

An Investigation of EFL Learners' Speaking Anxiety and Motivation in Face-to-Face and Synchronous Text-based Chat and Voice-based Chat Environment

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Abstract

This research investigated the effects of synchronous text-based and voice-based chats on Russian EFL students' speaking anxiety and motivation. To this end, 90 Russian EFL learners at the upper-intermediate level were selected and assigned to three groups: synchronous text-based, synchronous voice-based, and traditional (face-to-face). After that, the questionnaires of AMTB and SAS were given to the three groups to determine their motivation and speaking anxiety before conducting the treatment. Then, one experimental group was taught eight conversations through a synchronous text chat. The other experimental group was taught through a synchronous voice chat. The control group received a traditional conversation instruction. After teaching eight conversations, the mentioned questionnaires were re-administered to determine the impacts of the instruction on the participants' motivation and speaking anxiety. Finally, the gathered data were analyzed using one-way ANOVA and Post hoc Scheffe test. The gained findings demonstrated that there were remarkable differences between the post-test of the experimental participants and the control participants. The obtained outcomes depicted that the experimental participants noticeably outperformed the control participants in the motivation and speaking anxiety post-tests. The results of this study provide some practical implications both for EFL teachers and learners.

Keywords: Motivation, Speaking Anxiety, Synchronous Text-Based Chat, Voice-Based Chat

Introduction

Foreign or second language learning is subjected to some affective factors, one of which is Foreign Language Anxiety, which is defined as a distinct complex of self-perception, feelings, and behavior pertinent to the language learning context arising from the uniqueness of the language learning processes (Horwitz et al., 1986). Wang and Chang (2010) state that the majority of foreign language students experience some sort of anxiety in their language classes. Students in foreign language classes usually state that speaking English is the most anxiety-producing skill. Based on Young (1990), speaking in front of classmates and on-spot performances produce much anxiety from the students' perspectives, and students experience more anxiety over speaking than other language skills.

Pertaub et al. (2001) assert that anxiety usually appears when a speaker is required to deliver a public speech or communicate with foreigners since they have a fear of being assessed or humiliated by other people. Although people are conscious that this anxiety

is not normal, they cannot overcome it, resulting in depressive disorders, irritation, and distress (Pertaub et al., 2001). Horwitz et al. (1986) stated that this type of anxiety inserts in speaking a foreign language and may increase when we communicate with native speakers of that language.

The other influential variable involved in learning a language is the motivation referred to as the stimuli behind people's actions: “why humans think and treat as they do” (Dörnyei, 2005, p. 1). Dörnyei (2001) emphasizes the impact of motivation on learning a second language, and it is considered the most significant single variable influencing a language learner's success. Dörnyei (2009) believes that “L2 motivation provides the main impetuses to commence the learning behaviors and later the driving force to keep the long and often monotonous learning processes; that is, all the other variables necessitated in L2 learning presupposes motivation to some extent and motivation is often mentioned in explaining any L2 learning successes or failures” (p. 261).

Crookes and Schmidt (1991) indicate that motivation is fundamental in schools due to its strong influence on pupils' learning because motivation is a key to their learning achievement. Therefore, students with high learning motivation usually study and learn better than less motivated students (Trong Tuan, 2012; Yılmaz & Çelebi, 2022). Motivation can be viewed as a vital component in determining the students' learning achievements since motivation is more important than aptitude (Marefat & Pakzadian, 2017).

Harmer (2007) agrees that students who are in some way motivated perform noticeably better than their peers despite their instructors' unsatisfactory methods or unfavorable situations, while pupils without adequate motivation cannot reach long-termed objectives despite having the most significant learning capabilities. No curricula and teaching approaches are proper or good enough for these demotivated learners to guarantee their learning accomplishments. Thus, demotivation can lead to learners' low achievement or negative attitudes towards the target language. In addition, Dörnyei (1997) puts it that in language teaching, both instructors and researchers regarded motivation as one of the primary agents affecting the rates and successes of L2 learning. Therefore, language instructors need to recognize the vital role of motivation in their students' learning. They should boost the motivation of tier students to improve their language learning (Kılıçarslan et al., 2021; Trong Tuan, 2012).

Both mentioned affective variables could be affected by using synchronous e-learning. Synchronous e-learning is referred to teaching/learning that occurs concurrently by the electronic modes. Synchronous voices or texts provide opportunities for interactions between teachers and students and between students and their classmates. In addition to chatting, video-conferencing can facilitate face-to-face communications. Web conferences via questionnaires, surveys, and question-answer sessions can provide more interactions than video conferencing (Al-Rubaat, 2022; Perveen, 2016).

Synchronous modes instill a sense of community via cooperative learning (Asoodar et al., 2014). This mode is a room for teachers and learners to communicate and cooperate in real-time. Applying webcams and class discussion features, it resembles the conventional classrooms, except that all students access it remotely by the Internet. Lessons can be saved and added to an e-library. Utilizing the archived e-library, learners can access and replay teachers' lectures as many times as needed to learn the materials (Teng et al., 2012). Direct interactions with instructors and learners in real-time are like the conventional face-to-face classrooms, somewhat better, as the distance is no more a

block and by connectivity through the Internet, no time is lost in traveling, etc. Because of teachers' and class-fellows presence, synchronous sessions can lead to better motivation to participate in activities (Samadi & Samadi, 2020; Yamagata-Lynch, 2014). Immediate feedback and responses can assist learners in solving any difficulties they face when they learn.

