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The Effect of Asynchronous Computer-Mediated Condition on L2 Learners' Monologue Speaking Ability, Speaking Apprehension, L2 Self-Confidence, and Willingness to Communicate

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Abstract

This study was conducted to examine the effect of asynchronous computer-mediated condition on L2 learners' speaking ability, speaking apprehension, L2 self-confidence, and willingness to communicate. The participants of this study included 40 intermediate undergraduate students of English language teaching at an Iranian university. The participants were assigned to two experimental (asynchronous computer-mediated) and control (face-to-face) conditions randomly. In the experimental group, the participants practiced speaking in an asynchronous online environment, and in the control group, the students spent a part of their class time accomplishing monologue tasks. Using questionnaires, the participants' speaking ability, speaking apprehension, L2 self-confidence, and willingness to communicate were measured at the beginning and at the end of the term. The findings showed that the monologue speaking ability mean score of those in the computer-mediated group improved significantly more than that of the face-to-face group. Another finding of this study was the superiority of the computer-mediated condition with regard to the participants' speaking self-confidence, speaking apprehension, and willingness to communicate. Overall, the results suggest that asynchronous computer-mediated condition can provide learners with a less-threatening condition that can improve the chances of their L2 monologue speaking ability.

Keywords: L2 speaking ability, monologue, willingness to communicate, speaking apprehension, L2 self-confidence

Introduction

Speaking is a significant language skill in both first and second language teaching and learning literature since language users should master it to be able to communicate orally with both native and non-native speakers of a language. In addition, the growing number of communication technologies around the world has risen the amount of oral communication (Amiryousefi, 2019; Galante, 2018). This increase has urged the mastery of speaking ability especially for second language learners, who unlike first language learners, have a difficult task (Lin, 2020).

As a result, teachers have taken different measures to help their students improve their speaking abilities. One of the solutions provided in recent years has been the employment of computer-mediated technologies to boost learners' second language ability (Derakhshan et al., 2016; Hoomanfard & Rahimi, 2020; Tsai, 2019). Different learner-computer and computer-mediated applications have been utilized by teachers to provide an ideal condition for students' acquisition of their second language. The examination of prior studies reflects a promising picture of using computer-mediated technologies in the instruction of different skills and components of a second language (Lin, 2020; Liu et al., 2019). One of the under-explored areas of research which has been minimally examined is the effect of asynchronous computer-mediated speaking instruction on second language monologue speaking ability and its relevant individual differences variables.

The present study aims to address a part of this gap in the literature by examining whether and how the asynchronous computer-mediated condition significantly improves learners' speaking ability, speaking self-confidence, willingness to communicate, and decreases their speaking apprehension. The following research question guided the present study:

Research question: Does asynchronous computer-mediated condition significantly affect learners' speaking ability, speaking self-confidence, speaking apprehension, and willingness to communicate?

This study is of significance since it can contribute to the literature on second language speaking, individual differences variables, and computer-assisted language learning (CALL). The findings of this study, in addition to

occupying a niche in the literature, can show whether learners' monologue speaking ability in L2 (referring to both second and foreign language) can be improved by using asynchronous computer-mediated practice opportunities. Monologues are increasingly used in high-stake tests (e.g., IELTS, TOEFL, Duolingo) and real-life academic and commercial contexts (lectures, proposal presentations, etc.). Therefore, focusing on learners' monologue speaking ability and improving this ability seems to be a vital task in both researching and teaching an L2. Moreover, this study is of significance since it addresses the issue of individual differences variables, which has been identified as a significant mediating factor in second language development (Dornyei, 2019; Ellis, 2010; Storch, 2018). The findings of this study indicate how asynchronous computer-mediated speaking instruction can affect learners' speaking self-confidence, willingness to communicate, and speaking apprehension.

Computer-Mediated Communication in Speaking Instruction

In terms of the speaking skill, when computer-assisted language learning is at play, the possible options will be practicable as follows: computer-learner interaction basis or learner-learner interaction with some minor role of computer as a helping device. The first one is referred to as tutorial CALL (Guillén, 2015) and learners use a computer and speak with it to strengthen their pronunciation and develop their speaking, especially at elementary levels (Warschauer & Healey, 1998). In this option, learners received negative and positive feedback from a computer by means of drill (Warschauer & Ware, 2006). In the updated version of this option, artificial intelligence has recently got involved in such a way that computers take a more active role as interlocutors even in highly complex conversations (Blake, 2017).

