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Research Article

The use of mobile applications in language teaching: Transition from tradition to easy, fun and daily life

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Abstract

The learning difficulties experienced by students during COVID-19 are from boredom, lack of enthusiasm in learning, and unstable emotions, which are stimulated by the uninteresting and boring learning design. This research aims to analyze three things: the use of mobile learning in overcoming students' difficulties in Arabic language learning, students' attitudes in Arabic language learning, the use of mobile learning technology in transforming students' Arabic language skills. This research used the approach of mixed-method research that is focused on collecting and analyzing data that are done in a series of studies. The respondents of this research were the eighty students from Metro Lampung High School and East Lampung High School, respectively. The research instruments were questions in Quizizz application, the questionnaire used Google Form application, and the interview was conducted through a video call. The data were analyzed using qualitative and quantitative data analysis techniques. This study resulted in findings that COVID-19 has stimulated teachers in improving the creativity in designing learning based on interesting mobile learning. The positive attitude of the students increases significantly after using mobile learning. The result of the t-test was $p<.05$, which means that the use of mobile learning can transform students' Arabic language skills. This study concluded that interesting mobile learning technology has overcome various students' learning difficulties. This study recommends the use of mobile learning in Arabic language learning.

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Introduction

COVID-19 has caused students' mental disorder in the form of anxiety and fear, which impacts students' behavior (Grubic, Badovinac, & Johri, 2020). Fear and anxiety cause various learning difficulties (Owusu, Koomson, & Hanson, 2020). Learning difficulties are also triggered by the unpreparedness of the students for the change of the learning system from face-to-face classroom learning to online learning (Putri, Purwanto, Pramono, Asbari, Wijayanti, & Hyun, 2020). Learning difficulties are also stimulated by the unpreparedness of teachers in utilizing online media in the learning process. Besides, the non-optimal role of the teacher and the presence of parents in ensuring a smooth online learning process, inadequate internet network (Zhou, Huang, Cheng, & Xiao, 2020), and the uneven learning device (Abidah, Hidaayatullaah, Simamora, Fehabutar, & Mutakinati, 2020) resulted in not achieving the learning objectives.

Some of the students' learning difficulties during COVID-19 are identified from two main factors, namely social factors and psychological factors. The difficulties from the social factors are related to the readiness of teachers in designing online learning so that the learning process becomes irregular and not on target. Besides, the inconducive

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learning environment affects students' learning attitudes. The difficulties from the students' psychological factors are in the form of anxiety, lack of enthusiasm about learning, and unstable emotions so that it creates a negative attitude in learning. A negative attitude is indicated by students' absence in the virtual classroom, ignoring the learning tasks, and inactivity during class discussion (Gillett-Swan, 2017). This negative attitude has had an impact on the achievement of learning.

So far, studies about learning during the pandemic of COVID-19 tend to examine three main issues. First, some studies see the presence of COVID-19 has changed the learning pattern from the classroom learning into online learning and influenced the achievement of the learning competency (Bao, 2020; Dhawan, 2020). Some assess that the presence of COVID-19 threatens students' psychological development because students do not do face-to-face learning with the teacher directly but with the intermediary of mobile learning (Wang et al. 2020). Second, some studies see the presence of COVID-19 has changed the function of the teacher from transferring knowledge into learning facilitator. The function of the facilitator brings a big problem for teachers who are not ready to use the mobile learning approach in learning (Nofriansyah, Ganefri, & Ridwan., 2020; Widiastuti, Susilo, & Nurfinaputri, 2020). On the other hand, the presence of engaging online learning provides a significant influence on the concentration and competency of the students (Adinda & Mohib, 2020; Blieck, Zhu, Schildkamp, Struyven, Pynoo, & Cindy, 2020). Third, some studies examine the importance of parents' assistance in students' learning (Lee, Phillips, Steward, Kerns, & Lee, 2020; Mandarakas, 2014). Parents' assistance in students' learning during the pandemic may affect the learning activity.

From the three tendencies of previous research, it appeared that the dimensions of the teacher in the form of readiness in using mobile learning and its role in ensuring the success of learning had not been studied carefully. At the same time, the analysis of students' attitudes in facing online learning was less considered because the study was more focused on the achievement of learning objectives. This study complements the shortcomings of the previous studies that tended to see the weaknesses of online learning in the pandemic of COVID-19. This study analyzes the use of mobile learning in students' Arabic language learning in senior high schools and explains the positive side of the presence of the pandemic from the aspect of teachers and students.

The Effective Learning Tools for Language Learning

COVID-19 has caused learning difficulties for students. These difficulties are in the form of a condition where students cannot perform learning as usual because of the internal and external obstacles that affect students' psychological condition and learning outcomes (Besand, 2020). The sign of learning difficulties is the obstacle to achieve learning outcomes (Batlolona & Souisa, 2020). One of the effective learning tools to face this problem is mobile-learning technology (Hern, Jaimez, & Garc, 2020). Mobile learning is a language learning model that utilizes cellular and mobile phone technology as learning tools (Alepis & Kontogianni, 2020). Mobile learning can also be developed in various multimedia that can be accessed easily through mobile phones, laptops, tablets, and computers so that learning materials become interesting and easy to understand. The use of mobile learning involves the collection of networks that includes the hardware and software and sending data in the form of messages, text, or sound (Hrastinski, 2009). Data can be sent and stored and accessed anytime through the internet network that is interconnected and can create a share function (Gallego & Topaloglu, 2019).

