

Medical Students' Perception, Attitude, and Benefits of Using Mobile Messaging Applications for Learning Outside Clinical Settings

Dr. Sofia Alvarez^{1*}, Dr. Miguel Torres¹

¹Department of Medical Education, Hospital Clínico San Carlos, Madrid, Spain

Abstract:

Today, many institutions of higher education worldwide frequently utilize online instruction through trendy WhatsApp as representing an instant messaging application for Smartphone. The present study is aimed at introducing a mobile gadget that become useful in practices of teaching learning. The objectives of the study are to examine the student's perception on omnipresent aspect of WhatsApp mobile learning, to examine the students' attitude on WhatsApp mobile learning and to examine educational advantages of WhatsApp mobile learning. The participants of this study were 33 students who were all in seventh semester in English Education Study Program of Teacher Training and Education Faculty, University of Madura and pursuing Teaching Practice Program, academic session 2018-2019, in some selected government schools located in Pamekasan area when this study was conducted. The study employs mixed method, viz, by using quantitative and qualitative method since the study describes student's experience regarding WhatsApp mobile learning. In this research, questionnaire and interviews were employed to collect data. The results reveal that omnipresent WhatsApp mobile learning is not only appealing but also useful for their education. The students' positive attitude of WhatsApp mobile learning is emphasized in the study. Some have a preference to employ traditional learning inside classroom to WhatsApp mobile learning. However some feel disposed to keep employing WhatsApp for future teaching learning. Furthermore, WhatsApp mobile learning is not quite compatible with the have family - students hence they like better traditional teaching learning in classroom because the learning make their family life troublesome.

Keyword: Omnipresent WhatsApp, Mobile Learning, Technological Gadget.

INTRODUCTION

The emergence of trendy mobile - based messaging applications makes many institutions of higher education worldwide frequently utilize online instruction through mobile technology (Jimoyiannis et al, 2013) such as WhatsApp representing an instant messaging application for Smartphone. With respect to that, many students now utilize their Smartphone as a digital media in classroom for a wide diversity of purposes, but generally for communicating digitally via texting. Communicating digitally amongst groups of students has started to be well-liked for the period of the last decade through a choice of channels, such as: E-mail, Facebook, BBM, Line messenger, Twitter, and lately WhatsApp. Every

single of these apparatus has divergent characteristics that can influence its suitability for learning purposes (Calvo et al, 2014). WhatsApp (WA) is a Smartphone application that has become a ubiquitous application allowing WA user to easily share text messages, audio media messages, snapshots, pictures, videos, etc and the user may check whether the pictures or the text messages sent are looked or read by the receiver with the dual tick image (✓✓). The application was developed to allow users both send messages privately and freely to each other through their Smartphone and create conversation groups. According to Husain & Adamu (2014) this application has some unique features; one of them is its capability to boost communication within a group of persons that creates it the most widely downloaded applications embracing more than six hundred million users globally. The creator of the group positions as its manager, a position that possesses the autonomy of removing and adding participants without the necessity for endorsement from the group members. Besides, every one of the participants in the group gets pleasure from equal rights. The application allows the participants to receive an alert for each message sent or, alternatively, to make the incoming alerts soundless for the duration of approximately eight hours, one day, or a complete week.

WhatsApp is derived from a group of English words “What’s up?” denoting “What’s new?” has become not only one of the most demanded applications global but also the most popular messaging application on Smartphone with the greatest name recognition, by far the greatest user base, and the most powerful corporate backing since its acquisition by Facebook in 2014. WA, a mobile application in which instant messaging can be exchanged by internet connection (Willemse, 2015), is provided with a closed platform to make interaction with numerous people we know and not to someone we do not know or who is our acquaintance’s acquaintance as in case of Facebook. Moreover, since April 2013, WA has been “acquired by Google for 1 billion dollars, and claims 400 million active monthly users” (Barhoumi, 2015). Considering the emerging significance of the mobile technology it is not shocking that there is a mounting interest in investigating it, encompassing user investigations regarding persons’ WhatsApp utilization and possible applications (Fiadino et al, 2014). The mobile technology application has already existed on the marketplace since 2010; the affirmed purposes of the builder was to substitute the existing Short Message Service (SMS) platform for a system that is free of charge with a cross platform mobile messenger that works on an internet data plan. Given that internet facility is needed for utilizing WhatsApp, a good deal of information are able to be accessed in real time, as well as sharing that information via technology is both immediate and convenient. Generally speaking, WA Messenger is a proprietary; cross platform immediate messaging subscription service for Smartphone and certain feature mobile phones that utilizes the internet for communication.

