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## A study to Analyze impact of social media on society: WhatsApp in particular

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### Abstract

With an enormous growth in the number of users for social media, it becomes important to understand its impact on the society. This paper is a small step 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. In the study, authors have focused their research on 225 users. In this survey authors found that WhatsApp has a significant impact on the humans these days. It adversely impacts the youth and their education, behavior and routine life. This app is found to be highly addictive, which leaves a trace that becomes difficult to control. The impact of this application is so engrossing that users give up their real world interest and whole emotional quotient is restricted to the app. Their happiness or sadness depends on the reply that they receive from other users. They cannot control themselves from constantly chatting, replying and sharing of ideas. Hence, it is found during the study that some findings are alarming and needs to be controlled. It is noticed during the survey that WhatsApp has greatly influenced the life style of its users and therefore its usage should be monitored and controlled to avoid any adverse effect on emotional health of its users.

**Index Terms:** Human needs, emotional health, WhatsApp, Social media

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## **1. Introduction**

With the exponential advancement in the world of technology[1], we are coming up with better and smarter electronic gadgets and application on frequent basis. The life of humans is greatly affected by this advancement in technology. It will not be incorrect if we say that nowadays humans have become slave to the electronic gadgets. Rather than humans operating these devices, humans are being controlled and driven by smart hand held gadgets.

The manner in which communication takes place has transformed drastically during past decades. Now face to face communication has been almost replaced by communication over various applications like facebook, twitter and WhatsApp etc. Among various communication platforms, WhatsApp and facebook are popular communication applications because of its convenience. WhatsApp and facebook do not compete with each other as both have different characteristics [2]. Although both offer similar kind of facilities but offer different kind of user experience and therefore do not compete. While facebook has asynchronous communication, the most prominent and exciting feature of whatsapp is synchronous and acknowledge enabled communication. Another major factor that impacts popularity of WhatsApp is its capability of a private communication with friends, thus giving a sense of relatedness and belongingness. On the contrary, there exist some instances available in literature where WhatsApp is used for domestic issues like divorce, unfortunate but true [3,4]. This shows the negative usage of technology on the interpersonal relations as these messages may be sent in jiffy of anger.

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 [5,6]. 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 user gets addicted to its usage. This paper performs a survey to evaluate influence of WhatsApp on its users from both positive and negative perspectives. The study also assesses the impact of this application on education, psychology and mental health of its users. The motive behind selection of WhatsApp to survey impact of communication application is its popularity because it is communicator not only among two individuals but also in a large group. Another motive is its convenience in sharing any kind of media files (image, video, text etc.). Moreover the decline in the tariff for mobile data plans has also boosted the usage of WhatsApp as nowadays it comes at quite reasonable price and doesn't require deep pockets.

## **2. Motivation**

The According to statistics of 2007 available, according to South East Asia Mobile communications, mobile penetration rate was 114% and this figure is still growing exponentially in each country [7]. The major part of the population carrying mobile devices is the young generation of each county. Moreover with the advancement in the technology and introduction of 3G and 4G, there exists literally no limit on the extent of usage of mobile phones. Mobile phones are capable of making calls, chatting, multimedia, financial transaction point, camera and the list is endless. As in this paper, we focus on WhatsApp, so we will restrict our discussion to WhatsApp only.

While there exist many uses of WhatsApp, it has some adverse affects also. For example, any message on WhatsApp spread like a wild fire with help of group communications [8,9]. Many a times, WhatsApp is used to destroy image and reputation of an individual or an organization sometimes by providing fake evidences. Many a times, we come across some messages stating some mishappening and its evidence, which keeps on circulating in the cyber world. But on verification, it comes that the news which was circulating on internet, was fake and created one. Thus it is evident that WhatsApp heavily disrupts our work life and social activities

[10]. Additionally, excessive usage of WhatsApp results into addictive signals. Thus, in order to assess the influence of WhatsApp on its users and their life style, authors have executed this survey.

The current paper has been organized into sections. Section 1 gives the brief introduction to the topic and motivation for selecting the topic has been presented in Section 2. Related findings have been discussed in section 3. Section 4 gives the findings of the current research and thus quantifies the effect of WhatsApp on its users. Conclusion of the research has been discussed in section 5.