In the second option, the role of computers is relegated to a mediation tool that assists the interlocutors to communicate and speak more effectively, which is referred to as computer-mediated language learning, or social CALL (Guillén, 2015). Communication in this mode may be synchronous or asynchronous. Both of these options have benefits and demerits at the same time (Skehan, 2003) and these are the tasks and activities which are to be posed to direct a teacher to one of these two alternatives.

In this regard, many applications and software tools have been introduced to be of help and can facilitate the second language learning (see Blake, 2017 for a review of these tools). However, the computer-mediated tools have obtained superiority over the tools based on the other alternative due to its higher effectiveness in L2 speaking elements. It is noteworthy that with the advent of VoIP (Voice over IP), researchers have shifted their focus from the writing skill to the speaking skill and studies have assessed the advantages of bilateral synchronous and asynchronous speaking tools and devices. Before that, the main focus was on the effect of written asynchronous practice on the speaking skill (Payne & Whitney, 2002).

A piece of research undertaken by Guillén (2015) and Blake (2017) revealed that asynchronous speaking assisted learners to produce more complex chunks and sentences compared to the situation in which they were exposed to synchronous interaction. In the same way, Alshahrani (2016) investigated the impact of videoconferencing on students' oral proficiency and reported the presence of no significant difference between videoconferencing-based practice and no videoconferencing practice. Voice blogging, however, was revealed to be effective in learners' oral performance in terms of complexity but not in terms of accuracy and fluency (Hsu, 2016). Newly, Chen and Tseng (2021) looked into Facebook to study the impact of asynchronous speaking practice on students' oral performance and reported its effectiveness in learners' speaking ability. They claimed that asynchronous computer-mediated tasks and activities facilitated the production of various lexical items and structures and resulted in learners' better performance in the post-test.

Willingness to Communicate

Willingness to communicate in second language dates back to the 1980s when McCroskey looked into unwillingness to communicate in mother tongue (McCroskey & Richmond, 1987). When this variable took its way into research, other interrelated variables such as motivation and perceptions of language proficiency found their ways, as well. The concept of willingness to communicate indeed claims that even when individuals are provided with opportunities to communicate, willingness to communicate may still not be at play. Willingness to communicate is defined as "a

readiness to speak in the L2 at a particular time with a specific person and as such, is the final psychological step in the initiation of L2 communication" (MacIntyre & Doucette, 2010, p. 162).

MacIntyre et al. (1998) proposed a pyramid containing linguistic, communicative, and social psychological elements that makes up the willingness to communicate. MacIntyre and Doucette (2010), in their pyramidal definition of willingness to communicate, considered it as a "a socially constructed, dialogic process" (p. 93). In addition, some theoretical and practical looks at the concept of willingness to communicate shifted it from a behavioristic notion towards an individual difference variable (Dornyei, 2005). Today, willingness to communicate is dominantly regarded as an instantaneous preparation and inclination to start speaking under the influence of different factors such as the psychological and situational ones that determine when and how to speak.

Different variables have been reported to affect one's second language willingness to communicate. The findings of prior studies show that speaking apprehension (Elahi Shirvan et al., 2019), oral communication strategy (Salehi & Nosratinia, 2022), and speaking apprehension (Baghaei, 2013), and emotional intelligence (Dastgoshadeh & Javanmardi, 2021) affect second language learners' willingness to communicate. In the present study, two main predictors of willingness to communicate (i.e., speaking apprehension and L2 self-confidence) are examined to see whether and how the asynchronous computer-mediated condition affects willingness to communicate and these two individual difference variables.

Speaking Apprehension

One of the variables which has been investigated in educational settings for the last five decades is speaking apprehension. The literature on speaking apprehension is extended since it is widely believed that by taking different measures, teachers can decrease learners' speaking apprehension (Bowman, 2018). In this regard, several key figures (McCroskey, 1976), have argued that communication apprehension is not inherited but is learned. Several definitions have been provided for speaking apprehension, but one of the most comprehensive definitions was provided more than 35 years ago. (McCroskey & Baer, 1985) defined speaking apprehension as "communication apprehension is defined as an individual's level of fear or

anxiety associated with either real or anticipated communication with another person or persons" (p. 81). Speaking apprehension can adversely affect psychological and cognitive functions in both pedagogical and real-life settings, and scholars try to find solutions to minimize this apprehension.

