

**UNIVERSITY OF TARTU  
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**BASIC SCHOOL STUDENTS' PERCEPTIONS OF  
THE APPLICATION MEMRISE  
AS AN ASSISTING TOOL  
FOR LANGUAGE LEARNING  
MA thesis**

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## **Abstract**

Different techniques for foreign language learning change and develop over time and mobile assisted learning has been growing in popularity over the past few years. Even though the techniques used in the applications are not new, the gamification aspect of them can motivate students to learn languages and have positive results in overall language knowledge. Therefore, the aim of this thesis is to use the language learning application Memrise as an assisting tool for language learning and find out the perceptions of the students using the application and whether they could benefit from it. The study was conducted in a large basic school near Tallinn, Estonia among students from 6<sup>th</sup> and 9<sup>th</sup> grade.

The present master's thesis consists of an introduction, two main chapters, a conclusion, a list of references and four appendices. The first chapter contains the literature review on vocabulary learning and teaching, motivation theories and an overview of different language learning applications. The second part gives an overview of the conducted study including both questionnaires used to assess the motivation of the students and later collect information on the perceptions on using the language learning app. The results are analysed, and further suggestions are made to teachers planning to use the application in a language learning environment.

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## **Introduction**

Vocabulary acquisition is one of the most important parts of language learning as it creates the basis for communicating in that language; however, students might not always be motivated to study. Different language learning applications can enhance the language learner's experience a lot and the use of such technological solutions can be beneficial in distance or independent learning as well.

There are many components to a person's vocabulary such as all the words, word parts and lexical phrases the person knows (Barcroft 2016: 2). School is one of the places where the number of new words learned usually increases rapidly (Lightbown and Spada 2013: 25), therefore, it is important for the student to receive meaningful input in a language learning environment. This can happen through various ways, for example, through extensive reading, guessing from context, using the keyword technique or other mnemonic devices etc. It is also important for the learner to first notice the word (Nation 2013: 103) and then have numerous meaningful encounters with the word (Nation 2013: 107) to support the memorisation of the word. This can either be done in a classroom setting through different games, activities, or exercises, but also using different technological solutions such as videos, online flashcards or language learning apps that are mostly based on the repetition of the words and phrases.

There are different types of research done on the use of mobile-assisted language learning (MALL) and a large number of them (Gharehblagh, Nasri 2020; Hao, Y. et al. 2019; Chen 2019; Tonomori 2017; Horbatiuk 2019) have shown an increase in vocabulary

and writing skills as well as positive influence on learning ability, motivation, and attitude towards language learning of students.

The present MA thesis focuses on student's perceptions of the language learning application Memrise. Two groups of 6<sup>th</sup> and 9<sup>th</sup> grade students in a large basic school near Tallinn test the application for one month. Each of the groups are added to a custom-made course in the application created based on their grade's coursebook (for the 6<sup>th</sup> grade *Family and Friends 5*, for the 9<sup>th</sup> grade *New Matrix*). Before the application testing period, the students fill out an online survey where they can share their previous experience in using language learning apps as well as their language learning motivation is assessed using Dörnyei's (2009: 9-39) L2 Motivation Self System model. After the test period, the participants fill out the second survey about their user experience of the application and they have the opportunity to give feedback on their experience. Based on this information, a set of recommendations are compiled for the teacher to know what to keep in mind when creating the courses in the application in the future. There are three research questions formed regarding this subject:

1. Are younger students more eager and motivated to use the application and what could be the reasons behind it?
2. What are the main issues and benefits of using this type of application in the opinion of the students using it?
3. Could a student with high classroom and language use anxiety benefit from using the application and raise their linguistic self-confidence level?

This study is potentially useful for teachers looking for different ways to integrate language learning applications or other technological solutions to their lessons. If the use of the application motivates students of different ages or supports students who have problems studying English in general, it can be useful to know what exactly the reasons behind that

are. The reason for choosing Memrise as a learning tool for this thesis, is the opportunity to create new courses depending on the study unit, the opportunity to monitor the use and progress of the students using the application and it has a "leader board" feature that shows the points of the student compared to the other course members and that could be interesting to study in relation to the students' motivation of using the application.

This thesis consists of two main chapters. The first chapter is the literature review and gives an overview of teaching and learning vocabulary, different motivation theories and ways of measuring students' motivation and finally an overview of the studies done on different language learning apps and the details on the app that is used for the study – Memrise. The second chapter focuses on the empirical study conducted in a large basic school near Tallinn among 15 students from 6<sup>th</sup> and 9<sup>th</sup> grade. The results of the study are analysed, discussed and suggestions are made for teachers who plan to use the same language learning app in a language learning environment.

## CHAPTER 1

### 1.1. Learning and teaching vocabulary

Understanding words gives us the tools to understand everything that is surrounding us. Having a wide vocabulary benefits language learning and helps us express ourselves to those around us. A person's vocabulary consists of all the words, word parts and lexical phrases (Barcroft 2016: 2) known and used by them and the most impressive growth will happen usually in school when thousands of more words will be learned in addition to the thousands already known and used by the student (Lightbown and Spada 2013: 25).

Words can be categorised as low and high frequency words depending on how many times they are used in a language setting (Nation and Webb 2017: 6). It is important for language teachers to know the most frequently used words, to know what kind of vocabulary their students need to be familiarised with first. When the students have a strong knowledge base of the most frequently used words, it is much easier to develop their vocabulary and overall language skills further. It is difficult to agree upon one single list of words that are high frequency in a language, but research has been done to determine different lists that could be as accurate as possible using different methods for measuring the frequency.

Michael West (1953) was one of the first who developed a very detailed word list called the General Service List in 1953 consisting of 2000-word families by using a five-million-word corpus of written text and counting the occurrences of each word in that corpus (Nation and Webb 2017: 10). Although it is quite a comprehensive list, many authors since then have come up with more modern and updated versions of high-frequency word lists. Norbert and Diane Schmitt (2014), for example, say that 3000-word families are a more

accurate number in a word list and suggest that knowing the vocabulary in that amount would raise the understanding of the words in most graded reading materials of students to 98% and raise the understanding of spoken language to 95% (Nation and Webb 2017: 11).

An even more recent list has been developed by Dang and Webb in 2016 called the Essential Word List (Nation and Webb 2017: 12) that was developed mainly using lemmas, which are made up of headwords and just its inflections, not its derivations. This research brought them to the conclusion that 800 most frequent lemmas were sufficient for a beginner and after acquiring that number, the learner was likely to be familiar with 60% of the words they encountered later on (Nation and Webb 2017: 12). Choosing an appropriate word list for students to start with can be difficult and the aims of the students and the lessons should be kept in mind while making that decision.

The first step to learning new words is noticing them (Nation 2013: 103) and this can happen during reading or speaking activities, or the teacher can encourage this by deliberately drawing attention to certain words. Noticing that a new word exists is, however, not enough for a student to memorise it and start using it in context. Nation (2013: 107) also points out that the learner must have many meaningful encounters with the word before it stays in the learner's memory. However, Nation (2013: 108) continues, that this kind of repetition must be seen as a repetition by the student himself, meaning that enough time has passed from the first encounter of the word but not too much time so that the learner has forgotten the word completely. Boers (2021: 19) emphasises the importance of repetition in language acquisition as well and says that for a group of learners, repeatedly encountered items will more likely be learned than those that occur with a lower frequency. He refers to a study conducted by Ellis (2002) where he concludes the importance of frequency and how it is a "necessary component of theories of language acquisition and processing."

Usually knowing a word refers to knowing its form, meaning and use (Nation 2013:



48). From a purely mechanical aspect, words are usually not immediately acquired but learned over a period of time due to several exposures to them (Schmitt 2000: 4). Schmitt (2000: 4) explains also that there are different levels to knowing a word - firstly receptive knowledge, meaning that the learner understands the meaning of the word, which is usually connected to reading and listening and secondly, productive knowledge, which is the ability to produce the words and use them in the correct context themselves.

Schmitt (2000: 120-121) draws attention to another important factor in vocabulary learning, which is incidental and explicit learning. Explicit learning means that the attention is focused on the information directly and incidental learning seems to “happen” without necessarily focusing attention on the learning procedure itself (Schmitt 2000: 120-121). A language teacher should plan the activities in the lessons in a way that could benefit both processes.

In addition to the different ways we learn new vocabulary, the time we spend on the acquisition of the words is different as well and is dependent upon many factors. Webb and Nation (2017: 25-38) point out the relevance of the “learning burden”, which is the level of effort needed to learn a word. Different aspects, such as the learners’ previous knowledge of their first language and other languages may all influence the learning burden – when the learners’ second language is similar to their first language, the learning burden will be light and *vice versa* (Webb and Nation 2017: 25-38).

Boers (2021: 19) adds that the length of the words and formal complexity of the words presented is a factor as well, as well as including cognates to a set of words taught, which can ease the learning burden. In the classroom, where the background of the students is different, a teacher should consider that the learning burden for the students might be different as well and use different methods to ease the learning burden. Webb and Nation (2017: 25-38) say it is important for a teacher to promptly estimate the learning burden for

words in order to know where to direct their focus when teaching certain words. They claim (2017: 25-38) that it is possible to reduce the learning burden by deliberately pointing out what connects the first and the second language patterns and analogies.

The way we learn vocabulary is dependent on different strategies. Schmitt (2000: 132) notes that mostly the strategies used are simple memorisation, repetition and taking notes and that students seem to favour these to the more complex ones that include other skills such as forming associations, using the keyword technique or other mnemonic devices, rote repetition and more. There is not a single specific strategy suitable and effective for all learners and the age, learning style, educational background and other factors might influence the effectiveness of the strategy (Oxford 2017: 127). General learning strategies also contain language learning strategies which in themselves contain more specifically vocabulary learning strategies (Nation 2013: 326). There are different features to strategies, but most notably they should include choice on which strategy to use (if any), complexity, require knowledge and increase effectiveness of learning (Nation 2013: 326). Since vocabulary is learned incrementally, exposure to the words and repetition are crucial to the acquisition of words and the recycling of words happens mostly in texts and conversations (Schmitt 2000: 146).

Schmitt (2000: 150-153) emphasises the need for teachers to promote extensive reading as an effective technique for students to meet less frequent words that they would not otherwise be familiarised with using other methods. Reading is also a very common technique for vocabulary learning even though there are some details to keep in mind to maximise the effectiveness for the learner. Lightbown and Spada (2013:171) draw attention to research evidence that states, that second language learners mostly gain more from texts that are interesting and important to them, but the presence of a language instructor is not less important as it influences the learning experience even more. The same research

(Lightbown and Spada 2013:171) also states a fact that for the reader to guess the word-meanings in any text, they must know usually more than 90 % of the words in that text. So, for the student to successfully learn vocabulary, only reading text that is interesting for them, is not enough.

Nation (2017: 90-92) studies extensive reading as a vocabulary activity and supporting the notion of the reader having to know more than 90% of the text, he points out that the learner should deliberately be exposed to text on the appropriate level and the proportion of the unknown words should be around 2% to support fluency development (Nation 2017: 90-92). Nation (2017: 90-92) says that with extensive reading, repetition, deliberate noticing, and varied encounters are the key which support the activity and the development of the language learner.

Schmitt (2010) has analysed data from various studies done on different aspects related to vocabulary learning. He pointed out findings that state the benefits of extensive reading (Schmitt 2010: 32). Horst (2005) stated that the participants in her study managed to learn over half of words unfamiliar to them through extensive reading, Pigada and Schmitt (2006) also researched the learning of spelling, meaning and grammatical characteristics through extensive reading and found that it enhanced 65% of the target words on at least one of these word knowledge types and especially spelling, which improved even through a small number of encounters to the word (Schmitt 2010: 29).

Waring and Takaki (2003) on the other hand, found in their study that incidental vocabulary learning through reading does benefit the learner but only to the level of partial understanding and not full level of mastery of the words (Schmitt 2010: 30). Furthermore, they found the number of exposures to the word was important as well, pointing out that about eight repetitions should be minimum for learners to have about 50% chance to recognize the form or the meaning of a word about three months later (Waring and Takaki

2003). Nation and Webb (2017) point out important aspects to further enhance vocabulary learning through extensive reading – they advise the active use of dictionaries while reading, doing narrow reading within a limited topic area and rereading books.

Intentionally creating associations is a strategy brought out by Rebecca Oxford (2017: 255) and this also entails the keyword technique which is a mnemonic strategy. The method uses words and illustrations to highlight the features of the word meaning (Hiebert and Kamil 2005: 8). This method is a way to learn the form and meaning of the word using mnemonic devices that make the learner remember the word after they have given it a connection to either a picture or a word (or a part of a word) usually in L1 (Nation and Webb 2017: 115-116). Research done on the keyword technique has brought out that it suits (Nation 2013: 464):

- learners of differing achievement (Levin et al. 1992, McDaniel and Pressley 1984); however, low aptitude learners might find the technique challenging (McGivern and Levin 1983);
- learners at different grade levels including young children (Pressley et al. 1981) and elderly learners (Gruneberg and Pascoue 1996);
- educationally disadvantaged learners.

Compared to extensive reading, this technique does not focus on repetition, but some requirements must be met for it to work as effectively as possible (Nation and Webb 2017: 115-116).

Choosing the appropriate keyword and/or linking image is crucial for the effectiveness of the technique and so is a reasonable amount of guided practice of the technique so that the learners could be aware of the technique and could benefit from it (Nation and Webb 2017: 115-116). Visualisation of the word, not only describing it, has proven to be important as well as the word will then be memorised both linguistically and

visually (Nation and Webb 2017: 115-116). Nation (2013: 467) concludes that the keyword technique has immense evidence to be very effective for learning a wide variety of languages and the technique enhances immediate and long-term recall.

Oxford (2017: 257) argues that the keyword technique can be useful for simplistic pairings of word sets rather than deep processing of information. She also points out a study by Gu (2003) that criticised mnemonic methods stating they ignore the syntactic, emotional, and pragmatic meanings of the words (Oxford 2017: 257). All of this should be considered when implementing the method.

Guessing from context is claimed to be an important strategy for language learners (Nation and Webb 2017: 93-96). This technique occurs through listening and reading when clues from the linguistic context, previous background knowledge of the topic or even just common knowledge is used to infer meaning to words that are either partially known or completely unknown to the learner (Nation and Webb 2017: 93-96). Studies done on the subject correlate guessing skills to high vocabulary knowledge, reading skill (Herman et al 1987), reading comprehension and verbal IQ (Hafner 1967). Oxford (2017: 256) points out a study (Gu and Johnson 1996) that claimed the benefit to vocabulary size and overall language proficiency but also refers to a study (Lawson and Hogben 1998) that showed guessing from context to be less efficient than other strategies, pointing out that abundant context takes the focus away from the new word itself.

Webb and Nation (2017: 93-96) identify four points to consider to make learning from context most efficient. They say teachers should choose the text to work with to be of appropriate level of difficulty, encourage to increase the amount of reading and listening to assure quality input, work on the reading and listening skills of the learners deliberately and train the learners to use the mentioned strategy (Webb and Nation 2017: 93-96).

