THE IMPACT OF WHATSAPP TOWARD UAD UNDERGRADUATE STUDENTS' BEHAVIOR IN LEARNING PROCESS

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Abstract. WhatsApp is one of the social media that is used to communicate in the learning process. At present, students cannot be separated from their daily activities away from this social media. This opportunity can be utilized as well as possible by the students. This research was conducted to find out of using WhatsApp toward undergraduate students' behavior in the teaching and learning process. This study was descriptive qualitative research. The data were analyzed using descriptive analysis technique. The data were collected using interviews, observation, and documentation. The aim of this study to analyze the impact of WhatsApp toward undergraduate students' behavior and to analyze students' behavior in their learning process. The result of this research showed that are a positive impact on student behavior as it affects the learning process as, students' sharing knowledge, student preparation for class, attention, student participation in class, student learning, desires to take additional classes or in subject matter and the negative impact such as, students are more focused.

Keywords: Impact; WhatsApp; Undergraduate students; Behavior; Learning process.

INTRODUCTION In the development of industrial era 4.0, technology is needed for the advancement of quality in the field of education. Technology Enhancement Learning (TEL) has the potential to improve the student experience by facilitating learning independently, which can reduce the barriers experienced and it is very easy to access anywhere and anytime. With the current technological evolution, new opportunities have emerged for students to interact with classmates, teachers and learning material (Vaughan & Lawrence 2013). The various technologies are available, most have been used for teaching and learning processes in the classroom as a medium to facilitate students, for example, such as WhatsApp.

A WhatsApp in a smartphone is a mobile phone with advanced computing capabilities and connectivity (Andrew, 2009).WhatsApp enables communication with anyone who possesses a smartphone, has an active internet connection, and has installed the application. Hence, students can follow their activities off-campus using WhatsApp, SMS, Facebook, Twitter, LinkedIn and Blogs (Dashti&Aldashti, 2015). It can be ideal for students because its cost is low and that enables students and teachers to communicate, chat, share ideas and send audio and video messages as frequently as they want at any time of the day. Despite, communication and networking opportunities provided by the WhatsApp tool, and the students feel easy to adapt and participate in class sessions

when using technologies such as tablets or smartphones, with which they actively interact depending on needs (Sevillano-García&Vázquez-Cano, 2015).

At present, students cannot be separated from their daily activities away from this social media. This opportunity can be utilized as well as possible, for example, can be used in a more constructive way for learning because the new generation is technology-friendly and easy to use anytime and anywhere. This is also a part of students' daily lives, i.e. by means of informal communication this will be more accepted by students with better participation and response. This will be cost-effective because it does not require sophisticated hardware and software as the delivery of learning material.

Having reviewed on some relevant literature which conducted this research, LiaqatAli(2018) the results of their research show that the WhatsApp application can be very convenient platform to answer questions and discuss by students and lecturers anywhere and anytime and using of mobile applications and technology influences student behavior, in the academic field as well performance and teaching strategies.

WhatsApp as a mobile instant messaging that gained incredible popularity with users between other instant messaging.
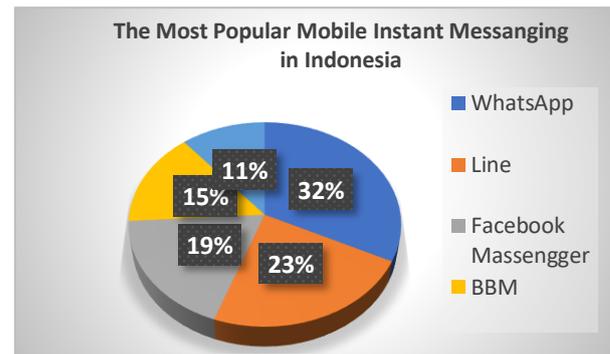

The Most Popular Mobile Instant Messanging in Indonesia

WhatsApp 32%
Line 23%
Facebook Massengger 19%
BBM 15%
11%

Figure 1. The most popular mobile instant messaging in Indonesia(Population Review and Census, 2019).

