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The Traces of Positive Psychology in Technology-enhanced Language Learning: A Reflection on the State of Self-Confidence, Self-Efficacy, and Self-esteem in EFL Setting

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Abstract

Keeping the importance of technology-enhanced language learning in mind, this study intended to inspect the effects of online learning as a sub-category of technology-based instruction on the self-confidence, self-esteem, and self-efficacy of EFL learners in the EFL context of Uzbekistan. To perform this study, 80 EFL learners were selected and divided into two groups: The Control Group (CG) and the Experimental Group (EG). Before doing the research, the groups were pretested on self-efficacy, self-esteem, and self-confidence. Next, the CG received a traditional treatment; no technology-based instruments were used. Five units of Touchstone 3 were instructed to this group in a face-to-face class by their teacher. The same lessons were taught to the EG via applying online instruction. After teaching all lessons, the posttests of self-efficacy, self-esteem, and self-confidence were administered to both groups. The results of the independent samples t-test and ANCOVA test displayed that the differences among the posttests of the two groups were statistically substantial. The EG outstripped the CG on the three posttests.

The EFL teachers, learners, and material developers can benefit from the impact of the research.

Keywords: Online Learning, Positive Psychology, Self-Confidence, Self-Efficacy, Self-Esteem, Technology

Introduction

The rapid development of technology opens new avenues for teaching and learning the English language worldwide. According to Dusek (2006), technology is the usage of scientific or other knowledge to practical tasks by organized systems that include productive skills, living things, machines, and people and organizations. These days, as technology advances constantly, instructional approaches and learning tactics develop as well (Hollands & Escueta, 2020). According to Reinders and White (2011), technologies have created educational settings, opportunities, and resources, making it easier for students to build self-directed learning practices. By adopting technology to suit their requirements, language learners may experience the process of language acquisition. Many chances exist for EFL students to simply establish communications in foreign language environments with native speakers thanks to technology (Reinders & Benson, 2017).

Consequently, language learners must understand how to use technology for language acquisition (Reinders & Darasawang, 2012). Technology integration in the classroom has given educators and students exciting new chances to improve the effectiveness of the educational process (Yenkimaleki & van Heuven, 2019). Accordingly, Reiser and Ely (1997) described educational technology as a discipline concerned with the methodical identification, creation, organization, and use of a wide variety of learning resources and the administration of these activities to facilitate human learning.

Technology promotes online education in a variety of settings. Since online learning has been around for a while and has given students, teachers, educational planners, and institutions new opportunities, it is a suitable alternative for teaching various courses (Mayadas et al., 2009; Rahimi et al., 2021). Online learning was born with the emergence of the Internet and technological developments. It entails planning, organizing, presenting, and assessing pupils' learning while utilizing e-learning tools to support it (Ahmed & Al-Kadi, 2021; Moore & Kearsley, 2011). However, to facilitate students' effective learning, it is imperative to go beyond haphazard online approaches and provide high-caliber online learning materials that result from careful instructional designs and planning (Hodges et al., 2020). Affective elements, including self-confidence, self-efficacy, and self-esteem, may be crucial to students' learning in this virtual setting. As a result, it is vital to investigate and take them into account in online classes.

Self-confidence is the belief in one's performance (Clark et al., 2008). Furthermore, as Rubio (2007) stated, self-confidence is a feeling of competence required for satisfaction and managing daily problems. A person's view of and self-esteem

constitute their level of self-confidence (Marianty et al., 2021). Success in life may be attributed to having self-confidence, not just in academic pursuits but also in interpersonal and social relationships. It is evident that self-assured students are enthusiastic, put in more effort, are more driven, and persevere through difficulties (Bong, 2008). Individuals who exude confidence will be highly optimistic about their ability to succeed. Even though self-esteem and confidence are important in school, many kids still struggle with these issues. Less confident learners will exhibit certain behaviors, including shutting down, retreating from their surroundings, avoiding conversation, participating little in group activities, and acting aggressively (Fitri et al., 2018). One of the effects of low self-esteem among high school kids is poor academic performance. Because they do not believe in themselves, students who lack self-confidence are likelier to perform poorly in class. People frequently think they will fail the tests and quizzes their professors offer them because of the negative ideas always going through their heads. Additionally, pupils are more likely not to be involved in class if they feel uneasy speaking in front of the group or sitting in front of the group. Various issues may contribute to pupils' poor self-confidence (Cadiz-Gabejan, 2021).

