

## Negative Aspects of Using Social Networks in Education: A Brief Review on WhatsApp Example

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### Abstract

The aim of this study is to examine negative effects of using WhatsApp social network application in educational processes and to create a conceptual framework in this manner. In order to examine the literature related to the research topic, sources in different databases were evaluated and research works after especially 2010 have been considered accordingly. A holistic framework regarding negative results of using WhatsApp in education has been tried to be established by examining the sources in detail. There is currently not too many scientific research works on benefits and disadvantages of using WhatsApp in long-term. But since this application has been accepted by many researchers as an instant messaging approach, it appears to be a small number of studies analyzing the effects of over-use of instant messaging take place in the associated literature. When the data obtained within this research is examined it is possible to express that the students addicted to instant messaging are inadequate in academic processes, they cannot control the time spent for messaging, they neglect their homework and they are also less disciplined compared to other students. Additionally, it is also seen these students' comprehension levels, learning skills, productivity and academic achievements have been affected negatively. It is also remarkable that students using instant messaging during reading tasks can increase the time required for completing reading, and may even feel sleepiness during daytime.

**Keywords:** social media, whatsapp, addiction, negative effects, education

## 1. INTRODUCTION

Technology affects many areas and provides great convenience in the areas where it is widely used. Thanks to rapidly developed technology, devices are shrinking in terms of physical and hardware, and the internet technologie continues to develop and become more accessible every time (Davies et al., 2017; Schroeder, 2018; Vannoy, & Palvia, 2010). Especially mobile devices and internet technologies are used extensively by the users. At this point, it is possible to indicate that integration of technology into different areas can lead to disadvantages as well as

advantages. This negativity generally results from misuse, overuse and out-of-objective use by users.

Since their first appearance in the technology arena, mobile devices have undergone a strong evolution in terms of appearance and using features. As a result of different development phases, mobile devices have reached the size of ‘smart phones’ that have gone beyond their basic functions (Cheng et al., 2017; Kiljander, 2004; Thulin, & Vilhelmson, 2017). Along that process, internet usage has always become the first choice of feature in smart phones. Users can use different social communication tools including especially social media (Facebook, Twitter, Instagram, WhatsApp, etc.), thanks to applications installed on their smart phones.

With the spread of smart phones and easy access to the internet, the number of social media users has increased rapidly. In this context, the WhatsApp social network application is widely used in smartphones. WhatsApp was designed by Brian Acton and Jan Koum in 2009, in order to make messaging communication and circulation clearer and faster, thanks to internet and wi-fi technologies keeping users in touch (Harma & Shukla, 2016). WhatsApp allows users to send and receive real-time location information, photos, videos, audio and text messages to other people and groups. All these tasks are done free of charge and thanks to that environment, up to 100 MB of text messages, images, audios, videos, PDF/Word documents, spreadsheets, slide shows and more of different data can be transmitted to target users (Whatsapp, 2019b). WhatsApp also stands out as a powerful social network that can share links to web addresses (Dan Bouhnik & Dshen, 2014), appeal to people of all ages (Zan, 2019) and allow fast communication. WhatsApp is an instant messaging application that can be run on majority of mobile platforms, by being one of the most popular mobile applications worldwide (Priyono, 2016).

WhatsApp social network enables sharing of different-type data and resource, ensuring effective communication and interaction, and even the creating joint activities within created groups (Yılılmazoy & Kahraman, 2018). With this high level of communication and interaction environment, it is seen that higher education institutions have started to adopt mobile technologies to meet the needs and expectations of students (Han & Shin, 2016; So, 2016). It is seen that web technologies are actively used and social media supported learning is becoming more widespread in today’s education system, due to the frequent use of internet and smartphone applications among students (Yılılmazoy & Kahraman, 2018). Mobile devices and the associated applications can be used in an educational event, for getting educational content,

finding additional sources of data, searching for specific information, and encouraging interaction as well as communication in peer groups (Echeverria & others, 2011). Here, WhatsApp has a great role in combining all critical and effective features for ensuring good educational experiences in the era of web based teaching / learning.

Thanks to all its effective features, WhatsApp is highly addictive and can have a huge impact on regular users, as well as causing some sideeffects, which are difficult to control and eliminate (Yeboah & Ewur, 2014). WhatsApp is used extensively by students in daily life, by reaching to different areas. In the changing education system, web technologies are actively used and social media supported learning is becoming more widespread. However, if it is not evaluated carefully, this mobile application may have some negative effects / side-effects due to misuse and overuse.

Based on the explanations so far, objective of this study is to examine negative effects of using WhatsApp social network application in educational processes and to create a conceptual framework in this manner. In order to examine the literature related to the research topic, sources in different databases were evaluated and research works after especially 2010 have been considered accordingly. A holistic framework regarding negative results of using WhatsApp in education has been tried to be established by examining the sources in detail. There is currently not too many scientific research works on benefits and disadvantages of using WhatsApp in long-term. But since this application has been accepted by many researchers as an instant messaging approach, it appears to be a small number of studies analyzing the effects of over-use of instant messaging take place in the associated literature.

Considering the topic and the research, the rest of the content is organized as follows: Next section provides information regarding material and methodology infrastructure of this research briefly. After that section, the third section focuses on the research works evaluated and provides brief information about what did they obtain about negative aspects of WhatsApp in educational processes. Following that, the fourth section provides a general discussion with also some suggestions for further research and the content is ended by the final section regarding conclusion and future works planned as following the current study.

## **2. METHODOLOGY**

This study is a literature review which aims to create a conceptual framework by examining the negative effects of using WhatsApp social network in educational processes. The literature

review provides information about the subject of interest and provides a theoretical basis for the research (Buyukozturk, 2009). A typical literature review involves the process of reading, selecting, and critically evaluating current knowledge, ideas, research findings, and discussions to achieve a specific purpose (Ekiz, 2013). In this section, the simple approach followed for data collection and analysis is explained first under the following sub-section. Next, some brief information about the WhatsApp application is given accordingly.

