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Vocabulary acquisition – learning words in isolation and in greater units

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Prohlašuji, že jsem závěrečnou práci vypracoval samostatně a použil jen uvedených pramenů a literatury.

V Olomouci dne   …………………………………………

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Abstract

144 students of English at the Palacký University participated in the present study. Data about their vocabulary learning were gathered by means of a questionnaire. The results showed that the majority of students use a variety of learning techniques and sources of new vocabulary. Furthermore, they perceive vocabulary as a crucial aspect of language learning. The degree of importance seems to be a major factor influencing students' approach to vocabulary – the more important vocabulary is, the more they learn. Students do not use spaced repetition in their learning. Implementing it could significantly enhance their efficiency when acquiring vocabulary.

Introduction

Words are essential components of every language. Vocabulary lays foundations for each language skill and its aspects (be it grammar, pronunciation, or anything else). Everything is examined in relation to vocabulary. Therefore, foreign language learners should not underestimate its powers and importance.

Learning vocabulary can be approached in many different ways. If we choose the right methods, the whole process may become faster and more efficient. Taking advantage of combination and larger units over learning in isolation is the method discussed in this bachelor's project. It may enable us to not only acquire new words more easily but also retain them for a much longer time. The following pages describe what is meant by combination and larger units and try to explain why this approach is superior to isolation.

The project consists of a theoretical and a practical part. The theoretical part briefly describes what is involved in knowing a word (Chapter 1), next, focuses on memory and the process of learning (Chapter 2), deals with how words combine in a language to form greater units (Chapter 3), and lastly (Chapter 4), evaluates several selected methods of learning vocabulary. The research is based on a questionnaire, which investigates second language learners' attitudes towards vocabulary learning. The practical part then introduces the research (Chapter 5), and analyses collected data (Chapter 6).

The findings from both parts may serve as suggestions for language learners on how to improve their learning. The teaching practice can benefit likewise. Teachers might find inspiration for their classes, make vocabulary teaching more effective, and help their students be more aware of various learning methods. A frequent problem is that teachers tell us *what* to learn rather than *how*.

Theoretical part

1 Knowing a word

In second language learning, knowing a word does not simply mean knowing its translation. Nation (2013, p. 44) states that "words are not isolated units of the language, but fit into many related systems and levels". Being able to fully understand and use a word requires knowledge of its many parts, such as meaning, pronunciation, written form, grammatical rules, connections to other words, etc. (Nation, 2013, pp. 48-49).

Acquiring all these aspects is a complicated, time-consuming, and, primarily, gradual process (Schmitt, 2000, p. 4). It is natural that the individual parts are learned at various rates. Thus, different levels of knowledge occur. This can be seen in the ability to either use a word actively/productively in our speech or writing, or only understand it passively/receptively when seen or heard (Schmitt, 2000, pp. 4-5). However, these two kinds of knowledge both require a combination of the aspects mentioned earlier. Knowing only the meaning and written form does not necessarily ensure that we can recognize the word passively in spoken form. Similarly, knowing its forms and meaning may be insufficient to use the word actively when speaking/writing (Nation, 2013, pp. 48-50).

Sorting a word into active or passive vocabulary is also affected by the word's frequency. Nation (1990, p. 33) claims that the passive lexicon of native speakers consists predominantly of low-frequency words. The same may be applied to second language learners. Webb's study (2008) suggests that knowledge of a word decreases with its decreasing frequency. It may then be assumed that high-frequency words appear more in productive use (Nation, 2013, p. 84).

It is also important to mention that words do not have to belong to the receptive or productive group permanently. Although receptive vocabulary comprises most of our lexicon, it may be transferred to the productive knowledge (Thornbury, 2002, p. 15) mainly by multiple and repeated encounters (Gairns and Redman, 1986, p. 65). However, this does not mean that receptive knowledge always occurs first (Thornbury, 2002, p. 15).

In conclusion, vocabulary is an interconnected system of words and we should be aware of its complexity. Different levels of knowledge result in knowing a word actively or passively. However, the division into these two groups may be somewhat limited and unsatisfactory since knowing a word whichever way has many forms.

2   Memory and Learning

One objective of vocabulary acquisition is learning as many aspects of a word as possible to use it in different contexts and situations. Another one should be keeping all these pieces of information in our memory in a way that enables us to work with them anytime we need it. To achieve this, it is necessary to first familiarize ourselves with what affects this process. This chapter deals with memory and forgetting and introduces different types of learning.

2.1   Memory and forgetting

Without memory, we would not be able to learn anything. The better the memory, the easier we learn and remember things. This is desired especially in language learning, where we want to remember all grammar rules and every word we encounter.

2.1.1   Short-term and long-term memory

When we learn vocabulary (or basically anything), an item at first enters our short-term (working) memory. There it can stay only for a few seconds as our brain performs mental operations with it (Schmitt, 2000, p. 131). However, in this type of memory, we can process only several items for a short period of time. The length of this period may be increased using the articulatory (Thornbury, 2002, p. 23) or phonological (Baddeley, 2007) loop, where information is constantly being repeated in order to not forget it immediately. Thornbury (2002, p. 24) suggests that this repetition may be the first step to transferring a word from short-term to long-term memory (this type of memory, compared to the short-term, functions as a network where large quantities of information are stored for a much longer time than seconds, up to permanently). At the same time, he stresses that "simply repeating an item" may result in insufficient retention. Baddeley (2007, p. 4) supports this statement: "…degree of long-term learning depended on the depth and richness of encoding and not on the length of time the material was held in the STS…"[1]. Thornbury (2002, pp. 24-26) provides a list of aspects that help transfer the item to long-term memory more effectively:

- encountering a word several times on multiple occasions
- deliberate recall and usage of its form and/or meaning
- deliberate work with a word (such as studying its many components) in multiple sessions

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[1] Explanation: STS = short-term store (Baddeley, 2007, p. 4)

- personalisation (e.g., creating own examples, mental images, connections to personal experience or emotions)

Schmitt (2000, p. 132) further adds that linking new items to in our lexicon already existing ones represents another major contribution to long-term retention. However, a combination of more methods seems to be the key factor in committing words to memory (McCarthy, 1990, p. 120). Furthermore, Schmitt (2008) states that "it seems that anything that leads to more exposure, attention, manipulation, or time spent on lexical items adds to students' learning".

2.1.2 Forgetting

The process of forgetting is as natural as the ability to remember. Since our goal is to make remembering the most effective, we also want to prevent forgetting or at least decrease the amount we forget. It was discovered that after initial learning, approximately 70% is forgotten in the next 24 hours. The remaining knowledge then fades over time in a much slower manner (Ebbinghaus, 1913, p. 76). Fortunately, these enormous losses may be moderated with the use of proper methods. The most significant are spaced repetition and active recall (Dunlosky et al., 2013).

Losing knowledge of a word is often caused by too long intervals between revisions/encounters of the word or by no revisions/encounters at all (Gairns and Redman, 1986, p. 89; Thornbury, 2002, p. 26). In these cases, spaced repetition ensures that an item is encountered before it crosses the threshold of unsuccessful retrieval. Every such contact resets the forgetting process and makes it slower the next time (Ebbinghaus, 1913, p. 53; Schmitt, 2000, pp. 130-131; Nation, 2013, p. 464). The results of research show that massive improvement occurs when spacing is used compared to no spacing (Karpicke and Bauernschmidt, 2011). However, an important question is whether the time between individual revisions of a word should be equal or increasing. Shortly said, the effects of both seem to be relatively the same (Karpicke and Bauernschmidt, 2011).

By active recall (or practice testing) is understood the process of deliberate retrieval of information from our memory (Dunlosky et al., 2013). For example, it may be the retrieval of a word's translation. Pavičić Takač (2008) writes that "every recall of a previously learnt word strengthens the link between knowledge and retrieval cue"[2]. This strengthening of connections may be the primary reason why forgetting slows down. The significance and positive effects of

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[2] Explanation: Retrieval cue is an impulse which helps us retrieve information about the word – e.g. the written form helps us retrieve the meaning (Pavičić Takač, 2008, p. 75).

this method are supported by many studies (e.g., Karpicke and Blunt, 2011; Dunlosky et al., 2013).

On their own, active recall and spaced repetition are powerful methods of reducing forgetting. However, their combination seems to be even more powerful (Kang, 2016). A useful assistant in which both methods may be effectively implemented is reviewing with flashcards (discussed in Chapter 4).