According to Dornyei and Ryan (2015), self-esteem is an evaluation of one's worth and perspective. While Habrat (2013) describes self-esteem as competence, success, and engagement with the outside world, Manning et al. (2006) describe it as self-acceptance. A strong sense of self-worth is necessary for effective English language learning. Probably the most important factor influencing human conduct is self-esteem. According to Brown (2000), one cannot engage in any effective cognitive or emotional activity without a certain level of self-worth, self-assurance, self-awareness, and faith in one's capacity to complete the task. Stated differently, low self-esteem might hinder learners' ability to meet objectives, such as speaking both in their mother tongue and a foreign language (Arifin & Pertiwi, 2017).

People with high self-esteem often think well of themselves, their skills, and their prospects. However, poor self-esteem can lead to unfavorable ideas and insecure sentiments. Therapy, introspection, and partaking in activities that boost self-esteem and confidence can also help to enhance it (Marpaung & Wenas, 2019). Additionally, you may boost your self-esteem by surrounding yourself with encouraging and supporting individuals. Individuals' general success and happiness can be significantly impacted by their ability to develop and maintain a good sense of self-worth (Nurhayati & Bewa Kaha, 2019).

An individual's self-worth and self-efficacy largely determine success and failure. They affect the effort someone puts in to accomplish their goals. Those with high self-efficacy put forth more energy to finish projects than those with low self-efficacy, while those with high self-esteem think well of themselves. Individuals with poor self-esteem frequently criticize themselves (Kartika, 2022). Their self-efficacy fuels students' confidence in their ability to finish a task or get the intended results. People with strong self-efficacy set higher standards for themselves and are more determined to achieve their

goals. Furthermore, they ultimately achieve greater success than those with low self-efficacy (Bandura, 2006). Happiness and life satisfaction have been demonstrated to be correlated with self-efficacy (Bandura, 2000).

As declared by Huang et al. (2016) and Schwarzer et al. (2014), people with high levels of self-efficacy are more likely to think that they can handle and succeed in tasks that need a lot of resources. Individuals' interactions with their surroundings enhance their self-efficacy since they feel more capable of managing difficult activities (Bandura, 2011). When activities get more challenging, people may have reduced levels of self-efficacy, which may reduce their likelihood of finishing the work (Lee & Mendlinger, 2011). Many investigations have found a direct connection between self-efficacy and work abilities (Hirschi & Jeansch, 2019), physical and mental health, and academic performance (Anderson et al., 2006).

Theoretical Background

In the twenty-first century, technological use in education is crucial. It is difficult for educators in the twenty-first century to incorporate new technology into their lesson plans (Kurniawati et al., 2018). Additionally, employing technology in EFL classes has the potential to boost student English proficiency and the efficacy of the learning and teaching process (Fitriah, 2018). Using technology in their lesson plans might provide challenges for teachers at times. However, instructors are open to integrating technology into the classroom to enhance language instruction and learning. They understand that when technology is utilized wisely, it can provide educators with new opportunities to apply their creativity, provide students with real-world experience in the classroom, and assist students in developing 21st-century skills (Insani et al., 2018).

As one of the fundamental abilities of the twenty-first century, technology is required of students in both the classroom and the business (Suherdi, 2017). They are capable of integrating technology into their daily life. During the learning process, students can utilize ICT to access online learning resources and investigate any information related to their course (Kee & Samsudin, 2014). The assertion made by Lam and Lawrence (2002) that utilizing technology gives students easy access to knowledge and empowers them to take charge of their education supports it.