Regarding the importance of synchronous e-learning and affective factors in language learning, the current research investigated the effect of synchronous text-based chat and voice-based chat on Russian EFL learners' motivation and speaking anxiety during the Covid-19 pandemic.

Review of the Literature

The main affective factor in English language learning is motivation. Muftah (2006) defined motivation as the biological, cognitive, emotional, or social forces that activate and guide behaviors or as a feeling of interest or tendency that makes a person perform something or something that makes such feelings. EFL students' motivation is the psychological state that reflects their desires, requirements, and goals to learn a target language that certain activities might state. According to Brown (2000), motivation is probably the most often used catch-all word for explaining the success or failure of virtually all complex activities. Ellis (1997) believes that motivation is usually dynamic; it is not something a student has or does not have but somewhat differs in various times based on the learning contexts.

Motivated students can be more eager and enthusiastic to donate time to learning a language (Muftah & Rafic-Galea, 2013). Therefore, barricades in language learning may be produced because of inadequate motivation and negative attitudes (Oroujlou & Vahedi, 2011). Nasri et al. (2021) asserted that learners' motivation increases due to three reasons: integrative causes, instrumental causes, and internal causes.

Gallos (2006) stressed the significance of motivation as it is related to performance. Lawler (1973) proposed the expectancy theory as a main point to comprehend motivation to figure out why we perform in the ways we do. This theory discusses that individuals are mainly rational decision-makers who think about their work and perform in ways that meet their requirements and aid them in achieving their objectives. In other words, individuals are forward-looking, performing in ways that they see as most beneficial to obtaining what they search for.

Anxiety is the other affective factor that can affect English language learning. Spielberger (1983) defined anxiety as the subjective feelings of nervousness, apprehension, tensions, and worries related to the arousal of the nervous system. Nevertheless, in defining language anxiety, Scovel (1978) argued that although people know what language anxiety is and all have experienced the feeling of anxiousness, anxiety is still not simple to define in an easy sentence. It is concerned with the feeling of uneasiness, frustrations, worry, apprehension, and self-doubt (Brown, 2000). According to Pappamihiel (2002), anxiety can be associated with a threat to self-efficacy and appraisal of a situation as threatening. Besides, Gregersen (2005) argued that students who have anxiety during English language learning might think that their study is not pleasurable. Studies on foreign language anxiety showed that anxiety could negatively affect language learning (Aida, 1994; Ojekemi et al., 2022).

Anxiety has a facilitative and hindering role in learning a language (Aydin, 2018). Recently, the results of the research have revealed that anxiety has a negative impact on learning a foreign language. MacIntyre (1995) explained that anxious students focus on the available tasks and their reactions to them; they won't learn as quickly as calm students. This is in agreement with the affective filter hypothesis proposed by Krashen (1985), stating that learning can happen when the learners' affective filter is normal and low. Unmotivated learners with much anxiety need higher affective filters that hinder learning and input (Ellis, 2012). In this regard, his chief ideas are:

- A high affective filter can hinder inputs from reaching Language Acquisition Device (LAD).
- A low affective filter permits the learning inputs to “strike deeper” and the second language to be learned.
- The affective filter is accountable for individual variations in L2 learning, which means it is a variable that affects second language acquisition (Chen & Chew, 2021).

We can control the anxiety of the students by using online instruction. Two basic environments are usually compared in online instruction, synchronous and asynchronous. They are different in terms of place and time of learning and teaching tasks: Asynchronous environments are not permanent and geographically autonomous and are more individual-based, self-paced, and less teacher-dependent (Xie et al., 2018). The asynchronous environment bears problems as also implied by the media richness and media naturalness methods (Blau et al., 2017; van der Keylen et al., 2020). The media richness method explains the ability of the media to (1) supply instant feedback, (2) transfer verbal and non-verbal communications, (3) supply a sense of personalization, and (4) imitate a natural language (Blau et al., 2017; Kim et al., 2019).

The primary advantages of synchronous online instruction are authentic interpersonal communications, authentic language, and instant feedback. These features can decline the differences between face-to-face and online instructions in this way and supply a sense of personalization. On the other hand, synchronous communications have been less effective in discussing complicated opinions or profound thoughts (Hrastinski, 2010). For learners, learning experiences, desirable results, and the kind of performances matter: They learn applied skills better when they are instructed in a synchronous online environment (Nsa et al., 2012), while cognitive achievements, including constructing valuable and insightful contributions, are better in asynchronous environments (Ogbonna et al., 2019). Also, synchronous instruction positively affects students' commitments and task motivation (Hrastinski, 2008). Simultaneously, in face-to-face environments, the risk of detached participation in the classroom (e.g., inactive listening or watching the teachers' lectures, quietly reading peer sentences in chatting) needs to be regarded (Smith & Smith, 2014). Based on Rapanta et al. (2020), videoconferencing reduces the fluency of interactions and attention compared to conventional instruction. The other problem of synchronous learning is associated with the technical infrastructures that need to permit participation in live distant environments in an adequate quality (Xie et al., 2018).

