Assessment of Self-Regulation in English Vocabulary Learning among Croatian High School Students

Nebes, Tomislav

Sveučilište u Zadru

Odjel za anglistiku

Diplomski sveučilišni studij anglistike; smjer: nastavnički (dvopredmetni)

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Izjava o akademskoj čestitosti

Ja, **Tomislav Nebes,** ovime izjavljujem da je moj **diplomski** rad pod naslovom **Assessment of Self-Regulation in English Vocabulary Learning among Croatian High School Students** rezultat mojega vlastitog rada, da se temelji na mojim istraživanjima te da se oslanja na izvore i radove navedene u bilješkama i popisu literature. Ni jedan dio mojega rada nije napisan na nedopušten način, odnosno nije prepisan iz necitiranih radova i ne krši bilo čija autorska prava.

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Sadržaj mojega rada u potpunosti odgovara sadržaju obranjenoga i nakon obrane uređenoga rada.

Zadar, 26. rujna 2018.

For my family, without them, I would have been nothing.

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1 Introduction

"Good teaching includes teaching students how to learn, how to remember, how to think, and how to motivate themselves." (Weinstein & Mayer, 1983, p. 2)

All learners and learning are different. The latter can be defined variously, from the definition that it is a process through which learners connect knowledge with their experiences (McPherson & Cassell, 2008) to the assumption that it "an active process in which the learner is fully aware of the learning situation, is motivated to learn, has intention to learn, and participates in the learning process" (Shergill, 2012, p. 198). Outcomes of learning, however, are more difficult to define once certain human traits are introduced to the equation: humans are, at the same time, both unique and identical, at least from a linguistic point of view. Even though each healthy child has, by its birthright, been endowed with the ability to learn languages, children learn different first languages but will acquire their own mother tongue at approximately the same time by going through language-independent development stages (Dörnyei, 2009). Later in life, though most children possess similar cognitive capacities, some will gather more linguistic knowledge than others. As an example, as the child matures and becomes more experienced it develops its own unique learning style (Bastable, 2010). Learning styles, together with learning strategies, and self-regulation are examples of learner differences.

Self-regulation is considered to be a part of motivational processes. Dörnyei (2001) places self-regulation in the 'actional stage' of learning, meaning that self-regulation is triggered only once the learner has made the choice of learning. Once the student is motivated for work, this motivation must be conserved in order to execute the desired goal completely. The extralinguistic world consists of various distractors and the student must learn how to deal with distractors such as „off-task thoughts, irrelevant distractions (…), anxiety about the task" etc. (Dörnyei 2001, p. 84).

Ideally, vocabulary learning requires student's conscious effort that should persist until the student has learnt a certain set of words and their associated meaning, form, and use (Nation 2001). This is naturally a process that should take longer than a day, and students require not only the motivation but also the self-regulatory component that will keep the student motivated until certain vocabulary has been acquired. In a Croatian vocabulary-learning setting, this self-regulatory component encompasses how well the student controls his environment, his thoughts, his emotions, etc. Self-regulation basically ensures that students approaching a vocabulary learning task, whether at home or at schools, will successfully execute it and learn

how to use the items from the vocabulary.

The focus of this thesis is on the self-regulatory strategies used by Croatian high school students while learning English as a second language (L2). Firstly, the psychological processes of second language acquisition (SLA), their connection with vocabulary learning and the relationship between self-regulation and vocabulary learning will be presented. This will be followed by the description of the aim, method, and procedure of the investigation that was carried out as a part of this thesis. Ultimately, the results and discussion will be presented.

2 Theoretical Background

This chapter encompasses the theory required to understand what self-regulation is and how it affects vocabulary learning. Firstly, we have to understand how second or foreign languages are learnt, how we can describe the process of learning a new language, including vocabulary, why learners learn languages differently, and what vocabulary learning strategies are.

2.1 How is the Second (Foreign) Language Learnt?

It is wise to define the second language. A second language (L2) is any language that is acquired after the first language. More specifically, it is a language that is learnt in the context where it is used, e.g. learning English in England or Bahrain, and learning French in France and the Democratic Republic of Congo (Saville-Troike, 2012). For the purpose of this thesis, we will connect *second language* with *foreign language* as the term *foreign language* better describes the role of English in Croatia. Nonetheless, certain definitions, hypothesis, and rules will be borrowed from the field of SLA and L2 learning. Therefore, a foreign language is a type of a second language that a speaker learns but cannot use in his “immediate social context” (Saville-Troike, 2012, p. 198). English is a foreign language in Croatia because students do not regularly communicate in English or with other English speakers.

According to Saville-Troike (2012), the process of L2 development begins with the learner’s knowledge of their first language, knowledge of the world, i.e. knowing that words represent something to someone, and their interaction skills. These, along with the innate capacity which may or may not be partially or fully present, are required for learning an L2. Once a learner has encountered an L2, whether by travelling to another country or by attending English lessons, the learner learns the L2 by building a learner language.

The learner language, also known as the interlanguage, intermediate states, or interim

grammars (Saville-Troike, 2012) is a language that contains elements of both languages. It is not its own language *per se* but a sandbox where learners piece together elements of both L1 and L2 and by receiving positive or negative feedback. The interlanguage is the result of "linguistic transfer, transfer of training, transfer of second language learning, transfer of second language communication strategies from L1 to L2, and overgeneralisation" (Ellis, 1994). The learner language is withal most apparent when learners make mistakes and they are indicative that there exists a system that resembles L2 yet contains errors that can only be a result of overgeneralisations or transfers. Transfer can either be negative or positive — negative transfer means that a structure was copied and transferred into IL, resulting in an incorrect L2 structure, while positive transfer is marked by a structure that is correct in L2 (Saville-Troike, 2012). The results of transfer and the Interlanguage, in general, are nurtured by feedback, aptitude, motivation, and instruction that the learner receives (Saville-Troike, 2012, p. 21). The end result, in case no fossilisation occurs, is multilingual competence.

2.2 The Psychology of SLA

The aforementioned framework includes the linguistic approach to SLA; however, psychological frameworks and theories must also be taken into account for L2 learners. A theory which is considered to be a key component of the psychological approach to SLA is the Information Processing (IP) theory, as it takes into account not only that learning is a dynamic process that can be influenced by affective factors but also because it explains the role of cognition in learning (Takač, 2008). IP and all approaches based on it consider that learning languages is just like learning any other complex skill. A complex skill consists of lower-order skills that constitute higher-order skills that can be learnt once the learner pays attention to input. The downside of paying attention to input is that humans are unfortunately limited in their attention capacity and span, and hence only a fraction of attention can be devoted to that learning. On the upside, once certain skills have been automatised, little attention is required for the execution of the skills, and a learner's goal becomes to turn their once demanding actions into autonomous actions, thus freeing up space for more learning. Once the learner knows how to execute certain actions, the learner will be able to hone them, leading to the reorganisation of the knowledge the learner possess and thus freeing up even more mental space required for further learning (Saville-Troike, 2012). In essence, IP explains "how knowledge is formed, (...) developed, (...) becomes automatic (...), [and] integrated into an existing cognitive system of the learner" (Takač, 2008, p. 26). A keyword that often appears in psychology and IP is input.

Input is omnipresent yet requires effort in order to be noticed.

Saville-Troike (2012) explains that input by itself is useless unless learners notice and consequently process it. Schmidt (1990, p. 131) noted that language learning is facilitated once the learners are aware of "the formal properties of languages". This connects the ability to perceive input with language learning. Since Schmidt (1990, p. 142) conveniently puts forth the question of "what (or who) controls what is noticed" an answer can be found in self-regulation. Tseng et al. (2006) assumed that a connection between vocabulary learning and the learner's ability to self-regulate exists. In order to test this hypothesis, they designed a questionnaire that determines which self-regulatory strategies students use when learning vocabulary.

2.3 Learner Differences

Learning differences, also known as individual differences or IDs (Dörnyei, 2009, p. 180; Ellis, 1994, p. 707) manifest themselves as age, gender, aptitude, motivation, cognitive style, personality, learning styles, and, most importantly, learning strategies of the learners (Saville-Troike, 2012, pp. 87–99). Ellis (1994, p. 707) defines them as the "differences in how learners learn an L2, how fast they learn, and how successful they are" and they are caused by differences in "aptitude (...) motivation, and specific learner strategies". Dörnyei (2009) sees learning strategies as defining characteristics of a learner and they determine how the language acquisition or learning process will unfold. In this thesis, the focus is on learning strategies as they are connected with the notion of self-regulation.