Since online classes offer a secure and safe way to interact with students and continue studying, nearly all higher education institutions worldwide have switched to online learning environments. This massively unplanned shift from the conventional in-person learning model to a fully online learning environment brought about a new era of instructional strategies educational institutions use to provide students with course material (Xu & Jaggars, 2011). Students unfamiliar with online learning may find it hard, partly because of the restricted opportunities for nonverbal communication. The overall experience and satisfaction of participants in online education can be equally influenced by other facets of online teaching, including instructor and student engagement or interactions, availability of learning materials, internet cost and access, self-confidence,

perceived quality, and time management (She et al., 2021; Conrad et al., 2022). To give policymakers information intended to improve the process of learning and teaching during these peculiar times, it is crucial to evaluate this evolution in instructional modes.

Studies show differences in students' access to digital learning resources at home, such as high-quality broadband connectivity, notwithstanding the widespread adoption of online learning in education. These factors include internet accessibility and affordability, which negatively influence pupils' satisfaction with this innovative learning environment (Cullinan et al., 2021; Rasheed et al., 2020). According to Li et al. (2021), pupils who encounter internet connectivity issues, including network congestion, give a low rating to both their overall happiness and e-learning experience when participating in online learning. Cost and accessibility issues with the Internet still exist worldwide, especially in wealthy nations. For instance, a US survey found that 20% of college students struggled to keep up with technology use because of issues with internet availability and data restrictions (Gonzales et al., 2020). Several factors, like inadequate fiscal resources, lack of access to necessary devices like laptops or desktop PCs, and the digital literacy abilities needed to attend online learning, contribute to the problem of internet affordability and accessibility (Silva et al., 2018). Student performance and satisfaction are always negatively impacted by variations in connectivity, which limit their ability to participate in online classes and with online information (Gonzales et al., 2020). According to the expectation confirmation theory, pupils expect cost-effective and seamless internet access to have a satisfying educational experience, which raises satisfaction (Jiang & Klein, 2009).

A student's belief or faith in their ability to do a task effectively is known as self-confidence (Mayadas et al., 2009). Perkins (2018) states that, among other things, self-confidence is linked to success, accomplishments in school, conciliation, and an individual's well-being. The three variables that might influence an individual's degree of self-confidence are self-esteem, self-efficacy, and self-compassion. Students' lack of confidence can cause issues not just for themselves but also for the institutions where they attend and for the efficient teaching of the curriculum. Low self-confidence caused many students to participate in class insufficiently and make inadequate progress after spending a significant amount of time in the classroom, which is largely to blame for the existing crisis in the instructional system. According to Norman and Hyland (2003), confidence plays a role in learning and can impact students' engagement and advancement. For students to take chances and participate in learning activities, they must have much self-confidence. Students who possess this confidence create goals for themselves and work hard to attain them without concern for the results (Tridinanti, 2018).

According to Sara et al. (2010), people have confidence from birth, but it might alter as they become older. Anxiety, self-insecurity, dread, and a sense of social alienation can all contribute to a decrease in a student's confidence (Rubio, 2007). Self-assurance is a powerful motivator and may influence behavior in people. A student's self-confidence may be defined as their sense of assurance in their ability to effectively complete various

tasks outside and inside the classroom to learn (Benabou & Tirole, 2002). However, the researcher's findings on the influences of self-confidence on the learning process indicate that students' learning differs depending on their confidence level (Atherton, 2015).

Self-efficacy is one of the most vital components in creating an effective self-management strategy for a chronic illness. According to research, their self-efficacy beliefs impact numerous facets of an individual's performance (Maddux 2016). Because it affects the maintenance of healthy habits, a person's confidence, or trust in his strength, is required to complete any activity (Gallagher et al. 2008). Individuals with greater self-efficacy exhibit superior physical and mental well-being compared to those with lower levels. Understanding one's values may help the patient become aware of his present state of health while adhering to the prescribed course of action. Self-efficacy measures an individual's problem-solving skills and indicates that someone feels confident in his abilities in various challenging scenarios (Harry et al., 2007). Cancer patients may find it easier to manage the stress and strain of their condition if they have a healthy sense of their value (Chirico, 2017). Prior research has demonstrated strong correlations between improved physical and mental health-related quality of life (Robb, 2013), greater physical functioning (Phillips & McAuley, 2014), and improved quality of life among cancer patients (Haugland, 2016).

