

New Trends in Behavioral Economics: A Content Analysis of Social Communications of Youth

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Md. Nur-Al-Ahad

Master Student, Toyohashi University of Technology, Japan

Syeda Nusrat

Lecturer, Faculty of Business Administration, University of Science and Technology, Chittagong, Bangladesh

Abstract

This paper summarizes the arguments and counterarguments within the scientific discussion on the issue of psychological factors that determine the level of rational behavior of an individual in decision-making, the nature of his/her interpersonal and intergroup interaction. The aim of the study is to analyze the main types of youth behavior, depending on the structure of the society around them and the subject of discussion. The urgency of solving this scientific problem is the constant transformation of the norms and rules of behavior declared in society, influenced by the development of information technologies, opening access to scientific and humanitarian knowledge, increasing the number of deviant behavior of young people, difficulties in their adaptation in society, etc. The study of the main psychotypes of the individual in the article is carried out in the following logical sequence: the starting point of the study is the assumption of a change in youth behavior depending on the object of discussion and the environment in which it is located, after which the authors use the content analysis method to study the behavior of students presented in different WhatsApp groups. The object of the study was the students of some Malaysian universities. The systematization of literary sources and further analysis testify to the continued use of smartphones, which support many applications, in a daily life. WhatsApp has been identified as one of the most popular applications used by smartphone users for both communication and education. The study empirically confirms the successful use of WhatsApp by university students and teachers as a means of communication and knowledge transfer. In the study, the authors have identified the topic of discussions, type of messages and contributors as well as silent readers involved in WhatsApp groups. All the messages exchanged are categorized based on four main topics which are study, personal, current issues and others. It has been found all groups have been able to achieve their respective group objectives. Overall, the most frequently discussed topic for each group is regarding study and personal interest.

Keywords: behavioral economics, WhatsApp, students' behavior, content analysis.

JEL Classification: D03, C38.

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Introduction

WhatsApp is used primarily for communicating with close friends, friends, and family. WhatsApp is seen as an informal means of communication with people rather than traditional text messaging (SMS). One study has found the creation and use of groups is a regular occurrence in WhatsApp (Church, K., and Oliveira, R.D, 2013). Some of these groups are titled as: roommates' group, colleagues' group, finance subject group, family group, as well as groups for a specific social event (Church, K., and Oliveira, R.D, 2013). Most participants have been seen actively using WhatsApp group to arrange social events and mini discussions. These groups allow people to communicate and share new things regularly without the pressure of having them to commit over an hour of anyone's time. Therefore, in this study, we will look further into the different categories.

Research done by the Higher Education Research Institute (2007) has shown that students spend around 94 percent of their time on online social networking websites during a typical week. Besides, most students are

spending quality time on WhatsApp even though social media is regarded by critics as posing challenges such as antisocial behavior, unproductive behavior, misuse of tools during instructional and so on. However, instead of some studies, which have imposed an outright ban on the use of social networking sites, there are some studies in developed countries indicating the fact that social networking sites do improve technology proficiency, social skills, and foster learning. According to LIN, Si (2012), animated emoticons are provided as substitutes of facial expressions, which is more vivid and entertaining than texting. All texting applications today such WhatsApp, Line, WeChat, and Viber have provided a variety of interesting emoticons. In general, students are likely to use emoticons towards showing their real feelings and emotion as well.

Research Objectives

The objectives of the study are:

1. To analyze the use of WhatsApp towards students' behavior in content analysis.
2. To understand the benefits of using WhatsApp among students nowadays.
3. To observe and analyze the conversation of WhatsApp in some chosen groups of students.
4. And to identify the topic of discussions, type of messages and contributors and silent readers involve in certain WhatsApp groups settings of the students.

