

# Factors Explaining Participation and Motivating Issues Affecting Students' usage of WhatsApp at Adi Chunachangiri University (ACU), Karnataka, India

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**ABSTRACT:** *This study focused on WhatsApp usage among Adi Chunachangiri University (ACU) students in Karnataka, India. The objective was to determine the level of WhatsApp usage among the students. Investigation questions are drawn up to guide the study. Three thousand five hundred registered students followed the study investigation design in the Adi Chunachangiri University (ACU) Library. The sample size of 400 was nominated through a random sampling technique. A more significant number of the users reflected on the positive effects of 'It keeps my interaction private and personal', and the maximum number of users said 'strongly agree', scoring 204(51%). Necessary statistical techniques and methods will be used to analyze the research data. After completion of the analysis, the findings will be drawn and presented as a report.*

**Keywords:** Factors Explaining Participation, Motivation, WhatsApp, Adi Chunachangiri University, Library Students, Karnataka, India

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## 1. Introduction

ICT (Information and Communication Technologies) advancements have dramatically changed global communication systems. One of the end products of this development is the emergence of the WhatsApp messaging application. WhatsApp Messenger is a different type of instant messaging application that students use to exchange text, images, videos, and audio messages through the Internet. The general acceptance and adoption of WhatsApp instant messaging have been studied by many. In this paper, we aim to study the use of WhatsApp by Adi Chunachangiri University students. These students find the app cost-effective, quick, easy, confidential, and convenient for imparting, interaction, and academic purposes. With WhatsApp, the imparting channel has become even more enjoyable by enabling the effortless sharing of information among students and lecturers. However, Yaboah and Ewur (2014) observe that notwithstanding the many benefits of WhatsApp, it has flaws that are causing more harm than good among today's students. This is stirring up a growing concern about the potential negative impacts of addiction, distractions from the study, insomnia, procrastination, and poor academic performance, among others.

## 2. Early Studies

There are quite a few references on this topic, which are presented here systematically. These studies contributed significantly to the literature on WhatsApp communication.

Ansari & Tripathi (2017) have highlighted that the *ITC* plays a significant role in broadcasting ideas and facts provided further. WhatsApp is a free immediate communication request that allows students to dispatch text communication and multimedia files. The author identified that students showed a consistent viewpoint on receiving services over WhatsApp. Most students trust that using WhatsApp can improve alert services and that information centres can effectively provide better student services. Fouad (2017) discusses the developing role of viral action in spreading information through WhatsApp. The author finds out the capacity of viral business of information relating to cognition knowledge about WhatsApp usage students, the capacity of this appeal on information divide, & ultimately, the information part that mainly influences knowledge of Egyptian society through viral business. Malhotra & Bansal (2017) discuss perceiving the attraction of *WP* (WhatsApp) among veterinary patrons. This research aims to interpret the usage of WhatsApp (*WP*) for educational suggestions with importance on its collision with education. Facts and statistics were received from students using questionnaires as a tool. WhatsApp can present significance to the educational group by respondent's deliberate supervising use & not permitting its substance character to cause awareness from their learning. Thelwall & Vis (2017) aim to discuss the usage of WhatsApp for learning/education purposes in university libraries; the authors found out. Females distributed images more frequently overall and distributed photos more often on Snapchat. Both males and females used helping applications in separate ways; girls applied filters & displays to pictures, whereas males improved images and used pictures to arrange the application. Ultimately, boys are more interested in singles in their figure photos. This is a detailed research of electronic photo exchange practices and methodically estimates the present generation of the program. Aharony & Gazit (2016) conducted a study in Israel in 2015 and covered ninety-one (191) *UG* communication students. The author establishes that personality attributes of accessibility to experience & social help are important, says the significance of the *WA* (WhatsApp) household category. The study reveals that there is a complex and not clear or decided relationship between the closeness variables and the significance of the *WA* (WhatsApp) household category. Therefore, the present research highlights the alliance into *WA* (WhatsApp) household category & closeness premise, the character habitual of accessibility to events, social help, and household frequency use. Anderson (2016) says that the intention to use cell phone texting or mobile immediate texting has grown at impressive rates in the past few years. This development has produced data gatherers & trend estimators to see the usage of cell phone texting applications in separate views than in the past. The author finds out that the 2015 study shows 1.4 billion students using cell phone texting applications not less than once a month. This is a 31.6 % growth from the last year. There are 2 billion students, showing 80% of cellphone students. Bajpai (2016) evaluates that socially knowing the operation of computers is separate from the bricks of information imparting. The emergence of cell phones is supporting performance. WhatsApp texting is 1 of the well-liked *SN* (social networking) tools for students, professionals, and families. The study is an interpretation of the extent to which LIS professionals use WhatsApp texting and the activities in which they are involved. An effort is made to understand the impact of WhatsApp texting on *LIS* professionals.