In the words of Bere (2012) WA messenger consists of the following collaborative features:

- a. Multimedia content: in this content, the user is allowed to exchange not only text messages, images, videos, but also voice notes.
- b. Group Chat: it is a great mode to disseminate information and has an ability to support the more effective and efficient interactions among group members.
- c. Unlimited Messaging: a sort of communications service over the Internet that allows persons to exchange unlimited messages on WhatsApp. In this regard, Phone’s internet connection like 4G/3G/2G/EDGE or Wi-Fi can be used in the application in order to ensure continuous data transmission across platforms.
- d. Cross Platform Engagements: Interactants with different devices (such as: personal digital assistants, Smart phones or Galaxy tablets) can message one another using a variety of media (such as: text messages, pictures, videos or voice notes).

- e. Offline Messaging: it is possible for us to send our messages to our friends who are not online even if we get trouble with net connectivity as the messages are saved to a database automatically when we are away from mobile phone network coverage.
- f. No Charges involved: WhatsApp Users do not need to pay charges when using WhatsApp because it uses phone's internet connection which can be used for email or web browsing.
- g. Pins and Users Name: the user of WA does not need to bear passwords or username in mind because it works through phone numbers and incorporates with users' address books.

WhatsApp has seemed to be extremely well-liked and besides this Application becomes greatly addictive and may make a great influence on regular consumer, and apart from that it is able to leave a trace that is so hard to control and cure (Yeboah and Ewur, 2014)

WhatsApp in language learning and teaching

It seems to be acknowledged each day teachers and students meet new mobile applications which create teaching and learning processes not only pleasurable but also effective. One of these applications is WhatsApp (WA), which can be used for many different uses, chiefly for educational ones, particularly language learning (Johnston et al. 2015; Barhoumi, 2015; Demir and Genç, 2016; Nitza and Roman, 2016; Boyinbode et al. 2017; Güler, 2017). In Fattah's study (2015), he studied regarding the effectiveness of WhatsApp as a learning device for improving students' writing aptitudes and found out that the students paid much attention to the smart phones usage in teaching. He also suggested that students generally employ their mobiles while sharing information with others by speaking, writing their notions on social media platforms, and posting messages to their companions. They kindly welcomed the notion that they were able to write what they indeed wanted in any time in anywhere. Moreover, associated with writing, the students put their ideas across freely on WhatsApp and had the alteration to be corrected and given feedback concurrently. The groups of writing made them get pleasure from the process and took the liability of their own learning. At the start of the study, they tried to write similar writings, but they started to write their own sentences in a short time.

Meanwhile in Allagui's study (2014) regarding WhatsApp employment on students' writing performance. It was showed that WhatsApp possessed a positive effect on students' spelling and vocabulary proficiencies. It was also revealed that students welcomed the expediency and effortlessness of writing provided by means of instant messaging in WhatsApp, accordingly they possessed a positive attitude about the application usage. The author came to conclusion that students were keen to employ WhatsApp while learning English, particularly writing abilities. Furthermore Ashiyan and Salehi (2016) tested whether WhatsApp as a mobile application was capable of impacting on Iranian EFL learners' the collocations assortment acquisition and located that WhatsApp was absolutely an advantageous tool which possessed a positive influence on language learners with getting new collocations. More importantly the examination of Bouhnik and Deshen (2014) revealed that the utilization of WhatsApp in school setting is capable of learning beyond the classroom because it assists with the trouble-free and fast transfer of links to study materials contrasted with other technologies. Utilizing WhatsApp to deliver study materials ascertain delivery of the message intended for a class in any shape to everybody whether or not it is delivered after school hours. In words of Redecker et al (2010) learning approaches utilizing social media like WhatsApp are perceived to promote educational innovation since they can encourage processes of teaching and learning that are grounded on personalization and collaboration.