2.2 Types of learning

For the purposes of this bachelor's thesis, learning is observed from the perspective of awareness. Although reality is much more intricate and there are various levels of awareness (Schmidt, 1990), a simplified division into two types of learning will suffice: aware (also known as explicit or intentional) and unaware (also known as implicit or incidental).

Explicit learning is "the direct learning and study of vocabulary" (Nation, 2013, p. 2), which involves conscious attention to the word's many aspects (e.g., form, meaning, word class). Implicit learning does not focus on the word itself but rather on the overall context (e.g. comprehension of a text) (Ortega, 2009, p. 94). Both play an essential role in vocabulary acquisition. Learning first the basic information about a word deliberately provides us the necessary knowledge for further encounters by which this knowledge can be consolidated and expanded (Nation, 2013, p. 95). The word's deeper knowledge (more meanings, collocations, nuances in use etc.) is then acquired predominantly due to incidental learning. Schmidt (1990) claims that this kind of learning is possible. Therefore, it is crucial to have immense amounts of input (text or listening) to see the word repeatedly and in many situations (Schmitt, 2008).

There is one more type of learning which needs to be addressed – rote learning. It is a specific type of explicit learning which consists in mechanical and usually massed study and repetition of vocabulary. Despite its positive effects in the beginning and in certain areas of language learning, from the long-term point of view, rote learning is considered ineffective (Gairns and Redman, 1986, p. 93). The main reason for this may be the lack of spaced repetition element.

By examining various aspects affecting memory, forgetting, and learning, this chapter showed that spaced repetition and active recall should be integrated into vocabulary learning to maximize its efficiency. Simultaneously, it supports the idea that the more and larger context is provided, and more connections between words are made, the better acquisition occurs.

3 Words in isolation and in greater units

The previous chapter looked at how the combination of learning methods and multiple kinds of interaction with a word enhances learning and memory. This section explores the positive effects of combination (or greater units) regarding language components.

As Nation already stated in the first chapter, and other linguists hold the same opinion (e.g., Pavičić Takač, 2008, p. 6 or Thornbury, 2002, pp. 16-17), "words are not isolated units". Explaining why words cannot be perceived in isolation may be viewed from different perspectives. Contrasting *isolation* to *combination* might also show us why combination is superior.

One interpretation of *isolation*, and possibly a frequent one, could be that isolated words are only individual, single units. This is, however, a wrong assumption. In a language, there are units which consist of several words and together, as a whole, carry one concrete meaning – multiword units (Thornbury, 2002, p. 6). Schmitt (2000, p. 99) mentions that multiword units "include compound words, phrasal verbs, fixed phrases, idioms, proverbs, and lexical phrases", etc. These and also individual words may be examined either in their basic forms (in isolation) or in greater units whose additional parts (such as collocates or context) exceed the basic form and provide the learner with more knowledge and better understanding of a word. The latter approach might be beneficial for a fundamental reason: "…language is not constructed word by word…" (Schmitt, 2000, p. 105), "…language production is based on assembling ready-made chunks…" (Pavičić Takač, 2008, p. 16), and thus "most of the language we use consists of familiar combinations" (Nation, 2013, p. 484). Therefore, it may be assumed that the process of learning vocabulary can be made more efficient if learners pays attention to these combinations and chunks (greater units) right from the start and do not rely on incidental learning.

The second reason why vocabulary cannot be viewed in isolation is the fact that words are related to other words in many ways (Thornbury, 2002, pp. 9-11). The following list excludes collocations, which are discussed later:

- Firstly, there are sense relations – mainly synonyms and antonyms (McCarthy, 1990, p. 16). Learning these together with a word may simplify the process greatly (McCarthy, O'Keeffe, and Walsh, 2010, p. 75), but, at the same time, they need to be used appropriately since "very few words are completely synonymous or exact

opposites". Therefore, these relations on their own usually do not provide enough information to fully comprehend the word's meaning (Schmitt, 2000, p. 29).

- Secondly, there are grammatical relations, called grammatical patterns or colligation as well (McCarthy, O'Keeffe, and Walsh, 2010, pp. 40-41). This means that words are arranged into structures based on the grammatical features of another word – e.g., a verb is followed by a specific preposition or a verb needs to be followed by a gerund (Schmitt, 2000, pp. 58-59). Knowing these patterns is certainly important to produce faultless language. They may be learned more easily if there are similarities between colligations in the learner's first and second language (Nation, 2013, p. 82). On the other hand, the influence of the first language can also cause production of incorrect forms (McCarthy, O'Keeffe, and Walsh, 2010, p. 47).

- Thirdly, words are related in terms of style and register. Different situations and contexts require different choices of words (McCarthy, O'Keeffe, and Walsh, 2010, p. 93). For example, when a situation demands the use of formal vocabulary, we cannot (or should not) use colloquial vocabulary. Therefore, the words we have used determine the ones we are likely to choose later.

- Lastly, words may be grouped into certain categories, such as hyponyms (subordinate words are labelled with one superordinate word – e.g. chairs and tables are furniture [McCarthy, O'Keeffe, and Walsh, 2010, p. 79]) and meronyms (one word is "a part of" another – e.g. a string is a part of the guitar [Thornbury, 2002, p. 10])[3], lexical fields (words connected to a specific topic or theme [Thornbury, 2002, pp. 10-11]), or word families ("a word and all its inflected and regular derived forms" [McCarthy, O'Keeffe, and Walsh, 2010, p. 7]).

Although these relations are probably not the primary way of acquiring new vocabulary for native learners (Thornbury, 2002, p. 18), they may assist second language learners in studying a word. Seeing how words connect in a language suggests that they connect in our mind too (Schmitt, 2000, pp. 37-38). Since comparing what is new to what is already known makes learning easier (Nation, 2013, p. 128), we may assume that learning the above-mentioned relations presents a benefit because we consciously make connections that would be later made anyway. However, words are not equal in terms of how easy or difficult they are to learn (Dąbrowska, 2009, p. 201), and thus, not all may require this approach. Similarly, we need to

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[3] Note: Hyponyms and meronyms also belong to sense relations (Schmitt, 2000, p. 26), but they are listed separately because, unlike synonyms and antonyms, they organize words, not contrast them.

bear in mind that learning words for productive use requires harder work (Nation, 2013, p. 56), and, in this case, those relations could be more helpful.

3.1 Collocations

Collocations may be defined as "the most likely combinations of words" (McCarthy, O'Keeffe, and Walsh, 2010, p. 28) or as words that "co-occur, or are used together frequently" (Gairns and Redman, 1986, p. 37). These frequent chunks account for a considerable part of the language's vocabulary (Hill, 2000, p. 53).

It seems reasonable to concentrate on collocations not only to become more fluent but also to produce correct combinations. Learners may actually wrongly assume that one word collocates with another (presumably due to the influence of the first language), and then they create unusual combinations (McCarthy, O'Keeffe, and Walsh, 2010, p. 34). Schmitt (2008) claims that conscious study of a word is rather limited, and repeated encounters, mostly incidental, are responsible for broadening its knowledge. A study (Pellicer-Sánchez, 2017) has even affirmed that incidental learning of collocations is possible. However, there is evidence (Zaferanieh and Behrooznia, 2011) that conscious study is more effective. The reasons for this could be that incidental encounters may appear in too wide intervals, which makes learning too slow to progress (Lewis, 2000, p. 14), and that conscious attention and study lowers the risk of negative influence of the first language. It may prevent learners from creating unusual collocates too because they see exactly which words appear together.

In addition to producing fluent and natural language, collocations have a "determining" purpose. They provide further information to when words are used. Moreover, they often determine how similar words differ from each other (Hill, 2000, p. 60; Dąbrowska, 2009, p. 209) – e.g. *bright* is more likely than *light* to collocate with the noun *sky*. This, again, may aid students in comprehending a word's meaning. But collocations alone do not have to give enough clues for proper use of vocabulary in specific situations (Conzett, 2000, p. 76). That is why it is important to learn words and their collocations in context (Thornbury, 2002, p. 128).

3.2 Sentences and larger context

The role of individual language items is to create larger units of speech or text (sentences), which then build even greater units. Practical use of words is thus very important (Nation, 2013, p. 138). Whether a word appears in the context of a single sentence, paragraph, or whole discourse, this context certainly contains relevant information about the word, which deepens what we know about it and may ease learning it (pp. 359-360).

