blogs and other social media on public relation practice. This survey resulted that usage of social media dramatically affects public relation. Social media greatly influences the image of political parties. It is used as an effective tool by the political parties for image building as a very large portion of prospective voters actively use and follows social media. Thus WhatsApp also plays a role to support civil societies and public sphere that will bring a change in the society over years (Shirky, 2011) (Cruz-moya, 2015).

In business, Image building is the topmost priority in business for which Companies identify various platforms. WhatsApp has proved itself to be a vital tool in Business world in order to establish widespread network and connectivity among its stakeholders. the reason for popularity of WhatsApp in business world is its ability to reach largest audience at the minimum

cost (Haenlein, 2010) (Faulds, 2009). However, competing agencies may use WhatsApp to destroy reputation and name of a leading brand by providing fake information and evidence. The effect of promotion using WhatsApp is intense and widespread. In (Gretzel, 2010) authors proposed a study that investigates the extent to which social media is used for context-based search in business. The influence of WhatsApp on education is also intensively researched (Silverstone, 2003) (J. N. Cummings, 2002). There exist many findings in the literature which proves that although there exists some positive effect of WhatsApp on education but its adverse effect is also gigantic.

WhatsApp enables students to learn and to co-operate each other as a team in an environment lacking facility (Joshi, 2014). During past few years, usage of WhatsApp in education has grown beyond leap and bound (Deshen, 2014). In (Ewur, 2014) authors concluded that most of the students believed WhatsApp to have an adverse effect on their performance while few students believed it having a positive influence in the education of students.

Authors in (Salem, 2013) conducted a survey regarding the influence of Cellphone language on the language proficiency of users. with help of predictive text and spell check features of WhatsApp, users need not to know the correct spellings of the word. In the language of WhatsApp, many abbreviations are in practice which is not acceptable in academics. For example, nowadays students are accustomed of writing "u", "ur" in place of "you" and "your" respectively. Thus it is evident that instant and text messaging have an adverse and damaging effect on the language of its users. Another concern of using WhatsApp is that its users don't use professional writing. Skills of professional and formal writing are diminishing by usage of WhatsApp.

Authors in (Banquil, 2009) concluded that usage of social networking sites has an adverse effect on one's academic performance. In (Godwin-Maduike, 2015) authors conducted a survey regarding the impact of WhatsApp on its users. In this survey, only 26% of respondents agreed that WhatsApp positively influences academics while all others believed WhatsApp to have adverse affects. In a similar research finding, authors in (Sarker) conducted a survey where 32% of the respondents believed WhatsApp to have a positive effect on academics while others agreed to its adverse effect academically.

4.0   RESULTS AND DISCUSSION

As it's era of electronic gadgets, people are more dependant on social media rather than newspaper, news channels. people use these gadgets to stay connected with outside world through social media sites. these days users can't stay away from their electronic gadgets as they start feeling disconnected and get restless. Various researchers have analyzed human behavioral and personality trends over cross platform, but these are inefficient for behavioural analysis of user.In this survey, we try to establish a relationship among psychological traits and social media use with respect to WhatsApp. Thus this study mainly emphasize on emotional health of society. for this, authors primarily used questionnaire through google forms and personal interaction/ interview.

The survey was performed on subjects from diverse age group, geographical locations and qualification background so that no specific parameter dominates the analysis. the sample size for research is limited to 116 participants through questionnaire and 52 participants through personal interaction [https://goo.gl/ aKcmpD].

Table 1 represents the age group of the data that has been surveyed. From Table 1 it is evident that majority of the data under survey comes from the age group of 13 years to 20 years (39.7%). The users in the age group of 21 years to 35 years also form 36.2% of research data. Although this questionnaire was sent to users of all age group, but from the data received it becomes evident that young generation has an enthuastism towards usage of whatspp.

Table 1 Age group of survey data

Age	Percentage
13-20 years	39.7
21-35 years	36.2
36-50 years	21.6
50+ years	2.5
Total	100

Table 2 and Table 3 represents the qualification and profession respectively of the users under survey. The survey also has a reasonable fraction of highly qualified community (graduates and post graduates) of the society are also

accustomed to use WhatsApp, which is a critical issue of concern as qualified community is getting hooked to WhatsApp. During the survey, we asked users for how long they are active on WhatsApp. The data is provided in the following gave alarming findings, that 46.6% of the users spend 2-4 hours on WhatsApp daily out of 24 hours. This 2-4 hours affect their sleep pattern and sleep hours which results in insomnia, depression, anxiety, eyesight weakness and othe forr health issues. This usage of 2-4 hours affects brain functioning of users also. Considering this widespread effect on the health of users, the usage should be moderated. All of these have been shown in Table 4.

Table 2 Qualification of survey data

Qualification	Percentage
less than Graduation	17.2
Under Graduate	41.4
Post Graduate	38.8
Doctorate	2.6
Total	100

Table 3 Profession of users under survey

Profession	Percentage
Businessmen	8.6
Student	45.7
Government Servant	2.6
Software Professional	3.4
Teacher	11.2
others	28.5
Total	100

Table 4 Usage of whatsApp daily (hours per person per day)

Duration	Percentage
Less than 1 hour	40.5
2-4 hours	46.6
5 – 8 hours	9.5
More than 8 hours	3.4
Total	100

We asked a question to users about three things that they never forget while leaving home. To our surprise, 98.3% of the users mentioned mobile. This was followed by keys, wallet, charger, water bottle, sunglasses, and cosmetics in order. This data reveals that mobile has become an indispensable part of our life these days and shown in Table 5.