### **3. Related Work**

In the literature, numerous research surveys on the usage of social media with special focus on facebook and WhatsApp are available. Different researchers have considered various factors to assess the influence of social media on our day to day life. WhatsApp has influenced each part of human life significantly. In this section we try to discuss some of the domains affected significantly. Complete estimate of the effect of WhatsApp is nearly impossible, so authors have selected some most prominently affected areas for discussion.

#### *3.1 Influence in Business*

Business is most prominently affected by the usage of WhatsApp positively as well as negatively. Social media is the top most agenda for many business executives. It is used for decision making involving various stakeholders without having to come together at one place. Companies identify various ways in which social media can be utilized to promote their product to largest audience at minimum cost [11,12]. On the contrary, social media may also affect the business adversely. Competing agencies may use WhatsApp to destroy reputation and name of a leading brand by proving fake information and evidence. The intensity of effect of promotion (good or bad) using WhatsApp is very high as it is capable of providing group communication.

WhatsApp also plays an important role as information source about its vicinity. This feature helps employment of WhatsApp for travel industry. In [13] authors proposed a study that investigates the extent to which social media is used in search engine results and thus providing context based search.

#### *3.2 Influence in Image Building*

Authors in [14] have provided a three-year-long international survey for impact of blogs and other social media on public relation practice. This survey resulted that usage of social media is dramatically affecting 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 perspective voters actively use and follow social media. Thus it can be said that WhatsApp also plays a role to support civil societies and public sphere that will bring a change in the society over years [15,16].

#### *3.3 Influence in Personal Relations*

According to whatsapp website: "More than 1 billion people in over 180 countries use WhatsApp to stay in touch with friends and family, anytime and anywhere. The reason behind the massive usage of WhatsApp is its capability to stay in touch with people you care about. It also offers an easy and secure way for us to share and discuss things. It's just one more way to build quality personal and professional relationships.

On the other side of it, many findings are existing giving alarming impact of social media on personal relations. Nowadays humans excessively use WhatsApp and social media to express their emotions and thus conducting personal relationships. Now a days, degree of personal connectedness and friendship is publicly

displayed by WhatsApp [17]. 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 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 limit.

### *3.4 Influence in Education*

As it has been discussed in above all sections, education is also severely affected by the WhatsApp. This influence of WhatsApp on education is intensively researched [18,19]. There exist many findings in the literature which proves that although there exists some positive affect of WhatsApp on education but its adverse affect is gigantic.

WhatsApp enables students to learn and to co-operate each other as a team in an environment lacking facilities[20]. During past few years usage of WhatsApp in education has grown beyond leap and bound [21]. In [22] authors conducted a survey about if whatsapp is affecting education positively or negatively. It was concluded during this survey that most of the students believed that WhatsApp has adverse affect on the performance of students although few students believed WhatsApp to have positive influence in education of students.

Authors in [23] conducted a survey regarding influence of Cellphone language on the language proficiency of users. In the cellphone language users are suggested words after typing first few characters of the word. Thus 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, now a days students are used to 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 get used to professional writing. Skill of professional and formal writing is diminishing by usage of WhatsApp.

Authors in [24] concluded that usage of social networking sites have adverse effect on one’s academic performance. In [25] authors conducted a survey regarding impact of whatsapp on its users. In this survey, 26 percent of respondents agreed that usage of WhatsApp positively influences academics while all others believed that WhatsApp affects academics adversely. In a similar research finding, authors in [26] 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. Research Survey and Findings**

The authors have conducted a research survey that analyzes various factors and dimensions in which WhatsApp influences day today life of its users. This survey involved users of various age group and qualification level in order to have correct findings. The survey consists of information of 225 users [<https://goo.gl/aKcmpD>] which are diverse in various parameters. The following Fig 1 and Fig 2 represents the age group and qualification of the data that has been surveyed. From Fig 1 it is evident that majority of the data under survey comes from the age group of 13 years to 20 years (45%). The users in the age group of 21 years to 35 years also form 36.7% of research data. Thus it is observed that focus is emphasized on the young users of WhatsApp.