Although guessing meaning of words from context is possible, and is also a quite frequent and useful practice (Thornbury, 2002, p. 148), Dąbrowska (2009, p. 206) argues that context (sentences in particular) cannot effectively and exactly determine a word's meaning – for example, we can guess that a verb represents movement, but we do not know what kind of movement it is specifically. Therefore, it seems better to deliberately learn the meaning of a word beforehand, and then use context for studying additional details, such as grammar, more collocations, or register (Nation, 2013, p. 441). However, the ability to infer a word's meaning and additional details is largely dependent on what and how many clues the context provides (Dąbrowska, 2009, p. 206). It is obvious that the sentence *"I know you're angry, but you didn't have to bellow at the children – now they're crying"* is more helpful in studying the word *bellow* than the sentence *"He bellowed at the children"*.

Even though learning in sentences is not necessarily more effective in regard to word's meaning, still, it may enhance the knowledge of its other aspects (Nation, 2013, p. 461) – mainly how the word is used in a sentence (its grammar). We also need to be aware of the fact that different language items might require more context to be acquired than others. This is the case of words used in a specific register, idioms, or proverbs. Thornbury (2002, p. 56) mentions that discourse markers or tags too need contextualisation to be learnt and later used correctly. Similarly, sense relations should be approached in the same way (McCarthy, O'Keeffe, and Walsh, 2010, p. 84), especially synonyms where differences in use and meaning need to be clearly distinguished by context (Gairns and Redman, 1986, pp. 69-70). According to Thornbury (2002, p. 121), actual language offers ideal conditions for learning. This is the reason why vocabulary should always be studied in context to maximize the efficiency of its acquisition.

To summarize this chapter, we saw that words enter into many types of relations with other words. The quality of learning new vocabulary may improve if learners are conscious of them. At the same time, focusing on collocations rather than on single language items seems to be more efficient not only in terms of language fluency. Context plays a significant part in vocabulary acquisition – the more is provided, the better opportunities for studying a word occur.

4   Selection of learning methods

Even though there are countless methods of learning vocabulary, this chapter concerns only a few selected. We will observe what can be learnt about a word using these methods, how effective they are, and what are their limitations and downsides.

Flashcards

Flashcards are simple, yet very effective in deliberate learning of new words (Thornbury, 2002, p. 145). But, as with other methods, the degree of benefit correlates with its proper use (Pavičić Takač, 2008, p. 81). Flashcards are mostly used for learning foreign words on one side and their meanings/translations on the other (Thornbury, 2002, p. 146). This type of knowledge may be acquired relatively well using this method (Nation, 2013, p. 440). However, much more than just translations can be learnt with flashcards (e.g., some grammatical structures or collocations). Still, not everything is possible to learn (p. 441). Even if a sentence context is provided, we cannot study much about register or frequency (p. 442).

Learners have two options how to create their own flashcards: writing them by hand or making them digitally. Either has its advantages and disadvantages. One advantage for both types is the element of active recall when students test themselves on what is on the other side of a card. Another is the implementation of spaced learning. However, here the two types of cards differ. When using paper cards, learners must track their progress and spacing themselves, whereas most of the flashcard programs or websites nowadays include an algorithm, which controls the spacing automatically (Nakata, 2011). Furthermore, digital flashcards are faster to create, and usually offer a range of customization, such as making cloze cards or adding audio files and images (visuals, whether physical or mental, can help learning and enhance memory significantly; Dąbrowska, 2009, p. 207; Gairns and Redman, 1986, p. 92). On the contrary, the advantage of handwritten cards over digital ones is the process of writing on a piece of paper, which may make memorizing easier (McCarthy, 1990, p. 127), but their creation time-consuming.

If we consider each type of cards in terms of effectiveness of learning, there seems to be no superiority of one over the other (Nikoopour and Kazemi, 2014). As already mentioned, greater impact will have proper use of this technique. Nation (2013, p. 446) lists rules which should be followed when studying from flashcards. These, among others, include for example: not putting too much information on the cards, using an item in context, or repeating aloud.

Vocabulary lists

Vocabulary lists belong to the most common vocabulary learning techniques (Oxford and Crookall, 1990, p. 10). Learners can write lists themselves, or they can find them in coursebooks or elsewhere. Lists usually include the second language item with its first language equivalent, and the student's objective is to learn these pairs by heart, often by means of rote learning (pp. 10-11). Although Thornbury (2002, p. 33) claims that learning from lists may be sufficient from the short-term point of view (learning many words quickly for a test or an examination), the long-term effects may be poor. The major disadvantages of vocabulary lists are the lack of contextualisation (p. 53) and the influence of the "serial effect", by which learners know the order of items, can remember what follows, and therefore do not really test their knowledge of the item (p. 33). According to Oxford and Crookall (1990, p. 12), if there is no further work with words after learning them from a list, results from using this method are fairly fruitless.

Dictionaries

A dictionary is an integral part of language learning as much as vocabulary itself. It is a wealthy source of basically all that is needed to know about a word (Thornbury, 2002, p. 65). A learner may find these pieces of information either in monolingual or bilingual dictionaries. However, there are certain limitations to both types. Monolingual dictionaries might provide misleading or insufficient definitions (Dąbrowska, 2009, p. 203; Gairns and Redman, 1986, p. 74), and translations in bilingual dictionaries do not have to correspond with the second language equivalent (Gairns and Redman, 1986, p. 75; Thornbury, 2002, p. 65). Nevertheless, Nation (2013, p. 417) is convinced that students benefit from dictionary use. If learners are conscientious when using one, the above-mentioned issues may not even present an obstacle. Apart from being an important source in conscious study of vocabulary, dictionaries serve as assistants when reading (Gairns and Redman, 1986, p. 79) – guessing from context is more efficient if the meaning is checked in a dictionary (Fraser, 1999, cited in Nation, 2013, p. 358).

Reading

If we look back at previous chapters and recollect what there is to know about a word and how this knowledge can be efficiently acquired, we might say that written texts provide a considerable number of various elements of knowledge. We can recognize a word's spelling, its meaning (if we can infer it successfully), grammatical structures, collocations, or usual

environments of use (frequency and register). Depending on the type of texts (novels surely differ from posts on social media in a number of ways), we are enabled to encounter the same word multiple times, see its relations to other words regarding topic (Thornbury, 2002, p. 58), examine it in various contexts and thus, besides other things, actively recall what we know, and also obtain deeper insight into already known words.

In addition to this, texts are one of the most frequent sources of unknown words (McCarthy, 1990, p. 117; Dąbrowska, 2009, p. 202). Therefore, they are appropriate not only for consolidating known information but also for coming across new words. However, the proportion of unknown items needs to be relatively low so that the text is understandable and guessing from context is possible. Nation (2013, p. 222) estimates that 95-98% of words in a text need to be familiar so those two conditions are met.

But knowing most of the words and reading itself may not ensure that learning will occur (Pavičić Takač, 2008, p. 17) or that it will be sufficient (Schmitt, 2000, p. 151). Especially in extensive reading (reading for pleasure), an immense quantity of reading is required for incidental learning to take place (Nation, 2013, pp. 356-357). A learner can make reading more efficient for vocabulary growth if he/she pays attention to new words and studies them (intensive reading) [p. 426]. Nevertheless, the best approach is combination of both types of reading (p. 348). Perhaps the only downside of reading may be the great amount of time that learners need to devote to it.

We could see that flashcards seem to be more powerful than word lists, which can nevertheless also be useful. Dictionaries are sources of information which enrich the initial meaning knowledge of new words, and together with previous conscious study can be best utilized in reading. In conclusion, although there are many more methods than listed here, and each contributes to vocabulary learning to a certain extent, all are efficient only if used appropriately. Since it is essential to learn words deliberately as well as incidentally (Schmitt, 2008), the most appropriate and effective approach is to use combination of more learning methods.

Practical Part

5   Introduction to the Research

The theoretical part provided a brief review of efficient vocabulary learning approaches and methods. The aim of the practical part is to find out how students of English learn new words, and if they learn them according to the findings from the theoretical part. At the same time, the survey tries to examine whether there are any factors which influence the learning process.

Research method

The research is quantitatively oriented, meaning that data from a large number of respondents need to be obtained. The most convenient tool for achieving this is a questionnaire. The data collecting was administered online, mainly for three reasons: more respondents can be approached this way, it is time-flexible for the respondents to fill in the questionnaire, and it is safer due to the epidemic situation.

