

# Influence of Online Chat App on Personal Development of Engineering Students

Arvinder Kour Mehta

Asst. Professor- Humanities and Management Department,  
Yeshwantrao Chavan College of Engineering, RTM Nagpur University,  
Nagpur, Maharashtra, India

## Abstract:

**T**he introduction of Social Networking chat app has taken all by storm and nobody can escape from getting addicted. The perceived high level of usage of social networking site amongst students is inevitable. As in the current scenario Students cannot be escaped from getting hooked by any of those apps because of the availability of so many attractive features. However, little is understood from empirical point of view about the intensity of usage of online chat app and its impact on the various aspect of Personality Development of students like Social Interaction, Personal Relationship, Physical Fitness, Mental Fitness, Academics and Ethical Behaviour This Study seeks to identify the influence of Online Chat App on Personal Development of Students on the various aspects like Social Interaction, Personal Relationship, Physical Fitness, Mental Fitness, Academics and Ethical Behaviour To achieve the purpose Quantitative Research was conducted and 704 structured questionnaires were administered to students of Engineering Institutes.

The study has revealed very interesting facts that usage of Online Chat Apps and its frequency of checking take time of the Students and affects their study and health which results in problems of procrastination & leads to distraction from Study. Beside this, whatever shared on the chat app is insignificant to their respective field. On the basis of the conclusion and outcome, recommendations and suggestions are provided to curb the menace and to develop the personality of the students.

This study will help in re-engineering the Teaching Methodology by mitigating the negative influence of On Line Chat App.

**Keywords:** Whatsapp Messenger, Impact, Students Performance.

## I. INTRODUCTION

The world is ever changing due to the advancement technology in every sphere of life. In today's hitech world its very hard to escape the presence of technology especially the one available on mobile. Many of us depend on it to a great extent to do our job to get around and to find certain things and what most people did not even though of few years back, is now becoming a reality.

Online Chat app is one of the changes in technology which is commonly used on specific mobile phones and computers. As the Smart Phones became popular, many messaging services were launched like whats app, hika, we chat, fb messenger etc. All these services are free or a very nominal small amount is charged on year basis. All the online chats are highly addictive and affect to a great extent on regular users, the repercussion of which is difficult to control and cure especially when the users are happen to be students.

Internet usage continues to grow at an incredible speed. Around 40% of the world population has an internet connection today. In 1995, it was less than 1%. The number of internet users has increased tenfold from 1999 to 2013. The **first billion** was reached in 2005. The **second billion** in 2010. The **third billion** in 2014 (Ref: <http://www.internetlivestats.com/internet-users/>). As per the statistics given by (<http://trak.in/tags/business/2014/11/19/india-300m-internet-users-2014/>) Internet Users in India will cross 300 million mark by December 2014 according to 'Internet in India 2014' report jointly published by the Internet and Mobile Association of India (IAMAI) and IMRB International. The year on year growth rate registered stands at impressive 32 percent. The acceleration of internet growth in India can be gauged from the fact that India took 10 years to move from 10 to 100 million. It took 3 years to move from 100 to 200 million, whereas the next 100 million (from 200 to 300M) milestone was achieved in just 1 year. Even if the same growth is maintained, India will reach 500 million users before end of 2016.

The report states that the healthy growth in internet users has been driven by rural Indians who are now increasingly accessing internet either on their mobile phones or computers. Rural India registered a growth rate of 39 percent to reach 101 million users by October 2014, whereas urban India grew by 29 percent to reach 177 million by October 2014. By end of December 2014, Urban India will have 190 million internet users (63%), while rural India will have 112 million (37%).

With this rampant use of internet on mobile phones students are the most effected among all as they are in their period of learning and their interest on Friendship Social Interaction, Personal Relationship, Physical Fitness, Mental Fitness, Academics and Ethical Behaviour. As per the news published in the The Times of India on Nov 3, 2014, " Mobile

messenger service WhatsApp's user base in India has grown to 70 million active users, which is over a tenth of its global users, its business head Neeraj Arora has said.