To supporting the data above, Preston et, al (2010) argue that nearly 70% of students state that they learn just as well in online learning communities such as WhatsApp groups, Facebook communities, Twitter chats, and Google+ communities, as they do in lectures that are held in the classroom in the presence of other students. WhatsApp is that it represents a private kind of interaction much better than other social media platforms such as Facebook or Twitter (Madden, Lenhart, Cortesi, & Gasser, 2010)

Based on the data above, the researcher chooses WhatsApp as an interesting topic to do this research. But the limitations of this study focused on student's behavior in the learning process.

WhatsApp

Mobile learning uses WhatsApp platforms for mobile distance education. Early WhatsApp contains a variety of computing capabilities and connectivity. On the other hand, it is also a cross-platform smartphone

messenger that employs users' existing Internet data plan to help the network socially in real-time (Aicha, 2014). WhatsApp provides online users with the ability to send and receive a variety of media, such as images, videos and audio media messages. Client software is available for Apple, iOS, Google Android, Blackberry OS, Microsoft windows phone, among others. WhatsApp Inc. was created in 2009 (Albergotti, MacMillan & Rusli, Evelyn, 2014) WhatsApp instant messaging handled ten billion messages per day in August 2012 (Olanof, 2012). In June 2013, WhatsApp Inc. announced that it handled 27 billion messages every 24 hours (Sushma, 2018).WhatsApp had over 450 million monthly active users. Additionally,700 million photos are shared daily, and 10 billion messages are also shared daily (Parmy, 2013). The WhatsApp platform has the following collaborative features such as provide students or instructors with the ability to create a group (social network group) that supports the social interactions of up to 11 group members that can engage in discussion forums, provides the ability for students to send messages without limits. The application uses a 4G/3G/EDGE Internet data plan or Wi-Fi to ensure continuous data transmissions across the WhatsApp mobile system and students using WhatsApp through a variety of mobile devices, such as smartphones, Galaxy tablets, and so on can message one another through texts, images, videos, and so on. Motiwalla (2007), suggests that popularity and support for mobile devices

within the student population are great and that the majority of students at universities benefit from texting through mobile learning devices. Other research in this field found that students in universities are oriented and positive about using mobile learning in educational fields and it can be best utilized in education (Litchfield et al, 2007). In other words, the field of principal factors influencing students'motivations to engage in social interactions. (Cheung et al, 2008).

Behavior

The most important feature of the smartphone is communication. The accessibility to the Internet through smartphones has become a daily routine for people to an extent that is over-depended on. With a smartphone, people can communicate without concern about the distance. Smartphones have been broadly adopted by mainly the youth (Carroll, et al, 2002). Through the advancement made today, they are also used for other purposes such as entertainment, bills payment, audio and camera recording and internet browsing. These smartphones have become an adaption for all age groups, either younger generations or older generations. A study over 140 individuals in Spain, whose ages range between 20 to 60 years old and they found that smartphones are commonly used for their convenience in communication (Church, K., & de Oliveira, 2013). In Riyadh, research that has been carried out on 450 individuals, ages ranging

between 18 to 55 years old (Alosaimi, 2016) reported that smartphones are mostly utilized for their communication purposes and also entertainment purposes. O'Hara et al (2014) on 20 people (17 to 49 years old), found that smartphones, specifically WhatsApp, is a place where individuals would express their problems to their peers. Behavior has been defined in a different way, which refers to the cumulative deposit of knowledge, understanding, manner, values, attitudes, roles, concepts of the life, and possessions acquired by a group of people in the course of generations through group striving and individual (Bandura, A., 1997), it is personal's beliefs in their capabilities to produce desired effect by their own actions. Similarly, a proxy for culture has been reported to affect on-line behavior (Carroll, J., 2002).

The research questions of this study are "how the impact of WhatsApp toward students' behavior and how is the impact on students' learning process? "The objectives of this study are to know how the impact students' behavior of WhatsApp and to find out how the impact of students' learning process.