The Aim of The Study

The study is conducted to meet the educational requirements of students according to the availability of technological choices. The participants of this study were 33 students (18 females and 15 males) who were enrolled in English Education Study Program of Teacher Training and Education Faculty, University of Madura (hereafter UNIRA), Pamekasan, East Java. The partakers were all in seventh semester and pursuing Teaching Practice Program, academic session 2018-2019, in some selected government schools located in Pamekasan area when this study was conducted. The English department students became the targeted group because these students retreated from their campus for their teaching practice timetable and during this length of time, scores of things occurred in their campus. They needed uninterrupted update of what was coming up in their campus. During teaching practice period they also encountered quite a lot of difficulties associated with class management and control for which they required guidance continuously from their instructor. Furthermore they were unable to get touch with the previously learned courses. Likewise teachers were hard to keep track of what students were undertaking and what problematic matters they were encountering. In this regard if they could be provided with things related to administrative messages, tips of classroom management, concise summaries of previously learned subject matter, and also could be provided chance to ask questions associated with the problematic matters they encountered. It can show usefulness for their education. Additionally this can assist the teachers to know what students are undertaking and what problematic matters they are encountering. Besides it can support collaborative learning by giving the chances to work in a group employing their mobile gadgets. Hence the notion behind the research is that the introduction of mobile gadgets are going to be useful in practices of teaching learning as well as the research is hoped to provide transition towards mobile learning

RESEARCH METHOD

The present study is an experimental study using sole group post experiment design merely. The objectives of the study are to examine the student's perception on omnipresent aspect of WhatsApp mobile learning, to examine the students' attitude on WhatsApp mobile learning and to examine educational advantages of WhatsApp mobile learning. This study is carried out during teaching practice timetable in some selected government schools located Pamekasan area. The study employs mixed method, viz, by using quantitative and qualitative method since the study describes student's experience regarding WhatsApp mobile learning. Total 33 seventh semester students of English Education Study Program of Madura University, academic session 2018-2019, participated in the study. All partakers were also made WhatsApp Group named "UNIRA Students of PPL". They were employing WhatsApp and participated enthusiastically. It is noted that nobody of the partakers had previously employed WhatsApp mobile for learning activities.

In this research, questionnaire and interviews were employed to collect data. Questionnaires were then developed employing five indications. The scale ranges from 1.Greatly Agree (GA); 2.Agree (A); 3.Neutral (N); 4.Disagree (D); to 5.Greatly Disagree (GD). The overall 30 questions including three areas (viz: Perception Attitude, and Educational Advantages on WhatsApp mobile learning) were developed. In that case, after the quantitative data were already made, qualitative data were thus collected employing interview that consisted of ten questions. The form of a friendly chat was taken for the interviews while interviewees didn't know that they were being interviewed. And they were asked to give their feedback regarding the use of WhatsApp mobile learning employing questionnaire. Interview numbered 10 was then carried out.

