

## EFL STUDENTS' PERSPECTIVES TOWARDS THE USE OF ICT FOR SELF-REGULATION

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**Abstract:** This survey research aims to examine EFL students' perceptions of using ICT to self-regulate their language learning. A total of 164 non-English majored sophomores at a public university completed a 25-item questionnaire which consisted of six areas regarding goal setting, resources, affection, cultural outcomes, metacognition monitoring, and social connection. The findings indicate participants utilized ICT to manage those aspects of their language learning. In addition, students were excited about using ICT devices to attain objects, control emotions, and manage resources, but less enthusiastic about using technology to engage in social learning and metacognitive monitoring. Several pedagogical implications have been recommended for pedagogists to stimulate students' self-regulation in their language learning.

**Keywords:** ICT, self-regulated learning, self-regulation, students' perspectives

### 1. Introduction

The notion of self-regulated learning (SRL) has gained popularity in educational circles as the concepts of lifelong learning and personalized learning gain popularity (Lewis & Vialleton, 2011). It is defined as "an active, constructive process where learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features of the environment" (Pintrich, 2000, p. 453).

The SRL methods of monitoring, goal setting, and controlling are thought to be critical in helping students build a feeling of personal control (Zimmerman, 2000). Control over the learning process is one of the variables contributing to academic achievement (Lewis & Vialleton, 2011). According to Zimmerman (2009), self-regulated learners are more likely to be proactive in pursuing learning goals, which

motivates learners to take command of their learning process. As Zimmerman (2000) claimed, self-regulated learners must have a high level of self-efficacy in their learning activities and a strong commitment to their educational purposes. Learner autonomy and self-regulation (SR) are crucial for students to achieve their learning goals. Learners need to be able to set learning plans, choose resources and techniques, and monitor and assess their learning throughout the learning process. Both frameworks stress active engagement, goal-directed behavior, metacognitive skills, and their inner innovation for themselves to take responsibility for students' own growth. Students' SR results in their complete acceptance of responsibility for their educational decisions. It is known that SR and other online learning features are linked.

The idea of SRL in language learning has expanded with the advent of technological instruments (Pintrich, 2000; Lai & Gu, 2011; Lai, 2013). The potential of Information and

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Communication Technology (ICT) tools for language learning has been discovered in research conducted in technology-enhanced learning environments (Chapelle, 2010), and these potentials have been shown to enrich both formal and informal instructional contexts (McLoughlin & Lee, 2010; Zhang, 2011; Lai, 2013). However, limits on in-class language education make it difficult to incorporate ICT technologies (Zhang, 2011). With the new trend of technology area 4.0, digital devices are utilized to support either teachers or students in managing their teaching and learning processes (Lai & Gu, 2011; McLoughlin & Lee, 2010). Therefore, the use of ICT in SRL processes must be further investigated to untangle the complicated nature of technology usage for SRL (Lai & Gu, 2011; Çelik et al., 2012; Hsiao et al., 2012). This study is an effort to add to the literature on ICT use for SRL. The research question was addressed “What are students’ perceptions towards their utilization of ICT to self-regulate their language learning?”

## 2. Literature Review

### 2.1. *Self-Regulation and ICT Language Learning*

ICT technologies have proliferated in educational settings in recent decades, and as a result, theories of self-regulated learning have evolved to emphasize the importance of technology in education. Because of the mandatory online teaching and learning during the Covid-19 outbreak, educational institutions were allowed to adapt by making the most of their technical infrastructure. Students were better prepared to thrive in higher education surroundings. In contrast to universities in the developed world, those in developing nations have been forced to rely on free software like Zoom or Google Meet to deliver course material through live online classes using information and communication technology (ICT) devices like personal computers, laptops, iPads, cellphones, headphones, and microphones. SRL has been recognized for raising students’ interests and

motivation in language learning outside of the class (Winke & Goertler, 2008; Lai & Gu, 2011; Çelik et al., 2012; Pham et al., 2021); promoting their metacognitive monitoring (Hirata, 2011; Hisao et al., 2012; Tran & Nguyen, 2020); enhancing students’ language skills (Hisao et al., 2012; Ngo, 2019).