The common core of the lexical approach is the idea that language is not only

grammar and vocabulary, but rather it consists of chunks that combine coherent text when put together in the correct manner (Lewis 1997). Lewis (1997) describes in his book about the subject, that there are four different types of these chunks: words, collocations, fixed expressions, and semi-fixed expressions.

Teaching collocations or phrases has certain challenges, some of them might have similar translations in L1 and L2 but completely different meanings that could result in strange combinations or meanings of many phrases might not be easily recognisable for the students, such as idioms (Boers 2021: 50). Students' attention should be drawn to these possible differences so they would be more aware of the language structure and possible variations of meanings.

Lindstromberg and Boers (2008: 7-16) say that knowing chunks of words is beneficial to language learning as they stay in our memories in one whole and constructing them one word at a time will not be necessary. They add that this is a way to make more room in our memories that we can then use to more fluently speak or write and using these chunks of language makes it less likely for the learner to make mistakes in the future because the chunks are in their long-term memory and act as "islands of accuracy" (Lindstromberg and Boers 2008: 7-16). Lewis (1997) states that in language teaching, the concentration should be on larger lexical phrases, not individual words.

Norbert Schmitt (2008) has summarised the information gathered from different research done on vocabulary learning and some of the suggestions are as follows:

- vocabulary targets should be set high for the students to be able to use the second language successfully;
- since vocabulary learning happens over time, it is useful to be flexible with using different approaches in the learning process.
- intentional learning is important and so is establishing a meaning-form link, which is

usually done with L1;

- learner engagement with the lexical items in the study process is crucial for successful learning.

These are only some of the points emphasised, vocabulary learning has been a research subject for many years and will be an important one in the future as well.

## **1.2. Motivation and language learning**

Motivation has been a subject of discussion and research for a long time and various theories have been developed regarding it. Maehr and Meyer (1997) define motivation as “a theoretical construct used to explain the initiation, direction, intensity, persistence, and quality of behavior, especially goal-directed behavior.” Woolfolk (2016: 471) identifies similar ideas but emphasises the importance of motivation being an internal state. A common division in motivation is amotivation, intrinsic motivation and extrinsic motivation (Woolfolk 2016: 471). Amotivation means the person has no engagement at all and there is complete lack of motivation (Woolfolk 2016: 471). Extrinsic motivation usually comes from outside sources, meaning the learner either wants to earn a reward, avoid punishment, *etc.* and the focus is usually not on the idea of the task of the subject itself (Woolfolk 2016: 471). Intrinsic motivation is a state where no outside stimuli would affect the learner’s performance or a task, the motivation comes from inside the learner and is driven by the activity itself (Woolfolk 2016: 471).

One of the earliest studies, that is still relevant today regarding intrinsic motivation, was done by Edward Deci (1975) where he concludes that people have a need for competence and self-determination, and this is the basis for intrinsic motivation. He then divides intrinsic motivation into two different behaviors: firstly, seeking out situations that challenge the person, but not too much or too little, the challenge must be moderate and the second involve the need to solve challenges to reduce dissonance or uncertainty that the

person faces (Deci 1975).

Motivation theories have developed over time and there are various ways to categorise them using different methods. Eggen and Kauchak (2016: 416) identify 4 main theoretical views of motivation: behaviorist, cognitive, sociocultural, and humanistic theories.

Behaviorist theories are based on studying the changes in behavior that are influenced by the environment around the subject and giving rewards (Eggen and Kauchak 2016: 416). Although giving rewards in the study process is still widely used, this theory has been criticised by many authors, who claim that using rewards as motivation, does not accurately measure motivation of the student and suggest that using rewards is not beneficial at all when the task itself is intrinsically motivating to the student (Eggen and Kauchak 2016: 416). Cognitive theories are based on thought and the learners “desire to make sense of their experiences” and this theory can also explain why learners want to have feedback or try to solve difficult problems without having any practical benefit to it (Eggen and Kauchak 2016: 417). Sociocultural theory emphasises the need for social interaction and claims that students are more motivated in a cooperative and supportive classroom rather than a competitive environment (Eggen and Kauchak 2016: 417). Humanistic theory of motivation is based on humanistic psychology and the main idea of the theory is that only understanding the behavior of people is not enough - their feelings, actions and thoughts must be examined to understand what motivates them (Eggen and Kauchak 2016: 418).

Even though different theories can explain how motivation of learners works, they cannot necessarily help with understanding the motivation of the language learner, as is it different and influenced by various aspects. Lightbown and Spada (2013: 82) point out a study conducted by Robert Gardner and colleagues (2003) stating it is difficult to understand if positive attitude toward language learning results in successful learning or successful



learning produces positive attitudes or if they both affect each other. They emphasise, that even if the positive attitude and successful learning correlation is difficult to determine, there is still plenty of evidence stating the connection between positive attitudes and willingness to keep learning (Masgoret and Gardner 2003).

Lightbown and Spada (2013: 84) state two main factors in motivation in second language learning: learners' communicative needs and attitudes towards the second language community. The understanding that language is needed for communication purposes and social situations enhances the learners' motivation because they see the value in learning it and therefore are more motivated to reach a high level of proficiency. When the learners have positive attitudes towards speakers of the language, their motivation to learn the language increases because they want more communication with them, and they want to be understood (Lightbown and Spada 2013: 84).

Williams and Burden (1997) came up with a much more detailed framework consisting of internal and external factors influencing the motivation of the learner (Dörnyei and Ushioda 2011: 53-54). Table 1 shows the overview with a very detailed list of factors. Williams and Burden (1997) base their framework on social constructivist theory and on the idea that every person is motivated in a different way, but social and contextual influences have to be taken into account as well (Dörnyei and Ushioda 2011: 53-54).

As part of the socio-cultural educational model, Robert Gardner (1985) created the Attitude Motivation Test Battery, and it has widely been used for researching motivation in language learning. The main variables that the test measures are integrativeness, attitude toward learning situation, motivation, and language anxiety (Gardner 1985: 39-61). Although this model has been used by many researchers, it has also received some negative feedback, especially regarding the term "integrativeness" (Kormos and Csizér 2008). Language changes over time and especially English, which is used even more nowadays

and is not so closely related only to the native speakers and their cultures anymore (Kormos and Csizér 2008).

| INTERNAL FACTORS  | EXTERNAL FACTORS  |
|---|---|
| Intrinsic interest of activity: <ul style="list-style-type: none"> <li>• arousal of curiosity</li> <li>• optimal degree of challenge</li> </ul>   | Significant others: <ul style="list-style-type: none"> <li>• parents</li> <li>• teachers</li> <li>• peers</li> </ul>  |
| Perceived value of activity: <ul style="list-style-type: none"> <li>• personal relevance</li> <li>• anticipated value of outcomes</li> <li>• intrinsic value attributed to the activity</li> </ul>  | The nature of interaction with significant others: <ul style="list-style-type: none"> <li>• mediated learning experiences</li> <li>• the nature and amount of feedback</li> <li>• rewards</li> <li>• the nature and amount of appropriate praise</li> <li>• punishments, sanctions</li> </ul> |
| Sense of agency: <ul style="list-style-type: none"> <li>• locus of causality</li> <li>• locus of control RE process and outcomes</li> <li>• ability to set appropriate goals</li> </ul>   | The learning environment: <ul style="list-style-type: none"> <li>• comfort</li> <li>• resources</li> <li>• time of day, week, year</li> <li>• size of class and school</li> <li>• class and school ethos</li> </ul>   |
| Mastery: <ul style="list-style-type: none"> <li>• feelings of competence</li> <li>• awareness of developing skills and mastery in a chosen area</li> <li>• self-efficacy</li> </ul>   | The broader context: <ul style="list-style-type: none"> <li>• wider family networks</li> <li>• the local education system</li> <li>• conflicting interests</li> <li>• cultural norms</li> <li>• societal expectations and attitudes</li> </ul>  |
| Self-concept: <ul style="list-style-type: none"> <li>• realistic awareness of personal strengths and weaknesses in skills required</li> <li>• personal definitions and judgements of success and failure</li> <li>• self-worth concern</li> <li>• learned helplessness</li> </ul> |   |
| Attitudes: <ul style="list-style-type: none"> <li>• to language learning in general</li> <li>• to the target language</li> <li>• to the target language community and culture</li> </ul>  |   |
| Other affective states: <ul style="list-style-type: none"> <li>• confidence</li> <li>• anxiety, fear</li> </ul>   |   |
| Developmental age and stage   |   |
| Gender  |   |

**Table 1. Williams and Burden’s framework of L2 motivation (Williams and Burden 1997)**

With more and more students learning L2 language as means to communicate to foreign people in an international environment, integrativeness, defined by Gardner as “identification with native speakers of the L2” serves no real purpose or relevance in the 21<sup>st</sup> century (Kormos and Csizér 2008).

Zoltán Dörnyei (Dörnyei and Ushioda 2009: 29-32) has offered an alternative to this

when he developed his L2 Motivation Self System. He analysed integrativeness from self-perspective and offers an alternative meaning: the Ideal L2 Self (Dörnyei and Ushioda 2009: 29-32). In his theory he claims that if a person would like to be and eventually becomes proficient in L2, it can be interpreted as having achieved the integrative disposition (Dörnyei and Ushioda 2009: 29-32).

The Ideal L2 Self in his theory is based on the idea of an “ideal self” who speaks the L2 (as opposed to the real self who does not) and the person learning should then have the motivation to want to become that “ideal self” to reduce the contrast between the actual and ideal self (Dörnyei and Ushioda 2009: 29-32). The theory has two other components: Ought-to L2 Self and L2 Learning Experience (Dörnyei and Ushioda 2009: 29-32). The first is based on more extrinsic motives, such as the belief of oneself of having to have certain attributes in order to meet certain expectations and therefore avoid negative outcomes that might result otherwise (Dörnyei and Ushioda 2009: 29-32). The L2 Learning Experience, according to Dörnyei (2009), relates to the learning environment and experience, for example the teacher, peer group or other factors that might influence the learner.

Motivation is dependent on many variables and there are different ways to measure motivation from different aspects. Age can be one of the factors influencing motivation, a study (Kormos and Csizér 2008) done on over 600 Hungarian students from three different age levels – secondary school, university and adult learners showed, that the main motivation for learning English was interest in English language cultural products for the secondary school students. Older students – university students and adults mostly were motivated by international postures such as possibly living in an English-speaking country or having international connections (Kormos and Csizér 2008).

Classroom or language use anxiety can negatively affect language learners and is also somewhat related to age. A study (Fenyvesi et al. 2020) done on 276 Danish primary

school learners showed that younger students had lower levels of classroom anxiety and had more positive competence beliefs but relied more on external authorities for motivation. Older students did not rely on external authorities at that level but had higher levels of classroom anxiety and their English competence belief was lower (Fenyvesi et al. 2020).

Motivation in language learning is dependent upon many factors. The next section will focus on language learning applications and what aspects of language learning can they influence.

### **1.3. Language learning applications**

Using ICT tools and different digital applications to support and improve language learning has been on the rise over the past years. There are many different mobile applications available such as Duolingo, Babble, Busuu, Quizlet for learning a wide variety of languages and the learning itself can be brought outside of the classroom and can be much more flexible when the learner can choose the time, place, length, and duration of the study.

Most of the language learning in the application is through spaced repetition of either words, phrases, or both. Spaced repetition is the opposite term of massed practice and is based on the idea of short study sessions spread out over a course of a longer period instead of learning all the necessary items at once (Settles and Meeder 2016). As Nation (2013: 107) emphasises, repetition of the word is crucial for the student to memorise it and using different algorithms in the app, the words will be presented to the learner multiple times and they will be reviewed after a certain amount of time.

There are some apps that focus on mnemonics as well, such as Memrise. In the application, the learner can create “mems” in the application, which means the learner can add a word, or a phrase of their choosing to the word or phrase they are studying. This is related to the keyword technique, an effective way to connect the word or phrase the learner wants to study to another phrase or a word that the learner has a meaningful connection with

(Nation and Webb 2017: 115-116). This can benefit the learning process significantly.

There are different types of research done on the use of mobile-assisted language learning (MALL). Gharehblagh and Nasri (2020) researched a group of elementary school students using MALL methods of giving instructions using Telegram as a collaborative tool and their writing skills improved significantly compared to their peers after using the mobile-assisted tools. Hao, Y. et al. (2019) created a language learning app themselves for the purpose of a study, done on ten 7th-grade students who were struggling with learning English as a foreign language, showed significant improvement in results, motivation, and attitude towards learning English in general. A similar app was developed with a focus on self-regulated learning mechanism by Chen (2019), who researched the vocabulary skills development and whether mobile-assisted applications would affect the students' learning performance in a positive way and the results showed motivation and self-regulation abilities improved for the 5th-grade students in the study.

Mobile-assisted language learning can also benefit older students. Results of the research done on undergraduate students by Tonomori (2017) stated that the application Memrise was helping the students improve their vocabulary skills and their learning ability. An app designed for researching language-abilities by Horbatiuk (2019) showed an overall increase in the level of knowledge of the students after using it. Significant improvement in language knowledge and especially vocabulary was also noticed by the participants of a large-scale study conducted on the Busuu language learning app (Rosell-Aguilar 2018).

Research shows a positive impact on the results, motivation, and attitude towards the English language, however, there can be downsides to mobile-assisted language learning. Heil et al. (2016) comment, that there has been some criticism on the general MALL research for a lack of quantifiable learning outcomes. They refer to an elaborate meta-analysis by Burston (2015) who researched 291 MALL studies and discovered that

only 35 of them were „of sufficient duration of 1 month and involved a minimal number of subjects – ten.” Burston (2015) also critiqued the research design by many of them and claimed that they failed to address other variables that might affect the study and seemed to be too focused on the technology and not the language learning itself. Even though Burston (2015) offers critique to the research done on this subject, he also points out that the learning tools seem to still have mostly positive learning outcomes and emphasises that vocabulary is the most popular topic researched.

Since the topic of mobile assisted language learning is relatively new, research has mostly been done in Asian countries and not so significantly in other parts of the world. The education system in Asia is different and is influenced by general societal norms and therefore the validity of the studies is unclear and any conclusions should be made taking these aspects into account.

Memrise is an app that will also be used for the research conducted for this thesis. It is a language learning application used by millions of people. Learners can choose a suitable course from the many available ones and it is also possible to create a course in the application itself. The application was created in 2010 and is now being used by more than 50 million people from 189 different countries (Memrise 2021).

The methodology used in the application is spaced repetition (Settles and Meeder 2016) along with mnemonic devices. Memrise is described in their webpage as “built with a mix of technology and science that brings your mind to life” (Memrise 2021). In building their language courses in the app, they focus on making the learning process as interesting as possible for the learner and they want the learner to use what they have learned in different ways and specific times (Memrise 2021). Gamification of the app is one of the features that can make it fun for the learner, the user interface is colourful and each correct answer grants the user points. These points will be added together, and each course has a leaderboard that

ranks the learners, and this might motivate some learners to achieve more. The effectiveness of the app is in both the spaced repetition and mnemonic devices described earlier and the app also send outs daily reminders to assure consistency in using the app. The application is available on a mobile platform and can also be accessed from the web, which is a useful feature when using it in a classroom setting. The learner can choose from various language courses such as the Memrise verified courses or courses created by independent users.