The experience and outcomes of learning for L2 learners can also be influenced by self-efficacy. Research suggests that learners possessing a high degree of self-efficacy could experience greater levels of confidence when learning a language (Sabti et al., 2019), motivation to engage in language learning activities (Anam & Stracke, 2020; Doménech-Betoret et al., 2017; Mendoza et al., 2022), and reduced anxiety when addressing learning challenges (Pawlak & Csizér, 2022). According to Wang et al. (2021), Chinese undergraduate students studying English who possess a high sense of self-efficacy report feeling more pride and joy during the learning process. Similarly, Japanese EFL students report feeling more motivated to read and listen when they possess a positive sense of self-efficacy (Chen et al., 2021). Furthermore, some studies have found that EFL learners with a high degree of self-efficacy also often do better across the board in the four abilities of writing, speaking, listening, and reading (Chen & Zhang, 2019; Wang & Sun, 2020).

An individual's views and attitudes about their values and talents are evaluated to determine their level of self-esteem. Due to the numerous changes in teenage roles and responsibilities, self-esteem is often unstable throughout this time (Zhao et al., 2021). Early adolescence is when self-esteem frequently declines, whereas middle and later adolescence is when it tends to rebound (Trzesniewski et al., 2003). Positive self-experiences (Peng et al., 2019), excellent interpersonal interactions, and improved mental and physical health (Cameron & Granger, 2019; Li et al., 2010) are all associated with adolescents with high self-esteem levels.

According to Riasati and Zare (2012), students with strong self-esteem are better equipped to overcome obstacles in their language learning process and experience less

anxiety. In other words, pupils with high self-esteem tend to learn languages more successfully than those with poor self-esteem. As previously said (Halima, 2015), high self-esteem encourages initiative and good attitudes about learning. It supports kids in achieving positive outcomes despite stress or other challenges. When students or children feel good about themselves, they will progress further in their development. According to Satriani (2014), people with low self-esteem frequently exhibit signs of stress and melancholy. Students with low self-esteem will struggle to progress since they don't think learning is fun and don't want to do it.

Self-esteem is a fundamental psychological construct that may be used to drive academic engagement (Lim & Lee, 2017). According to expectation-value theory, an individual's positive self-evaluation may predict academic results like academic engagement (Fang, 2016). Based on research by Sirin and Rogers-Sirin (2015), there was a considerable constructive link between academic engagement and self-esteem, which impacted the fields linked to academic engagement. According to a study by Filippello et al. (2019), a person's degree of academic involvement may be predicted by their sense of self-worth.

Experimental Background

Masykuri (2022) studied how students who were taught listening comprehension during the pandemic were affected by technology. For this study, the researchers chose 66 seniors in high school. The researchers employed a test as a tool for their investigation. The researchers employed a learning management system and a YouTube short video to provide the content. The researchers used Anates software to analyze the data statistically. The consequences of this examination depicted that technology-assisted language learning significantly impacts EFL listening comprehension.

Nguyen and Pham (2022) made an effort to look at how using technology may help high school students improve their speaking abilities and how they feel about using technology to study foreign languages. One hundred students participated in the investigation, which was carried out in a high school in the province of Kien Giang. They answered questions concerning the use of technology to improve their speaking abilities. Furthermore, the participation of six English instructors in the interview provides an understanding of teachers' views on the use of technology to assist students in improving their speaking abilities. The study's findings demonstrated how much technology affected speech.

Rezaei Dastgerdi (2022) examined how employing online activities could affect Iranian EFL learners' speaking abilities. Because of this, thirty volunteers were randomly chosen and split into two EGs and one CG. First, the participants took the speaking portion of the IELTS exam. The EGs were given access to two types of online learning tasks related to speaking abilities—one with instructor assistance and the other without—while the CG was not given any. A posttest on speaking proficiency was then administered to the three groups to compare the potential effects of the online learning activities. The outcomes demonstrated that the EG participants produced more fruitful

outcomes. Furthermore, the outcomes of the two EGs with the teacher's active participation were superior.