In the process of learning, communication occurs between students and teachers interactively through the intermediary of various applications such as Classroom, Video Conference, Live Chat, Zoom Meeting, Whatsapp, and Youtube (Dumford & Miller, 2018). Online learning provides a variety of learning experiences that is accessible to students anywhere and anytime (Guler, 2020). The content and learning experience is delivered through electronic technology so that the utilization of media types depend on the structure of the studied material (Blaschke, 2014).

The learning process oriented on the teacher as the center of information has changed to the learning that focuses on the technological content of mobile learning. The technology content replaces the function and role of the teacher and changes it into a function as facilitator and motivator of learning. The function of the teacher is more emphasized as a facilitator that helps students to get information on proper knowledge (Hung, 2016). Teachers take full responsibility for designing and running all the processes of online learning (Zalavra & Papanikolaou, 2019). In the learning process, the interaction between teachers and students is dominated by the visual, sometimes combined with conversation in a video conference and gives flexibility to the students to use diverse media (Olaniran, Duma, & Nzima, 2017). Learning using mobile learning emphasizes on the role of the media as the main source of information (Brinkley-Etzkorn, 2018). As the main source of information, mobile learning has presented a learning environment that allows students to reconstruct knowledge widely beyond the traditional classroom (Gkonou, 2016). Learning

using mobile learning that is designed with a fun app generates interest in students (Brinkley-Etzkorn, 2018). Students who feel happy in learning will quickly develop the skill of using information and communication technology that is needed and can access learning anywhere, anytime (Mamun, Lawrie, & Wright, 2020).

Theoretical Framework of the Study

This study is based on the conceptual theory of mobile-based learning to overcome learning problems during COVID-19 pandemic. The learning difficulties that students experience in the form of stress and anxiety directly influence teachers' creativity in designing mobile-based learning. Interesting mobile-learning-based learning design can grow up students' positive attitudes in learning and influence students' learning outcomes (Figure 1).

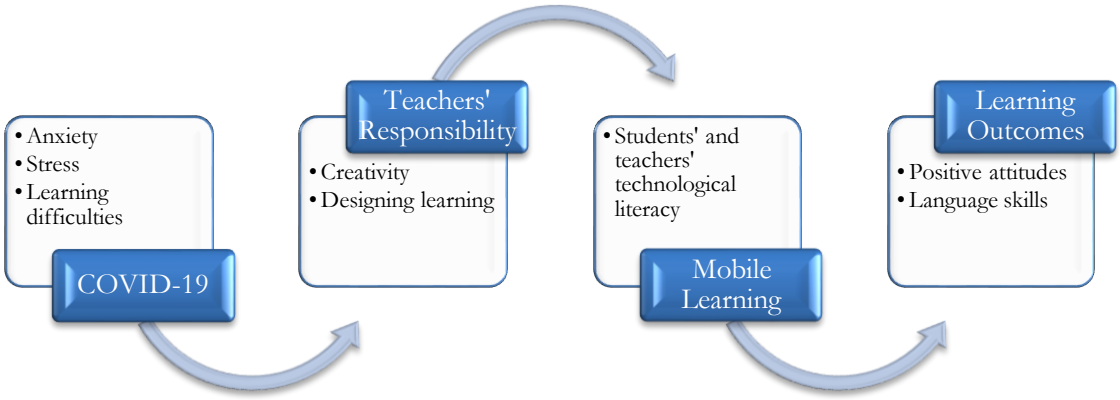

Figure 1.

Conceptual Framework of the Study

The theoretical framework above is derived into the paradigm of thinking that is students' learning difficulties during pandemic encourages teachers to have a high responsibility to think about the continuity of education for students. High technological literacy level affects teachers' skill to design learning based on mobile learning. A mobile-learning strategy can overcome students' learning obstacles and improve learning outcomes.

Research Problem

The high school students' difficulties in the Arabic language are identified from two main problems, the linguistic and nonlinguistic difficulties. The linguistic difficulties include the difficulties in pronouncing the sound and in the mastery of vocabulary and grammar. The nonlinguistic difficulties are related to the limited competencies of teachers in using a diverse range of online applications in learning the Arabic language, the low technological literacy of students, and the inadequate internet network. Besides, the online learning conditions make students stress in learning, and the skill of parents in assisting students' learning is still weak.

This study implicitly illustrates the other side of COVID-19 impacts for students and teachers in Arabic language learning using mobile learning. In line with this objective, there are four questions formulated as follow:

- How is the use of mobile learning in Arabic language learning?
- How is the attitude of students in learning Arabic?
- How are students' and teachers' technological literacy levels?
- Can the students' Arabic language skills be developed by using mobile-learning technology?

The answers to these questions become a discussion that provides an understanding of the positive potency of COVID-19. The use of mobile learning in teaching and learning can resolve difficulties experienced by high school students, as well as stimulate teachers in improving competence in designing online learning. This paper is based on three arguments. First, COVID-19 can stimulate teachers in developing the skill to design learning based on mobile learning. High teachers' creativity results in various interesting application designs in learning the Arabic language. Second, the use of interesting mobile learning can increase the students' positive attitude in learning. Third, the success of Arabic language learning using mobile learning will not be achieved without adequate technological literacy both on teachers and students.

