

**THE EFFECT OF EPISTEMIC CURIOSITY ON SELF-REGULATED
LEARNING STRATEGIES AND MOTIVATION OF VERY YOUNG EFL
LEARNERS**



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LEARNERS**

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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ABSTRACT

THE EFFECTS OF EPISTEMIC CURIOSITY ON SELF-REGULATED LEARNING STRATEGIES AND MOTIVATION of VERY YOUNG LEARNERS

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This study examined the effects of epistemic curiosity (EP) on very young EFL learners' (VYL) self-regulated learning strategies (SRLS) and motivation. Further, it explored teacher's reflections and very young learners' perceptions of English lessons after epistemic curiosity was increased via in-class activities. A treatment was applied with the non-EC group (N=18) and EC group (N=18) was also observed through mixed-method research to detect any possible changes. The quantitative data were collected with pre- and posttests of Self-Regulated Learning Questionnaire (SRL) and Motivation Questionnaire. According to the obtained results, a significant change was found in the SRL of the EC group while the non-EC group did not show any significant difference. There was no significant change in the motivation of each group even though numbers showed a slight increase in both groups. Finally, a positive correlation was found between EC, SRL, and motivation. The qualitative data gathered from focus group discussions with the EC group and teacher reflective field notes indicated a positive change in students' perceptions of learning English. The study offers pedagogical implications and suggestions for the effects of epistemic curiosity while teaching English to very young learners.

Keywords: Self-regulated Learning, Very Young Learners, Epistemic Curiosity, Motivation, English Language Teaching, EFL.



ÖZ

EPİSTEMİK MERAKIN ERKEN YAŞ İNGİLİZCE ÖĞRENCİLERİNİN ÖZ DÜZENLEMELİ ÖĞRENME STRATEJİLERİ VE MOTİVASYOLARINA ETKİSİ

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Bu çalışma epistemik merakın erken yaşta İngilizce öğrencilerinin öz düzenlemeli öğrenme stratejilerine ve motivasyonlarına olan etkisini incelemiştir. Ayrıca ders içi aktiviteler ile epistemik merak artırılmasının ardından öğretmenlerin görüşlerini ve öğrencilerin İngilizce dersine karşı tutumlarını araştırmıştır. 18 kişilik iki gruptan biri 8 hafta boyunca epistemik merak artırıcı etkinliklere maruz kalırken diğer grup olası bir değişikliğe karşın karma yöntem tasarımıyla gözlemlenmiştir. Nicel veriler, Öz-Düzenleyici Öğrenme Anketi (SRL) ve Motivasyon Anketi'nin ön ve son testleri ile toplanmıştır. Sonuçlara göre, deney grubunun öz düzenlemeli öğrenme stratejilerinde anlamlı bir değişiklik bulunurken, kontrol grubu herhangi bir anlamlı farklılık görülmemiştir. Her iki grupta da sayılar hafif bir artış gösterse de her grubun motivasyonunda etkili bir değişiklik olmamıştır. Son olarak, epistemik merak, öz düzenlemeli öğrenme ve motivasyon arasında pozitif bir korelasyon bulundu. Deney grubuyla yapılan odak grup tartışmalarından ve öğretmenin yansıtıcı alan notlarından toplanan nitel veriler, öğrencilerin İngilizce derslerine yönelik tutumlarında olumlu bir değişiklik olduğunu gösterdi.

Anahtar Kelimeler: Öz düzenlemeli öğrenme, Erken Yaş Öğrencileri, Epistemik Merak, Motivasyon, İngiliz Dili Eğitimi





DEDICATION

*To my beloved family, the best sister in the world, and my dearest friends who helped
and encouraged me to find the strength to stand up each time I fell*

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Chapter 1

Introduction

This chapter presents the details of the present study, which investigates any possible effect of epistemic and perceptual curiosity on very young learners' self-regulated learning strategies and motivation in English classes. Firstly, an overview of epistemic and perceptual curiosity is delivered and then it is discussed regarding the very young learners and language learning. After the brief description and discussion, self-regulated learning strategies and motivation in very young learners are explained together with curiosity's role in language learning. The chapter continues with the statement of the problem, the purpose of the study, research questions, and the significance of the study. Finally, the definitions of key terms used in the study are explained.

1.1 Theoretical Overview

1.1.1 Curiosity in very young learners of English. Curiosity has been defined from different aspects over the years. While some scholars expressed that it is a deficiency of self-resistance, other researchers identified it as an essential virtue in education (Berlyne, 1978; Phillips, 2013). It is highly associated with open-mindedness by many authorities which can be inferred as being open to new experiences, new knowledge, and learning (DeYoung et al., 2014; Mahmoodzadeh & Khajavy, 2019). While the definition may seem complex, curiosity is not a new concept. Anyone observing children can name them curious. They are curious about objects, sounds, and sights in the environment and they consistently ask questions and pursue explanations (Liquin & Lombrozo, 2020). Very young learners (VYLs) are very passionate about the world around them, eager to explore the environment, and open to new experiences such as learning new languages (Uysal & Yavuz, 2015). Most of the time curiosity is associated with a positive impact on the learners by

assigning learning a deeper meaning for the learners and helping them understand the environment better, and turning learning and possession of knowledge into pleasure (Litman, 2005; Mahmoodzadeh & Khajavy, 2019). It is seen in recent studies in psychology that more positive L2 emotions such as enjoyment, pleasure, excitement, and satisfaction are witnessed during the learning process (MacIntyre & Mercer 2014; Mahmoodzadeh & Khajavy, 2019).

In line with the previous studies, VYLs are curious and their curiosity is an important factor in their learning process, especially in language learning. They love asking questions and seeking explanations from the world. To attain this process, curiosity enables permanent learning and transforms the learning process into a joyful adventure instead of an obligation for the VYLs. Considering these aspects of curiosity, it can be said that curiosity provides new paths to explore for VYLs along with the satisfaction of possession of information.

1.1.1.1 Types of curiosity. As a natural characteristic of VYLs, curiosity is divided into perceptual and epistemic. While perceptual curiosity (PC) is mostly related to uncertain perceptions, epistemic curiosity (EC) is associated with the desire for more information (Berlyne, 1978). PE can be found in animals besides humans, opposite to EP which is unique to humans only (Jepma et al., 2012). Another difference between PC and EC is that EC is aroused by the desire for knowledge hence ideas and theories, and PC is evoked by sensual stimuli (Collins et al., 2004). Subaşı (2012) gives two examples of PC and EC to clarify the difference between the two types of curiosity. PC as stated earlier is mostly associated with animals and can be seen in their behaviors such as monkeys attempting to solve a puzzle or rats trying to find the exit from a maze. EC, on the other hand, is unique to humans and can be exemplified as a scientist's efforts to solve a problem by conducting research.

First, a study was conducted by Collins et al. (2004) to understand individual differences in PE. 302 undergraduate students answered a 33-item questionnaire as well as trait scales of the State-Trait Personality Inventory (STPI), and the Sensation Seeking (SSS) and Novelty Experiencing (NES) scales. According to the results, it was found that PC, different from EC, pursued both knowledge and sensory experience. Another study by Nakamura et al. (2020) was conducted with

university students to find out which classroom activities activate EC in the L2 classes. 25 Thai students participated in the study and data were collected through a survey and focus group interview. Results showed that participants experienced EC the most when they carry speaking activities (exchanging stories and listening to peers), knowledge-generating activities (lessons), idea-generating activities, and textbook exercises (solving problems, listening to a quiz).

Ruiz-Alfonso and Leon (2019) carried out a study with high school students to investigate the relationship between teaching quality and EC during mathematics lessons. 1003 students participated in the study and a questionnaire was used to gather data as well as open-ended questions. The results indicated that harmonious passion, which could be described as autonomous internalization forcing individuals to participate in the activities that they are appealed to, could be anticipated by teaching quality. Students' autonomous internalization could determine their deep strategies to learn. And finally, it was found that EC could be anticipated by deep strategies to learn.

Another study conducted by Hong et. al (2020) aimed to test the efficacy of gamification as a learning activity in English lessons besides students' attitudes toward gamification by measuring their EC during the treatment. Data were collected from 96 high school students in the 9th grade through 3 questionnaires. According to the results of the study, it was found that English learning anxiety was negatively affected by EC as well as attitudes towards gamification influenced students' learning process positively. According to the study, it was implied that applying gamifying in classrooms could increase EC and develop students' content learning.

In conclusion, two types of curiosity, PC and EC, are associated with different aspects of humans. While PC is related to sensory emotions and perceptions, EC is more associated with a hunger for knowledge. PC can be found in both humans and animals however EC is unique to humans as the holders of problem-solving ability. Hence EC was used in this study.

1.1.2 Self-Regulated learning strategies (SRLS) and curiosity. Self-regulation can be specified as a system of various processes such as controlling

thoughts, behaviors, and feelings during learning (Boekaerts & Cascallar, 2006; Schunk & Zimmerman, 2002; Zumbunn et al., 2011). During these processes, learners become aware of their abilities and limitations and manage their learning accordingly, which makes them approach a task in the classroom with confidence and resourcefulness (Zimmerman, 2002). Recent research showed that even the smallest training of self-regulation could make a difference in VYLs' learning process and laid a foundation for their future academic life as it could help VYLs build learning and self-efficacy attitudes at a very young age (Dignath et al., 2008; Magogwe & Oliver, 2007; Zumbunn et al., 2011). Therefore, it is best to describe self-regulation as a process rather than a skill.

One of the most recent frameworks related to personal epistemology in SRL was developed by Muis et al. (2018) including four phases; *task definition, planning and goal setting, enactment, and evaluation*. According to the framework, *task definition* was explained as the learners' perception construction of the task. After defining the task, learners were supposed to *set goals* and design a *plan* regarding their epistemic beliefs which were derived from the learners' perceptions. The *enactment* was assumed to take place when the learners started to carry out the task by applying chosen strategies. Lastly, *evaluation* was accepted as the last step of the framework. Learners were believed to evaluate the task and its success or failure during the process. According to their framework, to improve SRLS, learners must develop cognitive and metacognitive skills. As described by Winne et al. (2017), while cognition corresponds to the learning process and gaining knowledge, metacognition means operations to reach the information.

Furthermore, prior research on SRL discussed internal conditions during the SRL tasks that learners engage in while internal conditions were described as features learners carry into the tasks with them (Berding et al., 2017, p.106; Ketabi et al., 2014, p.4; Winne, 2017, p.40). Epistemological beliefs are among these internal conditions (Winne, 2017). Epistemological beliefs are defined as learners' beliefs about knowledge and knowing, and they help learners to see the learning process from a different dimension (Berding et al., 2017). Research proved that they had an impact on self-regulation (Berding et al., 2017; Ketabi et al., 2014). These studies explained that learners' epistemic beliefs of knowledge influence their perspectives

of learning and regulate the learning process. In the study of Ketabi et al. (2014), epistemic beliefs of pre-service English teachers affected their concept of teaching English. In Winne's (2017) research, the importance and effect of epistemic beliefs on the learning process were emphasized by stating that learners carried different tactics of learning into the tasks and were affected by the external factors during the tasks. In SRL, curiosity plays a crucial role. Curiosity prompts thinking skills and enhances the value of a task thereby helping learners develop the necessary strategies for self-regulation (Lauriola et al., 2015; Muis et al., 2018). It also raises memory activity during the learning process (Muis et al., 2018)

Another study was conducted to find out teachers' and students' perceptions of SRLS during the writing courses of English lessons by Tulguç & Şeker (2017). 50 teachers and 28 students participated in the research. The data were collected via a questionnaire and semi-structured interviews. The results demonstrated that foreign language teachers integrated SRL in their lessons only sometimes. Although teachers stated that they encouraged their students to set goals during the learning orally, no tasks or activities were used to directly encourage students for SRL. Participant teachers indicated that the reason for their lack of encouragement towards SRL was students' inability to comprehend the value of the activities. Students' responses also matched with the teachers' responses. Implementation of SRL in the Turkish foreign language teaching context was not seemed to be achieved.

To sum up, EC of learners is a part of tasks during SRL and it affects their concept of knowledge to which they shape their learning accordingly. Considering that each learning environment has different conditions, the epistemic beliefs of learners cannot be ignored as an internal factor. Therefore, it can be said that epistemic curiosity and SRL are two factors that affect each other.

1.1.3 Motivation and curiosity. Individuals who are energized to complete a task are defined as motivated. The levels and the nature of the motivation vary among individuals (Ryan & Deci, 2000). The amount of stimulation has a key role in determining the level of motivation as too much of it causes anxiety whereas too little can create no motivation for exploration (Borowske, 2005). Motivation is

divided into two types: intrinsic and extrinsic, while the first one refers to carrying out anything for its own sake, the latter aims to reach a goal (Benabou & Tirole, 2003; Reiss, 2012).

Curiosity and motivation are related to each other in many ways. Curiosity is defined as a form of intrinsic motivation (Pluck & Johnson, 2011; Gurning & Siregar, 2017; Loewenstein, 1994; Oudeyer et al., 2016, p. 257; Tulgar, 2018). In his study, Loewenstein (1994) reviewed literacy of curiosity focusing on two main subjects: the psychological basis of curiosity and measurement of curiosity stating that the first one of these was examined more heavily. According to his research, he mentioned the motivational force of curiosity which caused many people in history to succeed or fail many times. According to his claim, the desire to possess information motivated people to act in the way they did. Pluck & Johnson (2011) support Loewenstein (1994) with their paper which focused on the educational aspect of curiosity. They stated that EC enhanced learning by motivating learners and, the perception of information's value is the determinant of motivation and curiosity.

Gurning and Siregar (2017) emphasized that learners with higher curiosity levels were more successful compared to students with learners with low curiosity. In their study they aimed to make a comparison between two teaching strategies: INSERT and SQ3R, to find out curiosity level's effect on reading comprehension and the relation between teaching strategies and curiosity. The study was conducted with 78 participants in a quasi-experimental design. According to the results, it was found that students with high levels of curiosity were more successful than their friends with low curiosity even though the same strategy was adopted in the lesson.

Tulgar (2018) conducted a study in a Turkish setting. The study aimed to investigate the effect of curiosity on the second language learning process. 10 foreign learners of Turkish participated in the study and the data were collected through reflective reports. Results of the content analysis showed that curiosity enhanced participants' language development, especially in socio-cultural, pragmatic, and linguistic knowledge. Further, it was stated by the researcher that curiosity served as motivation during the study.

To sum up, curiosity and motivation have been related by many researchers through the years. The amount and nature of motivation differ among individuals

however encouragement has an important role in the level of motivation. Curiosity, defined as intrinsic motivation, has a way of influencing the behaviors of learners. Therefore, curiosity, especially EC, is claimed to enhance learning, by motivating them toward exploratory behavior.

1.2 Statement of Problem

Although VYLs are curious, their characteristic is ignored in the classrooms and they are expected to act opposite of their personality (Chak, 2007, p.142). VYLs are engaged in their learning process as a result of this curious nature (Pinter, 2011; Uysal & Yavuz, 2015). They have an active role in learning, and they shape their learning by engaging with the environment around them (Cameron, 2002; Puskas, 2017). They interact with the people, they explore the environment, and they build knowledge out of their experiences (Uysal & Yavuz, 2015). Curiosity is defined as a natural characteristic of young learners most of the time, however, teachers and parents might neglect this characteristic as their endless questions and desire to explore everything can create uncertain feelings for teachers and parents (Chak, 2007). SRL is described as a process that helps students control their behaviors to shape their learning experiences which are divided into several stages (Zumbrunn et al., 2011, p. 4). Self-regulated students are motivated to learn and know how to manage in a learning setting (Perry & Rahim, 2011). This should be kept in mind that being metacognitively involved in the learning process is not enough itself to be self-regulated successfully, students need to be devoted motivationally, as well (Schunk & Zimmerman, 2011). In brief, VYLs are active in their learning process, as a result of their curious nature. Using this natural characteristic of VYLs in language classrooms might affect their SRLS and their motivation toward English. Using their curiosity in the language classrooms while teaching the target language can help them control and organize their learning process and make English lessons more attractive for them. Thus, the present study aims to gain a deeper understanding of the effect of EC on VYLs' perception of SRLS and motivation in EFL classes.