### Data Collection and Analysis

In the context of data analysis, research studies published after 2010 were examined by applying a comprehensive enough content analysis. The research studies included within the analysis phase generally include discussions regarding negative aspects of using WhatsApp social network in education. In this context, main focus points of these studies were briefly expressed. In this way, a holistic framework was tried to be formed in accordance with the purpose of the study reported here. For the search in the literature, some simple keywords such as ‘whatsapp’, ‘negative effects’, ‘negative use’, ‘social network’, ‘education’, ‘teaching’ and ‘learning’ were used to gather some data regarding recent research studies. After getting the whole recent research studies, more consideration have been given to the ones with more citations, more interaction over the Web (i.e. share, view), and being unique in terms of found findings.

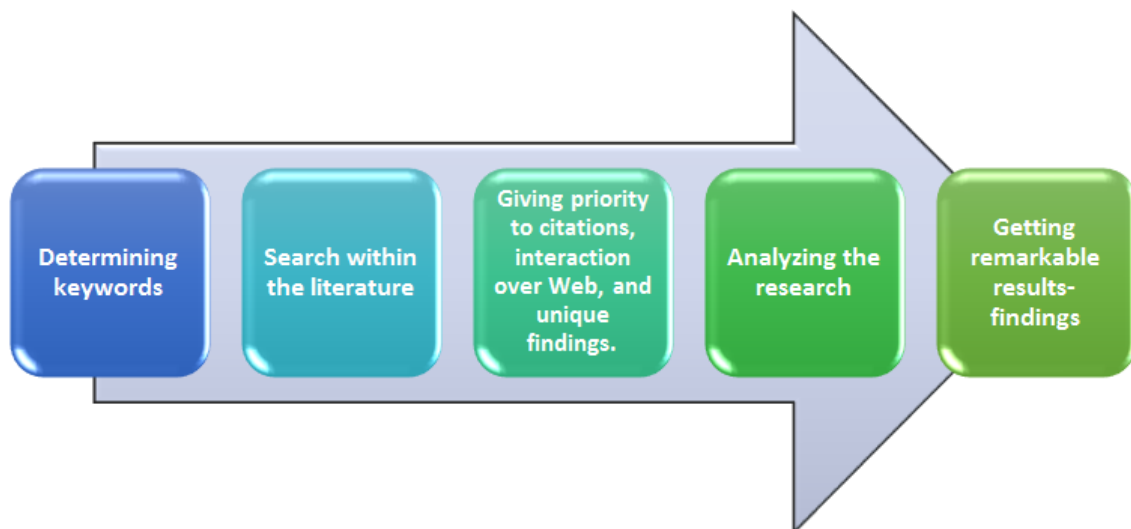


Figure 1. Data collection and analysis phases followed in this study.

### **3. WhatsApp Application as a Social Network**

WhatsApp is an application that offers instant messaging service across platforms within the scope of smartphones (Allagui, 2019). The application, which was launched in 2009, gained widespread use and popularity in a very short time. Today, WhatsApp is known as the most popular social messaging application (We Are Social, 2019).

Thanks to the WhatsApp application that can be integrated and used in many fields such as marketing, health and education, users can communicate and be in-share with their families, friends and colleagues, for free of charge. WhatsApp provides communication through peer-to-peer interaction and in closed, private (members-only) groups. It facilitates interactive, multimedia oriented using features with instant sending of texts, images, audio and video over users' mobile phones (Rosenberg & Asterhan, 2018). It briefly allows creation of groups that enable exchanging of information quickly, sending music, photos and videos and ensuring instant communication in a way that has never been seen before (Souza, 2015). In the context of WhatsApp environment, the whole messages sent when the device is turned off can be forwarded to the user and archived accordingly. WhatsApp serves to establish and maintain one-to-one personal relationships and ensures memberships in social groups (Church & de Oliveira, 2013). Group activities can also be carried out in collaboration with the WhatsApp application. WhatsApp is used not only for exchanging information, but also for entertainment and for communicating with friends and family (Malka, Ariel and Avidar, 2015). Among all critical features, WhatsApp has been a unique type of social networking.

When compared to popular social networking technologies such as Facebook messenger or Google Hangouts, interface of the WhatsApp is simple and easy-to-use (Cheung, Hew, & Ng, 2008). The application, which is also very easy-to-install, allows instant synchronous communication and maximum mobility (since it is installed over mobile phones). In this context, WhatsApp is very accessible to the general population, by including teachers when it is evaluated from an educational perspective (Calvo et al., 2014; Gaur, & Bohra, 2019; Ramzan et al., 2019). It can be used for even distance education processes (Aktas, & Can, 2019; Madge et al., 2019; Saleem et al., 2018; Simui et al., 2018). Furthermore, it can be an assistive tool for life long learning / learning outside of the classroom environment (Aktas, & Can, 2019; Blonder, & Waldman, 2019; Glenda et al., 2019). Unlike social networks like Facebook, it is not required to create a wider personal profile page to use WhatsApp environment. Furthermore, although Facebook allows users to access personal profile information, events,

friend lists, and communicate with other users over different profiles, the same things are not possible over WhatsApp (Sánchez-Moya and Cruz-Moya, 2015).

From a general perspective, it is possible to express features of the WhatsApp application as follows (WhatsApp, 2019a):

- It provides easy, reliable messaging environment with free internet connection.
- It allows you to communicate with groups that are important to you (i.e. family or co-workers groups). In the groups, users can share messages, photos, and videos up to 256 people at the same time. It is also possible to name / re-name groups, mute them or set notifications.
- WhatsApp allows communication without interruption and synchronizes all the chats with the computers with by using WhatsApp over Web and the desktop.
- Thanks to voice and video calls, WhatsApp allows communicating with people in different countries for free or low costs (according to the used service provider).
- By running an end-to-end encryption, WhatsApp allows secure communication (for all types of information and files shared) between two peers.
- WhatsApp allows sending photos and videos instantly and enables users to benefit from built-in camera for capturing important moments. At this point, WhatsApp is able to run over even weak-slow connection.
- WhatsApp also allows sending / receiving PDF files, documents, spreadsheets, slideshows and more.
- By using the WhatsApp interface, users can transmit their voice instantly (without needing texting) and record conversations.