The next chapter will focus on the study conducted for the purpose of this thesis. The aim, research question, participants, procedure and results and conclusions will be presented.

## **CHAPTER 2**

### **2.1. Aim and research questions**

The aim of this thesis is to find out about students' perceptions of using the language learning application Memrise as an assisting tool in language learning among 6<sup>th</sup> and 9<sup>th</sup> grade students in a basic school near Tallinn. Based on the aim of the thesis, three research questions were formed:

1. Are younger students more eager and motivated to use the application and what could be the reasons behind it?
2. What are the main issues and benefits of using this type of application in the opinion of the students using it?
3. Could a student with high classroom and language use anxiety benefit from using the application and raise their linguistic self-confidence level?

The research methods used for the purpose of this thesis are described in the following sections.

### **2.2. Setting and participants**

The participants invited to join the study were students from 6<sup>th</sup> and 9<sup>th</sup> grade of a large basic school near Tallinn. The reason for choosing that school is that the author of the thesis is one of the English teachers in that school. The reason for choosing the 6<sup>th</sup> and 9<sup>th</sup> grade was to have two groups with a sufficient age difference to compare the motivation of the students. The 9<sup>th</sup> grade is also the final class of the basic school and the 6<sup>th</sup> grade is the final class of the second stage of three stages of the basic education in Estonia. All the language learning groups in the school are composed of students of different classes and



based on the language level of the student; the 6<sup>th</sup> grade has four 45-minute English lessons per week and the 9<sup>th</sup> grade has three 45-minute lessons per week. The 6<sup>th</sup> grade students use the coursebook *Family and Friends 5*, suitable for A2 level according to the Common European Framework of Reference for Languages (CEFR). The 9<sup>th</sup> grade students use the coursebook *New Matrix* suitable for B1 level.

There were 15 participants in the study, eight from the 6<sup>th</sup> grade and seven from the 9<sup>th</sup> grade, who were initially interested in participating in the study. After sending out the first questionnaire and receiving answers of the 15 participants, only seven of them continued to use the application for the whole duration of the study – six from the 9<sup>th</sup> grade and one student from the 6<sup>th</sup> grade. The students were from different classes. There were four different classes of 6<sup>th</sup> grade students – three from one, three from the second and one of each from third and fourth class. From the 9<sup>th</sup> grade level there were three students from one class and the remaining four were all from different classes. The parents of all the participants were informed of the study taking place via Studium messages due to the students being underage. At the time of the study, the schools were closed, and students were doing distance learning and having online classes. All the communication of the author and the participants happened via messages, e-mails, Studium messages or video calls.

### **2.3. Procedure**

The participants for the study were invited through presentation and introduction of the study in online classes and messages in Studium. 15 participants showed initial interest in participating in the study and answered the first questionnaire sent out to them using Microsoft Forms. Questionnaire 1 (see Appendix 1) was created to assess the motivation of the students and to receive information about their previous experience in using language learning apps. The questionnaire was created primarily based on the L2 Motivation Self System (Dörnyei 2009: 9-39) measuring the factors that influence language learning

motivation, such as classroom anxiety, linguistic self-confidence, language use anxiety, instrumentality, cultural interest, integrativeness, reliance on external authorities and precursors to “Ideal L2-self” (Dörnyei 2009: 9-39). The first questionnaire was formed using the examples of factors measured in two studies done by Fenyvesi et al. (2020) and Kormos and Csizér (2008) comparing the age-related differences of motivation among students. Separate questions were added to receive information about previous experience in using language learning apps.

Since the students have a different language level, the surveys were available in both Estonian and English so the students could choose their preferred option and minimise any possible misunderstandings regarding the content of the surveys. 11 students chose the Estonian version (seven from the 6<sup>th</sup> grade and four from the 9<sup>th</sup> grade) and four the English version (one from the 6<sup>th</sup> grade and three from the 9<sup>th</sup> grade).

After the students filled in the first questionnaire online, they received access to the course created by the author in the Memrise language learning application. Along with the access, the author sent a brief written instruction on how to use the app and details about the features available. Two different courses were created for the 6<sup>th</sup> (see Appendix 3) and the 9<sup>th</sup> grade (see Appendix 4) in the app, both consisting of 100 words and phrases taken from the coursebooks used: *Family and Friends 5* for the 6<sup>th</sup> grade and *New Matrix* for the 9<sup>th</sup> grade.

Words and phrases from all the units in the coursebook were used, including both those that the students had already learned and those they had not yet studied – 12 units from the 6<sup>th</sup> grade and 10 units from the 9<sup>th</sup> grade coursebook. The reason for the selection was for the students to have an opportunity to revise the words they have already learned or give the students with lesser abilities a chance to first learn the words they are already familiar with, so they would not feel so discouraged about learning new words. Since

students from different classes were participating in the study and the pace for the same class levels in the school is different, it was more efficient to let the students learn the words at their own pace and not parallel to the units. The words and phrases were individually added to the Memrise system, there were no translations available, so these needed to be added as well. The words and phrases were chosen based on the topic of the unit, phrases with prepositions were added as well and some easier words and expressions for the students to also practice correct spelling. It is also possible to bulk add words in Memrise for the course creator.

From the 15 students that filled out the first questionnaire, seven accessed the application and started using it. The students were instructed to choose the pace they were most comfortable with in using the app and there was no limit or minimum number of the words the students had to study. The duration of the use of the application by the students was one month from the 25<sup>th</sup> of March until the 25<sup>th</sup> of April.

After the testing period of the application, a second questionnaire (see Appendix 2) was sent out to the students to receive feedback on their experience. The questionnaire was sent out via Microsoft Forms and there were open questions for the students to share their perceptions of the app, the motivation to use the app and whether they felt any difference in their language proficiency after using the application. The results from both of the questionnaires will be discussed in the following sections.

## **2.4. Results**

The following sections are divided into four categories. The results from the first questionnaire about students' motivation will be analysed in two different ways. Firstly, based on the age of the students, the 6<sup>th</sup> grade and the 9<sup>th</sup> grade will be compared and secondly based on the differences of two groups – the students who decided to continue to participate in the research and those who did not. The third category presents data from

Memrise application and the results of the students and the fourth category analyses the results of the second questionnaire focusing on the feedback of the students who used the app.

#### **2.4.1. Results from the first questionnaire based on age**

The first questionnaire, (Appendix 1) consisting of 28 statements, was filled out by 15 students, eight from the 6<sup>th</sup> grade and seven from the 9<sup>th</sup> grade; the questionnaire was filled out by the students in Microsoft Forms. There were eight categories that measured the motivation of the student based on the different aspects of the Dörnyei's (2009: 9-39) L2 Motivation Self System model and two additional questions about motivation to learn languages through fun activities and previous use of language learning apps. Students had to assess every statement based on a 4-point Likert scale as follows: 1 - strongly disagree; 2 – disagree; 3 – agree; 4 – strongly agree. The last question was whether they have previously used language learning apps or not and the answer “Yes” directed them to an open-ended question where they could share what type of apps they had used.

Although only seven of the 15 students who responded to the questionnaire proceeded to use the language learning app, all the 15 answers will be analysed below: firstly, based on the two age groups and secondly based on whether they continued to use the app or not. The reason for this is to determine if there are any relevant factors related to students' motivation influencing the decision to start using the app or it could be influenced by other factors. While some of the students did not proceed to use the app, information about their motivation is still useful to see the overall tendency of what motivates students of different age groups.

#### **Linguistic self-confidence**

The section of linguistic self-confidence consisted of 3 statements:

Statement 1: *I am good at English.*

Statement 2: *I am good at learning something new in English.*

Statement 3: *If I think of all the students in my English class, I am one of the best students.*

The most frequent answers for both age groups were similar – with the first two statements, the students mostly agreed, while with the third question, they mostly disagreed. The answers to these statements (see Table 2) suggest a rather high level of linguistic self-confidence for both groups.

|                   | Statement 1 |           | Statement 2 |           | Statement 3 |           |
|-------------------|-------------|-----------|-------------|-----------|-------------|-----------|
|                   | 6th grade   | 9th grade | 6th grade   | 9th grade | 6th grade   | 9th grade |
| Strongly agree    | 0           | 1         | 1           | 0         | 0           | 0         |
| Agree             | <b>7</b>    | <b>5</b>  | <b>6</b>    | <b>6</b>  | 2           | 1         |
| Disagree          | 1           | 1         | 1           | 1         | <b>5</b>    | <b>6</b>  |
| Strongly disagree | 0           | 0         | 0           | 0         | 1           | 0         |

**Table 2. Summary of linguistic self-confidence of the two age groups based on the three statements (number of responses)**

Statement 1: *I am good at English* and Statement 2: *I am good at learning something new in English* received similar answers – the most frequent answer for both age groups being “Agree”, which might mean that they feel that they are good at English, but not good enough to confidently claim that or they might feel there is still room for improvements. The answers to the second statement showed “Agree” as the most popular answer as well and even though the statement refers to learning something new, which can mean extra effort for the students, they are still confident in their abilities, which is a rather positive result.

With Statement 3: *If I think of all the students in my English class, I am one of the best students*, the answers for this statement varied quite significantly from the first two. The most popular answer was “Disagree” and three students agreed with the statement. The lower results indicate that even though the students are rather confident in their language abilities, they would rather not consider themselves as the best students in the class. This could also be affected by the language learning environment, grades, how the students see

themselves compared to their peers, self-esteem or it could be a cultural feature, as modesty is traditionally preferred in the Estonian society.

### **Classroom anxiety**

This section analysing the classroom anxiety of students had five statements:

Statement 4: *I look forward to English lessons.*

Statement 5: *I have enough English lessons per week.*

Statement 6: *I'm afraid of making a mistake when I speak English in the lessons.*

Statement 7: *I don't mind saying answers aloud in the English lesson.*

Statement 8: *I am afraid of giving a wrong answer in the English lesson.*

Since most of the statements in the questionnaire are positive, for the clarity of the results, the classroom anxiety will be measured in a way that a higher number of responses for “Agree” or “Strongly agree” indicate lower anxiety and “Disagree” or “Strongly disagree” indicate higher anxiety. The results will be the opposite for statements 6 and 8.

The most frequent answers (see Table 3) for the 6<sup>th</sup> grade students were “Agree” for three of the five statements and disagree for two of the statements, which indicate lower anxiety levels. Most frequent answers for the 9<sup>th</sup> grade were “Agree” for three statements and two of the other statements had varied answers, but the results still indicating a slightly higher level of anxiety for the older students compared to the younger students.

|                   | Statement 4 |           | Statement 5 |           | Statement 6 |           | Statement 7 |           | Statement 8 |           |
|-------------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
|                   | 6th grade   | 9th grade | 6th grade   | 9th grade | 6th grade   | 9th grade | 6th grade   | 9th grade | 6th grade   | 9th grade |
| Strongly agree    | 1           | 1         | 3           | 1         | 1           | 2         | 1           | 1         | 0           | 1         |
| Agree             | <b>4</b>    | <b>5</b>  | <b>5</b>    | <b>5</b>  | 2           | 2         | <b>7</b>    | 3         | 2           | <b>3</b>  |
| Disagree          | 3           | 1         | 0           | 1         | <b>5</b>    | 1         | 0           | 3         | <b>5</b>    | 2         |
| Strongly disagree | 0           | 0         | 0           | 0         | 0           | 2         | 0           | 0         | 1           | 1         |

**Table 3. Summary of classroom anxiety of the two age groups based on the five statements (number of responses)**

With Statement 4: *I look forward to English lessons*, younger students had more of a variety in their answers, this statement also shows 9<sup>th</sup> graders are keener on going to English lessons; this might be influenced by the approaching exams or more developed self-discipline skills. Anxiety or fear of going to a class might also be influenced by the environment of the class and relationship with the teacher, which might significantly differ with the 6<sup>th</sup> and 9<sup>th</sup> grade students. With Statement 5, the results here again divide evenly between the age groups with most students agreeing that they have enough English lessons per week.

With Statement 6: *I'm afraid of making a mistake when I speak English in the lessons*, the answers for the 9<sup>th</sup> grade students varied throughout the scale. Although there were three 6<sup>th</sup> grade students who leaned on the same side, most of the group (five students) rather disagreed with the statement, meaning the younger students are less likely to be afraid of making mistakes in the lessons. The results of the older students feeling more anxious towards making mistakes were surprising as they have more experience in using the language, so it might be either influenced by personal anxiety or the classroom environment.

Looking at Statement 7: *I don't mind saying answers aloud in the English lesson*, none of the 6<sup>th</sup> grade students felt they mind saying answers aloud in the lesson, which means they feel rather safe in their classroom environment regarding this aspect, which is positive. The answers varied for the 9<sup>th</sup> grade and were more similar with the results of Statement 6. Three of seven students felt they do mind saying answers aloud in the lesson, which might indicate their discomfort in the classroom environment and higher classroom anxiety.

With Statement 8: *I am afraid of giving a wrong answer in the English lesson*, the answers supported the overall higher level of anxiety of the older students. The results for the 6<sup>th</sup> grade varied quite significantly as only two students agreed with the statement and

the rest of the students either disagreed or strongly disagreed, meaning the younger students might feel less anxious in the classroom and are not afraid to give a wrong answer as opposed to the older students.

### **Language use anxiety**

This section analysing the language use anxiety of students had two statements:

Statement 9: *I would feel uncomfortable speaking English to a native speaker.*

Statement 10: *I would feel uncomfortable speaking English to a foreigner who is a non-native speaker of English.*

The same reversed Likert scale was used here, and results were measured in the same way as with the previous section – a higher number of responses for “Agree” or “Strongly agree” indicate lower anxiety and “Disagree” or “Strongly disagree” indicate higher anxiety. While the most popular answer between both of the age groups were “Disagree”, the number of “Agree” answers of the 6<sup>th</sup> grade students indicated a higher level of anxiety compared to the older students.

|                   | Statement 9 |           | Statement 10 |           |
|-------------------|-------------|-----------|--------------|-----------|
|                   | 6th grade   | 9th grade | 6th grade    | 9th grade |
| Strongly agree    | 1           | 0         | 1            | 0         |
| Agree             | 3           | 1         | 3            | 1         |
| Disagree          | <b>4</b>    | <b>4</b>  | <b>4</b>     | <b>4</b>  |
| Strongly disagree | 0           | 2         | 0            | 2         |

**Table 4. Summary of language use anxiety of the two age groups based on the two statements (number of responses)**

The results show less language use anxiety of the older students, although their classroom anxiety average level was higher. This could indicate that while the 6<sup>th</sup> grade students feel comfortable in the classroom environment, they do not feel confident in their language use outside of the classroom. There could be many reasons for the difference in anxiety, for example, older students have had more practice and feel more comfortable with



their language ability and therefore would not feel so uncomfortable talking to a native speaker or a foreigner in English. Language use may be different outside of the classroom also because the students know they are not assessed based on their ability and therefore feel less anxious. Younger students might feel more uncomfortable also since they might not have any relevant experience with speaking to any native speakers as the older students might already have some experience, for example from travelling or other social situations.

