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## **How Do Vocational Students Perceive the Use of Telegram for their Online Reading Comprehension?**

### **Abstract**

The advancement of technology encourages English teachers to use online platforms and applications in their English teaching and learning process. There are many apps that can be employed, one of which is Telegram. This study investigates how students perceive the use of Telegram on their reading comprehension and the correlation between the perception and their reading comprehension. For this purpose, 104 students from an Indonesian vocational school from various majors completed an online questionnaire about the use of Telegram for learning English. Besides, a reading test was used to measure the students' reading comprehension. The results portray that the students across departments positively perceived the use of Telegram on their reading comprehension. Furthermore, this study reveals a weak correlation between how the students perceive the use of Telegram and their reading comprehension. It is signified by the correlation between the two variables of interest, .364, which is significant at the .000 level. It indicates that the student's perception and reading comprehension for this set of data were significant but had a weak relationship. This may be caused by the reading strategies instructions as the teacher did not provide guidance before the treatment. It yields the pedagogical implication that teachers should train their students to use reading strategies effectively for their online reading comprehension.

### **Keywords**

ICT use, online reading, reading comprehension, Telegram, vocational students

### **1 Introduction**

Engaging the students in reading texts is necessary for acquiring input and producing meaningful output (Indrayadi, 2021; Safaie, 2020; Soto et al., 2019). As one of the most crucial information processing skills (Hahnel et al., 2022), which depends on cognitive and linguistic processes (Nation, 2019), reading can influence students' academic success (Mulatu & Regassa, 2022; Alisaari et al., 2018). Generally, the utility of technology for reading creates critical challenges for education in terms of the speed of processing, text recall, and reading comprehension (Anggraini, Cahyono, et al. 2022; Beard, 2021). Previous research has investigated reading across mediums to determine its effectiveness in supporting students' reading abilities. Jeong and Gweon (2021) discovered a difference in readers' visual preferences, reading skills, and attitudes when reading articles in print vs. digital formats. They found that readers preferred printed texts for reading, although the performance gap between print and screen reading is closing. Research reported by Singer and Alexander (2017) revealed that the students preferred digital texts and often predicted better understandings when reading digitally. In contrast, performance was inconsistent with student preferences and outcome predictions. Furthermore, the students remembered essential details related to the significant idea and other pertinent material more clearly with printed texts. Thus, using a screen or printed medium for reading comprehension raises a conflicting issue.

Despite the debate about the technology's usefulness in reading, research has widely revealed that the teachers and the students in English language classrooms have commonly grown up with information and communication technologies (ICTs). Of the 1.081 articles reviewed by Booton et al.

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(2021), 11 studies explained that inbuilt narration as the feature of the mobile touchscreen could be beneficial for reading comprehension for children. Mah et al. (2020) conducted a preliminary investigation of Singapore's online reading education policy by encouraging bilingual students to read e-books and visit English or Chinese websites using mobile devices. Their research demonstrated that the digital technology use in English and Chinese positively predicted reading ability in both languages for students from English-dominant homes. In addition, their study found intriguing insights into how early reading skills were developed and how bilingualism and digital technologies were used.

In the Indonesian EFL university setting, Sumekto et al. (2022) have explored how online reading empirically afforded students' experiences and motivations because they assisted reading with technological tools and established the lecturer's instructional strategies. In the northeastern United States, Vorobel et al. (2021) explored the digital literacy of five language students in a university by using the ecological approach as the theoretical lens. Based on their study, the students felt that it was challenging to use a social bookmarking tool in online reading. The ESL students searched for a word or phrase's definition using software on their laptops, online dictionaries, Google Translate, or Google search. This activity demonstrates the variety of approaches the students can use to interpret information and recognize the need for flexibility in reading assignments in the part of the allocated time for online reading practices. Thus, coping the students with digital information in online reading is essential. Besides, mobile technologies have been integral to language learning because they have been increasingly used at primary or secondary levels.

Mobile technologies like computers, tablets, or smartphones allow spontaneous and individual modes of language learning, referred to as Mobile Assisted Language Learning (MALL) (Anggraini, Anugerahwati, et al., 2022; Zain & Bowles, 2021). Social Networking Service (SNS) has become integral to mobile technologies. Facebook, WhatsApp, Telegram, Twitter, Viber, YouTube, and Wikis are among the most popular SNS platforms utilized by students and lecturers out of the hundreds of others available worldwide (Noori et al., 2022). In some countries like Singapore, Telegram, one of the most popular digital platforms for broadcasting and news consumption (Herasimenka et al., 2022), promotes a cloud system and has Artificial Intelligence (AI) technology which benefits teachers and students in language learning (Aghajani et al., 2018; Chen et al., 2020; Hwang & Chang, 2021; Yin et al., 2021).