As it can be seen from search queries made with the Google search engine (in 2018); the queries for Facebook, Youtube and Google take the first three places. The WhatsApp social network ranks 20<sup>th</sup> in the list of the most searched applications-environments (Figure 2). When specific applications are removed, intensity of search for WhatsApp will be more visible. It is also noteworthy that the WhatsApp is ranked in the Google search queries even though it is installed in the mobile environment (found within application market).

When the popularity findings are analyzed in the active user dimension, it is seen that the ranking is respectively as Facebook, WhatsApp, Facebook Messenger, WeChat and Instagram for January 2019 (Figure 3). Here, WhatsApp has a great number of active users although it is

more compact and small social network environment according to other applications-social network environments. When it is considered in terms of monthly number of users (including also unique visits, for again January 2019), WhatsApp takes 3<sup>rd</sup> place in general, and 1<sup>st</sup> place in terms of instant messaging applications (Figure 4). A similar finding can be seen in also Figure 5.

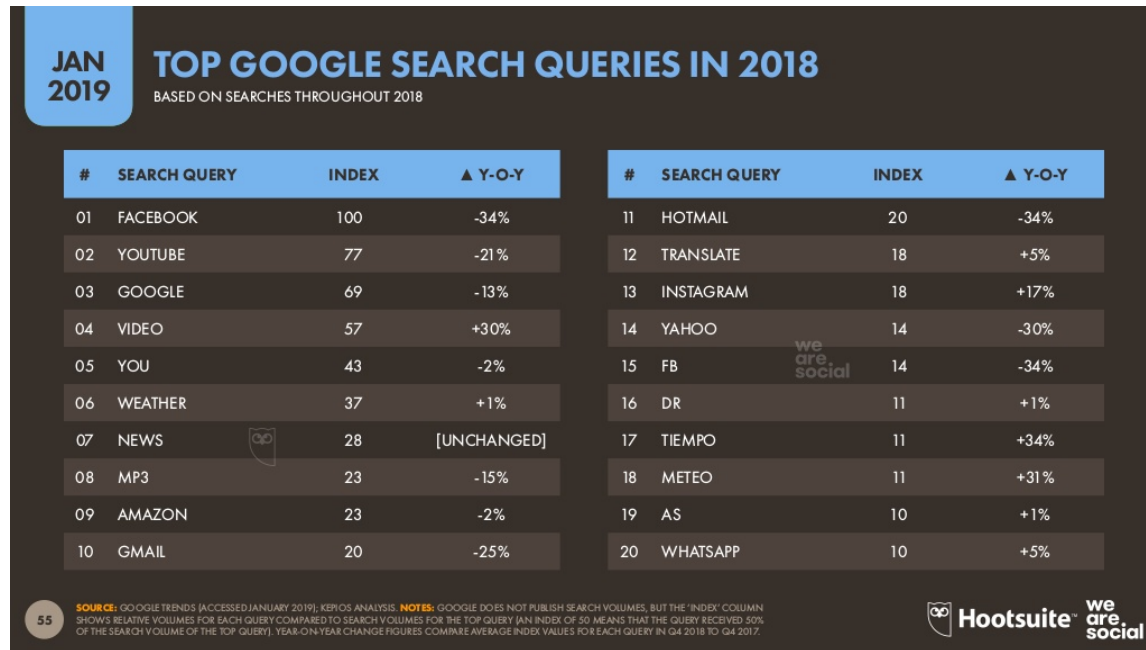


Figure 2. Findings regarding top Google search queries in 2018

(Source: <https://hootsuite.com>).





Figure 3. Ranking for active users all over the world in January 2019

(Source: <https://hootsuite.com>).

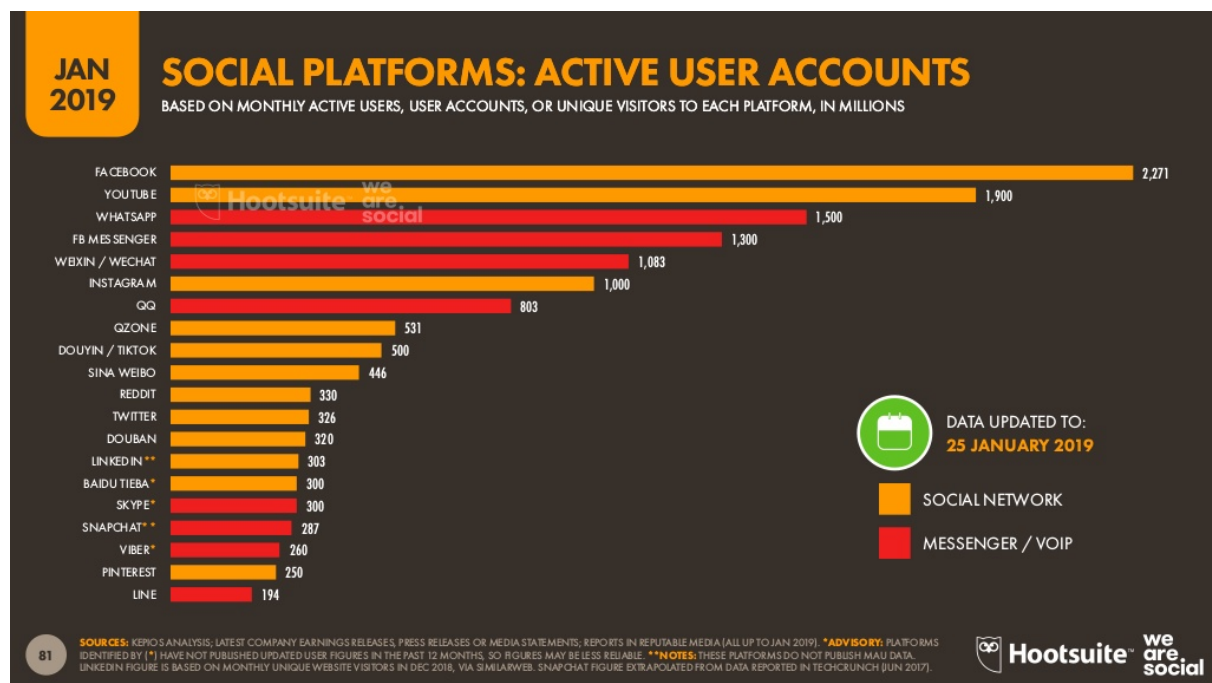


Figure 4. Using ranking considering monthly users and unique visits in January 2019

(Source: <https://hootsuite.com>).