### **Instrumentality**

The section of instrumentality had two statements:

Statement 11: *It's useful to study English because I will use it in the future in my work or studies.*

Statement 12: *I can earn more money in the future if I speak English well.*

The overall tendency for both of the statements was positive – students seem to have a high level of instrumentality. Most of the students either strongly agreed or agreed with the statements. None of the students in either of the age groups disagreed or strongly disagreed with the statements and the answers were divided between the two positive scale numbers resulting in a high level of instrumentality, with the older students having a slightly higher level.

|                   | Statement 11 |           | Statement 12 |           |
|-------------------|--------------|-----------|--------------|-----------|
|                   | 6th grade    | 9th grade | 6th grade    | 9th grade |
| Strongly agree    | 5            | 7         | 4            | 4         |
| Agree             | 3            | 0         | 4            | 3         |
| Disagree          | 0            | 0         | 0            | 0         |
| Strongly disagree | 0            | 0         | 0            | 0         |

**Table 5. Summary of instrumentality of the two age groups based on the two statements (number of responses)**

Even though the students are young, they already understand the importance of learning English and associate it with success in the future. Older students seem to be more confident in their answers as they all strongly agree with the statement and this could be

influenced by their approaching graduation, which might make them more aware of the importance of their future choices. Students associate knowing languages with a possible opportunity to earn more money in the future. This could stem from the overall belief in the society that education (and knowing languages) supposedly grants success and wealth in the future.

### **Cultural interest**

The cultural interest section had five statements:

Statement 13: *I like movies that are in the English language.*

Statement 14: *I often watch movies that are in the English language.*

Statement 15: *I mostly listen to songs that are in English.*

Statement 16: *I play different games (video games, mobile games, computer games etc.) that are in English.*

Statement 17: *I read books in English.*

For the cultural interest section, most of the students either strongly agreed or agreed with all of the statements, except for Statement 17 about reading books in English, where the younger students mostly either disagreed or strongly disagreed and thus influencing the overall results towards the 9<sup>th</sup> grade students having more cultural interest.

|                   | Statement 13 |           | Statement 14 |           | Statement 15 |           | Statement 16 |           | Statement 17 |           |
|-------------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
|                   | 6th grade    | 9th grade | 6th grade    | 9th grade | 6th grade    | 9th grade | 6th grade    | 9th grade | 6th grade    | 9th grade |
| Strongly agree    | 4            | 6         | 3            | 5         | 4            | 7         | 7            | 4         | 0            | 5         |
| Agree             | 3            | 1         | 3            | 2         | 3            | 0         | 1            | 2         | 0            | 1         |
| Disagree          | 0            | 0         | 2            | 0         | 0            | 0         | 0            | 0         | 3            | 1         |
| Strongly disagree | 1            | 0         | 0            | 0         | 1            | 0         | 0            | 1         | 5            | 0         |

**Table 6. Summary of cultural interest of the two age groups based on the five statements (number of responses)**

The results of the first statement of the section show that most of the students like

movies that are in the English language and this is not surprising as the popularity of movies in the English language is quite common and not a lot of children's movies are made in Estonian, so most of the movies they watch are most likely in a different language and especially in English. Popular platforms such as Netflix, Disney+, YouTube are accessible to more and more people and support the consumption of this kind of media in the English language. With Statement 14, the results are expected for the 9<sup>th</sup> grade students, as they generally like and often watch movies in the English language. The difference between the results of the 6<sup>th</sup> grade students could stem from either personal preference where the student could find shorter videos or some other type of entertainment more appealing or there could be restrictions from their parents.

There was a significant difference in the results of Statement 14, as all the 9<sup>th</sup> grade students strongly agreed with the statement and therefore mostly listen to songs that are in English. This could be influenced again by the fact that younger students are not so proficient in English so it might be easier for them to listen to songs in Estonian or it could be a personal preference and habit. Older students are first of all more proficient in the language and they are in the middle of developing their identity and preferences, so listening to songs in English could be one way to do that.

Different games are very popular among people of all ages as a form of entertainment and the answers to the Statement 16 support that idea. With the younger students the results of most of them playing games in English are expected because of their young age and the fact that very few games are created in the Estonian language. The popularity of smart phones makes it possible for them to play games outside of their homes as well. The 9<sup>th</sup> grade students seem to also enjoy playing different games as only one of the students disagreed with the statement. The fact that they rather answered "agree" than "strongly agree" could be influenced by many factors such as time, interest, hobbies, etc.

The largest gap between the results was with Statement 17, where none of the 6<sup>th</sup> grade students in the survey read books in English and only one of the seven respondents from the 9<sup>th</sup> grade group did not. Although none of the younger students claimed to read in English, this does not necessarily mean they do not read books at all and could be influenced by their language level, which might be too low for longer texts.

### **Integrativeness**

The intergrativeness section in the questionnaire consisted of four statements:

Statement 18: *I think it is fun to listen to someone speaking English.*

Statement 19: *English sounds irritating.*

Statement 20: *It is fun to learn new words in English.*

Statement 21: *I like to say words in English aloud.*

The overall results show that students either agree or strongly agree with the positive statements and disagree or strongly disagree with the negative one, thus indicating genuine interest in learning the language to feel closer to the language community (Dörnyei 2009:22). The results show slightly higher intergrativeness for the older students.

|                   | Statement 18 |           | Statement 19 |           | Statement 20 |           | Statement 21 |           |
|-------------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
|                   | 6th grade    | 9th grade | 6th grade    | 9th grade | 6th grade    | 9th grade | 6th grade    | 9th grade |
| Strongly agree    | 2            | 4         | 0            | 0         | 1            | 0         | 0            | 0         |
| Agree             | 3            | 3         | 0            | 0         | 6            | 7         | 3            | 5         |
| Disagree          | 3            | 0         | 4            | 2         | 1            | 0         | 5            | 1         |
| Strongly disagree | 0            | 0         | 4            | 5         | 0            | 0         | 0            | 1         |

**Table 7. Summary of integrativeness of the two age groups based on the four statements (number of responses)**

The results of Statement 18 could result either from personal preference, their lack of meaningful encounters with someone speaking English or the nature of the statement itself, which might have been a bit confusing for them. None of the students from both age groups agreed with Statement 19, so while some of them might not think it's fun to listen to

someone speak English, they also don't think it sounds irritating.

The results show positive association with learning new words and the students even find it fun, which is even more positive as finding the motivation to learn new things can sometimes be a challenge to students. Most of the older students agreed with the Statement 21, while one disagreed and one strongly disagreed. This could be again connected to experience in speaking the language – older students might feel more comfortable and knowledgeable and therefore do not have any trouble saying words aloud while 6<sup>th</sup> grade students might feel discomfort.

### **Reliance on External authorities**

This statement measured aspects of external motivation and whether students feel they have to study English because someone is asking them to. There were two statements:

Statement 22: *I study English because my parents say I have to.*

Statement 23: *I study English because the teacher says I have to.*

|                   | Statement 22 |           | Statement 23 |           |
|-------------------|--------------|-----------|--------------|-----------|
|                   | 6th grade    | 9th grade | 6th grade    | 9th grade |
| Strongly agree    | 0            | 0         | 1            | 0         |
| Agree             | 1            | 0         | 2            | 0         |
| Disagree          | <b>4</b>     | 1         | <b>3</b>     | 3         |
| Strongly disagree | 3            | <b>6</b>  | 2            | <b>4</b>  |

**Table 8. Summary of reliance on External authorities of the two age groups based on the two statements (number of responses)**

The most common answer for the 9<sup>th</sup> grade students was “Strongly disagree” and “Disagree” for the 6<sup>th</sup> grade students meaning the perceived reliance on external authorities is greater with younger students. This result means younger students may feel that they study English because the teacher or parents say they must. The older the students, the less they feel influenced by external authorities.

### **Precursors to Ideal L2-self**

The precursor to Ideal L2-self is an L2-specific facet of one's “ideal self” and if the

ideal self is a proficient language speaker, the motivation of the student to reduce the difference between the self and the ideal self is that much higher (Dörnyei 2009:29). This section consisted of four statements:

Statement 24: *When I grow up, I will surely be good at speaking English.*

Statement 25: *I think I will be good at reading books in English when I grow up.*

Statement 26: *I would like to live in an English-speaking country.*

Statement 27: *I would like to have friends in English-speaking countries.*

The most common answer for the 6<sup>th</sup> grade group was “Agree”, while with the 9<sup>th</sup> grade students it was either “Strongly agree” or agree, indicating that the older students feel slightly more motivated to become their ideal L2 selves. All the students either agreed or strongly agreed with Statement 24, showing their outlook on the future is positive and they strongly believe to have a good level of English in the future.

|                   | Statement 24 |           | Statement 25 |           | Statement 26 |           | Statement 27 |           |
|-------------------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
|                   | 6th grade    | 9th grade | 6th grade    | 9th grade | 6th grade    | 9th grade | 6th grade    | 9th grade |
| Strongly agree    | 2            | 2         | 1            | 4         | 2            | 1         | 1            | 6         |
| Agree             | 6            | 5         | 7            | 3         | 1            | 4         | 3            | 1         |
| Disagree          | 0            | 0         | 0            | 0         | 3            | 2         | 3            | 0         |
| Strongly disagree | 0            | 0         | 0            | 0         | 2            | 0         | 1            | 0         |

**Table 9. Summary of Precursors to Ideal L2-self of the two age groups based on the four statements (number of responses)**

Even though Statement 17 showed that the 6<sup>th</sup> grade students do not read books in English, they agree that they will be good at reading them in the future. Older students also either agreed or strongly agreed with the statement and they feel they will be good at reading books in English in the future.

Older students seem to consider the possibility to live in an English-speaking country more than younger students, which could be because their graduation is approaching, and

they think about their future decisions more than younger students, as it might be too early for the latter. Almost all the older students strongly agree they would like to have friends in English-speaking countries, while only one of the younger students either agrees or strongly agrees with the statement. The concept of having friends abroad might not be comprehensible for younger students and this could have influenced the answers. Since a larger number of older students consider themselves living in another country, the idea of having foreign friends is not something new or strange to them.

### **Language apps**

The final two questions of the first questionnaire were about the students' preference in learning language through fun activities and their previous experience with using language learning apps. The results of the first statement, Statement 28: *I like learning English*

*through fun activities such as games, watching videos or movies* are presented in Table 10.

|                   | <b>Statement 28</b> |                  |
|-------------------|---------------------|------------------|
|                   | <b>6th grade</b>    | <b>9th grade</b> |
| Strongly agree    | <b>5</b>            | <b>5</b>         |
| Agree             | 3                   | 2                |
| Disagree          | 0                   | 0                |
| Strongly disagree | 0                   | 0                |

**Table 10. Summary of preference to learn English through fun activities of the two age groups based on the two statements (number of responses)**

Quite naturally, the results showed that with both age groups, “Strongly agree” was the answer of most of the students and no student disagreed with the statement. There was not a significant difference between the average points of the age groups meaning both groups enjoy learning English through fun activities.

Statement 29: *I have used language learning apps before*, showed there were more older students who had used language learning apps previously – four students from the 9<sup>th</sup> grade and three from the 6<sup>th</sup> grade. Among the younger students who had used language

learning apps before, all the three mentioned Duolingo. Of the four students from the older grade, three mentioned using Duolingo and one both Duolingo and Lingvist.

The next section will analyse the results based on two groups: Group 1 composed of the students who proceeded to download and use the application and Group 2 composed of the students who did not. The results of the first questionnaire will be compared to determine if there are any significant differences between some of the motivation aspects between the students of the two groups and if there are any similarities between the students who did use the app and those who did not.

#### **2.4.2. Results from the first questionnaire based on the participants' interest to use the app**

Since there were 15 students who answered the first questionnaire and only seven who continued to download and use the application, a second analysis was done to determine if the two groups had any significant differences between any aspects of their language learning motivation and if this could have been the reason why they chose not to proceed with participating in the study. The data is shown for two groups – Group 1 consisted of seven students who proceeded to download and use the application, six students from the 9<sup>th</sup> grade and one from 6<sup>th</sup> grade. Group 2 consisted of eight students who did not proceed with the study – one student from the 9<sup>th</sup> grade and seven from the 6<sup>th</sup> grade.

#### **Linguistic self-confidence**

The results of the first section are presented in Table 11 below.

|                   | Statement 1 |          | Statement 2 |          | Statement 3 |          |
|-------------------|-------------|----------|-------------|----------|-------------|----------|
|                   | Group 1     | Group 2  | Group 1     | Group 2  | Group 1     | Group 2  |
| Strongly agree    | 1           | 0        | 0           | 1        | 0           | 0        |
| Agree             | <b>5</b>    | <b>7</b> | <b>6</b>    | <b>6</b> | 1           | 2        |
| Disagree          | 1           | 1        | 1           | 1        | <b>6</b>    | <b>5</b> |
| Strongly disagree | 0           | 0        | 0           | 0        | 0           | 1        |

**Table 11. Summary of linguistic self-confidence of the two groups based on the three statements (number of responses)**



For the first statements, the most popular answers were “Agree” for both groups and “Disagree” for Statement 3 also for both groups. Although there are some small differences in the rest of the answers, they are relatively similar to one another, so it can be concluded, that there is either none or a very small difference between the linguistic self-confidence level of both the group who proceeded to use the application and to the one which did not.

### **Classroom anxiety**

The results of the classroom anxiety section are presented in Table 12 below.

For the classroom anxiety category, the most popular answer for four of the five statements was “Agree”, the only significant difference was with Statement 6: *I'm afraid of making a mistake when I speak English in the lessons*, where the answers for the first group were varied – one student strongly agreed, two agreed, two disagreed and two strongly disagreed. Although the most frequent answer for Group 2 was “Disagree”, this statement received also varied answers for Statement 6 – two students strongly agreed, two agreed and none strongly disagreed.

|                   | Statement 4 |         | Statement 5 |         | Statement 6 |         | Statement 7 |         | Statement 8 |         |
|-------------------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|
|                   | Group 1     | Group 2 | Group 1     | Group 2 | Group 1     | Group 2 | Group 1     | Group 2 | Group 1     | Group 2 |
| Strongly agree    | 1           | 1       | 1           | 3       | 1           | 2       | 1           | 1       | 1           | 0       |
| Agree             | 4           | 5       | 5           | 5       | 2           | 2       | 4           | 6       | 2           | 3       |
| Disagree          | 2           | 2       | 1           | 0       | 2           | 4       | 2           | 1       | 3           | 4       |
| Strongly disagree | 0           | 0       | 0           | 0       | 2           | 0       | 0           | 0       | 1           | 1       |

**Table 12. Summary of classroom anxiety of the two groups based on the five statements (number of responses)**

So, while the results were once again similar, it could be concluded that Group 1 had slightly lower classroom anxiety than Group 2.

### **Language use anxiety**

The results of the language use anxiety section are presented in Table 13 below.

The most frequent answer chosen for both groups was “Disagree”, but there are slight differences in the results. With Group 1, who chose to use the app, it seems they mostly chose either “Disagree” or “Strongly disagree” as the answers to both of the statements while only two of the group chose “Agree” for the answers. With Group 2, the most popular choice was “Disagree” but none of the students strongly disagreed, two agreed and one strongly agreed with both of the statements.

|                   | Statement 9 |          | Statement 10 |          |
|-------------------|-------------|----------|--------------|----------|
|                   | Group 1     | Group 2  | Group 1      | Group 2  |
| Strongly agree    | 0           | 1        | 0            | 1        |
| Agree             | 2           | 2        | 2            | 2        |
| Disagree          | <b>3</b>    | <b>5</b> | <b>3</b>     | <b>5</b> |
| Strongly disagree | 2           | 0        | 2            | 0        |

**Table 13. Summary of language use anxiety of the two groups based on the two statements (number of responses)**

From these results it can be concluded that Group 1 is slightly less anxious about their language use ability than Group 2.

