# Effects of WhatsApp as Vocabulary Instructional Tool for Distance Learning among Tertiary Students

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Article Info	ABSTRACT			
Article history: Received: 8 January 2022 Revised: 7 February 2022 Accepted: 1 March 2022 Published: 1 April 2022 Keywords: WhatsApp Instructional Tool e-Learning Vocabulary Covid-19	The reality of Malaysia is no longer the same after COVID-19. Most of the sectors were affected due to pandemic, and that includes the education field. Therefore, the Malaysian government imposed the Movement Control Order (MCO) to curb the pandemic, which eventually disrupted the teaching and learning process. The psychical distancing has altered the traditional classroom meetings to distance learning or online learning using electronic tools. Mobile phones can be utilized to conduct e-learning because teachers can communicate with their students through text messaging applications. The use of the instant messaging application has become popular among teenagers nowadays. Therefore, the current study attempts to examine the effects of WhatsApp as an instructional tool without having a physical meeting with the students. A quasi-experimental study was conducted for six (6) weeks among 33 undergraduates Psychology students from a private university. Before receiving instruction through WhatsApp, the students undertook a vocabulary pre-test and took a post-test at the end of week six (6). The paired sample t-test analysis revealed that the use of WhatsApp had significantly improved students' knowledge. It is clear now that WhatsApp is an effective instructional tool for online learning and should be utilised efficiently during critical times like COVID-19.			

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## INTRODUCTION

The world is currently hit hard by a deadly virus known as Coronavirus 2019 (COVID-19) and Malaysia is one of the countries affected by the virus. COVID-19 is a Wuhan-born novel pneumonia disease that became an epidemic in all countries (Shimul, Hussain, Faisel, & Hamid, 2020). In Malaysia, COVID-19 became more and more clear when Singapore reported its first case (Labadin & Hong, 2020). Further, virus's rapid spread has affected various sectors, including education in Malaysia. Mukherjee (2020) stated that the global higher education environment has changed drastically in recent months due to the spread of COVID-19. Due to this pandemic, the education Ministry of Malaysia decided to close all the institutions. According to Elengoe (2020), the Malaysia government implemented Movement Control Order (MCO) on 18 March 2020, in which kindergartens, government and private schools, public and higher education institutions and skill training institutes were ordered to close. Even though all the institutions were physically closed, teachers were required to conduct the teaching and learning as usual. Hamid and Khalidi (2020) explained that teachers were suggested to consider the best possible ways to deliver their lessons to students. In general, teachers have changed their practices from conventional classroom meetings to online or offline distance learning through electronic tools (Kehoe, 2020; Allam, Hassan, Sultan, Mohideen, and Kamal, 2020).

The use of technology is considered an appropriate solution during MCO to keep education functional (Duraku & Hoxha, 2020). Online learning is widely used in many countries, although it is still at an emerging stage in Malaysia (Hamid & Khalidi, 2020). Yee (2020) stated that even though online learning in Malaysia is still at an early stage, many institutions were obliged to make drastic changes from traditional teaching to online teaching when MCO was enforced. Online learning, commonly known as e-learning or distance learning is considered a new learning method (Raheem & Khan, 2020 & Król, 2016). Online learning can be considered as a platform that makes students feel like they are in the classroom (Raheem, & Khan, 2020 & Trespalacios & Lowenthal, 2019).

Further, Maphosa, Dube & Jita (2020) stated that e-learning enables students to acquire information through experiential learning, where they may exchange their thoughts and discuss specific issues as they work to reach an agreement on a theory or concept. E-learning can provide and distribute content in different formats such as e-mails, slideshows, images, PDFs and word documents (Raheem, & Khan, 2020; McIntosh, 2014 & Mohammed, Kumar, Saleh, & Shuaibu, 2017). Besides that, Marwan, Madar and Fuad (2013) claimed that distance learning could be conducted via mobile phones in which the teachers can communicate with their students through text messaging applications. On the other hand, Tess (2013) stated that over the years, social media like blogs, wikis, Skype or Google Hangout, Facebook or WhatsApp have gained the reputation as reliable online learning tools.

Most of the university students are teenagers from 'Generation Z' who are technically savvy, self-expressive and open to new ways of doing things such as exploring social media (Javaeed, Kibria, Khan, & Ghauri, 2020; Ngalomba, 2020; Giarla, 2019; Weinstein, 2017; Swist, Collin, McCormack, & Third, 2015). According to Sponcil and Gitimu (2013), most students devote more time on social media daily for entertainment or news. In addition, many studies revealed that social media enhances interaction, collaboration and students' engagement in the education field (Faizi & El Fkihi, 2018; Faizi, Chiheb, & El Afia, 2015; Mallia, 2013). Thus, using social media as an instructional tool within institutions will support the continuity of teaching and learning when a crisis emerges, such as COVID -19.