A common learner difference is gender. In the field of vocabulary, Grace (2000) investigated whether males and females differ in the use of translations and whether they remember and recall vocabulary items differently. It was assumed that the different biological processes of lateralisation, difference in upbringing, and the different roles that males and females assume in the society influence how female learners learn vocabulary. In spite of the assumptions, she has found that males and females have identical vocabulary retentions scores and utilise translations the same. However, differences have been found in events when learners encounter unknown words: Males reported that encountering unknown words impedes their vocabulary learning, while females reported using contextual cues to guess the meaning of an unknown word. Catalan (2003) investigated the role of gender in L2 vocabulary learning strategies among 581 EFL learners and found that males use quantitatively less strategies than females. Additionally, a female bias towards social, memory, cognitive and metacognitive

strategies has been reported.

Another instance of learner differences is aptitude. Aptitude is not a facet of intelligence, but rather a unique individual difference inherent to everyone at varying levels (Shekan, 1991). Shekan (1991) reported that aptitude begins to appear at the same time when the mother tongue is learnt and remains relatively stable thenceforth. Two examples of aptitude were given: One type of learner may approach language learning by perceiving a given language as a system of patterns that has a predictable structure, while another type of learner may perceive a language as a collection of rules to be learnt. Aptitude encompasses, according to Saville-Troike (2012, p. 21) "memory capacity and analytic ability", as well as the learner's ability to make sense any received input, systematise the language, create general statements about the language, and ultimately to commit linguistic information to memory. Carroll (1965) segmented aptitude into:

1. **Phonemic coding ability** which is responsible for the processing and storing of sounds for easy access;
2. **Associative memory** which is responsible for the simple connection between a referent and a reference, e.g. a sound and a mental image;
3. **Grammatical sensitivity** which is responsible for the processing of grammar based on the received input;
4. and **inductive language learning ability** which is responsible *inter alia* for the learner's ability to use languages appropriately and correctly.

Another important individual difference is motivation, which, at its core, is the anticipation of a reward. This type of reward, according to Saville-Troike (2012), can be either integrative or instrumental, that is to say, a reward from associating and identifying with L2 speakers, or material rewards gained by learning a language respectively. The integrative motivation, characterised by the motivation residing within the learner and rewards found only in the learner, last more than the instrumental motivation which draws its power from the outside and whose rewards can be found outside the learner (Shekan, 1991). An example of integrative motivation would be the feeling of success after finding directions to the nearest bus station using an L2, while instrumental motivation can be found in situations where the learner has to learn a set of vocabulary items in order to pass an exam.

Naiman, Frohlich, Stern, and Todesco's (1978, as cited in Shekan, 1991) interview on successful learners has shown that there exist at least five general learner strategies that belong to the group of individual differences. Common for these strategies is that they determine how the learner approaches learning, how the learner perceives the structure and function of a

language, and how the learner approaches the learning process, i.e. whether the learner will supervise the learning process and the emotions and behaviours associated with learning.

2.4 Learning Strategies

Generally speaking, learning strategies are "behaviours and techniques they [learners] adopt in their efforts to learn a second language" (Saville-Troike, 2012, p. 97). Moreover, they describe how learners approach new linguistic and sociolinguistic information (Ellis, 1994). For Dörnyei (2009, p. 182), learning strategies answer the question of "*how proactively*" someone is engaged in language learning and he places them "somewhere in between motivation and learning styles", meaning that it is a combination of affective factors and how a learner approaches learning. According to Cummins & Davison (2007, p. 319), they include, but are not limited to: "selective attention to keywords or ideas, making inferences while listening or reading, using imagery to assist understanding or recall, evaluating one's own learning". Moreover, Weinstein and Mayer (1983, p. 2). explained these strategies as "behaviours and thoughts in which a learner engages and which are intended to influence the learners encoding process". Using learning strategies leads to students being "more successful, self-directed, and enjoyable" (Oxford, 1989, p. 235) and turns passive learners into active learners (Takač, 2008, p. 29) as they will utilise their cognitive resources in order to "select, acquire, organise and integrate the new knowledge". Learning strategies encompass rehearsal, elaboration, organisational, comprehension monitoring and affective strategies (Weinstein & Mayer, 1983, pp. 2–3). Following Rubin (1975) and Naiman, Fröhlich, Stern, Todesco (1978), O'Malley (1983) identified three major strategies and defined them as facilitators of language learning:

1. **Metacognitive strategies** which describe how the learner organises the learning process;
2. **Cognitive strategies** which describe how the learner approaches the learning materials;
3. **Socioaffective strategies** describe how the learner interacts with the non-linguistic world while interacting with learning materials.

O'Malley (1983) has shown that learning strategies are beneficial in classrooms as they will aid the execution of particular task types and has shown that socioaffective strategies are used less than cognitive and metacognitive strategies. Even though learning strategies were reported as being beneficial, introducing certain strategies to students yielded mixed results as

there were no noticeable changes in how students approached and solved a task. In essence, use of strategies facilitates language learning but teaching learners how to use strategies may or may not facilitate language learning.

Furthermore, Oxford (1989) believes that we can differentiate good from better learners through the learning strategies that they employ. Following Rubin's (1981, 1987) conclusion that learning strategies lead to better language learning outcomes she identified six categories that facilitate the language learning process:

1. **Metacognitive strategies** which describe how the learner monitors oneself and one's progress;
2. **Affective strategies** which describe how the learner handles various affective factors;
3. **Social strategies** which describe how the learner interacts with the non-linguistic world to achieve a linguistic goal;
4. **Memory strategies** which describe how the learners facilitate the input and processing of new linguistic information;
5. **Cognitive strategies** which describe how the learner facilitate that recall of required linguistic information;
6. **Compensatory strategies** which describe how the learner utilises one's intelligence and guesswork to overcome linguistic obstacles.

The use of these six strategies depends on multiple factors, some of which can be compared with learner or individual differences: "age, sex, affective variables, (...), general personality type, learning style, aptitude, career orientation, national origin, language teaching methods, task requirements" (Oxford, 1989, p. 236). In essence, learning strategies facilitate the language learning process, whereby its use depends on multiple factors but are generally employed by more proficient learners.

Gu et al. (1996) found that the use of vocabulary learning strategies correlates positively with learning outcomes. A strategy that has been found to be detrimental to the learning outcomes was repetition of words, while the most used strategies include, but are not limited to, note-taking, guessing, and the use of dictionaries, including looking up unknown words. Additionally, it has been found that learners who take initiative of their learning and practice selective attention have the most favourable learning outcomes. The pinnacle of the use of vocabulary strategies was achieved by less than 1% of the sample of 850 Chinese sophomores — Gu et al. (1996) describe these learners as 'Readers' and they represent what can only be

called the ideal EFL learner. These learners go out of their way to seek out ways to learn English holistically, do not practice memorisation but rather do their utmost to use English outside the classroom, and employ only those strategies that have been shown to facilitate vocabulary learning.

Many studies focused on the effects of learning strategies on L2 learning. Hoidn (2016) reports that instructing learners on how to learn, i.e. providing learning strategies, has a positive effect on learning and that learning strategies pertaining to cognition can be automatised. Brown and Perry (1991) have also concluded that learning strategies facilitate language learning by introducing learning strategies to students with varying English proficiency levels. Furthermore, Richards (1990) identified at least twenty-six different kinds of learning strategies and stated that it is inconclusive which strategies are effective or not. Nonetheless, it has been found that the less learning strategies the learner employs, the less able the learner is to acquire new linguistic information and employ it successfully (Takač, 2008). Dörnyei (2001), however, is sceptical of the idea that the use of learning strategies facilitates L2 outcomes as the investigations often fail to take into account that there exist no universal learning strategies and that each learner or groups of learners require individualised strategies.