Theoretical Framework

The emergence of Internet-based social media has made it possible for one person to communicate with each other. According to Carlsson (2009), people spend more time by their computers than outside with their friends but the social need is still there and is discovered in the interactions on social media such as Facebook, Twitter, and YouTube. The 21st century is witnessing an explosion of Internet-based messages transmitted through social media. Social media is actually a two-way media where people both talk and listen. Interactivity is what characterizes the social media with users freely sending, receiving and processing content for the use of others (Aula, 2010). In social media, people from various walks of lives gather in order to share as well as receiving information. Social media is changing the way people are communicating. Students constitute a great number of the total population in any country. Nowadays, students are using social media tools in order to get the most benefit out of their study and other related matters. One of the areas of social media is becoming widely popular nowadays that is cross-platform mobile messaging. WhatsApp is one of the most popular means of them.

Among the cross mobile messaging platforms used, WhatsApp has become very popular among the young generation (WhatsApp.com, 2014). WhatsApp has started its journey during the year 2009 by some ex-employees of Yahoo Inc. Over the years, WhatsApp has become a necessary and popular application for people to connect with each other's by only using internet connection and also without enduring any extra charges.

WhatsApp has come out to make life easy for Smartphone users (Slideshare.net, 2014). Compared to other cross-platform mobile messaging applications, WhatsApp is more users friendly. Also, the loading time of WhatsApp is really fast compared to other applications. WhatsApp has increased the popularity of the term "Stay Connected". WhatsApp only requires an internet connection, so it is a tool to get connected wherever one goes. WhatsApp is a multi-purpose, user-friendly, connectivity application to allowing sharing of not only messages but also images, audio files and videos (Patel, K.M., 2014).

According to one statistics published in 2013, the internet traffic in Malaysia increased by a whopping 51 percent to a total amount of 249,227 Mbps, as compared to 230,631 Mbps in 2012. The statistics have been described with the growth of several synergistic trends amongst Malaysian Internet users- such as the spike in the number of smartphones users' access in data messaging applications such as WhatsApp, WeChat and more (Cat Young, 2014).

Technology is changing in nature. And it turns out that WhatsApp is becoming popular than Facebook, the most popular social networking site. One survey result has revealed that 44 percent of smartphone owners use WhatsApp at least once a week compared to just 35 percent using Facebook messenger (Tech Times, 2013). Given the availability of WhatsApp across multiple mobile platforms and the fact that it has reached a critical mass of users, it provides us with an excellent opportunity to investigate how people really use such applications and how the messaging practices adopted in such services differ from traditional SMS.

Every user has a different intention when it comes to using the application. According to Church, K and Oliveira, R (2013), adoption and usage of mobile messaging services like this are influenced by a range of factors including cost, intent, community, privacy, reliability, and expectation. Therefore, we can conclude WhatsApp the most suitable application when it comes to people wants and needs.

WhatsApp as an application is being used in every major sphere of our lives. Having education is one of the major transformations in an individual's life. WhatsApp is not lagging behind when it comes to higher education perspective. In reality, WhatsApp has been found successfully being used by the students as well as teachers in the higher educational institutes.

From the viewpoint of higher education, WhatsApp is being used for the enhancement of discussions and sharing information among students and their lecturers. According to Yalcinalp and Gulbahar (2010), the value of these applications as follows by encouraging learners to learn by anticipating needs, make collaborative learning efficient and effective, build a relationship that stimulates learner to learner for consistent and progressive learning. Some countries such as China, India, and Zimbabwe have done some significant study about WhatsApp to determine the comparative advantages and disadvantages of the application and students performance while using these applications. But, there is a shortage of literature in the Malaysian context.

WhatsApp has a positive impact on e-learning, and it supports knowledge sharing between students, and between students and lecturers (Rambe and Chipunza, 2013). The study also showed the students felt that WhatsApp would give them the opportunity to express everything freely in a non-restricted environment thus removing the low participation constraints characteristic of lectures'. In addition, it showed that students learned technical skills by sharing and searching content on WhatsApp similar to other study-related platforms like e-learning platforms established by a particular university in the discussion. By using two-way interactions, it can be examined what kind of behavior of users and discussion of content more on learning or unrelated topics.

WhatsApp is popular among the students especially for academic purposes such as attach study-related files or documents arranging group work and sending links of useful websites. In another study, WhatsApp has been used by the students to extend classroom participation and engage in learning by conversation rather than lecture (Bruns et al., 2007). Students have limited time to communicate in the classroom. By using WhatsApp group, students can extend classroom communication by sharing information and participating in the synchronous conversation for course-related purposes.