## WhatsApp

Instant messaging applications are so on-trend now and one of the preeminent applications is WhatsApp which is beneficial for education (Ayuningtyas, 2018; Kacetl & Klimova, 2019; Saritepeci, Duran & Ermiş, 2019). Instant messaging applications are so on-trend now and one of the preeminent applications is WhatsApp which is beneficial for education (Ayuningtyas, 2018; Kacetl & Klimova,

2019; Saritepeci, Duran & Ermiş, 2019). This is because WhatsApp provides a platform for both the teachers and students to interact and express their knowledge and ideas openly (Abualrob & Nazzal, 2020). Further, WhatsApp contains many features such as video, recording videos, taking pictures, sending multimedia and documents, surfing the internet and many more that support teaching and learning (Boyinbode, Agbonifo & Ogundare, 2017). These features have captivated the attention of few researchers worldwide to examine the potential of instant messaging applications and particularly in language teaching and learning (Oriji & Anikpo, 2019; Gon & Rawekar, 2017; Boyinbode, Agbonifo & Ogundare, 2017; So, 2016). WhatsApp appears to be the most outstanding application among social media (Reeves, Alkhalaf & Amasha 2019; Sayan, 2016; Kustijono & Zuhri, 2018). A survey made in 2018 by the Malaysian Communications and Multimedia Commission (MCMC), showed that about 98.1% of users felt WhatsApp was the most favoured and owned application. WhatsApp is intensely common and convenient to be used because people can communicate with their friends through it (Sutikno, Handayani, Stiawan, Riyadi, & Subroto, 2016). Therefore, WhatsApp has dominated the global instant messaging application market.

WhatsApp and its attributes have also been in the limelight for educational purposes. A survey that Ahmad, Ismail and Nasir (2015) conducted, found that 46% of Malaysian university students used WhatsApp on a frequent basis compared to other social media. Alenazi (2017) asserted that merging WhatsApp into tertiary level education provided desired learning advantages. Mbukusa (2018) stated that WhatsApp is an innovative teaching strategy that can captivate students' interest and support their future learning. WhatsApp has various features that help students get eagerly involved in learning activities. Students can express their views and opinions through the features in WhatsApp like attaching documents, sharing videos or web links and many more (Hernández, Kattalina, Piracún & Alexander, 2018; Mbukusa, 2018; Susanti & Tarmuji, 2016). Thus, WhatsApp is considered to be an effective teaching tool that provides a positive impact on students' achievement in academics. However, Bernard and Dzandza (2018) pointed out that this platform was not efficiently used in teaching and learning. Also, teachers still are reluctant to use them as teaching and learning tools (Devi, Gouthami & Lakshmi, 2019). Therefore, the current study attempts to examine the effects of WhatsApp as an instructional tool without a having a physical meeting with the students.

## METHODOLOGY

The study used a quasi-experimental research design to collect data. A pre-test - post-test was used to determine the effects of teaching and learning through WhatsApp. Further, purposive sampling was employed to select 33 third semester undergraduates from Widad University College participated in the study. The main focus of this study was to provide instruction without having a physical meeting with the students. Therefore, the programme coordinator gave their mobile numbers with their students' consent. A closed WhatsApp group was created using mobile numbers whereby only the members were able to see the content. Before the experiment, students undertook a vocabulary pre-test adapted from Schmitt and Schmitt (2001) that consisted of 36 words was shared in the group. The vocabulary used a definition matching format allowing the students to choose the correct answer. The experiment was carried out for six (6) weeks, whereby six (6) words were sent via WhatsApp. All the teaching and learning processes were in fact, done via WhatsApp group.

The students discussed the words together through WhatsApp by providing meaning, exchanging pronunciation and constructing sentences, whereas the lecturer became the facilitator. By the end of each lesson, the lecturer catered vocabulary exercises for the students. The core textbook was used to extract 36 specific words and compress them into a list of words for the study. In order to determine the effects of teaching and learning through WhatsApp, all the students took a post-test at the end of week six (6). All the data gathered from both the test was examined and analysed using the Statistical Program for Social Sciences (SPSS 22), in which paired sample t-test was used to compute the means scores.

