

Research Paper

Utilization of Hello Talk Mobile Application in Ameliorating Iranian EFL Learners' Autonomy

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Abstract

Language teaching and learning have become more technologically advanced in recent years. These technological advances may change the nature of education and the place and the time at which the learning process takes place. In this regard, the present study investigated how the HelloTalk application affected Iranian intermediate EFL learners' autonomy. The study enjoyed a pretest-posttest quasi-experimental design. In doing so, 54 intermediate EFL learners were randomly selected from an institute in Isfahan, Iran. The participants were divided into two homogeneous experimental groups based on their level of education ($N = 27$). Both groups received a multidimensional Learner Autonomy Questionnaire (LAQ) as an online pre-test and post-test on Google Docs. The data was analyzed using Paired Sample T-test, frequencies, and percentages. By comparing different dimensions and the p-values of the two groups from the pre-test to the post-test, the results revealed that utilizing the HelloTalk application significantly and positively affected Iranian intermediate EFL learners' autonomy. Moreover, experts and EG learners had a positive attitude toward using the application. The findings of this study could be fruitful for learners with enough competence but inadequate knowledge of how to become autonomous through mobile applications. It could also provide insights into how technology tools and computer programs could facilitate teaching and learning English.

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1 INTRODUCTION

There has been an increasing attraction to incorporating technology into pedagogical purposes in recent years, and our lives are now deeply immersed in technology. By using new technologies, a significant change has been observed in the field of education, which facilitates learning and helps learners achieve a more fulfilled atmosphere. It is a fact that technology cannot be separated from educational environments, and both teachers and learners must be engaged with technology. Moreover, from the 1990s to the 2020s, how technology and foreign languages are connected has grown stronger; therefore, it has gained researchers' interest. However, it should be noted that EFL learners still rely on traditional learning methods despite being considered native speakers of the digital language of computers and smartphones.

In light of this, an essential point in learning English as a second language (L2) is learners' autonomy, especially in using mobile applications to learn a second language. Examining the learning and teaching process in second language classrooms revealed that non-native English learners might have good grammar, speaking, writing, and listening knowledge. However, they might lack autonomy and self-regulated learning knowledge compared to native speakers. Moreover, mobile applications complement language learners who have entered formal instruction as well as the first step for beginner autonomous learners. It is mentioned that applications can prepare EFL learners to have regular practices and exercises even when these learners are not formally studying a language but desire to continue practicing (Rosell-Aguilar, 2007).

In this connection, the present study benefited from using a mobile application named HelloTalk. The reasons behind choosing the HelloTalk application and improving Iranian EFL learners' autonomy through this application could be explained in this way. While teaching English to Iranian EFL learners in different English classes, the researcher observed that the learners are too dependent on the teacher for every single problem. Learners must focus on developing and helping or satisfying their internal criteria, such as perception, self-esteem, learning style, etc. However, in reality, especially in Iran, learners depend on the course's instructor, even in higher education.

The HelloTalk application can play a crucial role here by providing authentic learning materials, connecting learners to native speakers' communities, and providing language exchanges. Based on Larsen-Freeman's (2000) point of view, learners depend on the instructor at the beginning of the learning process. However, as the learners continue to learn, they become increasingly autonomous by developing their cognitive, meta-cognitive, social, and affective factors such as intelligence, interests, talents, motivation, and environmental factors. The other factor that needs to be mentioned is that educational applications in general and mobile learning in particular can affect learners' dependency on the teacher. Few researchers have addressed Iranian EFL learners' autonomy. In addition, it seems that no research has been found surveying Iranian EFL learners' autonomy through the HelloTalk mobile application.

According to previous studies, this application has the potential to enhance learners' learning skills. As mentioned by Nugroho et al. (2021), before using this application, the students could not

memorize the words well and needed a long time to memorize them correctly. Additionally, in a review of 11 English language learning applications, Valdimarsson (2020) explained that the application is more exciting, and perhaps its novel feature is its social aspect. Moreover, the application can offer various activities such as pronunciation, writing, and reading. In this connection, learning grammar as a sub-skill could be worked on with the aid of native speakers with whom the user comes into contact. According to Nushi et al. (2018), HelloTalk is a beneficial language learning tool, especially for the young generation, due to its social environment, practical use, and meaningful learning.

One delicate point that needs to be answered is whether Iranian EFL learners' autonomy can be increased through mobile applications, especially in the case of the HelloTalk application. The HelloTalk capacities might improve learners' autonomy. This application can supply a good platform for second language learners to learn English and other languages fluently by contextualized visual information. Moreover, using similar applications in classrooms can assist teachers and support learners in creating social connections with the people around them and make autonomous learning easier (Barton & Potts, 2013; Hafner et al., 2013). Therefore, the present study investigated the utilization of the HelloTalk mobile application for improving learners' autonomy from teachers' and learners' points of view, both inside and outside the class.

2 LITERATURE REVIEW

Researchers have shown an increasing interest in using technology in today's world, especially regarding the positive impacts of technology use on language learning

(Kondo et al., 2012; Liakin et al., 2015; 2017; Liu et al., 2018; Stockwell, 2010). According to Clement (2020), the number of non-gaming applications was 3.42 million in August 2020, whereas based on the Apple company announcement in 2018, the number of educational applications had reached 200,000 (Pendlebury, 2018). Therefore, there has been a tremendous shift toward using mobile applications for educational purposes. In modern societies, every single student and teacher works with many devices, which help promote any educational process (Pacheco et al., 2018; Zhernovnykova et al., 2020). Digital technologies have been used as an educational tool for decades because they can increase student engagement in the learning process (Buchanan, 2011; Palaiologou, 2016; Weis et al., 2002).

These new applications have motivated English language learners to change their acquisition strategies and assisted them in being more independent (Lai, 2014a; 21014b). It should be noted that the global pandemic (COVID-19) provides new opportunities for EFL learners and teachers to use new methods, such as the utilization of instructional applications. Learning through mobile applications can lead to some changes, such as turning passive learners into active learners and changing the traditional dependent learning methods into new, more autonomous learning methods, although there is still the question of how to best integrate MALL, especially in higher education (Chwo et al., 2018; Liu et al., 2016). Mobile-assisted language learning (MALL) is the sub-category of mobile learning; therefore, it is crucial to have a definition of M-learning. M-learning is different from other sorts of learning, and it is a method where the learning materials are available for mobile users wherever and whenever they want

(O'Malley et al., 2005). Accordingly, Dehkordi (2018) defined it as one technology that takes on more significant importance in teaching, specifically in language learning. In addition, based on Geddes's (2004) point of view, it can be used anywhere and anytime outside the classroom walls.