*"We have 70 million active users here who use the application at least once a month," Arora, a vice-president with WhatsApp, said at the fifth annual INK Conference. He said the total user base for the company, which was bought by Facebook in a blockbuster \$19 billion deal earlier this year, is 600 million."*

WhatsApp and other messenger has been around for a while but recent updates have improved the functionality of the application. The main objective behind this app is to replace SMS with a cross platform mobile messenger that works on an internet data plan with many other advantages which is not available on normal texting like Unlimited text, image, audio and video sharing etc. Now WhatsApp has introduced the calling services also. It is currently available for iPhone, Android, Windows Phone, Nokia Symbian60 and S40 and Blackberry.

All those apps brings us so many benefits, it has also got its flaws that are causing more harm than good among the students today. Hence, taking cognizance of the rate at which our youth at various Technical Institutions are hooking up to social media, there is dire urgency that first its effects on students various aspects should be studied and second some good corrective and preventive measures to be taken in this direction.

## **II. OBJECTIVES**

This study examines the use of online chat app amongst students at Engineering Institution in Nagpur. The researcher attempted to understand the perceived high level of usage of online chat app by looking at the intensity of its usage and how it affects their Social Interaction, Personal Relationship, Physical Fitness, Mental Fitness, Academics and Ethical Behaviour

1. The main objective of this paper is to evaluate the degree of the impact of online chat app on :
  - i. Social Interaction
  - ii. Personal Relationship
  - iii. Physical Fitness
  - iv. Mental Fitness
  - v. Academics and
  - vi. Ethical Behaviour
2. Also to determine the relationship between the use of the application and the above mentioned factors.
3. To identify the correlation with the above stated factor
4. To analyse whether the effect of online chat app vary with girls and boys and whether it has any significance with the age of the students
5. And finally, some recommendations for overcoming these problems will be discussed.

## **III. LITERATURE REVIEW**

### **Introduction**

Literature review for this paper was covered on Social Media and students performance. Social media has become a growing phenomenon with many and varied definitions in public and academic use. Any activities where humans share stories and influence others can be considered social networking Nicholson, (2011). Social networking or media is a great forum for discussing mutual topics of interest, and perhaps even meeting or renewing acquaintances with other humans virtually. According to Greenwald (2009) and Deloitte (2009), 55% of employees visit a social media site at least once a week.

### **Students and use of Social Networking Sites**

Students are increasingly utilizing these social networks for friends' news feeds, personal updates, events and activities, notes, and messages. According to an extensive study by the Office of Communications (Ofcom) of the United Kingdom, almost half (49%) of children aged 8-17 who used the Internet had set up their own profiles on a social networking site Ofcom, (2008a); Dowdall, (2009). Positive perceptions obtained from users of social networking sites i.e. effective learning which has resulted in an easy learning climate among students Mazer, et al., (2010). In another study conducted by Keenan and Shirii, (2009) they explored how social networking sites encourage friendliness through the use of Facebook, Twitter and LinkedIn. The study concluded that numerous approaches can be used to encourage amiability among students which leads to a positive effect from SNSs user's point of view. In a study conducted by Mazer et al., (2007) concluded that Facebook networking site is used by students more frequently and also faculty members. Recent data obtained from Facebook through their spokesperson, showed that approximately 297,000 users are university faculty members, although there are pros and cons in each case.

While the researcher agree on both negative and positive impact of social media and academic performance, our aim was to broaden the scope of thinking of decision makers to reflect on the realities and to create and maintain a system that can change students' attitude that will promote quality image and improve upon performance. After a critical review of various literatures on social media, the researchers could identify that there are gaps in knowledge as far as the negative effect of the use of "Whatsapp" and students performance especially in Engineering Institutes of Nagpur City, and that merits a closer investigation.

#### IV. METHODOLOGY

##### Research Methods

The researchers made use of both primary and secondary data, which were gathered from diverse sources, including, archival sources, text books, journals/articles (both publish and unpublished), and internet sites.