RESEARCH RESULTS AND DISCUSSION

In this research, together with questionnaire, data were collected employing interviews. When interviews were already carried out, then a descriptive qualitative analysis was conducted with the intention of identifying the usefulness of WhatsApp mobile learning in teaching learning.

a) Student's Perception on Omnipresent WhatsApp Mobile Learning

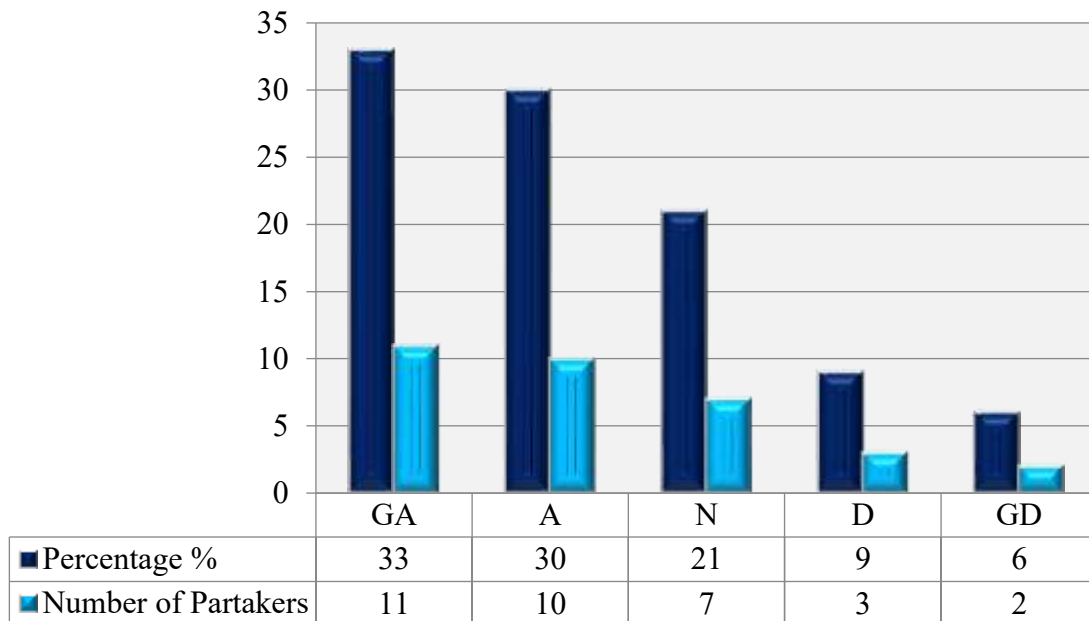


Figure1. Student's Perception on Omnipresent WhatsApp Mobile Learning

Omnipresent WhatsApp mobile learning is learning seeming to be in anywhere, anytime. 33% and 30% of the UNIRA students felt convenient learning anywhere, anytime. However 21% of them became neutral and 9% & 6% revealed disagreement with the learning. Ten interviews corroborated the questionnaire results and suggested that learning anywhere, anytime was getting appealing for them. And the discussions on the group, for the most part, were held at night (between 07.00 p.m until 10.00 p.m). Concerning with the students' disagreement regarding omnipresent learning, it came from the partakers who had a family (children, wife or husband). It was because they felt so busy with their family time that they constantly didn't have enough time to partake in discussions all the time consequently they failed to notice the discussions. Even occasionally with incessant mobile phone beep that could make them annoying when they were working or doing something. They considered learning inside the classroom was more convenient than out of the classroom. Hence the partakers were more inclined to support traditional learning than contemporary learning.