Some previous studies have examined Telegram in language learning. Alemi et al. (2019) applied Group Dynamic Assessment (GDA) through Telegram to review high school students' grammatical accuracy. Additionally, Ghorbani and Ebadi's (2020) study indicated that using chats in Telegram significantly improved learners' grammatical accuracy in the experimental groups. The results of the empirical study exposed that Telegram was a valuable educational tool that encouraged students to learn vocabulary in a fun way (Alakrash & Razak, 2020). In Iranian junior high classrooms, Vahdat's (2020) study on Telegram use showed a significant difference between the performance of experimental and control groups. The experimental group confirmed the effect of Telegram on improving collocational knowledge. Based on these previous studies, the study on the use of Telegram in different language learning classrooms can be done to enrich the empirical data about students' ease of use of that application in reading skills and achievement. The previous investigations portrayed little attention on the use of Telegram for vocational high school students. Lin et al. (2020) also argued that the use of mobile technology for reading development has been underexplored. In the Indonesian context of the EFL setting, Citrawati et al.'s (2021) study has also reviewed that Telegram had little attention to reading skills. Therefore, this study investigates the issue of the utilization of Telegram for reading skills in EFL vocational classrooms by addressing the following two research problems:

1. What is students' perception of the use of Telegram across study programs?
2. Is there any relationship between students' perception of the use of Telegram and their reading achievement?

## **2. Theoretical Considerations**

### **2.1 Offline VS Online Reading**

Reading is the most crucial part of English teaching (Liu et al., 2020) that involves the interaction of readers with the text at specific times and contexts of culture, social, and physical environment to construct meanings (Çetin & Kılıçkaya, 2019). In recent years, the transformation of traditional reading material to electronic texts is gaining much attention because it promotes more complex, fluid, and multifaceted competencies that involve the integration of multimodal texts and digital screens (Xodabande & Hashemi, 2022). A number of studies in the literature exposed the different aspects of reading electronic texts on computer screens that reported conflicting results. Recently, Liu et al. (2020) have proved that online reading instruction is effective. The students gained more knowledge and information than they had before. Besides, there were improvements in their reading skills, interest and motivation in learning, and a conducive learning environment. Another study by Liu et al. (2019) utilized eye-tracking technology to identify the online reading behaviour of 52 advanced students of English as a second language (L2). This study showed that lexical focus and glosses were considerably fixed when reading for vocabulary acquisition, whereas images were more intensely selected when reading for comprehension. Additionally, vocabulary concentration had a noticeably longer overall fixation period when the digital content was delivered in gradual steps. The analyses indicated that sequential reading had the ability to direct L2 students' attention toward micro-level aids.

In contrast, L2 students seemed to divide their attention between macro- and micro-level supports when presented with information simultaneously. Additionally, Çetin and Kılıçkaya (2019) have reviewed articles published between 2009 and 2017 about reading on paper or screen. They state that the reviewed studies are inconclusive but provide enlightening findings. Although the students preferred both paper and screen readings, the students showed lower performance on reading accuracy and speed when reading on screen. It also indicated that reading on a screen might take longer than reading on paper, mainly when the screen and font size are uncomfortable and lead to visual fatigue.

Similarly, Chou (2016) revealed that electronic texts made unpleasant reading experiences because the students commonly faced eyestrain, an unstable Internet, and the inconvenience of hardware portability. On the other hand, Martin-Beltrán et al. (2017) discovered that students were more likely to participate in meaningful conversation and employed text-based tools to aid in comprehension more frequently. Due to such obstacles to text readability in online reading, current advancements and technological improvements also need reconsideration to be offered to the students during the reading process with paper or digital media. Moreover, it has been claimed that the increase in smartphones continues to raise the potential ways to read in mobile practices (Alisaari et al., 2018; Booton et al., 2021; Haoning Mah et al., 2021; Lin et al., 2020; Momani, 2020; Xodabande & Hashemi, 2022). In this regard, because mobile devices showed students a variety of affordances and potential for new forms and cultures of learning, it is vital to research these emergent learning environments to better understand the students' associated perceptions and achievements.