##### Research Design

The research was carried on the basis of administering and collecting Structured Questionnaire.

##### Sample Size

The population under-study which consists of students of Engineering Students of Nagpur is incredibly large, making it impossible administer questionnaire to the whole population. As a result, a part of the population referred to as sample was taken for the study. Seven Hundred Four ( 704) representatives from Three Engineering Institution were surveyed. The data was analyzed through the use of SPSS

##### Result and Discussion

The responses given by respondents through the administration of structured questionnaire were compiled and in order to make interpretation and analysis easier, tables are presented first, followed by its interpretation and analysis.

##### Table

Of 704 Participant 37.% were Male and 62.1 % were femaile as is show in Table No. I given below:

Table No. I- Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	267	37.9	37.9	37.9
Valid Female	437	62.1	62.1	100.0
Total	704	100.0	100.0	

Further to the forgoing demographic information, the age frequency distribution is shown in Table No. II below.

Table No. II- Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Below 18 years	149	21.2	21.2	21.2
Valid 19-20 years	389	55.3	55.3	76.4
Valid 21-22 years	149	21.2	21.2	97.6
Valid 23-24 Years	15	2.1	2.1	99.7
Valid 25 and above	2	.3	.3	100.0
Total	704	100.0	100.0	

Table III below shows the frequency distribution on how long respondent have the experience of using online chat app and the data shows that appro 43.6% of the respondents are using it for less than one year.

Table – III- How long do you have the experience of using whats app

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than one year	307	43.6	43.7	43.7
Valid 1-2 years	230	32.7	32.8	76.5
Valid 2-3 Years	124	17.6	17.7	94.2
Valid More than 3 Years	41	5.8	5.8	100.0
Total	702	99.7	100.0	
Missing System	2	.3		
Total	704	100.0		

Table IV below shows the frequency distribution on how much time on average a day in the recent week respondents have spend the time on online chat app. This statistics is very alarming as majority of the students i.e 52.8% spend more than 1.5 hours a day on this online chat app

Table – IV- How much time on average a day in the recent week you spend on Online Chat app

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 1 hours	331	47.0	47.2	47.2

	1.5 -3 hours	202	28.7	28.8	75.9
	3.5 - 5 hours	86	12.2	12.3	88.2
	5.5 - 7 hours	31	4.4	4.4	92.6
	More than 8 hours	52	7.4	7.4	100.0
	Total	702	99.7	100.0	
Missing	System	2	.3		
Total		704	100.0		

Table - V below shows the frequency distribution on how frequently on average a day do you check Online Chat App Messages. This statistics is very alarming as majority of the students as 66.6% of the respondents check the online chat app every hour.

Table – V- How frequently on average a day do you check Online Chat App Messages

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 10 min	155	22.0	22.1	22.1
15-20 min	146	20.7	20.8	42.9
25-30 min	80	11.4	11.4	54.3
30 min - 1 Hr	86	12.2	12.3	66.5
2-4 Hr	96	13.6	13.7	80.2
Valid 5- 8 hours	50	7.1	7.1	87.3
Once in a day	38	5.4	5.4	92.7
Once in two days	6	.9	.9	93.6
Once in 3 days	10	1.4	1.4	95.0
More than 3 days	35	5.0	5.0	100.0
Total	702	99.7	100.0	
Missing	System	2	.3	
Total	704	100.0		

A researcher has devised a nineteen question questionnaire to measure the impact of On line chat app on the personal development of students. Each question was a 5-point Likert item from "strongly disagree" to "strongly agree". In order to understand whether the questions in this questionnaire all reliably measure the same latent variable (feeling of safety) (so a Likert scale could be constructed), a Cronbach's alpha was run on a sample size of 15 workers. we can see in Table No. VI that Cronbach's alpha is 0.683, which indicates a Good level of internal consistency for our scale.