### **Instrumentality**

The results of the instrumentality section are presented in Table 14 below.

For this section, none of the students disagreed or strongly disagreed with either of the statements. With Statement 11, answers from Group 1 were the same, all the students strongly agreed while Group 2, five students strongly agreed and three agreed.

|                   | Statement 11 |          | Statement 12 |         |
|-------------------|--------------|----------|--------------|---------|
|                   | Group 1      | Group 2  | Group 1      | Group 2 |
| Strongly agree    | <b>7</b>     | <b>5</b> | <b>4</b>     | 4       |
| Agree             | 0            | 3        | 3            | 4       |
| Disagree          | 0            | 0        | 0            | 0       |
| Strongly disagree | 0            | 0        | 0            | 0       |

**Table 14. Summary of instrumentality of the two groups based on the two statements (number of responses)**

With the second statement, the answers were more varied, but also more equal, as a similar number of students chose “Strongly agree” or “Agree” as their answers. Based on the answers from the first statement, it can be said that Group 1 has slightly higher instrumentality, but not significantly.

### **Cultural interest**

The results of the cultural interest section are presented in Table 15 below.

The answers for Group 1 are quite similar throughout the section, the students in that group either strongly agree or agree and the only variety in answers is with Statement 17, where one student disagrees, and one strongly disagrees. Group 2 has different answers regarding the cultural interest section, even though “Strongly agree” is the most popular answer throughout, each statement has answers from almost all the different options. The most drastic difference is with Statement 17 about reading books in English.

|                   | Statement 13 |         | Statement 14 |         | Statement 15 |         | Statement 16 |         | Statement 17 |         |
|-------------------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|
|                   | Group 1      | Group 2 | Group 1      | Group 2 | Group 1      | Group 2 | Group 1      | Group 2 | Group 1      | Group 2 |
| Strongly agree    | 6            | 4       | 5            | 3       | 6            | 5       | 5            | 6       | 5            | 0       |
| Agree             | 1            | 3       | 2            | 3       | 1            | 2       | 2            | 1       | 0            | 1       |
| Disagree          | 0            | 0       | 0            | 2       | 0            | 0       | 0            | 0       | 1            | 3       |
| Strongly disagree | 0            | 1       | 0            | 0       | 0            | 1       | 0            | 1       | 1            | 4       |

**Table 15. Summary of cultural interest of the two groups based on the five statements (number of responses)**

Almost all of the students from the Group 1 strongly agree with the statements, indicating most of them read books in English and the opposite answers are given by students from Group 2 – four students strongly disagree and three disagree and only one student reads books in English.

The responses to these statements show that Group 1 has a moderately higher cultural interest compared to Group 2. It could also signal, that students from Group 1 are

more willing to dedicate their spare time to learning English and developing their language skills, they have more spare time or deliberately manage their time in a way to prioritise activities that support English language learning.

### **Integrativeness**

The results of the integrativeness section are presented in Table 16 below.

With Statement 19, the most frequent answer was “strongly disagree” followed by “agree” and none of the students agreed or strongly agreed with the statement. Statement 20 had also similarities between the two groups – both of them had “agree” as the most frequent answer.

The answers to Statement 18 showed slight difference – the most frequent answer for Group 1 was “Strongly agree” followed by “Agree” for two students and one student who disagreed. With Group 2, the most frequent answer was “Agree”, two students strongly agreed and two disagreed.

|                   | Statement 18 |         | Statement 19 |         | Statement 20 |         | Statement 21 |         |
|-------------------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|
|                   | Group 1      | Group 2 | Group 1      | Group 2 | Group 1      | Group 2 | Group 1      | Group 2 |
| Strongly agree    | 4            | 2       | 0            | 0       | 0            | 1       | 0            | 0       |
| Agree             | 2            | 4       | 0            | 0       | 6            | 7       | 5            | 3       |
| Disagree          | 1            | 2       | 3            | 3       | 1            | 0       | 1            | 5       |
| Strongly disagree | 0            | 0       | 4            | 5       | 0            | 0       | 1            | 0       |

**Table 16. Summary of integrativeness of the two groups based on the four statements (number of responses)**

When comparing the answers of the two groups and especially statements 18 and 21, it can be suggested that Group 1 has a slightly higher level of integrativeness compared to Group 2, meaning they have a genuine interest in learning the language to feel closer to the language community (Dörnyei 2009:22).

### Reliance on External authorities

The results of the reliance on External authorities section are presented in Table 16 below. Since both of these statements were reversed, the answers leaning towards disagreement show less reliance on external authorities. While none of the Group 1 students agreed or strongly agreed with either of the statements, there were some who did from Group 2, especially with Statement 23. This indicates stronger reliance on external authorities for Group 2 compared to Group 1.

|                   | Statement 22 |         | Statement 23 |         |
|-------------------|--------------|---------|--------------|---------|
|                   | Group 1      | Group 2 | Group 1      | Group 2 |
| Strongly agree    | 0            | 0       | 0            | 1       |
| Agree             | 0            | 1       | 0            | 2       |
| Disagree          | 2            | 3       | 4            | 2       |
| Strongly disagree | 5            | 4       | 3            | 3       |

**Table 17. Summary of reliance on External authorities of the two groups based on the two statements (number of responses)**

Students from Group 1 are therefore not as motivated by the influence of their parents or teacher than Group 2.

### Precursors to Ideal L2-self

The results of the precursors to Ideal L2-self section are presented in Table 17 below. The results show slight difference in the answers for all the statements except Statement 24.

|                   | Statement 24 |         | Statement 25 |         | Statement 26 |         | Statement 27 |         |
|-------------------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|
|                   | Group 1      | Group 2 | Group 1      | Group 2 | Group 1      | Group 2 | Group 1      | Group 2 |
| Strongly agree    | 3            | 1       | 4            | 1       | 1            | 2       | 5            | 2       |
| Agree             | 4            | 7       | 3            | 7       | 3            | 2       | 1            | 3       |
| Disagree          | 0            | 0       | 0            | 0       | 3            | 2       | 1            | 2       |
| Strongly disagree | 0            | 0       | 0            | 0       | 0            | 2       | 0            | 1       |

**Table 18. Summary of Precursors to Ideal L2-self of the two groups based on the four statements (number of responses)**

The answers to Statement 26 are varied, for Group 1 the most frequent answers are “Agree” and “Disagree” and only one student leaning to “Strongly agree”. For Group 2, the answers

for the same statement are divided equally between all the eight respondents not showing any extreme values. While there is difference in answers, Group 1 is more heavily leaning towards the “Strongly agree” on most of the statements, indicating they have slightly more motivation to become their ideal L2 selves.

### **Interest to learn English through fun activities**

Both groups showed high levels of interest to learn English through fun activities, the results are shown on Table 19.

|                   | Statement 28 |         |
|-------------------|--------------|---------|
|                   | Group 1      | Group 2 |
| Strongly agree    | 5            | 5       |
| Agree             | 2            | 3       |
| Disagree          | 0            | 0       |
| Strongly disagree | 0            | 0       |

**Table 19. Summary of preference to learn English through fun activities of the two groups based on the two statements (number of responses)**

The most frequent answer for both groups was “Strongly agree” and the second most frequent answer “Agree”. Since the results were divided very equally, it can be said that there is no difference between interest to learn English through fun activities, it is equally high for both groups.

### **Language learning apps**

Four of the students from the first group had used language learning apps previously and three had not. With Group 2, five students had not used language learning applications and three had. Based on these results, it can be assumed, that those students who already had previous experience with language learning apps, were more likely to proceed to use them for the present study. It might also be possible, that the students who had previously used language learning apps, did not have a positive experience with them and that might have influenced their participation.

To conclude, it can be said that some of the factors of language learning motivation might have influenced the students' decision to participate in the study. Group 1 has, according to the results, slightly lower classroom and language use anxiety, slightly higher level of instrumentality, integrativeness and slightly more motivation of becoming their ideal L2 selves than Group 2. The results indicate moderately higher cultural interest and their reliance on external authorities as lower than for Group 2. Finally, the results show that those students who already had previous experience with language learning apps, were more likely to proceed in the study.

Overall, the results of the first questionnaire showed slightly higher motivation for older students and while the motivation level was leaning towards higher for 6<sup>th</sup> grade students as well, only three of the eight respondents of the questionnaire proceeded to download the app and from these three, only one finished the course. This information provides an answer to the first research question posed – younger students are not more eager and motivated to use the application, at least without supervision.

The reasons behind the lack of motivation to use the app can be different. The information was given to students from both age groups at the same time and the interaction was mainly done through video calls or e-mails. Due to the Covid-19 pandemic, the students had distance learning throughout the testing period of the application. While the older students managed to create an account and start using the application independently, only one of the students from the younger group did so. This could be related to distance learning – when schools are closed, students use computers, phones, and other devices more than usual to study and interact with their friends and they might be overwhelmed or tired and might not be motivated to use an additional application daily.

As was evident from a brief conversation with the students, most of them claimed they did not have time to even download the app because they were busy with schoolwork

or were too tired after school. Distance learning and the increased amount of independent schoolwork for the students could affect their motivation. The motivation to not use the app could also be related to the age of the students. Although they enjoy learning English through fun activities, they might need better guidance, preferably one-to-one and not through digital channels, to help them set up the application and guide them through the basics of how the application works. One of the students who has trouble with learning English, received guidance through a video call on how to set up the application and the account, but did not continue to use the app. This could be either influenced by the lack of motivation or the fact that the application itself is in English and even though the user interface is quite easy to navigate, even the instructions of the app could be too difficult to understand for some of the students with lower language proficiency.

### **2.4.3. Data from the Memrise application**

Not all the 15 students who answered the first questionnaire started to use the application – most of the 6<sup>th</sup> grade students did not. Three from eight 6<sup>th</sup> grade students installed the application and only one of them started to use it so data from the younger age group is limited to one student (see Table 20) and moving forward, most of the results from the data analysis will be focusing on the 9<sup>th</sup> grade students.

Six students from seven of the 9<sup>th</sup> grade age group installed the app and started to use it, some of them were more consistent than others, but most of them used the application for the whole duration of the study of one month. The results of the students can be seen on Table 20. Course progress shows the percentage of progress that the students had, 100% of progress meaning they learned all the 100 words in the course. Points are given in the application for every correct answer, 0 points will be given for a wrong answer and the number of points also depends on the speed of answering.



|                  | Course progress | Points (all time total for the course) | Rank among age group | Study time (In the last 30 days) | Words learned | Words healthy in long term memory | Difficult words |
|------------------|-----------------|--|----------------------|----------------------------------|---------------|-----------------------------------|-----------------|
| <b>9th grade</b> |                 |  |                      |                                  |               |                                   |                 |
| Student 1        | 100%            | 135,566                                | 1                    | 1h 37m                           | 100           | 85                                | 3               |
| Student 2        | 100%            | 96,647                                 | 2                    | 57m                              | 100           | 32                                | 2               |
| Student 3        | 82%             | 85,346                                 | 3                    | 5h 23m                           | 82            | 73                                | 11              |
| Student 4        | 20%             | 16,460                                 | 4                    | 13m                              | 20            | 0                                 | 5               |
| Student 5        | 10%             | 3,921                                  | 5                    | 0m                               | 10            | 0                                 | 6               |
| Student 6        | 0%              | 831                                    | 6                    | 0m                               | 0             | 0                                 | 1               |
| <b>6th grade</b> |                 |  |                      |                                  |               |                                   |                 |
| Student 7        | 100%            | 94,539                                 | 1                    | 1h 30m                           | 100           | 0                                 | 0               |

**Table 20. Data from the Memrise application**

“Rank among the age group” is based on the number of points at a certain time. The week, month, or all-time ranking could be seen in the application, the ranking in Table 20 is based on the all-time number of points of the whole duration of the course. “Study time” is based on the information received on the last 30 days, if the student, for example, installed the application and used it only on the first day, the points earned will be shown on the leader board but not the study time. “Words learned” shows the number of words from 100 that the student has learned. “Words healthy in long term memory” is based on the information and algorithm of the application, which assumes the words that the student should have in their long-term memory based on repetition and mistakes made while learning certain words. “Difficult words” show the number of words that the student has made the most mistakes with while learning, a word is usually assessed as difficult after the student has made two or more mistakes in learning the word.

From the seven students using the application, three completed the course fully, one completed 82% of the course, one 20%, one 10% and one did not manage to go further from 0%. The highest number of points was 135 566 and the lowest 831. The longest time spent

using the application was 5 hours and 23 minutes, but this did not necessarily mean the highest number of points or more progress in the course, in fact the student with the highest number of points and most words in long-term memory (according to the application) spent only one hour and 37 minutes in total using the application.

As mentioned before, only one 6<sup>th</sup> grade student actively used the application and managed to finish the whole course in 1 hour and 30 minutes. The information from the app shows that the student had 0 difficult words while learning the words but there are also 0 words in the student's long-term memory according to the app, which might not be entirely true. The fact that the student finished the course in less than two hours and that there were words from units that the student had already learned beforehand, might indicate that the words were already familiar to the student and they are already in the long-term memory even though the application does not confirm this.

The pattern is the same for the 9<sup>th</sup> grade students, the students who consistently used the application (Student 1, 2, 5) supposedly have more words in their long-term memory as opposed to those who did not use the application or did not do it consistently. The application measures the progress of the students based on consistency and errors made but does not consider that some of the words might already be familiar to the students and makes the assumption that the more they use the application and learn new words without making errors, the more words they have in their long-term memory, which could be entirely false.

The results of the second questionnaire will be presented in the next section where the students who used the application for the duration of the study gave their feedback and insights about their user experience.

#### **2.4.4. Results from the second questionnaire**

After using the application for one month, the second questionnaire (see Appendix 2) was sent to the students. Six of the seven users of the application responded to the

questionnaire, one from the 6<sup>th</sup> grade and five from the 9<sup>th</sup> grade, and gave their feedback, which will be analysed in the following section. The questionnaire consisted of four questions about the use of the application, which were followed by eight statements about the motivation to use the application and student's own assessment of the benefit of the application based on a 4-point Likert scale where: 1 - strongly disagree; 2 – disagree; 3 – agree ; 4 – strongly agree. The results can be seen in Table 21 below.

From the six students in the 9<sup>th</sup> grade age group, three managed to use the application regularly for the whole duration of the experiment and this can be confirmed by the course progress in the statistics of the course in Memrise, two students completed 100% of the course and one completed 82% of the course while one of them completed 20% and one 10% of the course. The only 6<sup>th</sup> grade student who used the application, completed 100% of the course in one day.

From the students who completed or almost completed the course, one used the app every day and the other two 5-6 times a week. The students who did not use the app regularly, used it either twice a week or less than once a week, indicating they might have downloaded the app, used it briefly and then never used it after that. The 6<sup>th</sup> grade student completed the course in one day and did not proceed to use the application after that, not even for revising the words.