M-learning was described by O'Malley et al. (2005) as any learning accomplished when learners are not in a steady state and exploit mobile technology. Moreover, Ally (2013) stated that learners' self-esteem, self-confidence, and autonomy might be enhanced through M-Learning and it can motivate learners in the learning process. Accordingly, Sutrisna et al. (2018) defined it as language learning through mobile devices and technologies. Based on Kukulka-Hulme and Traxler (2005), smartphones, tablets, and laptops are mobile devices in MALL that have two essential functions: portability and mobility. Portability and mobility refer to the state of being easy to carry and being used anywhere and anytime.

In light of this, MALL can increase motivation in language learning (Kim et al., 2013) and promote collaboration and interaction (Goh et al., 2012). According to Dashtestani (2013), Iranian English teachers' attitudes toward using mobile phones in teaching and learning English were positive. Chartrand (2016) stated that smartphones, especially dictionary applications, could improve vocabulary mastery and pronunciation. According to the respondents' positive perceptions, Wagner et al. (2016) showed that MALL, as a learning strategy, could support the teaching-learning process.

In addition, the results of Yudhiantara and Saehu's (2017) study revealed that using smartphones in classroom activities

led to positive student perception. Oz (2015) mentioned that the intermixture of English learning and technology depends on factors such as technology, teachers' and students' perceptions, and teachers' and students' awareness of technology in integration into English learning. Grimshaw et al. (2017) indicated that most language teachers worried about the restriction of MALL, although they were open to engaging their students in MALL.

2.1 General Outlook of Autonomy

The notion of autonomy has come into existence in several fields of study, such as psychology, philosophy, politics, and education. The term autonomy is derived from the Greek term *autonomic/autonomous*, which is used to describe someone or something that lives by their own rules (Swaine, 2020). Autonomy, in the process of learning, refers to the management of one's learning (Benson, 2001). In light of this, Holec (1981) provided a learner autonomy definition; in this way, when learners take charge of their learning process and accept responsibility for all decisions related to all aspects of their learning, they are independent.

In addition to what was mentioned above, one of the crucial issues in this regard is Learner Autonomy (LA). LA has assumed research of interest in foreign language learning and teaching. LA can be operationally defined as learners' ability to take responsibility in their learning process. It differs from learner to learner based on factors such as language proficiency, context, and learning goals (Zehani, 2021). Furthermore, LA relates to the awareness of the learning process by learners. White (2003) explained it in this way: when a learner can be autonomous in his/her learning process, and

simultaneously, he/she is supposed to collaborate with others.

The other factor that needs to be considered is that teachers have an essential role in learners' independence, whether in or outside the classroom. No wonder instructors can affect the learners' usage of technology devices or mobile applications outside the classroom. In this connection, Hagger and Chatzisarantis (2012) mentioned that teachers could encourage and increase student engagement in independent learning outside of the classroom. Additionally, students are willing to utilize the technological resources that teachers use in the classroom (Fagerlund, 2012; Lai & Gu, 2011). It is worth mentioning that teachers' suggestions and pieces of advice on using technologies can affect students' involvement beyond the classroom (Inozu et al., 2010).

It should be noted that different concepts are closely related to the notion of autonomy. Concerning learners' self-confidence, studies have shown that students lack the confidence to become involved in out-of-classroom activities (Gamble et al., 2012; Qi & Li, 2006). Another factor in this regard is self-direction; self-directed learning and the notion of autonomy are closely interrelated. Self-direction learning is a settled way of thinking or feeling about the learning assignment where the learner is in charge of the decision-making process in his learning (Hadi, 2012). Based on Majedi and Pishkar (2016), through self-directed learning, learners are advanced in the direction of self-evaluation, self-study, and autonomy. In addition, self-directed learning demands that learners take charge and take responsibility for their learning and arrange it for their purposes, recognize and fix learning gaps, choose and perform learning strategies, and assess their learning (Loyens et al., 2008).

2.2 Language Learning Studies on Mobile Applications

The use of mobile applications, in general, and the HelloTalk application, in particular, is not only a means of autonomous learning of a foreign language but also an efficient means of training learning in the classroom (Bardus et al., 2021). According to Wang (2010), technology has advanced independent learning through an English learning pattern that includes newspapers, short stories, magazine articles, letters, and internet articles. It can also promote English language competence. In addition, the researchers did not deny the role and importance of using traditional methods (Bardus et al., 2021). Nevertheless, they emphasized that modern teachers must be prepared to face the challenges and changes in the educational process. Furthermore, it is mentioned that mobile applications can aid in the student's learning process and make it more engaging and accessible at any time or place. A further result indicates positive attitudes toward mobile learning and adequate time spent using smartphones to practice English speaking skills (Ataeifar et al., 2019).

According to Pachler et al. (2017), due to learners' attachment to their mobile phones, these devices are supposed to be a source of inspiration and motivation. The process of teaching and learning is made more developed through the use of technology in educational systems. Based on the National Council for Educational Technology (1967), educational technology can be defined as methods and aids that can improve the process of human learning. It refers to all processes that can help human learning. Schwienhorst (2003)

stressed the importance of a motivating and authentic learning environment for learners to become more independent, but these are not sufficient alone. In light of this, Lai et al. (2016) mentioned that there are grounds for supposing that there were mismatches in instructors' and learners' perceptions of instructor engagement and specific roles that teachers could play. By appropriately manipulating the learning environment, reflective, social-interactive, and experimental-participatory learner behavior needs should be fostered.

Recent studies have shown that learners have positive attitudes toward using educational applications as a successful way to learn and train themselves to be autonomous both inside and outside of the classroom. Zehani (2021) examined mobile educational applications' utilization to enhance learners' autonomy in English language learning. The results of this study showed that teachers' and students' attitudes were positive, although the findings should be interpreted with considerable care. First of all, the study focused on first-year EFL students at the Department of English division of the Mohamed Khider University of Biskra; therefore, age and language level have influenced the results. Second, the questionnaire did not have any questions about usability, ease of use, and intention to use the applications that may have affected the result. Third, the students had not been interviewed to find out the external and internal factors involved in this type of mobile learning. Therefore, generalizing the findings to all kinds of prompts and recasts can be problematic.