Figure 5. The most popular messaging applications by country, in January 2019

(Source: <https://hootsuite.com>).

Considering the expressed features / advantages as well as popularity of it, WhatsApp seems as a powerful tool for educational purposes. The following sub-section is devoted to important points in this manner.

### 3.1. Characteristics of WhatsApp to be used for Educational Purposes

Using social networks in education facilitates and accelerates educational processes for both teachers and students. Widespread use of WhatsApp (reached around 1.5 billion users worldwide by the end of 2017) (Constine, 2018) made WhatsApp a potential pedagogical tool and a teacher-led virtual learning environment (Lopes and Vaz, 2016). WhatsApp is appropriate tool to be used for educational processes, thanks to its easy usability, high communication and interactive structure (Moran, 2015). Calvo, Arbiol and Iglesias (2014) compared characteristics of 15 different commercial messaging applications by considering potentials as learning environments. They indicated that WhatsApp is the most suitable social networking application for learning and working purposes, with its features such as group conversations, file sharing (especially multimedia), and easy access to speech-conversation history (Calvo et al., 2014).

Using WhatsApp in education enables students to connect themselves to a virtual world and communicate with other students and teachers via mobile devices (Moran, 2013). Advantages

of using WhatsApp (to support teaching-learning processes) include creating groups and sending unlimited messages including different media such as text, images, videos and audio (Souza, 2015). Messages sent via mobile devices are faster, more reliable and more efficient than the messages sent via alternative communication channels (Unesco, 2014). In this context, messages can be confirmed as received / read, as an important indicator for teaching activities (Kaiiski, Grings & Fetter, 2015).

Mobile learning refers to the learning process supported by the use of mobile and wireless information or communication technologies (Saccol et al., 2011). Mobile learning makes it possible to use mobile technologies alone or in combination with other information and communication technologies (Unesco, 2014). With WhatsApp, it is possible to form educational processes by being place and time independent.

Although WhatsApp seems as a strong tool for educational processes, it also employs some negative aspects when it is over-used. Although that issue may be seen in all kinds of social networks, the example of WhatsApp should be considered in order to understand better about essential advantages and disadvantages of that application. The next section gives a recent review by considering the literature.

### **3.2. Negative Effects of WhatsApp: View from the Literature**

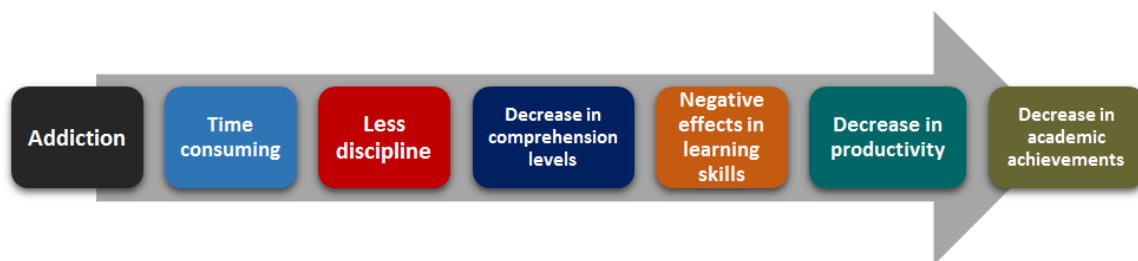
As it was mentioned before, negative effects – aspects of WhatsApp in educational processes seems to be an open problem and a remarkable research topic, which has not evaluated too much in the literature so far. So, research works especially after the year of 2010 were examined and general / important points in this manner have been taken into consideration in this study. The following paragraph explains each of remarkable research studies briefly and touches to the findings obtained regarding negative effects of WhatsApp mobile application (or it can be also called as a social network) in education.

In his study, Zan (2019) expressed that using WhatsApp social network in education has many benefits. However, in addition to the positive results, negative results such as remarkable number of students sending messages outside of class hours or use of inappropriate language in the WhatsApp messages were observed. Furthermore, it was seen that activating WhatsApp use during educational processes requires high level responsibility to follow all correspondence among students and checking possible errors and giving feedback for corrections in the whole messages send or received by each student. Yilmazoy, Kahraman & Baysan (2019) showed that

using WhatsApp social network in educational processes provided great convenience and ensures positive effects. However, in addition to the positive results regarding use of social networking in educational processes, several negative results such as having internet-based technical problems interrupting teaching / learning processes, increase in addiction to the application use and appearance of too much time wasted because of WhatsApp employment for activities, which may take less time with traditional tools, have been reported accordingly. In the study by Coleman & Connor (2019), it was reported that the use of WhatsApp social network in medical education has many positive effects as well as negative effects. In the context of negative effects, it was indicated that high number of big-sized (in terms of stored data size) visual learning materials may prevent rapid learning (Gon & Rawekar, 2017; Hayward & Ward, 2018), and the literature has already concerns regarding neglect of patient confidentiality when WhatsApp is used along medical education processes (Goyal, Tanveer & Sharma, 2017; Kaliyadan & others, 2016). It is also mentioned that an effective learning process within WhatsApp groups may be affected negatively when an active discussion is interrupted or slowed down because of delays in communication (Kaliyadan & others, 2016). In the review work by Baguma et al. (2019), it was stated that all students are not likely to have smart phones at the same-similar technological level, and WhatsApp groups always have the potential to produce an untraceable volume of data including also non-mandatory useful information at the individual level. In addition, it was explained that students and teachers should be available 7/24 in order to provide feedback for instant questions and opinions within discussions held in big-size groups. In the study by Fondevila-Gascón et al. (2019), it was emphasized that the use of WhatsApp has a high addiction potential due to the feeling of waiting for calls or messages at any time. In the statistical study applied over a specific target group, it was concluded that most of the participants could not give up WhatsApp application while they were doing another activity, and even showed remarkable signs of addiction. In his study, Gurusinga (2018) expressed that using WhatsApp has many positive results in the development of English writing skills. On the other hand, some negative effects were also mentioned as follows: the application is supported only by smartphones and most people still do not have smartphones to use WhatsApp. Also, instant messages have the possibility to be read by other people and a stable, active internet access is always needed for active use of the application. Finally, it is stated that continuous use of WhatsApp can raise an addiction. In the study realized by Hertzog & Swart (2018), it was stated that the internet is not always easily accessible for effective use of WhatsApp application and the duration of calls over WhatsApp may cause negative teaching /