Most of the students agreed with the statement that they liked that the app sent them daily notifications to study. Only two of the students did not, but this did not seem to affect the consistent use of the app and the student still managed to finish the entire course. On the other hand, the students who did not finish the course, claimed they liked receiving them, but this did not show in the results of their app use and therefore was not effective in motivating them.

|  | <b>Strongly disagree</b> | <b>Disagree</b> | <b>Agree</b> | <b>Strongly agree</b> |
|--|--------------------------|-----------------|--------------|-----------------------|
| Using the application was fun and engaging and I felt like I wanted to use it.             | 0                        | 0               | 3            | 3                     |
| Learning vocabulary through this application was useful to me.                             | 0                        | 0               | 2            | <b>4</b>              |
| With the app, it was easier to learn words and phrases than before.                        | 0                        | 0               | 1            | <b>5</b>              |
| I would like to use this or another language learning app in the future.                   | 0                        | 0               | 1            | <b>5</b>              |
| My knowledge of English vocabulary has increased.  | 0                        | 1               | <b>4</b>     | 1                     |
| I feel more comfortable using English in class after using the application.                | 0                        | 3               | 3            | 0                     |
| I feel more comfortable speaking in English after using the application.                   | 0                        | <b>4</b>        | 2            | 0                     |
| The Leaderboard in the application made me want to study harder to achieve better results. | 1                        | 0               | <b>3</b>     | 2                     |

**Table 21. Answers to the statement about use of the application (number of responses)**

“Mems” are a feature in the Memrise application where the learner can add words, sentences or pictures to individual words or phrases they learn to help them memorise them better. They could either add a word/words in their native language they associate with the word they want to memorise, or any other symbol or string of words that they find is useful in the study process. Even though the instructions on how to create “mems” was sent out by the author to the participants of the study, none of them created any on their own. This could either indicate that the words were not so difficult to memorise, or they did not find it useful or important.

The next two questions provide an answer to the second research question of this thesis - what are the main issues and benefits of using this type of application in the opinion of the students using it?

There were various positive comments about the use of the application and the most popular feature that the students liked was the versatility of the assignments/exercises. Three

students noted that they liked how there were different ways one word or phrase was presented, they could either write the word or choose the correct translation of the word and the different assignments were alternating so it did not get repetitive or boring for the learner. One student mentioned that the repetition of words from previous lessons helped memorise the words better, one said it was comfortable to learn new words/phrases and one mentioned that they liked to learn the correct spelling of the words through the application. The student from the younger age group said the app was user-friendly and easy to understand.

There were some negative aspects the students presented and made some suggestions. An aspect a student brought out was that in the writing exercises, the words with the incorrect preposition were not counted and no points were given for them. This could discourage the student who knows the word but does not remember the correct preposition, but on the other hand, insures that the student learns the phrase along with the correct preposition from the start. This might be disappointing to the learner at first but can have long-term benefits. The younger student, who finished the whole course in one day, said the words were already known to them, even if the words were from units that they had not studied yet. One student mentioned they did not like the repetition of the words that they had already learned. One student would have liked if the words had pronunciations as well for better memorisation.

One student commented that the app should remind the user more about reviewing the words they got wrong. One student added that some words only had one translation of the word even though the word had more meanings than one. This could be easily changed as well in the application where it is possible to add multiple meanings to the words, but this might end up confusing for the user.

With statement 30: *Using the application was fun and engaging and I felt like I*

wanted to use it, all the students either agreed or strongly agreed with it, wanted to use it and thought it was fun and engaging. Similar answers were given to statement 31: *Learning vocabulary through this application was useful to me*, four students strongly agreed with this statement and two agreed and found the application useful to them. Only positive answers were also given by students for statement 32: *With the app, it was easier to learn words and phrases than before*, five of the six students strongly agreed with the statement and one agreed so it can be assumed that it was easier to learn words and phrases for them than before. Statement 33 was: *I would like to use this or another language learning app in the future*. With this statement as well, five of the six students strongly agreed with the statement and one agreed. They feel positive about possibly using this or another language learning app in the future.

With the 9<sup>th</sup> grade age group, statement 34: *My knowledge of English vocabulary has increased*, received mostly positive answers. Four students agreed and one strongly agreed with the statement and the students rather feel their knowledge of English vocabulary has increased after using the application. The student from 6<sup>th</sup> grade answered “Disagree” to this statement, supporting the previous comment made, that the knowledge level did not really change, since the words were already familiar to the student.

With statement 35: *I feel more comfortable using English in class after using the application* and statement 36: *I feel more comfortable speaking in English after using the application*, there were some students who disagreed. Three students did not feel more comfortable using English in class after using the application and four students did not feel more comfortable speaking in English after using the app. The rest of the students agreed it had a positive impact on their abilities. Interestingly, only one student who finished the course claimed to feel more comfortable using English in class after using the application and the two students who did not finish the course, claimed the same.

Since it is rather difficult to draw any certain conclusions from this, as using the app for such a short period of time might not have any real effect on the student's language use anxiety and they might have already felt comfortable using English in class beforehand, the results of individual students will be analysed below. Individual answers of the second questionnaire will be compared to the results of the use of the app and the answers of the first questionnaire. The order of the students analysed is based on their results and their ranking based on their points in the app.

Student 1, who completed 100% of the course, showed a rather low linguistic self-confidence level, rather low classroom anxiety level and moderate level of language use anxiety based on the first questionnaire. This student chose "Disagree" as the answer of both statements, indicating that the use of the application possibly did not raise the student's linguistic self-confidence level or lower classroom or language use anxiety level. The student gave positive answers to the rest of the statements indicating that it was still fun and useful but did not significantly affect the confidence level of the student in a positive way.

Student 3, who completed 82% of the course, showed similar results. The student had a rather low linguistic self-confidence level, rather low classroom anxiety level and rather low language use anxiety level based on the first questionnaire. The student disagreed with the two statements, showing that the use of the application possibly did not have any effect on the linguistic self-confidence level of the student. Similarly to Student 1, the results of the other statements were positive as well. Student 3 did enjoy using the application, did so consistently but it rather had no significant effect on the linguistic self-confidence level of the student.

Student 2, who completed 100% of the course as well, showed rather high linguistic self-confidence level and rather low anxiety level in both classroom and language use based on questionnaire 1. The student felt the use of the application influenced their language use

ability in a positive way and agreed with both statements. So, it can be assumed, that the student with an already high linguistic self-confidence level might feel the use of the application either benefitted them or the confidence and anxiety level stayed the same.

Student 7, the only student from the 6<sup>th</sup> grade level who finished the course, had rather low linguistic self-confidence level, low language and classroom anxiety level based on the results of the first questionnaire. The younger student claimed to not feel more comfortable in class after using the app, this might have been due to the student already being comfortable or the app directly not having any impact to the level of comfort as the student claimed to already be familiar with the words and phrases taught.

To provide an answer to the final research question - could a student with high classroom and language use anxiety benefit from using the application and raise their linguistic self-confidence level, the results of Students 1, 2 and 3 and 7 will be analysed. Students 5 and 6 did not use the app consistently throughout the study and their answers might not be valid enough. Three of the four consistent users of the app who also had lower levels of linguistic self-confidence and rather higher levels of anxiety, did not find that the app had any benefits to their linguistic self-confidence or language use and classroom anxiety. Student 2 already had quite a high level of linguistic self-confidence and low anxiety levels and claimed the use of the application had benefits to their confidence level. However, since the overall number of participants who finished the course was so small, it can be said that the results are inconclusive and do not provide enough information to accurately answer the third research question.

With the final statement, number 37: *The Leader board in the application made me want to study harder to achieve better results*, two of the six participants of the study strongly agreed and three agreed that they felt the competition element of the application motivated them to try harder. The student from the 6<sup>th</sup> grade strongly disagreed with the



statement, which was understandable since this student was the only one participating in their age group and the leader board function did not have any real influence to the performance of the student.

## **2.5. Discussion**

The aim of the study was to test the use of the language learning application Memrise on 6<sup>th</sup> and 9<sup>th</sup> grade students and answer the following research questions:

1. Are younger students more eager and motivated to use the application and what could be the reasons behind it?
2. What are the main issues and benefits of using this type of application in the opinion of the students using it?
3. Could a student with high classroom and language use anxiety benefit from using the application and raise their linguistic self-confidence level?

The first questionnaire was conducted before the use of the application and 15 students from both age groups answered. The results of the first questionnaire showed slightly higher motivation for older students. Higher motivation level correlated with interest in using language learning applications as well, as most of the students who continued to participate in the testing of the app were from the 9<sup>th</sup> grade. A second analysis was conducted to compare the results of the group of students who proceeded to use the application and those who did not, which gave similar results – those who proceeded to use the app showed slightly higher language learning motivation level. All of this information offered an answer to the first research question – younger students are not more eager and motivated to use the app. The reasons behind that could be that they need more guidance and supervision when installing and using the application, distance learning might influence their overall motivation to study, they might be overwhelmed due to increased screen-time and online classes and some of the students with lesser language abilities might not

understand the user interface in the app as it is not in Estonian.

Based on the study conducted, the author would recommend to either use the application with older students (9<sup>th</sup> grade and up) or offer thorough guidance and support for the younger students throughout the use of the application, making sure all the students understand the user interface of the application enough for it to benefit their language learning.

The second research question - what are the main issues and benefits of using this type of application in the opinion of the students using it, was answered using the feedback from the second questionnaire. Most of the benefits, as brought out by the 9<sup>th</sup> grade students and one 6<sup>th</sup> grade student who used the application, were related to the versatility of the assignments in the application. This was mentioned by three users who liked that the words and phrases were presented differently, either by writing exercises or choosing the correct option. This offered alternation and made the studying process more interesting. The students also like the repetition of words from previous lessons, the comfortability and user-friendliness of the app and the fact that they could learn spelling in the app as well. Most of the students found it benefitted their knowledge of the language, it was fun to use, and they would use a similar application in the future.

From the negative aspects, the students did not like that writing words with incorrect prepositions did not grant them any points even when they knew the rest of the phrase correctly. Students also pointed out that they did not like that the words they had already learned were being repeated, that it was not possible to hear the pronunciations of the words, that the app did not remind the users enough about the words they got wrong and that only one meaning for a certain word or phrase was presented and not the other versions.

When using the application in a classroom setting, it would be useful to notify the students beforehand about the negative aspects, such as phrases need to be with the correct

prepositions for them to get points and they should pay attention to the meanings of the words presented in the courses. It would also be possible to add pronunciations to either all the words or phrases or some of them, as this feature is available in the app.

The final research question was if a student with high classroom and language use anxiety could benefit from using the application and raise their linguistic self-confidence level. When comparing the results of the students who completed the test period of the application, three of the four consistent users of the app who also had lower levels of linguistic self-confidence and rather higher levels of anxiety, did not find that the app had any benefits to their linguistic self-confidence or language use and classroom anxiety. However, since the number of students participating in the study was so small, the results are inconclusive, and no real conclusions can be made based on the information collected.

Although some of the results of the study were inconclusive, the general perception of the students using the app was rather positive. They liked the versatility of the app and that it gave them a chance to learn words in a more fun way that was different from what they were used to in a classroom setting. Mobile-assisted language learning is still a relatively new research topic, there are many aspects that could be researched further. Since this study was done in a unique learning situation, where it was not possible to directly interact with students, it would be interesting to see what results could come from a similar study if there were more participants, especially at the 6<sup>th</sup> grade level and if they were given more directions and assistance to guide them through the process. It would also be interesting to see if the classroom anxiety or language use anxiety of the students would change after using the application parallel to regular English classes and the app would be used as a supporting tool for vocabulary learning.

## CONCLUSION

Language learning applications are gaining more popularity and there are various apps available with different features, courses, and languages. It is possible to learn a new language using an app, but it can also be used to support the learning process of a language already familiar to the student. Studies have shown that students are motivated to use different apps for learning vocabulary and the present thesis studied that aspect as well, focusing on students from the 6<sup>th</sup> and 9<sup>th</sup> grade. Three research questions were formed for the purpose of this thesis:

1. Are younger students more eager and motivated to use the application and what could be the reasons behind it?
2. What are the main issues and benefits of using this type of application in the opinion of the students using it?
3. Could a student with high classroom and language use anxiety benefit from using the application and raise their linguistic self-confidence level?

The language learning app Memrise was used to study two groups of students and to find answers to the research questions.

The literature review of the thesis focused on three aspects: learning and teaching vocabulary, language learning motivation and language learning apps. As it has been pointed out by Lindstromberg and Boers (2008: 7-16), it is useful for a student to acquire vocabulary in “chunks”, which was the basis of creating the courses in Memrise language learning app. Repetition and meaningful encounters of the words are important as well (Nation 2013: 103-108) and so are different vocabulary learning strategies, such as the

keyword technique, which is a way to give a connection to either a word, part of a word or a picture to the word that needs to be learned, usually in L1 (Nation and Webb 2017: 115-116).

Motivation in language learning is a difficult subject and there are certain aspects of it that still need researching. There are theories developed by many authors such as Gardner (2003), Williams and Burden (1997) and Dörnyei (2009: 9-39) to assess the motivation of students. The questionnaire assessing the language learning motivation of the students for the present this, is based mostly on Dörnyei's L2 Motivation Self System model (2009: 9-39) and research done by Kormos and Csizér (2008) and Fenyvesi et al. (2020).

There were 15 participants in the study, eight from the 6<sup>th</sup> grade and seven from the 9<sup>th</sup> grade, who were initially interested in participating in the study. After sending out the first questionnaire and receiving answers of the 15 participants, only seven of them continued to use the application for the whole duration of the study, therefore the results of the first questionnaire were analysed in two parts. Firstly, comparing the results of the two age groups and secondly the group who proceeded to use the application and the group who did not.

The results of the first questionnaire showed a slightly higher level of motivation for the older students and while the motivation level was not low for the younger students, most of them did not continue to use the application, therefore providing an answer for the first research question - younger students are not more eager and motivated to use the application, at least without supervision. This was also supported by the second analysis of the first questionnaire where two groups of students were compared – Group 1, who continued to use the app and Group 2, who did not. The results showed Group 1 has, according to the results, slightly lower classroom and language use anxiety, slightly higher level of instrumentality, integrativeness and slightly more motivation of becoming their

ideal L2 selves than Group 2.

The reasons behind the lack of motivation to use the app can be different. Due to the Covid-19 pandemic, the students had distance learning throughout the testing period of the application, so they received minimal guidance on how to set up the application and how to use it, all the information was sent to them via e-mail. Younger students might need more guidance when using this kind of application and some of the students with lesser abilities, might not understand the user interface of the app since it is in English.

The second research question - what are the main issues and benefits of using this type of application in the opinion of the students using it, was answered using the feedback from the second questionnaire. Most of the benefits, as brought out by the 9<sup>th</sup> grade students and one 6<sup>th</sup> grade student who used the application, were related the versatility of the assignments in the application. The students also like the repetition of words from previous lessons, the convenience and user-friendliness of the app and the fact that they could learn spelling in the app as well. Most of the students found it benefitted their knowledge of the language, it was fun to use, and they would use a similar application in the future. From the negative aspects, the students did not like that writing words with incorrect prepositions did not grant them any points even when they knew the rest of the phrase correctly. Students also pointed out that they did not like that the words they had already learned were being repeated, that it was not possible to hear the pronunciation of the words, that the app did not remind the users enough about the words they got wrong and that only one meaning for a certain word or phrase was presented and not the other versions.