The questionnaire consisted of an introduction, which stated the purpose of the survey, and two sets of questions. In the first set, there were three questions regarding students' gender, study programme and form of studies. The second set was composed of ten questions about students' learning and their attitudes towards vocabulary. There were seven questions where only one option could be selected and three questions where multiple choices were possible (including an "other" option, where respondents could write their own answers). A blank questionnaire can be found in Appendix 1.

Subjects of the research

The questionnaire was distributed via a group email among students of English at the Palacký University, the Faculty of Education. The subjects were chosen intentionally from this particular university and faculty. Roughly over 650 students were approached to fill in the questionnaire. From this number, there were 584 students of Bachelor's and Master's degree in full-time and part-time form of studies who, at the time, were actively studying, and 74 who were prolonging their studies. In total, the questionnaire was completed by 145 students. However, the total number of valid answers was 144 because one respondent did not provide necessary information for the subsequent analysis and was, therefore, removed out of the sample.

Pilot stage

The aim of the pilot stage was to test the questionnaire on a smaller number of students to discover potential imperfections. 24 respondents completed the survey. After answering all questions, they were given room for feedback. The respondents were asked if there was anything that they would add or that they felt was missing in the questionnaire. The feedback was optional, and only four students commented. They found nothing wrong and would not add anything. After the feedback from the pilot stage, nothing was changed in the questionnaire, and it was sent to all targeted students of English.

6   Analysis of Questions

The following subchapters analyse results from the second set of questions of the questionnaire. Each question is firstly discussed individually, and then the answers are examined in relation to other questions. The last subchapter is dedicated to the overall conclusion from the results.

The first set of questions regarding respondents' basic information shows that from the total number of students (144) 34 were male (23.6%) and 110 (76.4%) were female. Next, 104 (72.2%) study for bachelor's degree and 40 (27.8%) for master's degree. Lastly, 108 students (75%) study full-time and 36 (25%) part-time. Although there is a considerable disproportion in answers in each question, the information about gender, study programme and form of studies will try to serve as criteria for examining the results of the second set of questions.

6.1   Question 1
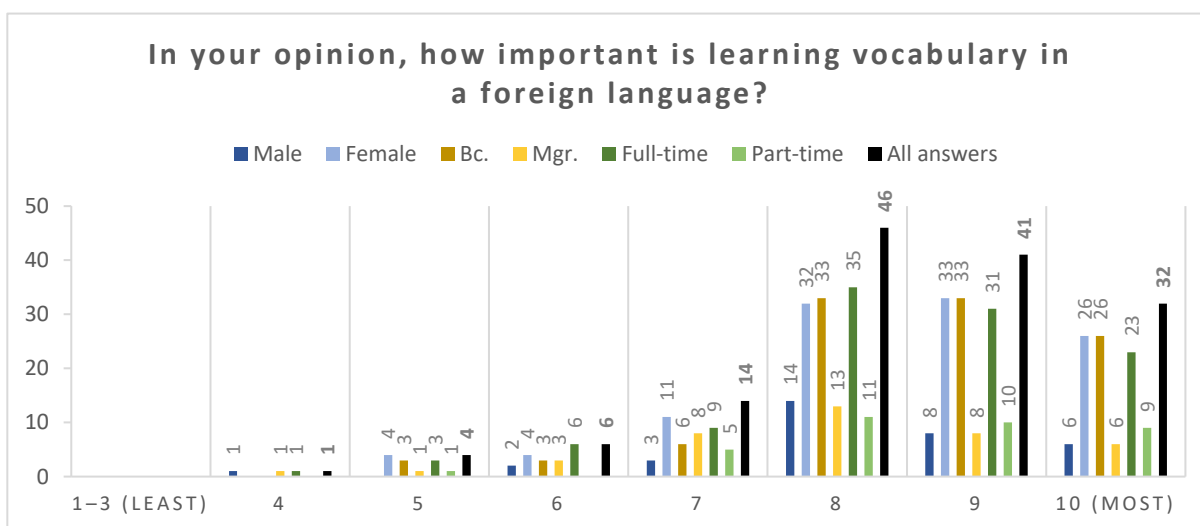
Figure 1: Importance of Vocabulary

The purpose of the first question was finding out how important is learning vocabulary in language acquisition for students, and if the degree of importance affects their success and the way they approach learning it. From the total number of respondents, the vast majority (119≐82.6%) regards vocabulary as a very important (8-10) aspect of language learning, with 32 respondents (≐22.2%) regarding it as the most important (10). However, the option with most answers (46≐31.9%) was "8". The rest of the students (25≐17.4%) perceives vocabulary as less important (4-7). Options 1-3 (not important) were not chosen by anyone. If we examine the graph in the proportion of answers to total number of respondents in a respective group – gender, study program and form of studies (henceforth GPF) – respondents studying full-time and part-time usually answer similarly

(differing by 1-5%, with the exception in options 4-6 where full-time students dominate). Regarding gender, females tend to perceive vocabulary as more important than males (with the exception in option 8, where more males answered in the ratio of 41%:29%). Students of the bachelor's degree regard vocabulary as more important than students of the master's degree (in option 10 in the ratio of 25%:15%, and 31.7%:20% in the option 9).

Question 6 about the amount of forgetting (see 6.6) focuses on the question of success. From the total number of answers, almost 90% of the respondents believe they forget 30-70% of new words. Only 7%, who rated vocabulary as very important (8-10), forget 10-20%. The proportion of those who forget less than 50% and those who forget more than 50% is relatively the same (6:4) in both groups of respondents (rating vocabulary as very important [8-10] and as less important [4-7]). From this finding we may conclude that the degree of importance does not correlate with amount of success (forgetting).

Students' approach to learning vocabulary (frequency of learning, see 6.3; and frequency of reviewing, see 6.9) in relation to the degree of importance has shown that those perceiving vocabulary as very important (8-10) tend to be more conscious about the frequency of learning and reviewing (20% from this group learns at least once a week and 21% reviews a word at least once, whereas by the "less important group" [4-7] 12% learns at least once a week and only 4% [1 person] reviews a word at least once). We can conclude that students learn and review more often if vocabulary is more important to them.

6.2 Question 2

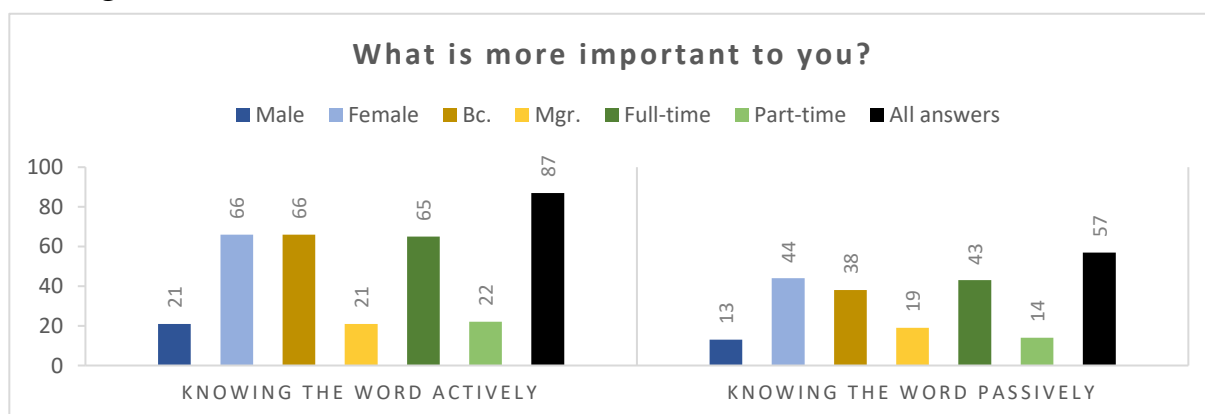*Figure 2: Active or Passive Knowledge*

From the graph we can see that for the majority of respondents (60.4%) it is more important to know words actively (i.e. being able to use words in their speech or writing). Regarding gender, there are no differences in the proportion of answers – the ratio of both groups (male and female) is 6:4 (active:passive knowledge). The same ratio applies also to both

forms of studies (full-time students choosing more the option "active knowledge"). A slight difference can be seen in the study programs. For 63% of students of the bachelor's degree it is more important to know words actively, which, again, results in the ratio 6:4. Students of the master's degree were more equal in their choices – 52.5% selecting "active" and 47.5% "passive".