1.3 Purpose of the Study

The purpose of this study is to trigger epistemic curiosity (EC) in VYLs of English and to investigate the effectiveness of VYLs' SRLS. The study also attempts to examine if EC has any effect on the motivation of VYLs. The study tries to find out the perceptions of VYLs and their teacher about promoting EC in English classrooms. Finally, it discovers any possible relationship between EC, SRL, and motivation of VYLs in English classes.

1.4 Research Questions

Considering the objectives of this study, the research questions were addressed:

1. Does EC have any effect on the SRL of VYLs (5-6 years old) in English classes?
2. Does EC have any effect on the motivation of VYLs?
3. Is there any relationship between EC, SRL, and Motivation of VYLs in English classes?
4. What are the perceptions of VYLs about learning English via EC activities
5. What are the reflections of the English teacher about promoting EC among VYLs?

1.5 Significance of the Study

As mentioned in the previous part of this study, EC cannot be said to be welcomed by all the parents and teachers. Even though earning, curiosity is hereby tended to be reduced by others at a very early age (Engel, 2013). Yet VYLs need to be included in the hands-on activities for efficient learning, especially when their

short attention span is considered. They should be allowed to walk around, ask questions, and understand the environment around them. This does not only mean that they are more focused but also that they improve rules and grasp the information (Uysal & Yavuz, 2015).

Further, self-regulated learners are different from their peers as it provides lifelong learning opportunities for the learners (Dignath et al., 2008, p.102). They are conscious of what they know and what they do not. They plan and organize their learning process, decide on their learning objects, self-monitor, and evaluate themselves (Corno, 1987). SRL has four basic domains: cognitive/metacognitive, developmental, motivational, and social/environmental (Zimmerman & Schunk, 2011). When these domains are considered, self-regulation of the learning process can be very appropriate for VYLs. VYLs who are curious and active learners in the first place, correspond to self-regulated learner characteristics.

In addition, motivation is a big factor that prompts learners to start, continue and achieve a specific goal in language education (Fenyvesi, 2020). For learners to grow intrinsic motivation toward language learning, they need to have authority in what they do, control their learning, and associate, knowledge with their life experiences (Lamb, 2011). When we take the requirements of SRL and young learner motivation, we see common basic points. They are complementary to each other and as a natural characteristic of VYLs, curiosity might have an effect on self-regulated learning and motivation if increased through lesson plans.

Curiosity plays a very important role in education. It is the basis of moving several studies proved that learning and acquiring more. VYLs have increasing hours of English lessons in online or face-to-face classes and it can be challenging for the teachers from time to time. They have to make the lesson as interesting as possible for the VYLs who do not have any valid reason to learn English. Therefore, triggering their curiosity in the English lessons may help both teachers and learners during the lesson. Another important characteristic of VYLs is how conscious they are of the environment around them, whether it is a classroom or a zoom meeting. They know and comprehend what is happening. Giving them the responsibility of regulating their learning can be interpreted as respect for their learning styles as well as a great support to the teachers in the classroom. It creates a great basis for VYLs'

future academic lives in language education or any other subject. Thus, the data collected from this study is expected to be used to shed light on VYs' SRL abilities and VYs' curiosity in English language classes.

1.6 Definitions

Very young learners (VYs): Learners who are pre-primary students or preschoolers (Ellis, 2018).

Self-regulated learning (SRL): It is a process in which students improve strategies to plan and manage their learning, actively (Zimmerman, 1990).

Epistemic curiosity: It is a curiosity type triggered by the forcing of knowledge acquisition (Berlyne, 1978).

Motivation: It is an individual's willingness to carry out a task (Vroom, 1980).

EFL: English language that is taught at school, does not have a great effect on learners' social life (Broughton et al., 2002).

Chapter 2

Literature Review

In this chapter, recent literature related to the utilization of curiosity in VYLs' English language education is examined along with SRLS of VYLs and their motivation toward English language education. VYLs, SLL of VYLs, motivation, motivation in SLL, motivation of VYLs, self-regulation, SRL, SRLS, SRLS studies on VYLs, curiosity, EP, curiosity in childhood education, and studies related to it were reviewed, respectively.

2.1 Very Young Learners (VYLs)

Reilly and Ward (1997, p. 3) defined VYLs as the children who have not started to read while Sun et al. (2016, p. 551) gave a specific age gap between 3 and 6 which can be interpreted as preschool ages when children are not able to read and write. According to Pinter (2011, p. 2) children whose ages are 3 to 5 are considered preschool kids thereby VYLs as they do not have any literacy skills, yet. Specifically, the age range in the study was between 5-6 and they could not read and write in English yet.

2.2 Second Language Learning (SLL) of VYLs

Teaching English to young learners and VYLs is different from teaching adults considering their nature (Li et al., 2018; Singleton & Pfenninger, 2018). Even though young learners are hard to accomplish activities that require maintenance of high levels of concentration, they are more motivated toward the things which they find appealing (Klein, 2005). There are advantages and disadvantages to teaching VYLs and YLs for teachers (Gautam, 2014). One of the advantages is the absence of

a strict syllabus which helps teachers be more flexible with the topics and arrange the time according to their students instead of due dates. Another advantageous point for teachers is that VYLs are curious and eager to learn. Besides, they love to include creativity in learning experiences which keeps them motivated. Regarding their motivation, it is said that as they do not have any previous school experience, they do not have any biases toward English lessons which prevents low motivation in language classes. Additionally, VYLs' curious nature is a great help for teachers to keep them engaged in the lessons (Reilly & Ward, 1997).

Apart from the advantages, there can be disadvantages of this age group considering English teaching. According to Reilly and Ward (1997), VYLs' mood swings can be tiring for their teachers. They can be affected by small details and be selfish as a result of their age which can be difficult for group activities (Roginska, 2013). However, one important point for VYLs is that their consciousness is not well developed yet. This can be interpreted in means of language learning and classroom management. In means of language learning, VYLs start to use language before they notice, they adapt the rules to the language they use, unconsciously (Scott & Ytreberg, 2001). When it comes to classroom management, VYLs are difficult to control as they do not comprehend the rules, yet. VYLs are logical individuals opposite of what is thought. They want to understand the reason behind everything as a result of their curious nature (Roginska, 2013). However, they voluntarily obey rules because the rules help them feel secure (Scott & Ytreberg, 2001).

To sum up, SLL in VYLs has benefits and challenges. While advantages can be specified as VYLs' eagerness, bias-free attitudes towards SLL, creativity in the classes, and the flexibility of the curriculum, the disadvantages of this age group can be presented as mood swings, lack of consciousness, and low levels of concentration. Considering these factors, it can be concluded that teaching English to VYLs is different from teaching English to adults.

2.3 Definition of Motivation

Throughout the years, researchers had disagreements on the definition of motivation (Littman, 1958; Brown, 1961; Bolles, 1975). Littman (1958, p.115) believed that there was a problem in the system when it came to defining motivation, as it had long been discussed and no agreement had been made on a specific description of it. Brown (1961, p.24) focused on the difficult position, which was arising from this ambiguity of motivation's definition, that researchers found themselves in to find a common point to describe it among all these disagreements especially when we consider that it is such a vital component in individuals' psychology. Bolles (1975, p. 1) supported his colleagues stating there were not any widely accepted criteria to define motivation. Hence, to be able to agree on a definition is incredibly difficult for a researcher. Fang (202, p. 179) believed that motivation had a big influence on people's behaviors and their willingness to achieve a goal. While Tohidi and Jabbari (2012, p. 820) stated that motivation was a powering tool for the people to bring out the best behavior for their good.

On the contrary, there are some similar points, if not the same. Motivation is defined as more of a desire, a voluntary activity, some kind of hunger, and driven by various researchers (Beatty, 1975; Bruno, 1980; Dewey, 1886; Gallistel, 1980; Vroom, 1964). Dewey (1886), one of the first researchers who defined motivation, said that motivation was a chosen desire. Dewey emphasized the free will of individuals (p. 155). However, while it is one of the leading definitions in psychology, it should be kept in mind that it is a very early description. Over time, many researchers proposed similar and more recent definitions of motivation (Beatty, 1975; Bruno, 1980; Gallistel, 1980; Vroom, 1964) These references to motivation are old. Vroom's (1964) definition also focuses on an individual's will to accomplish an activity. He defined motivation as a "voluntary activity" chosen by people. Just like Vroom, Bruno (1980) described motivation as a "wish or a desire" to fulfill a task. According to Beatty (1975), motivation was more like hunger which had a direct effect on individuals' behaviors. And lastly, Gallistel (1980) described motivation as a drive hidden in our actions.

Furthermore, recent definitions of motivation had been proposed by

distinguished scholars (Dörnyei, 2000; Keller, 1987; Ryan & Deci, 2000). One of the first definitions of motivations in the 21st century belongs to Ryan & Deci. According to the researchers (2000, p. 54), a motivated person is someone who is ‘energized’ to achieve a task. Dörnyei (2000, p. 535), on the other hand, focused on three aspects of motivation considering all the definitions; the *reason* for the choice of action by people, *duration* of the will to accomplish the task, and individuals’ *determination* to maintain the activity. He kept motivation responsible for these aspects.

In conclusion, motivation has a broad definition made by various researchers over the years. Even though the definitions do not have much in common, they agree on individuals' will. While early definitions focus on people’s instincts, more recent studies focus on people’s behaviors. In the present study, motivation has been defined as an individual's will to achieve a task since they were asked to complete various tasks during the treatment.

2.4 Motivation in SLL

Motivation has been an important component of the learning process (Cohen, 2010). Johnson and Johnson (1974) reported in their article that motivation influences learners in reaching their goals when used in an appropriate environment. Motivation is not a stable component during learning, it changes and evolves according to internal and external factors (Dörnyei, 2000; Dörnyei, 2001).

The majority of researchers agreed on motivation’s effect on language learning. It has been accepted as a leading factor for the initiation of second or foreign language learning and success in the field (Cohen, 2010; Dörnyei, 2012; Ushioda, 2010). Learning L2 requires different motivation compared to learning other subjects as students do not learn a language only for communication but they learn the culture of the spoken language; therefore, learning L2 also means a second culture, and the motivation cannot be seen as the same, as in learning other school subjects (Cohen, 2010). Motivation is accepted as a key factor in learning L2, whereas it is not considered to have such an effect on the acquisition of the mother

tongue. Even though it is not discussed as a key element during L1 acquisition, it can create a significant difference during the L2 learning process (Ushioda, 2010). It is supposedly the driving force for the maintenance of success in SLL (Dörnyei, 2012).

Heinzmann (2013) explained Gardner’s Socio-Educational Model of Language Learning which focuses primarily on motivation. According to this model, learners’ integrativeness and attitudes towards learning situations impact motivation which then influences success in language learning (see Figure 1).

Additionally, Anjomshoa and Sadighi (2015) stated that second language acquisition demands learning a second culture, hence Gardner’s Socio-Educational Model is appropriate for socio-cultural aspects of language learning. Therefore, as a crucial element of SLL, motivation has a special meaning for English lessons compared to other school subjects. As stated previously, language learning deals with cultural aspects of the spoken language which affects learners’ attitudes and integrativeness hence their motivation.

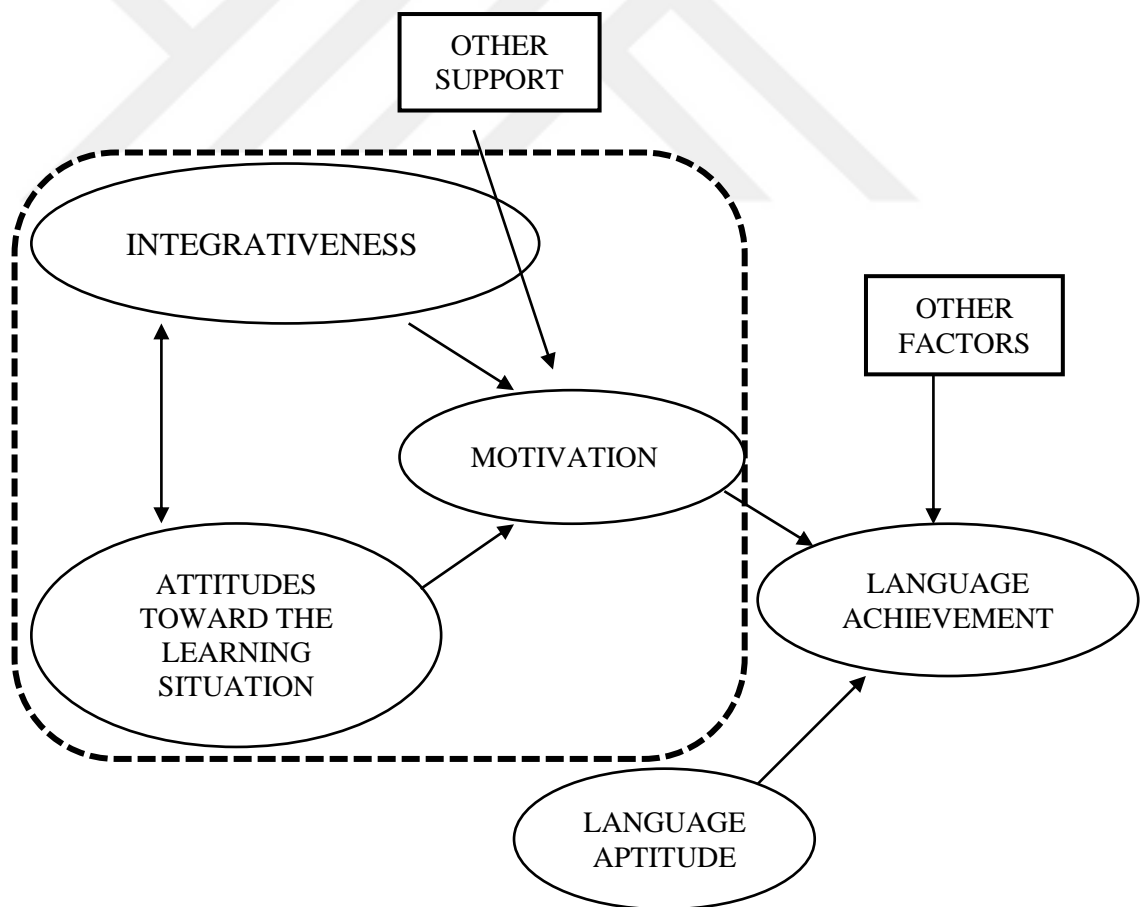


Figure 1. Integrative motivation (Heinzmann, 2013).

To sum up, motivation was defined as a very strong element of SLL and believed to be affected by various internal and external factors during the learning process. While it is not seen in L1 acquisition frequently, studies showed that it was essential in language learning. It was also stated by the researchers that SLL requires learners to acquire another culture as well as the language. Hence it was claimed that motivation for learning a second language is different from motivation for learning another school subject.

2.5 Motivation Among Very Young Learners (VYLs)

VYLs differ from each other in language classes (Pinter, 2011). This diversity is not about their language proficiency but their attitude and motivation (Nunan, 2010). As VYLs do not have a formal educational background in language learning, they are accepted A1 level. That's why the diversity in young and VYLs' classrooms occurs due to their attitudes and motivation towards language learning.