Similarly, in the realm of second language learning, speaking apprehension has been a significant factor in the literature on second language speaking (Daubney et al., 2017). Previous studies have reported the negative effects of speaking apprehension on L2 learners' speaking ability (Bećirović, 2020; Hewitt & Stephenson, 2012; Şimşek, 2017; Tóth, 2017), motivation (Papi & Teimouri, 2014; Teimouri, 2017), and willingness to communicate (Hashimoto, 2002; Khajavy et al., 2018). In addition, some studies (Oya et al., 2004) have found that L2 learners' low proficiency can result in their speaking apprehension.

Speaking Self-Confidence

The last variable reviewed here is L2 self-confidence. MacIntyre et al. (1998) argue that L2 self-confidence is shaped by language users' linguistic knowledge and their language learning and using experiences. In other words, variables such as L2 speaking apprehension and communicative competence form one's L2 self-confidence. The examination of the literature on L2 self-confidence reveals that trait self-confidence and state self-confidence variables are present for each person in each condition, and the examination of each of these aspects can reveal a part of the story. As their names suggest, trait L2 self-confidence refers to a more stable overall belief that speakers have of their second language communicative competence, and state L2 self-confidence deals with transient feelings of confidence formed due to contextual variables (Ghasemi et al., 2020).

Khatib and Maarof (2015) have reported that the language learners with a high level of self-confidence acted more successfully in English language learning. It is noteworthy that few studies have examined self-confidence and its effect on speaking skill, which is usually regarded as the most challenging skill in language learning and the highest focus has been put on the writing skill (Asakereh & Dehghannezhad, 2015; Khatib & Maarof, 2015). It has been reported that speaking self-confidence levels positively

affected speaking proficiency in English classes (Asakereh & Dehghannezhad, 2015). In fact, those learners who had positive attitudes towards speaking tasks and practices obtained greater achievements in terms of speaking proficiency. The findings of the study conducted by Asakereh and Dehghannezhad (2015) in this domain showed that speaking self-confidence has a significant positive correlation with higher scores in the speaking skill. In another context, Alawiyah (2018) assessed the relationship of EFL student-teachers' speaking achievement with speaking self-confidence in L2 and identified that self-confidence had a significant impact on speaking achievement.

The examination of the literature revealed that although several studies have been conducted to examine different aspects of speaking practice in computer-mediated condition, willingness to communicate, speaking apprehension, and L2 self-confidence, to the best of the researchers' knowledge, no prior study has investigated the extent to which asynchronous computer-mediated speaking practice condition can affect learners' monologue speaking ability, speaking apprehension, L2 self-confidence, and willingness to speak. This study was conducted to occupy this niche in the literature.

Method

Participants

The participants of this study were 40 intermediate students in two intact classes who were studying English language teaching at Rasht Islamic Azad University in Iran. The participants were all female and aged between 19 to 33. They were native speakers of Persian and were selected based on convenience sampling. These language learners were randomly assigned to conventional (face to face) condition (N = 20) and computer-mediated (N = 24) condition. In order to examine the participants' general English language ability, the participants sat for a IELTS Mock test (General Module), and the scores of all participants ranged between 4.5 to 6. This range reflects the participants' intermediate level of English language ability. Furthermore, the examination of the participants' IELTS scores in the two groups were not significantly different ($t(38) = .383$, $p < .05$).

Instruments and Materials

Five instruments and materials were employed to collect the required data. This section provides a review of these items in brief.

Proficiency Test and Speaking Tasks

In order to examine the participants' English language proficiency, the researchers employed an IELTS Mock test (General Module). This test which was provided online by Irsafam Language Institute which is located in Tehran included the main four language skills (listening, reading, writing, and speaking). The procedures were the same as the original IELTS exam. However, the participants' performances were not scored by an official IELTS examiner and were examined by experienced IELTS trainers (more than 10 years of IELTS teaching experience). The listening section included 40 items which had to be responded in 30 minutes. Similarly, the reading section included 40 items; however, the test-takers had 60 minutes to answer the questions. The participants had to take two writing tasks in 60 minutes. The first one was letter writing, and the second one required the test-takers to write an essay.