As it was stated in the theoretical part (p. 15), more effort is needed to learn vocabulary productively than receptively. Consequently, we may assume that the students for whom active knowledge is more important (Group 1) would use more techniques of learning vocabulary (see 6.5) and review words more often (see 6.9) in order to "put more effort" into productive learning. After inspecting how many methods every learner from both groups (active and passive) uses, it was found that on average students from Group 1 use five and "passive" students (Group 2) use four techniques. Furthermore, 73.5% of respondents who create their own sentences/phrases were from Group 1. This technique may enhance productive knowledge, and we can see that students who want to know words productively use an active approach. Despite the fact that the number of methods ranged relatively greatly, we may conclude that Group 1 puts more effort into learning. Regarding reviews of vocabulary, the majority of both groups (active and passive) revises irregularly. However, 26.4% from Group 1 reviews a word at least once (more encounters help to transfer a word into productive knowledge, p. 9), whereas only 12.3% from the other group does likewise. Furthermore, only 2.3% (2 respondents) in Group 1 never review vocabulary, but the percentage in Group 2 is much higher – 17.5%. Here we can see that, again, "active" students are more conscious about reviewing. From these results we may deduce that respondents for whom active knowledge of words is more important work slightly harder than the Group 2.
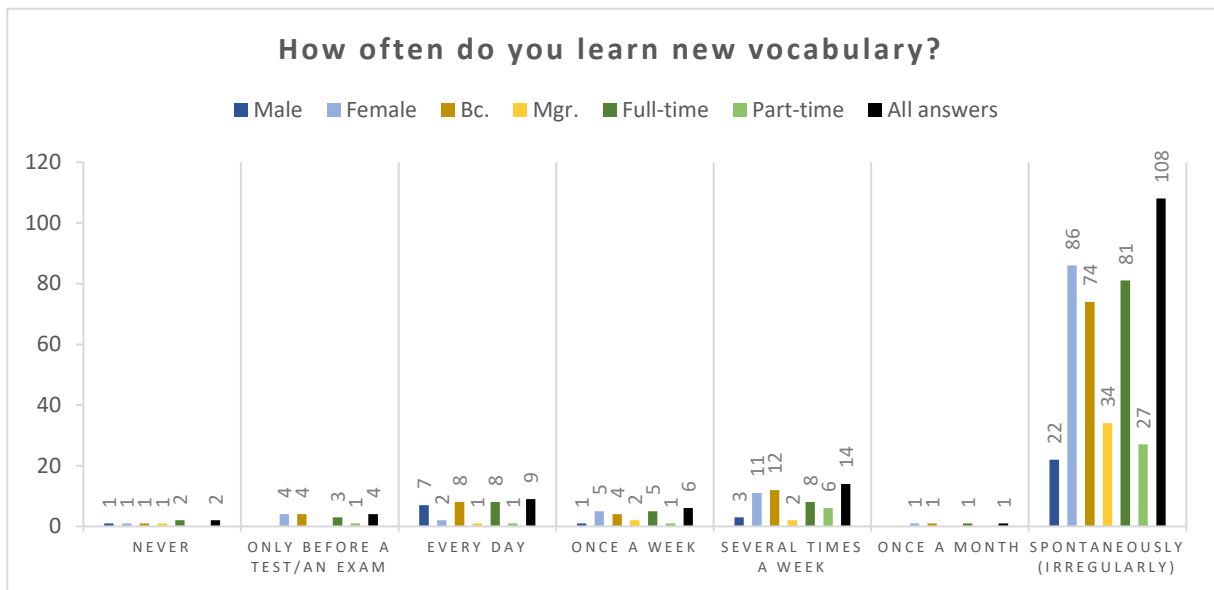
6.3 Question 3

Figure 3: Frequency of Leaning

The results of the third question show that 75% of all respondents learn new vocabulary irregularly. 20.8% of students (30) learn systematically – with the exception of one respondent they learn at least once a week. Four respondents (2.8%) learn new words only before a test or an examination. There are only two students (1.4%) who never learn vocabulary. It would seem logical to exclude these two respondents from the overall sample since they do not learn new vocabulary, and therefore they would have no value for the analysis. However, after closer inspection in relation to question 7 about the need to consciously study vocabulary in order to learn it (see 6.7), it was found that one respondent does not need to consciously study a word in order to learn it, and the second one can learn some words unconsciously. From this finding we can conclude that these two students do not consciously learn new words, but at the same time they are aware of the fact that they can learn new words unintentionally.

When examining the results in relation to GPF, the greatest difference regarding gender is in the option "every day" where only 1.8% of all females learn this way. The proportion of males is much higher – 20.6%. Study programs differ the most in the option "irregularly" with 71% of all bachelors and 85% of all masters. In the same option, both forms of studies have the same percentage of respondents – 75%. Although there were some interesting differences in some options (described above), the overall results examined in the relation to GPF showed nothing significant.

6.4 Question 4

Where do you get new vocabulary? (More choices possible)

Legend: ■ Male ■ Female ■ Bc. ■ Mgr. ■ Full-time ■ Part-time ■ All answers

Songs
- Male: 26
- Female: 94
- Bc.: 85
- Mgr.: 35
- Full-time: 94
- Part-time: 26
- All answers: 120

Movies/TV series
- Male: 29
- Female: 101
- Bc.: 94
- Mgr.: 36
- Full-time: 103
- Part-time: 27
- All answers: 130

Books/newspapers/magazines
- Male: 23
- Female: 87
- Bc.: 78
- Mgr.: 32
- Full-time: 84
- Part-time: 26
- All answers: 110

Online articles
- Male: 26
- Female: 77
- Bc.: 73
- Mgr.: 30
- Full-time: 78
- Part-time: 25
- All answers: 103

TV
- Male: 11
- Female: 23
- Bc.: 23
- Mgr.: 11
- Full-time: 19
- Part-time: 15
- All answers: 34

Radio
- Male: 4
- Female: 13
- Bc.: 11
- Mgr.: 6
- Full-time: 11
- Part-time: 6
- All answers: 17

YouTube
- Male: 30
- Female: 89
- Bc.: 89
- Mgr.: 30
- Full-time: 95
- Part-time: 24
- All answers: 119

Social media
- Male: 28
- Female: 82
- Bc.: 83
- Mgr.: 27
- Full-time: 90
- Part-time: 20
- All answers: 110

Speaking with people
- Male: 12
- Female: 40
- Bc.: 38
- Mgr.: 14
- Full-time: 37
- Part-time: 15
- All answers: 52

Texting with people
- Male: 13
- Female: 33
- Bc.: 38
- Mgr.: 8
- Full-time: 36
- Part-time: 10
- All answers: 46

School (lectures, lessons)
- Male: 27
- Female: 93
- Bc.: 88
- Mgr.: 32
- Full-time: 95
- Part-time: 25
- All answers: 120

Job
- Male: 5
- Female: 14
- Bc.: 9
- Mgr.: 10
- Full-time: 9
- Part-time: 9
- All answers: 19

Computer games
- Male: 25
- Female: 22
- Bc.: 38
- Mgr.: 9
- Full-time: 41
- Part-time: 6
- All answers: 47