The use of ICTs and SRL in EFL has been the subject of several prior overseas studies. Several pedagogists shed light on the use of ICT in fostering language students’ SR. They were reported to spend more time self-studying and self-controlling their learning outside the class. In addition, those studies advocate students’ positive stimulation towards using digital techniques in their SRL. More than nine hundred EFL beginners were polled by Winke and Goertler (2008) to explore how they utilized and perceived technology to help them improve their language skills in their own time. Researchers found that participants mainly use ICT for pleasure and information gathering, but only a small percentage of their time was spent using ICT to learn a language. Respondents claimed that they were unaware that a quarter (25%) of the technology they use daily could be used to aid in their language acquisition. In another investigation, more than 279 students at the University of Hong Kong were studied by Lai and Gu (2011). The results indicated that many students used technology frequently to enhance their language learning outside of the classroom. Still, there were significant differences in how individuals regulated critical components of their language learning. Therefore, using ICT for SRL requires additional investigations. In recent research by Çelik et al. (2012), EFL students’ usage of ICT tools to self-monitor their language acquisition was examined. Participants were 399 university students who were taking a high-intensity English course. A survey found that students were enthusiastic about using ICT to manage their learning materials but less evangelistic about using ICT tools for metacognitive control. Several studies have looked at the influence of individual ICT tools on SRL outside the class. Using English-language websites, self-directed English learning was the focus of Hirata’s (2011)

study of Japanese students. As a teacher, the researcher directed students through online language resources as part of an experimental design. Students' views regarding Internet use for SR were assessed after a 12-week intervention. According to the findings, web-based learning boosts students' ability to organize, monitor, and evaluate their language acquisition. Similarly, Hsiao et al. (2012) found an association between students' SR levels and their learning results through WebQuest learning with SRL-supported features. The results of 193 sixth-grade students' pre-and post-tests were collected. It was found that WebQuest-based language training that incorporated SRL features might increase the frequency of SRL activity in language learners.

In the Vietnamese teaching context, empirical studies have been conducted to investigate the effectiveness of SRL and ICTs on students' language skills development and explore their perceptions of the integration of SRL and ICTs. The correlation between EFL students' capacity for SR and their listening skills was examined by Ngo (2019). Gender and listening skills were also examined to see whether they affected the language learners' SR of learning habits. The research was conducted using the Motivated Strategies for Learning Questionnaire, adapted from Pintrich et al. (1991) and given to 38 English-major students at a university in central Vietnam. An appraised listening exam was also used to evaluate the listening skills of the individuals in their second language. The statistics show participants exhibited a moderate degree of SRL, which was correlated with their English listening skills. EFL learners' listening skill was closely linked to metacognitive SR, effort management, and critical thinking. Nevertheless, no gender or ability differences in the subjects' SR Systems are recognized. Another exploration by Tran and Nguyen (2020) was conducted with 100 English-major students using SRL strategies via a closed-ended questionnaire. The findings show that students employed SR strategies for record-keeping and monitoring and requested social

support more frequently. However, SR strategies were claimed to be poorly understood due to their lack of proficiency in their implementation process. The researcher consequently recommended educators should pay close attention to whether their students are aware of SR practices or not to help them become more self-directed learners. More recently, Pham et al. (2021) investigated the correlation among three constructs, namely internet self-efficacy, online self-regulation, and emergency online learning during Covid-19. Data from over 2,000 undergraduates at a Vietnamese institution was mined using a partial least squares structural equation modeling. Students' Internet self-efficacy was shown to be both a direct and an indirect predictor of their ability to take control of their learning, as evidenced by their interactions with course material, instructors, and other students. Students who had a previous online learning experience and those who had not shown substantial disparities in the correlations between the various variables examined in the research. Gender, on the other hand, had no impact on the interactions.