According to Lauricella, S. and Kay, R. (2013), WhatsApp is perceived as a communication channel to the students and the opportunity has opened for students to communicate with their classmates by using their mobile phone and easily to respond within a minutes in WhatsApp. In general, the purpose of creating WhatsApp groups of students is to send messages pertaining to a wide variety of things besides study.

As it is observed, previous studies on WhatsApp have focused mainly on improving language skills, individual messaging behavior and being the best communication channel.

We have taken a great step in our study. Considering the research gap, we have conducted our study on understanding students' behavior in WhatsApp group settings. We have adopted the content analysis method for this study. In our study, we have also focused on assessing students' attitude towards the usefulness of text messaging in facilitating education-based communication in higher education style.

According to Ludlow and Duff (2009), the internet has had a more dramatic influence on education than any previous technological innovation because it has allowed individuals of all ages to access education and training programs. Actually, people nowadays use social networking sites as well besides cross mobile messaging platform. People show various types of behavior while contributing or creating their content on social networks and cross-mobile messaging platforms like WhatsApp. Uses of social networking sites and cross mobile messaging platforms allow students to express themselves, communicate and collect profiles that highlight their talents and experience. Several studies have shown that using social networking sites like Facebook and cross mobile messaging platforms are helping students to improve their performance and also it facilitates information sharing.

Social media and internet-based tools that promote collaboration and information sharing can be used successfully in academic settings to promote student engagement and facilitate better student learning (Kabilan, Ahmad & Abidin, 2010). Although there is a growing debate regarding the use of social networking sites and other internet-based tools for academic settings, some research studies suggesting

actually only a handful number of students use these sites for academic benefits. Most use these sites for purposes other than academic intention. Though there are negative perceptions, the possible effects actually offset the negative ones. Many studies showed that the use of weblogs or blogs in education facilitated a useful learning atmosphere. Though there is a wide variety of literature of available regarding the use of social media in academic settings, so far there is not enough number of studies, which tries to uncover the effects of WhatsApp usage on students' learning. Through our study, we have reviewed the literature related to social networking and internet-based tools and tried to fit in our context. This research will add improvement in this mostly uncovered area adding to the existing knowledge.

Students show a variety of behavior while interacting in social media and cross mobile messaging platforms. Sometimes the behaviors are hard to explain. The information shared by the student is also varied in nature. According to Christofides, Muise & Desmarais (2009), in social media settings students are very likely to post personal information like a birthday (96%), e-mail address (85%), hometown (85%), and relationship status (81%). Also, there are varied purposes among students while using online networking sites. Students perceived online social networking was used most importantly for social reasons, although it is sometimes used informally for learning purposed (Madge, Meek, Wellens & Hooley, 2009).

Research Methodology

The total number of participants is 49. Out of 49 participants in three groups, 33 are females and 16 are males. They are all users of WhatsApp and they are also subscribers of the selected groups. Their age ranges from 20 to 40 years. And all of them are postgraduate students in various reputed universities in Malaysia. The sampling design used for this research is convenience sampling design where the data have been collected using a convenience sampling approach via an online observation. We have observed the three selected group members from 1st May to 1 July i.e. over two months' period. We have designed and deployed an online observation to further explore our main findings. The observation has been viewed and monitored. We have deciphered the conversations of these two months from these three selected groups using Jota text Editor. Generally, Jota has been used because it is probably the most user-friendly text editor for the Android platform, which makes it a perfect app for anyone writing for a living or just doing a lot of writing while on the move. Usually, Jota can handle a large text which is up to one million characters according to its developer and a wide range of encodings. All the conversations have been recorded in Jota Text editor and have been analyzed using content analysis to get the main findings.

Content analysis is a method of analyzing written, verbal or visual communication messages (Cole, 1988). It was first used as a method for analyzing hymns, newspaper and magazine articles, advertisements and political speeches in the 19th century (Harwood & Garry, 2003). In content analysis, we classify the key ideas in written communication such as a report, article or film. We can do a content analysis of video, film and other forms of recorded information. The classification process called coding consists of marking text passages with short alphanumeric codes. Content analysis allows the researcher to treat human activity as text. In other words, human action can be seen as a collection of symbols expressing layers of meaning. Observational data can be transcribed into written text for analysis.