Zhou (2023) looked at how Chinese postgraduate students' willingness to communicate (WTC) and speaking abilities were affected by online language exchanges. The outcomes showed that both groups had improved WTC and speaking abilities. The e-tandem group did better than the conventional group, nevertheless. The results showed that online language interactions positively impacted EFL learners' speaking abilities and WTC. Additionally, the EFL students' attitudes and views of the online language exchanges were favorable.

In a research published in 2023, Sart investigated how university students' self-confidence was affected by technological advancements. This research investigated how university students' self-confidence was impacted by the efficient use of technology and its advancement as 21st-century abilities. This study showed a strong understanding of current educational successes and shortcomings, such as the efficient use of technology and its advancement for university students' self-confidence. This study demonstrated the need for educational reform to improve technical fluency and creative problem-solving to boost participants' self-confidence.

Research Questions

Three questions were raised in this research:

RQ1. Does applying online learning as a technology-based instruction increase learners' self-confidence in EFL?
RQ2. Does applying online learning as a technology-based instruction increase learners' self-efficacy in an EFL setting?
RQ3. Does applying online learning as a technology-based instruction increase learners' self-esteem in an EFL setting?

Methodology of the Research

Research Participants

Deciding to conduct this study and answer the questions posed above, 80 EFL learners were selected among 148 students in one private English institute located in Tashkent City, Uzbekistan. The 80 selected participants were at the intermediate level based on their performance on the OQPT. Both genders with the age range of 18 to 26 were included in this study. Forty participants were regarded as the CG, and the rest were considered the EG. The materials taught to both groups and their teachers were the same; the only difference was the teaching method; the CG was trained traditionally, while the EG was trained using online learning.

Research Instruments

Self-Efficacy Scale

The five items of the Pattern of Adaptive Learning Scales (PALS) Academic Efficacy subscale, which measured students' judgments of their academic competence, were used to measure the academic self-efficacy of the students in this study both before and after the instruction (Midgley et al., 2000). On a scale of 1 (Not at all true) to 5 (Very true), participants indicated how much they thought each item described them. Their answers were added to create a global academic self-efficacy score ranging from 5 to 25. From the freshman to the senior year, academic efficacy's reliability coefficient (α) was 0.86, 0.85, 0.89, and 0.90, respectively, indicating strong measurement reliability.

Self-Esteem Scale

This study employed a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The 10-item Rosenberg self-esteem scale was widely accepted to evaluate general self-esteem (Rosenberg, 1965), which has been shown for the invariance of concept in the EFL contexts. Over four academic years, the coefficients of scale reliability (α) varied from 0.878 to 0.887, indicating acceptable internal consistency. This measure was applied both before and after the therapy, and it was approved by a group of English specialists.

Self-Confidence Scale

The degree of students' self-confidence before and after the therapy was assessed in this study using the Alkhaldi et al. (2021) self-confidence questionnaire. Thirty-nine items were included on a 5-point Likert scale from 1 (completely disagree) to 5 (absolutely agree). The dependability of this scale was demonstrated by the Cronbach Alpha values, which indicated α=.83. Three English professors in applied linguistics were given this questionnaire to review and provide feedback on. They verified its legitimacy after giving it a thorough inspection.

Research Procedures

As stated above, two groups of 40 participants were selected for this study. Before conducting the research, they were pretested on self-efficacy, self-esteem, and self-confidence. Then, the CG received the treatment conventionally without using any technology-based instruments. Five units of Touchstone 3 were trained for this group in a face-to-face class by their teacher. The same lessons were taught to the EG via using online instruction. A WhatsApp group was formed, and the EG participants were its members. Each part of the lesson was sent on this application, and the teacher provided the necessary explanations and feedback. The participants were required to share their knowledge and ideas in this online group; cooperative learning was encouraged among this group. After teaching all lessons, three posttests were given to both groups to measure the influences of the intervention on their self-efficacy, self-esteem, and self-confidence.

Research Results

The following tables present the results of the two groups pretests and posttests separately. First, an independent samples t-test was used to analyze the pretest data; second, several ANCOVA tests were conducted to investigate the scores gained on the three posttests.