a) Student's Attitudes on WhatsApp Mobile Learning

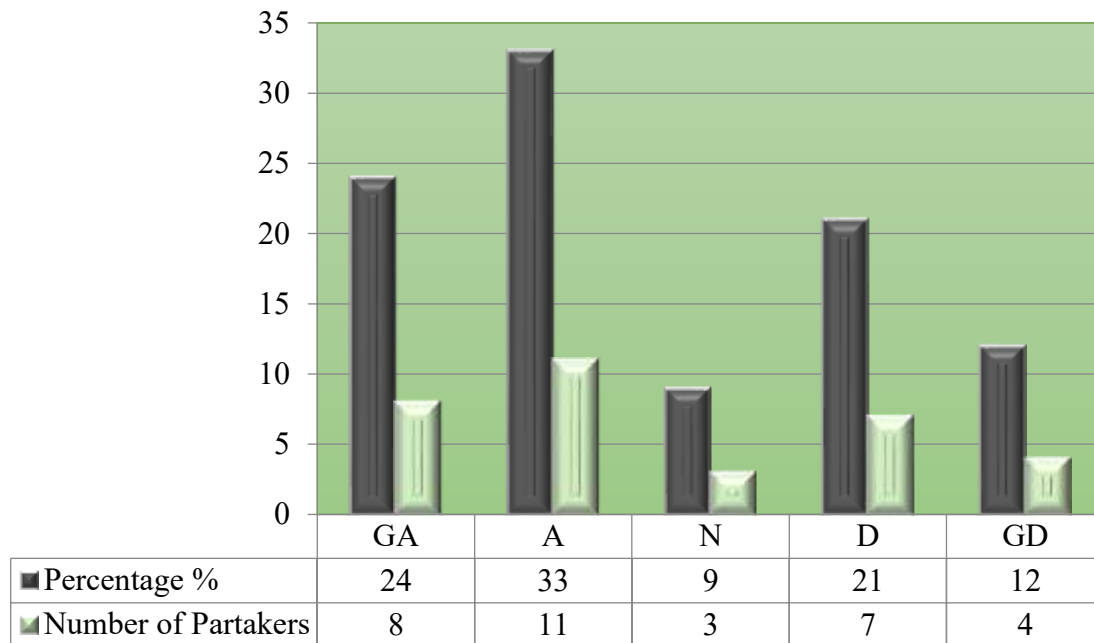


Figure 2. **Student's Attitudes on WhatsApp Mobile Learning**

24% and 33% of the partakers possessed a positive attitude regarding WhatsApp mobile learning. They considered WhatsApp mobile learning was a very helpful instructional method; a very helpful learning support and greatly personalized teaching medium. WhatsApp mobile learning for them was much given preference over traditional classroom. 9% of the partakers were neutral regarding the use of WhatsApp mobile learning. The cause of a negative attitude of the 21% and 12% partakers was a limited in mobile screen's size, more fondness for searching entertainment than educational issues and family's attention was more given priority than discussions in WhatsApp mobile learning.