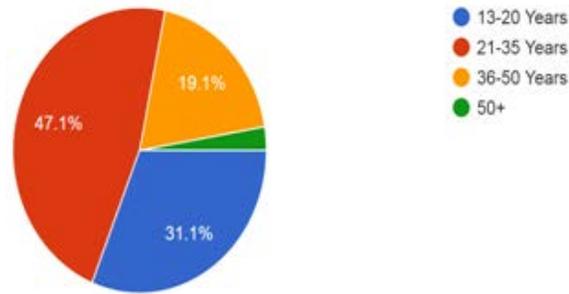


Fig. 1. pie chart for age group of survey users

Similarly Fig represents that qualification of major portion of the survey data is under-graduate and students. This survey also has a reasonable fraction of post graduates. This diversity in the educational qualification of the survey data forms a basis that the findings will be reasonable and will be applicable to wide range of its users.

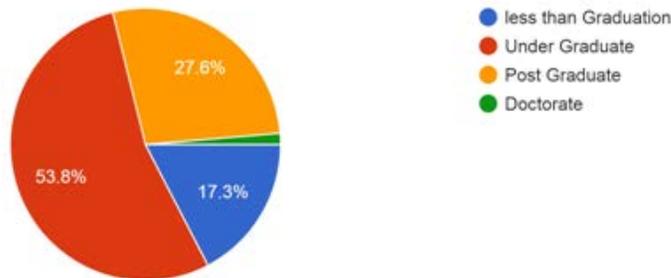


Fig 2: qualification of survey data

We asked a question to users about three things that they never forget while leaving home. To our surprise, 100% 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.

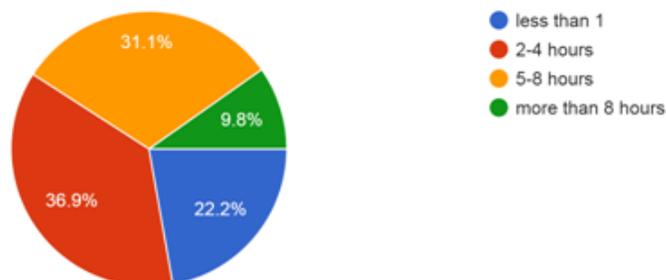


Fig 3: Usage of WhatsApp in terms of hrs/day

During survey we asked users for how long they are active on WhatsApp. The data gave alarming findings, that 51% 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 into insomnia, depression, anxiety, eyesight weakness and other health issues. This usage of 2-4 hours affects brain functioning of users also. Considering this widespread affect on health of users, the usage should be moderated.

Another question authors asked in the survey was “what is the primary purpose of group messaging?”. Following Fig 4 represents the chart for the obtained answers. In Fig 4, 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.

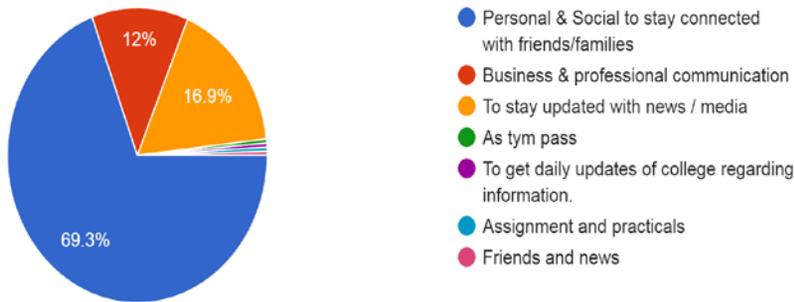


Fig 4: primary purpose of using WhatsApp

In the survey, it was also enquired that how many groups, users have joined in the past one year. This question was asked in order to evaluate the growth in usage of WhatsApp. it is observed that majority of the users have recently joined less than 5 whatsapp group while 31% of the people have joined 5 to 10 groups in the past one year.

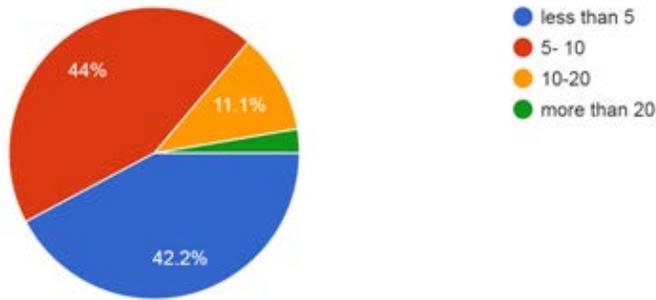


Fig 5: How many groups users joined in past one year

Another question during survey was to identify the reason of its users leaving any WhatsApp group. During the survey it became evident that users also leave the WhatsApp groups due to some or the other reason. While enquiring the reason, 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 Fig.