Table 1

Pretests Results

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Efficacy	CG	40	12.62	2.82	.44
	EG	40	11.57	2.18	.34
Esteem	CG	40	20.62	4.07	.64
	EG	40	22.20	3.81	.60
Confidence	CG	40	69.77	6.78	1.07
	EG	40	71.75	6.87	1.08

The two groups' mean scores and standard deviations are shown in the table above. The mean scores of the two groups on each dependent variable pretest are almost equal. They had an identical performance before getting the intervention.

Table 2

Pretests Results

	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Efficacy	4.48	.03	1.86	78	.06	1.05	.56
			1.86	73.32	.06	1.05	.56
Esteem	.83	.36	-1.78	78	.07	-1.57	.88
			-1.78	77.67	.07	-1.57	.88
Confidence	.02	.86	-1.29	78	.20	-1.97	1.52
			-1.29	77.98	.20	-1.97	1.52

The inferential statistics in Table 2 show no substantial differences between the pretests of the CG and EG. Based on the table, all sig values are above .05, implying that the members of the two groups were at the same level of self-esteem, self-efficacy, and self-confidence before the instruction.

Table 3

Self-efficacy Posttest Results

Groups	Mean	Std. Deviation	N

CG	14.82	3.74	40
EG	18.40	2.83	40
Total	16.61	3.75	80

The mean scores and the standard deviations of the CG and EG on the self-efficacy posttest are displayed in Table 3. The mean scores of the CG and EG are 14.82 and 18.40, respectively. One can conclude that the EG outdid the CG on the self-efficacy posttest.

Table 4

Self-efficacy Posttest Results

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	308.51[a]	2	154.25	14.72	.00
Intercept	522.51	1	522.51	49.88	.00
Pretest	52.90	1	52.90	5.05	.02
Groups	293.90	1	293.90	28.06	.00
Error	806.47	77	10.47		
Total	23193.00	80			
Corrected Total	1114.98	79			

The inferential statistics in the above table prove meaningful differences amongst the self-efficacy posttests of the CG and EG. The sig value is less than 0.05, inferring that the EG outdid the CG on the self-efficacy posttest.

Table 5

Self-esteem Posttest Results

Groups	Mean	Std. Deviation	N
CG	24.37	7.77	40
EG	31.62	11.31	40
Total	28.00	10.31	80

The mean score of the CG is 24.37, and the mean score of the EG is 31.62 on the self-esteem posttest. Their mean scores are clearly different; the mean score of the EG is higher than the CG. This betterment can be attributed to the advantages of the online instruction.

Table 6

Self-esteem Posttest Results

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.

Corrected Model	4304.01[a]	2	2152.00	40.39	.00
Intercept	126.63	1	126.63	2.37	.12
Pretest	3252.76	1	3252.76	61.05	.00
Groups	419.75	1	419.75	7.87	.00
Error	4101.98	77	53.27		
Total	71126.00	80			
Corrected Total	8406.00	79			

The inferential statistics show that the EG outstripped the CG on the self-esteem posttest as the sig value is lower than .05. The meaningful difference that exists between the posttests of the two groups may be attributed to the online instruction that the EG had received.

Table 7

Self-confidence Posttest Results

Groups	Mean	Std. Deviation	N
CG	77.85	10.21	40
EG	86.10	11.43	40
Total	81.97	11.54	80

As Table 7 reveals, the mean score of the EG on the self-confidence posttest is significantly higher than the CG's mean score. An ANCOVA test was run in the following table to see if there exists any considerable difference between the self-confidence posttests of both groups.

Table 8

Self-confidence Posttest Results

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1668.52[a]	2	834.26	7.24	.00
Intercept	2717.66	1	2717.66	23.59	.00
Pretest	307.27	1	307.27	2.66	.10
Group	1153.76	1	1153.76	10.01	.00
Error	8867.42	77	115.16		
Total	548128.00	80			
Corrected Total	10535.95	79			

The inferential statistics in Table 8 confirm a considerable difference between the CG and EG self-confidence posttests. The sig value is lower than 0.05, deducing that the EG did better than the CG on the self-confidence posttest.