Textbooks (not used in school)
- Male: 5
- Female: 13
- Bc.: 12
- Mgr.: 6
- Full-time: 10
- Part-time: 8
- All answers: 18
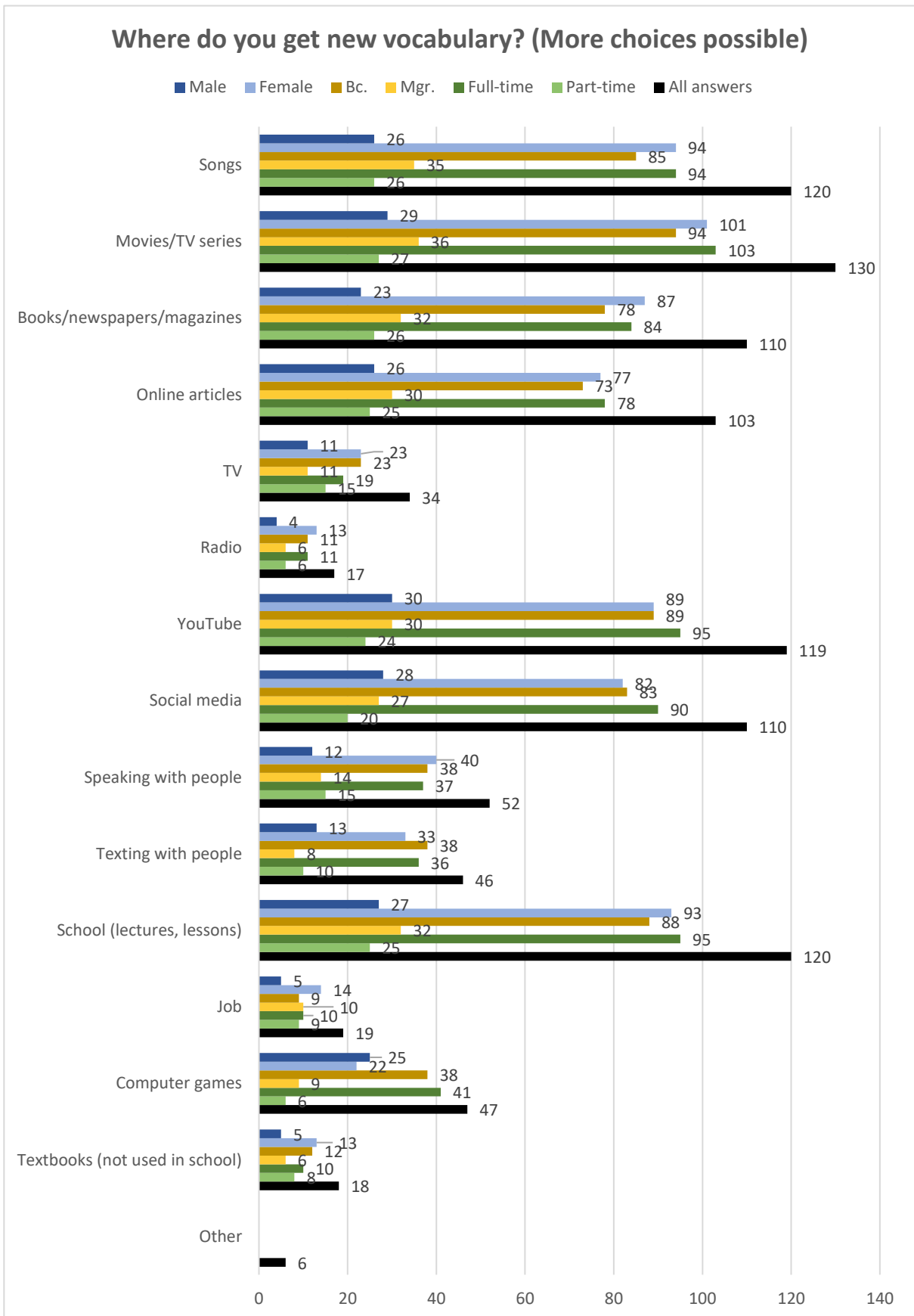
Other
- All answers: 6

Figure 4: Sources of New Vocabulary

In this question, respondents were allowed to choose multiple options. Although the number of choices ranged greatly among students, each selected at least two sources of vocabulary. The rounded average of number of sources is seven. Most frequently, respondents come across new vocabulary when watching movies or TV series (90.3%). Other major sources are songs, lectures in school (both 83.3%), YouTube (82.6%); books/newspapers/magazines and social media (both 76.4%), and online articles (71.5%). The rest of the options chose less than 36.1% of respondents; radio being the least selected (only 11.8%). Six respondents also added their own answers (see appendix 2). Two of them use language learning applications; one spontaneously thinks of a word, and if it is unknown, she learns it; and three students only emphasized an already selected option.

From the GPF point of view, the greatest difference was in the option "games" where males dominated (73.5% of all males). This option was chosen only by 20% of females. Another significant disproportion was regarding job – between bachelors and masters it was 8.7%:25% and between full-time and part-time students 9.2%:25%. Other major disproportion regarding form of studies (full-time:part-time) was in the options "movies/TV series" (95%:75%), "TV" (17.6%:41.6%), "social media" (83%:55.5%), and "textbooks" (9.2%:22%). A possible explanation for the last ratio could be that part-time students attend school only once a week, and therefore they must rely on studying from materials, not from lectures themselves. After all, this assumption may be confirmed by another difference between students of both forms regarding the option "school", where the ratio is 88%:69%.

Having a variety of sources is important to encounter words in different contexts and to encounter them repeatedly (pp. 10-11). Especially the aspect of multiple occurrences of the same word is perfectly present in songs because people usually have dozens of songs that they like to listen to more than just once. Regarding movies, videos, or various kinds of texts, there is a high likelihood that a word will be encountered multiple times. Furthermore, there is the surrounding context which may help understanding the meaning and the use of the word. Nevertheless, the same applies also to less selected methods. Here we can at least see respondents' preferences and also the fact that, for example, TV or radio do not belong to frequently used devices. Overall, the results from this question show that students usually draw vocabulary from multiple sources, which is one crucial aspect of effective learning.
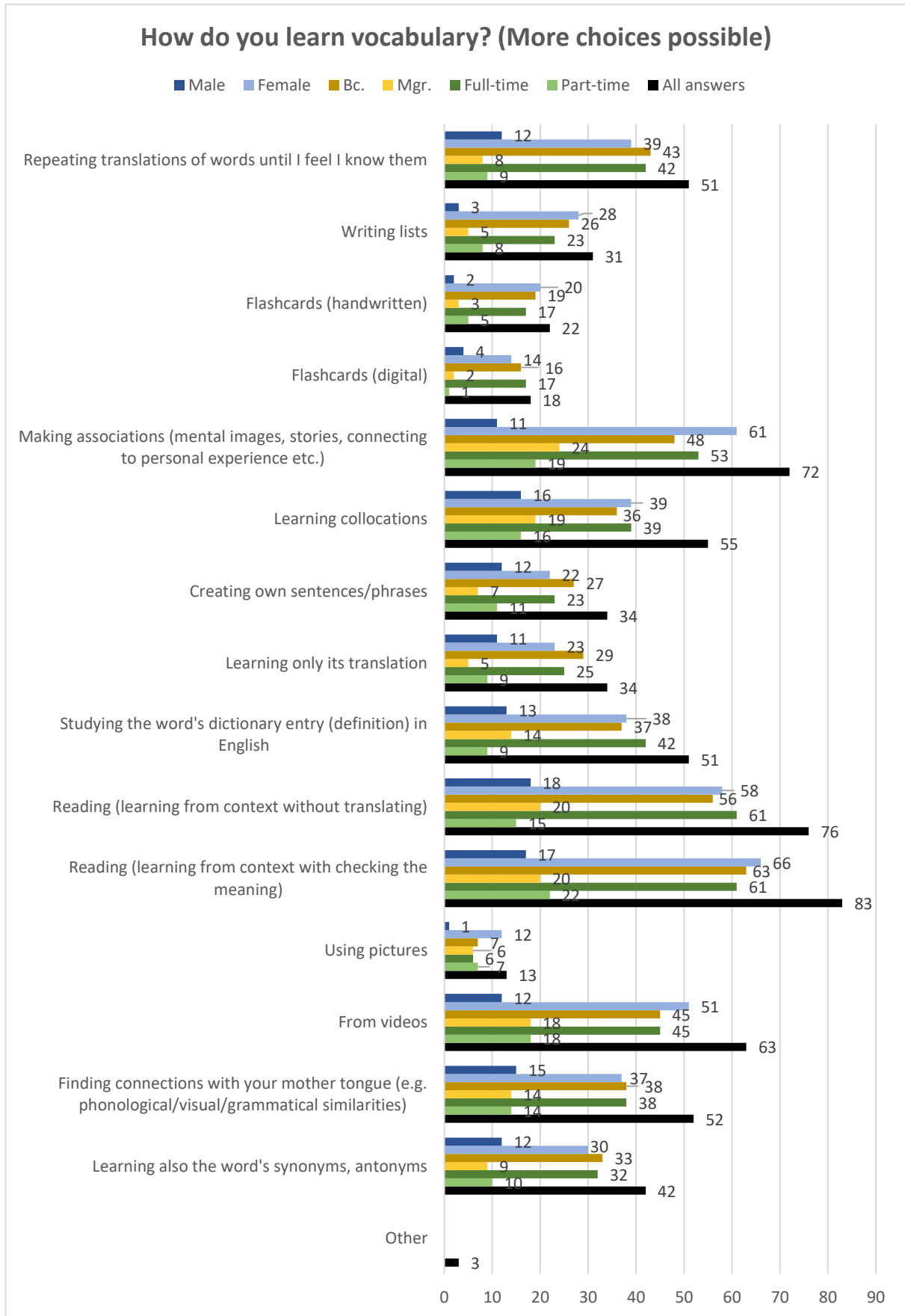
6.5   Question 5

