

The Effect of Telegram Application in Japanese Language Distance Learning During Covid-19 Pandemic

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ABSTRACT

The use of social media or mobile communication application for learning has attracted many researchers across the globe as they are inevitable in digital era. However, the use of Telegram seems to be overlooked in the hustle and bustle of research. Therefore, the aims of present study was to investigate the effectiveness of the Telegram application in Japanese Language learning as a course for beginner Japanese learners. The intervention (quasi-experimental condition) focused on the Telegram Apps for primary Japanese language learners with various professional backgrounds and do not yet know the Japanese language. Results showed a statistically significant correlation between growing motivation and interest in learning on learning outcomes and Japanese language skills. Students were more engaged in Japanese Language skills and more motivated to learn Japanese after a two-month intervention. The author concludes that the Telegram application as a mobile device is feasible and helpful in learning basic Japanese.

Keywords: Basic Japanese, distance learning, language learning strategies, learning media, Telegram application.

1. INTRODUCTION

The Nowadays, mobile technology and mobile phone applications have become important objects in our daily lives, especially in the pandemic era. With the increasing popularity of tablets and smartphones for distance language learning, these technologies gradually change how we behave. With the regular use of smartphones often marketed as learning tools, research shows that mobile device applications are now valuable for educational purposes; there are calls for integrating technology into language learning (Kukulka-Hulme, 2009).

More recently, the advent of the Internet has also enabled tremendous innovation in the delivery of post-secondary education (Gunasekaran, McNeil & Shaul, 2002; Teo & Gay, 2006). Mobile devices have been recently used overtly because of their accessibility, ease of use, and popularity. On the other hand, the modern use of networks and online applications has contributed significantly to online learning. Several previous studies have confirmed that learners can decide on the proper use of mobile technology for language learning with various language learning technology options (Doughty & Long,

2003). This study aims to identify the Telegram application mobile device that can effectively MALL in helping to improve Japanese language skills during this pandemic. Therefore, this study is essential to provide evidence of the effectiveness of the Telegram in improving basic Japanese language skills.

Telegram is a relatively new application, but its users are increasing with exciting features to support learning. Telegram's unique feature with several advantages is that the message sent will not lose even if the application is uninstalled. There is a bot feature to support learning by providing quizzes, student attendance, voting. The use of android applications as learning media is something exciting and new in education. It gives a new color in learning media development so that it is more exciting and diverse. However, the use of android applications as learning media is not only considered one-sided. However, it must have a purpose to motivate students and constantly stimulate them to remember what they have learned and stimulated learning (Musaddad, 2016).

The purpose of this study is to complement the results of similar existing studies. Several relevant studies show that the effectiveness of the Telegram application can

improve foreign language skills such as improving students' writing skills and attitudes (Aghajani & Adloo, 2018), improving Vocabulary (Zarei, Darani, & Ameri, 2017; Ghobadi & Taki, 2018), improve Listening comprehension skill (Salehpour, 2018). However, this study focuses more on the effect of the Telegram application on increasing Japanese language learning motivation and correlates with increasing learners' Japanese language skills. Moreover, this research shows that Japanese language learners can also use the Telegram application from various professional backgrounds.

The current generation of students is growing up in the digital world. Using digital social devices is a big part of their daily experience outside of educational settings. A large part of our social communication takes place online. Because the language of the Internet has a significant effect on the user's language, it is crucial to research the issues and their role in language learning. Technology can help facilitate the achievement of learning objectives (Hsu, 2013). Advances in mobile technology have also led to many changes in the effectiveness of mobile devices in language education (Baker & Frank, 1992).

Mobile technologies, such as smartphones, support social interaction and enhance and accelerate language learning (Ting, 2013). Using smartphones in a pedagogical environment as a mediated tool for SLA has positive results for classroom interactions (Brett, 2011; Chang and Vera Pa, 2011; Bicen and Kocakoyun, 2013). The advantages of Mobile-Assisted Language Learning (MALL) are extraordinary (Gromik, 2012; Schier, Mulvany, & Shaw, 2010). However, the use of the Telegram application as a distance learning medium for the Japanese language in Indonesia is still small.

Mobile phones have snowballed since 1995, apart from sending text messages and making calls, but also for other purposes such as teaching and learning (Chowdhury, Breznik, Verdnik, & Prihavec, 2012). One of them is that technological tools such as Telegram have achieved a dominant role in society (Lenhart, 2007). These tools have various attributes that affect their suitability for learning objectives (Calvo, Arbiol & Iglesias, 2014).