2.5 Vocabulary Learning Strategies

The degree to which a learner uses vocabulary learning strategies is an instance of learner differences (Takač, 2008). The existence of an endowed system for learning languages and a learner's capacity to learn another language besides one's mother tongue does not explain why some L2 learners appear to be more successful than others in the aspect of vocabulary learning. Takač (2008), and by extension, Ellis (1994), believe that using vocabulary learning strategies, that is to say, the activation of one's metacognitive abilities to focus on a certain vocabulary task with the goal of e.g. finding new words and applying them in new contexts may explain why some students have more success at expanding their mental dictionaries.

Nation (2001) considers vocabulary learning strategies an extension to the explicit teaching of vocabulary firstly because teaching (large or complex) vocabulary is a time-consuming effort and unviable, and secondly because vocabulary learning strategies will aid the students in transforming complex lexical information into simple information that can be easily absorbed. From the teacher's perspective, a strategy that the teacher can utilise is to choose which words are important enough to be taught, based on the word's frequency of appearance. A strategy that a learner can utilise when encountering an unknown word is the use

of a dictionary or “guessing from context” (Nation, 2001).

Generally speaking, Nation (2004, p. 352) provides the following four attributes of vocabulary learning strategies:

- The ability to choose between multiple approaches to a vocabulary related issue is the first attribute.
- The second attribute is complexity. Vocabulary learning strategies must have a certain structure that the learner follows.
- The third attribute of vocabulary learning strategies is that they have to be learnt in order to be used.
- The final attribute is that vocabulary strategies should “increase the efficiency of vocabulary learning and vocabulary use”. In essence, they should facilitate learning.

These vocabulary learning strategies manifest themselves as the utilisation of extralinguistic resources, such as flashcards and dictionaries, seeking out new meaning, searching for proper word use (collocations), and linguistic/cognitive resources, such as mnemonics and analogies (Cummins & Davison, 2007). Furthermore, they extend to “guessing a word’s meaning from the context and identifying the grammatical category of a word” (Takač, 2008, p. 52); and various activities used to consolidate vocabulary (Takač, 2008, pp. 21–23). The goal of the vocabulary learning strategies, from a teacher’s perspective, is to facilitate the student’s independent learning of new words (Paul & Norbury, 2012), as well as ensure that words are not learnt superficially as a result of “incidental word-learning opportunities” (Walpole & McKenna, 2007, p. 96). Stoffer (1995) has identified 53 vocabulary learning strategies and condensed them into nine categories (as cited in Takač, 2008, p. 66):

1. strategies involving authentic language use,
2. strategies involving creative activities,
3. strategies used for self-motivation,
4. strategies used to create mental linkages,
5. memory strategies,
6. visual/auditory strategies,
7. strategies involving physical action,
8. strategies used to overcome anxiety, and
9. strategies used to organise words.”

The identification of these strategies was accomplished *inter alia* by recognising that successful learners are not only aware of their learning process, but also because more

successful learners use more vocabulary learning strategies. The most common vocabulary learning strategies are, according to Takač (2008), memorisation and repetition, which can be subsumed under the category of rote-learning. Though these strategies have been regarded as inefficient, results show that they are better than guessing from context (Qian, 1996, as cited in Takač, 2008). Better learning outcomes and more efficient learning processes correspond with the increase of interconnected vocabulary learning strategies. Kojic-Sabo and Lightbown (1999, as cited in Takač, 2008) have found that the differences in vocabulary learning between EFL and ESL learners can be seen in the use of varied strategies. By investigating the use of vocabulary learning strategies among Canadian and Yugoslavian university students they have found that Yugoslavian EFL learners lacked the component of independent learning that was classified as a vocabulary learning strategy, leading them to conclude that the more vocabulary learning strategies learners utilise, the better their learning outcomes will be. Furthermore, Fraser (1999, as cited in Takač, 2008) has found that using dictionaries increases the amount of learnt words by a factor of two, but requires requires teaching learners how to use dictionaries properly.

Takač (2008) subsequently catalogued vocabulary learning strategies that elementary school EFL learners use. The results of the study on 358 learners narrowed the number of vocabulary learning strategies down from 53 to 27 strategies which belong to the categories of: "*formal vocabulary learning and practising, self-initiated independent vocabulary learning,* and *spontaneous (incidental) vocabulary learning (acquisition)"* (Takač, 2008, p. 100). These strategies include *inter alia* the use new words in new contexts and in the real world, planning vocabulary learning, translating words, repeating, and listening to songs (Takač, 2008, pp. 157-158). A subsequent investigation (Takač, 2008) has shown that though learners possess their own vocabulary learning strategies, it is unlikely that they will acquire the strategies that have been taught by their teachers, meaning that learners' vocabulary learning strategies are acquired gradually through time.

Furthermore, Mishra (2016, p. 519) reports that women are "more fluent in speaking, rote memory, [and] have bigger vocabularies and are more sensitive to grammar". Furthermore, women are reported using intensifiers more often than men, perhaps indicating a bigger vocabulary size, while men utilise "complex vocabulary when speaking to children" (Lisi, 2002, p. 129). Females' better vocabulary knowledge should correlate with them having better vocabulary strategies and consequently superior self-regulatory capacities.

2.6 Self-Regulation in Learning

The reason why you, dear reader, are able to read this thesis is because you and your genes have gone through the evolutionary process and come out as the fittest individual — Your supreme biological fitness allowed you to fight through the most volatile situations and to flee from the direst predicaments; your superb psychological traits helped you cope with the most tragic situations and gave you second wind; your innate survival instincts pushed you forwards, never letting you falter; your ancestors' charisma and persistence secured the future of your genes by fathering numerous children – one of which is you. And most importantly, more often than not, you have denied yourself instant gratification so that you may enjoy the fruits of your labour tomorrow. If you have ever done this, then you have successfully self-regulated your behaviour and emotions in order to become better than yesterday.

Learners similarly differ in their willingness and ability to utilise their full potential. The willingness to learn can be defined as self-efficacy and the ability to work at maximum potential capacity can be defined as self-regulatory efficacy (Zimmerman, 2000) The voice in our heads that produces questions, statements, describes emotions, makes us shape the world, and guides us towards our goals is the object of self-regulation (Zimmerman, 2000). This, however, only scratches the surface of self-regulation, as it can also be defined as the ways in which learners deal with thoughts and emotions in various contexts while working on a goal (Brown, 2007)

In educational psychology, self-regulatory mechanisms in learning have been described as consisting of three components: the behavioural, the environmental, and the covert self-regulation (Zimmerman, 2000). The first is responsible for the learner's ability to be aware of what he is currently doing and which changes can be induced, the second one concerns itself with the environment, and the third one focuses on cognition and emotions (Zimmerman, 2000). Specific for self-regulation is that its three components regularly interact with one another by judging how the learner is performing now and whether adjustments are required in order to achieve a certain set goal (Zimmerman, 2000). Such mechanisms make self-regulation a proactive activity (see Figure 1).