VYLs start to develop their academic skills during this age period. For this reason, teachers should be aware of the language they use with VYLs. Language should be learned naturally through games and activities with this age group of students. With games, VYLs are motivated to learn a second language as they are having fun (Reilly & Ward, 1997). VYLs are motivated by things they find attractive such as games, songs, and activities. Another component of the language lessons which keeps VYLs motivated is goal setting. VYLs show greater motivation when they are aware of what they do and why they do it in class (Klein, 2005). Scott and Ytreberg (2001) stated that children around this age start to develop logical reasoning, hence they begin to question and require to be informed by others. When they obtain the information, they feel included and motivated. On the other hand, Lamb (2011) said that to increase the intrinsic motivation of the learners, they demand authority on what they do. Because VYLs do not have external reasons to learn a second language under normal circumstances, intrinsic motivation is generally associated with this age group. As they feel motivated toward games and

activities because they enjoy them, this statement makes perfect sense (Fenyvesi, 2020).

In brief, every learner is different and each classroom has a diverse learning environment. However, different from adolescents, VYLs' diversity does not come from their language proficiency level as they do not have an academic background. Their diversity is based on their attitudes toward SLL. To keep them motivated and their attitudes positive towards the lessons, games are advantageous tools to use in the classroom. Since VYLs do not have external motivation, it is crucial to keep their intrinsic motivation high, for this purpose, games are used in English lessons as VYLs enjoy these activities. Another technique to maintain high intrinsic motivation is to set goals for VYLs. An increase can be observed in motivation levels when the lesson objectives are introduced.

2.6 Self-Regulated Learning (SRL) Strategies

2.6.1 Self-regulation (SR). Considering the current COVID-19 situation, many students and their parents feel anxious today, especially about the learning process. Some parents who do not have the same opportunities to provide an appropriate learning environment, feel inadequate for their children during their learning journey (Daniel, 2020). Even though they have their teachers to ask for help, the majority of the responsibility is left to them. Parents are held responsible for their children's learning. Achieving this goal requires a system. For this reason, self-regulation is an important term for teachers and students.

Not every student has to learn in the same way, they are special, so they learn in different ways (Ehrman et al., 2003; Zimmerman, 2002). During the 70s, the idea of differentiation started to gain popularity in education (Zimmerman, 2002). Then the self-regulation method came out accordingly. Self-regulation can be described as a process rather than a skill during which learners turn their "mental abilities" into "academic skills" by generating their ideas and opinions to reach their goals (Zimmerman, 2000; Zimmerman, 2002). To be able to self-regulate learning demands learners to foster some skills (Dignath et al., 2008). One of these skills is

metacognition. The term began to be used frequently during the 70s and 80s. Metacognition can be defined as people's awareness of their thinking (Zimmerman, 2002). It is crucial for students to know and evaluate their thoughts, in this way they can organize their learning process (Zimmerman, 1990).

Another skill that should be developed for self-regulation is self-monitoring which requires learners to monitor themselves during learning thereby they become conscious of their strengths and weaknesses (Corno, 1986). Bandura (1991) highlighted that self-monitoring is not only about the self-review of an individual's behavior. It is affected by different variables and one of them is the learner's mood states along with pre-existing cognitive structures and self-beliefs (p.250). For this reason, we cannot simply say that learners observe their behaviors objectively. Finally, self-monitoring has also a crucial role in defining realistic goals for learners and assessment of progress (Bandura (1991).

In brief, learners today are responsible for their learning. As different individuals, they learn at their unique pace and style. SRL helps them organize their learning process considering their strong and weak points. The regulation process asks learners to be aware of their self-thoughts and behaviors and is affected by mood states, pre-existing cognitive structures, and self-beliefs of learners.

2.6.2 Self-regulated learning (SRL). Panadero (2017) defined SRL as a conceptual framework to comprehend different elements of the learning process such as cognitive, emotional, and motivational (p, 1). This framework includes many processes such as goal-setting, planning, self-motivation, attention control, use of learning strategies, self-monitoring, and self-evaluation to promote learning and the subject of these processes is the learner (Zumbrunn et al., 2011, p.9). During the metacognitive process, learners plan their learning process, set goals, organize learning processes, self-monitor, and self-evaluate themselves. In the motivational process, self-efficacy and self-attribution are developed by the learners which helps them see the consequences of their actions. In terms of the behavioral processes, learners create the best learning environment for themselves (Zimmerman, 1990).

Hence, SRL cannot be thought of as a simple plain process. It includes various elements affecting each other just like any other mechanism used in

education. Bandura (2001) has a model to define this reciprocal relationship (see Figure 2).

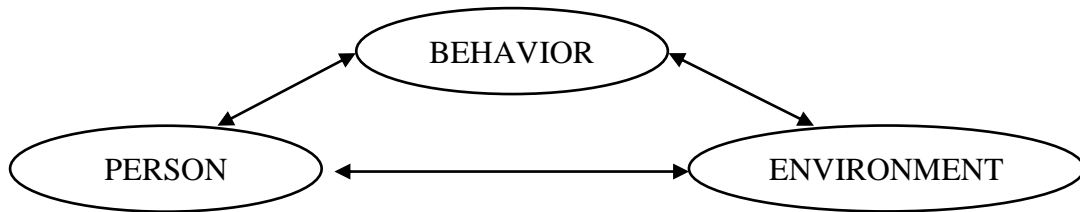


Figure 2. Bandura's model of reciprocal interactions (Bandura, 2001).

As seen from his Triadic Model, people impact their behaviors and environments and are affected by them back. Individuals expand their authority over the things they find important. SR demands self-contribution and self-awareness. Learners need to make sacrifices during SR. Bandura (2001) also described human agency as the actions that an individual does intentionally. It has several features to consider such as intentionality, forethought, self-reactiveness, and self-reflectiveness. We evaluate human behavior together with these aspects to see whether it occurs within the control of the person which is described in detail in the following section.

2.6.2.1 Intentionality. Bandura (2001, p. 6) described intentionality as the self-motivator of the possible future acts of individuals and locates it at the center of the action plans. However, to add more, intentionality itself is not enough for planning actions.

2.6.2.2 Forethought. Learners set goals and plan their future actions considering their goals. Courses of action that will bring learners closer to their goals are chosen. At this point, forethought enables learners to be motivated and shapes their actions when it is regarded as an anticipatory self-guidance which helps learners to select and direct behaviors according to their goals and possible consequences (Bandura, 2001, p.7; Luszczynska & Schwarzer, 2005; p.128).

2.6.2.3 Self-reactiveness. After individuals decide on intentional actions and do their forward-planning to reach their goals and foresee the anticipated outcomes, they take action instead of waiting for the actions to occur on their own (Verdin & Godwin, 2019). This feature of human agency regulates behavior and motivates people to carry their actions out (Bandura, 2001).

2.6.2.4 Self-reflectiveness. Besides regulating their actions, people examine the execution process of the actions (Bandura, 2001). In this course self-consciousness, motivation, values, and the meaning of life pursuits are examined by people. At further stages of self-reflectiveness, individuals compare and choose one action for another by considering values (Bandura, 2018).

Another point of view of SR comes from Schunk and Zimmerman (2007). They took Zimmerman's (2000) Cyclical Model of SR as the basis. According to this model, SR has three phases which are forethought, performance control, and self-reflection. Forethought is defined as the first step to considering action. During this phase, learners prepare themselves for their performances. They set goals and start modeling the learning process. The next phase is performance control. It occurs during the learning process and learners check themselves in the course of learning. They use feedback, social comparisons, and learning strategies to canalize their attention for better action. Lastly, in the self-reflection phase learners evaluate their actions, whether they reach their defined goals or not (see Figure 3).

Both models reflect the reciprocal aspect of SRL. All aspects have an effect on each other and learners should have the ultimate control over this process. To do so demands requirements from learners such as self-efficacy and motivation. However, most of the models in SRL tend to generalize these factors even though they differ from one learner to another and from subject to subject (Wolters & Pintrich, 1998).

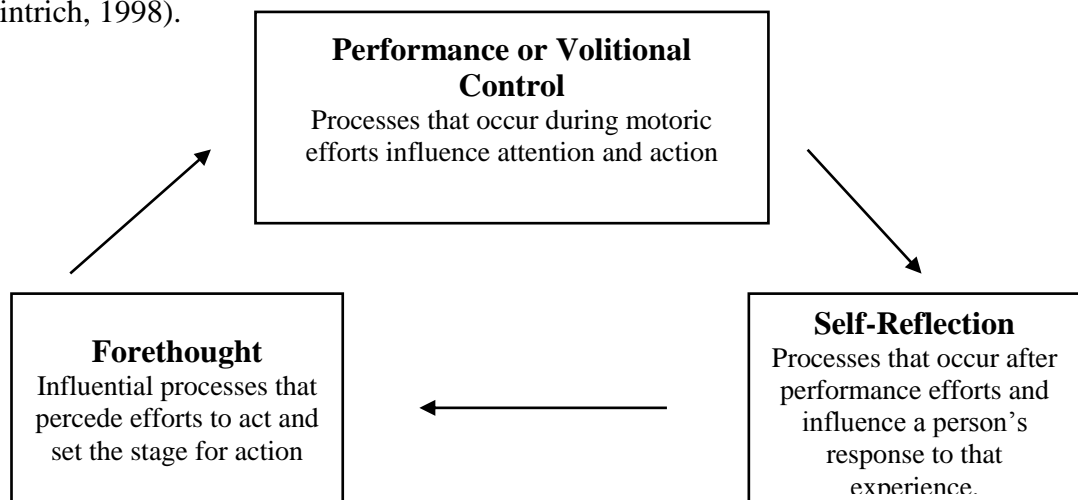


Figure 3. Cyclical model of self-regulation (Zimmerman, 2000).

Furthermore, Zimmerman (2000) is one of the very first researchers in this area proposing two more models besides the Cyclical model. The first model he represented was the Triadic Analysis of SRL. This model analyzes Bandura's Triadic Model and defends SRL could have been foreseen from Bandura's Social-Cognitive Approach Model (Zimmerman, 1989). After the Cyclical Model, the Multi-level Model was suggested (Zimmerman, 2000). This model has four stages; observation, emulation, self-control, and self-regulation, during which learners develop their self-regulatory competence.

Table 1

Multi-Level Model (Zimmerman, 2000)

Level	Name	Description
1	<i>Observation</i>	Vicarious induction of a skill from a proficient model
2	<i>Emulation</i>	Imitative performance of the general pattern of style of a model's skill with social assistance.
3	<i>Self-control</i>	Independent display of the model's skill under structured conditions.
4	<i>Self-regulation</i>	Adaptive use of skill across changing personal and environmental conditions.

Another SRL model was presented by Boekaerts (1992). The Adaptable Learning Model, later named as Dual Processing Model, focuses on the dynamic features of SRL. Boekaerts (1992) provided a theoretical basis for the explanation of findings of various psychological frameworks. Among these frameworks, motivation, emotion, and self-cognition can be counted (Panadero, 2017). Even though the Adaptable Learning Model was presented in 1991, it took some time to develop it into the Dual Processing Model. In 2006, Boekaerts and Cascallar suggested the improved model of SRL. Boekaerts' model was offering 2 parallel pathways; growth and well-being. Learners whose priority is their goals take action

towards growth as they value their goals and are ready to use their energy to reach them while learners who put well-being first, initiate action in the well-being path and prepare the best learning environment to avoid any undesirable learning experiences. It is also said that learners can switch the path during the learning process (Boekaerts & Cascallar, 2006) (see Figure 4).

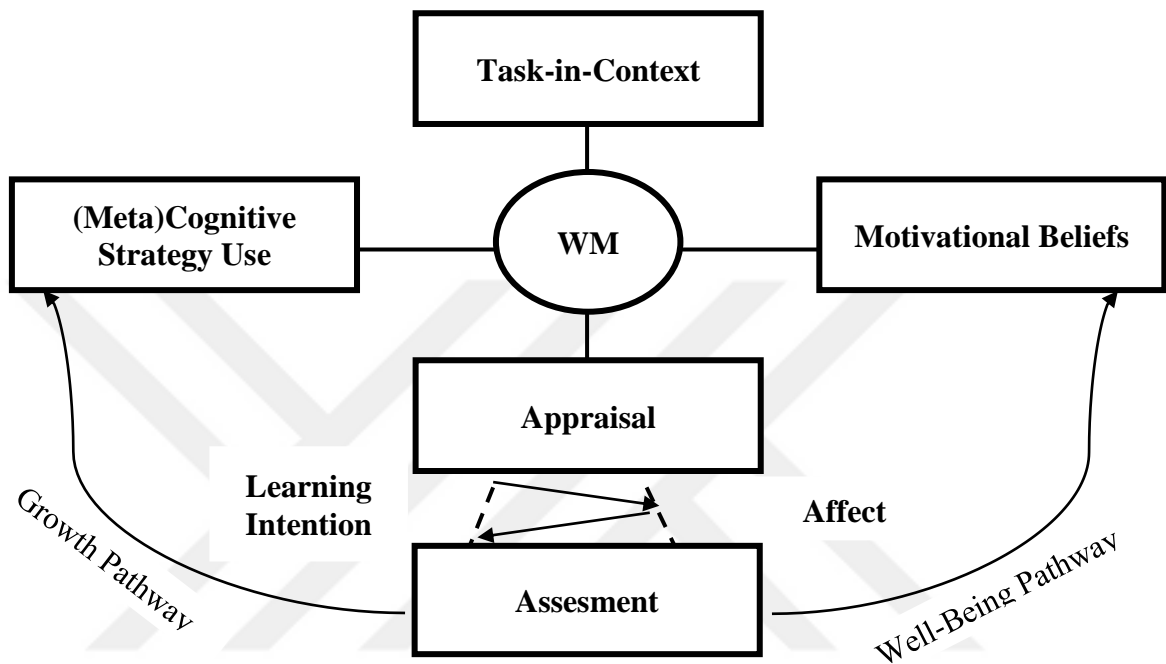


Figure 4. Dual processing model (Boekaerts, 1992).

For this study, Zimmerman’s Cyclical Model was adapted considering participants’ ages and their comprehension levels. In his model, Zimmerman adopts a simpler structure while defining SRL and describes three phases that can be observed and measured by VYLs’ teachers and students can self-evaluate themselves. The Cyclical Model takes the Social-Cognitive Model as a basis, which supports the relationship between behavior, person, and environment. Therefore, aspects of the Cyclical Model make a perfect fit for this study.

2.6.3 Self-regulated learning strategies (SRLS). All the given models have similar objectives for learners. They aim for self-efficacy, self-evaluation, and self-

regulation. To reach these goals, learners use particular strategies. Using SRLS enables learners to value their self-efficacy. They grow self-awareness during the process of selection and application of strategies (Zimmerman, 1989). The application of SRLS shows a great difference between younger and older students. VYLs cannot be expected to display the same manners during the learning process as a result of their nature (Uysal & Yavuz, 2015).

This nature of the VYLs can be misinterpreted sometimes as they cannot perform SRLS in the classroom. However, according to Hattie et al.'s (1996) review in which they examined 51 studies via meta-analysis to define characteristics of study skills interventions for success, they found that interventions are most useful for the youngest students (p. 126). The interventions in the studies highlighted the self-management of learning by the students via applying study skills and the studies examined cover students from different ages and levels from preschool kids to university students. Each researcher in the area defined different strategies used by their students. These strategies vary across age groups, their subject goals, and topics (Zumbrunn et al., 2011; Mahmoodi et al., 2014; Abadikhah et al., 2018)

Zumbrunn et al. (2011) examined literature and presented strategies found most commonly in the SRL studies. According to their paper, the most frequently used SRLS were goal setting, self-motivation, planning, attention control, flexible use of strategies, self-monitoring, help-seeking, and self-evaluation (p.9). To start with, goal-setting helps students control their behaviors to achieve the standards they set for themselves, and learners of SRL set their goals hierarchically according to their learning plan (Zimmermann, 2000). Motivation is important for learners to declare control over their learning (Corno, 1993). It takes place when a learner decides to apply a learning strategy independently (Zumbrunn et al., 2011).