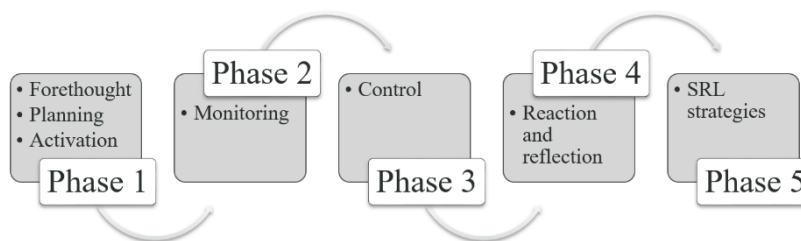
Research on SRL in Vietnam has focused chiefly on language skills and SR practice. However, one area where the potential of ICT tools could be explored further is SRL, an active, constructive process in which learners take the lead in their learning experiences, primarily due to the lockdown of face-to-face EFL classes. The COVID-19 epidemic has also caused difficulty in covering an in-depth understanding of learners' attitudes towards utilizing ICT for their learning regulation. Students' perspectives on SR and ICT capacity are significant aspects of the current body of knowledge, and empirical evidence is being gathered on these themes.

## ***2.2. Theoretical Framework***

Academics have offered several theoretical frameworks to explain how students' self-directed usage of technology for language acquisition is affected by various aspects.

**Figure 1**

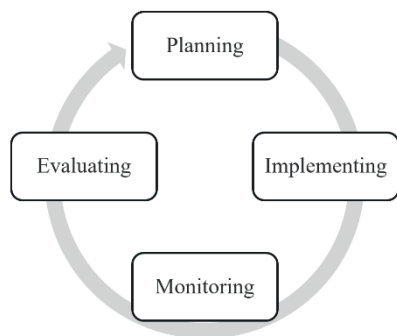
*Pintrich's (2004) Cycle Model for SRL*



Pintrich (2004) splits the SRL cycle into five parts, as described in Figure 1. A new component is added to his process model, which determines the strategies used by SRL. The critical aspects of SRL are metacognitive, cognitive, motivational, behavioral, and environmental (Pintrich, 2004). Metacognitive control is the ability to plan and monitor progress toward learning objectives. Employing cognitive strategies to search for learning materials and social resources is regarded as Cognitive regulation. Even though those SRL aspects were first grouped, motivational and volitional control approaches were studied independently. The finalized version of the model includes Zimmerman and Pons's (1986) self-regulated learning strategies.

**Figure 2**

*Thornton's (2010) Cycle Model With Recursive Stages for SRL*

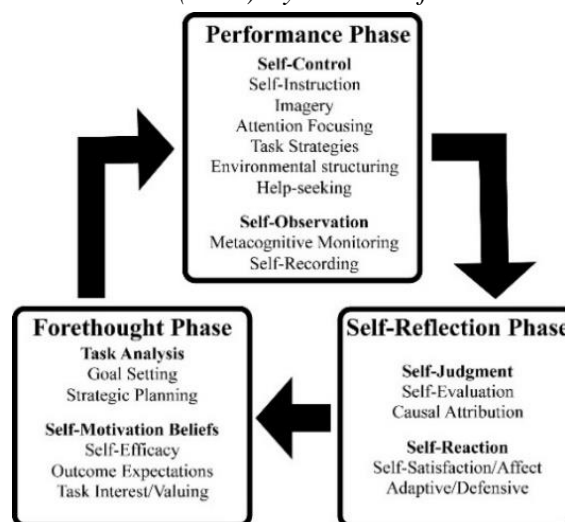


Thornton (2010) established a model for SRL in light of the idiosyncratic aspects of language learning more recently (Figure 2). Recursive stages are the focus of Thornton's paradigm. The first step is planning, which entails looking at what is needed and what the student already knows, coming up with some objectives, deciding on resources, and then finalizing your strategy. The first two steps

foster the ability to learn. Learners are given the option to study independently or with help from a tutor in phase two. Self-awareness of the language being known and the areas where the learners have deficits is developed during the monitoring phase. Learners may assess and evaluate the possibility that they have met their predetermined objectives in the final stage, the evaluation phase. Self-directed learning of languages is the goal of all of these stages (Thornton, 2010). As these stages of SRL are recursive, they enable learners to reflect on their learning and analyze their progress, and so help learners to maximize their learning experience.