## 2.2 MALL in Language Learning

Modern technology in the form of the internet and mobile gadgets has shifted the ways of language instruction into Mobile-Assisted Language Learning (MALL) (Alkhezzi & Al-Dousari, 2016; Elaish et al., 2021; Zhang et al., 2021). Supported by the implementation of handled devices and portable technologies that promote features for interactivity and portability, MALL is used to engage the students in the learning process (Alamer & Al Khateeb, 2021). Previous studies have analyzed the use of mobile phones in language classrooms. Klímová's (2018) review study concluded that mobile phones and their applications benefited English learning. Besides, there was a primary effect on the use of mobile applications for language skills and testing, and these apps had no significant impact on the advancement and retention of students' vocabulary. Additionally, Zain and Bowles (2021) have reviewed 25 empirical research articles from 2016 to 2020. Their analysis pointed out that the research trends on MALL were about the effectiveness of MALL, which resulted in the pedagogical benefits and perception. Several theoretical and conceptual frameworks, including the Zone of Proximal Development (ZPD), the Technology Acceptance Model (TAM), and the Community of Inquiry (CoI), were also discovered. Thus, the present study is centered on using TAM to understand educational technology's potential.

Telegram is one of the MALL applications, which can be used on a wide range of electronic devices, including laptops, tablets, and mobile phones (Yin et al., 2021). It has been a popular platform for communication and English learning among many Iranian EFL students (Ghorbani & Ebadi, 2020; Yin et al., 2021), Jordan (Momani, 2020), Indonesia (Citrawati et al., 2021), and other countries. This application initially functioned as a mobile instant messaging service. As a social media platform, Telegram functions for interaction and information sharing (Ghorbani & Ebadi, 2020; Ivone et al., 2020). The advancement of Artificial Intelligence (AI) technology has invited scholars to apply machine learning and natural language technology to the development of chatbots. It enables Telegram to make specific commands to create a quiz, manage learning material, and handle the classroom. In other words, the usefulness of this app leads this app to be used as a Learning Management System (LMS). Accordingly, the current study examined the use of the Telegram bot that was designed for EFL language learning. The bot has encouraged the teachers to develop instructional materials and assessments that are accessible to the teachers and the students.

## 3. Method

### 3.1 Participants

The study group comprised 104 students from state vocational schools in Malang, East Java, Indonesia. Four classes were selected based on their English learning processes which integrated Telegram and the face-to-face (F2F) meeting. Besides seven English teachers, only one teacher frequently used Telegram for instructional purposes. The reason for using Telegram was because of its feature. Based on the authors' understanding, Telegram has an artificial intelligence feature: a chatbot. This feature lets users customize the bot using programming languages based on their needs. The Telegram application was then used by the teacher and the students to compile the materials for one academic year. Fourteen sets of English materials were made available for the students and the teacher. The selected English teacher has used Telegram for almost two years for instructional purposes. The following table provides an overview of the number of students and their subjects.

Class	Major	Number
XI	Multimedia (MM)	31
XI	Logistics (L)	34
XI	Production (PD)	19
XI	Mecathronics (M)	20
	Total	104

Table 1: List of Student Group

When observed, state vocational school students learned English reading skills through Telegram. First, the students opened their Telegram group in which their teacher had sent a link to a Telegram bot that comprised initiation material, quizzes, and tests during two semesters of one academic year. The initiation materials contained texts from any relevant resources, teacher's PowerPoints, and videos. The students were directed to collaboratively learn the initiation materials in 15-20 minutes. The students who did not understand or did not want to share their opinions on the initiation materials could directly ask through Telegram. Then, the teacher and other students responded to it.

For the next activity, the students did the Telegram quiz and test to reinforce their understanding. The quiz and test were connected to other learning platforms such as Socrative and Quizlet. During daily practice, one mobile phone should be used in pairs. It was done to avoid any non-academic activity while using a mobile phone in the classroom. At the end of the meetings, the teacher asked students to access and learn the materials outside the classrooms.