Table 5 Three improtant things while leaving from home

Item	Percentage
mobile	98.3
Vehicle keys	95
purse/wallet/money/ATM card	93
charger	23
water bottle	18
Sunglasses/ makeup kit	12
ID card	08
Misc	7.5

When enquired "what is the primary purpose of group messaging?", obtained answers are shown in Table 6. In this table, it is observed that the primary usage of WhatsApp is personal usage to stay connected with friends. It is followed by usage of WhatsApp to stay updated with news, business, and professional communication in order. Now if we observe that the prime usage of WhatsApp is stay updated with news/media. On the contrary, it is also known that many circulations in the cyber worlds are fake and therefore WhatsApp can't be genuinely trusted and used for professionally.

Table 6 Purpose of WhatsApp usage

Primary purpose of using WhatsApp	Percentage
Stay connected with family/friends	64.7
Professional communication	15.5
To stay updated regarding current affairs	16.4
Misc	3.4
Total	100

To analyse the pace by which users are getting engaged in new WhatsApp groups, we also enquired about the number of groups they have joined in the past year. Following Table 7 and Table 8 represents the received data

which is concerning and eye opening as the primary purpose of the group communication as shown in Table 6 is just to feel connected with friends and family.

Table 7 Number of groups joined in past year

Number of groups joined in past year	Percentage
Less than 5	58.6
6 to 10	30.2
11 to 20	7.8
More than 20	3.4
Total	100

Table 8 Number of groups user is member of

Number of groups joined in past year	Percentage
Less than 5	46.6
6 to 10	34.5
11 to 20	13.8
More than 20	6.1
Total	100

In order to find the prime reason behind its populatity, we also surveyed our users. We received the data as shown in following Figure 1. The most popular factor for its popularity is its connectivity as a result of its acknowledgement feature. We also enquired about the feature that its users really miss about when instructed not to use it for some time. This data is represented in following Figure 1.
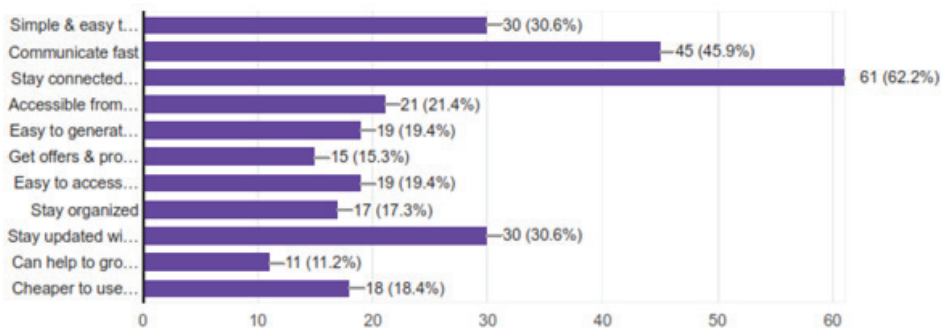
Figure 1 Advantages of group messaging in WhatsApp

Table 9 Most exciting feature its user miss about it

Most exciting feature	Percentage
Feel restless and get bore	8
Loose connection with friends	23
Miss information about current affairs	20.4
Time pass jokes and other stuff	8.8
Professional updates and notices	8
Ease of communication	15.9
Misc.	15.9
Total	100

It is evident from the above data that the people miss information about what is happening around when they are told to stay away from WhatsApp. other things which users miss about WhatsApp is a connection with friends, ease of communication, become restless in that order. Thus it shows that the WhatsApp has affected the lifestyle of humans to a great extent and ultimate humans are getting driven by this communication tool.

Authors also tried to find downside of WhatsApp by asking the reason of its users leaving any WhatsApp group if any, users cited various reasons. The most concerning reason is too much disturbance and group topic becoming irrelevant. This was followed by few other reasons like loss of interest and useless data circulation. Some other reasons that caused its users to leave the WhatsApp group were wastage of internet data usage, teasing/ taunting individuals in the group etc. The obtained data has been represented in the following Table 10 and Table 11.

From the findings, it is understood that WhatsApp has a widespread and enduring influence on the society. hence it becomes need of the hour to have a controlled and disciplined communication over WhatsApp. As many cases have been registered against WhatsApp for circulating fake news so it becomes important to verify the source of communication. some cases of enmity over WhatsApp based on religion, caste and place of birth has been registered under section 153A of IPC. people use advance media editing tools for providing fake evidences and thus spread rumours and adversely affect society. Recently, even judicial bodies have slammed a notice to WhatsApp for its detrimental effect on society as a result of circulating fake information at large.