METHOD

The method of this study is used descriptive qualitative. Qualitative research to show the descriptive of the data and analysis of phenomena, social activities, attitudes, perception, beliefs, and individual perspective or groups.

Settings of the research

This research was conducted at Ahmad Dahlan University - College of Languages - Department of English Language from October up to November 2019. Ahmad Dahlan University is located in Yogyakarta. The participants of the study were undergraduate EFL students in the fifth semester. The number of students who participated in this study was five EFL students in the Department of English Languages. Five students were interviewed.

Data Collecting Technique

In this research, three types of data collecting techniques were used observation, interviews and documentation, to explore the research question, and designed to elicit information about the present frequency of using WhatsApp toward EFL students' behavior in the Department of English language.

RESULTS

The behavior of students suggests that WhatsApp instant messaging makes learning easy, favors problem-solving and resolves to learn difficulties related to the learning process or to learning content distributed through WhatsApp, knowledge sharing.

Rambe and Bere (2013) suggest that in the WhatsApp platform can increase student participation in the form of online interaction, and coaching in the learning

community to knowledge creation and advancement in teaching modes through technological development.

However, the latest technological developments inherent in daily activities are also referred to as virtual networks that strongly support the intense interaction and communication of an online forum (Drago, 2015).

Increased multicultural nature in the process of online learning activities has become a necessity for every user to be aware of the role of a cultural factor play in student interaction and academic performance in an online environment (Gómez-Ray, Barbera, & Fernández-Navarro, 2016).

Furthermore, socio-cultural factors such as cultural and social background Diversity in online networks affect participation when students join and enter into the scope of discussion forum activities related to diverse academic content is an important component of success a learning achievement (Mittelmeier et al. 2016). Then, the most common use of WhatsApp for educational purposes is to facilitate communication between students. This usage is similar to the use of WhatsApp for personal, social goals and also purposes in the application of education (Yeboah & Ewur, 2014).

The Faster of Sharing Knowledge

Mobile Instant messaging through WhatsApp for academic purposes provides students with their opportunities to interact together, to construct and share knowledge (Chan, 2005).

In this system, students are quickly informed of every update and any message inserted by a member of the group. An easy to use user interface is important in helping orientate their attitudes toward this technology. In this respect, the findings of this study confirm those of previous research projects that underscore the importance of having a user-friendly Web-based platform (Cheung et al., 2008).

> *"It makes me easier to share the information with our friend by using of WhatsApp, because of the not only picture, we can share videos, file, audio and link a source from the internet"*
>
> (E1)
>
> *"I more accustomed to sharing some information and material quickly by online group discussion than face to face, because I felt effective and faster.*
>
> (E8)

In their research related to learning communities, Strijbos and Fischer (2007) noted that collaborative learning strategies are very useful to construct and share knowledge among students in collaborative and cooperative online courses in the presence of an instructor or tutor. The collaborative and cooperative learning activities achieved by students in the activity system help researchers find the cognitive outcomes of a learning activity

and the processes of knowledge creation and sharing during the learning process. Activity theory stimulates professionals to renew knowledge (Tillema & Orlandk, 2006).

The used of WhatsApp to engages matters (e.g., sending reminders, managing the class), for creating a positive social atmosphere in and out of class until the scope of learning process, for facilitating student to student with help giving, for didactical purposes (e.g., sharing learning materials, increasing activate students' question-answer session in learning activities), and to help the student to avoid indiscipline. Besides that, other social media platforms (e.g., encroaching on free time, student expectations regarding teacher availability, inappropriate language use (Asterhan& Rosenberg, 2015).

Students' Preparation Before class

The integrated of WhatsApp mobile learning activities as a valuable process for preparation before class like sharing knowledge, exchange experiences and ideas, discuss various academic, social issues, seek help and support during their learning activities. It appeared to be natural for them to create posts, share information, and conduct online discussions using the WhatsApp messenger. From a technical perspective, Husain (2014) may have been correct that the affordances of online content creation and communication.