**Figure 3**

*Zimmerman's (2009) Cycle Model for SRL*



According to Zimmerman's (2009) cycle model, SR is a three-stage self-directed learning process (Figure 3). Forethought, performance, and self-reflection are the stages that occur before, during, and after the learning attempt. Students begin the learning activity analysis process by evaluating their skills and setting goals and strategies for achieving their jobs. In

the second phase, students primarily use self-control and self-observation. Self-management may take several forms, including self-instruction, seeking help, and self-punishment (Dabbagh & Kitsantas, 2013). As a result, two types of self-observation are implied in terms of self-monitoring (comparison of actions performed or things created using criteria to judge the quality of what is being tried) and self-recording (recording of activities while being conducted to encourage in-depth assessment). Self-reflection is the last phase, which continues the learning process. At this point, students evaluate their progress and generate reasons to support their judgments. One way to do this is to utilize self-assessment tools (Zimmerman, 2009).

Zimmerman (2009) asserts that learners use self-regulation to direct and govern their actions, thoughts, and emotions to accomplish their learning objectives. This researcher recognized the multifaceted characteristics of self-regulation of learning, which encompasses the control and regulation of various components of learning processes, ranging from cognitive to metacognitive to socio-affective to behavioral. Other influential sociocognitive models of SRL suggest the following SRL aspects in terms of meta-cognition regulation (goal commitment, planning, and monitoring), cognition regulation (employing and monitoring cognitive strategies), motivation and affect regulation (monitoring and adjusting affective states, making learning attractive), environment regulation (creating favorable learning environments through seeking various physical and social resources), and behavior regulation (time and effort management). The understanding of self-regulation of its multidimensional nature includes regulating the cognitive, metacognitive, socio-affective, and behavioral processes and conditions that affect learning (Pintrich, 2004; Thronton, 2010). Due to the time restraint, the researchers could not cover all the SRL components. Hence, in this study, the researchers examined how language learners self-regulate several parts of their language learning experience regarding their goal commitment, relationship with the community, out-of-class learning materials, reflection on culture, metacognition control, and tradition control regulation via the use of

technology. Therefore, the model by Zimmerman (2009) with several aspects serves as the theoretical underpinning for the current research.

### **3. Methodology**

#### ***3.1. Research Design and Instruments***

This survey research employed a questionnaire related to the SRL Scale, which was designed based on the theoretical framework of Zimmerman (2009) and adapted from Lai and Gu (2011). In the first part of the survey, students' demographics, learning background, and familiarity with ICTs devices such as computers, laptops, iPad, and the Internet; cell phones or mobile phones; headphones, and microphones were required. For the questions related to their studying with ICT equipment, open space was delivered for students to share their experiences with some digital applications to learn English. The second section of the questionnaire consisted of 25 Likert-scale items split into six components in the SRL Scale on the attitudes of students regarding using ICT resources in their language learning activities, namely Social Connection (item 17, 21), Culture Outcomes (item 7, 25), Metacognition Monitoring (item 12, 14, 16, 19, 20, 23), Affection (item 2, 3, 4, 9, 22, 24), Resource (item 5, 10, 11) and Goal Setting (item 1, 6, 8, 13, 15). The responses ranged from "strongly disagree" to "strongly agree" on a five-point scale (1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree). The questionnaire was designed and delivered to other English lecturers at the institution for feedback and editing (Lai & Gu, 2011). The questionnaire was given to students at the beginning of semester 1, the school year 2021-2022.

#### ***3.2. Participants***

The current study was conducted with 164 second-year non-English major students from different backgrounds at a public university in Vietnam. They were reported to complete General English 1 to continue their following English credit. Hence, they were regarded to be at a pre-intermediate level of proficiency. Since English was a compulsory subject at the university, they only attended two English

classes per week, one of which lasted 135 minutes. The textbook they need to achieve is Market Leader, published by Pearson.