Method

Research Model

This study model followed a mixed-method research approach to test the instructional process and outcome. The mixed-method research was used in collecting and analyzing the data by combining the quantitative and qualitative approaches in one research procedure. The research design is illustrated in the following Figure 2.

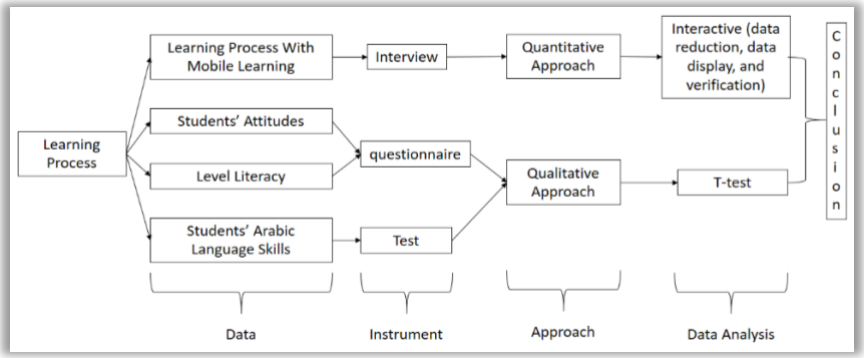

Figure 2.
Mixed-Method Research Design

This study analyzed four types of data, namely data on the learning process using mobile learning, data on the students' learning attitudes, data on the teacher and student's literacy level, and data on students' skills of the Arabic language. The data on how the learning process took place was obtained using an interview. The interview involved Arabic teachers. The result of the interview was recorded and put into categories using the interactive analysis framework proposed by Miles and Huberman, namely data reduction, which included data selection and grouping. The reduced data were then displayed, verified, and concluded.

The data on the students' learning attitudes, literacy levels and Arabic language skills were obtained with a quantitative approach, while the data on the students' learning attitudes and literacy levels were collected using questionnaire instruments. Test instruments were used to collect the data on the students' Arabic learning skill after using mobile learning is. The data collected through questionnaire were analyzed using a quantitative approach and categorization. The data of Arabic language proficiency test were analyzed using the statistical computation named t-test. A conclusion was derived after the data analysis (McKim, 2017).

Participants

Respondents of the study were 80 eleventh-grade students from Metro Lampung High School and East Lampung High School, respectively. In each school, two classes, experimental class and control class, were involved in that each class consisted of 40 students. All students in the experimental and control classes participated in every step of the research procedure. The distribution of the students' participation is displayed in Table 1.

Table 1.
Participants of Research

School	Class	Instructional Design
Metro High School	XI A	Mobile Learning
	XI B	Offline Learning
East Lampung High School	XI A	Mobile Learning
	XI B	Offline Learning

The decision of these participants was based on the consideration that these two schools are favorite schools with complete learning facilities. Besides, these schools also have professional teachers. On the other side, students experience difficulties in learning the Arabic language. The respondents were selected randomly based on similar characteristics in the skill of the Arabic language. Besides students, Arabic language teachers also became respondents in this study.

Table 2.
The Respondents' Demographic

Demography		Metro High School	East Lampung High School	Amount	Percentage
Class		XI	XI	-	-
Gender	Male	31	36	67	42%
	Female	49	44	93	58%
Age	16th	2	1	3	2%
	17th	74	77	151	94%
	18th	4	2	6	4%
Social Media	Whatsapp	80	80	100	100%
	Facebook	80	80	100	100%
	Instagram	80	80	100	100%
Ethnicity	Lampung	23	25	48	30%
	Javanese	45	48	93	58%
	Sundanese	4	2	6	4%
	Minangkabau	5	3	8	5%
	Palembang	3	2	5	3%

The data above indicated that the samples are students of eleventh grade that consist of boys and girls aged between 16 and 18 years old. All of these respondents have social media, such as Whatsapp, Facebook, Instagram, which can support online communication between respondents and teachers. Respondents who participated in the study were from diverse ethnicities such as Lampung, Javanese, Sundanese, Minangkabau, and Palembang.

Data Collection Tools

Data collection tools in this study consisted of an interview, questionnaire, and test of the Arabic language proficiency (vocabulary, grammar, reading comprehension skill, writing skill, and speaking skill). The interview was used to collect data related to the use of mobile learning in Arabic language learning. The interview was conducted by researchers and students directly via Skype. The interview questions consist of 15 questions that are developed based on the indicator of learning implementation using mobile learning. Here is the interview guideline that is used in the research:

Table 3.
Interview Guideline Blueprint

No	Indicator	Item Number
1	Supporting Media	1, 2, 3
2	Material Delivery	4, 5, 6, 7, 8
3	Ease of Access	9, 10, 11, 12
4	The Evaluation of Learning Outcomes	13, 14, 15

Furthermore, the questionnaire instrument was used to collect data on students' attitudes in learning the Arabic language and the level of students' and teachers' technological literacy. The questionnaire instrument consists of 25 items that were developed based on the indicator of positive attitudes. The following table is the blueprint used in developing the questionnaire of students' attitudes.