learning outcomes, if they are not optimized – managed efficiently. In the research study provided by Hamad (2017), it was stated that experience was required in preparing special materials for WhatsApp and using alternative software systems supporting the application. Findings from the experiments showed that the students were not always ready at the agreed WhatsApp meeting times and could send messages (to groups or everybody) even late at night. Findings also showed that some students did not participate in the discussions, it was not certain that all students could learn from the same materials, and that WhatsApp application caused some students to tend to participate in the course by just copying and pasting ready texts. In the study by Gon & Rawekar (2017), some disadvantages of using WhatsApp in educational processes are listed as briefly intensive messages causing chaos in teaching / learning processes, time-consuming interaction features that may return as negative effects and eye fatigue as a result of long-time use over mobile phones. In their study, Grover et al. (2016) reported that the use of instant messaging after bedtime causes shorter sleep time, more sleeplessness during daytime and eventually, decreased academic performance, which is a critical issue in terms of educational outcomes. In the study by Yeboah & Ewur (2014), it was stated that using WhatsApp social network in education has negative effects on students' performance as follows: Most of the students in WhatsApp spend very long time and postpone their educational studies. It was also explained that due to the rapid communication processes in the WhatsApp environment, students do not pay attention to the grammar rules (they may even forget the rules) and derive alternative communication ways because of WhatsApp-specific components such as emojis or animated icons. It was also mentioned that the WhatsApp causes lack of concentration in class environment, and raise issues / questions during academic preparation processes trying to balance online activities and face-to-face activities. The study by Dietz & Henrich (2014) showed that using text messaging through learning process does not affect students' learning positively. Rather, text messaging (texting) has been a distraction factor that resulted lower grades for students, who have send messages to each other during lecture time. Fondevila-Gascón et al. (2014) showed that students may lose their accurate sleeping hours, experience lowerings in their concentration level, and encounter with problems in their learning skills and productivity, due to sending and receiving WhatsApp messages (so that keeping themselves focused on that application environment). According to the study findings by Hayati, Jalilifar & Mashhadi (2013), use of mobile devices may lead teachers to play a passive role in the classroom environment and actually teacher-based (physical) interaction is better and more effective than using mobile devices. Fante, Jacobi & Sexton (2013) showed in their study that

students using instant messaging during reading processes may increase the time required to complete their reading tasks. In their study, Zhang, Song & Burston (2011) expresses that the disadvantages of using WhatsApp are likely to cause lack of attention and even forgetfulness. In the study by Junco & Cotten (2011), it was showed that using instant messaging during performing more than one school task had negative effects within the educational process. In their study, Huang & Leung (2009) showed that although students have obtained five kinds of thank-you forms (interpersonal benefit, social service, convenience, information and entertainment), they were unsuccessful and less disciplined along academic tasks and even neglected their homeworks because they cannot control the time they spend in instant messaging. Fox, Rosen & Crawford (2009) indicated that instant messaging negatively affected the academic impact on reading comprehension.



*Figure 5.* Negative effects of WhatsApp in education.

#### 4. DISCUSSION AND SUGGESTIONS

When the findings of the research are examined, it is possible to reach some main outcomes as general issues regarding negative effects – aspects of using WhatsApp in education. Furthermore, some suggestions for further research can also be derived thanks to currently achieved findings.

Considering the examined literature, the following points can be emphasized in the context of negative effects of WhatsApp use in education:

- Students, who are dependent on instant messaging, may be unsuccessful in academic processes.
- Students are often unable to control the time spent on messaging.
- Students using WhatsApp may neglect their homework and be less disciplined than other students.

- Using WhatsApp during educational processes may adversely affect some students' reading comprehension and academic achievement.
- Negative results such as inability to concentrate, reduced learning skills and productivity may occur in students, who are deprived of sleep due to active WhatsApp use.
- When using WhatsApp in educational processes is preferred, there may be issues such as students may not have a smartphone or internet access, as some kind of also restrictions.
- Receiving too many messages over WhatsApp may negatively affect learning.
- Active topic may be easily left out of account, because of unnecessary comments in WhatsApp environment.
- In WhatsApp groups, students may share posts out of the educational scope.
- In WhatsApp environment, groups may be inactive (as a result of low interaction by students) in time.
- There is not any sanction against non attendance to WhatsApp sessions.
- In WhatsApp environment, some students may not express him / her properly.
- Students may hesitate to ask questions in WhatsApp environment.
- There may be a tension against feeling like being observed in WhatsApp environment.
- Overuse of WhatsApp application may cause distraction.
- Using WhatsApp out-of-purpose and long-time messaging may increase addiction.
- Users may ignore questions / messages send over WhatsApp social network environment.
- Because of WhatsApp, academic boundary between the teacher and the students may be eliminated.
- Using wrong scientific language or missing corrections within WhatsApp environment may cause incorrect learning experiences.
- It was also reported that sharing too many educational materials over WhatsApp application may prevent the learning process.

In the light of the findings obtained in this study, the following suggestions can be expressed:

- Different research studies regarding negative effects of using WhatsApp social network in educational processes can be realized over different demographic groups.