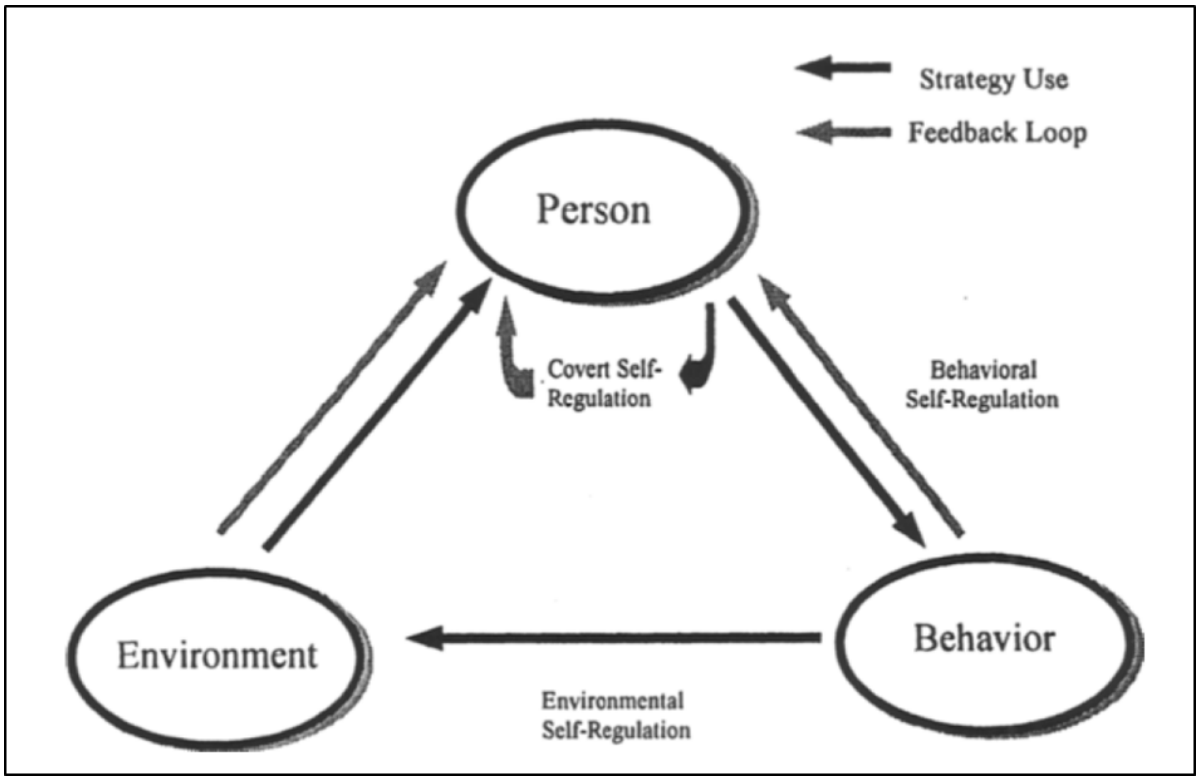

Figure 1. The relationship between three components of self-regulation (Zimmerman, 2000, p. 14)

This generally means that learners need to identify what they want to accomplish, plan how to achieve these goals and come to the realisation that they are responsible for achieving these goals before beginning to work on the goals themselves (Zimmerman, 2000). This effectively means that true self-regulation manifests itself not as total control over one's thoughts and the subsequent suppression of undesirable thoughts and emotions, but rather as the learner's being aware of oneself and one's needs. In essence, a self-regulated learner should always find a way to reconcile and fulfil all of their needs and desires without sacrificing the execution of the goal (Kuhl, 2000). It should, however, be noted that fully self-regulated behaviour is not guaranteed to happen, as "people do not always act according to their current hierarchy of motivational tendencies" (Kuhl, 1987, p. 280).

2.7 Self-Regulation in Vocabulary Learning

Saville-Troike (2012) sees the learning of L2 vocabulary as a key component of language learning. Generally speaking, vocabulary learning begins with input that is recognised. Once words contained within input have been recognised, learners have to use words in certain contexts, which leads to limited production. Only when learners are able to use words accurately and appropriately, can we say that a learner has successfully learnt a word.

The notion of word is however expanded to include not only simple words, but also larger units such as syntagma, collocations, metaphors, idioms, etc. The goal of vocabulary learning, therefore, is not the learning of the entire lexicon of the English language, but the knowledge of “function words” and most frequent words, in addition to vocabulary that the learner wishes or has to learn (Saville-Troike, 2012, p. 146).

Laufer (1998) investigated how vocabulary grows and in which ways it changed after one year on two groups of high school students. It has been found that even in non-holistic environments passive vocabulary knowledge will grow by 1600 word families annually, essentially meaning that for each lesson a learner’s vocabulary will grow by approximately eight to nine word families. Additionally, the growth of passive vocabulary also leads to the growth of active vocabulary, i.e. the most frequent words from the area of passive vocabulary will be transferred to active vocabulary. Since only the most frequent words are absorbed into active vocabulary, passive and active vocabulary will not grow at the same pace. The learning of words belonging to active vocabulary is stymied by the lack of use of words belonging to the passive vocabulary area which eventually leads to a plateau.

Investigations on language learning strategies, which, according to Tseng et al. (2006), partially explain the success of proactive students, but suffer from weak theoretical foundations and inconsistencies in theoretical explanations. For example, it has been debated whether learning strategies are an observable, behavioural phenomenon, or an innate learner difference. Additionally, learning strategies encompass many different areas of SLA which interact with one another and may produce invalid conclusions. Tseng et al. (2006) therefore investigated the underlying force that produces language learning strategies, strategic learning, within the scope of vocabulary learning, since this field is narrower than the broad category of ‘language learning’. Strategic learning is defined to be "goal-oriented, intentionally invoked, and effortful" (Weinstein et al., 2000, as cited in Tseng et al. 2006), and knowledge of strategic learning has been utilised to test self-regulation and the self-regulatory capacity, which focus mostly on the *meta-aspects* of learning. The goal was to explain and predict how self-regulation functions when learning vocabulary in addition to gaining an insight into how learners approach learning and maintain their motivation. This fresh perspective allows researchers to measure e.g. how learners experience stress, how they cope with it, how they solve boredom, and how they avoid procrastination. It would be inconsiderate to belittle vocabulary learning strategies and attempt to diminish their importance in the sphere of vocabulary learning, but the prerequisite of learning is a learner’s willingness to learn and how well the learners and the learners’ environment is suited for the task. In essence, the overall goal of Tseng et al.’s (2006)

was to see how learners approach the task of learning vocabulary in their heads.

In an effort to understand self-regulation in L2 vocabulary learning, Tseng et al. (2006) conceptualised an instrument which could be used by researchers to measure the self-regulatory capacity when learning vocabulary. In their research on strategic learning within the scope of self-regulation in vocabulary acquisition among 172 (90 male and 82 female) Taiwanese high school final years students, they found that self-regulation when learning vocabulary can be measured. The results validated the 'Self-Regulatory Capacity Regarding Vocabulary Learning scale' (SRCvoc). The 20 items in the scale form the following five facets (Tseng et al., 2006, p. 85-86):

1. **Commitment Control** which shows how successful the learner is at reminding oneself of the goals, whether one sets milestones, and how confident the learner is in one's skills;
2. **Metacognitive Control** which is related to how effective the learner is at managing one's thoughts and behaviour while learning, e.g. how good is the learner at preventing or delaying procrastination;
3. **Satiation Control** which represents the learner's ability to return to the task once its execution becomes tedious "by adding extra attraction or interest to the task";
4. **Emotion Control** which indicates how successful the learner is at recognising and managing negative emotions during the execution of a task;
5. **Environment Control** which shows to what extent the learner is aware of the impact of the environment on one's learning and how good the learner is at changing or relocating to another learning environment.

Few studies have focused on the use of self-regulatory strategies in L2 vocabulary acquisition, especially in the Croatian context. Thus, there is a need to explore this topic further. The general aim of this thesis is to determine whether Croatian high school learners use self-regulatory strategies when learning vocabulary in their English classes and whether strategy use and achievement levels are related.

Since Tseng et al. (2006) have successfully demonstrated that the SRCvoc instrument can be used to measure self-regulation when learning vocabulary, we hypothesise and build upon their assumption that self-regulation affects language and vocabulary learning. The assumption is that students who utilise self-regulatory strategies will have more success at learning vocabulary and languages in general, and thus have higher grades in English, as vocabulary knowledge is tested in Croatian high schools and will influence the overall English

grade. In essence, input is easier to process if a learner is motivated, knows how to remain motivated, and knows how to efficiently pay attention to vocabulary.

3 Aim and Method

The general aim of this thesis is to determine whether Croatian high school learners use self-regulatory strategies when learning vocabulary in their English classes and if there is a link between the five self-regulatory facets and achievement levels. In particular, the intention is to test whether Croatian 4th grade high schoolers use self-regulation strategies when learning vocabulary.

3.1 Aim

Firstly, we wanted to map how the high school sample uses self-regulatory vocabulary strategies. Secondly, we wanted to investigate whether a relationship exists between students' English grades and facets of SRCvoc. If the grades are more or less objective, they should be an indicator the student's knowledge of the English language, including vocabulary, and should thus be a measurement of the student's vocabulary knowledge. Thirdly, we wanted to check males and females differ in the use of self-regulatory strategies. Finally, we wanted to compare participants from different schools to see to what extent the use of self-regulatory strategies differs.

In short, the study will attempt to answer the following research questions:

1. Which self-regulatory strategies do Croatian EFL high school students use when learning English vocabulary?
2. Is there a relationship between elements of the SRCvoc and grade level?
3. Are there differences among gender in the use of self-regulatory strategies?
4. Are there differences among schools in the use of self-regulatory strategies?