Another strategy, planning, is helpful to regulate the learning process and is seen as a reciprocal strategy with goal setting (Zumbrunn et al., 2011; Zimmerman, 2002). It is carried out in three steps; setting a goal, providing strategies to reach the goal, and regulating time and resources to reach the goal (Zumbrunn et al., 2011). Attention control, on the other hand, refers to ignoring distractions and focusing on the areas most related to the learner's goals (Winne, 1995). Another strategy is the

flexible use of strategies. Strategies take shape according to learners' goals and individuals should choose and adopt strategies according to their learning process (Paris & Paris, 2001). Another important strategy is self-monitoring. Learners monitor their progress over the learning process to reach their goals. Self-regulated learners are motivated and feel satisfied when they see progress in the learning process and self-monitoring provides this motivation and satisfaction (Zimmerman, 2002). Help-seeking is not always associated with self-regulated learners; however, they ask for help from their peers when needed (Zumbrunn, 2010). Finally, self-evaluation plays a crucial role in SR. It can be described as self-judgment during which learners observe and compare their behaviors against some standards or previous behaviors.

Mahmoodi et al. (2014) conducted a study to discover SRLS that were most frequently used by Iranian EFL learners along with the association between motivation and SRL, and SRL and L2 success. 130 participants from 2 different language institutes answered a 46-item questionnaire. According to the results, they found five strategies most frequently adopted by the learners via frequency analysis. When they were asked about their strategies during the learning process, participants answered making connections between new and pre-existed English; practicing English when the subject is not clear; checking their knowledge of English regularly; finding various enjoyable ways of learning English; making a list of the subjects mastered and not mastered in English. The findings revealed that 5-most-frequently used strategies by learners are organizing and transforming, self-evaluation, keeping records, and monitoring.

Abadikhah et al. (2018) explored EFL university students' attitudes towards SRLS in writing academic papers. The study was carried out as a cross-sectional explanatory design. 98 participants studying English at the University of Mazandaran answered a 60-item questionnaire. To measure SRLS, 6 dimensions; motive (goal-setting, self-efficacy), method (task strategies), time (time-management), performance (self-evaluation, self-consequences), physical environment (environmental structuring), and social environment (help-seeking) were developed as the conceptual framework. Results showed that learners organize methods, social environment, performance, physical environment, motive, and time dimensions of

SRL from less to more. According to the results, the reason why the time dimension ranked the lowest is because participants might have a hard time with time management. Another finding from the study indicated that four-year students and three-year students used different strategies during academic writing practices.

In conclusion, it can be concluded from different studies that SRLS are adaptable according to individuals' learning goals and objectives. Even though the names of the strategies show variation among different models and studies, SRLS mainly put the learners at the center and aim to create independent learners who can set goals, plan their learning process and organize time and sources according to their goals, monitor and evaluate their learning and take the necessary actions, accordingly, establish a suitable learning environment and ask for help when needed.

2.6.4 Recent studies on SRL. Most of the research in SRL is conducted on older learners from middle and high schools or universities (Whitebread, 1999; Hendy & Whitebread, 2000; Perry & VandeKamp, 2000). Different research suggests that young learners have difficulty managing cognitive and metacognitive skills during the learning process (Paris & Newman, 1990; Zimmerman, 1990).

To begin with, a study by Whitebread (1999) examined the VYLs' metacognition. The study was conducted with 20 students from Leicestershire Primary School whose ages varied between 5 and 6 in the same primary school. During the study, students were introduced to a reclassification task designed by Inhelder and Piaget (1964) as a game. In the game, students were presented with various classification tasks. During the task, researchers observed participants' strategy application and performance. The results showed that 5-year-olds' and 6-year-olds' relation between metacognitive awareness and performance is significantly different. Hence, age has a crucial place in choosing strategies during the tasks.

Hendy and Whitebeard's (2000) study aimed to explore how teachers, parents, and students recognized and described the notion of 'independent learners' and how

this perception affected the practice and planning of the VYLs' classrooms. The mixed-method study collected the data from 48 nursery, reception, Y1, and Y2 students, 24 teachers, and 46 parents via interviews and questionnaires. Results showed that while children as young as 3-year-old displayed great success at expressing their choices, and recognized their difficulties and strengths, older children expressed that they identify the learning they receive. When asked about their perceptions of independence, teachers expressed concerns about VYLs' self-confidence, taking responsibility, expressing opinions, and making decisions. When it comes to parents, they showed less concern for their children's independence in the classroom. Opposite to teachers, parents were more optimistic about their children's independence.

Perry and VandeKamp (2002) attempted to describe features of classroom environments that improve self-regulated approaches and to help teachers of VYLs and YLs by working collaboratively to help them prepare tasks and instructions to develop SRL in the classroom. 5 teachers with experience of 3 to 8 years and their students participated in the study and the data were collected through observation. The observation instrument had three parts, in the first part, the observee and observers, date of observation, and nature of the observation were recorded. The second part involved what happened during the lessons and in the last part, types of tasks and choices (about what, who, where, when), opportunities to control challenges, opportunities for self-evaluation, support from the teacher and peers, along with teachers' evaluation practice were observed to determine the level of SRL in the classroom. Students' work, teachers' ratings of students' success and motivation, and semi-structured interviews were used to assess students' SRL. Based on the obtained data the participant-teachers provided their students with complex tasks, adapted the tasks to create challenges for their students, evaluated the learning process as well as supported their students' SRL, and adopted non-threatening evaluation practices for their students. The students reached a high level of metacognition, SRL, and intrinsic motivation as a result of the classroom practices their teachers adapted.

To sum up, contrary to general belief about VYLs' incapacity to carry out cognitive and metacognitive skills, several studies proved the opposite. These studies

showed that with the support and guidance of their teachers, VYLs could regulate their learning process in the classroom. Opposite to teachers' and parents' concerns, VYLs improved the self-awareness of their strengths and weaknesses and were able to define what they learned. However, age factors should be taken into consideration while observing the SRLS of VYLs as learners' choice of strategies showed great variations at different age levels.

2.7 Curiosity

2.7.1 Definition of curiosity. Curiosity has always had a great place in our lives from very old times to now (Shenaar-Golan & Gutman, 2013). It has been the force behind the greatest inventions and discoveries for humans. For some, it kills the cat, for others, it is a box opening to new worlds.

Many researchers agree that curiosity is an inner statement of living organisms (Berlyne, 1978; Day, 1982; Opdal, 2001; Litman, 2005; Phillips, 2013). First, Berlyne (1978, p.98) defines curiosity as an internal state that occurs when the individual encounters the unknown and demands to solve it. According to his definition, someone can be curious only about a specific thing and explore that specific thing instead of exploring various areas. Day (1982, p. 19) sees curiosity as a hidden motivating force for positive and negative behaviors. The type of situation is not defined or restricted to one as in Berlyne's definition. Further, Day emphasizes curiosity's role in education stating that sufficient curiosity is seen as the biggest motivator for education. Litman (2005, p. 793), describes curiosity as a desire that leads us to gain new information by motivating exploration. The definition also focuses on the pleasure of gaining new information through curiosity. The experience is defined as rewarding. Opdal (2001, p. 331), on the other hand, starts definition by discriminating between wonder and curiosity. While curiosity is defined as enthusiasm to discover something, wonder is just a mood of fascination with the eccentricity of things someone encounters. Later curiosity is associated with daily life and scientific problems in this definition, such as asking the time, then wanting to learn how the watches are produced. Lastly, Phillips (2013) underlines the

positive perspective that curiosity gained from the environment and how workplaces, schools, and industries represent or define themselves as curious or curiosity-driven for promotion.

In brief, as an inner statement of every living organism, curiosity influences our lives. It is the reason behind very important discoveries and inventions. Besides, it is defined as a great motivator for education. By promoting exploration, it guides individuals to learn more. However, curiosity and wonder should not be confused with each other. While the wonder is a mood, curiosity is a desire to know more.

2.7.2 Epistemic curiosity (EC). According to Berlyne (1978), curiosity is classified as perceptual curiosity (PC) and epistemic curiosity (EC). While PC is said to trigger uncertain perceptions, EC is believed to trigger the desire for knowledge (p. 98). EC is aroused when encountered with a question, an unsolved problem, or complicated ideas, and it aims to fill the gap in the learners' knowledge to solve the problems and answer the questions (Litman et al., 2005). The important part here is to find the correct answer. Muis et al. (2018) said that if a learner is not qualified enough to evaluate answers, it will bring negative consequences during the learning process. Hence learners need to be SR learners to select the best content from which they will learn, regulate their emotions and organize their learning and develop thinking skills for different perspectives while engaging in epistemic cognition to learn further.

Another difference between the EC and PC is that while EC is used only for human behavior, PC refers to all living organisms. The reason for this discrimination can be seen as the desire for knowledge is unique to humans. (Loewenstein, 1994; Pluck & Johnson, 2011). Individuals feel uncertain when they lack information and the gaps in the information influence the decision-making of humans (Ben-Haim, 2006, p.16; Harp & Vesselinov, 2013). Golman and Loewenstein (2016) suggested that the way people feel about a lack of specific knowledge is the source of their curiosity to learn. Loewenstein (1994) describes gaps in information as feelings of deprivation which can be specified as a curiosity. Considering the feelings that arise from the lack of knowledge and desire to fill the gap, two types of EC are suggested; I-type and D-type EC (Piotrowski et al., 2014) While I-type refers to the interest

factor of EC and is generally associated with the pleasure of gaining information, D-type means deprivation and aims to diminish uncertainty of the unknown and is seen as a need rather than pleasure (Litman, 2008, p.1586). Lastly, similar to the information gap, explanation, and information-seeking questions are identified with EC (Chouinard et al., 2007). VYs love learning new things by questioning. They pursue explanations to satisfy their curiosity and this questioning to gain more knowledge is defined as an explanation-seeking curiosity (ESC) (Luquin & Lombrozo, 2020). Considering the epistemic feature of explanation seeking, ESC is regarded as a crucial factor in children's learning (Chouinard et al., 2007).

For this study, EC was chosen as the study aims to explore VYs' SRLS and motivation in English lessons. As described as the desire to know, it was the most suitable option to measure considering VYs' nature.

2.8 Recent Research on EC and SRL Among VYs

As stated in previous parts, VYs are defined as curious by nature. They pursue information tirelessly, they ask questions until their curiosity is satisfied which is only satisfied when VYs receive the explanation (Pluck & Johnson, 2011). To fill the gap that exists in the knowledge VYs seek explanations. The crucial part here is to reach the correct answers (Muis et al., 2018). To be able to gain information VYs need to develop cognitive and metacognitive skills, in this way they regulate the learning process and have control over their learning (Dignath et al., 2008). In this section of the chapter, recent studies on EC and SRL among VYs were briefly summarized (Engel, 2013; Chak, 2007; Chouinard et al., 2007; Tulgar, 2018; Whitebread et al., 2007).

To begin with, Chouinard et al. (2007) investigated children's questions to see if they can solve a problem by asking questions to gather knowledge. Hence VYs' purposeful questioning ability was analyzed in this study. 67 VYs, aged between 4 - 5, from Bing Nursery School participated in the study. During the study, they were shown a box and two different pictures and asked to guess the object in the box. One group was allowed to ask any question they wished even though they were

not forced to do so while the non-EC group did not ask questions. The data from participants' correct answers were analyzed via ANOVA. The results showed that participants who asked questions were more successful at guessing the object in the box by asking the right questions. Overall, participants asked 267 questions and more than %90 of their questions were effective to gather the information to solve the problem.

In their study, Whitebread et al. (2007) explored VYLs' metacognitive skills and SRL in the classroom. 32 teachers and their students (aged between 3 to 5), from Cambridge, England were involved in this study. It took over 2 years to conduct the study. During the study, educators collected evidence of metacognitive skills from their students' classroom activities and their performances by recording them in the video. 582 events were collected initially and the number was reduced to 60 after 3 steps of elimination. 60 events were analyzed and the behaviors of students were coded. Results showed that students represented regulation the most when they work in pairs or small groups. Also, the data showed that students' regulatory skills were reduced when teachers were involved in their activities.

Chak (2007) focused on preschool students, their teachers, and parents to find out the parents' and teachers' perspectives on curiosity's role in children's improvement and education. The study conducted in Hong Kong, China involved 312 participants. In this mixed-method research, participants answered a questionnaire form of quantitative and qualitative questions. According to the results, both parents and teachers displayed a positive manner toward children's curiosity exploration and teachers were more eager to encourage students to be more curious. One important concern of teachers was their concerns related to the academic schedules. Even though preschool was less restricted compared to the primary level, there were still concerns about academic pressure. When it came to parents' concerns, they were worried about the safety and posed a positive attitude when the safety of the children was promised during exploration.

Engel (2013) conducted a study on teachers' opinions of children's curiosity. In the study, the participants were asked to circle the essential features of children that they need to acquire at school from a list. According to the results, curiosity was

selected as the most essential tenet that students needed to acquire at school by the teachers. However, when the study was conducted without a list of features to choose from, there was almost no curiosity mentioned in the answers. According to the results, curiosity was not one of the first things that teachers consider while preparing lesson plans. Another observation carried out by Engel and her students showed that kindergarten students ask very few exploratory questions which are opposite of their nature. Moreover, it was seen that even when they ask questions that may lead up to discussion in the classroom, teachers tend to ignore the questions as they do not want students to be distracted.

Tulgar (2018) looked at the effect of curiosity on SLL in terms of linguistic, socio-cultural, and pragmatic development. 10 students of an institution (AtaTömer) participated in the qualitative experiment. Data were gathered with reflection reports. They were asked to write their reports considering social and cultural aspects of language learning. Results showed that curiosity affected language learning positively. Participants stated that the target language's culture was seen as a source of curiosity by them and motivated them to develop language learning. Finally, curiosity influenced participants to go further and explore the language more.

To sum up, VYLs showed evidence of SRL in their behavior during learning when EC was evoked. They managed to ask purposeful questions and showed success when they worked in pairs or small groups. When it came to parents' and teachers' perceptions of SRL and EC, different opinions were found. While some studies reported positive manners toward SRL and EC from parents and teachers, other studies claimed the opposite by stating EC of VYLs was not supported enough in the classroom. As a result, curiosity was considered a positive factor in motivating the learners to develop their language in terms of socio-cultural and cognitive aspects in the Turkish setting.

Chapter 3

Methodology

The current section analyzes the effect of EC on VYLs' SRL and motivation toward SLL as well as VYLs' perception of English and the teacher's reflection during the lessons. At last, it scrutinizes the relationship between EC, motivation of VYLs, and SRL through mixed-method research. It employs qualitative and quantitative research methods to measure the difference before and after the treatment. While mixed-method research is said to present a deeper understanding of the research problem and questions, it requires combining two different types of data, contrary to the common assumption of simply collecting data (Creswell, 2012, p.535).

The chapter also explains the setting and participants of the study, procedures that took place during the study, reliability, validity, and limitations of the study. To achieve the objectives of the study, the following research questions were addressed:

1. Does EC have any effect on the SRL of VYLs (5-6 years old) in English classes?
2. Does EC have any effect on the motivation of VYLs (5-6 years old) in English classes?
3. Is there any relationship between EC, SRL, and Motivation of VYLs in English classes?
4. What are the perceptions of VYLs about learning English via EC activities?
5. What are the reflections of the English teacher about promoting EC among VYLs?