### Reliability Statistics

Table No. VI- Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.683	.712	19

After analyzing the questionnaire validity, the descriptive statistics of Questionnaire is given in Table No. VII:

Table No. VII- Descriptive Statistics ( SD- Strongly Agree, D- Disagree, NAND ( Neither Agree Nor Disagree, A- Agree, SA- Strongly Agree, T- Total Percentage)

S.N.	Questionnaire	SD	D	NAND	A	SA	T %
1.	Online Chat App are used more than phone to communicate with people	2.8	3.8	8.2	<b>49.0</b>	<b>36.1</b>	100.0
2.	Student Feel uneasy to talk with other face to face after using online chat App	<b>14.5</b>	<b>34.5</b>	24.6	19.3	7.1	100.0
3.	Online Chat App help to improve relationship with family	10.7	19.2	26.4	<b>28.8</b>	<b>14.9</b>	100.0
4.	Online Chat App help to improve relationship with friends	3.1	6.5	13.1	<b>46.2</b>	<b>31.1</b>	100.0
5.	Online Chat App has reduced the need to meet friends personally	8.5	14.3	21.6	<b>36.8</b>	<b>18.8</b>	100.0
6.	Family members keeps advising to use less Online Chat App and concentrate more on work	4.7	6.5	14.6	<b>32.5</b>	<b>41.6</b>	100.0
7.	Due to Online Chat App communication and conversation with family members reduced	9.9	22.9	20.2	<b>31.4</b>	<b>15.6</b>	100.0

8.	Online Chat app does not affect your physical exercise regime	<b>15.3</b>	<b>27.0</b>	23.6	25.6	8.5	100.0
9.	Physical activities decreased due to usage of Online Chat App	8.8	16.4	21.1	<b>36.4</b>	<b>17.4</b>	100.0
10.	You feel guilty if you do not reply Online Chat App Messages instantly	<b>18.9</b>	<b>30.7</b>	25.3	16.6	8.4	100.0
11.	You feel anxious when others do not reply to your message instantly	11.4	26.6	21.6	<b>28.3</b>	<b>12.2</b>	100.0
12.	While working you feel the urge to check the Online Chat App frequently	8.8	26.4	28.3	<b>27.8</b>	<b>8.7</b>	100.0
13.	Do you think Online Chat App harms you	<b>12.5</b>	<b>25.9</b>	34.5	18.3	8.8	100.0
14.	Online Chat App does not distract you from working or studying	<b>14.3</b>	<b>27.0</b>	23.6	25.6	9.5	100.0
15.	After using Online Chat App more spelling errors of English Words occur in Subject	11.8	22.3	17.8	<b>32.0</b>	<b>16.2</b>	100.0
16.	You manage your study time well when using online Chat App	8.5	16.5	25.1	<b>37.6</b>	<b>12.2</b>	100.0
17.	Online Chat App usage affected academic results	8.8	20.6	27.4	<b>30.4</b>	<b>12.8</b>	100.0
18.	Whatever is shared on online chat App is healthy and ethical	<b>9.9</b>	<b>17.9</b>	<b>43.3</b>	22.4	6.4	100.0
19.	Whatever shared on online Chat App helps to gain knowledge of your respective field	5.3	9.7	31.7	<b>37.1</b>	<b>16.3</b>	100.0

#### V. HYPOTHESIS

In the present study we have assumed and considered Hypothesis, the details of test applied and result arised is given in the table No. VIII :