- Research studies can be applied by considering different learning and education levels and comparing the obtained findings in this manner can contribute to the associated literature.
- Qualitative in-depth analysis works regarding use of WhatsApp in educational processes can be done accordingly.
- Using WhatsApp in educational processes can be planned with certain rules and programmes so that disadvantages / negative effects can be eliminated.
- WhatsApp has different using features and interaction ways. All these different features and interactive components can be taken into consideration within organized educational processes, in order to understand more about effects of that application – social network.

## 5. CONCLUSION AND SUGGESTIONS

In this study, the WhatsApp application, which is a popular mobile instant messaging and more broadly; a social network environment, was examined in terms of negative effects in educational processes. As general, WhatsApp is known as an effective social network tool as well as a strong communication tool, which means it can be used through different kinds of educational processes. Since first influence of online teaching-learning tools within education, there have been many different online or offline tools. But social networking has been the most effective tool among all of them. In detail, instant messaging tools such as WhatsApp have been examined for a while in terms of educational perspective. As the associated literature has more steps to take for detailed findings, there is still a remarkable amount of recent research works to be considered. This study has provided a brief review in this manner and tried to form a conceptual framework as well as essential information regarding negative effects that can be observed during use of WhatsApp in educational environments. When the data obtained during this research are evaluated, it can be seen that WhatsApp may cause the students to be addicted to instant messaging, which is not adequate in academic processes. Additionally, students cannot control the time spent for messaging, they neglect their homework and they become less disciplined. Also, it is reported that WhatsApp may affect students' comprehension levels, learning skills, productivity and academic achievements negatively. The mentioned negative effects are important since they may be analyzed in detail in order to direct effective using features and functions of that application into better educational processes. The authors believe



that this study has been a brief but informative enough reference for anyone interested to evaluate further the educational issues or opportunities regarding WhatsApp use.

In addition to the research realized here, the authors are also highly motivated about some future works. In this context, it was already planned to perform additional reviews in specific periods. On the other hand, there is also a future work plan, which includes preparation of a survey for understanding better about students' and teachers' ideas about negative (or positive) aspects-effects of WhatsApp when it is used in educational processes. Finally, additional works for some future perspective will be performed for giving more idea about how instant social networking environments-tools will shape the future of the education.

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### **Sosyal Ağların Eğitimde Kullanılmasının Olumsuz Yönleri: WhatsApp Örneği Üzerinden Kısa Bir Literatür Taraması**

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#### **Özet**

Bu çalışmanın amacı, WhatsApp sosyal ağ uygulamasının eğitim süreçlerinde kullanılması sonucunda ortaya çıkan olumsuz etkileri incelemek ve bu şekilde kavramsal bir çerçeve oluşturmaktır. Araştırma konusu ile ilgili literatürü incelemek için farklı veritabanlarındaki kaynaklar değerlendirilmiş ve özellikle 2010 sonrası araştırma çalışmaları bu bağlamda dikkate alınmıştır. Kaynaklar ayrıntılı bir şekilde incelenmek suretiyle eğitimde WhatsApp kullanımının olumsuz sonuçlarına ilişkin bütünsel bir çerçeve oluşturulmaya çalışılmıştır. Literatürde halen WhatsApp'ı uzun vadede kullanmanın yararları ve dezavantajları üzerine çok fazla bilimsel araştırma çalışması bulunmamaktadır. Ancak bu uygulama birçok araştırmacı tarafından anlık mesajlaşma yaklaşımı olarak kabul edildiğinden, anlık mesajlaşmanın aşırı kullanımının etkilerini analiz eden az sayıda çalışma literatürde rapor edilmektedir. Bu çalışmada elde edilen veriler incelendiğinde anlık mesajlaşmaya bağımlı öğrencilerin akademik süreçlerde yetersiz kaldığı, mesajlaşma için harcadıkları zamanı kontrol edemedikleri, ev ödevlerini ihmal ettiklerini ve diğer öğrencilere göre daha az disiplinli oldukları sonuçlarına ulaşmak mümkündür. Ek olarak, bu öğrencilerin anlama düzeyleri, öğrenme becerileri, verimlilik ve akademik başarıları olumsuz yönde etkilenmekte, ayrıca okuma süreçleri sırasında anlık mesajlaşma kullanılması durumunda okumayı tamamlamak için gereken süre artırılabilmekte ve hatta gündüz uykusu hissedilebilmektedir.

**Anahtar kelimeler:** sosyal medya, whatsapp, bağımlılık, olumsuz etkiler, eğitim

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**REFERENCES**

- Aktas, B. Ç., & Can, Y. (2019). The Effect of" WhatsApp" Usage on the Attitudes of Students toward English Self-Efficacy and English Courses in Foreign Language Education outside the School. *International Electronic Journal of Elementary Education*, 11(3), 247-256.
- Allagui, B. (2019). Writing a Descriptive Paragraph Using an Augmented Reality Application: An Evaluation of Students' Performance and Attitudes. *Technology, Knowledge and Learning*, 1-24.
- Baguma, R., Bagarukayo, E., Namubiru, P., Brown, C., & Mayisela, T. (2019). Using WhatsApp in Teaching to Develop Higher Order Thinking Skills--A Literature Review Using the Activity Theory Lens. *International Journal of Education and Development using Information and Communication Technology*, 15(2), 98-116.
- Blonder, R., & Waldman, R. (2019). The Role of a WhatsApp Group of a Professional Learning Community of Chemistry Teachers in the Development of Their Knowledge. In *Mobile Technologies in Educational Organizations* (pp. 117-140). IGI Global.