3.1 Research Design

The study adopted a mixed-method approach by using qualitative and quantitative research methods (Creswell, 2012). While qualitative data were gathered through teacher's reflective field notes and focus group interviews, in the quantitative part of the study, questionnaires were used. By using the mixed-method research approach, it was aimed to reach and use the most powerful aspects of both data types to answer research questions. A mixed-method study can be used to grasp a better understanding of the problem as only one type of research may not be enough to answer the questions or more detailed answers are desired besides it provides researchers with different perspectives of the research problem (Creswell, 2012, p. 535). Creswell and Clark named 4 main types of mixed-method designs in 2007 which are the triangulation design, the embedded design, the explanatory design, and the exploratory design (Clark et al., 2008, p.372). In triangulation design, both qualitative and quantitative research are conducted simultaneously, and results are compared with each other, then an overall analysis is done accordingly. In the embedded design, one type of data is used to back up the other type which is considered the main data. Most of the examples of the embedded design adopt qualitative data in a secondary role to support quantitative data (Clark et al., 2008). Both explanatory and exploratory designs are two-phased processes. However, while in the explanatory design, quantitative data are collected first and followed by the qualitative data according to the quantitative data results, the exploratory design firstly collects qualitative data contrary to the explanatory design and gathers quantitative data later.

The current research adopted a mixed-method approach by using the triangulation design as both types of data were collected simultaneously, results were compared and an overall interpretation was conducted. Quantitative data were collected via a self-regulated learning questionnaire and a motivation questionnaire which were given as pre and post-tests and qualitative data were collected through teacher reflective field notes and small focus group interviews with the students. The present study is quasi-experimental research in that it tests a treatment with non-EC and EC groups. Considering that participants were not selected randomly, the

research is quasi-experimental (Thyer, 2012). The following paragraph presents the research design of the current study in detail.

The current study aims to measure any possible difference between the participants' SRLS and motivation in English lessons along with any change in their perceptions of English lessons when EC is raised during the English lessons. To reach this end, an SRLS and motivation questionnaire were asked as pre-tests. Both questionnaires consist of 10 questions each and were adopted as a 3-point Likert scale for this specific age group. Specifically, smiley faces were implemented rather than points or verbal answers as the age group was very young

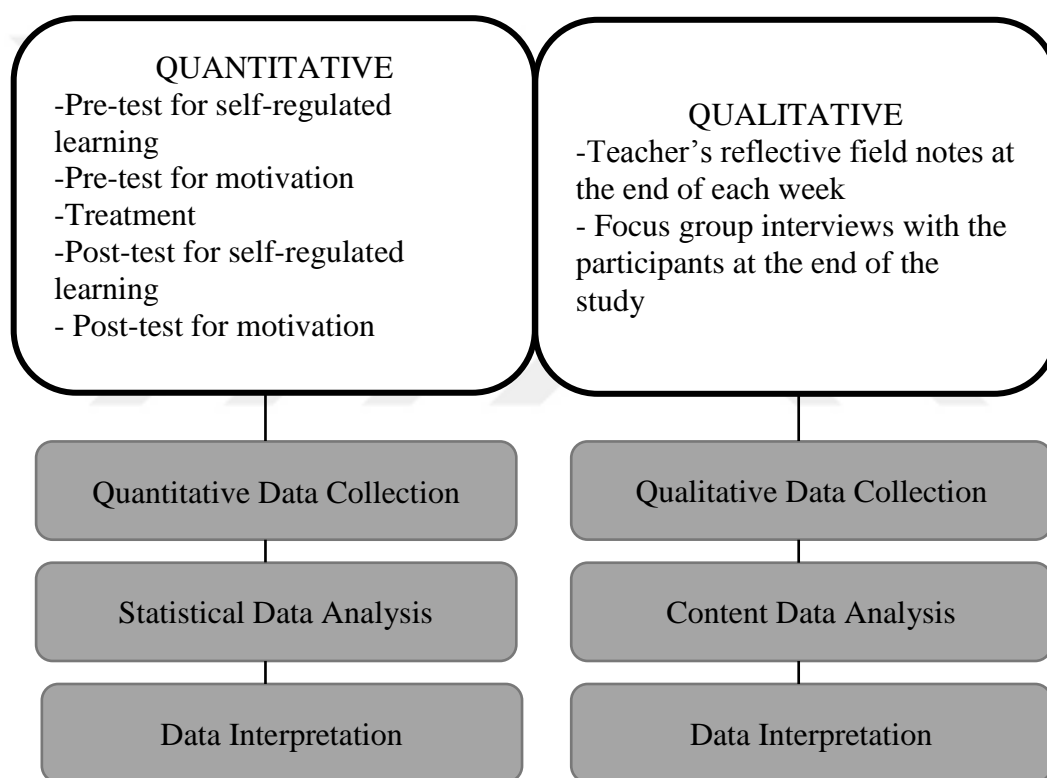


Figure 5. Visual representation of the research design.

After the implementation of the pre-tests on both non-EC and EC groups, the treatment started. During the treatment process, the EC group was exposed to practices aimed to enhance their EC while the non-EC groups continued their routine learning process as designed in the yearly plan. At the end of the 6 weeks of

treatment, the non-EC and EC groups took the same test as the post-test to see the difference. Along with the questionnaires, the teacher kept reflective notes during the treatment process and held a focus group interview with the participants at the end of the procedure.

3.2 Participants and Setting

The study was conducted at the kindergarten level of a private k-12 school in Istanbul. The kindergarten has 3 age groups: 4-, 5- and 6-year-olds. The study was carried out with 6-year-old groups. Out of 6 classrooms, 4 classes were chosen for the study. Non-EC and EC groups consisted of 36 in total (18 students in each group). As a consequence of COVID-19, the classroom population was half of the regular semester even though face-to-face education continued for kindergarten. For this reason, every participant who was able to continue attending school regularly was selected for the study. The ages of the participants were between 5 and 6. All of the participants were Turkish and none of them were literate or fluent in English. Participants' English level was accepted as A1 considering CEFR (Common European Framework of References for Languages) as they are VYL. In the non-EC group, there were 7 females and 11 males while in the EC group there were 8 females and 10 males. In total, out of 36 participants, there were 15 females and 21 males.

The school that this study was conducted is an International Baccalaureate (IB) school therefore it follows the Primary Years Programme (PYP) for kindergarten and primary school. The program aims to encourage students to inquire. There are interdisciplinary curriculum frameworks that serve this goal and all lessons are designed around these frameworks. PYP has six interdisciplinary themes and English lessons are planned considering these themes which are 'Who we are?', 'Where we are in place and time', 'How we express ourselves', 'How we organize ourselves', 'How the world works', and 'Sharing the planet'. Besides, there was a curriculum suggested by the Minister of Education. However, it can be stated that the

English curriculum in the kindergarten department was more flexible than in primary school, as the students are VYLs.

Both the EC and non-EC groups had 18 hours of English lesson hours per week and 6 hours of Crossroads which aimed to improve their communication skills by using English and there was not a certain curriculum to follow. Hence, students were encountered with English for 24 lesson hours a week. Of 24 lesson hours, Turkish English teachers had 18 hours with the students while native English teachers had 6 hours per week.

Table 2

Distribution of The Participants

	Non-EC Group		EC Group	
	N	%	N	%
Female	7	39	8	45
Male	11	61	10	55
Total	18	100	18	100

Apart from the students, 2 Turkish English teachers participated in the study. The teacher of the non-EC group was a 26-year-old female with a 3-year of experience in teaching in the same institution while the teacher of the EC group was a 27-year-old female with a 4-year of experience in teaching. Both teachers were ELT graduates and the EC group teacher was studying for her MA degree.

3.3 Data Collection

This part presents an analysis of qualitative and quantitative data collection tools and provides the data collection procedure of the study which includes sources of data, types of sampling, implementation, reliability, and validity.

3.3.1 Data collection instruments. To answer the research questions of this study, data were collected through qualitative and quantitative data collection instruments. The quantitative data were gathered with SRLS (see Appendix B) (Cronbach's alpha was .956) and motivation (see Appendix C) (Cronbach's alpha was .948) questionnaires by implementing both questionnaires as pre and post-tests. The qualitative data, on the other hand, were collected with focus group interviews which were held at the end of the treatment, and teacher reflective field notes.

3.3.1.1 Quantitative data collection tools. Quantitative data of this research were collected through the Self-Regulated Learning Strategies Questionnaire and Motivation Questionnaire. 10 questions for the SRLS questionnaire were chosen from the Motivated Strategies for Learning Questionnaire (MSLQ). The MSLQ was designed to measure students' learning strategies and motivation in the lessons (Pintrich & De Groot, 1990). It was first created in 1990 and originally has 44 items with a 7-point scale. To be able to fit it to the very young learners' abilities, the questionnaire was adapted to a 3-point scale. Instead of points, emojis were used considering the age group. Additionally, the sentences were simplified and translated into Turkish for the specific age group to increase their comprehension of the questions hence the reliability and validity. The Motivation Questionnaire was originally from the study of Schmidt et al. (1996) The questions were originally Arabic as the study was conducted on Egyptian students; however, the questions were translated into English by the researchers. The questions were also used in Çınar's thesis study in 2018. From the original questionnaire, 10 questions were chosen according to students' level. All the questions were translated into Turkish for the students by the instructor and necessary changes were made to simplify the language as well as turn the 7-point scale into a 3-point emoji scale for the participants to increase the reliability of their answers.

3.3.1.2 Qualitative data collection tools. The qualitative data were collected with focus group interviews and teacher reflective essays. For the focus group interviews, the teacher formed a group for discussion. Focus group discussions are

advantageous data collection tools for gathering information on common understanding and individual perspectives of the experiments (Creswell, 2012). McLafferty (2004) describes focus group interviews as a useful method to benefit from interaction between the participants. Considering participants' age, focus group discussions were useful to encourage the participants to talk about their experience of the study. During the focus group interviews, participants were asked whether they liked English lesson and they had any difficulties during the lessons ('Did you like English lesson?', 'Did you have any difficulties during the lessons?'). To support the focus group interviews, the teacher also wrote reflective field notes based on her observations during the study. Reflective field notes are teachers' thoughts that come out during the observations (Creswell, 2012). Maharaj (2016) argues that reflective field notes not only help researchers correct their mistakes during the study but also emphasize that observation and reflection are not the final steps of research, instead, they are the basic elements of this process. In this study, the researcher took field notes about how promoting EC in VYLs English classes effected students and the teacher ('One student asked her friend for clarification. It was the first time someone asked a question for clarification besides me'.).

Table 3

Visual Representation of the Research Questions and Applied Procedures

Research Questions	Data Collection Procedures	Data Analysis
Does EC have any effect on the SRL of VYLs (5-6 years old) in English classes?	SRLS Questionnaire	Independent Descriptive T-test
Does EC have any effect on the motivation of VYLs?	Motivation Questionnaire	Independent Descriptive T-test

Table 3 (cont'd)

Is there any relationship between EC, SRL, and M of VYLs?	Motivation and SRLS Questionnaires	One-way ANOVA
What are the perceptions of VYLs about learning English via EC activities?	Focus Group Interview	Content Analysis
What are the reflections of the English teacher about promoting EC among VYLs?	Teacher's Reflective Field Notes	Content Analysis

3.3.2 Data collection procedures. This section of the study presents the type of sampling and data collection procedure.

3.3.2.1 The type of sampling. As stated earlier, the study was carried out in an unusual situation for both students and teachers since the COVID-19 pandemic broke out. Despite many schools continuing distance learning, pre-schools remained face-to-face education and online education was offered for those who decided not to attend face-to-face education due to various reasons. In this study, all participants attended school regularly from the beginning of the year and lasted until the end of the school year without any breaks. Nonetheless, total student numbers were not the same as the previous years as the classroom populations were decreased for a healthier environment. As a type of non-random sampling, convenience sampling is used when the population matches the accessibility criteria of the study (Etikan et al., 2016). Considering that there were a limited number of students to participate in this study regularly, a convenience sampling was conducted during the research.

Table 4

Overall Study Presented Chronologically

Week	Data Collection
Week 1	Pre-test
Week 2	Treatment, Reflective field notes
Week 3	Treatment, Reflective field notes
Week 4	Treatment, Reflective field notes
Week 5	Treatment, Reflective field notes
Week 6	Treatment, Reflective field notes
Week 7	Treatment, Reflective field notes
Week 8	Treatment, Reflective field notes
Week 9	Content analysis of reflective field notes and focus group interviews, assessing tests in SPSS

3.3.2.2 Implementation. There were 4 data collection tools in this study. 2 of these tools, questionnaires, were used as pre-tests and post-tests, field notes were made each week during the study, and focus group interviews were conducted at the end of the study. The implementation started with the pre-test of the SRLS and Motivation questionnaires. Then the treatment started. For 6 weeks, students were introduced to the activities related to the lesson topic aiming to increase their epistemic curiosity by giving information gaps during the activities hence measuring any change in their SRLS and motivation in the lessons (see Appendix A). During the activities, the teacher observed the students and made reflective field notes each week. After the treatment ended, post-tests were given to the students, and focus group interviews were conducted by the teacher with chosen participants. Finally, content analysis of reflective field notes and focus group interviews, and assessment of the questionnaires were completed.

3.3.2.2.1 Week 1. Both students in the non-EC and EC groups were informed about the study and told that they were going to take the pre-tests. Both homeroom teachers and English teachers explained the questionnaires to the students and asked

them to give their most honest answers as well as there was no correct answer. The questionnaires were asked by the homeroom teacher in Turkish as the students were illiterate and students were asked to paint the emojis according to their answers individually. After the pre-test, the teacher prepared a 6-weeks-lesson plan for the treatment.

3.3.2.2.2 *Week 2.* The treatment started with a reading activity. The topic of the lesson was daily routines. The teacher started the lesson with a song to introduce the topic to the participants. Students watched the music video twice. Then the teacher asked them to name some of the activities they do in the morning and at night. After the warm-up, the teacher placed pictures on the ground with some pictures missing and started to read the story picture by picture. Whenever she came to the blank space she paused and looked at the participants and she said she didn't know what might happen as the picture was missing. After the story, she divided the classroom into two and asked them to find the missing parts of the story among other pictures she spread on the ground. During the task, she observed the participants. The whole treatment took 2 lesson hours.

3.3.2.2.3 *Week 3.* In week 3, the PYP theme was Sharing the Planet, so the teacher introduced participants to natural and human-made objects with a presentation and read the story *The Yard Guardian* from Cambridge Little Steps 3 book. After the story, the teacher asked students if they could see any natural objects but not to name them, and did the same thing for the human-made objects. She then introduced recyclable and unrecyclable objects. After the process of observation, the teacher brought 2 big boxes into the classroom with recyclable and trash logos on them. She asked participants what they could be. After their guesses, she asked their help to fill the boxes with the correct objects as she did not know the objects well. She gave students 10 minutes to find as many objects as they could find and put them in the boxes. She observed the students during the tasks and made notes. The whole treatment took 2 lesson hours.

3.3.2.2.4 *Week 4.* The topic of week 4's was physical appearance. To remind participants of the necessary vocabulary and structures, the teacher brought dolls to the classroom and describe their appearance and their clothes. Then teachers asked students to describe their friends' appearance. After the warm-up session, the teacher showed a big picture on the smartboard. The picture was from a well-known board game namely 'Guess Who'. The teacher explained the game to the participants and asked them to choose a person from the picture and not to tell anyone and participants had to ask the right questions to find the chosen character. Each student completed the task. The teacher observed the students during the tasks and made notes. The whole treatment took 2 lesson hours.