## 3. Research Questions

Thus, it is evident that WhatsApp is not just a social communication channel. It can potentially transfer files and images for different activities such as learning, communication, office work, professional communication and many more.

- In this work, we intend to find the extent of the use of WhatsApp for different activities by the users of Adi Chunachangiri University.
- How does WA (WhatsApp) impact students' academic lives at Adi Chunachangiri University?
- For what specific purpose do the end-users primarily use it? If WhatsApp is not used at the optimum level, what are the factors and causes? How WhatsApp influences the end-users both positively and negatively.
- We also want to understand the students' perception of using WhatsApp as a study tool.

With these above research questions framed, we proceed further in this work.

#### 4. Scope and Limitation

This study of WhatsApp usage among the students of Adi Chunachangiri University libraries has a few limitations. Geographically the coverage is restricted to the cluster of institutions under one university by including different constituent colleges, not going beyond these institutions. These institutions include the Adi Chunachangiri College of Pharmacy, Adi Chunachangiri College of Nursing, BGS College of Education, and BGS First Grade Colleges.

#### 5. Methodology and Survey Design

The present study started with a literature search from *LISA* (Library and Information Science Abstract) and *LISTA* (Library and Information Science and Technology Abstract) databases, Google Scholar, and Emerald Insight. Some important books published by the American Library Association (*ALA*) were also consulted to design the questionnaire. A sound design questionnaire was distributed to 6 Adi Chunachangiri University Colleges in Karnataka state, India. Four hundred fifty questionnaires were issued to all the students of these colleges. A sum of 400 responses was received.

#### 6. Results and Discussions

##### 6.1. Gender

The gender-wise status of Adi Chunachangiri University College students is shown in Table 1. It may be seen from the table that the maximum of the students, numbering 240 (60%), are male and the remaining 160 (40%) are female students.

S/N	Gender	No. of Students	%
1	Male	240	60
2	Female	160	40
	<b>Total</b>	<b>400</b>	<b>100.0</b>

Table 1. Gender of the Students

##### 6.2. Collegewise Students

The college breakdown of the Adi Chunachangiri University (*ACU*) students is presented in Table 2. The majority of the 110(27.5%) respondents are from the College of Adi Chunachangiri Institute of Medical Sciences.; 105 students are from the College of BGS Institute of Technology representing 26.3%; 90(22.5%) students are from the College of Adi Chunachangiri College of Pharmacy; 40(10%) students are from the college of Adi Chunachangiri College of Nursing, a very few students scoring 30 (10%) are from BGS College of Education, remaining 25(6.2%) students are from the BGS First Grade Colleges.

Sl.No	Colleges	Number of Students	%
1	Adi Chunachangiri Institute of Medical Sciences	110	27.5
2	BGS Institute of Technology	105	26.3
3	Adi Chunachangiri College of Pharmacy	90	22.5
4	Adi Chunachangiri College of Nursing	40	10
5	BGS College of Education	30	7.5
6	BGS First-Grade Colleges	25	6.2
	<b>Total</b>	<b>400</b>	<b>100.0</b>

Table 2. College wise Students

### 6.3. Time of Signing up with WhatsApp Messenger

Table 3 shows the times that students signed up for WhatsApp. The table reveals that more students scoring 175 (43.75%) have used the app for over 1 to 2 years. Only 60 and 70 students, representing 15% and 17.5%, created their accounts in less than one year and 2 – 3 Years, respectively. This indicates that students have sufficient experience with the app.