Table 4.
The Blueprint of Students' Attitudes Questionnaire

No	Indicator	Item Number	Scale	Score
1	The interest and desire to response	1, 2, 3, 4, 5	- Better	5
2	Enthusiasm	6, 7, 8, 9, 10, 11	- Good	4
3	Productivity and creativity	12, 13, 14, 15, 16, 17, 18, 19, 20	- Enough	3
			- Bad	2
4	Independence	21, 22, 23, 24, 25,	- So Bad	1

The questionnaire instrument was then used to collect data on the level of students' and teachers' technological literacy. The questionnaire instrument of technological literacy level consisted of 15 items that were developed based

on the indicator of technological literacy level. The following table is the blueprint that is used in developing the questionnaire of literacy level:

Table 5.

The Blueprint of the Literacy Level Questionnaire

No	Indicator	Item Number	Scale	Score
1	The understanding of the technology content	1, 2, 3,	- Better	5
2	The skill to operate software and hardware devices	4, 5, 6, 7	- Good	4
3	The skill to design and utilize technology in learning	8, 9, 10, 11	- Enough	3
4	Having a good attitude in responding to information	12, 13, 14, 15	- Bad	2
			- So Bad	1

The test instrument was used to collect data on the students' Arabic language skills. The test instrument consisted of 40 multiple-choice items. The test was developed based on the indicator of students' Arabic language skills. The table below is the blueprint that was used to develop the test on students' Arabic language skills:

Table 6.

The Blueprint of the Test Instrument on Students' Arabic Language Skills

No	Indicator	Item Number	Score	
			True	False
1	Vocabulary	1, 2, 3, 4, 5, 6, 7, 8, 9		
2	Grammar	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22		
3	Reading Comprehension Skill	23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33	1	0
4	Writing Skill	34, 35, 36, 37,		
5	Speaking Skill	38, 39, 40		

From the blueprint table above, it is explained that students' scores were converted to the score by using the following formula:

$$\text{Value} = (\text{Students' Score} : \text{Maximum Score}) \times 100$$

All instruments used in this research have been tested for content validity. The content validity test was done by the expert judgment and has fulfilled valid criteria, while the reliability test was done by using Cronbach Alpha. Below is the result of the content validity test and instrument reliability test.

Table 7.

The Result of the Content Validity Test and Instrument Reliability Test

No	Instrument	Validity	Reliability	
			Cronbach's Alpha	Item Number
1	Interview Guideline	Valid	-	15
2	The Questionnaire of Attitude	Valid	0,809	25
3	The Questionnaire of Literacy Level	Valid	0, 811	15
4	Test	Valid	0,862	40

Based on the result of the validity and reliability test above, it can be explained that all instruments are valid and reliable so that it can be used for collecting data of the research.

Data Analysis

This research used the mixed-method approach. The collected quantitative and qualitative data were analyzed in two ways. First, quantitative data analysis was conducted with the prerequisite test and t-test. The prerequisite test is the normality test with Kolmogorov-Smirnov's test statistic at a significant level: $\alpha = 5$ %. If the result of the prerequisite test shows that the samples are from a normal distribution population and population variances are homogenous, a hypothesis test for the data can be done with the parametric statistic that is the t-test. Second, qualitative analysis was done with several steps. The first is coding the result of the interview related to the learning process by using mobile learning, continued by making concepts from data that have no more changes. The third step is creating a category of

interview data results, followed by making a hypothesis from the arranged category. The fifth step is resulting in an analysis that is ready to test.

Results

The Use of Mobile learning in the Arabic Language Learning

Arabic learning in senior high school has been using mobile learning for six months. The data related to the use of mobile learning in Arabic instruction were obtained through interview. At the beginning of the use of mobile learning, teachers did not yet have sufficient readiness to carry out the learning. Arabic learning before the COVID-19 is in a traditional classroom using printed books and LCD projector media as learning resources. Online learning from home has been encouraging teachers to display learning as best as possible so that the competence of learning can be achieved. To improve knowledge and competence, the teachers follow various tutorials to design mobile-based learning either independently or organized by school institution. The teachers design the learning in a variety of applications, such as Google Classroom, Kahoot, Quizziz, Whatsapp, and YouTube, as outlined in the daily lesson plan (RPP) implementation. In the learning implementation, teachers and students interact in the virtual classroom supported by a variety of interesting application which is equipped with image and sound which is also provided with a space for discussion, assignments, and evaluation. The time of learning was compiled by teachers on a schedule that provides one meeting each week for 120 minutes. The material is presented with a fun strategy and can increase the students' participation. The implementation of mobile learning has encouraged teachers to do a variety of creativities in designing online learning and creating various Arabic language learning applications. To overcome the various obstacles in designing mobile learning, teachers follow various webinars and online training. The teachers' participation in various training has improved the creativity of the teacher significantly in designing mobile learning. The creativity of teachers emerges with various designs of learning applications such as vocabulary, grammar, speaking, Arabic language reading, and writing (Figure 3 and 4).