Considering the effects of synchronous learning on language improvement, some studies were carried out; for instance, Ono et al. (2015) examined the effect of a synchronous blog system on the speaking skill of EFL students in Japan. Based on a

questionnaire carried out as pilot research, it was demonstrated that the system had the potential to develop speaking skills and increase the learners' motivation.

Mugesatar and Ozdener (2008) examined the effects of two synchronous computer-mediated communication instruments: text and voice chat. Three groups (text, voice, and control) were used in this study. During a month, the respondents in the empirical classes were involved in 40–45-minute-long chat sessions in dyads, guided by eight activities. The information was gathered via pre- and post-questionnaires and a speaking test, and the respondents' attitudes were examined using closed and open-ended questionnaires. The findings indicated that the speaking skill of both experimental classes developed, but just the anxiety level of the text chatting group was reduced.

Kim (2017) examined the effect of various kinds of voice-based chat on EFL learners' negotiations of meanings based on proficiency level. The respondents comprised 123 students who were studying English in Korea. They were assigned to two voice-based chat groups: student-student voice-based chat and student-chatterbot voice-based chat. The treatment was conducted for a term that lasted three months. The results of the study indicated that there was a significant difference between the first chat and the last chat. The mean frequencies of negotiations moving at different proficiency levels changed positively over time by taking part in the student-chatterbot voice-based chat. Particularly, student-chatterbot voice-based chat, compared to student-student voice-based chat, permitted participants to utilize more tactics in negotiations. The tactics utilized in the chats also seemed to be diverse based on the students' proficiency levels. Finally, the desirable attitudes toward voice-based chat were found at all proficiency levels. This research provided empirical proof to verify the effect of voice-based chatterbots on oral interactions.

In a research, Fabriz et al. (2021) examined whether implementing asynchronous and synchronous learning and teaching environments in higher education was associated with definite students' experiences and consequences. In addition, they investigated how the mentioned environments advocate students' elementary psychological requirements for competence, relatedness, and autonomy introduced by self-determination theory (SDT). The information was gathered after the first online term because of the COVID-19 epidemic. The outcomes implied that from the students' perspectives, the teaching methods included in the two learning and teaching environments differed regarding their potential to advocate social interactions and the basic psychological requirements as introduced by SDT. Learners who studied mainly in synchronous environments conducted more peer-centered tasks, including feedback than in asynchronous environments. On the other hand, instructors mentioned fewer distinctions between teaching methods in asynchronous and synchronous environments, particularly concerning feedback tasks. Learners in synchronous environments testified more of their basic psychological requirements for competencies support and relatedness and much satisfaction with the online term than learners in most environments.

After reviewing the studies performed on the influences of synchronous learning on language improvement, it was demonstrated that using different synchronous learning can help EFL learners learn the English language more effectively. Therefore, the current research examined the influences of synchronous text-based and voice-based chat on improving Russian EFL learners' motivation and speaking anxiety. Thus, two questions were posed in this research:

RQ1. Does using synchronous text-based chat positively affect Russian EFL learners' speaking anxiety and motivation?

RQ2. Does using synchronous voice-based chat positively affect Russian EFL learners' speaking anxiety and motivation?

Methodology

Participants

The subjects of this inquiry consisted of 90 Russian upper-intermediate EFL learners, chosen among 133 English learners at a private English language institution in Moscow, Russia. Both genders participated in this study based on the convenience sampling method. The participants' English language proficiency level was assessed according to their scores on the Oxford Quick Placement Test (OQPT). The researchers separated the subjects into synchronous text-based, synchronous voice-based, and traditional (face-to-face) groups.

Instruments

To do this investigation, first, the researchers used the OQPT to select the homogeneous subjects. It was administered to assist the researchers in knowing if their participants were at elementary, pre-intermediate, intermediate, or advanced levels. This test encompassed 60 multiple-choice items, and based on its outcomes, those who scored between 42 and 50 were upper-intermediate and were regarded as the target subjects of the present inquiry.

The other instrument was the Gardner's (2004) Attitude/Motivation Test Battery (AMTB), which assessed the students' English motivation. This questionnaire had 26 statements, each with five options: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. Three English instructors confirmed the validity of the questionnaire, and its reliability was calculated by using Cronbach Alpha ($r=.84$).

The third tool exploited in this inquiry was the Speaking Anxiety Scale (SAS) that was an 18-item questionnaire adapted from Ozturk and Gurbuz (2014), who designed their questionnaire by selecting 18 items from the 33 items of the Foreign Language Classroom Anxiety Scale (FLCAS) made by Horwitz et al., 1986. Ozturk and Gurbuz (2014) selected the 18 items among 33 items of FLCAS Horwitz's (1986) scale that were straightly pertinent to foreign language speaking anxiety. This questionnaire included 18 statements, and each had five options: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. A group of English professors verified the validity of this questionnaire, and its reliability was assessed via using Cronbach Alpha ($r=.83$). It is worth noting that both mentioned questionnaires were utilized as the pre-tests and the post-tests in this research.