Finally, the participants took the three parts of the speaking section. The second part of the speaking section, which requires the participant to accomplish a monologue task, was used to assess the participants' speaking pre-test performance. At the end of the semester, the students took another speaking test (This time they did not take other skills), and their scores were recorded as their post-test scores.

Speaking Apprehension

To examine the participants' speaking apprehension in this study, which is situated in an EFL (English as a Foreign Language) context, the questionnaire provided by (Öztürk & Gürbüz, 2014) was employed. This questionnaire is taken from the anxiety model presented by Horwitz et al. (1986). It includes 18 items and examines the extent to which the respondent is anxious while speaking in an English class in an EFL setting, where English is not widely used in out-of-class contexts. The responses range from *strongly agree* to *strongly disagree.* In the present administration, the reliability value was as high as .94.

Willingness to Communicate

The researchers employed the willingness to communicate questionnaire developed by MacIntyre et al. (2001). This questionnaire includes different sections (speaking willingness to communicate inside and outside the classroom, listening willingness to communicate inside and outside the classroom, writing willingness to communicate inside and outside the classroom, and reading willingness to communicate inside and outside the classroom); however, speaking willingness to communicate was analyzed since it is pertinent to the objectives of this study. This section includes eight items and examines the extent to which learners are willing to speak English in class. The respondents had to select a response ranging from *Almost never willing* to *Almost always feeling*. The reliability of this measure was .92 in this study.

Speaking Self-confidence

The participants' speaking self-confidence was studied using a questionnaire provided by Asakereh and Dehghannezhad (2015). This oft-cited questionnaire has been employed in different contexts and is used to examine the extent to which English language learners are self-efficacious in speaking in English in class. This questionnaire includes 28 items. The responses range from *strongly agree* to *strongly disagree*, and its reliability in this administration was .88.

Procedures

The participants of this study practiced speaking in two different classes. The participants were assigned randomly to two experimental (computer-mediated) and conventional (face-to-face) groups. The semester included 18 sessions, and the same educational materials were used in both classes. The same teacher taught both classes. The participants had to accomplish one speaking task in each session. In the face-to-face group, around half of the session time was spent on speaking practice. In the experimental group, however, the learners were required to accomplish their speaking tasks online. In both classes, the groups changed each session to provide more learning opportunities for learners by being exposed to different knowledge sources (different students).

In the first three sessions of the semester, the teacher provided instruction on how to analyze a monologue. She taught them to focus on the

organization of the monologues they hear and pay attention to the lexical and grammatical items. The teacher provided models and required them to analyze the monologues. Then, she provided feedback on her students' analysis performance.

In both conditions, the participants had to accomplish a task. Each task included the presentation of a video clip, showing a sample of the intended monologue. These clips were provided by the book publisher as supplementary materials. The videos were five to seven minutes each and were finely-tuned to be suitable for the intermediate English language learners. In the computer-mediated condition the videos could be watched using Edmodo platform, and the clips were displayed two times employing an overhead video projector. The participants could take notes while watching the video so that they could analyze the conversations. In both groups, the participants were put in groups of four members. These groups were formed by the teacher and changed every week to increase students' learning through interacting with different interactants. In the conventional group, the participants had 15 minutes to examine the monologue and analyze it to identify its different features. They could also ask their questions from their peers during this period. Then, they had four minutes to prepare for their production. The learners had to produce monologues about the topics mentioned in the clips not longer than four minutes. After presenting their monologues, the group members provided feedback on their peers' performance. The last stage was the presentation of the same monologue in the next session after applying the comments.

In the experimental group, more or less the same procedure was followed. The videos were provided to learners online. The platform used in this study was Edmodo, which is a well-known educational platform used globally to facilitate the educational procedures for both learners and teachers. This web service provides an asynchronous communication platform so that the interactants can exchange files and notes (comments and responses) online without any temporal pressure. The participants in this group had 12 hours to analyze the monologues. The videos were sent to the class homepage, and the participants could watch the videos several times, but they could not download them. During these 12 hours, they had to analyze the videos and

share their assessment reports with their teammates. They had one day to record their own monologues and share them online with their teammates. After uploading the videos, the participants in the computer-mediated group had one day to analyze them and provide feedback on their peers' performances. Finally, after receiving feedback, each person had to upload a new video and solve the problems mentioned by their peers in comments.