### 3.3. Data Analysis

SPSS Statistics 22 was utilized to examine students' perceptions of using ICT in language learning activities with confirmatory factor analysis. This structural equation model looks at the relationships between measurable and latent variables (Brown & Moore, 2012). From the calculated statistics, the questionnaire may consistently assess ICT for SRL. In addition, internal consistency was determined using Cronbach's Alpha of 0.89, which could ensure the reliability and validity of the questionnaire (Dörnyei, 2007). This study utilized independent sample t-tests and variance analysis to explore the associations between language acquisition, demographic

**Table 1**

*Participants' Demographic and Learning Habits*

No.	Information	Classification	N = 164	
			Frequency (F)	Percent (%)
1	Gender	Male	96	58.5
		Female	68	41.5
2	Age	19-20 years old	105	64
		21-24 years old	59	36
3	English learning experience	3-5 years	42	25.6
		6-7 years	89	54.3
		More than eight years	33	20.1
4	Time for self-studying with ICT per day	Less than 1 hour	13	7.9
		1-3 hours	102	62.2
		4-5 hours	49	29.9
5	Technology tools	Computers/ laptop/ iPad and Internet	160	97.6
		Cellphones	164	100
		Headphones and microphones	128	78

More than 97% of participants owned or had easy access to ICT with computers/ laptops/ Ipad and the Internet, 100% mobile phones, and 78% headphones and microphones. Owing to some students' reports in the open-ended

characteristics, and technology usage for SRL and SR.

### 4. Findings

After completing the questionnaire, the data will be analyzed and evaluated to answer the research question.

#### 4.1. Students' Background

According to Table 1, 96 males (58.5%) and 68 females (41.5%). Forty-two individuals accounted for 25.6%, who had learned English for three or five years, 89 students (54.3%) for six or seven years, and 33 ones (20.1%) for eight years and onwards. In addition, 62.2% of participants reported dedicating from one to three hours per day to self-study with ICT, followed by 29.9% with 4-5 hours, and 7.9% with less than an hour.

questions, they added Learning Management Systems (LMS), Zoom, Meets, and even Zalo to exchange learning information with peers and teachers.

#### 4.2. Students' Perceptions Towards the Use of ICT for SR

Data analyzed from the second questionnaire demonstrates students' attitudes towards implementing ICT for their SRL. Six categories related to the SRL framework were employed, and their ranks were displayed in Table 2.

**Table 2**

*Students' Types of ICT Use for SRL*

No	Categories	Mean	Std.
1	Social Connection	3.02	1.21
2	Culture Outcomes	4.51	0.83
3	Metacognition Monitoring	3.76	0.8
4	Affection	4.42	0.84
5	Resource	4.62	0.86
6	Goal Setting	4.69	0.87

The factor analysis indicates the variation in their use of technology for language acquisition can be explained by six independent factors. Goal setting was the highest-ranked component ( $M=4.69$ ,  $SD=0.87$ ), followed by Resource ( $M=4.62$ ,  $SD=0.86$ ), Culture outcomes ( $M = 4.51$ ,  $SD = 0.83$ ), Affection ( $M = 4.42$ ,  $SD = 0.84$ ), Metacognition monitoring ( $M = 3.76$ ,  $SD = 0.86$ ), and Social connection ( $M=3.02$ ,  $SD=1.21$ ) respectively.

Concerning the areas of goal setting, 80.5% of participants said that they could accomplish their English learning objectives promptly and effectively. Additionally, 79.9% and 78.9% of respondents were aware of the role of ICT not only in helping them to attain their English learning objectives but also in sustaining their interests while pursuing those goals. Following that was their awareness of the need to define sub-goals throughout the English learning process (71.2%) and provide students with an opportunity to succeed with the objectives. Among the characteristics of goal commitment, approximately a third of students assumed and disputed that technology may develop and raise the chances of assisting them in achieving their objectives. In terms of Resource items, an average of 74.3% favored