Table 1. Summarization of findings of 3 WhatsApp groups

Name of the Group	Objective or Purpose of the Group	Number of Group Members	Number of Active Members	Number of Messages	Type of Messages
Postgraduate Student Group	To make an easier discussion related in financial subject with admin group.	14	11	213 messages	A (study) = 79% B (personal) = 9% C (current issue) = 1% D (others) = 11%
PG circle of 3	To keep in touch with each other and also with the sponsoring authority from the Scholarship Manager.	21	11	90 messages	A (study) = 20% B (personal) = 71% C (current issue) = 0% D (others) = 9%
Business School Student Group	To make an easier discussion about any topic related to study and at the same time to discuss personal issues such as foods and vacation.	11	11	2089 messages	A (study) = 7% B (personal) = 41% C (Current Issue) = 3% D (others) = 39%

Source: Own elaboration of the authors

As we can see from the above table, we can see that the selected three groups have differences in terms of their objective or purpose, number of group members, number of active members, number of messages, and

the types of messages. This has supplemented the reason why we have selected a variety of groups in order to reflect a more valid study.

Analyzing the conversations in the three (3) selected groups, we have come up with the following viewpoints to discuss further. The viewpoints are:



Figure 1. 5 Viewpoints of WhatsApp Conversations in the Research

Source: Own elaboration of the authors

Relationship

Within WhatsApp, multiple participants can be added to a dedicated thread of conversation. Again, these groupings are bound to particular kinds of collective encounters and relationships in the real world whether these are, housemates, and classmates, groups of friends, officemates or specific familial relationships. One of the groups in the findings, it is Postgraduate Student Group shows 14 people and all women are not really knows each other and created a group because of classmates discussion purpose. Therefore, the conversation more touch on the related topic of the group purpose, proved by 169 out of 210 messages discussing their study. One of the participants in a postgraduate student group shows their inconvenience words to asking for the irrelevant question. Consider some of the following remarks:

“*Eyh, silap group mengadu, Jomsembangkting 760*”. It shows that the group created more on relationship-based. They created more than one groups to have a different kind of chatting and only invite those who are closer among participants. The nature of conversation is based on how often they meet and how long are knowing each other. The postgraduate student group is tied because of the same class and the same group. Surely, they own another small group and only selected participant invited in the group.

Post Graduate (PG) circle of 3 student group has been initiated by the officials of the sponsoring organization. Especially, the scholarship manager is the person responsible for looking into the matters in the group. There are three moderators or administrators of this group and all of whom are officials from the sponsoring organization. The group members are selected by the sponsoring organization. The participants are winners of the prestigious scholarship scheme from the sponsoring organization. The participants are from diverse backgrounds. The participants are depicting four nations from four Asian countries. The participants are all postgraduate students both masters and PhD. All of them are pursuing higher education in reputed universities in Malaysia.

From the conversation as we can see, there is a close interaction and warm relationship among the group members even though they are from a diverse background. The messages exchanged are mostly personal and study-related. Actually, the messages are according to the purpose of the group. Out of 21 members, 11 members are the bunch of individuals who keep in touch nearly every day.

We have coded the messages of the group Jalan-Jalan Cari Makan:

Table 2. Coded messages of the group Jalan-Jalan Cari Makan

A1	<i>Takper. Yg penting b selamatbalikkerumah. N happy with ur vacation</i>
A3	<i>Hahha. Tq b. U r very understanding</i>
A1	<i>No strawberry sbdiri b pun comey. sweet mcm strawberry</i>
A3	<i>Kemasbilik...berpeluh...tp mcm takkurslagijer...</i>
A2	<i>Kobolehkurustu, silayakindiri, kalauko rasa susahkurus, kotolongkemasruma kami, cepattukokurushahah</i>

Source: Own elaboration of the authors

JJCM has been created based on the concept of friendship among selected business school members who share a similar interest. JJCM has built a tight relationship among its users as it is depicted in our findings. The members have been found sharing all the personal emotion and privacy feeling in this group.