Table No. VIII- Summany of Hypothesis Testing

Sr. No.	Hypothesis	Test Applied	Result	Hypothesis proved /disproved
1.	HO: The various component of Personal Development are independent of each other.	Correlation and Regression	It has been observed from the above calculation that the significant value shows for all the various components of Personal development are significantly correlated with each other	Alternate Hypothesis Accepted
2.	HO: Impact of on line chat app is unequal between girls and boys	Independent T-Test	It has been observed from calculation that all the value of Sig (2- tailed) test is more than 0.05. Hence Null Hypothesis Accepted	Null Hypothesis Accepted
3.	HO: Usability of Online chat app is independent of gender of respondents	Independent T-Test	It has been observed from the calculation that all the value of Sig (2-tailed) test is less than 0.05. Hence, failed to accept the null hypothesis.	Alternate Hypothesis accepted
4.	HO: Frequency of using online chat is independent of gender of respondents	Independent T-Test	It has been observed from the above tables and calculation that all the value of Sig (2- tailed) test is less than 0.05. Hence, failed to accept the null hypothesis.	Alternate Hypothesis Accepted
5.	HO: Usability of the online chat app and its frequency of use do not affect the personal social interaction of Students	Cross –Tab and Chi Square	It has been observed from the calculation that all the value of Sig (2-sided) test is showing 0.010 which is less than 0.05. Hence, we failed to prove Null Hypothesis.	Alternate Hypothesis Accepted
6.	HO: Usability of the online chat app and its frequency of use is independent of mental framework	Cross –Tab and Chi Square	It has been observed from the calculation that all the value of Sig (2-sided) test is showing 0.030 which is less than 0.05. Hence, we failed to prove Null Hypothesis.	Alternate Hypothesis Accepted

7.	HO: Usability of the online chat app and its frequency of use is independent of experience of using this app	Cross and Square	-Tab and Chi	It has been observed from the above tables and calculation that all the value of Sig (2- sided) test is showing 0.000 which is less than 0.05. Hence, we failed to prove Null Hypothesis.	Alternate Hypothesis Accepted
8.	HO: Frequency of using online chat app does not affect the physical activities of students	Cross and Square	-Tab and Chi	It has been observed from calculation that all the value of Sig (2- sided) test is showing 0.039 which is less than 0.05. Hence, we failed to prove Null Hypothesis.	Alternate Hypothesis Accepted
9.	HO: Frequency of using online chat app does not affect the academic activities of students	Cross and Square	-Tab and Chi	It has been observed from the above tables and calculation that all the value of Sig (2- sided) test is showing 0.04 which is less than 0.05. Hence, we failed to prove Null Hypothesis.	Alternate Hypothesis Accepted
10.	HO: Usability of online chat app is insignificant to gain of knowledge of respective field.	Cross and Square	-Tab and Chi	It has been observed from the above tables and calculation that all the value of Sig (2- sided) test is showing 0.357 which is more than 0.05. Hence, we accept the Null Hypothesis.	Null Hypothesis Accepted

**Discussion:** Main finding from the table No. VIII mentioned above it is observed that:

1. Personal development are significantly correlated with each other
2. Impact of on line chat app is unequal between girls and boys
3. Usability of Online chat app is dependent on gender of respondents as it is observed from the descriptive statistics that Girls are using more online chat app than boys
4. It is observed that Girls are using more frequently online chat app than boys and hypothesis testing also proved that Frequency of using online chat is dependent on gender of the respondents.
5. Usability of the online chat app and its frequency of use affect the personal social interaction of Students
6. Usability of the online chat app and its frequency of use affect the mental framework of the respondents
7. Usability of the online chat app and its frequency of use is dependent on the experience of respondent of using this app as the more experienced the respondents is in using online chat app, it is more likely that he will use more the online chat and its frequency of using the online chat app
8. Frequency of using online chat app affect the physical activities of students
9. Frequency of using online chat app affect the academic activities of students
10. Usability of online chat app is insignificant to gain of knowledge of respective field. This means that whatever respondents sharing on the online chat app is not benefitting them in their respective field.

## VI. CONCLUSION AND RECOMMENDATIONS

From the preceding discussions, it is evidently clear that; Online Chat App is a necessary evil for student. If used negatively it has adverse impact on the social face to face interaction, leads to lack of concentration during study time as it gives them urge to check the apps frequently and it results into anxiousness, it takes much of the study time and result in poor performance in studies and further whatever is shared through this online chat app is not healthy and it does not anyway help them in their respective field.