ICTs when they helped them obtain access to appealing and informative learning materials outside the class; consequently, they acquired more experience with ICT. In terms of cultural results, the majority of participants claimed to use ICT to find cultural values, whereas an average of 13.85% admitted to no cultural activities. The next rank was Affection, with the most considerable frequency of respondents selecting amusement and relaxation motives (78.4%), but slightly more than half claiming to use ICT for English study. Metacognition Monitoring was ranked fifth, allowing the researchers to identify better how students use ICT to govern their SRL metacognitively. Over 77.7% of students were aware of using ICT to accomplish their learning objectives at a particular stage. Furthermore, most students were conscious of their learning environment and could choose and use relevant ICT to address their learning deficits. Students' satisfaction with ICT use, their actions toward adjusting their English goals through ICT use, their intention to use relevant materials outside of class through ICT use, and their intention to use appropriate tasks outside of school through ICT use were calculated to be 65.4%, 57.4%, 55.9%, and 51.8%, respectively. The lowest score was for items related to social connection, indicating students' reluctance to use ICT to interact with English speakers.

The statistics provided the researchers with a picture of students' attitudes towards using ICT for SRL. The following is the discussion on what was found in this study with other relevant findings in implementing ICT for SRL.

## 5. Discussion

### 5.1. Students' Background

The participants acknowledged utilizing technology to control language acquisition. Since high school, students have had several specific experiences using ICT to learn English. Furthermore, all students had to attend virtual classes due to the country's lockdown. ICT was employed to serve educational purposes; hence, they spent more time using digital devices during their learning process. The result echoes Ngo (2019), Tran and Nguyen (2020), and Pham et al.

(2021). After online learning amid Covid-19, many students used digital dictionaries and read and commented on their classmates' and friends' walls in the target language. They also watched YouTube videos, read online news, and sent SMS or emails to their classmates and friends in the target language, among other activities. When distance classes have become popular, and students gradually get acquainted with online learning, students are obliged to use ICT for studying purposes. From open space for other ideas in section 2 of the questionnaire, students reported they had to attend much more online conferencing, Learning Management System (LMS), etc. than ever before. They stated that they had had no previous experience with Web 4.0 technologies like that. Participants' understanding of different technologies for language learning was likewise inadequate. Despite their regular use of popular communication technologies, the participants did not know how to perfect their language acquisition. With insufficient expertise about how to utilize technology, particularly communication tools, for language acquisition, the participants in this research mirrored prior studies' technical characteristics in Winke and Goertler (2008), Zhang (2011), and Lai and Gu (2011).

### ***5.2. Students' Perceptions Towards the Use of ICT for SRL***

The six aspects of technology-enhanced SRL were used to improve social connections with native speakers and other peer learners worldwide, encourage oneself to persevere and commit to a learning goal, seek out and expand learning resources, and improve cultural competence understanding. The finding is in line with several studies discussed in the literature (Winke & Goertler, 2008; Hirata, 2011; Lai & Gu, 2011; Çelik et al., 2012; Hsiao et al., 2012; Ngo, 2019; Tran & Nguyen, 2020; Nguyen, 2021). It could be explained that using technology was quite well-received and well-integrated into the cycle of all six components. Participants reported using technology to explore actual language usage opportunities, gain cultural knowledge, and expand their social networks. Using technology to create engaging learning environments has also been

documented. Besides, students were encouraged to examine their present language ability level actively. It was less optimistic, though, when it came to utilizing technology to communicate with native speakers and peers throughout the globe.

In terms of Goal Setting directly affecting student motivation, the analysis demonstrates that students were driven to attain their goals. The statistics illustrate that most students think ICT may help them learn a language. This conclusion supports, in part, the findings by Hirata (2011), Lai and Gu (2011), Ngo (2019), and Nguyen (2021), which respectively demonstrated the impacts of ICT on students' automated processes. Reasonably, students may learn languages faster and more successfully when using ICT. They discovered in their study that students' positive views of ICT for goal commitment management are linked to the technology's ability to provide diverse information sources and interactional possibilities.