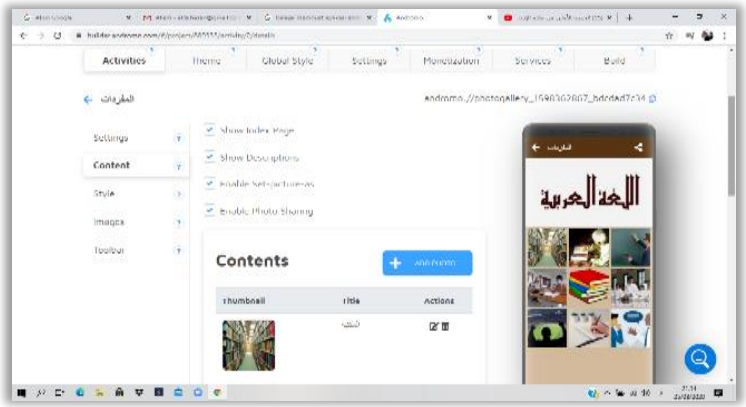

Figure 3.
Arabic Language Mobile Learning

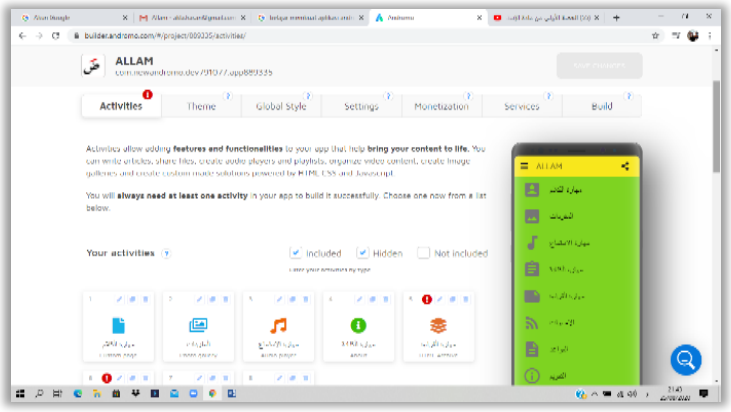

Figure 4.
Allam, the Application of Interactive Arabic Language Learning

In learning using mobile learning, teachers have a high commitment to achieve students' language competence. The high commitment was shown by teachers' responsibility in preparing learning maximally. Teachers designed the learning material that contains vocabulary, grammar, speaking skill, reading skill, and writing skill. The material was selected based on students' age development. The material was laid out interestingly in every application based on language competence that will be achieved. The application was implemented in class of XIA Metro Lampung High School and XIA East Lampung High School. In each learning session, the teacher motivated students by giving rewards and punishment. A reward was awarded to students who successfully achieved the target under some conditions. The punishment was given to undisciplined students who were not following the learning instructions, not doing the task, and absent in online classes. Besides providing motivation, teachers also fostered a sense of togetherness between teachers and students and students with students to exchange information and ideas. Students who were experiencing difficulties in the learning process were given direction and explanations with the help of additional applications such as Whatsapp and phone calls. The lesson was ended with the evaluation of using an interesting and fun game to measure the students' achievement toward the material.

Students' Attitude in the Arabic Language Learning

The analysis results toward students' attitudes in the learning Arabic showed that the use of interesting mobile learning has pushed the students' positive attitude in learning. 75.7% of students have a very high positive learning attitude, 11.2% of students have a positive attitude at the high level, 7.1% of students have a positive attitude at the moderate level, and only 6% of students have a positive attitude at the low level. The mean score of the questionnaire on students' attitudes before learning using mobile learning is $\bar{X}$=58.24 and $\bar{X}$=56.58 at the moderate level. The average value of students' attitudes after using the mobile learning in the learning is $\bar{X}$=78.25 and $\bar{X}$=79.86 at a high level (Figure 5).

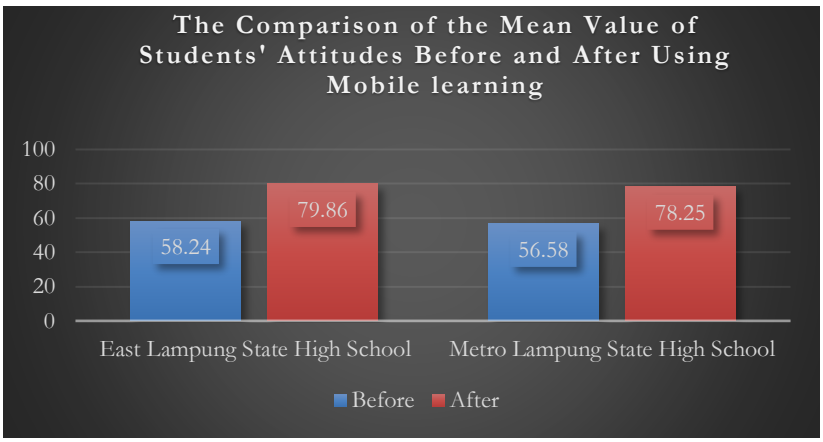

Figure 5.

The Mean Value of Students' Attitudes Before and After Using Mobile Learning

The students' positive attitude is characterized by several dimensions of attitudes, namely the interest and the desire to give a response, be enthusiastic, productive, and self-sufficient. In the interaction process of online learning, students showed an enthusiastic attitude. The sign of enthusiastic attitude was the students' response toward the instruction given in the delivery of the language tasks individually. The language tasks are given by delivering a story in Arabic in the form of video, writing in Arabic, answering questions from the presented readings, and reexplaining grammar in the readings. The enthusiasm was also shown by students from the number of questions asked in the class discussion about learning material that is not understood. The productive dimensions also appear in the learning by various students' creativity in showing the skill to speak, especially on the aspects of speaking and writing. The aspects of speaking were shown in the interesting video, which contains the expression of thoughts and feelings about various day-to-day events. Besides, the students' language creativity was also seen in written language that contains funny stories with exciting pictures. Arabic language learning has strengthened the students' independence in learning by finding various online learning resources to support the studied material. Students who have a low positive attitude were caused by the inadequate internet network where students live, inadequate mobile learning facilities, and lack of understanding toward the learning instructions. The teacher's interesting learning design influenced the students' positive attitude.