Data Collection and Analysis

The researchers selected 90 upper-intermediate subjects to conduct this investigation and separated them into synchronous text-based, synchronous voice-based,

and traditional (face-to-face). Then, the three groups were given the questionnaires of AMTB and SAS to measure their motivation and speaking anxiety before receiving the treatment. After that, one experimental group was taught eight conversations through a synchronous text chat. The other group was taught through a synchronous voice chat. The control group received a traditional conversation instruction. In each session, one conversation was taught to each group. After teaching all conversations, the questionnaires of AMTB and SAS were re-administered to assess the impacts of the instruction on the participants' motivation and speaking anxiety. Eventually, the collected data were analyzed using one-way ANOVA and Post hoc Scheffe test.

Results

After collecting the data, we analyzed them according to the aims of the research, and the obtained outcomes are presented in the following tables:

Table 1

Descriptive Statistics of the Experimental and Control Groups in the Speaking Anxiety Pre-tests

	N	Means	Std. Deviations	Std. Error
VB Group	30	40.13	11.74	2.14
TB Group	30	40.66	12.06	2.20
CG	30	39.06	11.32	2.06
Total	90	39.75	11.59	1.22

In Table 1, the descriptive statistics of the three groups are presented. The voiced-based group's mean score is 40.13, the text-based group's mean score is 40.66, and the control group's mean score is 39.06. The means of all groups had almost equal speaking anxiety before the intervention.

Table 2

Inferential Statistics of the Experimental and Control Groups in the Speaking Anxiety Pre-tests

	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	21.42	2	10.71	.07	.92
Within Groups	11949.20	87	137.34		
Total	11970.62	89			

Table 2 shows the scores of the three groups in the speaking anxiety pre-test. As Sig (.92) is higher than (.05), the differences between the groups were not meaningful at ($p < 0.05$). Their performance in the speaking anxiety pre-test was similar.

Table 3
Descriptive Statistics of the Experimental and Control Groups in the Speaking Anxiety Post-tests

	N	Means	Std. Deviations	Std. Error
VB Group	30	69.33	9.26	1.69
TB Group	30	70.43	8.71	1.59
CG	30	41.90	14.29	2.61
Total	90	60.52	17.17	1.80

Table 3 depicts the descriptive statistics of the three groups in the post-test of speaking anxiety. The voiced-based group's mean score is 60.33, the text-based group's mean score is 70.43, and the control group's mean score is 41.90.

Table 4
Inferential Statistics of the Experimental and Control Groups in the Speaking Anxiety Post-tests

	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	15620.42	2	7810.21	63.99	.00
Within Groups	10618.03	87	122.04		
Total	26238.45	89			

Table 4 indicates the scores of the three groups in the speaking anxiety post-test. As Sig (.00) is less than (.05), the differences between the three groups were significantly considerable at ($p < 0.05$). It can be stated that the empirical groups outperformed the control group in the speaking anxiety post-test.

Table 5
Post-hoc Scheffe Test, Multiple Comparisons (Post-test of Speaking Anxiety)

(I) Groups	(J) Groups	Mean Differences (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
VB Group	TB Group	-1.00	2.85	.94	-8.10	6.10
	CG	27.43*	2.85	.00	20.32	34.53
TB Group	VB Group	1.00	2.85	.94	-6.10	8.10
	CG	28.43*	2.85	.00	21.32	35.53
CG	VB Group	-27.43*	2.85	.00	-34.53	-20.32
	TB Group	-28.43*	2.85	.00	-35.53	-21.32

In Table 5, a post-hoc Scheffe test is run to compare all groups' scores in the speaking anxiety post-test. Based on the above outcomes, there was a meaningful difference between the post-test scores of the control group and the post-test of both

empirical groups ($p < 0.05$), while there were not any considerable differences between the speaking anxiety post-tests of the experimental groups ($p < 0.05$).

Table 6
Descriptive Statistics of the Experimental and Control Groups in the Motivation Pre-tests

	N	Means	Std. Deviations	Std. Error
VB Group	30	43.76	11.60	2.115
TB Group	30	45.56	12.63	2.30
CG	30	42.96	11.63	2.12
Total	90	44.10	11.88	1.25

Based on Table 6, the motivation pre-test mean scores of the voice-based group, the text-based group, and the control group are 43.76, 45.56, and 42.96, respectively. The differences between their post-tests seem not significant.

Table 7
Inferential Statistics of the Experimental and Control Groups in the Motivation Pre-tests

	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	106.40	2	53.20	.37	.69
Within Groups	12459.70	87	143.21		
Total	12566.10	89			

Table 7 depicts the scores of the three groups in the motivation pre-test. As Sig (.69) is higher than (.05), the difference between the three groups was not noticeable in the motivation pre-test.

Table 8
Descriptive Statistics of the Experimental and Control Groups in the Motivation Post-tests

	N	Means	Std. Deviations	Std. Error
VB Group	30	93.80	32.99	6.02
TB Group	30	96.73	33.34	6.08
CG	30	46.20	18.66	3.40
Total	90	78.91	37.05	3.90

Based on the descriptive statistics in the above table, the mean scores of the voice-based group, the text-based group, and the control group are 93.80, 96.73, and 46.20, respectively. The differences between their post-tests seem significant.