a) **Educational Advantages of WhatsApp Mobile Learning**

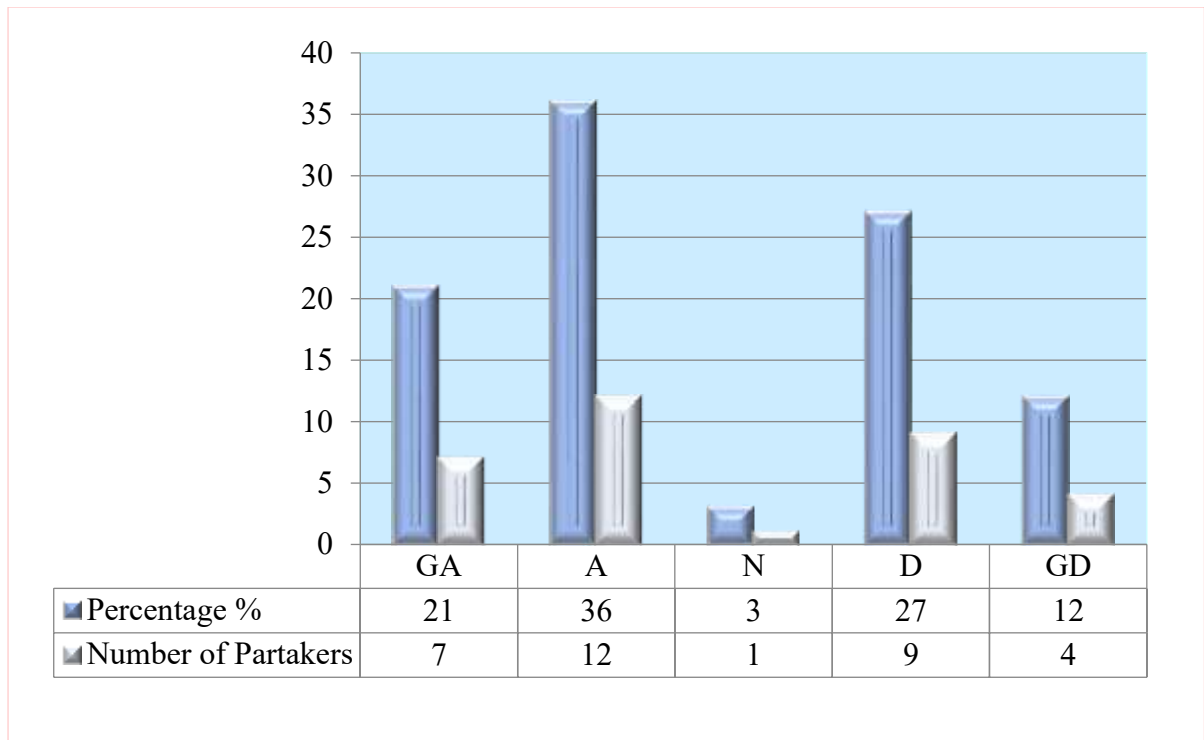


Figure 3. Educational Advantages of WhatsApp Mobile Learning

21% and 36% of the partakers concurred in learning employing WhatsApp mobile learning that many educational advantageous would be get. Only 3% of them were neutral. 27% and 12% of them were not of the same opinion to WhatsApp mobile learning. A number of the educational advantageous stated by the partakers when perusing interview viz: instantaneous feedback to the difficulty; learning from others difficulties; learning on action; revision of previously learned subject matters; clearness on subjects; pedagogy discussions; and accessibility of learning material constantly. Meanwhile those who were not of the same opinion to the notion of learning employing WhatsApp mobile learning gave the following several reasons, viz: inclination to see entertainment as opposed to see or search educational things employing WhatsApp mobile learning

In some studies mentioned that positive attitudes were declared by a lot of stakeholders of education about the adoption of WhatsApp mobile learning in educational circumstances. Results of this study revealed that the large majority of UNIRA students felt learning anytime, anywhere was extremely useful. Some UNIRA students who had a family deemed that omnipresent WhatsApp mobile learning was troublesome for their family life. Additionally, the students acknowledged that learning employing WhatsApp mobile had educational advantageous because the learning provided instantaneous feedback to the difficulty; learning from others difficulties; learning on action; revision of previously learned subject matters; clearness on subjects; pedagogy discussions; and accessibility of learning material constantly. In general, the students possessed a positive attitude regarding WhatsApp mobile learning. They came across WhatsApp mobile learning a very helpful instructional method; a very helpful learning support and greatly personalized teaching medium. WhatsApp mobile learning for them was much given preference over traditional classroom and felt disposed to keep employing WhatsApp for future teaching learning. Findings in this study also maintained that learning employing WhatsApp mobile learning potentially made

their lives more trouble-free as they were able to learn anytime and anywhere. Therefore, overall WhatsApp mobile learning was capable of contributing to the success of teaching and learning.

CONCLUSION

The study is aimed at coming across UNIRA students' perception, attitude and also advantageous towards the use of WhatsApp mobile learning with the created WhatsApp learning environment. The results show that omnipresent WhatsApp mobile learning is not only appealing but also useful for their education. The students' positive attitude of WhatsApp mobile learning is emphasized in the study. Some have a preference to employ traditional learning inside classroom to WhatsApp mobile learning. However some feel disposed to keep employing WhatsApp for future teaching learning. Furthermore, WhatsApp mobile learning is not quite compatible with the have family - students hence they like better traditional teaching learning in classroom because the learning make their family life troublesome.