3.2 Method

This section will deal with the technical details and the procedures involved in conducting the investigation. We will describe the instrument, procedures, and data analysis.

3.2.1 Sample

150 students from four schools were the subjects for this investigation. The number of

males was 68 (45%), the number of females was 79 (53%), and 3 (2%) have not stated their gender. 45 students attended the Franjo Petrić Gymnasium, 42 attended the Technical School, 40 attended the Vladimir Nazor Gymnasium, 23 attended the Medical School. The mean age (M) was 18.20 with an SD of 0.43. On average, the students have been learning English for 12.13 years with an SD of 0.44. The mean average English grade is 3.87 or a B, with an SD of 0.92. The results are shown in Tables 1 and 2.

Table 1. Frequencies: Gender, type of school

		N	%
Gender	Male	68	45
	Female	79	53
	Missing	3	2
	Total	150	100
Type of school	Vladimir Nazor Gymnasium	40	27
	Technical School	42	28
	Medical School	23	15
	Franjo Petrić Gymnasium	45	30
	Missing	0	0
	total	150	100

Table 2. Descriptive statistics: Age, Average number of years of studying English and grade last year.

	N	Mean	SD
Age	150	18.20	0.43
Years of learning English	150	12.12	0.44
Grade last year	150	3.87	0.922

N = Total Sample Number
SD= Standard Deviation

3.2.2 Instruments

A two-paged questionnaire containing two sections of questions was used. The first part of the questionnaire was related to the student's age, gender, class, school, years spent learning English, and their English grade at the end of the last year. The second part of the questionnaire included an adapted version of the 'Self-Regulating Capacity in Vocabulary Learning Scale' (SRCvoc) instrument created by Tseng et al. (2006). Vujnović's (2017) Croatian translation was used in this study. The set of twenty questions included five sub-scales, including *Commitment Control (ComCon) , Metacognitive Control (MetaCon), Satiation Control (SatCon), Emotion Control (EmoCon),* and *Environment Control (EnviroCon).* These twenty questions are not ordered in groups of four, but rather appear randomly so that the participants

do not notice that there are five components of their self-regulation being tested and consequently this should ensure that they do not modify their answers to skew the results of the questionnaire.

The twenty questions from the self-regulatory part of the questionnaire are answered by circling the correct number on a 6 pt. Likert scale, ranging from *strongly agree, agree, partly agree, slightly agree, disagree,* and *strongly disagree*. The scale, for the purpose of computer analysis, ranges from one to six, from 1 indicating s*trongly agree*, to 6 indicating *strongly disagree.* Two of the items in the questionnaire, the answers to the second and the twelfth question had to be recoded as they were phrased in the negative form, meaning that not recoding them, i.e. reversing the scale, would have skewed the results.

3.3.3 Procedure

The questionnaire was administered in pencil-and-paper form to fourth year high school students in Zadar at the end of their school year in May. Permission was given by the English teachers to conduct the investigation and students were, before the questionnaire was handed out, informed that the information on the questionnaires will remain anonymous and that the data will be analysed for the purpose of conducting an investigation on self-regulation.

3.3.4 Data Analysis

The data was subject to descriptive analyses, including frequencies, mean averages, and standard deviations. In addition, a t-test was carried out to study the differences in vocabulary strategy use among male and female subjects. One-way ANOVA analyses were used to measure whether the use of strategies varies across schools and grade levels.

4 Results

In this chapter, we will describe the results of our investigation and sort them by research questions. Due to the nature of the instrument, lower scores on the SRCvoc indicate that the learners self-regulate more, while higher scores indicate that the learners self-regulate less while learning vocabulary.

4.1 Descriptive Analysis

The data analysed in order to answer the question of which self-regulatory strategies do Croatian EFL high school students use when learning English vocabulary yields the following

results: For *Commitment Control (ComCon)*, the mean (M) is 2.87 with an SD of 0.99; *Metacognitive Control (MetaCon)* M=3.16, SD=0.95, *Satiation Control (SatCon)* M=3.16, SD=.91, *Emotion Control (EmoCon)* M=2.96, SD=0.95; *Environment Control (EnviroCon)* M=2.62, SD=1.06. The results are shown in Table 3.

Table 3. Results of the descriptive analysis of the five SRCvoc scales.

	N	**Mean**	**SD**
ComCon	150	2.87	0.99
MetaCon	150	3.16	0.95
SatCon	150	3.16	1.06
EmoCon	150	2.98	0.95
EnviroCon	150	2.62	1.06

N= Total Sample Number
SD= Standard Deviation

4.2 The Relationship between Grade Levels and Self-Regulatory Vocabulary Strategy Usage

The correlation test has shown that there exists a relationship between elements of SRCvoc and grade level and generally with better grades students report higher strategy use. A moderate correlation between grade levels and commitment control ($r=.41$, $p<0.01$) emotion control ($r=.39$, $p<0.01$), and satiation control ($r=.30$, $p<0.01$) was found. A weak to moderate relationship was found between grade levels and environment control ($r=.27$, $p<0.01$), and a weak correlation was found between grade levels and metacognitive control ($r=.19$, $p=0.02$).

Table 4. Correlations between Grade Last Year, Commitment Control, Emotion Control, Satiation Control, Environment Control scores, and Metacognitive Control.

Variables	Grade last year
ComCon	-.41**
EmoCon	-.39**
SatCon	-.30**
EnviroCon	-.27**
MetaCon	-.19*

**Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level.

4.3 Differences among Gender

The independent samples t-test used to investigate whether differences exist among gender in the use of self-regulatory strategies yielded the following: The only statistically significant piece of data concerns *EmoCon*. Females showed higher levels of *Environmental Control* (M=2.38) compared to males (M=2.88). Data relating to *ComCon, MetaCon, SatCon* and *EmoCon* were not statistically significant. The results are shown in Table 5.

Table 5. Comparison of vocabulary strategies (*Commitment Control, Metacognitive Control, Satiation Control, Emotion Control and Environment Control*) between females and males – Results of the independent samples t-test.

	Gender	**Number**	**Mean**	**SD**	**t**	**df**	**p**
ComCon	Male	68	2.85	1.04			
	Female	79	2.90	0.97			
	Total	147			-0.29	145	0.77
MetaCon	Male	68	3.08	0.99			
	Female	79	3.22	0.92			
	Total	147			-0.93	145	0.35
SatCon	Male	68	3.21	0.95			
	Female	79	3.08	0.89			
	Total	147			0.85	145	0.40
EmoCon	Male	68	2.98	0.86			
	Female	79	2.92	1.04			
	Total	147			0.35	145	0.73
EnviroCon	Male	68	2.88	1.11			
	Female	79	2.37	0.97			
	Total	147			2.96	145	0.01*

4.4 Differences among Schools

A oneway ANOVA test was used to investigate differences among schools in the use of self-regulatory vocabulary strategies. The results indicated that no statistically significant differences were found on the *Commitment Control, Metacognitive Control, Satiation Control, Emotion Control* scales. On the other hand, a significant difference was found on the *Environment Control* subscale ($p<0.01$). The results are shown in Table 6.

Table 6. Comparison between schools on the different vocabulary self-regulation sub-scales (*Commitment Control, Metacognitive Control, Satiation Control, Emotion Control and Environment Control*)– Results of the one-way ANOVA.

Scale	**df**	**F**	**p**
ComCon	F(3, 146)	0.16	0.92
MetaCon	F(3, 146)	1.0	0.36
SatCon	F(3, 146)	0.97	0.41
EmoCon	F(3, 146)	1.56	0.21
EnviroCon	F(3, 146)	4.13	0.01*

In order to find out which schools differed on the environmental control sub-scale, Tukey's *post-hoc* test had to be undertaken. The results show that all the schools differed in *EnviroCon* scores. The results of the post-hoc test are shown in Table 7. For the purpose of illustrating the differences, Figure 2 contains the schools and their respective *EnviroCon* average means. Notice the difference between the vocational schools (Medical and Technical Schools) and the gymnasiums.

Table 7. Comparison of schools on the Environmental control sub-scales – Result of the Tukey's *post-hoc test.* Number (N), Means (M), Standard deviations (SD), Significance (p).