They also use a friendly name to call other users such dear, baby and *abang* where it shows they have no gaps between each other and comfort to share a good feeling. It is proved in the table above. The table has shown us each user have a good relationship by giving moral support to diet in a joking mood. Every user has given a good response on every new topic that has come out by another user. Users can send as many as a possible messenger to share their ideas. A big reason for the popularity Whatsapp is highest compared to phone messenger because is that they allowed the user to message one another without paying any fee for text messenger.

Topics of Discussion

WhatsApp is more informal and social in nature. Therefore, it (WhatsApp) tends to be shorter messages and more on conversational. In every topic of discussions, whereas if I get a text it's more of a long response so I will not reply to it whereas with WhatsApp it can just be one word. The participants will contribute more if the topics of discussion are interesting and related to them for having a respond. Every topic was discussed regarding the objective of the group. The findings of Postgraduate Student Group show the highest percentage is in study messages by 79 percent compared with the personal, current issue and other types of messages. All conversation (refer in excel) are related in a handout by the lecturer (lines 8 to 36), assignment (lines 142 to 152), class schedules (lines 286 to 299), assigned group number (lines 316 to 324) and looking for supervisor (lines 168 to 226). It shows that how frequent this group discussing on study matter. The objective of the created Postgraduate Student group is successful and manageable. The group admin is an important person to conduct and control of group conversation.

Analyzing the objective and the messages exchanged in the Post Graduate (PG) circle of 3 groups, we can conclude the group is informal in nature. Personal and study-related messages have been seen to dominate the majority of the conversations. We have not seen any intimidating behavior or annoying topic of discussion in the group messages. Out of 21 participants, 11 participants are deemed to be regular contributors to the group discussion. The messages exchanged are well mannered and also there is a mixer of humor and emoticons in some of the messages which have been found to add new spice to the messages. The flow of the messages is in good sequence.

Following is Table 3 showing the topics of discussion in Jalan Jalan group:

Table 3. Topics of discussion in Jalan-Jalan group

A3	: <i>Penah org blkgtak.kakikiclahkrusi</i>
A3	: <i>Bauplak.kaki</i>
A2	: <i>Trbaik</i>
A7	<i>Dip n dip la</i>
A2	<i>Steamboat</i>
A2	<i>Banyakdalamfikiranaku, stimbot, steak, dimsum, dipndip, tomyam, sate, fishnchip, spagethi, nasigorengikanmasin</i>

Source: Own elaboration of the authors

The most attractive topic discussed by group members is a joke and foods discussion. It has truly achieved a group objective about foods planning. Through the topic of discussion, we can assume their relationship is very close in nature and for that reason; they can make a joke without hurting any of them.

They also plan for a food location by sharing the best place and argue for a not interested and expensive place. The group leader plays the main role in making the latest decision. It is observed every participant has a close relationship with each other. WhatsApp has made it easy to communicate with each other on any topic.

Time Spent

Because of its immediacy and ubiquity, text messaging is particularly well suited to providing time management assistance to students. According to Yao (2011), instant messaging is a platform used for receiving immediate responses to questions or concerns and facilitating a two-way conversation between group participants. Overall analysis from Postgraduate Student Group participants shows the time spent in conversation at hours 1500 to hours 2000. The class schedule of the postgraduate student group is usually in the morning and night. Therefore, a long conversation was active at certain peak hours. Other time, as a student it should focus on study and personal as well. Within 2 months of observation in Postgraduate student group, the total number is 215 messages by all participants. It shows that the participants are not using all the time to make conversation. There is a gap in group conversation between 2 days to 2 weeks.

Time is an important factor when it comes to communicating. Since students or participants of postgraduate student (PG) circle of 3 groups are users of smartphones and they are also mobile people in nature, so most of the messages are exchanged during convenient time either day or night when the participants are deemed to have free time. So, we can say the group participants are prudent while allocating their time in having a discussion in the particular group in discussion. Some participants are silent due to having a busy time with their study and other matters as we have got their whereabouts from the participants.