REFERENCES

- Allagui, B. (2014). Writing through WhatsApp: An evaluation of students writing performance. *Int. J. Mobile Learning and Organisation*, 8, 216–231. <https://doi.org/10.1504/IJMLO.2014.067022>.
- Ashiyani, Z., & Salehi, H. (2016). Impact of WhatsApp on learning and retention of collocation knowledge among Iranian EFL learners. *Advances in Language and Literary Studies*, 7(5), 112–127. <https://doi.org/10.7575/aiac.all.v.7n.5p.112>.
- Barhoumi, C. (2015). The effectiveness of WhatsApp mobile learning activities guided by activity theory on students' knowledge management. *Contemporary Educational Technology*, 6(3), 221–238.
- Bere, A. (2012). A comparative study of student experiences of ubiquitous learning via mobile devices and learner management systems at a South African university. *Proceedings of the 14th Annual Conference on World Wide Web Applications*. Cape Peninsula University of Technology, <http://www.zaw3.co.za/index.php/ZA-WWW/2012/paper/viewFile/537/160>.
- Bouhnik, D., & Deshen, M. (2014). WhatsApp Goes to School: Mobile Instant Messaging between Teachers and Students. *Journal of Information Technology Education: Research*, 13, 217-231.
- Boyinbode, O. K., Agbonifo, O. C., & Ogundare, A. (2017). Supporting mobile learning with WhatsApp based on media richness. *Circulation in Computer Science*, 2(3), 37–46. <https://doi.org/10.22632/ccs-2017-251-89>.
- Calvo, R., Arbiol, A., & Iglesias, A. (2014). Are all chats suitable for learning purposes? A study of the required characteristics. *Procedia Computer Science*, 27, 251-260.
- Demirbilek, M. 2010. Investigating attitudes of adult educators towards educational mobile media and games in eight European countries. *Journal of Information Technology Education*, Vol 9 (1), pp 235-247.

- Demir, D., & Genç, A. (2016). The Analysis of Foreign Language Proficiency Exam for the State Employees Based on the CEFR. *Hacettepe University Journal of Education*, 31(1), 53–65. <https://doi.org/10.16986/HUJE.2015014090>
- Fattah, S. F. E. H. A. (2015). The Effectiveness of Using WhatsApp Messenger as One of Mobile Learning Techniques to Develop Students' Writing Skills. *Journal of Education and Practice*, 6(32), 115–127. <https://doi.org/10.5296/ire.v5i1.10801>.
- Fiadino, P., Schiavone, M., and Casas, P. (2014). Vivisecting whatsapp through large-scale measurements in mobile networks. In SIGCOMM 2014, August.
- Güler, Ç. (2017). Use of WhatsApp in higher education: What's up with assessing peers anonymously?. *Journal of Educational Computing Research*, 55(2), 272–289. <https://doi.org/10.1177/0735633116667359>.
- Husain, R., & Adamu, A. (2014). Social networking site as a tool to enhance the educational communication between teacher and students. *Scholarly Journal of Education*, 3(8), 101-105.
- Jimoyiannis, A., Tsiotakis, P., Roussinos, D., & Siorenta, A. (2013) Preparing teachers to integrate mobile in school practice: Toward a framework for Pedagogy 2.0. *Australasian Journal of Educational Technology*, 29(2), 248-26.
- Johnston, M. J., King, D., Behar, N., & Sevdalis, N. (2015). Smartphones let surgeons know WhatsApp: An analysis of communication in emergency surgical teams. *The American Journal of Surgery*, 209, 45–51. <https://doi.org/10.1016/j.amjsurg.2014.08.030>.
- Nitza, D., & Roman, Y. (2016). WhatsApp messaging: Achievements and success in academia. *International Journal of Higher Education*, 5(4), 255–261. <https://doi.org/10.5430/ijhe.v5n4p255>.
- Redecker, C., Ala-Mutka, K., & Punie, Y. (2010). Learning 2.0-The impact of social media on learning in Europe. Policy brief. JRC Scientific and Technical Report. EUR JRC56958 EN, available from: <http://bit.ly/cljlpq> [Accessed 9 th July 2020].
- Willemse, J. J. (2015). Undergraduate nurses reflections on WhatsApp use in improving primary health care education. *Curationis*, 38(2), 1–7.
- 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), pp. 157-164