Table 9
Inferential Statistics of the Experimental and Control Groups in the Motivation Post-tests

	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	48279.82	2	24139.91	28.40	.00
Within Groups	73925.46	87	849.71		
Total	122205.28	89			

Table 9 shows the control and experimental groups' motivation post-test scores. As Sig (.00) is less than (.05), the differences between the three groups are remarkable at ($p < 0.05$). To ensure which groups outperformed the other, the researchers conducted a post-hoc Scheffe test in the following table:

Table 10
Post-hoc Scheffe Test, Multiple Comparisons (Post-test of Motivation)

(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
VB Group	TB Group	-2.93	7.52	.92	-21.67	15.81
	CG	47.60*	7.52	.00	28.85	66.34
TB Group	VB Group	2.93	7.52	.92	-15.81	21.67
	CG	50.53*	7.52	.00	31.78	69.27
CG	VB Group	-47.60*	7.52	.00	-66.34	-28.85
	TB Group	-50.53*	7.52	.00	-69.27	-31.78

The findings of the post-hoc Scheffe test in the above table show that the differences between the post-test scores of the control group and both experimental groups were meaningful, but the differences between the post-test scores of the experimental groups were not significant.

Discussion

After collecting the data, the researchers analyzed them to measure the effects of the treatment on the participants' speaking anxiety and motivation. The outcomes indicated that the subjects who received the instruction via synchronous text-based and voice-based chat performed better than the control group in their post-tests. As a result, the researchers can conclude that incorporating technology like synchronous voice and text chat can significantly affect EFL learners' speaking anxiety and motivation.

Social networking sites can enrich learners' creativity and improve their ability to make authentic and graphic texts. They suggest educators use contemporary methods to deliver learning and teaching content, permitting the flexibility to learn at work or at home

(Kerwin, 2012). More and more, we are finding these sites accessible and less technical than expected. Such sites open new opportunities for instruction to move online by facilitating communication among students at home and saving the time and travel limitations related to traditional site-based and face-to-face instructional approaches. Therefore, internet-driven online multimedia is preparing the ground for off-campus education and permitting learners to utilize computers to access instructional resources (Romoszowski & Mason, 2004).

The results show that learning English is facilitated via using social networking. Indeed, chatting is helpful in language learning; the findings of this research verify the outcomes of the preceding experimental investigations. The consequences of this investigation are congruent with Chérrez (2007), who investigated the impacts of synchronous voice chat on improving students' spoken production after taking part in a six-week task treatment utilizing Yahoo Messenger with Voice in non-native speaker to native-speaker dyads. The findings revealed that the task interactions applying voice chat with natives assisted EFL students in developing their fluency, learning novel vocabularies, and gaining more confidence in speaking the target language and communicating with native speakers of the language. In addition, the findings of this research confirm the results of Perveen (2016), who indicated that asynchronous e-language learning was beneficial for L2 students.

Our research findings are in line with Ono et al. (2015), who demonstrated that the synchronous blog system improved oral skills and increased the motivation of unmotivated EFL students. In addition, our study is in accordance with Mugesatar and Ozdener (2008), who inspected the use of text and voice chat. Their outcomes indicated that the speaking skill of both empirical classes developed thanks to using text and voice chat.

The consequences of the current study are congruent with the ideas of Marr (2000), who stated that technology could improve learners' motivation and language achievement. Researchers have discovered that students utilizing technology have boosted self-confidence and higher self-esteem and are more motivated and successful in learning (Liu, 2007S; Wishart, 2000).

Our study is advocated by constructivists who stated that the learners must apply technology as an instrument to explore problem solutions and gain new information. The use of technology in education creates a situation where students work together to assist each other in constructing new knowledge. Incorporating virtual learning contexts, blogging, media technologies, course management systems, useful websites, and special computer programmes into English language teaching assists in creating optimum learning situations from the constructivist perspective (Kaya, 2015). Based on constructivists, using technology can help learning occur via interactions in meaningful activities. Because there is no time limitation like a lesson, this virtual learning context can provide students with a continuous learning process.

Conclusions and Implications

The first conclusion drawn from this investigation is that chatting with each other is effective for EFL learners. The results of this research indicated that chatting has positive effects on language learners' speaking anxiety and motivation. Using Internet

chat rooms for developing students' motivation and speaking anxiety is also of great importance due to the opportunities that a chat room naturally provides for its users by mixing speaking and writing (more specifically typing) so that all of them can express themselves and type their opinions simultaneously without any interferences and interruptions of others' speeches. This is not practical in real classrooms because students cannot comprehend anything if they start talking and saying their opinions. In sum, online language learning is more interesting and compelling for learners. Online chatting increases English students' motivation and decreases speaking anxiety; it captures their attention; it aids those introverted learners in stating their opinions without embarrassment. Chatting can improve learners' typing skills and self-confidence.