In Jalan Jalan group, jokes are the most conversation occurred among group members with a total message of 214 and followed by other interesting topics, which are foods planning, birthday celebration and world cup with a total message of 125, 118 and 91 respectively. Almost an average of twelve minutes spent on making a joking each other, ten minutes spent discussing foods planning and birthday celebration and five minutes spent on a story about the world cup. What we can conclude from the time spending on each type of conversation is this group is really formed with a tight and good relationship with each other. It is because this kind of informal conversation like somewhat annoying jokes only accepted by a certain individual with a close relationship without the feeling of hard sensitivity.

Leisure Time and Distraction

We turn our attention now to consider ways that people come to acquire lightweight information about others through WhatsApp. WhatsApp offers notification and awareness mechanism. Some of the information had shared not be important to other participants and notifications give distraction to them. Refer to Postgraduate Student group conversation (lines 325-348); the participant is less chatting due to the final exam is around that time. Most of the participants need space of privacy and less contributes to the message conversation. Therefore, group participant must understand the situation and feel among them. In addition, Postgraduate student group less percentage of distraction, only 9% (personal) and 1% (current issues) discussing and sharing by group participant.

We have not found any distracting in postgraduate student (PG) circle of 3 groups. The messages are in plain English and the majority of the people use English as the medium of conversation. There is the presence of a small number of conversations in Basha Malaysia.

Business School Student group (Jalan-JalanCariMakan) also can be measured towards the leisure or distraction of conversations on WhatsApp group. The nature of this group is a close-need group where everyone is already closed to each other and can discuss everything in the WhatsApp group. Therefore, as refers to our findings on page 21, the most interesting topic that had been talked is about personal interest. The topic that got involvement from all members is food, birthday celebration and world cup, which have 125, 118 and 91 simultaneously out of 2089 messages. However, leisure topic is a topic that does not attract the entire participant to involve in the conversations appeared. For an instant, current issues just got only 5 out of 2089 messages. This can be analyzed that the current issue is a leisure topic which does not capture interest majority of participants in Jalan-JalanCariMakan group towards those conversations. In other words, it can be said that this group does not really have an interest in the current issue topic. Another leisure discussion topic is the facial treatment which it just has 3 out of 2089 messages.

Motivation and Support Systems

Referring back to the purpose of created WhatsApp group is to help one another in terms of planning, preparation, and information. Group admin is a responsible person to conduct and control in WhatsApp conversation. Nowadays, students are preferred two ways communication channel compared to face to face communication. Therefore, WhatsApp is one of the media to be part of the student lifestyle. The motivation creates in ways of listening to other participant problem and give for help. For example, refer to Postgraduate student group conversation (lines 168 to 226), each participant trying to help their classmates in searching supervisor for project paper. Some of the participants were feeling unmotivated due to rejection by another supervisor. It could help by giving suggestion for other supervisor name and contact number to reduce the stress of that participant. The problem can be shared with friends and taking positive advice from them.

Postgraduate (PG) circle of 3 student group is all about motivating and supporting each other. The group moderators are supportive of the scholarship winners and that is why they have initiated the group. The group participants are also found to be supporting and fun-loving as we have analyzed the messages.

The Business School student (Jalan-JalanCariMakan) group has been used as one of the support system tools in order to get the most benefit out of motivation on personal, other related matters and as well as study among group members. Since WhatsApp has become the portable means of communicating with others, each group of members has been utilizing its to focus on communicating freely and fast in any issue raise out in group conversation. The use of the WhatsApp group of business school student group has become more

facilitated through open-minded group members in supporting and motivating each other. With a close relationship and informal conversation in all topics, WhatsApp has become their choice for these reasons in communicating and updating information, especially on personal matters. It is observed that each group members are actively supporting and motivating each other in giving a positive comment even in a small issue or sometimes issues not related to the objective of the group. We realize that this group basically is able to support each group members in freely sharing more on their personal matter especially asking for opinion, comment, and idea without any dissatisfaction issue.