Scale	**School**	**N**	**M**	**SD**	**p**
Environment	Vladimir Nazor Gymnasium	40	2.45	1.09	
control	Technical School	42	3.05	1.13	
					0.44
	Vladimir Nazor Gymnasium	40	2.45	1.09	
	Medical School	23	2.70	0.80	
					0.80
	Vladimir Nazor Gymnasium	40	2.45	1.09	
	Franjo Petrić Gymnasium	45	2.32	0.98	
					0.94
	Technical School	42	3.05	1.13	
	Medical School	23	2.70	0.80	
					0.54
	Technical School	42	3.05	1.13	
	Franjo Petrić Gymnasium	45	2.32	0.98	
					0.01*
	Medical School	23	2.70	0.80	
	Franjo Petrić Gymnasium	45	2.32	0.98	
					0.49

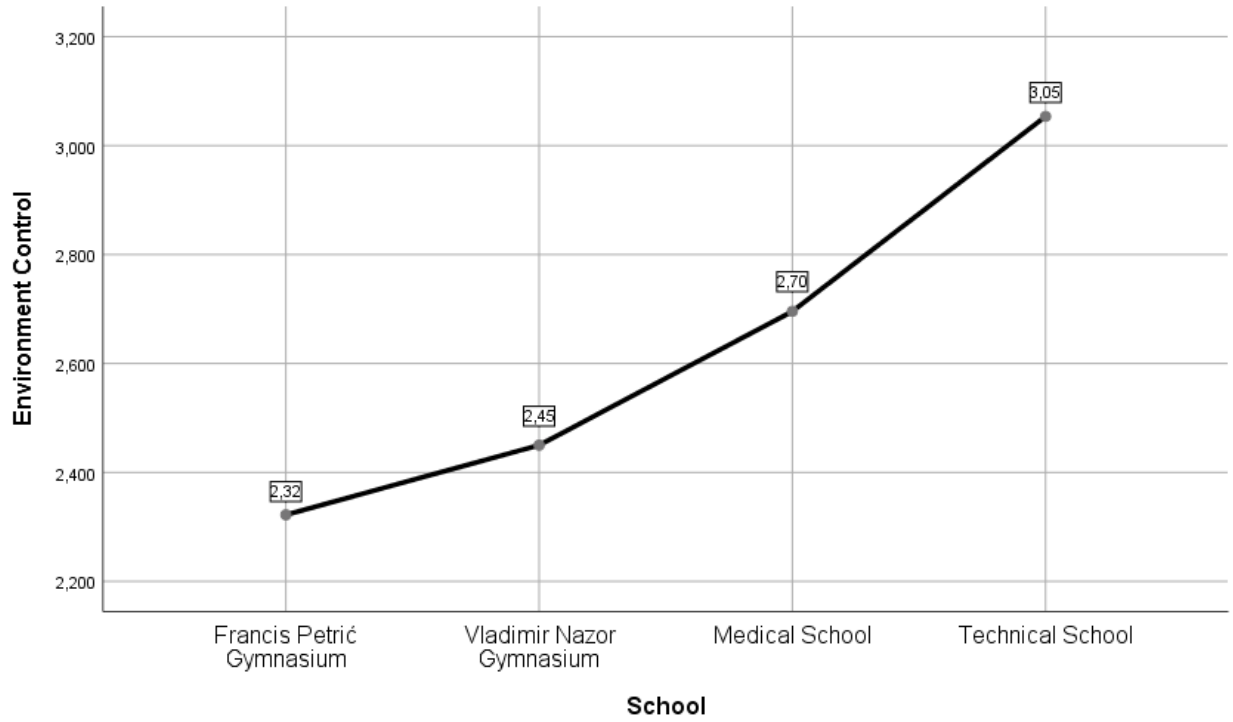

Figure 2. Illustration of *EnviroCon* scores. Displayed are average means for each school.

5 Discussion

Before beginning to discuss our findings it is important to note that lower scores in the SRCvoc facets indicate that the learner does more self-regulation, while higher scores indicate that the learner regulates oneself less. Croatian high school students are the most proficient regarding controlling their environment but are also proficient at staying committed to a task, and at dealing with their emotions while learning vocabulary. They are the least proficient when handling their own thoughts and behaviours and returning to the task. Vujnović (2017) investigated self-regulatory vocabulary strategy usage among Croatian primary and high school students. She found that both the male and female sample use strategies mostly from the areas of *Environment Control*, followed in order by *Commitment Control, Metacognitive Control, Satiation Control,* and *Emotion Control*. What we also found is that *Environment Control* and *Commitment Control* are areas in which Croatian students seems to be generally quite proficient, while *Emotion Control, Metacognitive Control* and *Satiation Control* strategy usage differs from Vujnović (2017). This means that, firstly, learners are aware that their learning environment will influence their vocabulary learning process and will do their best to arrange it to make the learning more efficient. If they sense that they are experiencing an uncomfortable amount of stress, they will deal with the source of stress immediately. Secondly, learners

believe that they can overcome any difficulties related to learning vocabulary and they are confident that their skills can accelerate the vocabulary learning process. Thirdly, students report that they are able to identify excess amounts of stress and are generally satisfied with how they reduce stress while learning vocabulary. Fourthly, students are confident in their skills to control their powers of concentration and in their skill of avoiding procrastination. Finally, students know how to keep learning interesting and do not become impatient with learning easily. Similar results have also been found in Iranian EFL contexts, as Moiinvaziri (2018) reports that a sample of 100 EFL learners has more success with controlling their environment than their emotions while learning vocabulary. The assumption is that controlling the environment is an easier task than tending to the metacognitive or emotional aspects of learning vocabulary. In essence, the results of his study concur with ours and Vujnović's (2017) in the area of *EnviroCon*, while *EmoCon* and *SatCon* seem to be the least reported facets of self-regulation.

Unsurprisingly, we have found moderate to weak correlations between all the facets of SRCvoc and learner grades, that is, the highest correlation has been found between *Commitment* and *Emotion Control*. This indicates that learners with higher grades are also able to stay committed to the task that they have to execute and are able to create an emotional state that will allow and facilitate vocabulary learning. This is in line with Zimmerman's (2000) conclusion regarding self-regulatory efficacy and self-efficacy, which states that setting higher goals produces great commitment which should produce better results. A lesser degree of correlation has been found between *Satiation* and *Environment Control* with learner grades. This indicates that students with higher grades experience less boredom, devise ways to make learning a more enjoyable experience, and know how to remove distractors either by improving the learning environment or by changing it. There was a weak relationship between grade levels and *Metacognitive Control*. This seems to indicate that regardless of grade level, students have difficulties delaying procrastination and controlling their thoughts while learning vocabulary.

When comparing the male and female sample, no statistically significant difference between males and females in the areas of *ComCon, MetaCon, SatCon, and EmoCon. Environment Control* was the only statistically significant result which implies that the female sample is more apt at controlling their learning environment than men. If we compare our results with Moiinvaziri (2018) we can see that the results are the opposite. In his investigation, Moiinvaziri (2018) has found that males generally use more self-regulatory strategies. Tseng et al.'s (2017, p.543) investigation on 1037 students in Taiwan has also concluded that females generally use more self-regulatory strategies than men, in particular when dealing with

"emotions, awareness and boredom". Additionally, Vujnović (2017) reports that males and females use self-regulation strategies identically, indicating that gender does not influence the use of self-regulatory strategies. This is in contrast with this study, which showed that females had stronger *Environment Control* vocabulary learning strategies.

The comparison between schools yielded only one statistically significant piece of data relating to *Environment Control*. *Environment Control* varied from school to school in a predictable manner. The results show us that the students in gymnasiums are more adept at controlling their learning environment than their vocational school counterparts. The two gymnasiums have the lowest means while the vocational schools' means are higher, with the Technical School's mean average being the highest. This not only shows that the scores for *Environment Control* differ between the schools but that there is a pattern.