Stockwell (2008) discovered that the cost of mobile phones is essential, and it can lead to disappointment in academic settings. Based on Azli et al. (2018), MALL can be implemented inside and outside the

classroom; in other words, it is formal and informal learning that can support traditional learning, boost the teaching process, and enhance learning. They also believed teachers could use MALL as an assistant in English teaching. It is worth mentioning that Dehkordi's (2018) study showed that male and female learners have positive attitudes and perceptions toward using technology-based learning. Some researchers noted that the use of mobile phones makes it easier for learners, teachers, and peers to communicate. This could be a great chance to improve their language skills (Nah et al., 2008; Rosell-Aguilar, 2007).

Concerning the advantages and disadvantages of the HelloTalk application, another research (Nugroho et al., 2018) provides information from students' perspectives in the following statements. There are some advantages of implementing HelloTalk in teaching vocabulary, described as easy to use, having various features, easy to remember vocabulary, time efficiency, and having an exciting learning experience. Finally, other research results have displayed that MALL increased language learning motivation (Kim et al., 2013) and promoted the development of collaboration and interaction (Goh et al., 2012). Moreover, smartphones provide a design plan for autonomous learning (Reinders, 2010), and they are inescapably a modern method of autonomous language learning (Clarke & Svanaes, 2015; Niño, 2015; Persson & Nouri, 2018).

All in all, the present study attempted to investigate how the HelloTalk application can improve Iranian EFL learners' autonomy. The researchers have raised the following research question to accomplish the purpose of this study:

How does the HelloTalk app impact Iranian intermediate EFL learners' autonomy from the pre-test to the post-test?

3 METHODS

In this section, the research design and setting are provided with detailed information at the beginning. Then, the research participants and instruments are carefully described as a significant and necessary part of the study. Finally, the data collection and analysis procedure are discussed to provide helpful information for the result section.

3.1 Design and context of the study

A quasi-experimental research design that is quantitative in nature was adopted in this research study, with two nonequivalent groups: Experimental Group Number One (EG1) and Experimental Group Number Two (EG2). In light of this, the quantitative part consisted of gathering data through the LAQ questionnaire given to Iranian Intermediate EFL learners to obtain the relevant information. It is worth mentioning that for collecting the data on autonomy, the current study aimed to investigate the characteristics of Iranian EFL learners enrolled in an institute in Isfahan, (in the Spring term of 2022). In addition, the homogeneity of each group was examined by participating in a Placement English Test (PET) at the Institute. Intermediate English learners were chosen for the study because of the course system used in the institute and their familiarity with the notion of being autonomous learners, which is related to their age and level of

English proficiency. As Bardus et al. (2021) mentioned, age and English language proficiency level can somewhat influence the results.

EFL learners received 6 hours of instruction per week within the course period, including primary skills and sub-skills. The course books used in the institute were *Active Skills for Reading Level 2* and *Headway Academic Skills Level 2*. In this connection, extra materials such as grammar, vocabulary, and reading exercises were provided to students for every unit by the institution. It should be noted that all the course classes had to use standard materials and topics. Learners' achievement was measured basically through an online autonomy learner questionnaire on Google Docs to collect the data on autonomy. The learners were given a questionnaire; one in the first session and one at the end of the course (the LAQ questionnaire was given at the beginning and end of the course).

3.2 Participants

Strictly speaking, the participants were Undergraduate/Postgraduate learners enrolled in an institute in Isfahan, Iran, in the spring term of 2022. The average age of the whole number of participants was 24 years old. A panel of six education experts with a 9.5 average year of teaching English and research experience were asked to review the application, fill out a questionnaire, and provide written comments to add several points of view to the design (Chen et al., 2019). The experts had doctoral and M.A. degrees in a relevant education or language learning field. The participants and their demographic information are outlined in Table 1.

Table 1. Demographic Background of the Participants

Participants	Learners	Educational experts
Number of Participants	54	6
Level of Education	Undergraduate/Postgraduate learners	Doctoral degrees/M.A
Age	The average age of 24 years old	The average age of 34 years old
English Level	Intermediate	Education expert
Gender	20 males and 34 females	Two males and four females
Nationality	Iranian	Iranian
Native Language	Persian	Persian
Target Language	English	English

3.3 Instruments

The present paper used two instruments to collect the data: the Learner Autonomy Questionnaire (LAQ), and the HelloTalk Application. The first instrument used for both a pre-test and post-test to assess the extent of the learners' autonomy was the Learner Autonomy Questionnaire. There are 44 items in the form of nine dimensions that are related to language learning (see Appendix A). It is worth mentioning that the nine dimensions are categorized and illustrated in Table 2. The LAQ (Learner Autonomy Questionnaire) was chosen in this study for three reasons; the first one was its comprehensibility. Since LAQ was one of the most comprehensive questionnaires, it considered a great extent of different dimensions that were related to learner autonomy. The second reason was the content validity of the LAQ; this could be determined by comparing it to other questionnaires that were available in the area of learner autonomy. The final reason was that many researchers confirmed the questionnaire (Gholami, 2016; Gömleksiz & Bozpolat, 2012; Karagöl, 2008; Tilfarlioglu & Ciftci, 2011). According to Tilfarlioglu and Ciftci (2011), the original

questionnaire has 40 items related to learner autonomy that were adapted from different resources, as mentioned above. While 30 of the items were adapted from Egel's questionnaire (2003), the rest of them were developed by examining different sources (Sancar, 2001; Koçak, 2003).

Gholami (2016) adjusted the LAQ to the Iranian context by piloting the test for learners and modifying or replacing some items. Moreover, to put appropriate items in the questionnaire, the other questionnaires that were used in the Iranian context were checked (Moini & Asadi Sajed, 2012; Hashemian & Soureshjani, 2011; Nematipour, 2012; Rahnama & Zafarghandi, 2013; Maftoon et al., 2011). In light of this, to improve LAQ or make it less extreme, partial or minor changes were used based on the aim of the study. With this framework, experienced professors of the Department of English of the Islamic Azad University, Isfahan (Khorasgan Branch), were asked to examine some items for modification or change. It is noteworthy that the LAQ questionnaire is categorized into nine dimensions, with dependent and independent questions (see Appendix A).