Discussion

The results gained in this study reveal that the EG outperformed the CG on the three posttests. Put differently, the results indicate that EFL learners' self-confidence, self-efficacy, and self-esteem were enhanced by online learning as a kind of instructional technology. The EG group's growth may be attributed to the advantages of online education, which include More chances for virtual group work and meetings that allow students to communicate with peers virtually. Online courses' message boards and grouping features are advantageous as they enable students to share their thoughts on assigned readings and other tasks and reply to their peers.

Additionally, with virtual learning, students may have more one-on-one time with their professors, which is advantageous for networking and education. Students can post work for evaluation and contact their lecturer through the director. Additionally, online classes could be beneficial for individuals who find that participating in class causes them to lose concentration. When interacting online, less forceful students might be able to participate in class discussions more effectively. With self-paced learning and the freedom to work from any location, the outcome may be a more customized educational experience. Students in online courses are free to select the time that suits them best for finishing readings and tasks. Courses may be performed anywhere there is an internet connection because the coursework is done online.

There are several benefits to utilizing technology in the classroom. You may frequently receive rapid feedback following tests, saving you from waiting days or weeks. Students in online courses submit digital work for their professors to examine. Teachers grade student work online and provide comments digitally. Students consequently get comments immediately. Students might have to wait a week or two in a regular classroom to hear back on their assignments. Students can learn quickly and improve for the next tasks if they receive feedback earlier. The benefits of online learning that have been discussed can support the findings of this study.

Our findings are endorsed by Masykuri's (2022) research, which demonstrated the impact of technology on EFL students' listening comprehension. Additionally, the findings of this study are consistent with those of Nguyen and Pham (2022), who examined the impact of technology on EFL learners' speaking abilities. Their findings demonstrated how much technology affected speech. Rezaei Dastgerdi's results from 2022 also supported our findings, as they revealed the beneficial effects of online activities on Iranian EFL students' speaking abilities.

Zhou (2023), who examined how online language interactions affected Chinese students' speaking abilities and WTC, also supports the results. His findings demonstrated that online language exchanges enhanced EFL learners' speaking abilities and WTC. The results of our study also align with the findings of Sart (2023), whose research showed how technological advancements impact university students' self-confidence.

Technology integration in teaching and learning has become crucial in the current educational environment. The main cause is the universality of the human-machine

interface, which has sparked a rapid revolution in invention and made it necessary to prepare graduates for life after graduation and the workforce. Technology is becoming an essential part of education as a result. The demands of the modern age are reflected in the move towards technology-based education approaches. The new educational vision encourages technology in the classroom and supports active learning, intending to improve digital technology competencies at all levels.

Traditional English teaching methods can be tedious and uninspired, especially in EFL or ESL contexts. As a result, students' interest and enthusiasm in the language learning process are not maintained by these conventional teaching strategies and settings. On the other hand, technology, like multimedia, with its effects—auditory, visual, and animated—can quickly capture students' interest and creativity. Multimedia technology gives an impression of believability and originality because of its enormous volume of information and capacity to transcend time and place. Students' attention and motivation are sustained and fostered in an engaging educational environment. Technology integration in English language instruction has created a more flexible and inclusive learning environment by tackling the difficulties of meeting each student's unique requirements and learning style. Because multimedia technology accommodates a variety of learning approaches and styles, students are more satisfied and have more autonomy.

Technology has also increased learners' exposure to the target language outside of the classroom through lengthier and more varied possibilities for language immersion. The conventional approach to teaching English made pupils become passive consumers of information, which hampered their ability to use the language pragmatically and with thorough comprehension. However, by offering interactive possibilities and enhancing students' cognitive capacities, multimedia technology has completely changed how education is imparted and learned (Ybarra & Green, 2003). With the help of online learning resources, students may actively interact with the language, which fosters critical thinking and effective communication. The teacher-centered method is replaced with multimedia technology, which improves the efficiency and standard of teaching second languages. Improved results in the English language classroom result from its enriching instructional material, dynamic language learning atmosphere, imagination-sparking activities, and active student participation.