### 3.2 Instruments

This study employed a questionnaire that was sent to the students through Google Forms. This Likert scale consisted of five categories with 36 items, including perceived ease of use (PEU), perceived usefulness (PU), attitude towards use (ATU), behavioural intention (BI), system characteristics (SC), and material characteristics (MC). This Likert scale category was adapted from Davis (1989) and Huang et al. (2012). PU, PEU, ATU, and BI were adapted from Davis (1989), while SC was adapted from Huang et al. (2012). The reliability of the questionnaire was measured by Cronbach's alpha for each construct and suggested an overall internal consistency of .949 (cf. Table 2).

Cronbach's Alpha	No of Items
.949	36

Table 2: Questionnaire Reliability

According to Hatch and Farhadi (1992), the reliability is considered low if the alpha model value ranges from 0.000 to 0.401. When the measure of test item dependability ranges from 0.401 to 0.700, it indicates that it is average. Based on the analysis, Cronbach's alpha ( $\alpha$ ) for the perception questionnaire was .948, indicating that it has high reliability to be used in the study because it was between 0.701-1.00.

The students' reading comprehension achievements were also collected to be compared with the students' responses on how they perceive Telegram. The reading test delivered by the English teacher was used to measure Vocational students' online reading comprehension. However, the teacher did not do the tryout of the reading test before administering it to the students. Instead, he only adjusted whether the test included the materials they had learned in Telegram.

### 4. Data Analysis

Dealing with the study questions, first of all, this study analyzed 104 students' responses to the questionnaire using descriptive statistics. Secondly, the result of this questionnaire was interpreted to reveal whether the students perceived the use of Telegram well. Then, this study employed a correlational test, Pearson correlation, to find out the relation between how the students perceived the use of Telegram and the students' reading comprehension. The result of this correlation was used to answer the study questions.

## 5. Results

### 5.1 Students' perception of the use of Telegram across study programs

This study was intended to investigate the relationship between students' perception of the use of Telegram and students' reading comprehension skills. Therefore, this study first presents the analysis of how the students perceive the use of Telegram obtained from the result of the Telegram Acceptance Model (TAM) questionnaire in Table 3. The result shows that the student's perception of the use of Telegram is close to point 4 on the Likert scale, which is equal to 80%. The mean of each category presented in percentages can be seen in Table 3.

Telegram Acceptance Model	Multimedia (%)	Logistics (%)	Production (%)	Mechatronics (%)
System Characteristics (SC)	79.80	77.80	80.40	82.60
Material Characteristics (MC)	80.60	78.40	78.20	78.20
Ease of Use (PEU)	76.80	75.00	75.00	78.20
Perceived of Usefulness (PU)	78.00	76.20	76.40	77.60
Attitude toward Use (AU)	78.00	76.00	73.80	74.20
Behavioural Intention (BI)	74.80	72.00	70.80	64.00

Table 3: Mean Score of Telegram Perception

Table 3 presents the means of students' perception of using Telegram to facilitate their online reading comprehension. There were six sections to examine the students' perceptions proposed by Haghghi (2019), i.e., system characteristic, material characteristic, ease of use, perceived usefulness, attitude toward use, and behavioural intention (see Appendix). The system characteristics of Telegram across study programs are high. It indicates that the students reported that Telegram was able to engage them in highly interactive activities as well as enhance their reading activities. It can be seen from the table that the students across the study programs positively perceived that Telegram could help them access the reading materials uploaded by the teacher. There are three criteria for students' perception, namely, high (the means range from 70% to 100%), moderate (the means range from 50% to 69%), and low (the mean ranges from 20% to 49%). The means of constructing material characteristics portrayed that the initiation materials in the form of videos, power point and online texts created and posted by the teachers enhance students' English skills. The means also depicted that students have a high perception of Telegram use (there is no mean which is less than 70%).

The teacher's guideline makes Telegram a convenient and exciting platform for language learning, as it is evident in response to the construct perceived ease of use. It also contributes to high means based on Table 3. Moreover, concerning construct perceived usefulness, the results reveal that learning through Telegram increases the students' desire to use appropriate forms of reading texts. As for the construct attitude about use, the participants mostly agree to incorporate Telegram into the curriculum. Finally, regarding the construct behavioural intention, some students decided to continue reading with Telegram, and some were neutral because the students' behavioural intention to use Telegram obtained a low mean on average. The mechatronics program got the lowest mean score of 64% among the study programs.

### 5.2 The relationship between how students perceive the use of Telegram and the students' reading achievement

In response to the second research question, Table 4 presents the correlation between students' perception of using Telegram and their reading achievements.