Telegram is a relatively new application, but its users are increasing with exciting features to support learning. Telegram's unique feature with several advantages is that the message sent will not be lost even if the application is uninstalled. There is a bot feature to support learning by providing quizzes, student attendance, voting. In addition, it can send files up to a maximum of 1.5 Gb, accommodate channel or group members with a capacity of up to 200,000 people. This application is like WhatsApp, but Telegram can use on a laptop without being online simultaneously on a cellphone. Telegram

can send in the form of text, images, audio, video, and others.

2. METHOD

To investigate the impact of using Telegram in learning basic Japanese, we prepared a series of quasi-experiments with a pre-experimental design approach. Our procedures conform to the ethical standards of our faculty. Learning is carried out twice a week for 60 minutes by providing learning materials through Telegram groups and Telegram channels

Ten samples of adult learners from 70 participants in *Aya Nihongo's* class using as respondents in our study, one of whom was male. Their median age was 20.1 and ranged from 17 to 24 years. Their work backgrounds vary from students, students, and employees.

2.1. Instruments and Measures

Various kinds of Telegram feature in the Telegram application that helps distance learning is showing in Figure 1. In Figure 1, a worksheet is an exercise for participants after getting material from the Telegram group. Figure 2 is a Telegram group for the ongoing teaching and learning activities. Then, picture 3 is a Telegram channel that provides quizzes every week. Furthermore, Figure 4 is the implementation of the quiz using the quiz bot feature on Telegram.

We measured the learning effect by providing basic Japanese test questions in the pre-test and post-test. We used SPSS statistical software to calculate the comparison and correlation of pre-test and post-test scores.

2.2. Procedures

This series of experimental activities were carried out for two months, starting with a pre-test in the Telegram group. This pre-test because the registered participants were from the general public so that a pre-test does hold to determine each participant's ability. Then, learning is carried out twice a week with a duration of 60



Figure 1 Features of the Learn Japanese Course in the Telegram app.

Table 1. Schematic outline of Japanese lesson and assessments

Time	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
60	Basic Japanese (pre-test)	Experimental intervention (Telegram Apps.)	Experimental intervention (Telegram Apps.)	Experimental intervention (Telegram Apps.)	Basic Japanese (post-test)

minutes/meeting with learning materials through Telegram groups and Telegram channels. The implementation is five times, as shown in Table 1.

The pre-test was carried out before the participants took part in Japanese language learning. The pre-test consists of fundamental questions about knowledge of *hiragana* and *katakana* (Japanese script). The post-test was carried out after the participants took part in Japanese language learning and treatment on the *Aya Nihongo* channel. The post-test consists of questions about the basic material of the Japanese language that has been studied.

3. RESULTS AND DISCUSSION

We present each comparison between the initial conditions before using Telegram media and after using Telegram as a Japanese language learning medium. We will discuss findings from quasi-experiments concerning each other to arrive at general conclusions. Half of them have never studied Japanese at all, the other half have studied Japanese in an average of only two months of learning Japanese. They participated, which included only those who attended the pretest, lesson intervention, and also post-test. They participate in their regular class with their regular teacher in the Telegram channel.

The Paired Sample t-test with SPSS used to compare the pretest scores of improving basic Japanese language skills indicate a significant increase in the overall score of the Japanese language test results, as seen in Tables 2 and 3.

Table 2. Output of paired sample t-test results

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	49.5000	10	33.03618	10.44696
	Posttest	76.0000	10	22.99758	7.27247

Table 3. Table styles

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Pretest & Posttest	10	.923	.000

This output (see Table 2) summarizes descriptive statistical results from the two samples studied, namely pre-test and post-test. For the pre-test value obtained, the average learning outcomes or mean 49.50. As for the post-test scores, the average value of learning outcomes was 76. The number of respondents used as research samples was ten students. The standard deviation value for the pre-test is 33.0361, and the post-test is 22.9975. Finally, the mean std. Error value for the pre-test is 10.4469 and for the post-test is 7.2724. Because the average value of pre-test learning outcomes < post-test means that descriptively there is a difference in average learning outcomes between pre-test and post-test results in Table 3.

The output in Table 3 shows the correlation test results or the relationship between the two data, or the relationship between the pre-test and post-test variables. The output indicated that the correlation coefficient value is 0.923 with a value of 0. Because the value of Sig 0 < probability 0.05, it can be said that there is a relationship between the pre-test and post-test variables.