The Level of Teachers' and Students' Technological Literacy

The success of Arabic language learning using mobile learning is primarily determined by the level of teachers' and students' technological literacy. Three main factors support the level of technological literacy, which are the availability of mobile learning on each teacher and student, teachers' linguistic competence, language teaching competence, the responsibility to solve the problem of learning, and the passion of students in learning Arabic using mobile learning. From the questionnaire distribution results, it was known that all teachers and students have a mobile-learning network that is connected to the internet. Based on data, 92% of the students have an android phone, 8% of them have a laptop, and 5% of them have android and laptop. 100% of Arabic language teachers in High School have android and laptop. The availability of this facility strongly supports the implementation of Arabic language learning using mobile learning.

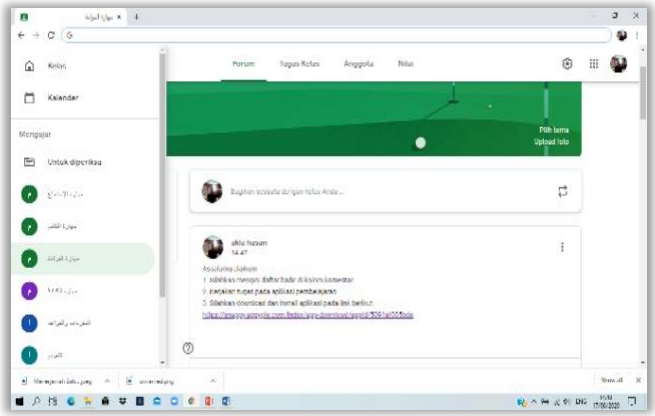

Figure 6.
Google Classroom as Class Communication Media

Figure 7.
The Evaluation of Arabic language learning by using Kahoot

The process of Arabic language learning using mobile learning requires teachers and students to have a high level of technological literacy to facilitate the learning process. The results of the questionnaire analysis to the teachers of the Arabic language at Metro High School and East Lampung High School indicated that Arabic teachers in both schools have good leadership and responsibility to the development of technology and the learning problems. Besides, teachers understand the digital literacy such as the use of mobile learning, the skill to design audiovisual learning media by utilizing android, computer, or laptop, the skill to develop learning based-technology, having good emotional intelligence, and high cooperation. This skill helps teachers maintain the implementation of learning using mobile learning.

The level of technological literacy is characterized by the understanding of the technological content, the skill to use hardware and software devices, the skill to design and use technology in teaching and learning, and a good attitude in responding to the information. The results of the data analysis show that the level of Arabic language teachers' technological literacy at High School is at a high level with the average value of 76.50 and 79.50 (table.8)

Table 8.
The Level of Arabic Language Teachers' Technological Literacy in High School

	N	Minimum	Maximum	Mean	Std. Deviation
Metro Lampung High School	4	73.00	82.00	76.5000	3.87298
East Lampung High School	4	74.00	86.00	79.5000	5.00000
Valid N (listwise)	4				

Table 9.
The Level of Students' Technological Literacy in High School

	N	Minimum	Maximum	Mean	Std. Deviation
Metro Lampung High School	80	43.00	82.00	53.1000	9.86440
East Lampung High School	80	49.00	92.00	59.0625	9.31087
Valid N (listwise)	80				

The measurement of the level of technological literacy on the teachers and students uses a Likert scale with five categories; very high, high, medium, low, and very low, with a range of interval values of 1-100. From Table 1, it can be seen that the average value of the level of Arabic teachers' literacy both at Metro Lampung High School and East Lampung High School is in the range of the interval 61-80 or high level. The level of students' technological literacy is in the range of 41-60 or the moderate level. (See Table 10).

Table 10.
The Measurement Scale of Technological Literacy Level

The Measurement Scale of Technological Literacy Level	
Interval	**The Level of Technological Literacy**
1 – 20	Very low
21 – 40	Low
41 – 60	Moderate
61 – 80	High
81 – 100	Very high

Adequate students' technological literacy skills can be enhanced by the teacher when the level of teachers' technological literacy is at a high level. The improvement of students' technological literacy skills can be made simultaneously during the learning process. The teacher gave a tutorial on how to use the application content that is used through the instructions. Students' understanding of the used application content has facilitated them in learning.

Students' Arabic Language Can Be Improved by the Use of Mobile learning Technology

The use of mobile learning in Arabic language learning can increase the positive attitude of students in learning significantly. The increase in students' positive attitude is influenced by the creativity of teachers in designing learning. Besides, the use of mobile learning can transform students' Arabic language skills. Students' Arabic language mastery before the implementation of mobile learning was still limited. From the test result, it was obtained that the average skill of students' Arabic-speaking at Metro Lampung High School is $\bar{X}$=78.97 and East Lampung High School is $\bar{X}$=79.41. This average value was in the range of the scale 73-87 with a score B for the Arabic language knowledge and skills, which means "good". The process of learning using mobile learning facilitates students in understanding linguistic material.