Table 2. Nine Dimensions in the Modified Learner Autonomy Questionnaire

Section	Number of Items	Focus	Questions
Dimension 1	6 items	Readiness for Self-direction	What are the learners' beliefs relating to self-directed learning in general?
Dimension 2	6 items	Independent Work in language learning	What are the learners' beliefs about independent work in language learning?
Dimension 3	8 items	Importance of Class/Teacher	How important do learners see the class/ the teacher in their language learning?
Dimension 4	5 items	Role of Teacher: Explanation/Supervision	What importance do learners give to teacher explanation and supervision?
Dimension 5	4 items	Language Learning Activities Outside the Class	About particular language learning activities, what are the learners' attitudes?
Dimension 6	3 items	Selecting Content	What are the learners' attitudes relating to the selection of content for language learning?
Dimension 7	3 items	Intrinsic motivation	How confident do learners feel about defining objectives?
Dimension 8	5 items	Assessment/ Motivation	How important is external assessment in motivating the learners' work?
Dimension 9	4 items	Interest in Other Cultures	What are the learners' attitudes relating to the culture of other countries?

The comparison of the dimensions of the questionnaire can lead to a better understanding of measuring the construct of learners' autonomy. Due to the comprehensibility of the questionnaire and its crucial factors, which were categorized into nine dimensions and focused on ready for Self-direction, independent work in language learning, the importance of class/ teacher, the role of teacher, language learning activities outside the class, selecting content, intrinsic motivation, assessment, motivation, and finally interest in other cultures.

The second instrument used in the present study was the HelloTalk app. The HelloTalk app was used as a treatment of the study to enhance EG1 learners' autonomy. It should be noted that the treatment of the study refers to the whole process of using the HelloTalk app inside and outside the classroom for EG1 learners. The required application was HelloTalk in this research, which has free and VIP versions. HelloTalk is a popular language-learning app on the market; the team is based in

Hong Kong and Shenzhen, China. This application covers almost all languages. The HelloTalk language exchange application aims to connect language learners to native speakers and facilitate language learning. The premium version should be downloaded to access many different options of the application without limitations.

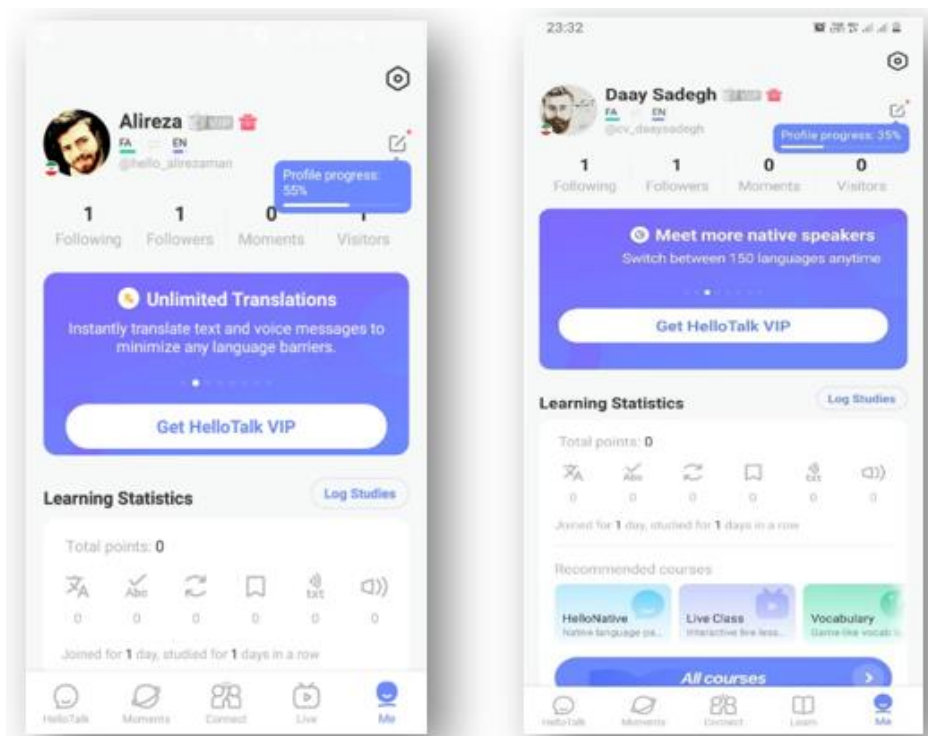
3.4 Data Collection Procedure

At the beginning of the 8-week- course with 24 sessions, learners in EG1 (Experimental Group Number One) and EG2 (Experimental Group Number Two) were asked to answer the online learner autonomy questionnaire on Google Docs. In EG1, the learners were introduced to the HelloTalk application, viewed the user guidelines, and formed a chat group (during week 1). It should be noted that the HelloTalk application was introduced step by step on WhatsApp, as can be seen in Figure 2. In addition, the application was also shared with experts. In the next step

(during week 2), different application options were introduced to EG1 learners: HelloTalk, Moments, Connect, Live, and Me. Some extra activities were designed for both EG1 (based on the usage of the HelloTalk application) and EG2 (based on the traditional teaching approaches)

learners. EG1 learners were able to discuss their answers with the group in a chat room, and they also had the opportunity to have 20 minutes per week of discussion with the instructor in the application chat room.

Figure 1. Installation of the HelloTalk Application by Participants of the Study



In week 3, the social aspect of the HelloTalk application was described for EG1 learners, and they were supposed to choose some topics for online discussion

with native speakers and their friends, but before that, they were asked to submit their topics to the instructor for feedback.