The analysis of the data and the current research results offer some pedagogical consequences for the students, teachers, and curriculum designers. The results of this research are encouraging for the students to improve their speaking and typing skills. Those introverted students who are shy to have face-to-face communication can benefit from the findings of this investigation. This research recommends that students need to be aware of the advantages of utilizing text-chat in language learning. They are familiar with computer and online materials such as chat, e-mail, WWW; however, they do not apply them in their language learning. Therefore, during the employment of social network tools and materials in the curricula, learners and teachers must be informed about how they can implement communication technologies supporting language teaching and learning. For this, help and assistance ought to be supplied from experts and teachers. Administrators of schools and ELT teachers can work on issues cooperatively with proficient teachers all around the globe. Chatting through different applications must be incorporated into curricula since it is familiar to students and teachers.

The results of this research can assist teachers in involving the students in the learning process and give up taking the full responsibility of teaching and bringing up autonomous and independent language students. Teachers need to strive to acquaint their pupils with new teaching methods such as the one discovered in this investigation: chatting on social networks. However, before teaching students how to utilize these methods and strategies successfully, instructors themselves should be instructed about them. Teachers must be furnished with suitable approaches to guide the learners with the proper ones that can concern with complicated academic actions. For example, if one approach does not work well, they ought to be able to offer another one.

Curriculum designers and English teachers can benefit from these results, giving them new insights into the implementation and incorporation of chatting in speaking and other courses. Instructors continually look for more innovative techniques and try to make interactive learning environments that attract learners and encourage them to cooperate and share opinions and experiences. Online chatting is one of the most valuable tools for supplying such powerful and multipurpose learning situations. Online apparatuses permit cooperative projects among different schools and facilitate learners' improvement via contact with classmates and specialists with identical interests.

Limitations and Suggestions of the Study

Like all studies, this research had some limitations and could not cover all the issues pertinent to the topic. They are as follows:

The included participants were limited to 90 people; therefore, the results of our research cannot be generalized to other populations. Next, studies could be replicated at different institutions and schools with a larger number of respondents. Only pre-test and post-test were used to collect the data for this investigation. Some qualitative research tools could be used (e.g., open-ended questionnaire items & interviews) in the subsequent studies to understand what teachers and learners think about chatting. This research was conducted in a private language institution; other studies can be done among high school and university students.

References

- Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of the Japanese. *Modern Language Journal*, 78(2), 155-168. <https://doi.org/10.1111/j.1540-4781.1994.tb02026.x>
- Al-Rubaat, A. M. (2022). The relationship between the morphological phenomena of the current sakakan dialect and the modern standard Arabic. *Eurasian Journal of Applied Linguistics*, 8(1), 1-12. Doi: <http://dx.doi.org/10.32601/ejal.911515>
- Asoodar, M., Atai, M. R., Vaezi, S., & Marandi, S. S. (2014). Examining effectiveness of communities of practice in online English for academic purposes (EAP) assessment in virtual classes. *Computers and Education*, 70, 291–300. <https://www.learntechlib.org/p/200693/>
- Aydın, S. (2018). Technology and foreign language anxiety: Implications for practice and future research. *Journal of Language and Linguistic Studies*, 14(2), 193-211. <https://files.eric.ed.gov/fulltext/EJ1184384.pdf>
- Blau, I., Weiser, O., & Eshet-Alkalai, Y. (2017). How do medium naturalness and personality traits shape academic achievement and perceived learning? An experimental study of face-to-face and synchronous e-learning. *Research in Learning Technology*, 25. doi: 10.25304/rlt.v25.1974
- Brown, H.D. (2000). *Principle of language learning and teaching* (4th Ed.). Longman.
- Chen, Y., & Chew, S. Y. (2021). Speaking performance and anxiety levels of Chinese EFL learners in face-to-face and synchronous voice-based chat. *Journal of Language and Education*, 7(3), 43-57. <https://doi.org/10.17323/jle.2021.11878>
- Cherrez, N. (2007). *A case study of the impact and usefulness of synchronous voice chat to improve EFL learners' spoken production*. Retrospective Theses and Dissertations, Iowa State University Digital Repository.
- Crookes, G. & Schmidt, R. (1991). Motivation: Reopening the research agenda. *Language Learning*, 31, 469-512. <http://dx.doi.org/10.1111/j.1467-1770.1991.tb00690.x>
- Dörnyei, Z. (2001). *Teaching and researching motivation*. Longman.
- Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Lawrence Erlbaum.
- Dörnyei, Z. (2009). The L2 motivational self-system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9–42). Bristol: Multilingual Matters.
- Ellis, R. (1997). *The study of second language acquisition*. Oxford University Press.