Gymnasiums have a consistently lower score than the vocational school. Admittedly, the sample size is relatively small, but we could interpret the results in multiple ways. The first explanation for the statistically significant difference between schools could be based on the curriculum. The English language proficiency requirements vary from one type of school to another. Students in gymnasiums are universally expected to enrol in universities and as a result they must pass the state exam which includes B2 English tests, while students in vocational schools, especially the Technical School, may not be prepared for the state exam at a B2 level and they generally take the A2 English tests at the state exam. If we connect this with the difference in curriculum, it is possible that students from Gymnasiums have a higher English proficiency level and consequently have higher requirements which require them to apply themselves and control their learning environment. In order to have a higher proficiency level, these students must apply themselves *inter alia* when learning vocabulary and it is likely that they have succeeded at self-regulating their behaviour and regulating their environment when learning new vocabulary. Which strategies the teacher uses and promotes can also explain why *Environment Control* differs from school to school. Takač (2008, p. 18) mentioned that English teachers are "[a] factor [that] influences vocabulary learning." It is possible that teachers in the Gymnasiums may promote better vocabulary learning strategies.

6 Conclusion

We know that self-regulation influences learners' success (Rubin, 1981; O'Malley et al., 1983; Rubin, 1987; Oxford, 1989; Tseng et al., 2006; Moiinvaziri, 2018). Croatian EFL learners report using strategies related to *Environment Control*, *Commitment Control*, and *Emotion*

Control the most, while *Metacognitive* and *Satiation Control* seem to be used the least. Students who report utilising more self-regulatory strategies also report having better grades. Previous investigations have shown that males generally utilise more self-regulatory strategies than females do (Moiinvaziri 2018), and that gender has no influence on the reported use of self-regulatory strategies (Vujnović, 2017). However, our investigation has shown that Croatian female high school students only regulate their learning environment better when compared to Croatian male high school students. Comparison between schools has shown that learners only differ in terms of *Environment Control* and that reported strategy use is higher in gymnasiums than in vocational schools. Further investigations focusing on the relationship between self-regulation and age, culture, school type, and socioeconomic status might yield better clarification of these results.

When teaching learners vocabulary and the related strategies, it is important to instruct them and/or their parents to pay attention to their (children's) thoughts while learning and to react accordingly. Learners should be taught how to set milestones and how to remain confident in one's skills in spite of hurdles in front of them. Additionally, students should be advised on how to approach vocabulary-related tasks as projects that require more time and effort which should allow them to return the task and bring it to its end. Finally, learners should be shown how to deal with frustration and other negative emotions while doing vocabulary-related tasks. In essence, a good teacher should show students how to manage themselves when learning vocabulary.

References

Bastable, S. B. (2010). *Health Professional as Educator: Principles of Teaching and Learning*. Jones & Bartlett Learning, LLC.

Brown, T. S., & Perry, F. L. (1991). A Comparison of Three Learning Strategies for ESL Vocabulary Acquisition. *Tesol*, *25*(4), 655–670.

Brown, L. V. (2007). *Psychology of Motivation*. Nova Science Publishers.

Carroll, J. B. (1965). The prediction of success in intensive foreign language training. In R. Glaser (ed.), *Training, Research and Education* (pp. 87–136). New York: Wiley.

Catalan, R. M. J. (2003). Sex differences in L2 vocabulary learning strategies. *International Journal of Applied Linguistics*, *13*(1), 54–77. https://doi.org/http://dx.doi.org/10.1111/1473-4192.00037

Cummins, J., & Davison, C. (2007). *International Handbook of English Language Teaching*. Springer US.

Dörnyei, Z. (2009). *The Psychology of Second Language Acquisition*. Oxford: Oxford University Press.

Dörnyei, Z., & Schmidt, R. (2001). *Motivation and Second Language Acquisition*. Second Language Teaching & Curriculum Center, University of Hawaii

Ellis, N. C. (1994). Consciousness in second language learning: Psychological perspectives on the role of conscious processes in vocabulary acquisition.Ellis, R. (1994). *The Study of Second Language Acquisition*. Oxford University Press.

Fraser, C. A. (1999). Lexical processing strategy use and vocabulary learning through reading. *Studies in second language acquisition*, *21*(2), 225-241.

Grace, C. A. (2000). Gender differences: Vocabulary retention and access to translations for beginning language learners in CALL. *Modern Language Journal*, *84*(2), 214–224. https://doi.org/10.1111/0026-7902.00063

Gu, Y., Johnson2, R. K., & Johnson, R. K. (1996). Vocabulary Learning Strategies and Language Learning Outcomes. *Language Learning*, *46*(4), 643–679. https://doi.org/10.1111/j.1467-1770.1996.tb01355.x

Hoidn, S. (2016). *Student-Centered Learning Environments in Higher Education Classrooms*. Palgrave Macmillan US.

Kojic-Sabo, I., & Lightbown, P. M. (1999). Students' approaches to vocabulary learning and their relationship to success. *The Modern Language Journal*, *83*(2), 176-192.

Kuhl, J. (2000). A functional-design approach to motivation and self-regulation: The dynamics of personality systems interactions. In *Handbook of self-regulation* (pp. 111–169). Elsevier.

Kuhl, J. (1987). Action control: The maintenance of motivational states. In *Motivation, intention, and volition* (pp. 279-291). Springer.

Laufer, B. (1998). The Development of Passive and Active Vocabulary in a Second Language: Same or Different? *Applied Linguistics*, *19*(2), 255–271. https://doi.org/10.1093/applin/19.2.255

Lisi, A. M. G. D. (2002). *Biology, Society, and Behavior: The Development of Sex Differences in Cognition*. Ablex Pub.

Ludden, D. (2015). *The Psychology of Language: An Integrated Approach*. SAGE Publications.

Macaro, E. (2001). *Learning strategies in foreign and second language classrooms: The role of learner strategies*. A&C Black.

McPherson, T., & Cassell, J. (2008). *Digital Youth, Innovation, and the Unexpected*. MIT Press.

Mishra, B. K. (2016). *Psychology - The Study of Human Behaviour*. PRENTICE-HALL OF INDIA.

Moiinvaziri, M. (2018). Exploring the Role of Self-Regulatory Capacity in Vocabulary Learning of Iranian EFL Learners. *Research in English Language Pedagogy*, *6*, 241–256.

Naiman, N., Froehlich, M., Stern, H. H., & Todesco, A. (1978). The good language learner: *Research in education series No. 7* (Revised version published in 1995) Toronto: Modern Language Centre. Ontario Institute for Studies in Education.

Nation, I. S. P. (2004). Learning Vocabulary in Another Language. *English for Specific Purposes*, *23*(1), 87–90. https://doi.org/10.1016/S0889-4906(02)00014-5

Nation, I. S. P. (2001). Teaching vocabulary. *Asian EFL Journal*, (c), 9. https://doi.org/10.1016/0346-251X(84)90029-0

O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Russo, R. P., & Küpper, L. (1985). Learning strategy applications with students of English as a second language. *TESOL Quarterly*, *19*(3), 557–584. https://doi.org/10.2307/3586278

Paul, R., & Norbury, C. (2012). *Language Disorders from Infancy Through Adolescence - E-Book: Listening, Speaking, Reading, Writing, and Communicating*. Elsevier Health Sciences.

Qian, D. D. (1996). ESL vocabulary acquisition: Contextualization and

decontextualization. *Canadian Modern Language Review*, *53*(1), 120-142.

Richards, J. C. (1990). *The Language Teaching Matrix*. Cambridge University Press.

Rubin, J. (1987). *Learner strategies in language learning*. Prentice/Hall International.

Rubin, J. (1981). Study of cognitive processes in second language learning. *Applied Linguistics, 2(2),* 117–131. https://doi.org/10.1093/applin/2.2.117

Rubin, J. (1975). What the "Good Language Learner" Can Teach Us. *TESOL Quarterly, 9(1), 41*. https://doi.org/10.2307/3586011

Saville-Troike, M. (2012). *Introducing Second Language Acquisition*. New York: Cambridge University Press. https://doi.org/10.1017/CBO9781107415324.004

Schmidt, R. W. (1990). The role of consciousness in second language learning. *Language Learning*, *11*(2), 129–158. https://doi.org/10.1093/applin/11.2.129

Skehan, P. (1991). Individual Differences in Second Language Learning. *Study in Second Language Learning Acquisition*, *13*, 275–298. https://doi.org/10.1017/S0272263100009979

Shergill, H. K. (2012). *Experimental Psychology*. PHI Learning.

Stoffer, I. (1997). University foreign language students' choice of vocabulary learning strategies as related to individual difference variables.