- Buyukozturk, S. (2009). *Handbook of Data Analysis for Social Sciences (In Turkish)*, Ankara, Turkey: Pegem A Akademi Press.
- 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. DOI: 10.1016/j.procs.2014.02.028
- 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. DOI: 10.1016/j.procs.2014.02.028
- Cheng, X., Fang, L., Hong, X., & Yang, L. (2017). Exploiting mobile big data: Sources, features, and applications. *IEEE Network*, 31(1), 72-79.
- Cheung, W. S., Hew, K. F., & Ng, S. L. (2008). Toward an understanding of why students contribute in asynchronous online discussions. *Journal of Educational Computing Research*, 38(1), 29–50. DOI: 10.2190/EC.38.1.b
- Church, K., & de Oliveira, R. (2013). What's up with whatsapp?: Comparing mobile instant messaging behaviors with traditional SMS. In *Proceedings of the 15th International Conference on Human-computer Interaction with Mobile Devices and Services* (pp. 352-361). ACM. DOI: 10.1145/2493190.2493225
- Coleman, E., & O'Connor, E. (2019). The role of WhatsApp® in medical education; a scoping review and instructional design model. *BMC medical education*, 19(1), 279.
- Constine, J. (2018). WhatsApp hits 1.5 billion monthly users. \$19B? Not so bad. TechCrunch. Online: <https://techcrunch.com/2018/01/31/whatsapp-hits-1-5-billion-monthlyusers-19b-not-so-bad/> (Retrieved December 14, 2019).
- Dan 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.
- Davies, S., Mullan, J., & Feldman, P. (2017). *Rebooting learning for the digital age: What next for technology-enhanced higher education?* (pp. 49-50). Oxford: Higher Education Policy Institute.
- Dietz, S. & Henrich, C. (2014). Texting as a distraction to learning college students. *Elsevier. Computers in Human Behaviour*, 36, 163-167.
- Echeverría, A., Nussbaum, M., Calderón, J., Bravo, C., & Infante, C. (2011). Face-to-face collaborative learning supported by mobile phones. *Interactive Learning Environments*, 19 (4), 351-363.

- Ekiz, D. (2013). *Scientific Research Methods (In Turkish)*. Ankara, Turkey: Anı Press.
- Fante, R., Jacobi, L., & Sexton, V. (2013). The effects of instant messaging and task difficulty on reading comprehension. *North American Journal of Psychology*, 15(2), 287–298.
- Fondevila-Gascón, J. F. (2019). Uses of WhatsApp in the Spanish university student. Pros and cons.
- Fondevila-Gascón, J. F., Carreras-Alcalde, M., Mir-Bernal, P., Del Olmo-Arriaga, J. L., & Pesqueira-Zamora, M. J. (2014). El impacto de la mensajería instantánea en los estudiantes en forma de estrés y ansiedad para el aprendizaje: Análisis empírico. *Didáctica, Innovación y Multimedia (DIM)*, 30, 1–15.
- Fox, A. B., Rosen, J., & Crawford, M. (2009). Distractions, distractions: Does instant messaging affect college students' performance on a concurrent reading comprehension task? *Cyberpsychology & Behavior*, 12(1), 51–53. doi: 10.1089/cpb.2008.0107
- Gaur, M., & Bohra, R. (2019). Efficacy of new media based video lectures in open and distance education system of India. *Asian Journal of Distance Education*, 14(2), 144-160.
- Glenda, A., Braga, J. D. C. F. B., & Reeves, J. L. (2019). Examining Social, Cognitive and Teaching Presences in an Online Teacher Development Course Using WhatsApp and Community of Inquiry. *FDLA Journal*, 4(1), 13.
- Gon, S., & Rawekar, A. (2017). Effectivity of E-learning through Whatsapp as a teaching learning tool. *MVP J Med Sci.*, 4(1):19–25.
- Goyal, A., Tanveer, N., & Sharma, P. (2017). WhatsApp for teaching pathology postgraduates: a pilot study. *J Pathol Inform.*, 8(1):6.
- Grover, K., Pecor, K., Malkowski, M., Kang, L., Machado, S., Lulla, R., ..., & Ming, X. (2016). Effects of instant messaging on school performance in adolescents. *Journal of Child Neurology*, 31(7), 850–857. DOI: 10.1177/0883073815624758
- Gurusinga, N. I. B. (2018). *The Contribution Of Chat Using Whatsapp On The Student's Ability In Developing English Writing Sixth Semester Of English Department At Uinsu* (Doctoral Dissertation, Universitas Islam Negeri Sumatera Utara).
- Hamad, M. M. (2017). Using WhatsApp to Enhance Students' Learning of English Language" Experience to Share". *Higher Education Studies*, 7(4), 74-87.
- Han, I., & Shin, W. S. (2016). The use of a mobile learning management system and academic achievement of online students. *Computers & Education*, 102, 79–89. doi:10.1016/j.compedu.2016.07.003

- Harma, A., & Shukla, A. K. (2016). Impact of Social Messengers Especially WhatsApp on Youth-A Sociological Study. *International Journal of Advance Research and Innovative Ideas in Education*, 2(5), 367-375.
- Hayati, A., Jalilifar, A., & Mashhadi, A. (2013). Using Short Message Service (SMS) to teach English idioms to EFL students. *British Journal of Educational Technology*, 44(1), 66-1. DOI: 10.1111/j.1467-8535.2011.01260.x
- Hayward, E, & Ward, A. (2018). Virtual learning communities for faculty members: does WhatsApp work? *Med. Educ.*, 52(5):569.
- Hertzog, P. E., & Swart, A. J. (2018). The use of WhatsApp in design-based modules. In *2018 IEEE Global Engineering Education Conference (EDUCON)* (pp. 445-450). IEEE.
- Huang, H., & Leung, L. (2009). Instant messaging addiction among teenagers in China: Shyness, alienation, and academic performance decrement. *Cyberpsychology & Behavior*, 12(6), 675–679. DOI: 10.1089/cpb.2009.0060
- Jere, N. R., Jona, W., & Lukose, J. M. (2019). Effectiveness of Using WhatsApp for Grade 12 Learners in Teaching Mathematics in South Africa. In *2019 IST-Africa Week Conference (IST-Africa)* (pp. 1-12). IEEE.
- Junco, R., & Cotten, S. R. (2011). Perceived academic effects of instant messaging use. *Computers & Education*, 56(2), 370–378. DOI: 10.1016/j.compedu.2010.08.020
- Kaieski, N.; Grings, J. A.; Fetter, S. A. (2015). Um estudo sobre as possibilidades pedagógicas de utilização do WhatsApp. *RENTE Revista Novas Tecnologias na Educação*, v. 13, p. 1-10.
- Kaliyadan, F., Ashique, K. K. T., Jagadeesan, S., & Krishna, B. (2016). What's up dermatology? A pilot survey of the use of WhatsApp in dermatology practice and case discussion among members of WhatsApp dermatology groups. *Indian J Dermatology, Venereol Leprol.*, 82(1):67–9.
- Kiljander, H. (2004). *Evolution and usability of mobile phone interaction styles*. Helsinki University of Technology.
- Lopes, C. G.; Vaz, B. B. (2016). O Uso Pedagógico dos Grupos do Whatsapp no Ensino de História. In: V Congresso Internacional de História - Novas Epistemes e Narrativas Contemporâneas, Jatai.
- Madge, C., Breines, M. R., Dalu, M. T. B., Gunter, A., Mittelmeier, J., Prinsloo, P., & Raghuram, P. (2019). Whatsapp use among African international distance education