Conclusion

This study revolves around investigating students' behavior towards uses of WhatsApp messenger. Three groups of postgraduate students from different universities in Malaysia have been observed using the observation method of research. In the study, we have identified the topic of discussions, type of messages and contributors as well as silent readers involved in each WhatsApp groups. All the messages exchanged are categorized based on four main topics, which are study, personal, current issues and others. It has been found all groups have been able to achieve their respective group objectives. Overall, the most frequently discussed topic for each group is regarding study and personal interest. Issues like class confirmation and cancelation quiz arrangement date and subject registrations have been found being discussed.

In terms of personal interest, they are using WhatsApp as a medium to express their feelings; sharing the problem and asking for certain help from group members. Nearly most group members have been found giving good response and cooperation in reflecting each member's problem and personal matter. It seems like having good chemistry of relationship and open-mindedness in discussing any problem in the selected groups. We have found some topics, which are popular among Business School students' group, but those are never discussed in the other two selected groups. We have identified that the selected groups are not keen when it comes to discussing current issues. Burning issues have been found to be discussed in a loose manner.

It has been evident through our analysis that, WhatsApp has become the portable means of communicating with each other, particularly among students. Students have been found using WhatsApp for many reasons including study and other matters.

What we have observed in our study is that the majority of the group members are actively involved in any conversation as they are mobile individual in nature. This has given them a greater advantage over traditional ways of communicating like making phone calls. WhatsApp also allows users to make a group to discuss any topic with a large number of users' real-time.

Human beings are changing in nature. Through our study, we have tried to analyze the behavior of the three selected group members and also we have analyzed their messages using content analysis and we have then matched according to their respective group objectives. The group members are found to be benefitted from the messages shared or conversations held.

An application that is created or established of course will bring different benefits and drawbacks to the users. Same goes to the creation of WhatsApp application. If we look from the positive impact, generally WhatsApp has been found contributing to tightening relationship among individuals within close group settings. This application is definitely useful and without it, the group discussions would probably not be as what has been analyzed in our findings. In such situations, people also should carefully rethink about how they should use this application in building a relationship, sharing on the topic discussed, spending time for giving comment and sharing the idea and motivating each other.

Future Research Indications

As we have conducted this study, we have sensed there is a lacking about reliable study regarding this topic. Analyzing this study, we can further recommend some significant studies, which can be done in the future in order to enrich this topic. One future study can be done among various groups of students like high school students, bachelor's degree student, and postgraduate students. Another potential study can be done where the WhatsApp usage behavior of the two or more countries can be analyzed. As we can see, there are huge opportunities to conduct several significant studies in this field.

References

1. Bedichandani, A, Mohite, K., et al. (2014). Retrieved June 15, 2014, from Slideshare: <http://www.slideshare.net/priyankashinde351/strategy-on-whatsapp>.
2. Bruns, A., et al. (2007). Mobile learning technologies and the move towards "users-led education" in exploring the use of text and instant messaging in higher education classrooms, Lauricell, S. and Kay, R. (2013). *Research in Learning Technology*, pp. 14.