The elements of language, vocabulary and grammar, significantly increase in students because the learning using mobile learning provides both written and spoken exercises. Besides language elements, students' Arabic speaking also goes better. The students dare to speak in Arabic, although errors of pronunciation and grammar sometimes occur. The Arabic language speaking practice was carried out in class discussions using the Zoom app guided by the teacher as the moderator of the discussion who allows students to express their opinion. Besides, Arabic speaking practice was recorded in the video as a task. Arabic reading comprehension skill also increases significantly. The increase of Arabic reading comprehension skill is characterized by the skill to read and answer questions about a text. The use of mobile learning has also stimulated the students' writing skill. Task instructions were given online to

encourage the students to construct words into sentences, sentences into a series of text. The students' overall competence is the result of the use of mobile learning that is formulated as learning outcomes.

The analysis results of the test data on students showed an increase in learning outcomes significantly. To find out whether the use of mobile learning can transform the students' Arabic language skills, the t-test was carried out. The t-test was conducted after the data were tested for normality and homogeneity. The normality test results with the Kolmogorov-Smirnov's test statistic was at the significant level $\alpha = 5\ \% = 0.05$. It was known that the significance value count in each class successively is 0.072, 0.064, 0.080, and 0.067. From the test decision based on the output of the normality test, it was obtained that the entire count significance value is $> \alpha$, so H_0 is accepted. The conclusion was that the sample of the normality test is from a population with a normal distribution. It was then performed the homogeneity test with Levene's statistic test at a significant level, which shows: $\alpha = 5\ \% = 0.05$. It was known that the significance value count is $0.075 > \alpha$, so H_0 is accepted, which means that the population variance is homogeneous. Based on the conducted prerequisites test, the sample is from a population that normally distributes, and the variance of the population is homogeneous so that hypothesis test could be done to post-test data with the parametrical statistic that is the t-test.

Table 11.

The Result of the t-Test: The Influence of the Use of Mobile learning Toward Students' Arabic Language Skills

		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	Df	Sig. (2-tailed)
Pair 1	**Pretest - Posttest**	-1.82750E1	1.70072	.13445	-18.54055	-18.00945	-135.920	159	.000

From the t-test result (table.11), it is known that sig value count (2-tailed) is 0.000 at a significant level: $\alpha = 5\ \% = 0.05$. The criteria of the test result are if sig count is $> \alpha$, so H_0 is accepted, and H_a is rejected. The test result shows that the value of sig count is $> \alpha$, which means the use of mobile learning can improve students' Arabic language skills.

Discussion and Conclusion

The study showed some findings. First, the learning difficulties faced by students during COVID-19 pandemic give a positive impact on the aspects of teachers' creativity in designing learning. Learning difficulties experienced by students during the COVID-19 have stimulated the teachers in designing a variety of interesting learning designs in mobile learning. This is confirmed in the research of Yoo & Jin (2020) that the learning difficulties faced by students have an impact on the increase of the teachers' creativity in designing learning. The teachers' high creativity in designing mobile-based learning can answer problems in Arabic language learning for high school students during the COVID-19 pandemic. Some problems occur in the Arabic instruction, including anxiety, low level of motivation, and unstable emotion which all lead to the students' difficulties in learning vocabulary and in speaking Arabic effectively. The difficulties caused by the low interest in studying, feeling of boredom, lack of spirit, and enthusiasm in learning, and the low proficiency of the Arabic language, and all causes can be solved by using interesting and fun mobile learning. The COVID-19 outbreak is seen as the destroyer of human life order, and on the other hand, it emerges a positive impact. The presence of COVID-19 has encouraged high school teachers to improve various teaching competencies. Teaching competencies cover the skill to plan, process, and evaluate mobile-based learning. Teachers' high responsibilities to overcome learning difficulties that students experience affect the improvement of teachers' creativity in designing interesting mobile-based learning (Qadhi, Hendawi, Mohammad, Ghazi, Al-Dosari, & Du, 2020).

Second, the learning process does not only cover the material mastery but also it relates to students' psychological condition stimulated by the learning design arranged by teachers (Kumar & Bervell, 2019). The students' psychological condition influences their learning attitude. There is a significant learning attitude of the students before and after the implementation of mobile learning (Figure 5). Students' psychological condition is shown either in a positive or negative attitude, and teachers' high creativity can influence students' positive attitude in learning. The use of mobile learning in the instructional process has significantly influenced the students' psychological condition, which, in turn, improve their learning attitude. The positive attitude is shown in the form of interest and desire to give a response in the study that increases significantly. Enthusiasm has encouraged students to be productive and independent in learning. The discipline attitude is shown by attending the class on time and completing tasks before a deadline. The

positive attitude is also shown by positive responses in each stimulus given by the teachers. Students' attitude always relates to the learning activity. Therefore, the success of learning will depend on the teachers' skills in growing students' positive attitudes in learning (Shakah, Al-Oqaily, & Alqudah, 2019).