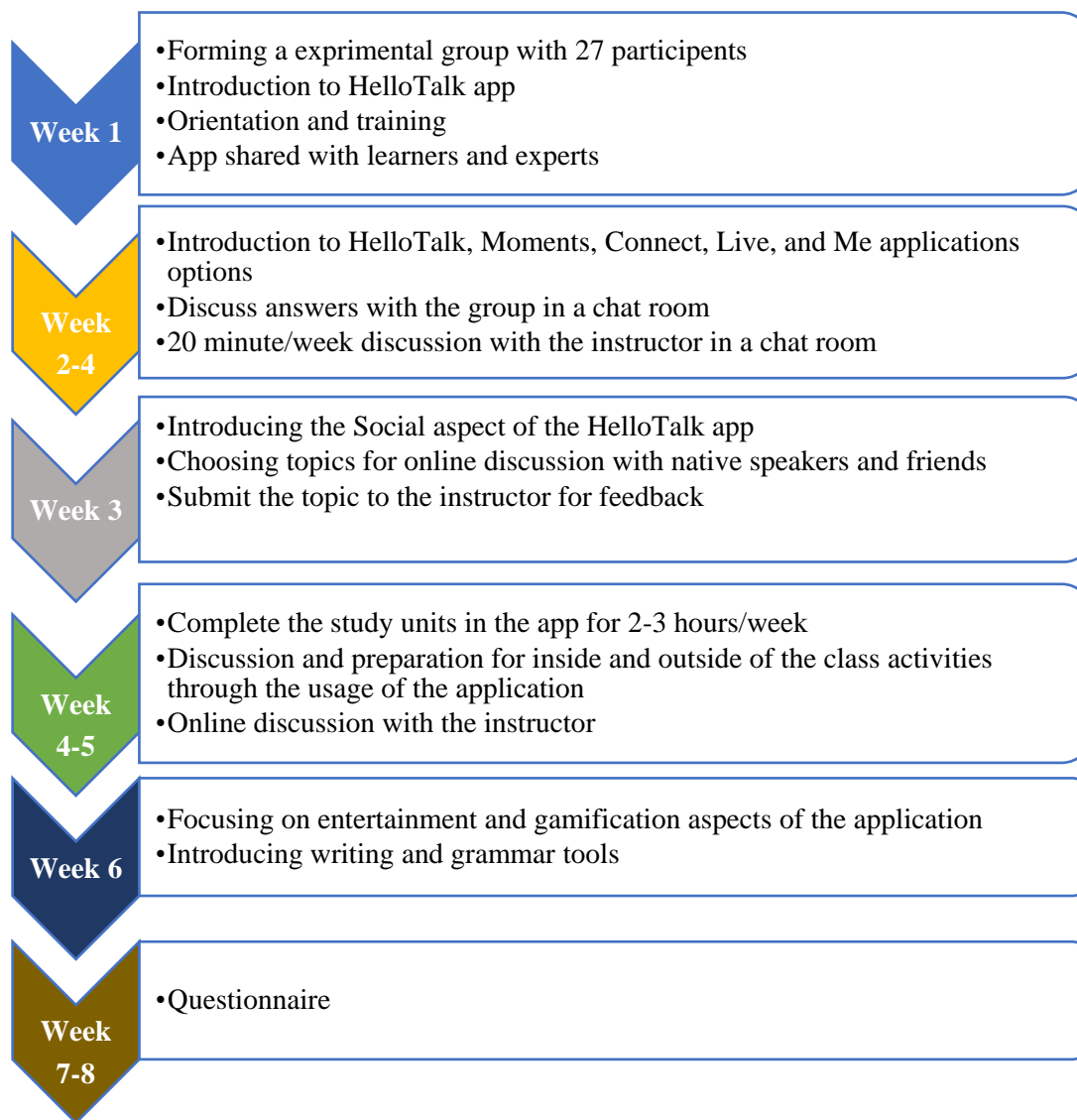
Figure 2. Introducing the HelloTalk Application on WhatsApp



During weeks 3 to 4, learners in EG1 were supposed to complete the study units in the application for 2-3 hours per week and answer the inside and outside of the class activities using the HelloTalk application. Moreover, learners had the opportunity to discuss online with the instructor. Over the next few weeks (during weeks 5 to 8), they were motivated to share and discuss the material in the chat room, where the instructor could encourage EG1 learners and provide structured comments. In week 6, the instructor tried to focus on the

application's entertainment and gamification aspects to consider its fun and appealing aspects and introduce these particular parts of the application. Furthermore, the writing and grammar tools of the application were explained to EG1 learners because EG2 learners had some writing and grammar tasks or activities that the institution designed for each semester. Finally, in weeks 7 to 8, the participants completed a questionnaire. The research procedure is summarized in Figure 3.

Figure 3. Research Procedure



One also should not overlook that, to bring a visual aspect to the study, some participants were asked for permission to use their screenshots and personal information, as seen in Figures 1 and 2.

It is essential to highlight that the same conditions were provided for EG2 learners to achieve reliable results. In a parallel manner, at the beginning of the EG2 course, the syllabus and the aims of the

course were explained (during week 1). During weeks 1 to 8, some external materials such as writing, speaking, reading, listening, and grammar activities were designed and shared by the institution. In this connection, EG2 learners were supposed to submit their homework, activities, and inside/outside class study units (in the form of oral or written forms). In addition, (during weeks 2-8), they had the

opportunity to choose suitable topics for a 20-minute/week discussion in the class. It should be noted that the learners had to submit the topic to the instructor for feedback. Furthermore, they were asked to connect to native speakers and their friends through Instagram and WhatsApp in the classroom. Finally, the questionnaire was completed by the participants between weeks 7 and 8.

3.5 Data Analysis Procedure

After gathering sufficient data about the phenomenon under study, data analysis is necessary for organizing, summarizing, synthesizing, and shifting the collected data. The Paired Sample T-test was used in the study after counseling with an expert in the field of statistics. In another way, the study used a Paired Sample T-test to

address the research question and compare the means of the control and experimental groups. Additionally, for analyzing LAQ questionnaires, IBM SPSS Statistics (Version 26) software was used for summarizing and categorizing the information.

4 RESULTS

This section analyzed the learner autonomy questionnaire to achieve the study goal. It must be noted that before any data analysis, reliability statistics should be examined. In doing so, Cronbach's alphas were provided in Table 3, which could illustrate the questionnaire's reliability. According to the information provided in Table 3, both questionnaires were reliable.

Table 3. Reliability statistics

Questionnaires	Cronbach's Alpha		Number of Items
	Pre-Test	Post-Test	
LAQ-EG2	.890	.850	9- Dimension
LAQ-EG1	.898	.912	9 -Dimension

During the first step of the procedure, the learners were asked to fill out the questionnaire, and they were ensured that all the ethical issues were observed in this study. The next step was to test the data collected through the LAQ questionnaire to determine whether the distribution of the data was normal or not. In light of this, the following Null Hypothesis had to be taken into consideration to analyze the collected data correctly:

H02: The distribution of the collected data is not Normal.