Based on the results of these data, according to the journal International Journal of Pedagogy and Teacher Education, 2017 regarding online learning using application-based media with various facilities in helping this learning can make students have an interest in learning and hone their abilities. So, mobile learning carried out during a pandemic can be used as a suitable learning medium, using application-based media, namely Telegram.

Motivation is considered one of the most essential and mandatory factors that L2 learners must possess. Students' success in learning a second language is highly dependent on their level of motivation (Dörnyei, 1990). Dörnyei (2005, 2009) proposed a new model called the L2 Self-Motivation System (L2MSS). This model has been applying in several recent studies because of its validity. This research is critical to do in the distance learning Japanese during this pandemic. So by utilizing the application on the cellular can foster learning motivation in students in improving their Japanese language skills. Suppose students are motivated by their ideal L2 self. In that case, their instructor should always encourage visualization of that ideal self, paying attention to how fluent and proficient the Japanese learner is in keeping their motivation constant. This project replicates the large-scale survey study of Dörnyei (2009). Since L2MSS is considered a theoretical foundation for recent research on L2 motivation, many studies have used it as a theoretical framework.

One of the game activities in the Telegram application is playing werewolf. Sometimes teachers and students also play outside of learning, such as in the werewolf game. *Werewolf Game* is a group card game. The game, usually abbreviated as WW, will pit two

groups, namely groups of human characters and werewolves, when one character runs out is victory. Learning situations interspersed with games add relaxation and bring students and teachers closer together so that learning becomes fun.

Another feature in the Telegram application is being able to create *Robots/Bots*. *Robot* (starting now referred to as *BOT*) is one of the features that is quite interesting. Bots are features such as Personal Assistant that can adjust according to our wishes. Another thing is the creation of stickers. Long before there were stickers in the WhatsApp application, Telegram had already implemented them. On Telegram, stickers for free, both by Telegram directly and by others. We can even make our stickers.

The benefits of learning Japanese are straightforward to communicate and light on mobile phones. According to the students at *Aya Nihongo*, learning Japanese through the Telegram application was good, but the drawback was that there was no video call feature. However, currently, Telegram has developed a video call feature that can even share screens such as video conferencing applications.

Many factors cause students to feel bored. There are three possibilities, first, from the factor of the students themselves. Second, from environmental factors that are not conducive. Third, teachers have not made learning enjoyable (Grafura & Wijayanti, 2016). This study becomes the teacher's evaluation in order to find out the solution to the problem. So from these problems, teachers try to overcome learning more attractively and creatively, one of which uses technology as a learning medium. Motivation is considered a variable that strongly affects the success of language learning. It is an elemental force needed to start learning a language and continue this process long term. Research into L2 motivation has developed over time through different stages.

The use of learning media in the learning and teaching process can generate new desires and interests, generate motivation and stimulation of learning activities and even affect the psychological influence on students (Hamalik, 2014). The use of learning media at the learning orientation stage will significantly help the effectiveness of the learning process and delivery of messages and lesson content at that time. Therefore, it is essential to have learning media in the learning process because one of the functions can overcome the problems of students who complain about being bored, not appreciating.

Stuart, Brown and Draper (2004) provide an example of how mobile technology handsets encourage a more dynamic form of student interaction. Zurita and Nussbaum (2004) stated that students respond using handheld devices to provide anonymous answers that motivate students. All the responses on the primary screen foster student-student interaction with students

interested in checking their progress. This study enhances student-student and student-teacher interactions via mobile devices through a non-threatening pedagogical environment (Ting, 2013).

One of the newest learning media is through the application. The use of android applications as learning media is something exciting and new in education, and android applications have given a new color in the development of learning media. The use of this application makes learning media more exciting and diverse. However, the use of android applications as learning media is not only one-sided. Android must have a goal to motivate students and provide students always to remember what they have learned and provide learning stimuli for students (Musaddad, 2016). Among them is the mobile Telegram application. The application is relatively new, but lately, its users are increasing with exciting features to support learning. Telegram's unique feature with several advantages is that the message sent will not be lost even if the application is uninstalled. There is a bot feature to support learning by providing quizzes, student attendance, voting.

Some of the advantages of the Telegram application are as follows.

First, a cloud-based Telegram application means that all chat results are stored on the Telegram server, making it easier for us to switch to other devices. For example, we have a new Smartphone and want to install Telegram on the smartphone. Just install it and register it with a number that has registered, then when we have successfully logged in, all chat data on the previous smartphone will go to the new device, including pictures, chat, files, and others, without decreasing in the slightest.