3. Church, K., & Oliveira, D. R. (2013, August 30). What's up with WhatsApp? Comparing Mobile Instant Messaging Behaviors and Traditional SMS. Retrieved July 1, 2014, from Mobile HCI: http://www.ic.unicamp.br/~oliveira/doc/MHCI2013_Whats-up-with-whatsapp.pdf.
4. Christofides, E., Muise, A., & Desmarais, S. (2009). Information disclosure and control on Facebook: are they two sides of the same coin or two different processes? *Cyberpsychology & Behavior*, 12(3), 341-345.
5. Cole, F. (1988). Content analysis: process and application. *Clinical Nurse Specialist*, 2(1), 53-57.
6. Harwood, T., & Garry, T. (2003). An overview of content analysis. *The Marketing Review*, 3(4), 479-498.
7. Higher Education Research Institute (2007). College freshmen and online social networking sites. Retrieved July 2, 2014, from Zanamwe, N., Rupere, T., & Kufandirimbwa, O. (2013, January 1). Use of Social Networking Technologies in Higher Education in Zimbabwe: A learner's perspective. *Journal of Computer and Information Technology*, 18.
8. Ifham, K. (2014, March 2). Disadvantages and Advantages of WhatsApp. Retrieved July 4, 2014, from <http://www.drawbacksof.com/disadvantages-whatsapp/>.
9. Kabilan, M., Ahmad, N., & Abidin, M. (2010). Facebook: An online environment for learning of English in institutions of higher education? *The Internet And Higher Education*, 13(4), 179-187.
10. Kaplan, A., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68.
11. Lauricella, S., & Kay, R. (2013). Exploring the use of text and instant messaging in higher education. *Research in Learning Technology*, pp. 17.
12. Lin, & Si. (2012). Instant Messaging on Interpersonal Relationship: How It Brings Intimacy and Negative Feelings? Thesis dissertation Master of Science, pp. 30.
13. Ludlow, B., & Duff, M. (2009). Evolution of distance education at West Virginia University: Past accomplishments, present activities, and future plans. *Rural Special Education Quarterly*, Issue published June 1, 2009.
14. Madge, C., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university: 'It is more for socializing and talking to friends about work than for actually doing work'. *Learning, Media and Technology*, 34(2), 141-155.
15. Osman, Mohd Azam, Talib, Abdullah Zawawi, Sanusi, Zainal Abidin, Shiang-Yen, Tan, & Alwi, Abdullah Sani (2012). A Study of the Trend of Smartphone and its Usage Behaviour in Malaysia. *International Journal on New Computer Architectures and Their Applications (IJNCAA)*, 275-286.
16. Patel, K. M. (March 2014). Customer Satisfaction Towards WhatsApp. Retrieved 24 June 2014, from <http://www.slideshare.net/Erchiragpatel/project-report-on-customer-satisfaction-towards-whatsapp>, pp.62.
17. Rambe, P., & Chipunza, C. (2013). Using mobile devices to leverage student access to collaboratively-generated-resources: A case of WhatsApp instant messaging at a South African University. International Conference on advanced information and communication technology for education, pp. 7.
18. Satariano, A. (2014). WhatsApp's Founder Goes From Food Stamps to Billionaire. Retrieved August 2014, 2014, from Bloomberg: <http://www.bloomberg.com/news/2014-02-20/whatsapp-s-founder-goes-from-food-stamps-to-billionaire.html>.
19. Schofield, J. (2013, June 21). Net-based services like WhatsApp are replacing SMS among the under 35s, says Analysis Mason. Retrieved June 30, 2014, from ZDNet: <http://www.zdnet.com/net-based-services-like-whatsapp-are-replacing-sms-among-the-under-35s-says-analysis-mason-7000017147/>.
20. Tech Times. (2013, December 3). WhatsApp beats Facebook to emerge most popular mobile messaging service. Retrieved June 30, 2014, from <http://www.techtimes.com/articles/1794/20131203/whatsapp-beats-facebook-to-emerge-most-popular-mobile-messaging-service.htm>.
21. WhatsApp Inc. (2014). Retrieved June 20, 2014, from WhatsApp: <http://www.whatsapp.com/>.
22. Yalcinalp, & Gulbahar. (2010). Retrieved in Yeboah, J. & Ewur, G.D. (2014). The Impact of Whatsapp Messenger Usage on Student Performance in Tertiary Institutions in Ghana. *Journal of Education and Practice*, pp. 8.
23. Yao, X. (2011). Enhancing classroom education with instant messaging tools. International Conference on Internet Computing and Information Services.
24. Yong, Cat (2014, April 9). Malaysian Internet Consumption posts unprecedented growth. Retrieved June 24, 2014, from enterprise news: <http://www.enterpriseitnews.com.my/connectivity/item/3425-malaysian-internet-consumption-posts-unprecedented-growth.html>.
25. Zanamwe, N., Rupere, T., & Kufandirimbwa, O. (2013, January 1). Use of Social Networking Technologies in Higher Education in Zimbabwe: A learner's perspective. *Journal of Computer and Information Technology*, 18. Retrieved 2014, from <http://www.ijcit.com/archives/volume2/issue1/Paper020102.pdf>.