S/N	Time of creation of account	No. of Responses	Percentage
1	< 1 year	60	15
2	1-2 Year	175	43.75
3	2 – 3 Year	70	17.5
4	> 3 Year	95	23.75
<b>Total</b>		<b>400</b>	<b>100.0</b>

Table 3. Time for creation of account

### 6.4. Number of WhatsApp Study Groups.

Table 4 shows the study groups each of the students belonged to. The result reveals that 152(38%) students were in less than one study group. However, the result indicates an impressive membership of students in various study groups, with 130 of them representing 32.5% belonging to between 2 and 3 study groups; 65 (16.52%) belong to 4 to 6 study groups, while 53 (13.25%) students say more than 7 study groups.

S/N	No. of study groups	No. of Responses	Percentage
1	< 1	152	38
2	2-3	130	32.5
3	4-6	65	16.25
4	7 >	53	13.25
<b>Total</b>		<b>400</b>	<b>100.0</b>

Table 4. Study Groups

### 6.5. Usage of WhatsApp among Students

WhatsApp is an application available on new generation smartphones like iPhone, Samsung, Sony, Oppo, Karbonn, Micromax, Lava, etc., allowing students to send text messages for free. Students are not charged for a text sent through WhatsApp. There are various methods for usage patterns of WhatsApp by Adi Chunachangiri University students: Just before sleep, As soon as I wake from sleep, While eating, I install an app lock to avoid unpermitted access to my page, I keep my data (internet) on for 24 hours in a day While walking along the road, I use WhatsApp amidst sleep.

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – strongly agree, SD = Standard deviation, N=Number of Students, P = Probability, Numbers in Parentheses Indicates Percentage

S/N	Usage pattern	Responses in Percentage (N=400)					Mean	SD	P Value
		1	2	3	4	5			
1	Just before sleep	23 (5.8)	45 (11.3)	80 (20)	102 (25.5)	150 (37.5)	3.78	1.22	.000
2	As soon as I wake from sleep	35 (8.8)	55 (13.8)	80 (20.0)	95 (23.8)	135 (33.8)	3.60	1.31	.000
3	While eating	25 (6.3)	30 (7.5)	65 (16.3)	175 (43.8)	105 (26.3)	3.76	1.11	.000
4	I installed an app lock to avoid unpermitted access to my page	21 (5.3)	30 (7.5)	90 (22.5)	125 (31.3)	134 (33.5)	3.80	1.13	.000
5	I keep my data (internet) on for 24 hours in a day	50 (12.5)	80 (20)	100 (25.0)	75 (18.8)	95 (23.8)	3.21	1.34	.000
6	While walking along the road	35 (8.8)	46 (11.5)	84 (21)	150 (37.5)	85 (21.3)	3.51	1.19	.000
7	I use WhatsApp during sleep	45 (11.3)	58 (14.5)	66 (16.5)	128 (32)	103 (25.8)	3.47	1.31	.000

Table 5. Pattern of Usage of WhatsApp

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – strongly agree, SD = Standard deviation, N=Number of Students, P = Probability, Numbers in Parentheses Indicates Percentage

The analysis of WhatsApp usage by the students is presented in Table 6.5. The WhatsApp usage pattern of Adi Chunachangiri University (ACU) is shown in Table 6.5. The table shows that result, there is a significant difference ( $P < .000$ ) among the students concerning the usage pattern of ‘Just before sleep’. More students scoring 150(37.5%) replied ‘strongly agree’, and a few, scoring 23(5.75%) of them, said ‘strongly disagree’ with the usage of WhatsApp with a mean value of 3.78 and SD 1.22 for using WhatsApp of Adi Chunachangiri University.

#### 6.6. Reasons for the Use of WhatsApp by the Students

Students love instant messaging services. They use it to talk with friends and family, but they don’t hesitate to contact companies through WhatsApp. With rapid growth over the past years and currently one billion monthly active students worldwide, this is a trend we cannot neglect. I have had experience using WhatsApp for a university for about 12 months, and I want to share the benefits I see with you. Private and personal; Faster than email; Adding attachments and emotions; No content strategy needed; Better than live chat, etc. Nowadays, WhatsApp is highly helpful for academic and research activity in university libraries.