3.3.2.2.5 *Week 5.* For the 5th week, the English teacher created a cave for the participants. Week 5's topic was inventions through the time hence teacher showed some interesting inventions via a PPT to the participants. Then the teacher asked participants if they knew of any invention they used today. After the participants' answers, she started to describe an invention without giving the name. She described the usage, the size, and the color of the invention but she did not tell the name to the participants. Then she asked students to find the picture of the invention on the walls of the cave among other pictures. Participants tried to find the correct invention with the help of information they gathered from the teacher each time. The teacher observed the students during the tasks and made notes. The whole treatment took 2 lesson hours.

3.3.2.2.6 *Week 6.* The subject of week 6 was again inventions. The teacher read the book 'The Most Magnificent Thing' to the participants however did not read the end of the book. Then the teacher asked the participants what could happen at the end of the book. Participants were supposed to guess the ending by considering the character's problem at the beginning and creating an invention to solve the character's problem. At the end of the lesson, participants displayed their inventions

to the teacher. The teacher observed the students during the tasks and made notes. The whole treatment took 2 lesson hours.

3.3.2.2.7 *Week 7.* The last week of the treatment was Week 7 and the subjects' revision week. The teacher showed a music video of summer clothes to the participants, and together they made a sorting activity with summer and winter clothes. Then the teacher brought a big box covered with glitter and question marks on it. She said that there was an item in it and the only way to learn it was to touch it without looking. Students started to put their hands into the box and touch the item. They started a conversation with each other to find the item. After each made a guess considering what they felt, the teacher showed the item to the participants. Students guessed 10 items in the lesson. The teacher observed the students during the tasks and made notes. The whole treatment took 2 lesson hours.

3.3.2.2.8 *Week 8.* During the last week (Week 8), the homeroom teacher and English teacher explained the post-tests to the students and took them one by one. Again, the questions were in Turkish and asked by the homeroom teacher orally as the students were illiterate. After the post-tests, focus group interviews were conducted with the participants by English and homeroom teacher. The homeroom teacher helped the English teacher with translation to increase the reliability of the study as participants felt more confident and relaxed in their native language. There were 2 classrooms for the experiment with 19 students in total. Thus, the focus group interview was conducted in two groups for two classrooms as the number of students was already suitable.

3.3.2.2.9 *Week 9.* After the 8-week long treatment, the teacher gathered her reflective field notes for content analysis. The focus group interviews were also analyzed considering the content analysis. Lastly, the pre and post-test results were analyzed by using the SPSS to measure any possible change in the participants' SRLS and motivation toward the English lessons.

3.3.3 Data analysis procedures. In the current study, both quantitative and qualitative data collection tools were used. As for the quantitative data, the same pre- and post-tests of SRLS and Motivation questionnaires were applied at the beginning and the end of the treatment process. Each test was analyzed with SPSS and interpreted after the results were obtained. The questionnaires were piloted before the treatment to see Cronbach's alpha scores which were .956 for the SRLS questionnaire and .948 for the Motivation questionnaire. Additionally, the results of the pre- and post-tests of EC and non-EC groups were compared by utilizing paired t-test to find out the VYLs' SRLS and motivation levels as well as the relationship between EC, SRL, and motivation after EC was raised during the lessons. The parametric test was adapted to analyze the data as it highlighted the difference between the EC and non-EC groups better. To put it clearer, the diversity in the distribution of the results was seen evidently with the parametric test.

For the qualitative data, the teacher noted reflective field notes, and focus group discussions were done with participating EC groups to find out their perceptions of the learning English. Content analysis was applied to analyze these two data tools (Creswell, 2012). Specifically, the codes which were determined by answers to the discussions and field notes were combined into themes that were repeated. After turning codes into themes, the themes were interpreted to complement the quantitative data and the research questions.

3.3.4 Reliability and validity. Reliability and validity are two important elements to determine the quality of research (Singh, 2014). The validity of the instruments is the consistency of the proposed use of the tools and the interpretation of the results while reliability means dependable and consistent scoring (Creswell, 2012; Mohajan, 2017). In this study, some changes were made to increase the validity and reliability of the scores. These precautions aimed to minimize the errors and increase the trustworthiness of the results (Singh, 2014).

To increase the reliability and validity of the study, test-retest reliability was used to see the consistency of the results. The conditions of the testing were controlled by the teachers. The homeroom teacher was informed about the process of data collection in

detail and expectations of the data collection process were clarified. Participants were informed before the pre and post-tests and asked the questions in their native language to acquire the most reliable answers. The questions were explained in detail to the participants who had a problem with the comprehension of the questions. The questions were asked by the participants' homeroom teacher to make them feel relaxed and avoid any possible bias by participants as they were VYLs, they might not give the most accurate answers to their English teacher not to upset her. Thus, the homeroom teacher asked the questions to collect the most objective answers from the participants. The questions were simplified and the 7-point Likert scale was turned into a 3-point emoji scale. Participants answered the questions by painting the related emoji. After the regulations, the Cronbach's alpha value for the SRLS questionnaire was .956 and for the motivation questionnaire, it was .948 which proved the test's internal consistency. In the qualitative data collection part, students were asked in their native language and the questions were simple and specific to reach accurate answers.

Table 5

Reliability Values of the Questionnaires

	Number of Items	Cronbach's Alpha	Comment
SRLS Questionnaire	10	.956	Accepted
Motivation Questionnaire	10	.948	Accepted

3.4 Limitations

It should be noted that the current study has some limitations. The first limitation was the number of participants (N = 36). As explained earlier, the study was conducted under extreme circumstances which caused the participant numbers to be less than usual. As a result of this fact, the teacher had to conduct convenience sampling to choose the participants. She chose the regular attendees of the lessons as the study required participants to attend the lessons continually. Also, the study was

conducted only in one school and it was private. The results might vary if the study had been conducted in a public school or the validity and reliability could be higher if there were more schools and more participants in this study. These limitations affected the external validity of the findings. Considering the limitations, the results of his study should be considered as a suggestion for future studies rather than a conclusion.



Chapter 4

Findings

4.1 Overview

This chapter presents the findings of the current study which aims to find the possible effect of EC on the SRLS and the motivation of VYLs in English lessons. In this section, first the quantitative findings and then qualitative results are explained through the findings of the pre-and post-tests of the SRLS questionnaire of EC and non-EC groups, pre-and post-tests of the motivation questionnaire of EC and non-EC groups, teacher reflective field notes and focus group discussions of the EC groups are found consecutively.

4.2 Quantitative Results

4.2.1 Findings related to EC's effect on SRLS. To determine the effect of the EC on the SRLS among the participants, descriptive statistics and a paired sample test were applied to the questionnaire data. According to the analysis, the mean score for the EC group pre-test was found as 13.00 with an SD of 6.58, with a minimum score of 1.00 and a maximum score of 20.00 (N=18, M=13.00, SD=6.58, min.=1.00, max.=20.00). The mean score for the EC group post-test was found as 15.11 with an SD of 3.21, with a minimum score of 7.00 and a maximum score of 20.00 (N=18, M=15.11, SD=3.21, min.=7.00, max.=20.00). While the mean score for the non-EC group pre-test was found as 14.22 with an SD of 6.58, with a minimum score of 2.00 and a maximum score of 20.00 (N=18, M=14.22, SD=6.58, min.=2.00, max.=20.00), the mean score for the non-EC group posttest was found as 13.50, with an SD of 3.21, with a minimum score of 2.00, and a maximum score of 20.00 (N=18, M=13.50, SD=3.21, min.=2.00 max.=20.00). As seen in Table 6, the post-test findings of the EC group showed that the SRL of the EC group increased after implementing EC activities in their English classes ($M=15.11$, $SD= 3.21$) and

posttest findings of non-EC group indicated that the non-EC group's SRL decreased (M=13.50, SD=3.21) (See Table 6).

Table 6

Descriptive Statistics for Pre/Post-tests of SRL

		M	Min.	Max.	N	SD	SE
EC group	PreSRL	13.00	1.00	20.00	18	6.58	1.55
	PostSRL	15.11	7.00	20.00	18	3.21	0.75
Non-EC group	PreSRL	14.22	2.00	20.00	18	6.58	1.26
	PostSRL	13.50	2.00	20.00	18	3.21	1.00

To gain a deeper understanding of the findings, the following figure presents the gain score of pre-and post-tests of the EC and Non-EC groups. As shown in Figure 6, the comparison of pre-and post-tests and gain score of the EC group indicated that the EC group has higher scores in the post-test, and the non-EC group's post-test scores decreased.

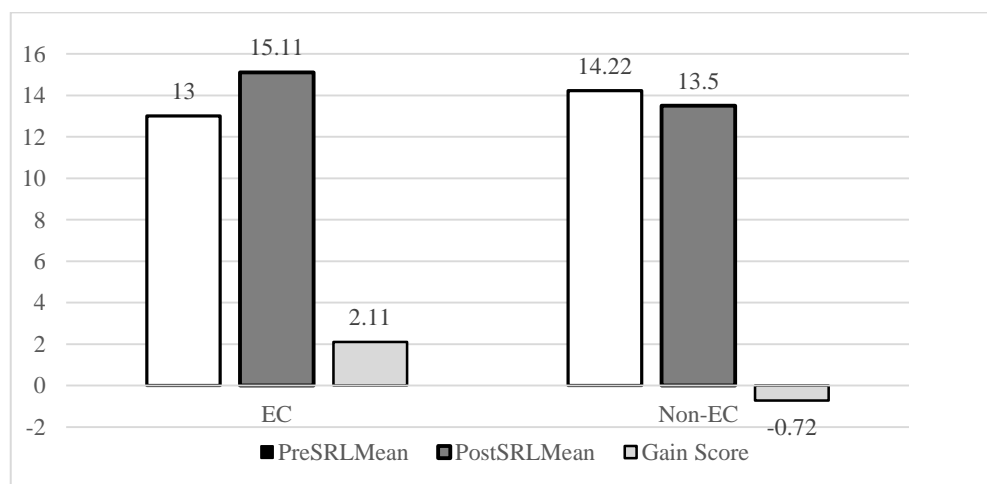


Figure 6. Comparison of EC and non-EC groups' gain scores in SRL test.

To see the statistically significant difference in scores between these two groups the comparative results of the paired sample test were reported in Table 7 below. As demonstrated in the table, there was a statistically significant difference between the findings of the EC group's preSRL (M=13.00, SD=6.58) and postSRL-tests (M=15.11, SD=3.21) conditions ($t(17)=2.216$, $p=.041$, $p<.05$). No statistically significant difference was found in non-EC group's preSRL (M=14.22, SD=6.58) and postSRL-tests (M=13.50, SD=3.21) conditions ($t(17)=1.416$, $p=.175$, $p>.05$). Therefore, it can be concluded that EC positively affected the EC group's SRL in the English lessons.

Table 7

Paired Sample Test Results for EC and Non-EC groups

		Paired Differences							
		M	SD	SE	Lower	Upper	T	df	Sig.2
EC Group	PreSRL	2.11	4.04	.952	.100	4.12	2.21	17	.041*
	PostSRL								
Non-EC Group	PreSRL	.722	2.16	.510	-.353	1.79	1.416	17	.175
	PostSRL								

* $p < .05$

4.2.2 Findings related to EC's effect on motivation. To see the effect of the EC on the motivation among the participants, descriptive statistics and a paired sample test was applied to the questionnaire data. Based on the analysis, the mean score for the EC group pre-motivation test was found as 12.94 with an SD of 6.84, with a minimum score of 0.00, and a maximum score of 20.00 (N=18, M=12.94, SD=6.84, min.=0.00, max.= 20.00). The mean score for the EC group post-motivation-test was found as 14.22 with an SD of 3.78, with a minimum score of 6.00 and a maximum score of 20.00 (N=18, M=14.22, SD=3.78, min.= 6.00, max.=

20.00). While THE mean score for the non-EC group pre-motivation test was found as 12.44 with an SD of 6.17, with a minimum score of 0.00 and a maximum score of 20.00 (N=18, M=14.22, SD=6.17, min.= 0.00, max.= 20.00), the mean score for the non-EC group post-motivation test was found as 13.33, with an SD of 5.13, with a minimum score of 0.00, and a maximum score of 20.00 (N=18, M=13.33, SD=5.13, min.= 0.00, max.= 20.00). As seen in Table 8, the post-motivation test findings of the EC group indicated that the EC group’s motivation toward English lessons raised after adapting EC activities in their English classes ($M=14.22$, $SD=3.78$). Post-motivation test findings of the non-EC group also indicated that participants’ motivation increased ($M=13.33$, $SD=5.13$); however, not as significantly as the EC group ($M= 14.2$, $SD=6.84$) (see Table 8).

Table 8

Descriptive Statistics for Pre/Posttests of Motivation

		M	Min.	Max.	N	SD	SE
EC group	Pre-Motivation	12.9	0.00	20.0	18	6.84	1.61
	Post-Motivation	14.2	6.00	20.0	18	3.78	0.89
Non-EC group	Pre-Motivation	12.4	0.00	20.0	18	6.17	1.45
	Post-Motivation	13.3	0.00	20.0	18	5.13	1.20

To understand the findings in-depth, the following figure displays the gain score of pre-motivation and post-motivation tests of the EC and Non-EC groups. As displayed in Figure 7, the comparison of pre- and post-tests and gain score of the EC group indicated that the EC group had higher scores in the post-test compared to the non-EC group’s post-test scores.

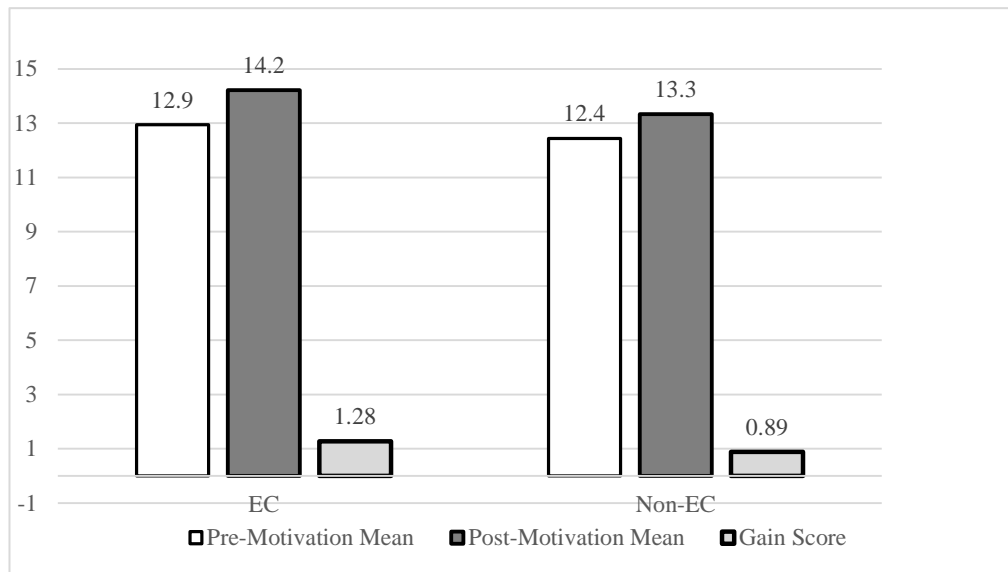


Figure 7. Comparison of EC and non-EC groups' gain scores in motivation test.

According to the results obtained statistically significant difference was found in the scores of EC group's pre-motivation test (M=12.9, SD=6.84) and post-motivation test (M=14.2, SD=3.78.) conditions either ($t(17)=-1.40$, $p=0.17$, $p>.05$), as well as non-EC group's pre-motivation test (M=12.4, SD=6.17) and post-motivation test (M=13.3, SD=5.13) conditions either ($t(17)=-.888$ $p=0.06$, $p>.05$), (See Table 9).