Figure 5: Learning Methods

In this question, respondents were again allowed to choose multiple options. The number of selected techniques ranged greatly among students. Nevertheless, the rounded average of number of used methods is five. The most popular technique of learning vocabulary is reading – 102 respondents (70.8%) selected at least one type of reading (extensive without translating, intensive with checking the meaning). From this number slightly over half of students read both ways, which is regarded as the efficient method of learning vocabulary through reading. Learning meanings of words deliberately – repeating translations (rote learning), word lists and flashcards – is used by 22-35% of all students, with rote learning being the most common technique. 42% of those who use word lists learn in combination with flashcards. Flashcards are only marginally more popular than lists. Personalisation (creating personal associations, such as mental images or stories) was selected by 50% of respondents. This process may enhance learning and memory (p. 11), and we can see that it is used fairly frequently. On the other hand, using pictures, as opposed to mental images, is the least selected method (only 9% of all students). In the graph we can also see that 38% of respondents learn words in combination with collocations, and 23.6% use new language items in sentences or phrases (thus creating greater units). Overall, most students seem to use a variety of learning techniques (as Schmitt stated on page 11, the more work with a word improves learning), combing deliberate and incidental learning. Both approaches are regarded as efficient (p. 19).

The only noticeable differences regarding GPF were in using word lists and handwritten flashcards (more females and bachelors than males and masters tend to use these), making associations (55% of females:32% of males), using pictures (females, masters and part-time students use them more than males, bachelors and part-time students), and using digital flashcards (more bachelors and full-time students than masters and part-time students use them).

6.6 Question 6

How much vocabulary do you think you forget after learning it?

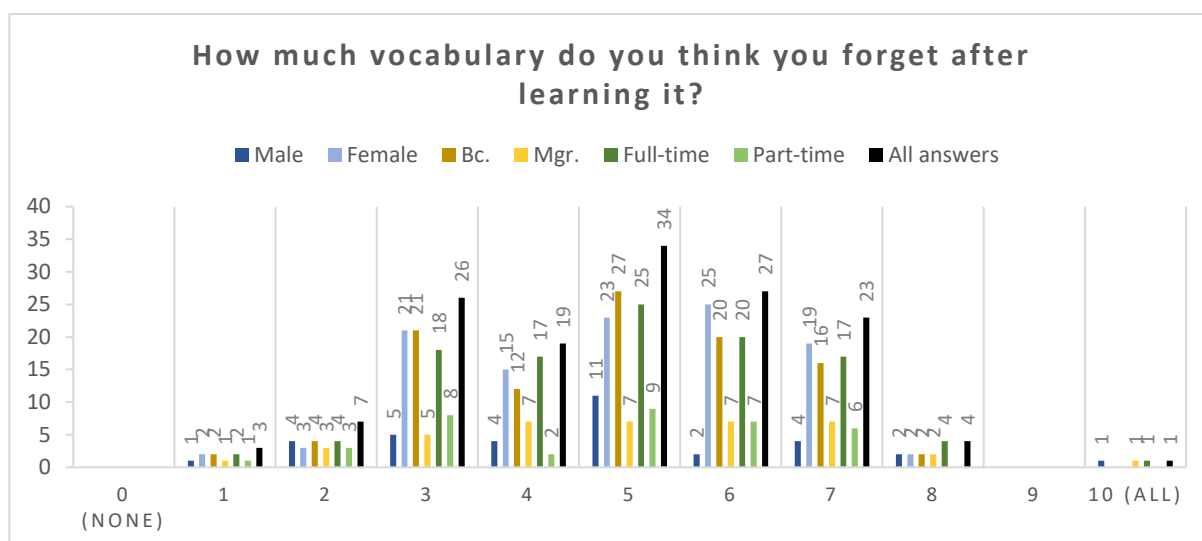■ Male ■ Female ■ Bc. ■ Mgr. ■ Full-time ■ Part-time ■ All answers

Figure 6: Amount of Forgetting

Interesting results were found in the question about the amount of forgetting. The most frequently selected option was "5", which can be regarded as 50%. According to students' opinion, 23.6% believe they forget this amount of vocabulary after they have learnt it. The percentage of respondents who forget less (10-40%) is exactly the same as the percentage of those who forget more (60-100%) – 38.2%. However, there was only one student who claimed to forget everything, and none selecting "90%". Therefore, it is more accurate to say that the respondents who forget more are in the range between 60-80%. As we can see from the graph, there was nobody to remember everything. The majority of respondents (89.6%) claim to forget between 30-70% of words after learning them, which confirms Ebbinghaus's claim that large proportion of what we learn is forgotten shortly after (p. 11).

The question is whether the frequency of reviewing learnt words (see 6.9) affects the amount of forgetting. According to the findings from the theoretical part, more encounters (reviews) with the word enhance its retention in our memory (pp. 10-11). The results of closer investigation show that, surprisingly, the only three respondents who claim to forget 10% actually never review words. Six out of seven students who forget 20% review spontaneously, the seventh respondent never revises vocabulary. The most unexpected finding was about the only respondent who believes to forget everything. This student filled in that he learns and reviews vocabulary every day, and ticked all options regarding sources of new words (adding that he comes across them everywhere). However, his only learning technique are digital flashcards. A possible explanation for this phenomenon could be that he uses this method inappropriately, and, obviously, also inefficiently. Other degrees of forgetting do not show any

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significant similarities from which any generalizations could be concluded. We can only see that higher rates of forgetting may be caused by unsystematic reviews and lack of spaced repetition in students' learning. Research shows (p. 11) that spaced repetition/systematic revising makes learning and memory better.

The criterion of GPF showed no relevant differences between the groups. The individual proportions in each area were basically balanced.
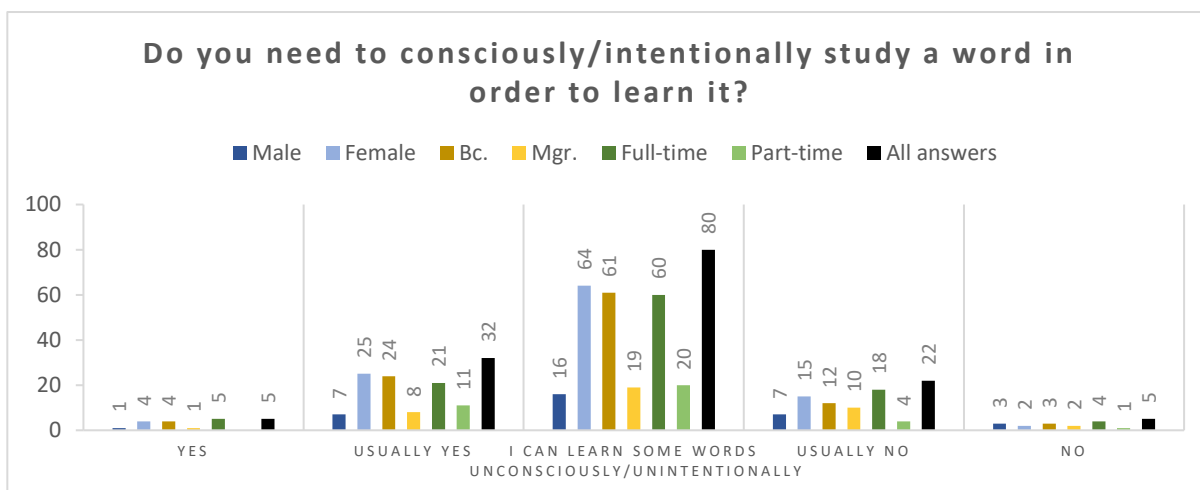
6.7 Question 7

Figure 7: Conscious Study of Words

It is evident that conscious study of words consolidates the items in our memory better and faster than unintentional learning. But it does not mean that learning unconsciously is impossible. In fact, 55.5% of respondents believe that they can learn some words this way. This also confirms Schmidt's claim that incidental learning is possible (p. 12). However, the questionnaire did not examine what kinds of words they can learn unintentionally (this would surely provide interesting data about this topic) because, for the purposes of this project, it would go into unnecessary detail. Examining the graph more, 15.3% usually do not need to consciously study the item in order to learn it, and 3.5% do not need to do it at all. On the other hand, 22.2% usually need to intentionally study a word, and 3.5% can learn a new word only by consciously studying it. Although the majority of respondents in each group (GPF) can learn some words unintentionally, most of the rest of respondents in both forms of studies, bachelors, and females usually need conscious attention to new words. Only the majority of the rest of males and masters usually do not need to consciously study vocabulary.