Students had complete contempt for using ICT to link with others and learn about the target culture for academic objectives. Survey respondents were categorized into two groups based on their use of ICTs or not, including connecting with native speakers of the target language and secondly with other language learners globally for support and encouragement. Although one of the primary features of digital settings is the ability for learners to connect with native speakers, this study discovered that the majority of EFL learners do not fully use this potential. The first possible explanation might be that just a tiny number of EFL learners displayed high levels of second language preparation for interpersonal communication. Secondly, it could be explained by students' limited use of ICT for communicating with native speakers and other students that they are unconscious of its critical role in language learning, leading to the conclusion that students' awareness should be raised through explicit instruction and strategy training, which supports the findings in Pintrich (2004); Dabbagh and Kitsantas, (2013) and Ngo (2019).

Concerning the Affection component, it is essential to control one's emotions. It is undeniable that affection like effort and persistence are linked to self-regulated learning.



The students expressed positive attitudes towards using ICT tools for affection and resource management. In addition, almost all the students commented they used ICT resources to make language learning more appealing. It is in line with Pham et al.'s (2021) results that ICT tools may facilitate self-regulated learning by connecting learners to abundant resources. Some students claimed that ICT technologies might be used to create an atmosphere for learning outside of class, proving the validity of this assumption which supports Lai's (2013) finding. However, the relatively low rank of social connection compared with the other aspects disagrees with Lai and Gu (2011), which revealed students' attention to developing their social relationships. It could possibly be explained that the participants were used to seeking lesson content with ICT by themselves, rather than asking for help from others and developing communication skills. As a comparison, this might reveal the differences between English and non-English majors students, which were analyzed by Pham et al. (2021).

The results show students ranked metacognitive processes with ICT quite at low frequency. The statistics indicated that EFL students felt ICT had a less impact on metacognitive control than emotional or resource management. Nearly a third of all the participants were unclear or disapproved of the utility of using ICT to track their own academic progress. It is indicated they had little knowledge of utilizing ICTs to improve language skills. This study's findings on students' attitudes toward using ICT to manage metacognitive components of language learning highlight the importance of strategy training in language acquisition. Students should be encouraged and supported to employ ICT tools with metacognitive practices, which Çelik et al. (2012) and Lai and Gu (2011) recommended in their studies. This aid may include metacognitive strategies, ICT resource information, and guidance on using technology to study a foreign language outside of the classroom.

## 6. Conclusions and Implications

Using SRL as a theoretical framework, this study discovered that participants' technical

profiles matched earlier research, indicating that language learners utilize ICT tools to govern their learning activities. The findings reveal that EFL students use ICT to regulate a variety of aspects of their language learning process, including Social Connection, Culture Outcomes, Metacognition Monitoring, Affection, Resource, and Goal Setting. As a result, previous studies that demonstrated positive perceptions and interaction with ICT for emotional regulation are supported by this study. Using ICT, students may learn at their own pace and their level. In this way, ICT may help students enjoy and relax while learning a language, thereby preserving their interest and enthusiasm. Learners have access to a broad variety of resources they may choose according to their needs and preferences via ICT. As a result, they will be able to help students better manage their resources. This study found that EFL students used ICT for metacognitive and social control less than other aspects of SRL. However, there is still an emphasis on the necessity for EFL students to get strategy training and participate in awareness-raising activities.

However, this investigation still has restrictions. The majority of participants in this research are not English majors, and there is an imbalance between the sexes. Second, owing to the small sample size, the results of this research should not be extrapolated too far. Third, because just the questionnaire was used to assess participants' SRL, it is possible that some students did not read, question, or evaluate answer options prior to submitting their responses. Future research may incorporate qualitative methods such as interviews to understand how students manage their language acquisition. Students enrolled in EFL programs should become familiar with ICT for SRL, particularly metacognitive techniques. Consequently, language learners will be more aware of the need to manage social connections and cultural learning. In this context, the application of ICT to discover and engage with a target culture is referred to as "culture learning regulation." Teachers should additionally educate students on the value of cultural knowledge in language learning to increase their consciousness. Students may benefit from adopting ICT such as online chat or email for

cultural studies by increasing intercultural participation. Students may benefit from an understanding of cultural distinctions. In addition, further research might recruit students from a broader range of academic disciplines and employ a random sample approach to find a better match between study participants and the intended audience for more reliable and believable findings.