	Perceptions	Reading Score
<b>Pearson Correlation</b>	System Characteristics	.132
	Material Characteristics	.187
	Ease of Use	.175
	Perceived of Usefulness	.217
	Attitude toward Use	.211
	Behavioural Intention	.167
<b>Sig. (1-tailed)</b>	System Characteristics	.087
	Material Characteristics	.027
	Ease of Use	.036
	Perceived of Usefulness	.012
	Attitude toward Use	.014
	Behavioural Intention	.043

Table 4: Correlation of Telegram Perception and Reading Score

It can be discovered that all the categories of perception demonstrated a significant relationship between perception and reading score (Sig. value < 0.05). However, only one of the perception categories did not show any considerable degree of relationship, i.e., system characteristics, as the significance level was higher than 0.05. Additionally, the Pearson correlation of those categories ranges from .132 to .217. According to Schober et al. (2018), the correlation coefficient is weak if it is less than 0.40. Thus, it can be inferred that the level of relationship between the perception and reading score is weak as the scores of Pearson correlation signified less than 0.40.

## 6. Discussion

The objective of this study was to investigate students' perceptions of the use of Telegram across study programs and whether there was any relationship between how students perceived the use of Telegram and their reading achievement in the vocational school in the Indonesian EFL context. To commence, the present study extended students' perceptions of Telegram use, which revealed a high level of approval for using that online platform in English Foreign Language (EFL) vocational settings. The majority of students believed that this application should be used for reading instructions. In line with the findings, other previous studies have discovered the effectiveness of using Telegram in enhancing students' English performances, such as grammar accuracy (Ghorbani & Ebadi, 2020), vocabulary (Alakrash & Razak, 2020), and collocation knowledge (Vahdat, 2020). Besides that, the findings of this study appear to be compatible with Amiryousefi's (2019) finding that investigated first-year English students from two colleges in Iran succeeded well in utilizing Telegram to improve their English skills, namely speaking and listening.

Nevertheless, the outcomes of this study contributed to the body of research that has not explored the use of Telegram on online reading comprehension. We claimed that Telegram could also facilitate the reading comprehension of EFL vocational students as Telegram can be integrated into another online platform, including Socrative, for reading and supplemented by freely available initiation materials in the form of PowerPoint, online texts, and videos. The accessibility of tutorial videos, movie clips, and other learning tools may influence a student's reading score. The movies sent to the participants were brief and under 3MB in size. Although Telegram supported bigger files (up to 2GB), lesser file sizes were utilized to facilitate download. According to Anggraini, Cahyono, et al. (2022), technology produce some intrinsic incentive in L2 students for reading comprehension, which may have a part in the students' reading performance. The motivating feature of new technology and learning settings was apparent in the current study since most students readily volunteered in pre-class and in-class activities.

Referring to the relation between the students' perception of the Telegram application for learning English and reading achievements, the result of this study disclosed a weak correlation between the

variables. This may be due to the study's limitations contributing to the degree of correlation. First, it can be due to the teaching strategy used by the teacher in the classroom. It was good that the students could read the materials inside or outside the classroom. Kung (2019) found out that students' reading comprehension can be affected by the reading strategy and the authentic texts that the teachers delivered. Reflected into the reading practice using Telegram, the students collaboratively learned the initiation materials for 15-20 minutes. Second, reading may be hampered by the students' proficiency level.

As demonstrated by Anggraini and Cahyono (2020), online reading comprehension processes differ among readers – with high proficiency levels seem more individual rather than low-proficient readers who are more frequent employ a socio-affective reading strategy, such as sharing, asking, and confirming their comprehension by communicating in a live chat with their group members. It is inclined that low-proficient readers tend to use chat features compared to their counterparts. Therefore, reading comprehension might not only be influenced by the use of Telegram but also by the reading strategy that was applied by the teacher and the students with different proficiency levels. Reading strategies were noticed as a reading process, which is automatic in nature, and readers sometimes have a significant level of active control over their reading process reading strategies (Dawadi & Shrestha, 2018).

Secondly, the reading texts used in the test that were used by the teacher to examine reading comprehension can be categorized as less valid because the teacher just took it from any sources without validating the texts whether it was appropriate for his students' reading proficiency or not. It can be assumed that the students' reading test scores may not reflect reading comprehension. According to Tengberg (2018), an educator should be careful with how he or she identifies and characterizes the difficulty of questions since it helps him or her understand which specific task a test taker must complete more accurately. Furthermore, Dawadi and Shrestha (2018) proved that students utilize comparable strategies to tackle challenging activities. Therefore, future research can consider the limitations of this study in administering the reading test to obtain more comprehensible findings.