"Make an intensive communicate with instructors about office hours and meetings"

(E8)

"When there are unexpected subjects, we always use WhatsApp to communicate so that we can prepare the material and our self"

(E1)

"Share some information to read and prepare material before class begins"

(R4)

"Publish courses announcements"

(P8)

The students currently need cooperative and collaborative learning using technology that is easy and fast to share knowledge informal class or an informal class, this kind of interaction promotes learning formal content in an informal way with the possibility of having access to the information at no specific study- time and meaning negotiation of all the participants (Baharani & Sim, 2012), (Díaz & Carrión, 2015).

Students are satisfied with this online activity because they can integrate learning communities and have a positive attitude towards these activities. Enhancement in the use WhatsApp in the University environment helps students easily cooperate and collaborate and improve their communication to make it easier for students to prepare for learning before the class is running can also prevent students

from communication between lecturers and students (Rovai, 2002).

Williams, Birch & Hancock (2012) argue that online lectures are more effective when combined with attend face-to-face lectures and online lectures with the aim of achieving learning outcomes. Thus, students are expected to get used to maximizing their preparation both from themselves and equipment before entering class.

Attention or Focus Group Discussion

The level of focus or full attention on each learning process as well as the delivery of information is very important to achieve maximum learning. In this regard, the use of social networking and integration of instant messaging has shown that the features can encourage collaborative learning to contribute to the process of learning active participation. In this study, the WhatsApp group serves as a possible tool in supporting these activities (Pierce, 2009). This indicator refers to all occurrences when students demonstrate, through questions and/or comments, how committed or concerned they may be with the activity they are carrying out (Casanova et al., 2009).

Some responses from the participants below illustrate their attention during online group discussions by using WhatsApp.

"communicate with my classmates about matters related to courses requirements"

(E2)

"communicate with my instructor about matters related to courses requirements"

(P8)

"to discuss ideas about courses with my classmates"

(R4)

Results show that the use of WhatsApp can support students in focusing attention on any information received in the discussion group no need for adaptation and intensive which is quite long and this makes students easy on the inside integrate into their learning. This matter found about students' positive perceptions about the use of WhatsApp in their learning are similar to other research findings(Ahad& Lim, 2014). The technology gives students' of any age, the opportunity to engage in collaborative interaction (Romero & Barberá, 2012). In online discussions, collaborative practices play an important role since the participants try by working together, different strategies to build knowledge as a group.

The students also unconsciously when using WhatsApp in their learning needs with a high level of attention in the discussion of the context, in this situation the student felt easier, fun, and useful, which means they have positive behavior towards using WhatsApp in their formal learning.

In operating this application, to send, receive messages, and to form groups, it does not require a complicated regulatory process, so it's very easy to

use (Tang & Hew, 2017). This discussion forum is good to provide opportunities to collaborate and work together to build knowledge for students (Chan, 2005). So, Discussion in an online group integrated into a mobile device provides opportunities for students to interact socially with their instructors to facilitate learning and complete learning difficulties and facilitate solving a problem.

Students' Participations

Student participation in the learning process is very important because it can support one of the successes in a learning process, where students can directly participate in responding to material that has been previously presented in an online group.

Platforms on WhatsApp can encourage collaborative learning that contributes to the learning process, active participation, and support the learning process anytime and anywhere, as well as in the context of informal communication, which is common in all social media platforms (Arteaga Sánchez, Cortijo, & Javed, 2014).

"In my opinion, the level of participation in WhatsApp is more active, because students are more forthright in expressing what they think"

(P8)

"I became accustomed to actively asking and sharing information about

assignments and learning materials"

(R4)

"asking, responding and confirming information related to learning both from friends and lecturers"

(E2)

There are previous findings that also indicate support for full participation and sharing of content about learning material in online activities both classrooms and outside the classroom (Arteaga Sánchez et al., 2014),(Bouhnik & Deshen, 2014),(Church & De Oliveira, 2013),(Nguyen & Fussell, 2016),(Rambe & Bere, 2013)(Rambe & Chipunza, 2013). So, among students quickly share about each update and any message inserted by group members. The users can be helped to confirm, and actively participate in asking about the information they have got. The result, have similar to the previous study underscores the importance of having a friendly web-based platform to increase the active participation of users (Cheung et al., 2008). This indicator refers to all occurrences when students demonstrate, through questions and/or comments, how committed or concerned they may be with the activity they are carrying out(Casanova et al., 2009).