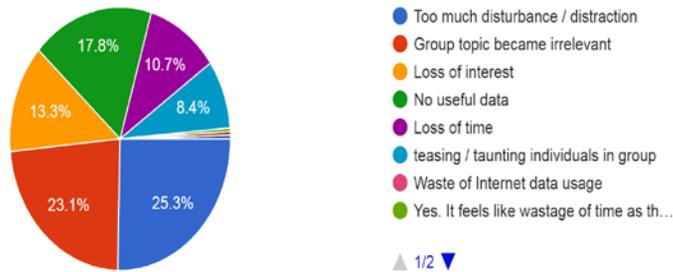


Fig 6: Reason for leaving the WhatsApp group

Another question for survey was to evaluate the advantage of WhatsApp over other messaging services. The obtained result has been represented in following Fig.

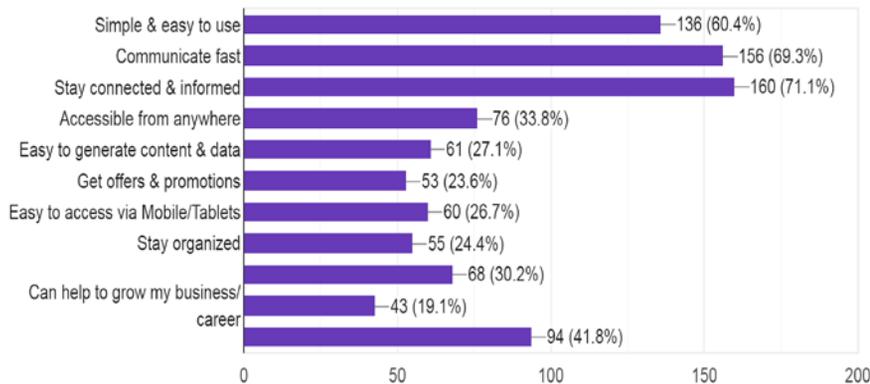


Fig 7: advantages of group messaging in WhatsApp

The users of WhatsApp were also told to list the factor they missed the most when they are instructed to stop using WhatsApp. The obtained results have been shown in the following Fig.

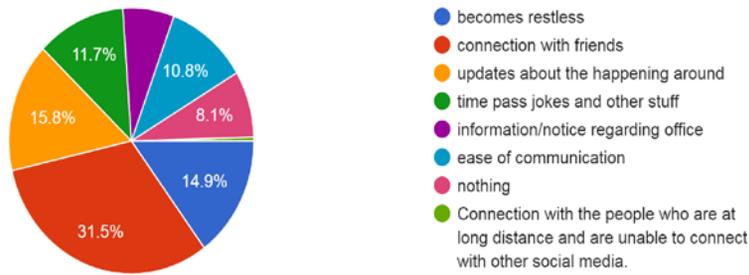


Fig 8: what users miss most about WhatsApp

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 are connection with friends, ease of communication, become restless in that order. Thus it shows that the WhatsApp has affected the life style of humans to a great extent and ultimate humans are getting driven by this communication tool.

## 5. Conclusion

This survey was conducted to evaluate the influence of social media on the life style of humans. This study is conducted with the special focus on WhatsApp. The survey was conducted on 225 users and various conclusions have been drawn by this research. In this study, it is proven that WhatsApp has affected its users' life styles in gigantic manner. Some findings are shocking and need to be considered seriously otherwise the damage will be irreversible and it will be too late.

In order to prevent the damaging loss by extensive usage of this application, time necessitates researching few questions. It needs to analyze the impact of this application on education system. At the same time, care should be taken to minimize the drawbacks expressed by the students. Research should take place in the direction of evaluating impact of various multimedia elements on students' interest in addition to images. Experiments should also take place to conduct verification of qualitative data. Concerned experts should consult the involvement of various applications in the education system. In the similar manner, rigorous research should take place in all domains to evaluate effectiveness of messaging applications.

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