Reasons for the use of WhatsApp by the Adi Chunachangiri University (ACU) students are shown in Table 6. The result shows the majority of the students concerning with the reason ‘To occupy free time when I am bored’; the majority of the students scoring, 168(42.0%) say ‘agree’; and only 6(1.5%) of students say ‘strongly disagree’, with the highest mean value of 4.00 and SD is 1.02, for the reason of WhatsApp usage in Adi Chunachangiri University.

#### 6.7. Positive Effects of WhatsApp Use on Students

Probably all students are using WhatsApp as it is one of the most critical instant messaging applications available online. Most students use WhatsApp on their smartphones to share academic information, etc. It is an essential form of social media that has influenced the psyche of modern students; however, it has its advantages and shortcomings, which are: A community of like-minded friends; Cost effective; Welcome absence of advertisements; Seamless operation; facilitating business; forming a community; WhatsApp has become a platform for e-learning; WhatsApp does not have advertisements; End – To – End Encryption in WhatsApp, etc.

S/N	Reasons for the use of WhatsApp	Responses in Percentage (N=400)					Mean	SD	P Value
		1	2	3	4	5			
1	To keep in touch with family members, friends and course mates	20 (5)	35 (8.8)	65 (16.3)	160 (40)	120 (30.0)	3.81	1.10	.000
2	To participate in academic study groups	10 (2.5)	45 (11.3)	63 (15.8)	102 (25.5)	180 (45.0)	3.99	1.13	.000
3	To share and exchange academic information	18 (4.5)	38 (9.5)	49 (12.3)	210 (52.5)	85 (21.3)	3.77	1.03	.000
4	To occupy my free time when I am bored	6 (1.5)	16 (4.0)	76 (19.0)	168 (42.0)	134 (33.5)	4.02	.906	.000
5	To be current with trending news	30 (7.5)	25 (6.3)	78 (19.5)	166 (41.5)	101 (25.3)	3.71	1.13	.000
6	To have contact with course lecturers	18 (4.5)	14 (3.5)	84 (21.0)	118 (29.5)	166 (41.5)	4.00	1.08	.000
7	To feel belong in the virtual society	33 (8.3)	54 (13.5)	86 (21.5)	124 (31.0)	103 (25.8)	3.53	1.23	.000
8	To create an online network of friends	14 (3.5)	16 (4.0)	60 (15.0)	210 (52.5)	100 (25.0)	3.92	.933	.000
9	To express myself freely	11 (2.8)	25 (6.3)	60 (15.0)	186 (46.5)	118 (29.5)	3.94	.970	.000
10	To share my recent beautiful pictures	69 (17.3)	46 (11.5)	84 (21.0)	95 (23.8)	106 (26.5)	3.31	1.41	.000
11	To create a group of like-minded individuals	26 (6.5)	53 (13.3)	86 (21.5)	122 (30.5)	113 (28.3)	3.61	1.20	.000
12	To join groups	51 (12.8)	66 (16.5)	60 (15.0)	98 (24.5)	125 (31.3)	3.45	1.40	.000
13	To make calls	30 (7.5)	25 (6.3)	51 (12.8)	106 (26.5)	188 (47.0)	3.99	1.23	.000
14	To share videos	8 (2.0)	18 (4.5)	84 (21.0)	196 (49.0)	94 (23.5)	3.88	.890	.000
15	To seek or date marriage partners	10 (2.5)	23 (5.8)	86 (21.5)	178 (44.5)	103 (25.8)	3.85	.953	.000

Table 6. Reasons for use of WhatsApp

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – strongly agree, SD = Standard deviation, N=Number of Students, P = Probability, Numbers in Parentheses Indicates Percentage

S/N	Positive Effects	Responses in Percentage (N=400)					Mean	SD	P Value
		1	2	3	4	5			
1	It enriches my academic experience	10 (2.5)	15 (3.8)	80 (20.0)	175 (43.8)	120 (30.0)	3.95	.935	.000
2	It increases my social contacts and relations	5 (1.3)	25 (6.3)	63 (15.8)	202 (50.5)	105 (26.3)	3.94	.884	.000
3	It impacts my academic performance positively	8 (2.0)	28 (7.0)	45 (11.3)	185 (46.3)	134 (33.5)	4.02	.954	.000
4	I feel very free expressing myself in study groups than in lecture hall	15 (3.8)	55 (13.8)	70 (17.5)	116 (29.0)	144 (36.0)	3.80	1.17	.000
5	It keeps my interaction private and personal	11 (2.8)	15 (3.8)	60 (15.0)	110 (27.5)	204 (51.0)	4.20	1.00	.000
6	It enables me to attach emotions to my interaction	36 (9.0)	46 (11.5)	100 (25.0)	106 (26.5)	112 (28.0)	3.53	1.25	.000
7	It fosters my communication with my lecturers	26 (6.5)	44 (11.0)	66 (16.5)	102 (25.5)	162 (40.5)	3.83	1.25	.000