Lastly, a coin has two sides. We grasp that Telegram also has advantages and disadvantages in educational settings. Alizadeh (2018) investigated the use of Telegram as a Social Networking Site (SNS) under the qualitative analysis of students' responses, finding merit and demerit codes. Regarding merit code, Telegram is adequate for its accessibility, data exchange, group learning, competitive atmosphere, peer-checking, and time-saving, which is similar to the findings of Habibi et al. (2018) and Sutikno et al. (2016). On the other hand, Alizadeh (2018) mentioned that the demerit codes emerging from the analysis were dependence and cheating, distrust, addiction, distraction, internet problems, lack of supervision, and lack of instruction. Additionally, considering the result of the questionnaire regarding behavioural intention, it indicates that some students understand the intention of using Telegram for broader purposes of communication, but some are neutral. It suggests that the teacher can try to find another way to make students recognize that Telegram can be positively used for broader communication purposes in daily practice and more functions in EFL learning.

## **7. Conclusion**

The findings of the present study unveiled the positive perception of Telegram use in facilitating EFL vocational students' online reading comprehension. Furthermore, the significant but weak correlation has portrayed the relationship between students' perception and reading achievement after Telegram use exposure. Overall, the findings of the current study have several pedagogical implications. First, it indicates that Telegram is appropriate to assist vocational students in improving their EFL skills. Second, Telegram provides ample opportunities for L2 students to interact actively and collaborate



in EFL classrooms. Finally, the teacher should consider the reading strategy, the reading test validity, and Telegram's positive and negative sides when they intend to use it for teaching reading.

In the end, the limitations of this study need to be acknowledged. It is suggested that future researchers study more subjects to gain meaningful insights into the use of Telegram. Then, this study uses the reading test scores from the teacher in the vocational school that becomes the study object. Further study should investigate the relationship between how the students perceive the use of Telegram and the students' reading comprehension achievement by using the standardized reading test. Therefore, the results would be more fruitful.

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## Appendix

### Technology Acceptance Model

This survey is to understand your attitude toward the use of Telegram in the course in this study. Please read the following statements carefully and answer them as sincerely as possible by putting a checkmark. There is no right or wrong answer.

Items	Sub Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
System Characteristics	(SC1) I think Telegram provided a realistic learning environment for doing the activities (SC2) I think Telegram provided a simulated English learning environment (SC3) I think I felt more comfortable in using Telegram to comment on the points given by my teacher or other members comparing to a face-to-face situation (SC4) I think Telegram gave me an opportunity to interact with my teacher and classmates more than before.					
Material Characteristics	(MC1) I think the videos and other materials posted by our teacher and other members made me learn better how to REFUSE in English (M C2) I think the videos and other materials posted by our teacher and other members can help me immerse in a learning atmosphere. (MC3) I think the videos and other materials posted by our teacher and other members were useful for improving my oral proficiency (MC4) I think the videos and other materials posted by our teacher and other members helped me to learn the important points of each unit.					
Perceived Ease of Use	(PEU1) Telegram provided clear guidance about my work. (PEU2) I think operating Telegram does not take too much time. (PEU3) Learning to use Telegram for my class activities was easy. (PEU4) Interacting with my teacher and other members through Telegram was convenient and not stressful.					
Perceived Usefulness	(PU1) Learning via Telegram helped me to speak English appropriately (PU2) I think that Telegram can improve my outcome with regard to learning English. (PU3) Learning through Telegram increased my desire to use English REFUSALS more appropriately. (PU4) The comments and feedbacks provided by my teacher and classmates via Telegram were really useful					

Attitude toward Use	(AT1) I like using Telegram to learn English. (AT2) I had a positive attitude toward using Telegram in this course. (AT3) I feel that using Telegram is a good method to learn English. (AT4) I will register in other online classes that use Telegram as a means of posting course materials
Behavioral Intention	(BI1) If I access to Telegram, I will continue to use it to learn English. (BI2) Using Telegram helped me to become more willing to communicate in English. (BI3) If I have access to Telegram, I will continue to write my messages in English (BI4) When I use Telegram, I have more self-confidence to take part in conversations in English.

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