The final research question was if a student with high classroom and language use anxiety could benefit from using the application and raise their linguistic self-confidence level. When comparing the results of the students who completed the test period of the application, the results were inconclusive, there were not enough participants in the study

to draw any certain conclusions about the aspects of the app benefitting the linguistic self-confidence of the students.

Although it was difficult for younger students to continue to use the application, the students who did use it, generally had a positive experience, they liked that the app was different from how they usually learn vocabulary and the gamification aspect made learning fun for them. For educators who would like to use this application with their students, it would be preferred if either older students (9<sup>th</sup> grade and up) would use the app or younger students, who have received enough guidance on how to use the app.

## REFERENCES

### Primary sources:

Memrise mobile application. Available at: <https://www.memrise.com/about>, accessed March 1, 2021.

### Secondary sources:

Barcroft, Joe. 2016. *Vocabulary in Language Teaching*. New York: Routledge.

Boers, Frank. 2021. *Evaluating Second Language Vocabulary and Grammar Instruction*. Canada: Routledge.

Burston, Jack. 2015. Twenty years of MALL project implementation: A meta-analysis of learning outcomes. *ReCALL*, 27(01), p 4-20.

Chen, Chih-Ming. 2019. An English vocabulary learning app with self-regulated learning mechanism to improve learning performance and motivation. *Computer Assisted Language Learning*. Vol. 32 Issue 3, p 237-260.

Deci, Edward L. 1975. *Intrinsic motivation*. New York and London: Plenum Press.

Dörnyei, Zoltán. 2001. *Motivational Strategies in the Language Classroom*. Cambridge: Cambridge University Press.

Dörnyei, Zoltán and Ema Ushioda. 2009. *Motivation, Language Identity and the L2 Self*. United Kingdom: Multilingual Matters.

Dörnyei, Zoltán and Ema Ushioda. 2011. *Teaching and Researching Motivation*. United Kingdom: Pearson.

Eggen, Paul and Don Kauchak. 2016. *Educational psychology: windows on classrooms*. Boston: Pearson.

Ellis, Nick C. 1994. *Implicit and explicit learning of languages*. London: Academic Press.

Ellis, Nick C. 2002. Frequency effects in language processing: A review with implications for theories of implicit and explicit language acquisition. *Studies in Second Language Acquisition*. Vol. 24 Issue 2, p 143-188.

Fenyvesi, Katalin, Mikkel B. Hansen and Teresa Cadierno. 2020. The role of individual differences in younger vs. older primary school learners of English in Denmark. *International Review of Applied Linguistics in Language Teaching*, Vol. 58 Issue 3, p 289–322.



- Gardner, Robert C. 1985. *Social Psychology and Second Language Learning*. Great Britain: Edward Arnold.
- Gharehblagh, Nasibeh M. and Najmeh Nasri. 2020. Developing EFL Elementary Learners' Writing Skills through Mobile-Assisted Language Learning (MALL). *Teaching English with Technology*, Vol. 20, p 104-121.
- Gruneberg, Michael M. and Kate Pascoe. 1996. The effectiveness of the keyword method for receptive and productive foreign vocabulary learning in the elderly. *Contemporary Educational Psychology*. Vol. 21, p 102-9.
- Gu, Yongqi and Robert K. Johnson. 1996. Vocabulary learning strategies and language learning outcomes. *Language Learning*. Vol. 46, p 643-679.
- Gu, Peter Y. 2003. Vocabulary learning in a second language: person, task, context, and strategies. *TESL-EJ*. Vol. 7 Issue 2, p 1-26.
- Hafner, Lawrence E. 1967. Using context to determine meanings in high school and college. *Journal of Reading*. Vol. 10 Issue 7, p 491-498.
- Hao, Yungwei, Kathryn S. Lee, Szu Chen and Sin Chie Sim. 2019. An evaluative study of a mobile application for middle school students struggling with English vocabulary learning. *Computers in Human Behaviour*. Vol. 95, p 208-216.
- Heil, Catherine R., Jason S. Wu and Joey Lee. 2016. A review of mobile language learning applications: trends, challenges and opportunities. *The EUROCALL Review*, Vol. 24, No. 2, Teachers College, Columbia University, USA.
- Hiebert, Elfrieda H. and Michael L. Kamil. 2005. *Teaching and Learning Vocabulary*. USA: Routledge.
- Herman, Patricia A., Richard C. Anderson, P. David Pearson and William E. Nagy. 1987. Incidental acquisition of word meaning from expositions with varied text features. *Reading Research Quarterly*. Vol. 22 Issue 3, p 263-284.
- Horbatiuk, Larysa, Nataliia Kravchenko, Hanna Aliexsieieva, Victoriia Lipych and Tetiana Rozumna. 2019. Use of Mobile Applications for Foreign Language Lexical Competence Formation. *Journal of History, Culture & Art Research*, Vol. 8 Issue 3, p 113-124.
- Horst, Marlise. 2005. Learning L2 vocabulary through extensive reading: A measurement study. *Canadian Modern Language Review*. Vol. 61 Issue 3, p 355-382.
- Kormos, Judit and Kata Csizér. 2008. Age-Related Differences in the Motivation of Learning English as a Foreign Language: Attitudes, Selves, and Motivated Learning Behavior. *Language Learning*. Vol. 58 Issue 2, p 327-355.
- Koval, Natalie G. 2019. Testing the deficient processing account of the spacing effect in second language vocabulary learning: Evidence from eye tracking. *Applied Psycholinguistics*. Vol. 40 Issue 5, p 1103 – 1139.

- Lawson, Michael J. and Donald Hogben. 1998. Learning and recall of foreign language vocabulary: Effects of a keyword strategy for immediate and delayed recall. *Learning and Instruction*. Vol. 8, p 179-194.
- Levin, Joel R., Mary E. Levin, Lynette D. Glasman and Margaret B. Nordwall. 1992. Mnemonic vocabulary instruction: Additional effectiveness evidence. *Contemporary Educational Psychology*. Vol. 17, p 156-174.
- Lewis, Michael. 1997. *Implementing the Lexical Approach: Putting Theory into Practice*. United Kingdom: Hove.
- Lightbown, Patsy M. and Nina Spada. 2013. *How Languages are Learned*. United Kingdom: Oxford University Press.
- Lindstromberg, Seth and Frank Boers. 2008. *Teaching Chunks of Language*. Helbling Languages.
- Maehr, Martin L. and Heather A. Meyer. 1997. Understanding motivation and schooling: where we've been, where we are, and where we need to go. *Educational Psychology Review*. Vol. 9 Issue 4, p 371-409.
- Masgoret, Anna-Marie and Robert C. Gardner. 2003. Attitudes, motivation and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language Learning*. Vol. 53 Issue 1, p 123-163.
- McGivern, Julie E. and Joel R. Levin. 1983. The keyword method and children's vocabulary learning: An interaction with vocabulary knowledge. *Contemporary Educational Psychology*. Vol. 8, p 46-54.
- Nation, Paul. 2013. *Learning Vocabulary in Another Language*. Victoria University of Wellington: Cambridge University Press.
- Oxford, Rebecca L. 2017. *Teaching and Researching Language Learning Strategies*. New York: Routledge.
- Pigada, Maria and Norbert Schmitt. 2006. Vocabulary acquisition from extensive reading: A case study. *Reading in a Foreign Language*. Vol. 18 Issue 1, p 1-28.
- Pressley, Michael, Joel R. Levin. 1981. The keyword method and children's learning of foreign vocabulary with abstract meanings. *Canadian Journal of Psychology*. Vol. 35, p 283-7.
- Rosell-Aguilar, Fernando. 2018. Autonomous language learning through a mobile application: a user evaluation of the Busuu app. *Computer Assisted Language Learning*. Vol. 31 Issue 8, p 854-881.
- Schmitt, Norbert. 2000. *Vocabulary in Language Teaching*. United Kingdom: Cambridge University Press.

- Schmitt, Norbert. 2008. Review article: Instructed second language vocabulary learning. *Language Teaching Research*. Vol. 12 Issue 3, p 329 – 363.
- Schmitt, Norbert. 2010. *Researching Vocabulary, A Vocabulary Research Manual*. United Kingdom: Palgrave Macmillan UK.
- Schmitt, Norbert and Diane Schmitt. 2014. A reassessment of frequency and vocabulary size in L2 vocabulary teaching. *Language Teaching*. Vol. 47 Issue 4, p 484-503.
- Settles, Burr and Brendan Meeder. 2016. A trainable spaced repetition model for language learning. Paper presented at Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics, p 1848–1858, Available at: <https://s3.amazonaws.com/duolingo-papers/publications/settles.acl16.pdf> accessed March 21, 2021
- Tonomori, Ono. 2017. Vocabulary learning through computer assisted language learning. *Mitsubishi Journal of Arts & Sciences*. Vol. 58 Issue 1, p 67-72.
- Waring, Rob and Misako Takaki. 2003. At what rate do learners learn and retain new vocabulary from reading a graded reader? *Reading in a Foreign Language*. Vol. 15, p 130-163.
- Webb, Stuart and Paul Nation. 2017. *How Vocabulary is Learned*. United Kingdom: Oxford University Press.
- West, Michael. 1953. *A general service list of English words*. London: Longman, Green & Co.
- Williams, Marion and Robert L. Burden. 1997. *Psychology for language teachers*. Cambridge: Cambridge University Press.
- Woolfolk, Anita. 2016. *Educational Psychology*. United Kingdom: Pearson.

## APPENDIX 1

### Questionnaire 1

Dear student,

Thank you for showing interest in participating in the study of the language learning app Memrise. Before I give you access to the course in the app, I would like you to answer a few questions about your interest and motivation in learning English. Filling out this survey should not take more than 10 minutes.

I will only use this data for the purpose of my MA thesis and no one else will get access to this information.

Thank you already in advance!

Pille Pilter

1. Name
2. Class
3. Read the statements and choose your answer based on how you feel about it. The answers are on a 4-point scale:

- 1 - strongly disagree - you completely disagree with the statement  
 2 - disagree - you don't disagree 100% but rather disagree  
 3 - agree - you don't agree 100% but rather agree  
 4 - strongly agree - you completely agree with the statement

If you are not sure how to answer, choose the one that you think is more suitable.

For example, the statement is "I look forward to English lessons." When you do look forward to them, but not all the time, choose the "agree" option.

|  | Strongly disagree | Disagree | Agree | Strongly agree |
|--|-------------------|----------|-------|----------------|
| I am good at English.  |                   |          |       |                |
| I am good at learning something new in English.                                    |                   |          |       |                |
| If I think of all the students in my English class, I am one of the best students. |                   |          |       |                |
| I look forward to English lessons.   |                   |          |       |                |
| I have enough English lessons per week.  |                   |          |       |                |
| I'm afraid of making a mistake when I speak English in the lessons.                |                   |          |       |                |
| I don't mind saying answers aloud in the English lesson.                           |                   |          |       |                |
| I am afraid of giving a wrong answer in the English lesson.                        |                   |          |       |                |
| I would feel uncomfortable speaking English to a native speaker.                   |                   |          |       |                |

|  |  |  |  |  |
|--|--|--|--|--|
| I would feel uncomfortable speaking English to a foreigner who is a non-native speaker of English. |  |  |  |  |
| It's useful to study English because I will use it in the future in my work or studies.            |  |  |  |  |
| I can earn more money in the future if I speak English well.                                       |  |  |  |  |
| I like movies that are in the English language.  |  |  |  |  |
| I often watch movies that are in the English language.   |  |  |  |  |
| I mostly listen to songs that are in English.  |  |  |  |  |
| I play different games (video games, mobile games, computer games etc.) that are in English.       |  |  |  |  |
| I read books in English.   |  |  |  |  |
| I think it is fun to listen to someone speaking English.   |  |  |  |  |
| English sounds irritating.   |  |  |  |  |
| It is fun to learn new words in English.   |  |  |  |  |
| I like to say words in English aloud.  |  |  |  |  |
| I study English because my parents say I have to.  |  |  |  |  |
| I study English because the teacher says I have to.  |  |  |  |  |
| When I grow up, I will surely be good at speaking English.   |  |  |  |  |
| I think I will be good at reading books in English when I grow up.                                 |  |  |  |  |
| I would like to live in an English-speaking country.   |  |  |  |  |
| I would like to have friends in English-speaking countries   |  |  |  |  |
| I like learning English through fun activities such as games, watching videos or movies.           |  |  |  |  |

4. I have used language learning apps before Yes/No

No directs to the end of the questionnaire. Yes directs to question 5

5. Which language learning apps have you used?

## Küsimustik 1

Hea õpilane!

Aitäh, et oled näidanud välja huvi Memrise keeleõpperakenduse testimise vastu. Enne kui saadan sulle ligipääsu kursusele, palun sul täita lühike küsimustik enda inglise keele õppimise huvi ja motivatsiooni kohta.

Küsimustiku täitmine ei tohiks võtta rohkem kui 10 minutit ja kasutan neid andmeid vaid magistritöös ning kolmandatel isikutel neile ligipääsu ei ole.

Suur tänu!

Pille Pilter  
Inglise keele õpetaja  
Viimsi Kool

1. Nimi
2. Klass
3. Loe läbi väide ja vali vastus mis tundub sulle kõige õigem. Vastused on 4-punkti skaalal järgnevalt:

- 1 - ei nõustu üldse - vali see variant, kui väide ei käi üldse sinu kohta  
 2 - ei nõustu - vali see variant, kui sa pigem ei nõustu väitega  
 3 - nõustun - vali see variant, kui sa pigem nõustud väitega  
 4 - nõustun täielikult - vali see variant, kui väide käib täielikult sinu kohta  
 Kui sa pole kindel, kuidas vastata, vali see variant, mis tundub sulle õigem.