To examine the normality of the data, the Kolmogorov-Smirnov and Shapiro-Wilk tests were utilized. After using the tests, the results revealed that the data distribution was normal. For instance, those tests were used for Dimension 1 in Table 4. It is noteworthy that the data was collected from the EG1 learners.

Table 4. Kolmogorov-Smirnov and Shapiro-Wilk Tests for Dimension 1

Kolmogorov-Smirnov				Shapiro-Wilk		
Dimensions	Statistic	df	Sig.	Statistic	df	Sig.
Dimension 1	0.153	27	0.100	0.949	27	0.206

The Statistical Significance/P-values (Sig) of the EG group was higher than .05 (that is, the alpha level), as indicated in the table above. In both tests, therefore, the distribution of the collected data was normal.

4.1 EG2 Learners' Autonomy Questionnaire Results

Subsequent steps included the results of the t-test analysis of the paired samples. As previously described, the LAQ questionnaire was used both for the pre-test

and post-test. After collecting the data, they were categorized into some dimensions and analyzed through the Paired Sample T-test. Table 5 shows the pre-test and post-test results of the EG2 group with 27 participants.

As shown in Table 5, traditional teaching methods do not impact learners' autonomy significantly. Most dimensions do not affect learner autonomy, except dimensions one and three, in which the p-value is lower than .05

Table 5. Results of Paired Sample T-test of Experimental Group Number Two

Dimensions	Group	N	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
						Lower	Upper			
Dimension 1	EG2	27	0.253	0.321	0.061	0.125	0.380	4.090	26	0.000
Dimension 2	EG2	27	0.141	0.664	0.127	-0.120	0.404	1.110	26	0.277
Dimension 3	EG2	27	0.217	0.433	0.083	0.045	0.389	2.606	26	0.014
Dimension 4	EG2	27	0.007	0.886	0.170	-0.343	0.358	0.043	26	0.965
Dimension 5	EG2	27	-0.101	0.434	0.083	-0.273	0.070	-1.218	26	0.234
Dimension 6	EG2	27	-0.197	0.579	0.111	-0.426	0.031	-1.771	26	0.088
Dimension 7	EG2	27	-0.098	0.379	0.072	-0.248	0.051	-1.353	26	0.187
Dimension 8	EG2	27	-0.111	0.657	0.126	-0.371	0.148	-0.878	26	0.387
Dimension 9	EG2	27	0.092	0.710	0.136	-0.188	0.373	0.676	26	0.504

4.2 EG1 Learners' Autonomy Questionnaire Results

The following results of the collected data refer to the Paired Samples T-test of experimental group number one, which was the critical part of the study. According to the mean, Sig., and other information provided in the table, almost all dimensions affected learners' autonomy. It is worth pointing out that the p-value of most dimensions was lower than .05 (the alpha level); therefore, almost all dimensions impacted the learners' autonomy.

Consequently, it was possible to conclude that the HelloTalk application significantly impacted Iranian intermediate EFL learners' autonomy. The only dimension that did not have significant changes was dimension four, which was related to the role of the teacher, which refers to the dependent questions of the LAQ questionnaire (In Appendix A, some questions are both dependent and independent in the LAQ questionnaire.).

Table 6 Results of Paired Sample T-test of Experimental Group Number One

Dimensions	Group	N	Pre-Test & Post-Test Means	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
							Lower	Upper			
Dimension 1	EG1	27	3.506	0.604	0.460	0.088	-0.787	-0.422	-6.829	26	.000
			4.111								
Dimension 2	EG1	27	3.203	0.580	0.803	0.154	-0.898	-0.262	-3.751	26	.001
			3.783								
Dimension 3	EG1	27	3.296	0.513	0.521	0.100	-0.720	-0.307	-5.119	26	.000
			3.810								
Dimension 4	EG1	27	3.703	0.333	0.971	0.187	-0.717	0.051	-1.782	26	.086
			4.037								
Dimension 5	EG1	27	3.203	0.574	0.845	0.162	-0.908	-0.239	-3.526	26	.002
			3.777								
Dimension 6	EG1	27	3.604	0.567	0.639	0.123	-0.820	-0.315	-4.616	26	.000
			4.172								
Dimension 7	EG1	27	3.259	0.432	0.772	0.148	-0.737	-0.126	-2.906	26	.007
			3.691								
Dimension 8	EG1	27	3.548	0.355	0.640	0.123	-0.608	-0.102	-2.884	26	.008
			3.903								
Dimension 9	EG1	27	3.518	0.388	0.835	0.160	-0.719	-0.058	-2.417	26	.023
			3.907								

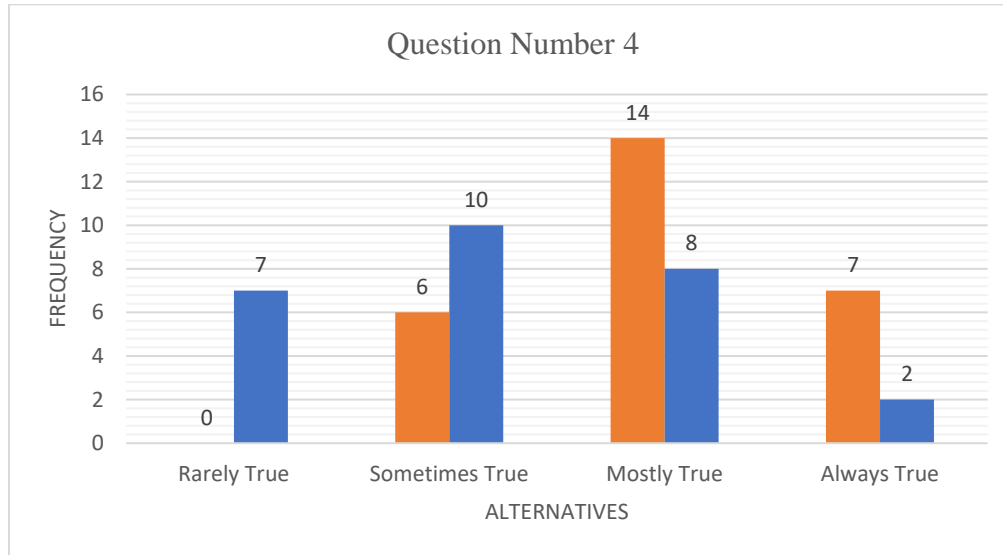
As shown in Table 6, dimension four has five questions (which are questions numbers 9, 14, 15, 21, and 22. See Appendix A for more information). In addition, the questions focus on the explanation and supervision role of the teacher. The following figure could better illustrate the

differences between the EG1 and EG2 groups' frequencies to provide a deeper understanding. Question number 4 is related to dimension one (Self-direction), and the question is (I want to talk in English with my family, friends, or native speakers) with five alternatives (See

Appendix A). Although dimension 1 in EG2, t-test positively affected the learner's autonomy, the frequencies of answers in EG2

were lower compared with those of the EG1 group.