- (IDE) students: transferring, translating and transforming educational experiences. *Learning, Media and Technology*, 1-16.
- Malka, V., Ariel, Y., & Avidar, R. (2015). Fighting, worrying and sharing: Operation ‘Protective Edge’ as the first WhatsApp war. *Media, War & Conflict*, 8(3), 329-344. DOI: 10.1177/1750635215611610
- Moran, J. M. (2013). *Novas tecnologias e mediação pedagógica*. 21 ed. rev. E atual. – Campinas, SP: Papirus.
- Moran, J. M. (2015). Educação híbrida: Um conceito-chave para a educação hoje. In: BACICH, Lilian; NETO, Adolfo Tanzi; TREVISANI, Fernando de Mello. *Ensino híbrido: personalização e tecnologia na educação*. Porto Alegre: Penso.
- Priyono, A. (2016). Improving quality of interactivity between organisation and customers with the support of WhatsApp. Paper presented at the 2016 Global Marketing Conference at Hong Kong.
- Ramzan, M., Ahmad, D., & Asif, M. (2019). Dynamics of WhatsApp Usage by University Students. *Pakistan Library & Information Science Journal*, 50(2).
- Rosenberg, H., & Asterhan, C. S. (2018). “WhatsApp, Teacher?”-Student Perspectives on Teacher-Student WhatsApp Interactions in Secondary Schools. *Journal of Information Technology Education: Research*, 17, 205-226.
- Saccol, A. Z.; Schlemmer, E.; Barbosa, J. (2011). *M-learning e u-learning: novas perspectivas da aprendizagem móvel e ubíqua*. São Paulo: Pearson Prentice Hall.
- Saleem, N. E., Al-Saqri, M. N., & Al-Badri, A. S. (2018). The Reality of Use of WhatsApp as a Tool for Distance Education in Teaching and Learning. *Advanced Online Education and Training Technologies*, 200.
- Sánchez-Moya, A., & Cruz-Moya, O. (2015). Whatsapp, Textese, and Moral Panics: Discourse Features and Habits across Two Generations. *Procedia-Social and Behavioral Sciences*, 173, 300-306. DOI: 10.1016/j.sbspro.2015.02.069
- Schroeder, R. (2018). *Social theory after the internet*. UCL Press.
- Simui, F., Mwewa, G., Chota, A., Kakana, F., Mundende, K., Thompson, L., ... & Namangala, B. (2018). “WhatsApp” as a Learner Support tool for distance education: Implications for Policy and Practice at University of Zambia. *Zambia ICT Journal*, 2(2), 36-44.
- Souza, C. F. (2015). Aprendizagem sem distância: tecnologia digital móvel no ensino de língua inglesa. *Revista Texto Livre*, v. 8, p. 39-50.



- Thulin, E., & Vilhelmson, B. (2017). Mobile phones: Transforming the everyday social communication practice of urban youth. In *The Reconstruction of Space and Time* (pp. 137-158). Routledge.
- Unesco. (2014). *Organização das Nações Unidas para a Educação, a Ciência e a Cultura. Diretrizes de políticas da UNESCO para a aprendizagem móvel*. Brasília: UNESCO.
- Vannoy, S. A., & Palvia, P. (2010). The social influence model of technology adoption. *Communications of the ACM*, 53(6), 149-153.
- We Are Social. (2019). Digital in 2019. 18 Aralık 2019 tarihinde <https://wearesocial.com/global-digital-report-2019> adresinden erişilmiştir.
- WhatsApp. (2019a). Feature of WhatsApp. Online: <https://www.whatsapp.com/features/?lang=tr> (Retrieved December 18, 2019).
- WhatsApp. (2019b). About WhatsApp. Online: <https://www.whatsapp.com/about/> (Retrieved November 20, 2019).
- Yeboah, J., & Ewur, G. D. (2014). The impact of WhatsApp messenger usage on students performance in Tertiary Institutions in Ghana. *Journal of Education and practice*, 5(6), 157-164.
- Yılmazsoy, B., & Kahraman, M. (2018). Investigation of Tutor-Teacher Views on Using Whatsapp Social Network in Education. *FATİH Project Educational Technologies Summit*, (pp. 137-148). Ankara, Turkey.
- Yılmazsoy, B., Kahraman, M., & Baysan, E. (2019). Investigation of Student Opinions on the Use of Social Networks in the Education Process: The Case of WhatsApp (*In Turkish*). *International Congress on Science and Education*, (pp. 137-148). Afyonkarahisar, Turkey.
- Zan, N. (2019). Communication Channel Between Teachers and Students in Chemistry Education: WhatsApp. *US-China Education Review*, 9(1), 18-30.
- Zhang, H., Song, W., & Burston, J. (2011). Reexamining the effectiveness of vocabulary learning via mobile phones. *TOJET: The Turkish Online Journal of Educational Technology*, 10(3), 203-214.