Discussion

The results in this study for high education at the undergraduate student as a participant

felt satisfied by using WhatsApp in online group discussion and impact their behavior when they operate it.

The attitudes of students suggest that this application makes learning easy, favors problem-solving and resolves to learn difficulties related to the learning process or to learning content distributed in their learning. And the other positive impact behavior consists of; sharing knowledge, interaction or participation, attention and preparing their course for the learning process.

In addition, social interactions improve the effectiveness of learning and teaching (Vygotsky, 1978). This advantage help students easily construct and share knowledge through WhatsApp social networking. It is similar to (Vygotsky, 1978) states that can improve their social relations in every situation especially in academic purposes. Gillingham and Topper (1999) mean that the effectiveness of the learning process view in a good online discussion context can solve their difficulties together.

Finally, the results of this study which are consistent with those ideas stated by researchers such as; WhatsApp for academic purposes provide students with their opportunities to interact together, to construct and share knowledge (Chan, 2005).

In the previous result showed that support with this study in full participation and sharing of content about learning material in online activities both classrooms and outside the classroom (Arteaga Sánchez et al., 2014),(Bouhnik & Deshen, 2014),(Church & De-Oliveira, 2013), (Nguyen & Fussell, 2016), (Rambe & Bere, 2013), (Rambe &Chipunza, 2013). Meanwhile, to all occurrences when students demonstrate, through questions and/or comments, how committed or concerned they may be with the activity they are carrying out (Casanova et al., 2009). Enhancement with using WhatsApp in the University environment helps students easily, cooperate, collaborate and improve their communication. it easier for students to prepare for learning before the class is running, also prevent students from communication between lecturers and students (Rovai, 2002).

This situation is becoming more active and is increasingly based on the online social context. It also makes the learning process is becoming efficient, saves time and Increasingly at odds with formal education. In addition, face-to-face learning in the classroom is a formal academic learning process and used mostly to disseminate information to individuals rather than improve social interaction between students. The social dimension is very important in constructing knowledge and orientating students towards new educational technologies that use social networks. The WhatsApp mobile learning is a good solution to improving community-level interaction, the social presence among students and it can also impact their behavior.

Conclusion

This study has shown that WhatsApp as social networking has a high positive impact on the learning process of students. The use of the WhatsApp messenger as an effective way to facilitate their activity in education has increased. First, students' behavior and past experiences when using WhatsApp and the application perceived ease of use shape their attitudes toward this technology. From the findings, it is clear that the students' behavior is positive and oriented toward the learning process integrating WhatsApp learning activities. Some students give their statements that WhatsApp instant messaging makes learning easy, faster to share knowledge with their friend informal class although an informal, the student also easier to prepare before the class (to confirm the schedule, time and the material), attention and focus group discussion and improve student by s participation in collaborative by using Whatsapp.

Students prefer this innovative educational technology-based mobile learning on their smartphone. It helps students to create a learning community, to easily construct knowledge and to share it with other members of a WhatsApp group through instant messaging. In addition to the social interaction between students in the group, WhatsApp instant messaging is a free application, which is advantageous. Mobile system text messaging allows the user to send and receive messages synchronously and asynchronously. The WhatsApp instant messaging system is simplistic, intuitive, and very easy to use. Users have the chance to continue chatting with their buddies without slowing down the device. Another advantage of WhatsApp instant messaging is that it allows users to transfer all of the data, like file, picture, videos, audio and links in some resources.

ACKNOWLEDGMENTS

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