Data Collection and Data Analysis

The data required to answer the research questions were collected at the beginning and the end of the semester. The participants' IELTS speaking-part 2 scores were also recorded as the pre-test speaking scores. In addition, the participants responded to the items of speaking self-confidence, speaking apprehension, and willingness to communicate questionnaires before starting the treatment. At the end of the semester, the participants were also required to take an IELTS speaking-part 2 test and answer the items in the three questionnaires. In addition to running descriptive statistics, the scores obtained in the two data collection steps were compared across the two groups and within time points. In so doing, Mixed ANOVA was run four times to check the significance of the differences between the mean scores.

Results

Descriptive Statistics

The data collected in this study were first subjected to descriptive analysis. Table 1 provides the results of these descriptive analyses.

Table 1

Learners' speaking, speaking apprehension, willingness to speak, and L2 self-confidence

		Pre-test		Post-test	
		Mean	SD	Mean	SD
Speaking	Conventional	4.45	.39	4.8	.52
	CMC	4.33	.38	5.2	.25
Apprehension	Conventional	44.5	2.21	40.15	2.41
	CMC	44.2	2.24	36.16	3.08
L2 self-confidence	Conventional	74.4	2.7	77.15	2.84
	CMC	74.83	2.64	81.41	2.46
Willingness to communicate	Conventional	23.20	1.7	26.15	1.89
	CMC	23.08	1.81	32.79	1.73

As provided in Table 1, the speaking mean scores of both conventional and computer-mediated groups increased from pre-test, M = 4.45 (.39) and M = 4.33 (.38), to post-test, M = 4.8 (.52) and M = 5.2, (.25), respectively. Similarly, the participants' speaking self-confidence scores improved in both groups from pre-test, $M_{conventional}$ = 74.4 (2.7) and M_{CMC} = 74.83 (2.64), to post-test, $M_{conventional}$ = 77.15 (2.84) and M_{CMC} = 81.41 (2.46). Similarly, the participants' willingness to communicate scores in both conventional and computer-mediated groups were computed, M = 23.2 (1.7) and M = 23.08 (1.81), to post-test, M = 26.15 (1.89) and M = 32.79, (1.73), respectively. Finally, the results showed that the speaking apprehension of both groups decreased from pre-test, $M_{conventional}$ = 44.5 (2.21) and M_{CMC} = 44.2 (2.24), to post-test, $M_{conventional}$ = 40.15 (2.41) and M_{CMC} = 36.16 (3.08).

Inferential Statistics

In order to answer the research question, the researchers employed several Mixed ANOVAs. Mixed ANOVA was used to examine both within-subjects and between-subjects variances during the treatment. First, the effect of monologue speaking practice conditions (computer-mediated versus face-to-face) on learners' speaking performance was examined (Table 2).

Table 2
Mixed ANOVA for Speaking

			df	MS	F	Sig.	η^2
Speaking	Within-group	Time	1	8.185	89.58	.001	.681
		Time*Group	1	1.50	16.45	.001	.231
	Between-groups	Group	1	.464	2.14	.151	.048

As provided in Table 2, there were significant effects of time, F (1, 42) = 89.58, p <.01, η^2 = .681, and the interaction of time and group, F (1, 42) = 16.45, p <.01, η^2 = .231. These figures show that the participants improved their speaking ability during the treatment. It was also found that the speaking mean scores of the experimental group was significantly higher than that of the face-to-face one, F (1, 42) = 2.14, p < .01, η^2 = .048.

The participants' speaking apprehension scores were also examined across time and group, and the results are provided in Table 3.

Table 3
Mixed ANOVA for Speaking Apprehension

			df	MS	F	Sig.	η^2
Apprehension	Within-group	Time	1	837.56	281.9	.001	.870
		Time*Group	1	74.33	25.026	.001	.373
	Between-groups	Group	1	99.68	10.11	.003	.194

As indicated in Table 3, there was a main effect for time, F (1, 42) = 281.9, p <.01, η^2 = .87. The effect of the interaction of time and group was also significant, F (1, 42) = 74.33, p <.01, η^2 = .373. The effect of conditions on learners' speaking apprehension was also significant, F (1, 42) = 99.68, p <.01, η^2 = .194.