Unexpectedly, WhatsApp retorted that it has no control over its content and thus can't take any measure to authenticate the information which annoys its millions of users from source https://www.hindustantimes.com/analysis/WhatsApp-groups-are-a-hazard-and-need-to-be-recalled/story-ssyoWrovD2mZ2LUexOVrHP.html. therefore becomes the moral responsibility of community to confirm the authenticity of information being circulated. thus society should have its ethical usage and let WhatsApp not influence belief system and thought process of the community.

Table 10 Downside of whatsApp

Limitation of whatsApp	Percentage
Too many messages	41.6
Too much space required	23
Distraction	36.3
Irrelevant/repeated information	44.2
Wastage of time	11.5
No control over content	22
No authencity check	15

Table 11 Reason for leaving any WhatsApp group

Reason	Percentage
Disturbance	27.60
Group discussion getting irrelevant	24.1
Loss of interest over the time	13.8
No useful data	19
Loss of time	6.9
Teasing/usage of derogatory words	6
Misc.	2.6
Total	100

5.0   CONCLUSION

This survey was conducted to evaluate the influence of social media on the emotional health of society. The study is conducted with the special focus on WhatsApp. the survey was conducted on various users through personal interaction ad questionnaire. In this study, it is proven that WhatsApp has adversely affected emotional health of society in a gigantic manner. Some findings are agitating and need to be considered seriously otherwise the damage will be irreversible.

ACKNOWLEDGEMENTS

REFERENCES

Ariff, A. D. (2014). Convenience or Nuisance?: The 'WhatsApp' D ilemma. *October, 155*, 189–196.

Banquil, K. (2009). Social networking sites affect one's academic performance adversely. *UST Coll. Nurs.*, 1–42.

Chambers, D. (2013). Social media and personal relationships: Online intimacies and networked friendship. *Springer*.

Chigunwe, A. S. (n.d.). Contributions of WhatsApp Media to Domestic Violence in Bindura Urban. *Int. Open Distance Learn.*, 2017.

Cruz-moya, A. S.-m. (2015). Whatsapp, textese, and moral panics: discourse features and habits across two generations. *Procedia - Soc. Behav. Sci., 173*, 300–306.

Cummings, J. N., Butler, B., & Kraut, R. (2002). The quality of online social relationships. *Communications of the ACM, 45*(7), 103-108.

Deshen, D. B. (2014). WhatsApp goes to school: Mobile instant messaging between teachers and students. *J. Inf. Technol. Educ. Res., 13*, 217–231.

Ewur, J. Y. (2014). The impact of WhatsApp messenger usage on students performance in Tertiary Institutions in Ghana. *J. Educ. Pract., 5* (6), 157–164.

Faulds, W. G. (2009). Social media: The new hybrid element of the promotion mix. *Bus. Horiz., 52* (4), 357–365.

Fredricksen, C. (2013). Social networking reachers nearly one in four around the world. *Worldw. Soc. Netw. users*.

Godwin-Maduike, J. C. (2015). Social media and academic performance of business education students in South-East Nigeria. *J. Educ. Pract., 6* (25), 127–134.

Gretzel, Z. X. (2010). Role of social media in online travel information search. *Tour. Manag., 31* (2), 179–188.

Haenlein, A. M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Bus. Horiz, 53* (1), 59–68.

Hartmann, M. (2006). The triple articulation of ICTs. Media as technological objects, symbolic environments and individual texts. *Domest. media Technol.*, 80–102.

Hinson, D. K. (2008). How blogs and social media are changing public relations and the way it is practiced. *Public Relat. J., 2* (2), 1–21.

Joshi, T. B. (2014). A study of students experiences of WhatsApp mobile learning. *Glob. J. Human-Social Sci. Res.*

Karapanos, E., Teixeira, P., & Gouveia, R. (2016). Need fulfillment and experiences on social media: A case on Facebook and WhatsApp. *Computers in Human Behavior, 55*, 888-897.

Montag, C. (2015). Smartphone usage in the 21st century: who is active on WhatsApp? *BMC Res. Notes , 8* (1), 331.

Oliveira, K. C. (2013). What's up with WhatsApp?: comparing mobile instant messaging behaviors with traditional SMS," in Proceedings of the 15th international conference on Human-computer interaction with mobile devices and services. 352–361.

Olson, P. (Oct 2014). WhatsApp Hits 600 Million Active users, Founder Says. *Forbes*.

Quan-Haase, A., & Young, A. L. (2010). Uses and gratifications of social media: A comparison of Facebook and instant messaging. *Bulletin of Science, Technology & Society, 30*(5), 350-361.

Salem, A. A. (2013). The impact of technology (BBM and WhatsApp Applications) on English linguistics in Kuwait. *Int. J. Appl. Linguist. English Lit., 2* (4), 65–69.

Sarker, M. G. (n.d.). Impact of Whatsapp messenger on the university level students: A sociological study.

Shirky, C. (2011). The political power of social media: Technology, the public sphere, and political change. *Foreign Aff.*, 28–41.

Silverstone, E. H. (2003). Consuming Technologies: Media and information in domestic spaces. *Routledge*.

Uhlein, C. (n.d.). Explaining Croo-National Differences in Divorce: The Effects of Technology and Alcohal Consumption.