Table 7. Positive Effects of WhatsApp Use

The respondents' positive effects of WhatsApp use on the students in the ACU Library are shown in Table 7. The table reveals the positive impact of 'It keeps my interaction private and personal'; many students replayed 'strongly agree', scoring 204(51%), and few scoring 11(28%) of the state 'strongly disagree'; with the highest mean value of 4.20 and SD is 1.00, for positive effects of WhatsApp use on the students in the ACU Library.

### 6.8. Negative Impacts of WhatsApp Use on the Students

WhatsApp is one of the important instant messaging applications available on the internet. Around 1 billion people in over 180 nations use WhatsApp to make voice and video calls and share messages, pics, and videos with their friends and family. This application is free of cost, quite simple and reliable for calling and messaging purposes. Negative impacts of WhatsApp use on the students in ACU include an unwelcome distraction, WhatsApp addict teens remaining aloof from the real world, WhatsApp encouraging laziness among teens, WhatsApp having harmful effects on health, sleep deprivation, etc.

S/N	Negative Impacts	Responses in Percentage (N=400)					Mean	SD	P Value
		1	2	3	4	5			
1	It reduces the time spent in studies	102 (25.5)	92 (23.0)	88 (22.0)	60 (15.0)	58 (14.5)	2.70	1.37	.000
2	Causes distractions during lecture periods	88 (22.0)	96 (24.0)	156 (39.0)	40 (10.0)	20 (5.0)	2.52	1.09	.000
3	It creates false impressions among students	188 (47.0)	96 (24.0)	75 (18.8)	21 (5.3)	20 (5.0)	1.97	1.14	.000
4	Creates a loss of interest in studies	125 (31.3)	66 (16.5)	68 (17.0)	65 (16.3)	76 (19.0)	2.75	1.51	.000
5	Students can be involved in accidents	188 (47.0)	102 (25.5)	45 (11.3)	40 (10.0)	25 (6.3)	2.03	1.24	.000
6	Reduction in students' physical activities	120 (30)	41 (10.2)	74 (18.5)	66 (16.5)	99 (24.8)	2.96	1.56	.000
7	Causes insomnia (sleeplessness) for students	99 (24.8)	50 (12.5)	66 (16.5)	82 (20.5)	103 (25.8)	3.10	1.53	.000
8	The use of the app affects students' academic performance negatively.	178 (44.5)	106 (26.5)	44 (11.0)	58 (14.5)	14 (3.5)	2.06	1.20	.000

Table 8. Negative Impacts



Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – strongly agree, SD = Standard deviation, N=Number of Students, P = Probability, Numbers in Parentheses Indicates Percentage

The respondent’s negative impacts of WhatsApp use on the students at ACU Library are shown in Table 8. The table reveals that negative impacts of ‘Students can be involved in accidents’, and the majority of the respondent’s biggest choice is ‘strongly disagree’, scoring 188(25.5%), and only 25(6.3%) of the state ‘strongly agree’; with the lowest mean value of 2.03 and SD is 1.24, for negative impacts of WhatsApp use on the students in the ACU Library.

### 6.9. Perception of Students towards WhatsApp Usage

Technology has a huge effect on students’ lifestyles, and most tertiary organizations have encountered many positive reactions to the development of mobile technology in higher education. This is where the WhatsApp application has become popular as a mobile learning style and is considered one of the communication programs since many engineering college students nowadays have smartphones. WhatsApp is a Smartphone application for instant messaging. These days, it’s hard to capture students’ interest in learning English subject. Therefore, WhatsApp can be one of the creative teaching techniques to attract them and provide fun-based learning. WhatsApp increases idea contribution among students and provides faster and easier communication. Thus, this research aims to examine the use of WA (WhatsApp) as a learning instrument & how it could help students to enhance their language learning. Besides, it also investigates the significance of using the tool and defines its use based on students’ perceptions as it suits the recent young generation’s lifestyle.