Additionally, the use of multimedia technology in English language instruction places a strong emphasis on student-centeredness and encourages communication between educators and learners. The instructor now plays the role of a facilitator, setting up the environment for language acquisition. Multimedia technology makes this participatory approach possible, creating an atmosphere conducive to target language learning and allowing teachers and students to communicate in both directions. It creates a lively and captivating learning environment, enhancing students' interactive and communication skills. The ability to present course information flexibly using technology—especially multimedia—offers substantial benefits for language learners.

Teachers may create their own curriculum, which gives them the freedom to tailor instructions and assignments to their students' unique requirements and interests. Higher levels of motivation and interest are fostered by this personalization, which also helps to improve the relationship between teachers and students. Technology also broadens the learning environment's scope beyond the conventional classroom's walls. Thanks to online learning and applications, learners have more time and opportunity to engage with and understand the course material. Students can connect with their professors and have meaningful conversations through the network. This improves their comprehension and learning process by allowing them to ask questions, get responses, and get further instructions. The advantages of technology can serve as arguments supporting the current study's findings.

Conclusions, Implications, and Suggestions

This research surveyed the effects of online learning as a technology-based instruction on EFL learners' self-confidence, self-efficacy, and self-esteem. The results showed a substantial difference between the EG and CG posttest results. The results demonstrate how using technology and online education improved the EG participants' self-efficacy, self-esteem, and self-confidence. It may be inferred from the results that modern technology, including computers and online learning resources, can teach languages more communicatively. This is so that students can practice language skills in a real-world setting. Computers can create interactive and engaging learning experiences, including communicative language teaching techniques where the personal computer is assigned a vital role (Haleem et al., 2022). Writing, speaking, listening, and reading are the four language abilities that may all be enhanced with modern technology. For instance, using internet tools, students can listen to real English-language content like podcasts, audiobooks, and news broadcasts. Thanks to online tools, they may pick up new vocabulary and grammar and enhance their listening comprehension abilities.

In conclusion, there are many benefits that technology has brought to the teaching and learning of English, such as exposure to native culture, enhanced motivation and engagement, and flexibility in course material. However, technology also has drawbacks, such as taking the instructor's place, limiting cognitive capacities, and reducing the time students spend engaging in productive language activities. Attaining linguistic competency in EFL classrooms requires a well-balanced strategy between technology and conventional teaching approaches.

Even though language instruction has benefited from technological innovation and efficacy, educators must continue to adopt a humanistic perspective and offer students psychological support. Teachers' kind explanations and insightful criticism cannot be replaced by technology. Teachers should maintain the human teaching element while utilizing technology as a helping tool. Keeping technology and interpersonal communication in check is essential to developing a comprehensive environment for language acquisition. Technology has a significant influence on English language

instruction and acquisition. This combination and the instructor's function can provide advanced learning outcomes (Toshiyuki Hasumi & Chiu, 2024).

According to this study, students learning a language online should be conscious of their motivation by managing, regulating, and controlling their emotions in certain situations. Autonomous learners should cultivate a desire to use digital technologies to improve their academic achievement. They can enjoy their language learning incentive goals and select their digital tools according to their degree of language competence. According to this study, language learners should obtain their learning materials via technology. Furthermore, to achieve educational outcomes in an online language learning environment, examining learner requirements must be among the core elements of training. They must rebuild and alter the provided materials to do it. To help students acquire good attitudes and the urge to feel more happy emotions, L2 instructors should look for real and engaging content.

Education policymakers may be encouraged by this research to consider EFL students' motivation in online learning environments. Teachers should have access to computer laboratories, projectors, CD and DVD players, and assistance with digital tools. They might provide academic workshops to assist educators in boosting student enthusiasm. They can offer internet-based resources and encourage learning environments to help students become more motivated and exhibit positive behaviors. This study suggests that legislators may reconsider using technology as realistic learning materials in English classes.

There were some unavoidable restrictions on this study. One of them was the study's tiny sample size; it is advised that future researchers enlist more subjects for similar investigations. The other constraint relates to our data being solely quantitative; to enhance their study findings, future researchers are encouraged to gather both quantitative and qualitative data. Future studies are advised to look at how technology and online learning affect English language proficiency in various EFL situations and the language's core and sub-skills.

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