### **RESEARCH FINDINGS**

The paired sample t-test was employed to determine whether there was a significant difference in students' knowledge between the vocabulary pre-test and post-test scores after receiving and sharing knowledge through WhatsApp. The paired sample t-test shows that the difference in the vocabulary test scores between before and after six (6) weeks of instruction through WhatsApp is statistically significant where t (33) equals to -9.58 and p equals to .000. Also, students have higher scores in their post-test with a mean score of 15.48 with a Standard Deviation (SD) of 4.72. Thus, the statistical test reveals that there is an effect due to the treatment given indicated by significance values of < 0.05 (H0 rejected) as shown in Table 1 below.

Table 1: Results of Paired Sample t-test Before and After Using WhatsApp as an Instructional Tool

Test	N	Mean	Standard Deviation	t- value	df	<i>p</i> -value
Pre-test Post-test	<u>33</u> 33	7.60 15.48	4.72	- 9.58	32	.000

## DISCUSSIONS

This study shows strong empirical evidence on the level of implementation of learning organization practices in the district of Central Melaka, Melaka. The level of practice of the three aspects contained in the LO and the implementation of LO practice is at a high level according to the teachers and administrators' perception. The T-test analysis showed a significant difference between the perceptions of the administrator working group and the teacher working group. The administrator working group showed higher confidence in implementing learning organization practices than the teacher working group. The working group of administrators is the leaders who lead and navigate the school organization. Organizational leaders play an important role in successfully implementing LO practices in a school organization as organizational leaders play a role in creating a conducive environment to encourage innovation and learning processes among human resources in school (Chen et al., 2016). The findings of this study are in line with the opinion put forward by Haiyan, Walker and Xiaowei (2017), who also agreed that school leaders are responsible for building and nurturing a culture of learning among teachers in schools.

In addition, the school organization leaders also have a role in creating an effective communication system between all human resources to enable knowledge transfer effectively and smoothly (Gino et al., 2010). The organization's leaders should also encourage and motivate all human resources to push human resources beyond all possibilities in carrying out daily work processes. (Sivanathan & Cynthia Fekken, 2002). School leaders today are responsible for administrative matters and play a role in efforts to develop the potential of human resources in producing more creative and innovative human resources. (Arma et al., 2016). Organizational leaders need to identify the potential possessed by each human resource and strive to strengthen this potential by assigning tasks according to the talents and potentials possessed by human resources. Giving casual and not given full attention will reduce the sincerity and motivation of human resources to give their best in the tasks carried out.

### CONCLUSION AND RECOMMENDATION

The study aimed to investigate the use of WhatsApp as an instructional tool for tertiary students. The study showed that students' knowledge improved after receiving instruction through WhatsApp. Hence, it can be concluded that WhatsApp is an effective and useful instructional tool to be executed in online learning (Susanti & Tarmuji, 2016; Gon, & Rawekar, 2017; Mpungose, 2020). Moreover, WhatsApp can be a suitable instructional tool during MCO because the physical meeting is most unlikely at this point (Khan, 2020; Maphosa, Dube, & Jita, 2020; Abualrob & Nazzal, 2020; Annamalai, 2018; Barhoumi, 2015).

WhatsApp provided pedagogical benefits that could support teaching and learning during challenging circumstances like Covid-19. The findings of the study indicated that WhatsApp was useful for teaching and learning because it enabled students to gain access to information and allowed them to search information related to their lessons and at the same time immediately shared the information in the form of audios, videos, documents, or images with their friends (Alenazi, 2017 & Gon & Rawaker, 2017). Hence, WhatsApp was considered the most convenient tool to be employed in the learning process as teachers and students could share the vocabulary learning materials including worksheets, video links, and voice notes.

Based on the study's results, it is highly recommended to utilise WhatsApp as an instructional tool in the education process (Shariffuddin, Raihan, Shaaidi, & Hashim, 2016). The WhatsApp tool established positive attributes that could boost students' interest in actively engaging in learning (Maphosa, Dube & Jita 2020). As a matter of fact, the authorities of the universities should consider WhatsApp as one of the e-learning platforms and exploit it fully during critical times like the Covid-19 lockdown (Mukherjee, 2020; Abualrob & Nazzal, 2020; Maphosa, Dube & Jita 2020). However, educators should be trained on how to use WhatsApp efficiently. Besides that, more studies should be carried out to identify the impact of WhatsApp in teaching and learning and relate WhatsApp with other instructional tools.

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