Table 9

Paired Sample Test Results for EC and Non-EC Groups

		Paired Differences							
		M	SD	SE	Lower	Upper	t	df	Sig.2
EC Group	Pre-	-1.27	3.84	0.90	-3.19	0.63	-1.40	17	0.17
	Post								
Non-EC Group	Pre-	-.888	1.93	0.45	-1.85	0.07	-1.94	17	0.06
	Post								

4.2.3 Findings related to relationship between EC, SRL, and Motivation.

To see whether there is any relationship between EC, SRL, and M of VYLs in English classes, a one-way ANOVA test was conducted on the means of the EC group's Motivation and SRL questionnaires findings. According to the results of the paired sample correlation test, a strong correlation between the independent variable and dependent variables was found in a positive direction. As demonstrated in Table 10, a strongly positive correlation was found between the pre-and posttests of the SRL Questionnaire with a Pearson Correlation Coefficient of .883, and a statistically significance was also detected ($r=.883$, $r>.8$, $p=.000$, $p<.05$). A strong correlation was also found between the pre-and posttests of the Motivation Questionnaire with a Pearson Correlation Coefficient of .896 in a positive direction and it was found as statistically significant ($r=.896$, $r>.8$, $p=.000$, $p<.05$)

Table 10

Paired Samples Correlations for SRL & Motivation

		N	Correlation	Sig.
Pair 1	PreSRL& PostSRL	18	.883	.000
Pair 2	PreMot & PostMot	18	.896	.000

* $p<.05$

Notes: PreMot: Pre Motivation; PostMot: Post Motivation

4.3 Qualitative Results

4.3.1 Findings of VYLs' perceptions about English. To find out the perception of VYLs about English lessons, focus group discussions were performed with the EC groups after the treatment. The findings of focus group discussions of 18 VYLs were acquired through content analysis. In the focus group discussions, the following question was asked to participants: 'Do you like English?' (Why and why

not?). There were 2 groups in the discussions, each had 9 students. And the questions were asked in Turkish by the homeroom teacher.

4.3.1.1 Focus group discussions. The gathered responses were interpreted with content analysis and 5 themes were obtained according to answers. The themes attained from the responses were entertaining, positive feelings towards activities, negative feelings towards workbooks, beneficial, and not being able to understand.

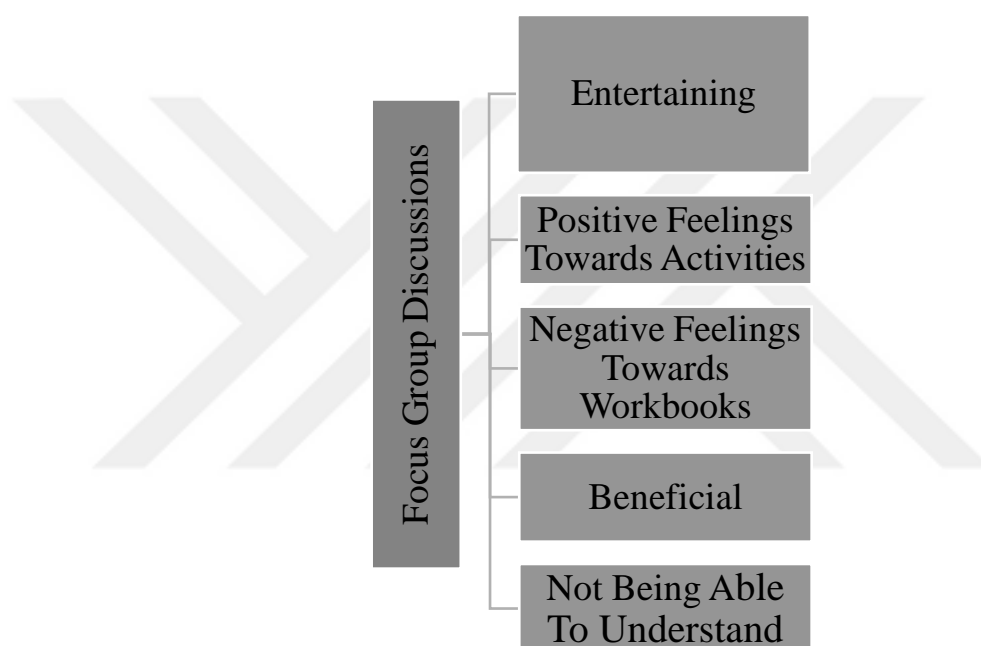


Figure 8. Focus group discussions' results.

4.3.1.2 Entertaining. According to focus group discussion answers, participants found English lessons very entertaining. They had time during the lessons and they found English lessons very funny. The following viewpoints were expressed by the participants:

[...] I like English lessons because I think they are fun. (S1, Focus Group Discussion Data)

[...] I think English lessons are funny because we play a lot of games and I am having so much fun (S7, Focus Group Discussion Data, 15.06.2021)

[...] English lessons are very funny that's why I like English lessons. (S9, Focus Group Discussion Data, 15.06.2021)

[...] I like English lessons the most because we always have fun. I like having fun in the lesson. (S13, Focus Group Discussion Data,15.06.2021)

[...] I like English lessons because they are very entertaining. (S16, Focus Group Discussion Data,15.06.2021)

Based on the comments shared by the participants, they have a positive attitude toward English lessons as they find it entertaining. They all stated that they like English lessons and they have fun during the lessons. Hence it can be interpreted that that EC had a positive effect on their perceptions about learning English.

4.3.1.3 Positive feelings toward activities. It was stated by the participants that they like activities about English lessons the most. They had fun during the activities and they expressed they liked English lessons because of these activities. The following comments were affirmed by the participants.

[...] English lessons are so funny because we do lots of activities. I like playing in the lesson. I like videos. (Referring to the EC activities.) (S1, Focus Group Discussion Data,15.06.2021)

[...] I think lessons are fun because we play games. My favorite is the box game. Because we had so much fun, it was very funny. (Referring to the EC promoting information gap activities). (S2, Focus Group Discussion Data,15.06.2021)

[...] I like English lessons because I like dinosaur games in the lesson so much. S4, Focus Group Discussion Data,15.06.2021)

[...] I like English lessons; we do a lot of activities. I have so much fun. The funniest one was the cave. (S7, Focus Group Discussion Data,15.06.2021)

[...] I like English lessons. I like playing games (referring to EC activities) during the lessons. (S10, Focus Group Discussion Data,15.06.2021)

In conclusion, it can be seen by the participants' comments that they found the EC activities entertaining which positively influenced participants' perceptions of English lessons. Additionally, there were not any participants who stated dislike for the EC activities.

4.3.1.4 Negative feelings towards workbooks. The results of the content analysis showed that participants like English lessons when they do not have to do their workbooks in the lessons. The following statements were shared by the participants:

[...] I like English lessons when we play games but don't like when we do our workbooks. (S6, Focus Group Discussion Data,15.06.2021)

[...] I like playing games and doing activities but I don't like workbook activities. (S12, Focus Group Discussion Data,15.06.2021)

[...] Our workbooks are boring and it takes too long to finish them. (S16, Focus Group Discussion Data,15.06.2021)

[...] I sometimes don't understand the workbook. (S18, Focus Group Discussion Data,15.06.2021)

When asked what they like and what they do not, participants stated that workbooks used during the lessons were boring and they did not like English lessons when they had to complete an activity on their books. They stated that the reason was that it took too long to complete the books and they felt bored. As a result of their statements, it can be concluded that participants hold negative feelings towards workbooks which can influence their perceptions about English lessons.

4.3.1.5 Beneficial. According to focus group discussion answers, participants found English lessons beneficial. They stated that they like English lessons because

learning English is beneficial for them. Considering these findings, the respondents said:

[...] English lessons are very beneficial. We learn and speak English. (S8, Focus Group Discussion Data,15.06.2021)

[...] I like the English lessons because we learn a lot of things. (S10, Focus Group Discussion Data,15.06.2021)

[...] I like English lessons because they are good for us. We learn English. (S13, Focus Group Discussion Data,15.06.2021)

[...] English lessons are very beneficial. I want to speak English. (S15, Focus Group Discussion Data,15.06.2021)

To conclude, based on participants' comments, the English lessons were found beneficial for students' improvement. Participants' statements indicated that the benefit of learning English is known by the participants. Besides, some participants even stated that they want to improve themselves well enough to speak English fluently just like their teacher. In conclusion, it can be said that EC activities had a positive effect on participants' perception of English lessons.

4.3.1.6 Not being able to understand. The participants emphasized in the discussions that they do not enjoy the lessons when they do not understand the teacher or do not comprehend the rules of the activity they do. The following Excerpts were shared by the participants:

[...] I generally like English lessons but sometimes I cannot understand what Miss Cansu says, that's when I don't like English. (S3, Focus Group Discussion Data,15.06.2021)

[...] I do not like English lessons when I don't understand the teacher but I like it when I am able to understand. (S14, Focus Group Discussion Data,15.06.2021)

[...] I sometimes cannot understand our teacher and the books. But I like English when we play games and do activities. (S18, Focus Group Discussion Data,15.06.2021)

In brief, it was stated that participants did not enjoy the lessons if they did not understand the instructions of the teacher. As a result, they developed a negative feeling towards English lessons. Hence it can be concluded that teachers should be clear when giving instruction of the activities not to affect participants' perceptions of English negatively.

4.3.2 Teacher's reflective field notes. Besides the focus group discussions, the teacher's reflective field notes were also gathered to gain in-depth data about the possible effect of EC on SRLS and motivation in English classrooms as well as participants' perception of English lessons. In accordance with the content analysis, four themes which were enjoyment, observation, comparison, asking questions, and helping each other were identified. The following figure presents the themes followed by the in-depth summary of the findings:

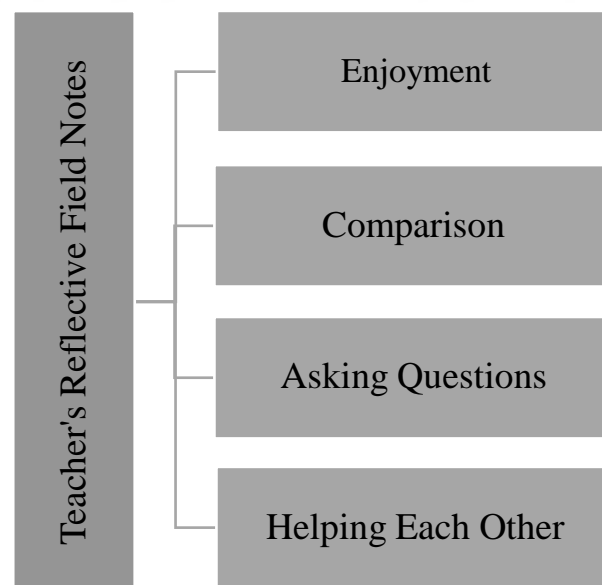


Figure 9. Teacher's reflective field notes results.

4.3.2.1 Enjoyment. The reflective field notes of the teacher displayed participants showed enjoyment during the activities. It was observed by the teacher that they had fun, laughed, and were motivated during the activities in the lessons. They participated in the lessons actively and showed excitement while carrying out the tasks. Furthermore, they asked to do the same activities over and over again even though the lesson ended. It was also observed that they mentioned the activities to their homeroom teacher with enthusiasm.

[...] Students were listening to the story very carefully. They were trying to fill the blanks in the story with a sentence whenever the teacher stopped and looked at the students. They were laughing and screaming while trying to find the missing parts. (T, Reflective field notes, 21.05.2021)

[...] Students had so much fun during the task. They were laughing while trying to complete the task. They run all around the class to find the correct objects to classify as natural vs. hand-made. (T, Reflective field notes, 24.05.2021)

[...] They jumped and clapped their hands while guessing the correct person from the chart. I even felt excited as I was watching. (T, Reflective field notes, 31.05.2021)

[...] Everyone wanted to touch the box. They were very excited and were shouting at each other with excitement. They did not want the activity to end. (T, Reflective field notes, 11.06.2021)

To conclude, the notes of the teacher indicate that students had fun and were excited during the EC activities. Students' expressions and gestures confirmed the teacher's observations during the lessons. In summary, it can be stated that the experience of EC activities during the English lessons motivated students in the English lessons, especially when it is considered that they asked the activities to continue even after the lesson ended.

4.3.2.2 Comparison. Concerning the teacher's reflective field notes, comparison between the participants was noticed by the teacher. During the

activities, to achieve the goal, students tried to observe their peers and compared their work with their friends. Starting as a competition between them, it evolved into a strategy. This situation reached a level where they made self-evaluations and tried to change their answers accordingly.

[...] Some students were looking at others' works and attempted to imitate their friends' answers. They knew their answers were not correct. (T, Reflective field notes, 31.05.2021)

[...] A student said his invention was wrong and changed his invention to make a familiar one with his friend. The other student tried to hide her invention. (T, Reflective field notes, 24.05.2021)

[...] Group one struggled to find missing parts. They peeked at the other group's cards. I warned them. (T, Reflective field notes, 21.05.2021)

[...] A student said that the other student's objects were not correct objects for the natural objects box because they were different from the rest of the objects. (T, Reflective field notes, 24.05.202)

To sum up, it can be inferred from the reflections that were noted by the teacher that EC activities took an important part in enhancing the learners' SRLS in English lessons. Students started to evaluate and notice the difference between various works. They evolved their works into more accurate versions by evaluating and analyzing other examples.

4.3.2.3 Asking questions. Detected as a self-regulation strategy and a result of participants' curiosity, asking questions was a method for students to gather information and monitor their learning process. It was pointed out by the teacher that participants asked a lot of questions during the treatment process. Most of these questions were asked to understand the activities and tasks better. One outstanding observation was that at first, the questions were directed to the teacher, after a few lessons, participants began to ask the questions to each other. The teacher interpreted these notes as a sign of regulation of knowledge.

[...] Students asked questions to understand the task. They repeatedly asked the same question “Are we going to find the piece?” (T, Reflective field notes, 21.05.2021)

[...] It was observed that before the activities, students asked questions for clarifications. They asked the time limit the most. I opened the timer on the board. They also wanted me to confirm their objects. (T, Reflective field notes, 24.05.202)

[...] One student asked her friend for clarification. It was the first time someone asked a question for clarification besides me. (T, Reflective field notes, 31.05.2021)

[...] A student asked his friend for confirmation. The other student confirmed and turned and asked me if it is correct. (T, Reflective field notes, 24.05.2021)

To summarize, it can be stated that students improved their self-regulation of information. They realized that their teacher was not the only source for the information. They started to explore other ways to reach information.

4.3.2.4 Helping each other. To help or receive help from someone requires awareness of self-learning process. Students were expected to understand what their needs were to receive their friends’ assists and recognize their strengths to offer help to others. Based on the teacher’s reflections, while completing the activities, participants helped each other. They showed support and learned collaboration throughout the treatment process. They kept calling each other for help and supporting their friends once their work is done.

[...] One of my students interrupted her friend and asked for help to find the correct object. (T, Reflective field notes, 24.05.202)

[...] While describing the characters on the board, students helped their friend when he could not find the word to define the character. They shouted, “Say

eye color!”, “Tell hair!”, “Glasses, yes, no?” (T, Reflective field notes, 31.05.2021)

[...] In the cave, best friends hold their hands together. They correctly directed each other. (T, Reflective field notes, 04.06.2021)

[...] While drawing their inventions, one of my students finished hers earlier and carried her markers to help her friend to color his invention as the time was almost off. (T, Reflective field notes, 24.05.2021)

As seen in the examples, participants learned collaborative work. It was also revealed that participants were motivated to complete the tasks in English lessons. They were not only motivated to finish their works but also wanted to achieve accomplishment as a team with their classmates in English lessons.