More longitudinal and experimental researches are needed to determine the relationship between SRL and genuine language acquisition using self-reported data. Further research on the effect of strategy education on self-directed language learning is additionally warranted.

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### Appendix

	Items	SA/A (%)	NS (%)	SD/D (%)
1	ICT plays an integral part in maintaining my passion for achieving the English learning goals	78.9	6.7	14.4
2	ICT makes English learning more attractive	77.1	7.3	15.6
3	ICT makes me spend more time learning English	60.2	15.3	24.5
4	ICT enables me to regain my passion for resisting learning English	73.3	9.5	17.2
5	ICT enables to expand of learning resources	73.2	10.1	17.7
6	ICT enables me to reach English learning goals in learning English	79.9	7.2	12.9
7	ICT enables me to find information on language and culture	75.1	13.5	11.3
8	ICT enables me to achieve English learning goals quickly and efficiently	80.5	6.3	13.2
9	ICT maintains my passion for learning English	76.9	7.6	15.5
10	ICT enables me to increase learning experience outside the class	72.5	9.7	17.8
11	I search for attractive language learning materials and experiences delivered by ICT	77.3	11.0	11.8
12	I know how to use ICT to effectively monitor myself to achieve the learning goals at each stage	77.7	13.5	8.8
13	ICT creates and increases opportunities to help achieve my goals	70.9	10.7	18.4
14	I plan to learn tasks to do outside of school that involve the use of ICT	51.8	18.8	29.4
15	I set sub-goals for the next stage of learning in the light of how much I can understand and produce when using ICT to acquire information or communicate with others	71.2	7.6	21.2

16	I plan relevant materials to do outside of school that involve the use of ICT	55.9	16.6	27.5
17	ICT enables me to connect with English native speakers	58.3	10.5	31.2
18	When I feel bored with learning English, I use ICT to entertain and increase the enjoyment	78.4	7.2	16.5
19	I am satisfied with the way I use ICT to help myself continue to reach my goals	65.4	13.5	31.4
20	I adjust my English learning goals using ICT	57.4	13.2	29.4
21	ICT enables me to search for encouragement and support from other English learners	57.1	14.2	28.7
22	ICT makes me enjoy learning English more	71.7	10.2	18.1
23	For the areas that I am weak in, I know how to select and use appropriate ICT to improve the areas	68.1	13.7	18.2
24	ICT makes my English learning a relaxing process	75.8	11.4	12.8
25	ICT enables me to understand and appreciate the target culture better	73.4	10.2	16.4

## QUAN ĐIỂM CỦA SINH VIÊN TIẾNG ANH TRONG VIỆC SỬ DỤNG CÔNG NGHỆ THÔNG TIN ĐỂ TỰ ĐIỀU CHỈNH VIỆC HỌC TIẾNG ANH

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**Tóm tắt:** Nghiên cứu khảo sát này nhằm mục đích tìm hiểu nhận thức của sinh viên học tiếng Anh đối với việc sử dụng công nghệ thông tin (CNTT) để tự điều chỉnh việc học tiếng của họ. 164 sinh viên không chuyên năm thứ hai tại một trường đại học công lập đã hoàn thành bảng khảo sát gồm 25 mục liên quan đến khả năng tự điều chỉnh mục tiêu, tài liệu học, điều tiết cảm xúc, mục tiêu văn hóa, giám sát siêu nhận thức và kết nối xã hội. Kết quả cho thấy sinh viên sử dụng CNTT trong việc học ngoại ngữ. Ngoài ra, sinh viên hào hứng với việc sử dụng các thiết bị CNTT để tiếp cận đối tượng, kiểm soát cảm xúc và quản lý tài nguyên; nhưng ít hào hứng với việc sử dụng CNTT để học tập xã hội và giám sát siêu nhận thức. Nghiên cứu cũng đưa ra một số đề xuất sư phạm nhằm kích thích khả năng tự điều chỉnh của sinh viên trong việc học ngôn ngữ.

*Từ khóa:* CNTT, học tập tự điều chỉnh, tự điều chỉnh, quan điểm của sinh viên