Figure 4. Comparison between EG1(Red) and EG2s' (Blue) Answers



After all, it is time to answer the research question and determine whether the conclusions of the present study are consistent with those of the others investigating the relationship of the study's variables. A quasi-experimental investigation was done to examine the research question, which was:

How does the HelloTalk app impact Iranian intermediate EFL learners' autonomy from the pre-test to the post-test?

The results revealed that by the usage of the HelloTalk educational app, almost all dimensions impacted the learners' autonomy. The only dimension that did not have significant changes in the learners' autonomy was dimension four, which was related to the role of the teacher. Dimension four showed that the learners were dependent on their teacher. Generally speaking, they wanted their teacher to

explain lessons on the board, repeat grammatical structures, correct their errors, and give them all the needed learning materials.

Using the HelloTalk application improved the self-direction of the learners; thus, the concepts of autonomy and self-directed learning were closely connected. Based on Majedi and Pishkar (2016), through self-directed learning, learners are advanced in the direction of self-evaluation, self-study, and autonomy. In addition, in self-directed learning, learners are expected to take responsibility for their learning, arrange their learning purposes, recognize and fix learning gaps, choose and perform learning strategies, and assess their learning (Loyens et al., 2008).

According to dimension two, which refers to independent work in language learning, utilizing the HelloTalk application improved learners' autonomy. According to Wang (2010), technology has advanced independent learning through

an English-language learning model that includes journals, news, magazine articles, letters, and articles on the Internet. It can also promote English language competence. The results of the present paper concerning the research question are in agreement with Bardus et al.'s (2021) finding, which is the use of mobile applications, in general, and the HelloTalk application, in particular, is not just a means of autonomous learning of a foreign language, but also an effective means of training learning in class.

Regarding other aspects pertaining to the significance of the class and teacher in fostering learners' independence, the results revealed that using the application improved learners' independence. In this connection, the present study had similar results as Dashtestani (2013); Iranian English teachers' attitudes toward using mobile phones in English language teaching and learning were beneficial. The study's results also align with Yudhiantara and Saehu's (2017) study, revealing that using smartphones in classroom activities led to positive student perception. It should be noted that this result refers to dimension five. The application's use could lead to an improvement in the autonomy of learners, as evidenced by the results, through the usage of motivation and encouragement. Pachler et al. (2012) mentioned that due to learners' attachment to their mobile phones, these devices are supposed to be a source of inspiration and motivation. Based on the National Council for Educational Technology (1967), the definition of educational technology encompasses methods, development, application, and assessment of the system that aids in improving the process of human learning. The results revealed that using educational technology, particularly the HelloTalk application, could be a good way of

assessing the system both for learners in terms of self-assessment and for teachers in terms of learner assessment.

Based on the LAQ questionnaire results, which refer to the nine dimensions, fostering the behavior of social-interactive and experimental-participatory learners is necessary, as Schwienhorst (2003) claimed correctly. It is worth mentioning that teachers should be equipped and prepared with information, abilities, knowledge, and skills through experience or education to assist learners in using technological material within and outside the classroom to learn languages. As Lai et al. (2016) mentioned, mismatches in student and teacher perceptions could arise due to the extent of teacher involvement and their specific roles. Results from this study have shown that learners have positive attitudes toward using educational applications as a successful way to learn and train themselves to be autonomous both in and out of the classroom, which is in line with Zehani's (2021) results.

Consequently, one or two techniques are not enough to develop learner autonomy; a planned approach is necessary instead. By using the techniques and technologies, autonomy can be fostered, but not all dimensions can be developed. A multidimensional design is required to develop autonomy and all its aspects in the learners' learning process. The multidimensional design has the potential to affect the learner's proficiency, which is what many language teachers aim for.

5 CONCLUSIONS

This study attempted to investigate the contributory role of educational applications, particularly the HelloTalk application, in improving Iranian intermediate

EFL learners' autonomy. The study subjects were divided into two groups with 27 participants. LAQ questionnaire was distributed online on Google Docs among the learners. In the next step, the Paired Sample T-test was used to examine learners' autonomy improvements and compare EG1 and EG2 means. It was revealed that in most dimensions, the use of the HelloTalk application positively affected EG1 learners and improved EG1 learners' autonomy.

One of the implications of this study deals with online English courses in Iran. As suggested by this study, some courses could be presented online and in the form of virtual ones to prevent some problems of commuting for the learners and manage the time and place for these courses to be held. This study's findings and related literature validate that presenting courses in virtual forms has the potential to be used in educational areas. This study could impact learners with enough competence but who do not know how to be autonomous through mobile applications. It may benefit researchers keen to carry out a similar study in the future and give instructional technology planners guidance on how to utilize technology tools and computer programs or mobile applications such as HelloTalk to facilitate teaching and learning the English language.

The small number of participants was one of the study's limitations, which requires further investigation for any generalization. The credibility and reliability of the verbal or written responses to the instruments used in the present study were limited to the honesty of the experts and learners. Learners who are enrolled in institutions are usually involved at work; therefore, explaining and following the stages of a research study can be such a big deal in some cases with the absence of learners. Moreover, all students are not

equipped with technology tools and multimedia, even in the technology era, so persuading them to be equipped was another problem. This research study was influenced by the quality of the Internet and the development of the ability to conduct classes in virtual conditions. The premium version of the HelloTalk application was a challenge due to financial issues.

Since this study was conducted on a group of Iranian intermediate-level EFL learners, more studies are also needed on different levels of EFL learners. In this study, the utilization of the HelloTalk application in improving learners' autonomy was under investigation; therefore, further research is needed to examine the effect of conducting virtual courses on the development of other language skills. As another suggestion for further research, it is recommended to review the project taking into account gender differences to achieve a better outcome in this case.