- Ellis, R. (2012). *Language teaching research and language pedagogy*. John Wiley & Sons. <https://doi.org/10.1002/9781118271643>
- Fabriz, S., Mendzheritskaya, J., & Stehle, S. (2021). Impact of synchronous and asynchronous settings of online teaching and learning in higher education on students' learning experience during COVID-19. *Frontiers in Psychology, 12*, 1-16. <https://doi.org/10.3389/fpsyg.2021.733554>
- Gallos, J. V. (2006). Organization development. A Jossey-Bass reader. (J. V. Gallos, Ed.), *The Jossey-Bass business & management series* (pp-73-87). Jossey-Bass. A Wiley Imprint.
- Gardner, R. C. (2004). *Attitude/Motivation test battery: International AMTB research project*. The University of Western Ontario, Canada.
- Gregersen, T. S. (2005). Nonverbal cues: Clues to the detection of foreign language anxiety. *Foreign Language Annuals, 38*, 388-400. <https://doi.org/10.1111/j.1944-9720.2005.tb02225.x>
- Harmer, J. (2007). *The practice of English language teaching* (Fourth edition). Pearson Education.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal, 70*(2), 125-132. Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal, 70*(2), 125-132. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>
- Hrastinski, S. (2008). Asynchronous and synchronous e-learning. *Quarterly Journal of Education, 31*, 51-55. <https://er.educause.edu/articles/2008/11/asynchronous-and-synchronous-elearning>.
- Hrastinski, S. (2010). How do e-learners participate in synchronous online discussions? Evolutionary and social psychological perspectives, in *Evolutionary Psychology and Information Systems Research* (119-147). N. Kock (Boston, MA: Springer US).
- Kaya, H. (2015). Blending technology with constructivism: Implications for an ELT classroom. *Teaching English with Technology, 15*(1), 3-13. <https://files.eric.ed.gov/fulltext/EJ1140571.pdf>.
- Kerwin, D. (2012). *The impact of digital and computer mediated communications on the academic writing of adolescents*. Cortland, NY: SUNY College.
- Kılıçarslan, S., Bal Sezerel, B. & Sak, U. (2021). An investigation of the relationship between speed-based verbal reasoning subtest of Anadolu-Sak intelligence scale and perceptual speed tests. *Talent, 10* (2), 129-142. DOI: 10.46893/talent.844308
- Kim, H. J., Hong, A. J., & Song, H.-D. (2019). The roles of academic engagement and digital readiness in students' achievements in university e-learning environments. *Journal of Educational Technology in Higher Education, 16*, 1-18. <https://doi.org/10.1186/s41239-019-0152-3>.
- Kim, N. Y. (2017). Effects of types of voice-based chat on EFL students' negotiation of meaning according to proficiency levels. *English Teaching, 72*(1), 159-181. DOI:10.15858/engtea.72.1.201703.159.
- Lawler, E. (1973). Expectancy theory and job behavior. *Organizational Behavior and Human Performance, 9*, 482-503. [https://doi.org/10.1016/0030-5073\(73\)90066-4](https://doi.org/10.1016/0030-5073(73)90066-4)

- Liu, H. (2007). Social network profiles as taste performances. *Journal of Computer-Mediated Communication*, 13(1), 101-117. <https://doi.org/10.1111/j.1083-6101.2007.00395.x>
- MacIntyre, P. (1995). How does anxiety affect second language learning? A reply to Sparks and Ganschow. *The Modern Language Journal*, 79(1), 90-99. <https://doi.org/10.1111/j.1540-4781.1995.tb05418.x>
- Marefat, F., & Pakzadian, M., (2017). EFL Learners' Motivation and Attitude toward EIL in the Increasingly Globalized Local Context of Iran: A Structural Equation Modeling Approach. *Journal of English Language Teaching and Learning University of Tabriz*, 19, 91-120. https://elt.tabrizu.ac.ir/article_6256_ae9acca48b9d989a845f8a81d7d66c3e.pdf.
- Muftah, M., & Rafic-Galea, S. (2013). Language learning motivation among Malaysian pre-university learners. *English Language Teaching*, 6(3), 92–103. □ DOI:10.5539/elt.v6n3p92
- Mugesatar, H., & Ozdener, N. (2008). The effects of synchronous CMC on speaking proficiency and anxiety: text versus voice chat. *The Modern Language Journal*, 92, 595–613. <https://doi.org/10.1111/j.1540-4781.2008.00789.x>
- Nasri, M., Shafiee, S., & Sepehri, M. (2021). An investigation of Iranian intermediate EFL learners' L2 motivation and attitude in a computer-assisted language learning environment. *Issues in Language Teaching (ILT)*, 10(1), 355-389. doi: 10.22054/ilt.2021.62359.614.
- Nsa, S. O., Akpan, E. O., & Williams, P. S. (2012). Instructional strategies and students' skills acquisition in vegetable crop production. *Pakistan Journal of Economic Studies*, 2, 163–167. https://ijbssnet.com/journals/Vol_5_No_8_1_July_2014/18.pdf
- Ogbonna, C. G., Ibezim, N. E., & Obi, C. A. (2019). Synchronous versus asynchronous e-learning in teaching word processing: An experimental approach. *South African Journal of Education*, 39, 1–15. DOI: 10.15700/saje.v39n2a1383
- Ojekemi, O.S., Rjoub, H., Awosusi, A.A., Agyekum, E. B. (2022). Toward a sustainable environment and economic growth in BRICS economies: do innovation and globalization matter?. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-022-19742-6>.
- Ono, Y., Onishi, A., Ishihara, M., & Yamashiro, M. (2015). Voice-based computer mediated communication for individual practice to increase speaking proficiency: Construction and pilot study. *CALICOJ*, 9(3), 61–68. DOI: 10.1007/978-3-319-20609-7_12
- Oroujlou, N., & Vahedi, M. (2011). Motivation, attitude, and language learning. *Procedia- Social and Behavioral Sciences*, 29, 994–1000. <https://doi.org/10.1016/j.sbspro.2011.11.333>
- Öztürk, G., & Gürbüz, N. (2014). Speaking anxiety among Turkish EFL learners: The case at a state university. *Journal of Language and Linguistic Studies*, 10(1), 1-17. <https://www.jlls.org/index.php/jlls/article/download/178/165>
- Pappamihel, N. E. (2002). English as a second language students and English language anxiety: Issues in the mainstream classroom. *Proquest Education Journal*, 36(3), 327-355. http://lhc.ucsd.edu/mca/Mail/xmcamail.2004_09.dir/att-0070/01-RT0363English.pdf