Second, free to upload all types of files. Well, this is what we like the most on Telegram; uploading any file is accepted. Even unknown file types do not matter when uploaded. Unlike other applications that only support photos, videos, and sound/audio. The file size is capable of uploading one file up to 1.5Gb in size once sent.

Third, can create Username. Well, this is also good for maintaining the confidentiality of personal data. For example, if we want to chat with someone we do not know, we can create our Username without knowing the phone number (the phone number is not showing it). The Username begins with the @ sign. Example username: @ilmu_Telegram. When we click on the Username, immediately directed to the Telegram Science channel. The actual address is https://Telegram.me/ilmu_Telegram.

Fourth, can create channels. Channel is a unique channel created as information, and the term is almost the same as a personal website, where visitors or members can read to their heart's content.

There are two types of channels that Telegram provides:

1) Public Channel

This channel is usually making for public purposes, where all Telegram users can read channel posts without joining the channel—for example, a Public Channel: @ilmu_Telegram.

2) Dedicated/Privacy Channels

Well, for this channel, only people who join can read the articles or posts provided. If we do not join, we cannot read it. Due to privacy, we cannot even name the link as we wish. Privacy Channel Example: <https://t.me/joinchat/Sz9Je4ep84uwT>.

So, technological progress is the answer to the increasing progress of globalization in the world. The progress will undoubtedly have a significant impact on the civilization of students' lives. It could be said and now we have become "slaves" of the information technology civilization itself. Many students who also act as users of information and communication technology prove that their lives can never be separated from the role of information technology. We as educators also need to be directed to a "technology-aware" or "technology-literate" attitude. Which is often interpreted as modernization, the promised advancement of human ability to control nature through science, improve material welfare through technology, and increase the effectiveness of student abilities through the conscious application. Because with the science of information and communication technology, humans can do things that were never imagined before. Technology is proven to have a positive impact on people who use it. Not for students.

With a variety of information, students can access the world's information quickly and easily. So, they can realize that the world is in their hands. Access will undoubtedly provide students with a wealth of information that can spur their motivation to increase their creativity, especially in informatics. Our lives are now slowly starting to change. From the previous era, the industry turned into the era of information and communication behind the influence of the digital era and informatics, which made computers, the internet, and the rapid development of information technology the main parts that must exist or should not be lacking in the world of education. In entering this era, schools prepare students to face all the challenges changing very rapidly in their living environment. The ability to speak foreign languages and computer skills are two criteria that are often asked by the public to enter the digital era, both in Indonesia and throughout the world. So, with computers penetrating all human life, our education system requires a very high responsibility to develop language and computer skills (Krismawanti, 2019).

4. CONCLUSION

The overall results of this study compare the results of the two Japanese language proficiency tests, an intervention that emphasizes the effectiveness of the Telegram application shows the following. First of all, this study positively affects students' Japanese language skills and fosters their motivation and interest in learning. Second, this study supports the hypothesis that Telegram Apps can effectively improve basic Japanese language skills. Also, this Telegram application fosters higher student motivation and interest in learning Japanese.

The use of application-based learning media has an important role, especially in this covid-19 pandemic. The Telegram application, with all its conveniences can use as an exciting learning medium for the Japanese language learning process. Learning media with the Telegram application can improve participants' Japanese language skills. Thus, the innovation of learning mobile learning during the pandemic by using the Telegram application plays an essential role in growing student interest in learning and honing Japanese language skills. Teachers also learn to use the exciting features available in the Telegram application. However, the limitation of this research is that during the implementation of Aya Nihongo's class, the Telegram application has not upgraded to the video call feature, so learning is not carried out in virtual meetings and results in less two-way interaction or reciprocal relationships. However, now the Telegram application has released a video call feature that allows students and teachers to learn through virtual meetings in the Telegram application. Further research is expecting to study more about the Telegram application and explore more information about the effectiveness and obstacles of this Telegram application through in-depth interviews with respondents.

REFERENCES

- Aghajani, M., & Adloo, M. (2018). The Effect of Online Cooperative Learning on Students' Writing Skills and Attitudes through Telegram Application. *International Journal of Instruction*, 11(3), 433-448.
- Baker, C. & Frank, B. (1992). *Item response theory: Parameter estimation techniques*. New York: Marcel Deker.
- Bicen, H., & Kocakoyun, S. (2013). The evaluation of the most used mobile devices applications by students. *Procedia - Social and Behavioral Sciences*, 89, 756-760.
- Brett, P. (2011). Students' experiences and engagement with SMS for learning in higher education. *Innovations in Edu. and Teaching Int.*, 48(2), 137-147.