English teachers must participate actively in group cooperation to monitor progress and moderate suggestions when cooperation breaks down, and online cooperation training is essential. Many English learners need training, self-regulation training, and directions to foster their autonomous learning, although one of the goals of using educational applications is to improve learners' autonomy. To encourage learners and improve their skills for collaborative work, course instructors must design activities that incorporate educational applications into the learning process.

The HelloTalk application is a powerful means for second language teaching and learning if used as support for well-defined learning objectives. It reduces the problems of target language practice, provides social aspects, offers communication

with native speakers, improves language skills through practice and online courses, and enhances learners' autonomy. These are just a few application advantages that can facilitate English learning. Therefore, it is crystal clear that there is a tremendous shift toward using the HelloTalk application for educational purposes. Using technology materials in a classroom by a teacher leads to the learners' motivation improvement and enhances learners' ability to work independently, which needs to be investigated more, especially in Iran.

Last of all, from the authors' points of view, learners' trust and respect for their teacher may indicate infantilization (i.e., the more the learner acts or feels like an infant, the better he can acquire the target language). The institution and teacher encouraged learners to use the application, but it was not mandatory. As a result, some factors could have influenced the study's findings, which were unavoidable.

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Appendices

Appendix A

Learner Autonomy Questionnaire

I hereby declare that I voluntarily participated in this study. I let the researchers use my responses as data as far as my identity remains anonymous. In addition, the researchers guarantee that all information I provide for this study will be treated confidentially.

Name: Time of the Class: Age:

Educational background: English Experience (year):

Direction: Please check the closest answer to the following questions according to your actual cases. Thank you very much for your help and patience.

5= Always True

4= Mostly True

3= Sometimes True

2= Rarely True

1= Never True

Qs	LEARNER AUTONOMY QUESTIONNAIRE	1	2	3	4	5
1	I usually set my own goal for each semester. (Independent Question-Dimension 1)					
2	I use other English books, mobile applications, and resources of my own will. (Independent Question-Dimension 2)					
3	When I hear someone talking in English, I listen very carefully. (Independent Question-Dimension 1)					
4	I want to talk in English with my family, friends, or native speakers. (Independent Question-Dimension 1)					
5	I enjoy learning grammatical points on my own. (Independent Question-Dimension 2)					
6	While learning English, I like activities in which I can learn on my own. (Independent Question-Dimension 2)					
7	I like trying new things while I am learning English. (Independent Question-Dimension 2)					
8	I am afraid that I won't learn a topic if the teacher doesn't explain it in the English class. (Dependent Question-Dimension 3)					
9	I learn better when the teacher explains something on the board. (Dependent Question-Dimension 4)					
10	I use my own methods to learn vocabulary in English. (Independent Question-Dimension 2)					
11	I feel confident when the teacher is beside me while learning English. (Dependent Question-Dimension 3)					

12	I can learn English only with the help of my teacher. (Dependent Question-Dimension 3)				
13	My teacher always has to guide me in learning English. (Dependent Question-Dimension 3)				
14	While learning English, I would like my teacher to repeat grammatical rules. (Dependent Question-Dimension 4)				
15	I feel happy when my teacher explains every detail of English. (Dependent Question-Dimension 4)				
16	In the future, I would like to continue learning English on my own/without a teacher. (Independent Question-Dimension 1)				
17	I like projects where I can work with other students in the English lesson. (Independent Question-Dimension 5)				
18	I can learn English grammar on my own/ without needing a teacher. (Independent Question-Dimension 3)				
19	If I cannot learn English in the classroom, I can learn working on my own. (Independent Question-Dimension 3)				
20	I like learning English words by looking them up in a dictionary or using mobile applications. (Independent Question-Dimension 2)				
21	I like my teacher to correct my errors when I make a mistake. (Dependent Question-Dimension 4)				
22	I want the teacher to give us the words that we are to learn. (Dependent Question-Dimension 4)				
23	I would like to use cassettes, videos, CDs, and mobile applications to learn a foreign language outside of the classroom. (Independent Question-Dimension 5)				
24	I like to listen and read in English outside of the classroom. (Independent Question-Dimension 5)				
25	I would like to select the materials for my foreign language lessons. (Independent Question-Dimension 6)				
26	I would like to share the responsibility of deciding what to do in the English lesson. (Independent Question-Dimension 6)				
27	I know how I can learn English the best. (Independent Question-Dimension 3)				
28	If I haven't learned something in my English lesson, I am responsible for it. (Independent Question-Dimension 1)				
29	I would like to choose the content of what is to be taught in the English lesson. (Independent Question-Dimension 6)				
30	The teacher should give me regular tests or mobile applications so that I can measure my English language proficiency. (Dependent Question-Dimension 8)				
31	I like English because I like to speak English. (Independent Question-Dimension 7)				
32	I know my weaknesses and go for them. (Independent Question-Dimension 1)				
33	I believe that I will reach a good level in the English language. (Independent Question-Dimension 7)				
34	Every time I have an assignment, the teacher should score or correct it. (Dependent Question-Dimension 8)				

35	I think that I learn English better when I work on my own. (Independent Question-Dimension 2)					
36	My language learning success depends on what I do in the classroom. (Independent Question-Dimension 3)					
37	I find it more helpful to work with my friends than to work on my own for the English lesson. (Independent Question-Dimension 5)					
38	I do the English lesson activities only when my teacher is going to grade me. (Dependent Question-Dimension 8)					
39	I have my own ways of testing how much I have learned. (Independent Question-Dimension 8)					
40	I can be a fluent English speaker in the future. (Dependent Question-Dimension 7)					
41	I try to understand the jokes and riddles of the foreign language. (Independent Question-Dimension 9)					
42	I also investigate the culture of the foreign language I am learning. (Independent Question-Dimension 9)					
43	I also investigate the idioms and sayings of the foreign language I am learning. (Independent Question-Dimension 9)					
44	I ask people who have lived abroad about the lifestyles of the people living there. (Independent Question-Dimension 9)					

Appendix B

Online Consent Forms



LEARNER AUTONOMY QUESTIONNAIRE

Direction: Please check the closest answer to the following questions according to your actual cases. Thank you very much for your help and patience.

* Required

I hereby declare that I voluntarily participated in this study. I let the researchers use my responses as data as far as my identity remains anonymous. In addition, the researchers guarantee that all information I provide for this study will be treated confidentially. *

- Agree
- Disagree