Takač, V. P. (2008). *Vocabulary Learning Strategies and Foreign Language Acquisition*. *System* (Vol. 37). https://doi.org/10.1016/j.system.2009.05.005

Tseng, W. T., Dörnyei, Z., & Schmitt, N. (2006). A new approach to assessing strategic learning: The case of self-regulation in vocabulary acquisition. *Applied Linguistics*, *27*(1), 78–102. https://doi.org/10.1093/applin/ami046

Tseng, W. T., Liu, H., & Nix, J. M. L. (2017). Self-regulation in language learning: Scale validation and gender effects. *Perceptual and motor skills*, *124*(2), 531-548.

Vujnović, M. (2017). The role of self-regulation in EFL vocabulary knowledge/Uloga samoregulacije u znanju vokabulara engleskog kao stranog jezika. Retrieved from https://urn.nsk.hr/urn:nbn:hr:142:467247

Walpole, S., & McKenna, M. C. (2007). *Differentiated Reading Instruction: Strategies for the Primary Grades*. Guilford Publications.

Weinstein, C. E., Husman, J., & Dierking, D. R. (2000). Self-regulation interventions with a focus on learning strategies. In *Handbook of self-regulation* (pp. 727–747). Elsevier.

Weinstein, C. E., & Mayer, R. E. (1983). The Teaching of Learning Strategies. *Innovation Abstracts*, *5*(32), 2–4. https://doi.org/10.1108/13552540210420989

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In

Handbook of self-regulation (pp. 13–39). Elsevier.

Appendix: 'Self-Regulating Capacity in Vocabulary Learning Scale' (SRCvoc)

Upitnik o samoregulaciji ponašanja pri učenju vokabulara engleskoga jezika kod hrvatskih srednjoškolaca

Dragi/e učenici/e,

Cilj ovog upitnika je istražiti na koji način učite vokabular engleskoga jezika i provodi se u svrhu pisanja diplomskog rada.

Upitnik je u potpunosti anoniman pa vas molim da što iskrenije odgovorite na svako pitanje kako bi se dobili što točniji i vjerodostojniji podaci. Ne postoje točni i netočni odgovori. Trebate procijeniti koliko se svaka tvrdnja odnosi na vas. Ne odgovarajte kako smatrate da se od vas očekuje ili kako bi odgovarali drugi.

Zahvaljujemo na vašem vremenu i suradnji!

---

1. **Demografski upitnik** – Pažljivo pročitaj pitanja i odgovori ili zaokruži.

1. Dob: _____ 2. Spol: M ili Ž (zaokruži)

3. Razred: _____ 4.Škola _____

5. Engleski učim već _____ godina.

6. Koja je bila tvoja zaključna ocjena iz engleskog prošle godine?: 2 3 4 5

2. **Upitnik o iskustvu s učenjem engleskog vokabulara** – Zanima nas tvoj osobni stav. Nema **točnih** ili **netočnih** odgovora. Ovaj upitnik neće utjecati na tvoju ocjenu i molimo te da budeš iskren/a. Pažljivo pročitaj svako pitanje i odgovori na način da zaokružiš broj koji najbolje opisuje tvoje iskustvo s učenjem engleskog vokabulara.

Broj	Iskustvo	1 u potpunosti se slažem	2 slažem se	3 djelomično se slažem	4 djelomično se ne slažem	5 ne slažem se	6 uopće se ne slažem
1.	Kada mi učenje vokabulara više ne predstavlja ništa novo, postajem nestrpljiv/a.	1	2	3	4	5	6
2.	Znam kako smanjiti napetost kada sam pod stresom jer moram učiti vokabular.	1	2	3	4	5	6
3.	Pokušavam riješiti problem ako okolina u kojoj učim nije prikladna za učenje.	1	2	3	4	5	6
4.	Za učenje vokabulara imam posebne načine učenja kako bih ispunio/la svoje ciljeve.	1	2	3	4	5	6
5.	Za učenje vokabulara imam posebne načine za održavanje svoje koncentracije.	1	2	3	4	5	6
6.	Zadovoljan/na sam načinima na koje smanjujem stres kada učim vokabular.	1	2	3	4	5	6
7.	Kada učim vokabular vjerujem da mogu ispuniti ciljeve brže od očekivanog.	1	2	3	4	5	6
8.	Zadovoljan/na sam načinom kojim smanjujem dosadu kada učim vokabular.	1	2	3	4	5	6
9.	Kada učim vokabular smatram da su moji postupci kojima kontroliram koncentraciju učinkoviti.	1	2	3	4	5	6
10.	Kada učim vokabular ustrajem sve dok ne ispunim cilj koji sam si postavio/la.	1	2	3	4	5	6

11.	Za učenje vokabulara imam svoje posebne postupke kojima sprječavam oklijevanje i odgađanje učenja.	1	2	3	4	5	6
12.	Kada sam pod stresom jer moram učiti vokabular jednostavno odustanem od učenja.	1	2	3	4	5	6
13.	Smatram da mogu savladati sve probleme koji su vezni za postizanje mojih ciljeva u učenju vokabulara.	1	2	3	4	5	6
14.	Kada učim vokabular znam kako urediti svoju radnu okolinu kako bi mi učenje bilo učinkovitije.	1	2	3	4	5	6
15.	Ako se osjećam nervozno zbog učenja vokabular odmah rješavam taj problem.	1	2	3	4	5	6
16.	Kada učim vokabular smatram da su načini na koje kontroliram odgađanje učenja učinkovite.	1	2	3	4	5	6
17.	Kada učim vokabular svjestan/svjesna sam da je radna okolina važna.	1	2	3	4	5	6
18.	Siguran/sigurna sam da mogu savladati dosadu za vrijeme učenja vokabulara.	1	2	3	4	5	6
19.	Kada mi je dosadno dok učim vokabular, znam kako mogu utjecati na svoje raspoloženje da poboljšam učenje.	1	2	3	4	5	6
20.	Kad učim vokabular, tražim dobro radno okruženje.	1	2	3	4	5	6

Hvala na sudjelovanju u ovom istraživanju. Po završetku podigni ruku kako bi naznačio/la kraj ispunjavanja upitnika.

Summary

Assessment of Self-Regulation in English Vocabulary Learning among Croatian High School Students

Based on the findings from the psychology of second language acquisition and vocabulary learning, self-regulation is an essential part of language and vocabulary learning. Using the 'Self-Regulating Capacity in Vocabulary Learning' (SVCvoc) scale in this thesis we measured the self-regulatory capacity among Croatian EFL learners. The study investigated the relationship between reported use of self-regulatory strategies when learning vocabulary and grades, and differences in strategy use among gender and school type. The findings show that there exists a relationship between grade levels and reported strategy use. In particular, higher grade levels were correlated with increased use of strategies pertaining to *Commitment Control* and *Emotion Control*. Females showed higher use of *Environmental Control* self-regulatory strategies compared to males. Furthermore, Gymnasium high school learners showed more use of self-regulatory vocabulary strategies, including *Environment Control*, compared to vocational schools.

Keywords: English language learning, vocabulary learning strategies, self-regulation in vocabulary learning

Sažetak

Vrednovanje samoregulacije kod hrvatskih srednjoškolaca pri učenju engleskog vokabulara

Polazeći od psihologije usvajanja drugog jezika i teorije učenja vokabulara otkriveno je da je samoregulacija bitan dio postupka učenja jezika i vokabulara. Izmjerena je sposobnost samoreguliranja ponašanja kod hrvatskih učenika engleskog kao stranog jezika i odnos između korištenja samoregulativnih strategija i ocjena, spola i vrste škole koristeći skalu „sposobnosti samoregulacije pri učenju vokabulara". Naša saznanja ukazuju da postoji odnos između ocjena i samoregulativnih strategija. Konkretno, više ocjene koreliraju s povećanjem korištenja strategija za *kontrolu predanosti* i *kontrolu emocija*. Učenice uporabljuju strategije samoregulacije *kontrole okoline* više od učenika. Nadalje, gimnazijalci su pokazali veću uporabu strategija samoregulacije pri učenju vokabulara, uključujući *kontrolu okoline*, u usporedbi sa strukovnim školama.

Ključne riječi: učenje engleskog, strategije učenja vokabulara, samoregulacija u učenju vokabulara