- Pertaub, D. P., Slater, M., & Barker, C. (2001). An experiment on public speaking anxiety in response to three different types of virtual audience. *Teleoperators and Virtual Environments*, 11(1), 68-78. DOI: 10.1162/105474602317343668
- Perveen, A. (2016). Synchronous and asynchronous e-language learning: A case study of virtual university of Pakistan. *Open Praxis*, 8 (1), 21–39. DOI: 10.5944/openpraxis.8.1.212
- Qashoa, S. H. (2006). *Motivation among Learners of English in the Secondary Schools in the Eastern Coast of the UAE*. Dubai: British University in Dubai.
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*, 2, 923–945. <https://doi.org/10.1007/s42438-020-00155-y>
- Romoszowski, A., & Mason, R. (2004). Computer-mediated communication. *The Modern Language Journal*, 93, 769-782. http://www.communicationcache.com/uploads/1/0/8/8/10887248/computer-mediated_communication_-_chapter_15.pdf
- Samadi, H. & Samadi, N. (2020). Study of life skills based on the verses of the textbook of Holy Quran. *Journal of Social science and Humanities Research*, 8(3), pp.37-42. <https://journals.researchhub.org/index.php/jsshr/article/download/906/811>
- Scovel, T. (1978). The effect of affect on foreign language learning: A review of the anxiety research. *Language Learning*, 28, 129-142. <https://doi.org/10.1111/j.1467-1770.1978.tb00309.x>
- Smith, D., & Smith, K. (2014). Case for ‘passive’ learning – the ‘silent’ community of online learners. *The European Journal of Open, Distance and E-Learning*, 17, 86–99. <https://doi.org/10.2478/eurodl-2014-0021>
- Spielberger, C. D. (1983). *Manual for the state trait anxiety inventory*. Consulting Psychologists Press.
- Tanti, Miriam. (2012). Literacy education in the digital age: Using blogging to teach writing. *Teaching English with Technology*, 12(2), 132 - 146. <https://files.eric.ed.gov/fulltext/EJ1144932.pdf>
- Teng, D. C., Chen, N., Kinshuk, S., & Leo, T. (2012). Exploring students’ learning experience in an international online research seminar in the Synchronous Cyber Classroom. *Computers and Education*, 58(3), 918–930. doi:10.1016/j.compedu.2011.10.018
- Trong Tuan, L. (2012). An empirical research into EFL learners’ motivation. *Theory and Practice in Language Studies*, 2(3), 430-439. <https://www.academypublication.com/issues/past/tpls/vol02/03/02.pdf>
- van der Keylen, P., Lippert, N., Kunisch, R., Kühlein, T., & Roos, M. (2020). Asynchronous, digital teaching in times of COVID-19: a teaching example from general practice. *Journal for Medical Education* 37: Doc98. doi: 10.3205/ZMA001391
- Wang, L. J., & Chang, H. F. (2010). Applying innovation method to assess English speaking performance on communication apprehension. *Belt Journal*, 1(2), 147-158. <https://revistaseletronicas.pucrs.br/index.php/belt/article/view/8218>
- Wishart, J. (2002). Students and teacher’s motivation and learning through use of CD – ROMs. *Journal of Multimedia and Hypermedia*, 9(4), 333-347. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.492.5916&rep=rep1&type=pdf>

- Xie, H., Liu, W., Bhairma, J., & Shim, E. (2018). "Analysis of synchronous and asynchronous E-learning environments," in *Proceedings of the 2018 3rd Joint International Information Technology, Mechanical and Electronic Engineering Conference (JIMEC 2018)*, ed. B. Xu (Paris: Atlantis Press).
- Yamagata-Lynch, L. C. (2014). Blending online asynchronous and synchronous learning. *The International Review of Research in Open and Distributed Learning*, 15(2), 18-31. DOI: 10.19173/irrodl.v15i2.1778
- Yılmaz, Y. & Çelebi, C. (2022). Views of information technologies teachers on the effects of values education on informatics ethics. *International Online Journal of Education and Teaching (IOJET)*, 9(1). 506-530. <https://iojet.org/index.php/IOJET/article/download/1535/771>
- Young, D. J. (1990). An investigation of students' perspectives on anxiety and speaking. *Foreign Language Annals*, 23(6), 539-553. <https://doi.org/10.1111/j.1944-9720.1990.tb00424.x>