S/N	Perception	Responses in Percentage (N=400)					Mean	SD	P Value
		1	2	3	4	5			
1	Important for educational learning	20 (5)	35 (8.75)	60 (15)	125 (31.25)	160 (40)	3.93	1.16	.000
2	WhatsApp helps me to improve teamwork skills	35 (8.75)	60 (15)	55 (13.7)	155 (38.7)	95 (23.7)	3.54	1.24	.000
3	Share information and connect ideas with peers	20 (5)	28 (7)	45 (11.2)	125 (31.2)	182 (45.5)	4.05	1.13	.000
4	Increases my interest and motivation in lessons	55 (13.7)	16 (4)	60 (15)	135 (33.7)	134 (33.5)	3.69	1.33	.000
5	Learning is a waste of time	36 (9.0)	60 (15.0)	88 (22.0)	96 (24.0)	120 (30.0)	3.51	1.30	.000
6	Increase my Communication with friends more efficiently	20 (5.0)	21 (5.3)	62 (15.5)	95 (23.8)	202 (50.5)	4.10	1.14	.000
7	I feel a sense of situation When using WhatsApp	46 (11.5)	54 (13.5)	86 (21.5)	102 (25.5)	114 (28.0)	3.45	1.33	.000
8	The use of WhatsApp stresses me out	88 (22)	66 (16.5)	102 (25.5)	66 (16.5)	78 (19.5)	2.95	1.41	.000
9	My grades will be better if I could contact teachers through WhatsApp after College hour	22 (5.5)	23 (5.8)	66 (16.5)	115 (28.8)	174 (43.5)	3.99	1.15	.000
10	Not conducive to good learning because it creates technical problems	70 (17.5)	23 (5.8)	84 (21.0)	102 (25.5)	121 (30.3)	3.45	1.42	.000

Table 9. Perception of Students

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – strongly agree, SD = Standard deviation, N=Number of Students, P = Probability, Numbers in Parentheses Indicates Percentage

The respondents’ perception of students towards WhatsApp usage in the ACU Library is shown in Table 9. The table reveals that in the perception of ‘Increase my Communication with friends more efficiently’, the majority of the Adi Chunachangiri University students say ‘strongly agree’, scoring 202(50.5%) and very few, numbering 20(5%) with the highest mean value of 4.10 and SD is 1.14, for the perception of students towards WhatsApp usage in the ACU Library.



### 6.10. Problems for effective use of WhatsApp

The WhatsApp may keep crashing, you may have trouble connecting to the WhatsApp servers, texts may be slow to send, or you may not be able to receive messages; problems for effective use of WhatsApp at ACU, such as GDPR Compliance; messages can be deleted – or can they?; It’s hard to enter a professional mindset on a personal app; It’s not built for transferring sensitive information; You need a contact’s phone number to add them; Group chats are with phone numbers, not people; Conversation topics and agendas can become confused; Entering and leaving group chats; only see who has read your messages; Sometimes, you need a roundup, etc.

S/N	Hindrances to the use of WhatsApp	Responses in Percentage (N=400)					Mean	SD	P Value
		1	2	3	4	5			
1	Poor internet network	166 (41.5)	102 (25.5)	50 (12.5)	30 (7.5)	52 (13.0)	2.25	1.39	.000
2	Poor electricity supply for charging phone battery.	134 (33.5)	114 (28.5)	70 (17.5)	50 (12.8)	31 (7.8)	2.33	1.27	.000
3	High cost of data subscription	132 (33)	155 (38.8)	35 (8.8)	30 (7.5)	48 (12.0)	2.27	1.31	.000
4	Lack of time	70 (17.5)	45 (11.3)	60 (15.0)	85 (21.3)	140 (35)	2.75	1.53	.000
5	Faulty mobile devices (phones)	110 (27.5)	95 (23.8)	75 (18.7)	76 (19.0)	44 (11.0)	2.62	1.35	.000
6	Insufficient knowledge on the use of the app.	96 (24.0)	90 (22.5)	54 (13.5)	102 (25.5)	58 (14.5)	2.84	1.41	.000

Table 10. Hindrances to the use of WhatsApp

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – strongly agree, SD = Standard deviation, N=Number of Students, P = Probability, Numbers in Parentheses Indicates Percentage

The respondent’s problems with the effective use of WhatsApp at ACU Library are shown in Table 10. The table reveals that problem of ‘Lack of time’, the majority of the student’s biggest choice is ‘strongly agree’, scoring 140(35%), and very few, numbering 45(11.3%), the state ‘disagree’, with the highest mean value of 2.75. SD is 1.53, the problem for effective use of WhatsApp in ACU Library.