Third, the success of the Arabic language learning with the mobile learning approach can be done because of the level of technological literacy among the teachers and students are good (Table 8 and Table 9). The success of Arabic language learning using the mobile learning approach is supported by teachers who are competent in the field of Arabic language learning. Arabic teachers have good leadership, understanding of technological literacy, emotional intelligence, and high cooperation. Adequate literacy level for Arabic language teachers as a prerequisite is vital to carry out the learning with the mobile learning approach. Some researchers suggested that implementing the learning-based mobile learning should be supported by the high technological literacy level (Spante, Hashemi, Lundin, & Algers, 2018; Viberg, Mavroudi, Khalil, & Bälter, 2020). The mastery of adequate technological literacy is urgent because the function of the teacher in learning is as a facilitator of learning. As a facilitator of learning, the teacher must have the skill to design learning content that enables students to learn independently and happily (Tamir, 2020).

Fourth, the use of interesting mobile learning has transformed the mastery of students' Arabic language. The increase of Arabic language mastery is achieved in line with the implementation of the learning by following the planned procedures that are compiled in a fun process. Some researchers showed that learning systems based on mobile learning can provide a relaxed and fun learning atmosphere (Mirzamohammadi, 2017). The sense of pleasure in learning can recognize students' emotions (Hassan, Alam, Uddin, Huda, Almogren, & Fortino, 2019). The learning that was originally considered difficult, uninteresting, and boring, turned into a fun process. Besides, the success of learning is influenced by the model of the teacher in teaching practice. The interesting practice by the teacher has increased the success of learning (Montenegro, 2020). The use of mobile learning as a strategy in the Arabic language learning has encouraged students to be active in various learning activities.

The teacher ended the use of mobile learning as a media in teaching and learning with an evaluation. The evaluation process is based on the observations of the teacher during an online class, and on a language proficiency test which includes the mastery of the listening material, the skill to express thoughts orally in the class discussion forum, the skill to read the Arabic text that is measured by reading comprehension and skill to express thoughts through writing. The observation on the learning process shows that a constraint occurs in the classroom discussion. The constraint is due to the poor or unstable signal when accessing the mobile learning application that leads to unconducive discussion. The evaluation done by the teacher is to measure the success level of learning using mobile learning. The implementation of the evaluation uses the Kahoot game application that is developed by the teacher. The use of the online game in this evaluation provides flexibility for teachers to measure the students' Arabic language skills. Some researchers stated that the use of online games designed interestingly has generated interest for students to respond to learning (Heumos & Kickmeier-Rust, 2019; Tahir & Wang, 2020).

The learning process using the mobile learning approach is not free from constraints. In learning using mobile learning, there are three constraints. First, students do not have the same motivation level in participating in learning. Various learning attitude is also seen from the tendency of students in responding to learning. The teacher encouraged students by implementing reward and punishment rules, which then have an impact on the seriousness of students' learning. A reward in the form of additional credits is provided for the students who were actively engaged in the learning process, and punishment in the form of additional tasks is given to students who did not actively participate in the learning process. Second, the skill of every teacher in designing online learning is not the same and still limited so that the portion of the material mastery of language elements and language skills are unbalanced. Third, at the same time, the support of students' android devices is not all adequate. Some students' smartphones are out of date and sometimes are bothered by the quality of the signal, image, or sound. Besides, some students could not follow the information presented in the learning because they do not understand the instruction that is delivered in Arabic. Students who are left behind the information will show a negative attitude in learning (Sulisworo, Ishafit, & Firdausy, 2016).

This study is different from previous studies that see COVID-19 as a threat to learning. This study is more oriented on the creativity of teachers in designing the learning using a variety of mobile devices on learning. Besides, the process of using mobile learning emphasizes the role of the positive attitude of students in learning. The analysis also aims at the achievement of students' language proficiency as the influence of the use of mobile learning designed by the teacher. From this study, it is suggested that the learning of the Arabic language on the students of Madrasah Aliyah

is focused on the design of technology-based learning media that encourages a positive attitude of students in learning. The involvement of students' high positive attitude will drive the success of the study (Adachi, 2015).

The conclusion of this study shows that COVID 19 has influenced the learning process negatively and positively. This study results in findings that COVID-19 has stimulated teachers in improving creativity to design interesting mobile-based learning. The design of engaging learning has grown students' positive attitude in learning. The students' positive attitude creates good behavior to complete learning tasks and be excited to follow the learning process. Besides the increase in students' positive attitude in learning, students' Arabic language skills have also increased. These skills include the mastery of listening, vocabulary, and grammar that are shown in class discussions, argumentation in Arabic, and reading and writing skills. The use of mobile learning for the development of students facilitates students with easy and fun Arabic language learning (Krause, Portolese, & Bonner, 2017). The use of mobile learning cannot be done maximally without the support of students' and teachers' high technological literacy levels. The high level of technological literacy influences teachers' creativity in designing mobile-based learning. The strategy of interesting mobile learning has enhanced students' Arabic language skills.

Recommendations

This study has analyzed the use of mobile learning to overcome difficulties in language learning. Language teachers can use this study as an alternative strategy in online learning. Besides, other researchers can do further research that relates to online learning following technological developments.

Limitations of the Study

The scope of this study is limited to the use of mobile learning strategy in Arabic language learning for high school students. Therefore, the researchers in the field of education can conduct further research with different materials and education levels to increase the breadth of science on the theory of mobile learning both in the learning process and learning evaluation.

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