- 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.
- Chang, S.E., & Vera Pa, Y.H. (2011). Exploring factors influencing mobile users' intention to adopt multimedia messaging service. *Behav. Inf. Technol.*, 30(5), 659–672.
- Chowdhury, A., Breznik, G., Verdnik, K., & Prihavec, B. (2012). *Customer identification and authentication procedure for online internet payments using mobile phone*. Google Patents.
- Dörnyei, Z. (1990) Conceptualizing motivation in foreign language learning.
- Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum.
- Dörnyei, Z. (2009). The L2 motivational self-system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation Language Learning*, 40: 45–78.
- Doughty, C. J., & Long, M. H. (2003). Optimal psycholinguistic environments for distance foreign language learning. *Language Learning & Technology*, 7(3), 50–80.
- Ghobadi, S., & Taki, S. (2018). Effects of Telegram stickers on English vocabulary learning: Focus on Iranian EFL learners. *Research in English language pedagogy*, 6(1), 139–158.
- Grafura & Wijayanti. (2016). *100 Masalah pembelajaran*. Yogyakarta: Ar-Ruz Media.
- Gromik, N. A., (2012). Cell phone video recording feature as a language learning tool: A case study. *Computers & Education*, 58(1), 223–230.
- Gunasekaran, A., McNeil, R. D., & Shaul, D. (2002). E-learning: Research and applications. *Industrial and Commercial Training*, 34(2), 44 – 53.
- Hamalik, O. (2014). *Teaching and learning process*. Jakarta: Bumi Aksara.
- Hsu, L. (2013). English as a foreign language learners' perception of mobile assisted language learning: A cross-national study. *Computer Assisted Language Learning*, 26(3), 197–213.
- Krismawanti. (2019). *Mendidik anak di era digital*. Bandung: PT. Sarana Ilmu Pustaka.
- Kukulska-Hulme, A. (2009). Will mobile learning change language learning?. *ReCALL*, 21(2), 157–165.
- Lenhart, A. (2007). Teens and social media: The use of social media gains a greater foothold in teen life as they embrace the conversational nature of interactive online media. *PEW Internet and American Life Project*, 1615 L ST., NW – SUITE 700 WASHINGTON, D.C. 20036, 1–55.
- Musaddad. (2016). *Pengaruh media belajar berbasis aplikasi android terhadap minat belajar mandiri mahasiswa pendidikan agama Islam Universitas Islam Indonesia*. Universitas Islam Indonesia: Pendidikan Agama Islam.
- Salehpour, F. (2018). The effect of using Telegram instant messaging application on listening comprehension skill among Iranian intermediate EFL Students. *International Journal of Educational Investigations*, 5(3), 79–91.
- Schier, M. A., Mulvany, J., & Shaw, J. (2010). Use of student audio recordings to develop communication skills in a first year physiology unit. In *27th ascilite Conference, 'Curriculum, Technology and Transformation for an Unknown Future'*, Sydney, Australia. Retrieved from <http://www.ascilite.org.au/conferences/sydney10/Ascilite%20conference%20proceedings> (Vol. 202010).
- Stuart, S. A., Brown, M. I., & Draper, S. W. (2004). Using an electronic voting system in logic lectures: One practitioner's application. *Journal of Computer Assisted Learning*, 20(2), 95–102.
- Teo, C. B., & Gay, R. K. L. (2006). A knowledge-driven model to personalize e-learning. *ACM: Journal of Educational Resources in Computing*, 6(1), 1–15.
- Ting, Y. (2013). Using mobile technologies to create interwoven learning interactions: An intuitive design and its evaluation. *Computers and Education*, 60(1), 1–13.
- Zarei & Darani & Ameri. (2017). Effect of Telegram Application on Iranian Advanced EFL Learners. *Vocabulary Knowledge and Attitude*. Vol. 5, Issue 20.
- Zurita, G., and Nussbaum, M. (2004). A constructivist mobile learning environment supported by a wireless handheld network. *Journal of Computer Assisted Learning*, 20, 235–243.
- <https://databoks.katadata.co.id/datapublish/2021/07/01/daftar-negara-pengguna-smartphone-terbanyak-indonesia-urutan-berapa>
- <https://mediaindonesia.com/humaniora/389057/kemenkominfo-89-penduduk-indonesia-gunakan-smartphone>