Chapter 5

Discussion and Conclusions

5.1 Discussion of Findings for Research Questions

The purpose of the present study was to examine the effect of EC on VYLs' SRLS and motivation in English lessons. Further, the current study sought to investigate VYLs' perception of English lessons. For this purpose, the same pre-and post-tests of SRLS and motivation questionnaires were employed to collect quantitative data. As for the qualitative data collection tools, focus groups discussions and teacher's reflective field notes were reviewed through the content analysis. In the following section, the findings of the study will be discussed by addressing each research question.

5.1.1 Discussion of findings of RQ 1: Does EC have any effect on the SRL of VYLs (5-6 years old) in English classes? This research question aimed to find out whether raising EC in the English learning environment in the schools has any effect on VYLs' regulation of their learning. As the study adapted Zimmerman's Cyclical Model (200), the effect of EC on SRL was aimed to be explored by checking VYLs' performance, self-reflection, and forethought. They were measured via the SRLS questionnaire. The previous chapter results showed that there was a statistically significant difference between the EC group's pre-and post-tests. The mean of the EC group increased considerably whereas the non-EC group's mean seemed to decrease.

As previously stated, Zimmerman (2000) defined self-regulation as a process (p. 13). As seen in the teacher's reflective field notes clearly, participants' awareness of self-regulation increased gradually during 6 weeks. According to Corno (1986, p. 333), an important element of self-regulation was the self-monitoring ability of an individual. It was explained by Bandura (1991, p. 250) not only as a self-review of an individual's behaviors but also an individual's self-belief and mood states.

Quantitative findings of the study indicated a rise in awareness of participants' self-monitoring skills which was revealed in the teacher's reflective essay. Participants began making comparisons between their works and others' therefore evaluating their works and evolving them accordingly. Zumbrunn (2011) claimed the self-evaluation process to be included in the SRL framework to promote learning. Further Zimmerman (1991) defined evaluation as the last step of SRL while Zumbrunn (2010) described it as self-judgment during which individuals observe their friends and compare their works.

According to Zumbrunn et. al (2011), help-seeking was one of the most frequent SRLS. As seen in the teacher's reflective field notes, participants asked lots of questions to the teacher and each other. One reason for this can be reaching the learning goal which helped them control their behaviors (Zumbrunn, 2011) by completing the task accurately. Another reason can be receiving the correct explanation. Curious by their nature, VYLs seek explanations to fill the gaps existing in their nature (Graham & Helen, 2011). The important part here is to reach the correct answers (Muis et. al, 2018). Distinguishing the wrong answers from the correct ones requires metacognitive development in this way, learners control and regulate their learning processes (Dignath et. al, 2018). Therefore, VYLs' questions aimed to find accurate answers hence regulating their learning accordingly. VYLs stated English lessons were beneficial for themselves at the end of the 6-week-process as they believed they were learning and discovering new things in each lesson. As a result, the findings of the current study revealed that EC affected the VYLs' SRL in English classes positively when it was raised with appropriate activities. Through the EC activities, VYLs improved SRL by using strategies such as help-seeking, self-evaluation, self-monitoring, and self-reflection.

5.1.2 Discussion of findings of RQ 2: Does EC have any effect on the motivation of VYLs (5-6 years old) in English classes? This research question intended to investigate the motivation level of the VYLs' after EC was raised through activities during English lessons. A questionnaire was used to answer this question, and focus group discussions and teacher's reflective field notes were used

to have a more detailed answer to the question. To be more specific, the definition of motivation was specified as an individual's will to achieve a task. According to the previous chapter results, the quantitative analysis of the motivation questionnaire indicated a higher increase in the motivation level of the EC group compared to the non-EC group when the mean of the findings was considered. Put differently, adapting EC activities in English lessons, enabled the EC group to develop their motivation level more compared to the non-EC group. These findings are also in alignment with the literature (Bandura, 2001; Day, 1982; Klein, 2005; Lamb, 2011; Reilly & Ward, 1997, Scott & Ytreberg, 2001)

During the English learning process, motivation was accepted as a key factor creating a significant difference for the learners in several studies (Dörnyei, 2012, Ushioda, 2010). It was discovered that VYLs felt motivated when English classes were supported with the activities (Reilly & Ward, 1997). Results of qualitative analysis of the findings revealed that participants found English lessons more entertaining when EC was raised with game-like activities. As it was stated by Fenyvesi (2020) that VYLs enjoy games and activities while learning a second language, an increase in the motivation questionnaire was expected.

The results are also alignment with Day's study. According to Day (1982), enhancing curiosity with games in the SLL classroom enables VYLs to motivate themselves to learn a second language. VYLs stated that they had more fun and were more willing to engage in the English lessons when activities and games were included during learning. As previously defined as the individual's will to complete a task, motivation seemed to be enhanced in the English lessons when EC was raised with activities.

Additionally, the results of this study were also supported by the teacher's reflective field notes. It was observed during the lessons that VYLs enjoyed the EC-adapted lessons more. They felt excited and motivated to finish the tasks together as a group. According to the teacher's reflective field notes, the participants not only accomplished their tasks but also helped their friends during the activities as they were motivated to reach the goal at the end. As Klein (2005) explained, VYLs were more motivated to do the things they find appealing. When this characteristic meets

with their curiosity, an increase was noticed in their motivation level in EC adopted English classes.

Another point found in the teacher's reflective field notes was participants' willingness to be included in the games, hence in the process of English learning. It was observed that participants asked a lot of questions to understand the activities and carry out their tasks correctly besides of not to stay out of the games. As Scott & Ytreberg (2001) explained, attempts of involvement in the process is a motivating factor for the VYLs. The findings were also supported by Klein's (2005) statements about the positive correlation between participants' desires of involvement in the learning process and motivation. Additionally, it was also found in the teacher's reflective field notes that participants sought and provided help during the activities. Lamb (2011) stated that students wanted more authority and described this characteristic as a motivator for the learners. Thus, it is seen that participants' intentions to help their friends during the activities is a method of showing authority in their tasks and therefore, a motivator in English lessons.

In conclusion, defined as a voluntary act to fulfill a task, motivation had been a key element in the SLL, especially for the VYLs (Bruno, 1980; Vroom, 1964). Accordingly, the findings of the current study revealed a rise in VYLs' motivation level after EC was adapted to the English classes via activities and games. As stated by the participants themselves, the EC-raised lessons were more enjoyable.

5.1.3 Discussion of findings of RQ 3: Is there any relationship between EC, SRL, and motivation of VYLs in English lessons? With this research question, it was intended to find whether these three aspects have any effect on each other during VYLs' English classes. To answer this question, the motivation and SRLS questionnaires were conducted and the findings were analyzed through one-way ANOVA. According to the analysis a strong correlation between the independent variable, epistemic curiosity, and dependent variables, SRL, and motivation, was found in a positive direction.

Panadero (2017) defined SRL as a framework that included different elements of the learning process and one of these elements was motivation (p.1). On the other hand, Corno (1993), described motivation as an essential factor for the learners to declare control over their learning process. As a key element in SRL, to have control over the learning process is seen associated with motivation in this way. Motivated learners show SRL in their learning process and feel satisfied when they notice progress during learning (Zimmerman, 2002). The participants who felt motivated after their English lessons that were planned with EC activities started to take control of their learning process to gain achievement during the lessons as the sense of success was motivating for them. As they felt more motivated, they gained more control over the process and regulated their learning during the lessons.

Additionally, the findings of the study were supported by Boekarts' Dual Processing Model. In accordance with the model, the participants' motivational beliefs played a significant role in their SRL process during the activities. As stated by the participants in the focus group discussions, they felt motivated and fostered positive feelings when they were introduced to the EC enhancing activities in English lessons. There was also a change in the perceptions of the participants about English lessons. Participants' enjoyment in the English lessons was one of the observations in the teacher's reflective field notes. According to the notes, participants displayed willingness and excitement to participate in the lessons. As previously stated by Bandura (2001), intentionality was a significant part of the learners' education life as self-regulated learners. VYLs who had fun during the EC activities were motivated to participate in future SRL.

The study conducted by Mahmoodi et al. (2014) displayed that some of the most used SRL strategies by learners during English learning process were finding enjoyable ways of learning a language and self-motivation. In alignment with the results of the study, it was seen in the focus group discussions (see figure 8) that implementing games in English lessons enhanced participants' joy and changed their perceptions of English lessons positively.

Another study by Klein (2005) also supported the findings of the analysis. According to one of his studies, VYLs were seemed to be motivated by goal setting

as well as the items which attract their curiosity. VYLs display motivation when they know the task and the reason behind it. They also develop individual learning strategies to achieve the tasks.

In brief, it was found that motivation and SRL had a positive effect on each other when VYLs were introduced and asked to complete EC activities in the English lessons. Motivated to complete the tasks, VYLs were willing to regulate their learning process during the lessons. Nevertheless, further studies should be conducted to investigate the relationship between motivation and SRL.

5.1.4 Discussion of findings of RQ 4: What are the perceptions of VYLs about learning English via EC activities? The aim of this research question was to find the participants' perceptions after they encountered the EC activities in the English class. To answer the question, qualitative data were gathered through focus group discussions and teacher reflective field notes.

The results of focus group discussions indicated that all participants had positive feelings towards English after the EC was raised with the activities. Some students even stated that they liked the lessons better with these activities. They expressed positive feelings towards English lessons and EC activities. They also described these activities as games and some participants specified them as their favorite activities. The results were supported by Pluck and Johnson (2011). As stated in their study, VYLs are curious by their nature hence enhancing curiosity was met with enthusiasm by the participants.

Additionally, the participants expressed that they found English entertaining after the EC was raised in English lessons. According to the results of the content analysis, participants had fun during the lessons which positively affected their participation in the lessons. Also, it can be inferred from their statements in the focus group discussions that they found the lessons beneficial for their improvement. VYLs are curious by their nature which is a great help to keep them engaged in the lessons (Reilly & Ward, 1997). When their curiosity was associated with the EC activities, they displayed positive attitudes towards English.

Parallel to the study conducted by Muis et al. (2018), asking questions to reach correct answers increased the students' success and motivated them. The finding by Muis et al.'s study was also similar to Chouniard's study (2007). Improving the habit of asking questions to reach correct answers brought success and increased participants' participation to the lessons. According to the teacher's reflective field notes and focus group discussions, it was observed that participants developed question asking habit during the lessons. This strategy can also be explained as an attempt to understand the teacher correctly to succeed in the activities. It was also observed that participants sought help from their peers to achieve the tasks. Hence, it can be concluded from the results that participants realized that they needed to make an effort to be successful.

However, there was one point in the results of focus group discussions which was not being able to understand the teacher's instructions. Some students expressed dislike when they could not comprehend the teacher's instructions on the tasks. Notwithstanding the advantages of this age group, some disadvantages were listed by Roginska (2013). One of the disadvantages of VYLs was stated as their selfishness. As a result of their selfish characteristics, they expected to understand everything impatiently. Nevertheless, they accepted that SLL was a process and they needed to endeavor to comprehend the language. Thus, they started to improve new ways of comprehension. According to the teacher's reflective field notes, they began asking questions to each other, seeking help, and comparing their work with their friends. Therefore, it can be concluded from the focus group discussions and teacher's reflective field notes that instead of giving up and waiting for the answers, participants made an effort to understand the instructions and complete tasks. Additionally, they participated in the lessons voluntarily and had fun during the learning process.

5.1.5 Discussion of findings of RQ 5: What are the reflections of the English teacher about promoting EC among VYLs? With this research question, it was aimed to discover the English teacher's reflections about adapting EC in VYLs' English classes. To have an answer, the teacher's reflective field notes were

gathered during the treatment process. According to the reflections, the participants generally showed a positive attitude towards the English lessons after the implementation of EC activities. The teacher explained that the lessons became more entertaining after promoting EC among the VYLs. It could be seen between the notes that the lessons were entertaining not only for the students but for their teacher, as well.

Engel (2013) found that in VYLs classes, students' lack of curiosity was one of the biggest problems as seen in the form of not asking any questions to discover new information. In the teacher's field notes, it was seen that participants developed new ways to gather information when introduced EC activities. They started to ask questions to their friends instead of asking questions to their teachers, only. They realized that their teacher was not the only source for the data. In accordance with this result, Whitebread (1999) stated that students' regulation skills reduced when teachers involved. Besides, they improved collaborative work skills by helping each other which surely decreased the workload of the teacher in the class.

Another advantage of promoting EC among the students was teaching them self-evaluation. According to the teacher, they started to work more elaborately on their tasks. They self-evaluated their work by making comparisons with other students. However, it should be noted that this comparison helped students improve their language skills positively instead of discouraging them. Perry and Vandekamp (2002) expressed in their study that in-class activities helped students raise motivation and SRL skills. Similar to the result of Perry and Vandekamp, teacher's reflections confirmed EC activities' positive effect on participants.

In conclusion, as Chak (2007) explained positive reflections of teachers on students' curiosity, the teacher's reflective field notes indicated that promoting EC among VYLs increased their participation in the lessons, made English lessons more entertaining both for the teacher and for the students, decreased the workload of the teacher in the classroom as the VYLs developed SLR and started to evaluate and regulate their learning and finally taught participants collaboration.

5.2 Pedagogical Implications

This thesis offers several implications and recommendations for researchers and teachers. The findings of the current study revealed that promoting EC via activities during English lessons could raise VYLs' SRL. The findings also showed that motivation was affected positively by the EC activities during the English lessons. Besides, the VYLs expressed their satisfaction with the implementation of EC in their English lessons in the focus group discussions and the teacher's reflections were positive towards the promotion of EC in SLL according to the teacher's reflective field notes.

To begin with, the measurement and assessment of the SRL in VYLs' English classes is a complicated process that requires long hours of observations as well as conducting trustworthy pre and post-tests. Conducting a pre-post-test with VYLs demands clarification for the most honest answers from them. Researchers should be certain that they explain each item and scale clearly to the VYL. It is best to use colorful scales to keep VYLs engaged during the measurement process. Also, it should be borne in mind that questions should be asked in VYL's native language and should be as simple as possible to obtain the most reliable results. If the researcher is not the one asking the questions, then the teacher in charge should be informed in detail about the process. It is a must to support quantitative data with qualitative data to reach valid results. Further, implementing EC in English classes necessitates careful planning and preparations. To be able to observe each student, it is recommended to have a small number of students in the classroom. Besides, it is important for the smooth running of the study to explain each item that is used during the activities and tasks to the VYL precisely. Finally, the findings of the current thesis study are valuable as the implementation of the EC in English classes perceptions about English lessons and decreased the teacher's workload according to teacher's reflective field notes.

5.3 Conclusions

The purpose of the current thesis study was to investigate the effect of EC on VYLs' SRL and motivation, the relationship between the EC, SRL, and motivation, motivation's effect on SRL, VYLs' perceptions about English after the EC is raised during the English lessons and lastly, English teacher's perception of promoting EC among the VYLs. The pre and post-test results regarding the effect of EC on the SRLS and motivation indicated a statistical significance between the EC and non-EC groups which contributes to the literature. The study results revealed that SRL was increased after the implementation of the EC activities in English classes. It was also found that the motivation level of the participants was higher after promoting EC among the VYLs. Besides, the findings gathered revealed that motivation impacted SRL positively however further research is required for making a more general statement. Moreover, the results of the qualitative findings gathered from the teacher's reflective field notes and focus group discussions supported the results of the quantitative findings of the study. Concisely, the results of the current study demonstrated that implementation of the EC activities during the English lessons could increase SRL and motivation levels of VYLs and positively affect their perceptions about SLL.

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APPENDICES