Näiteks. Väide on " Ma ootan inglise keele tundidesse minekut." Kui sa ootad inglise keele tundidesse minekut, aga mitte iga kord, vali "nõustun" variant.

|  | Ei nõustu üldse | Pigem ei nõustu | Pigem nõustun | Nõustun täielikult |
|--|-----------------|-----------------|---------------|--------------------|
| Ma oskan hästi inglise keelt.  |                 |                 |               |                    |
| Uute asjade õppimine inglise keeles on mulle lihtne.                                     |                 |                 |               |                    |
| Kui ma mõtlen kõikidele õpilastele minu inglise keele klassis, siis olen üks parimatest. |                 |                 |               |                    |
| Ma ootan inglise keele tundidesse minekut.   |                 |                 |               |                    |
| Mul on nädalas piisavalt inglise keele tunde.  |                 |                 |               |                    |
| Ma kardan vigade tegemist kui ma räägin inglise keele tunnis.                            |                 |                 |               |                    |
| Mul ei ole inglise keele tunnis vastuste valjult välja ütlemine probleem.                |                 |                 |               |                    |
| Ma kardan inglise keele tunnis vale vastust öelda.                                       |                 |                 |               |                    |

|  |  |  |  |  |
|--|--|--|--|--|
| Kui ma peaksin inglise keelt emakeelena rääkiva inimesega inglise keeles rääkima, tunneksin ma ennast ebamugavalt.       |  |  |  |  |
| Kui ma peaksin inglise keelt rääkiva välismaalasega inglise keeles rääkima, tunneksin ma ennast ebamugavalt.             |  |  |  |  |
| Inglise keelt on kasulik õppida, sest mul on seda tulevikus töö ja haridust omandades vaja.                              |  |  |  |  |
| Kui ma oskan inglise keelt, on mul võimalus tulevikus rohkem raha teenida.   |  |  |  |  |
| Mulle meeldivad filmid, mis on inglise keeles.   |  |  |  |  |
| Ma vaatan tihti filme, mis on inglise keeles.  |  |  |  |  |
| Ma enamasti kuulan laule, mis on inglise keeles.   |  |  |  |  |
| Ma mängin erinevaid mänge (videomänge, mobiilimänge, arvutimänge jne) mis on inglise keeles.                             |  |  |  |  |
| Ma loen ingliskeelseid raamatuid.  |  |  |  |  |
| Minu arvates on tore kuulata kedagi inglise keeles rääkimas.   |  |  |  |  |
| Inglise keel kõlab häirivalt.  |  |  |  |  |
| Uusi ingliskeelseid sõnu on lõbus õppida.  |  |  |  |  |
| Mulle meeldib ingliskeelseid sõnu valjult välja öelda.   |  |  |  |  |
| Ma õpin inglise keelt sest mu vanemad ütlevad, et ma pean.   |  |  |  |  |
| Ma õpin inglise keelt sest mu õpetaja ütleb, et ma pean.   |  |  |  |  |
| Kui ma vanemaks saan, oskan ma kindlasti hästi inglise keelt.  |  |  |  |  |
| Ma arvan, et ma oskan hästi ingliskeelseid raamatuid lugeda kui ma vanemaks saan.  |  |  |  |  |
| Ma tahaksin elada riigis, kus räägitakse inglise keelt emakeelena.   |  |  |  |  |
| Ma tahaksin sõpru, kes on riikidest, kus räägitakse inglise keelt emakeelena.  |  |  |  |  |
| Mulle meeldib inglise keelt õppida läbi põnevate tegevuste nagu näiteks mängude mängimise, videote ja filmide vaatamise. |  |  |  |  |

4. Ma olen kasutanud varem keeleõppeäppe. Jah/Ei
5. Milliseid keeleõppeäppe oled kasutanud?

## APPENDIX 2

### Questionnaire 2

Dear student,

Now that you have finished the course in Memrise, I would like to hear about your experience.

Please answer as thoroughly and honestly as possible. Filling out this survey should not take more than 10 minutes.

I will only use this data for the purpose of my MA thesis and no one else will get access to this information.

Thank you already in advance!

Pille Pilter

1. Name
2. Class
3. I managed to use the app regularly for the whole duration of the experiment. Yes/No
4. I used the app:
  - Every day
  - 5-6 times a week
  - 3-4 times a week
  - Twice a week
  - Once a week
  - Less than once a week
5. When using the app, the things I really enjoyed about it were...
6. When using the app, the things that I found could have been different were...
7. I liked that the app sent me daily notifications to remind me to study. Yes/No
8. I created my own "mems" in the application - either added pictures or words to help me memorise some of the words or phrases. **Yes directs to 2 new questions:**

1. How many "mems" did you create?
2. Did they help with memorising the vocabulary?
  - Yes, a lot
  - Yes, sometimes
  - No
  - Maybe/ I'm not sure

#### **No directs to statements:**

Read the statements and choose your answer based on how you feel about it. The answers are on a 4-point scale:

- 1 - strongly disagree - you completely disagree with the statement
- 2 - disagree - you don't disagree 100% but rather disagree
- 3 - agree - you don't agree 100% but rather agree
- 4 - strongly agree - you completely agree with the statement



If you are not sure how to answer, choose the one that you think is more suitable. For example, the statement is "I look forward to English lessons." When you do look forward to them, but not all the time, choose the "agree" option.

|  | Strongly disagree | Disagree | Agree | Strongly agree |
|--|-------------------|----------|-------|----------------|
| Using the application was fun and engaging and I felt like I wanted to use it.             |                   |          |       |                |
| Learning vocabulary through this application was useful to me.                             |                   |          |       |                |
| With the app, it was easier to learn words and phrases than before.                        |                   |          |       |                |
| I would like to use this or another language learning app in the future.                   |                   |          |       |                |
| My knowledge of English vocabulary has increased.  |                   |          |       |                |
| I feel more comfortable using English in class after using the application.                |                   |          |       |                |
| I feel more comfortable speaking in English after using the application.                   |                   |          |       |                |
| The Leaderboard in the application made me want to study harder to achieve better results. |                   |          |       |                |

## Küsimustik 2

Hea õpilane

Nüüd, kui oled lõpetanud Memrise keeleõppeäpi kursuse, tahaksin sinu kogemusest kuulda.

Palun vasta nii põhjalikult ja ausalt kui võimalik.

Küsimustiku täitmine ei tohiks võtta rohkem kui 10 minutit ja kasutan neid andmeid vaid magistritöös ning kolmandatel isikutel neile ligipääsu ei ole.

Suur tänu!

Pille Pilter

Inglise keele õpetaja

Viimsi Kool

1. Nimi
2. Klass
3. Kasutasin keeleõppeäppi regulaarselt kuu aja jooksul. Jah/Ei
4. Kasutasin äppi:

Iga päev

5-6 korda nädalas

3-4 korda nädalas

2 korda nädalas

Üks kord nädalas

Vähem kui üks kord nädalas

5. Äppi kasutades meeldis mulle selle juures enim...
6. Äpi kasutamise juures segas mind kõige rohkem...
7. Mulle meeldis, et äpi kaudu saadeti mulle igapäevaselt teateid, mis meenutasid mulle, et on aeg sõnavara õppida. Jah/Ei
8. Kasutasin äpisiseseid sõnade juures variante luua mem'se, ehk lisasin pilte või sõnu, mis aitasid mul teatud sõnu ja väljendeid paremini meelde jätta.

1. Mitu mem'i sa ise sõnade juurde lisasid?

2. Kas need aitasid sind sõnavara õppimisel?

Jah, väga palju

Jah, mõnikord

Ei

Võib-olla/ma ei ole kindel

Loe läbi väide ja vali vastus mis tundub sulle kõige õigem. Vastused on 4-punkti skaalal järgnevalt:

1 - ei nõustu üldse - vali see variant, kui väide ei käi üldse sinu kohta

2 - ei nõustu - vali see variant, kui sa pigem ei nõustu väitega

3 - nõustun - vali see variant, kui sa pigem nõustud väitega

4 - nõustun täielikult - vali see variant, kui väide käib täielikult sinu kohta

Kui sa pole kindel, kuidas vastata, vali see variant, mis tundub sulle õigem.

Näiteks. Väide on " Ma ootan inglise keele tundidesse minekut." Kui sa ootad inglise keele tundidesse minekut, aga mitte iga kord, vali "nõustun" variant.

|   | Ei nõustu üldse | Pigem ei nõustu | Pigem nõustun | Nõustun täielikult |
|---|-----------------|-----------------|---------------|--------------------|
| Äpi kasutamine oli lõbus ja kaasahaarav ning ma tundsin, et tahan seda kasutada.                                      |                 |                 |               |                    |
| Sõnavara õppimine läbi äpi oli mulle kasulik.   |                 |                 |               |                    |
| Äpi kaudu oli lihtsam sõnavara õppida kui varem.  |                 |                 |               |                    |
| Tahaksin seda või mõnda teist keeleõppeäppi kasutada ka tulevikus.  |                 |                 |               |                    |
| Minu inglise keele sõnavara on kasvanud.  |                 |                 |               |                    |
| Tunnen pärast äpi kasutamist ennast tunnis inglise keelt kasutades mugavamalt.  |                 |                 |               |                    |
| Tunnen ennast pärast äpi kasutamist inglise keeles rääkides mugavamalt.   |                 |                 |               |                    |
| Äpis olev edetabel, mis näitas teiste osalejate punkte, motiveeris mind rohkem õppima ja paremaid tulemusi saavutama. |                 |                 |               |                    |

## APPENDIX 3

### 6<sup>th</sup> grade course vocabulary

#### Level 1

stuck in the middle  
a tape measure  
Have fun!  
tie together  
a tree house  
perfect for me  
make something  
fly a kite

#### Level 2

learn a script  
onto the stage  
I'm nervous  
lights have gone down  
enter the house  
ready for  
a surprise party

#### Level 3

sweep the floor  
Congratulations  
rubber gloves  
an athlete  
the wrong direction  
decorate the room  
as old as  
as tall as  
bright enough

#### Level 4

a wildlife park  
environmental issues  
a rubbish dump  
a police station  
air pollution  
water pollution  
pick up the litter  
a solar panel  
fossil fuels  
to burn wood  
alternative energy

#### Level 5

pick up the litter  
Can I help?

This is horrible!  
dangerous chemicals  
take out rubbish  
a colourful ribbon

#### Level 6

recycling centre  
an insect house  
to visit the park  
a reptile house  
to go extinct  
endangered species  
to increase the population  
loss of habitat

#### Level 7

a first aid course  
call an ambulance  
take off  
put on  
get out  
put on a plaster  
a first aid kit  
a bandage  
to train people  
pick up  
put down

#### Level 8

additives  
ready-made food  
ingredients  
health food  
dairy products  
junk food  
healthy diet  
low in calories  
source of protein

#### Level 9

an athlete  
train the players  
a football fan  
captain of the team  
to breathe oxygen  
carbon dioxide

to pump blood

#### Level 10

an archaeologist  
a piece of jewellery  
a stone carving  
a statue  
an ancient city  
ruins of a city  
to explore  
a fortress

#### Level 11

to write in a diary  
a photo album  
a manual  
a comedy film  
special effects  
a sea creature  
a performance  
a confident girl  
a teenager

#### Level 12

a photographer  
a microphone  
to write an article  
to be determined  
a celebrity  
a scientist  
famous for

## APPENDIX 4

### 9<sup>th</sup> grade course vocabulary

#### Level 1

a set of characteristics  
ancient history  
to be determined  
a generalisation  
to be flexible  
management  
a perspective on  
to bear in mind  
to take part in  
to sort out

#### Level 2

to break in  
to find out  
make up your mind  
to guarantee  
to resemble  
community service  
death penalty  
an organisation  
a punishment  
to be specific

#### Level 3

bring to life  
to develop  
a descendant  
come to terms with  
to put up with  
the human race  
agriculture  
nutrition  
to try on  
to result in

#### Level 4

a breakthrough  
to welcome the opportunity  
to communicate  
an expansion  
mass production  
going strong  
with flying colours  
a talent for  
to assure  
previous

#### Level 5

a benefit

humiliation  
to impact  
to sacrifice  
to look on the bright side  
of  
to work out  
to hang on to  
on the contrary  
to manufacture  
to encourage

#### Level 6

body language  
an impression  
an enquiry  
apprehensive  
impressive  
to impress  
subconsciously  
to avoid  
an expression  
a gesture

#### Level 7

an architect  
an asylum seeker  
a refugee  
to emigrate  
to look back on  
relatively  
to come up with  
to discover  
enthusiastically  
unmistakable

#### Level 8

an assessment  
claustrophobia  
a consequence  
a probability  
make a run for it  
exhausting  
destructive  
a paramedic  
a comparison  
to pop out

#### Level 9

an accommodation  
a contribution  
a tranquilliser  
a queue

to come around  
to wear off  
to take advantage of  
despite  
to settle in  
temporary

#### Level 10

an approval  
a congestion  
productivity  
to be on time  
to be your own boss  
fascinated  
incredible  
to represent  
astonishing  
appalling

# RESÜMEE

TARTU ÜLIKOOL  
ANGLISTIKA OSAKOND

**Pille Pilter**

**Basic school students' perceptions of the application Memrise as an assisting tool for language learning**

**Põhikooli õpilaste hinnangud rakenduse *Memrise* kasutamisele keeleõppe abitöövahendina**

Magistritöö

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Annotatsioon:

Erinevad võõrkeeleõppemeetodid muutuvad ja arenevad ajas ja mobiilirakenduste kasutamine keeleõppes on viimastel aastatel populaarsust kogunud. Selle magistritöö eesmärk on kasutada keeleõpperakendust Memrise abistava tööriistana keeleõppes ning välja selgitada seda kasutavate õpilaste arvamus rakendusest ning kas neil on sellest kasu. Uurimus viidi läbi suures Tallinna lähedal asuvas põhikoolis 6nda ja 9nda klassi õpilaste seas. Antud töö koosneb sissejuhatuses, kahest põhipeatükist, kokkuvõttest, viidete nimekirjast ja neljast lisast.

Esimene peatükk on kirjanduse ülevaade, mis keskendub sõnavara õppimisele ja õpetamisele, motivatsiooniteooriatele ja ülevaatele erinevatest keeleõpperakendusest. Paljud uuringud on näidanud, et keeleõpperakendused võivad aidata neid kasutanud õpilaste sõnavara ning kirjutamisoskust parendada, samuti on täheldatud positiivset mõju õpilaste õppimisvõimele, motivatsioonile ja üldisele suhtumisele keeleõppesse.

Teine osa keskendub läbi viidud uuringu tulemustele – analüüsitud on nii esimest küsimustikku, mis aitab mõõta õpilaste keeleõppe motivatsiooni kui ka hilisemaid tulemusi ja õpilaste arvamus rakenduse kasutamise kohta. Esimeses küsitluses osalesid 15 õpilast mõlemast klassiastmest ning nende tulemusi võrreldes sai järeldada, et vanemad õpilased on mõningal määral rohkem motiveeritud inglise keelt õppima ning ka keeleõpperakendusi kasutama. Seda toetas ka fakt, et ainult üks õpilane kaheksast küsimustikku täitnud 6nda klassi õpilasest hakkas aktiivselt rakendust kasutama. Esimese küsimustiku kohta tehti ka teine analüüs, mis võrdles neid õpilasi, kes jätkasid rakenduse kasutamist ja neid, kes mitte. Ka need tulemused näitasid, et rakenduse kasutamist jätkanud õpilased olid mõningal määral suurema keeleõppe motivatsiooniga. Rakendust kasutanud õpilased tõid välja positiivse aspektina, et neile meeldis rakenduse mängulisus, mis lihtsustas õppimist, ülesannete mitmekesisus ning nad oleksid huvitatud sarnast rakendust ka tulevikus kasutama. Negatiivsestest aspektidest toodi välja sõnade häälduse puudumise, juba õpitud sõnade kordamise ning punktide vähendamise vale eessõna kirjutamise eest. Kolmandale uurimusküsimusele, kas rakenduse kasutamisest oleks positiivset mõju õpilaste keelelisele enesekindlusele, ei olnud võimalik leida lõplikku vastust liiga väikese osalejate arvu tõttu.

Märksõnad: inglise keel, sõnavara, keeleõpperakendused, motivatsioon, inglise keele õpetamine

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Pille Pilter

18.05.2021

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