The next set of data was on learners' speaking self-confidence. Table 4 provides information on the changes in learners' speaking self-confidence during the treatment.

Table 4
Mixed ANOVA for Self-Confidence

			df	MS	F	Sig.	η^2
Self-confidence	Within-group	Time	1	475.15	217.4	.001	.838
		Time*Group	1	80.15	36.67	.001	.466
	Between-groups	Group	1	120.4	10.02	.003	.193

As provided in Table 4, there were significant effects of time, F (1, 42) = 217.4, p <.01, η^2 = .838, and the interaction of time and group, F (1, 42) = 36.67, p <.01, η^2 = .466. These figures show that the participants improved their speaking self-confidence during the treatment. It was also found that the speaking self-confidence mean scores of the experimental group was significantly higher than that of the face-to-face one, F (1, 42) = 10.02, p < .01, η^2 = .193.

The last variable examined within this study was the participants' willingness to speak. The participants' willingness to speak scores were also examined across time and group, and the results are provided in Table 5.

Table 5
Mixed ANOVA for Willingness to Communicate

			df	MS	F	Sig.	η^2
WTC	Within-group	Time	1	874.0	282.4	.001	.871
		Time*Group	1	249.1	80.51	.001	.657
	Between-groups	Group	1	232.23	69.8	.001	.625

As indicated in Table 5, there was a main effect for time, F (1, 42) = 282.4, p <.01, η^2 = .871. The effect of the interaction of time and group was also significant, F (1, 42) = 80.51, p <.01, η^2 = .657. The effect of conditions on learners' speaking apprehension was also significant, F (1, 42) = 69.8, p <.01, η^2 = .625.

Discussion

The findings showed that the monologue speaking ability mean score of those in the asynchronous computer-mediated group improved significantly more than that of the face-to-face group. This finding is in line with previous studies in other contexts (Chen & Tseng, 2021; Hsu, 2016; Likourezos et al., 2019) which found that asynchronous computer-mediated speaking practice has been more successful than face-to-face speaking practice. One of the reasons which might have resulted in the superiority of the asynchronous computer-mediated condition can be sought in the amount of cognitive pressure it imposes on learners. Due to the asynchronous computer-mediated condition employed in this study, the learners are less under temporal pressure, which can be a significant factor in the formation of cognitive pressure (Hoomanfard & Rahimi, 2020). In this study, the participants in the face-to-face condition had to complete their tasks in highly limited time periods (e.g., ten minutes); however, those in the computer-mediated condition had hours to accomplish their tasks. As stated in cognitive load theory, humans' working memory is limited in capacity, and when the data are complicated or the task instructions impose a difficult learning situation, learners have more difficulty accomplishing their tasks (Woolfolk, 2016).

Any change in the difficulty of data or task instructions can increase or decrease the difficulty of the task for learners. In the present study, the extended amount of time provided in the computer-mediated condition could have facilitated learners' examination of the model and peers' videos and the preparation for their own monologues. The reduction in the temporal pressure, which is categorized under the extraneous cognitive load (Likourezos et al., 2019), can improve learners' performance since the extra time can leave some cognitive resources for learners to deal with tasks more deeply. This deeper cognitive engagement with tasks can be a significant factor in learners' acquisition of new items (Kirschner et al., 2018).

Another finding of this study was the superiority of the computer-mediated condition with regard to the participants' speaking self-confidence. One of the reasons for the higher self-confidence of the participants can be attributed to the speaking performance development of both groups. Based on the findings, the learners in the computer-mediated group who had higher scores in the post-test had higher self-confidence scores too. This finding is in line with that of prior studies which showed that knowledge development and self-confidence are reciprocally inter-related, and the change in one of these variables can affect the other one (Razmjoo & Hoomanfard, 2012; Su et al., 2018; Truong & Wang, 2019).

An alternative reason which can explain the higher self-confidence level of those in the computer-mediated condition can be related to the lower cognitive load the tasks imposed on them. As reviewed earlier, the lower cognitive load (i.e., extraneous cognitive load) imposed by the activities in the computer-mediated class was identified as a major factor shaping learners' superior speaking ability. Previous research projects (Feldon et al., 2018; Truong & Wang, 2019) have shown that those educational conditions that do not involve very cognitively-demanding tasks result in higher self-confidence beliefs. This happens since learners feel that their cognitive ability is sufficient to accomplish the intended tasks, and they feel that they are self-efficacious enough as a learner. This self-confidence belief can also nourish learners' efforts to study more and improve their speaking ability. This cycle can go on indefinitely until one of these components fails to function.