Similar to most research, this paper has limitations that point to further opportunities. The authors focused on only six out of the numerous aspects of Personal Development like Social Interaction, Personal Relationship, Physical Fitness, Mental Fitness, Academics and Ethical Behaviour and too the research was carried out at Engineering Institutes only. Additional studies on other aspect and field of study would provide further insights into the impact of Online Chat App on the personal developments of students. Although, framed within an academic context, the research can be utilized to investigate the use of Online Chat app not only at School and Colleges but also at home, workplace and various other settings and for a variety of different audiences such as teenagers, young adults, the elderly, or families.

In summary, the purpose of this paper was to identify the impact of Online Chat app on the personal development of Students. The study found that, instead of making communication easier and faster thereby enhancing effective flow of messages and idea sharing among students, online chat app has rather impacted negatively on the Personality of students. As earlier it is stated that this online chat app is necessary evil and we cannot stop the students to use it, however, we can diverge them and channelize them to use this judiciously and constructively by the following methods provided in the recommendation

### Recommendations

The author therefore, recommends the following:

- Management of Technical Institutions should intensify guidance and counselling sessions for the students.

- Time management should be incorporated into the curriculum of Technical Education.
- Sudden Unannounced quizzes should be conducted frequently by teachers/lecturers to compel students to sit-up and concentrate more on the study and lectures .
- Cell phones should either be forbidden in lecture halls or switched off if allowed in, instead of the prevailing practice of allowing them in but must be put on mute. This allows the students to chat during lectures.
- Students must be enlightened on the devastating effect of retiring to the short hand form of writing on their spellings and grammatical construction of sentences during their communication skills lessons in first year.
- Considering the fact that majority of students are using this app, it is necessary that methodology of teaching to be changed and teachers needs to be more active and participate in the online groups of students so that check can be made on the contents of the matter and analyzing the students who are becoming addicted to this app.

#### **REFERENCE**

- [1] Boyd, D.M. & Ellison, N.B. (2008). "Social Network Sites: Definition, History, and Scholarship," J Comput-Mediat Comm. 2008 (13), 210-230.
- [2] Churchill, D. (2009). Educational applications of Web 2.0: using blogs to support teaching and learning. British, Journal of Educational Technology, 40(1), 179-183.
- [3] Hassan A. Alseirehy & Adel A. Al Youbi, Towards Applying Social Networking in Higher Education: Case Study of Saudi Universities, MAGNT Research Report (ISSN. 1444-8939) Vol.2 (4). PP: 217-231
- [4] Jeannette Sutton ( 2008), Backchannels on the Front Lines: Emergent Uses of Social Media in the 2007 Southern California Wildfires, Proceedings of the 5th International ISCRAM Conference – Washington, DC, USA, May 2008 F. Fiedrich and B. Van de Walle, eds.
- [5] Johnson Yeboah ( 2014), The Impact of Whatsapp Messenger Usage on Students Performance in Tertiary Institutions in Ghana, Journal of Education and Practice, Vol.5, No.6, 2014
- [6] John C. Bertot, Paul T. Jaeger, Justin M. Grimes Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies, Government Information Quarterly 27 (2010) 264–271
- [7] Kuppuswamy, S., & Narayan, P. (2010). The Impact of Social Networking Websites on the Education of Youth, International Journal of Virtual Communities and Social Networking (IJVCSN), 2(1), 67-79.
- [8] Manish Agrawal (2013), a rumor theoretic analysis of tweets during social crises, MIS Quarterly Vol. 37 No. 2, pp. 407-426
- [9] Ngonidzashe Zanamwe (2013), Use of Social Networking Technologies in Higher Education in Zimbabwe: A learners' perspective, International Journal of Computer and Information Technology (ISSN: 2279 – 0764) Volume 02– Issue 01
- [10] S. Kuppuswamy and P. B. S Narayan,. "The Impact of Social Networking Websites on the Education of Youth," International Journal of Virtual Communities and Social Networking, (IJVCSN) vol. 2, 2010, Available at <http://www.igi-global.com/article/international-journal-virtual-communities-social/43067>
- [11] <http://trak.in/tags/business/2014/11/19/india-300m-internet-users-2014>
- [12] <http://www.internetlivestats.com/internet-users>