### 7. Conclusion

The WhatsApp messaging app has received a place of pride in students’ academic and social lives at Adi Chunachangiri University (ACU), Karnataka, India. It was found to foster academic interactivity and social connectivity among the students, promote blended learning, and permit media in their education. Equally, it has emerged as a handy tool for transferring ideas, information, and knowledge, which students and lecturers should explore to facilitate learning. However, the Reasons for using WhatsApp by the students at Adi Chunachangiri University (ACU) are presented in Table 6. The result among the respondents concerning the reasons ‘To share videos’, more respondents scoring 196(49%) say ‘agree’. It may be seen from the table that 7 positive effects of ‘It keeps my interaction private and personal’, and the majority of the respondents say ‘strongly agree’, scoring 204(51%). It may be seen from the table that 6.8, negative impacts of ‘Students can be involved in accidents’, majority of the respondents say ‘strongly disagree’, scoring 188(47%). It may be seen from the table that 7, with the perception of ‘Increase my Communication with friends more efficiently’, most respondents say ‘strongly agree’, scoring 202(50.5%). The table 10 shows that result in the case of the problem ‘High cost of data subscription’, more respondents scored 155(38.75%), stated ‘disagree’ & 30(7.5%) of respondents said ‘agree’ for effective use of WhatsApp. Nowadays, WhatsApp plays a major role in university students’ education.

## References

- [1] Aharony, N., Gazit, T. (2016). The importance of the WhatsApp family group: an exploratory analysis. *Aslib Journal of Information Management*, 68(2), 174-192. doi: [10.1108/AJIM-09-2015-0142](https://doi.org/10.1108/AJIM-09-2015-0142).
- [2] Anderson, K. E. (2016). Getting acquainted with social networks and apps: WhatsApp-ening with mobile instant messaging? *Library Hi Tech News*, 33(6), 11-15. doi: [10.1108/LHTN-07](https://doi.org/10.1108/LHTN-07)
- [3] Ansari, M. S., Tripathi, A. (2017). Use of WhatsApp for Effective Delivery of Library and Information Services. *DESIDOC Journal of Library & Information Technology*, 37(5), 360-365. doi:[10.14429/djlit.37.11090](https://doi.org/10.14429/djlit.37.11090).
- [4] Bajpai, M. K. (2016). Impact of WhatsApp on LIS Professionals. *DESIDOC Journal of Library & Information Technology*, 36(6), 424-430. doi:[10.14429/djlit.36.6.10221](https://doi.org/10.14429/djlit.36.6.10221).
- [5] Fouad, N. (2017). Viral marketing effect on digital knowledge acquisition: WhatsApp as a model. *Alexandria*, 27(1), 10-29. doi: [10.1177/0955749017718705](https://doi.org/10.1177/0955749017718705).
- [6] Malhotra, D. K., Bansal, S. (2017). Magnetism of WhatsApp among veterinary students. *Electronic Library*, 35(6), 1259-1267. doi: [10.1108/EL-04-2016-0086](https://doi.org/10.1108/EL-04-2016-0086).
- [7] Thelwall, M., Vis, F. (2017). Gender and image sharing on Facebook, Twitter, Instagram, Snapchat and WhatsApp in the UK. *Aslib Journal of Information Management*, 69 (6), 702-720. doi: [10.1108/AJIM-04-2017-0098](https://doi.org/10.1108/AJIM-04-2017-0098).
- [8] Yeboah, J. and Ewur, D. (2014). The impact of WhatsApp messenger usage on students' performance in tertiary institutions in Ghana. *Journal of Education and Practice*. Vol. 5 (6), 159-164. Available at [www.iiste.org](http://www.iiste.org). Accessed 9/3/2017.