Another finding of this study was the superiority of the computer-mediated monologue speaking practice on learners' speaking apprehension over the face-to-face condition. The examination of the related literature shows that computer-mediated condition usually provides a less threatening atmosphere in which learners can communicate more easily (Bárkányi, 2021). The online condition can help learners engage in speaking actively since they experience a more relaxed emotional condition. The absence of physical proximity can decrease learners' communication apprehension since they do not feel overwhelmed by the physical presence of others (Lee & Lee, 2020).

Finally, in the present study, the participants in the computer-mediated condition were of higher willingness to communicate and obtained lower speaking apprehension scores. It is in line with the findings of previous studies which found a negative relationship between these two sets of scores (Amirian et al., 2020; Lin, 2020). The participants' lower speaking apprehension is reported to be a significant predictor of willingness to communicate in both theoretical and empirical studies (Jamalifar & Salehi, 2020). Speaking apprehension, especially in EFL settings, is a variable which can affect learners' participation in speaking tasks in classes. They avoid participating in second language tasks in order to protect their ego as they find it possible to make mistakes and get embarrassed when their peers are around (Amiryousefi, 2019; Safari Moghaddam & Ghafournia, 2019).

However, the literature shows that in those conditions where learners have more preparation time, like the asynchronous computer condition in this study, they are more willing to speak. In a recent study, Author (2022) found that in asynchronous computer-mediated speaking practice, learners are more socially, behaviorally, and emotionally engaged with the tasks and spend significantly more time on speaking than those who have to speak with no or shorter preparation time for their monologue speaking tasks. As previous studies have shown, the effect of emotional engagement on social and behavioral engagement was also documented in other contexts (Han & Hyland, 2015; Huisman et al., 2018; Zhang, 2020; Zhang & Hyland, 2018), and this study provided evidence for the inter-relatedness of different

engagement types in the asynchronous computer-mediated speaking context.

To conclude, this study contributed to the literature on second language monologue speaking ability, individual differences, and computer-assisted language learning. Based on the findings of this study, monologue speaking practice condition significantly affects second language leaners' speaking ability, L2 self-confidence, speaking apprehension, and willingness to speak. The significant role of learning condition in the formation of learners' psychological and linguistic areas has been well-documented in the literature (Ellis, 2019), and this study provided evidence in an asynchronous computer-mediated condition to empirically support this belief.

The findings also implied a web of connections between different engagement types. Based on the findings, L2 learners' emotional engagement (feelings) can affect their behavioral engagement (the amount of interaction), and form learners' cognitive engagement (learning). As found in this research, the participants' L2 speaking comprehension and L2 self-confidence can determine learners' willingness to communicate, which can result in their monologue speaking development.

This study has some implications to offer teachers. First, the findings of this study suggest that teachers should benefit from new technologies such as asynchronous computer-mediated platforms to provide a more relaxed conditions for their learners so that they can develop their second language ability. The intrinsic features of asynchronous computer-mediated condition which enable learners to spend a hefty amount of time examining models, providing feedback, analyzing feedback, and preparing for production can both affectively help them to practice a second language and increase their on-task time. In addition, implied by the findings of this study and found in previous studies, learners' emotional engagement can, to a large extent, determine their behavioral engagement and cognitive engagement; therefore, teachers are recommended to examine their learners' emotional engagement constantly to ensure their learning.

The data used in this study was limited to questionnaire data since the data collection was done in the first days of Covid-19 outbreak, and most participants did not participate in the interview phase. As a result, the few interview data sets were not analyzed in this study; however, other

researchers are invited to conduct studies to examine how the asynchronous condition can affect learners' individual differences variables and monologue speaking ability. Interviews can reveal the cognitive strategies learners employ in the asynchronous computer-mediated condition to learn English. In addition, others can carry out research to study whether and how reading and listening abilities can be improved using synchronous and asynchronous computer-mediated conditions to identify the affordances and limitations of these conditions.

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