Let us now examine whether the amount of conscious attention influences how much students forget. This relation, however, cannot be viewed as very relevant because I believe that

students based their estimation of the amount of forgetting on vocabulary they learn intentionally. Nevertheless, the comparison of these two questions showed an interesting finding. On the opposite ends of the scale (need and no need of conscious study) there are five respondents. Those who do not need to learn words intentionally claimed to forget 10-30% (only one student more - 50%). By contrast, those who need to study words consciously claimed to forget 50-70%. Furthermore, the options "usually yes" and "usually no" show similar trend. 31% of the "usually yes" respondents forget 20-40%, and 65.6% forget 50-80%; whereas 54.5% from the "usually no" group forget 20-40%, and 40.9% forget 50-80%. It may be hypothesized that students who need to study words consciously seem to forget more than the ones who do not need conscious attention. This, however, is against Schmitt's suggestion that more attention aids learning (p. 11).
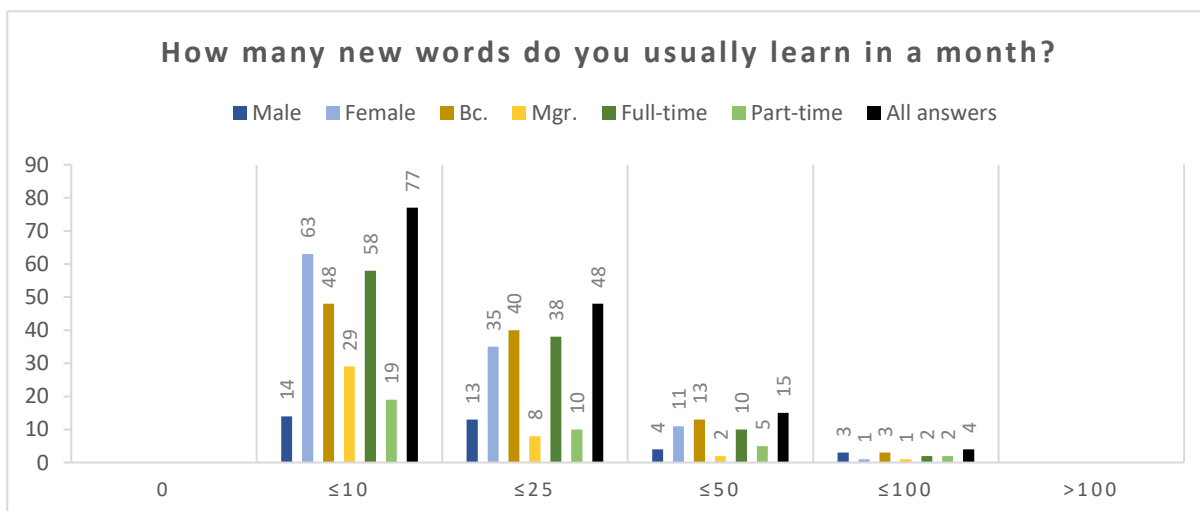
6.8 Question 8

Figure 8: Amount of New Vocabulary

This graph about the number of new words students learn in a month shows that 53.5% of respondents learn ten or less words, 33.3% learn 25 or less, 10.4% learn 50 or less, and only 2.8% learn up to 100 words. There was not a single respondent who learns more than 100 words or none at all. However, students' answers are rough estimates and the actual numbers may be considerably different for two reasons – new words can be learnt unconsciously (and as we saw in the previous question, many students believe they can learn some this way) and some can be guessed from context. The question is whether respondents were aware of these facts and counted such words. But this was not part of the research. Also, when we look at the number of new words students learn in a month from the perspective of forgetting, and take into consideration the fact that on average learners forget 50% of what they have learnt, this too impacts the actual amount of new vocabulary students acquire.

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Regarding study program, students of the bachelor's degree (53.8% of them) seem to learn more words (more than 10) as opposed to students of the master's degree (27.5% of them). Similar applies to gender – 58.8% of males learn more than 10 words as opposed to 42.7% of females. There were no other significant differences when comparing GPF.

If we analyse the data about the number of words students learn in a month in relation to the question about the importance of vocabulary in language learning (see 6.1), we find out that those who claimed to learn 50 or less and 100 or less were the ones who regard vocabulary as very important (8-10). Only one respondent rated it as less important (7). Comparing the percentages of respondents between the options "10 or less" and "25 or less", there was found no prominent connection with the importance of vocabulary. Nevertheless, we may assume that students for whom vocabulary is very important may learn more words than other groups.
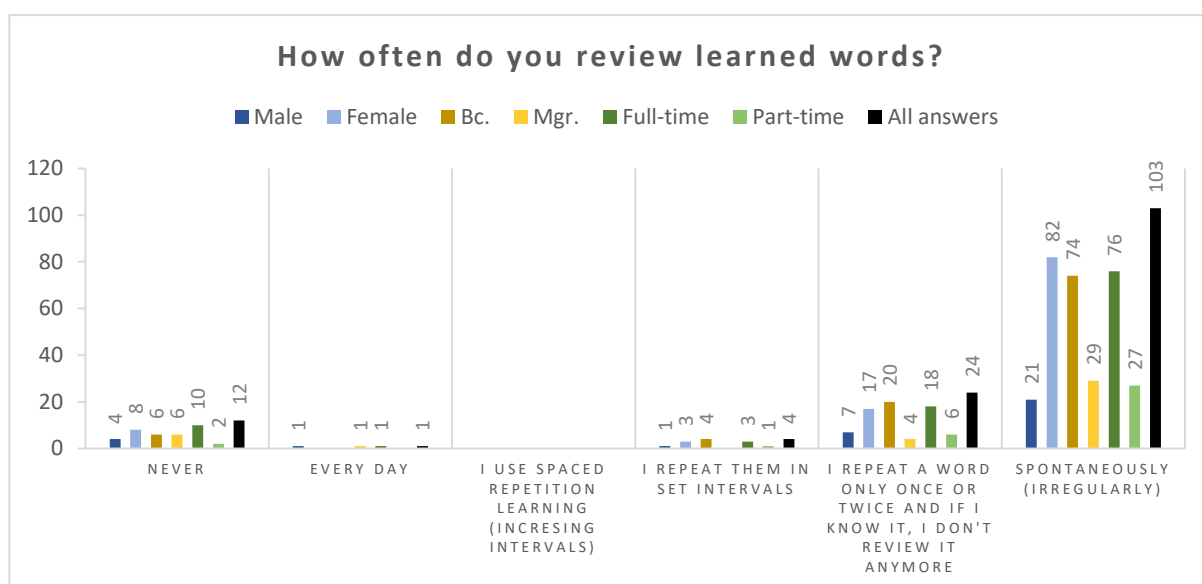
6.9   Question 9

Figure 9: Frequency of Reviewing Words

The results of this question were partially discussed in 6.1, 6.2, and 6.6. Let us now evaluate them more generally. 71.5% of all respondents review learnt words irregularly, meaning that no other option was suitable for them. But what exactly "irregularly/spontaneously" means, we do not know. At the same time, 74.8% of those who chose this option also learn vocabulary irregularly. The percentage of students who repeat a word at least once or twice is 16.7%. Revising vocabulary by the means of distributed repetition does mere 2.8% of students. Moreover, they use only set intervals; there was no respondent who reviews words in increasing intervals. One student reviews vocabulary every day. 8.3% of all respondents never review learnt words. This group was specific for one reason – it was the

only group where the percentage of the importance of knowing words passively dominated over the percentage of knowing the word actively (specifically 83.3%:16.7%). In other options, the ration was the opposite (38.8%:61.2% or 29.2%:70.8%), and the importance of active knowledge prevailed. Regarding GPF, the only larger difference was related to the "never" option – higher percentage of males, masters and full-time students chose this option in comparison to females, bachelors and part-time students (specifically 11.76%:7.27%, 15%:5.77%, and 9:26%:5.56%).

When we look back at the amount of vocabulary students forget and contrast it to the frequency of reviews, it can be assumed that there is a possible correlation. Because students review mostly irregularly, and the amount of forgetting is rather great, they could lower this amount if they implemented more conscious and systematic revising into their learning. The best approach according to the theoretical part (p. 11) would be learning new vocabulary by means of spaced repetition, preferably with increasing intervals so that the words that need to be reviewed do not accumulate too much.
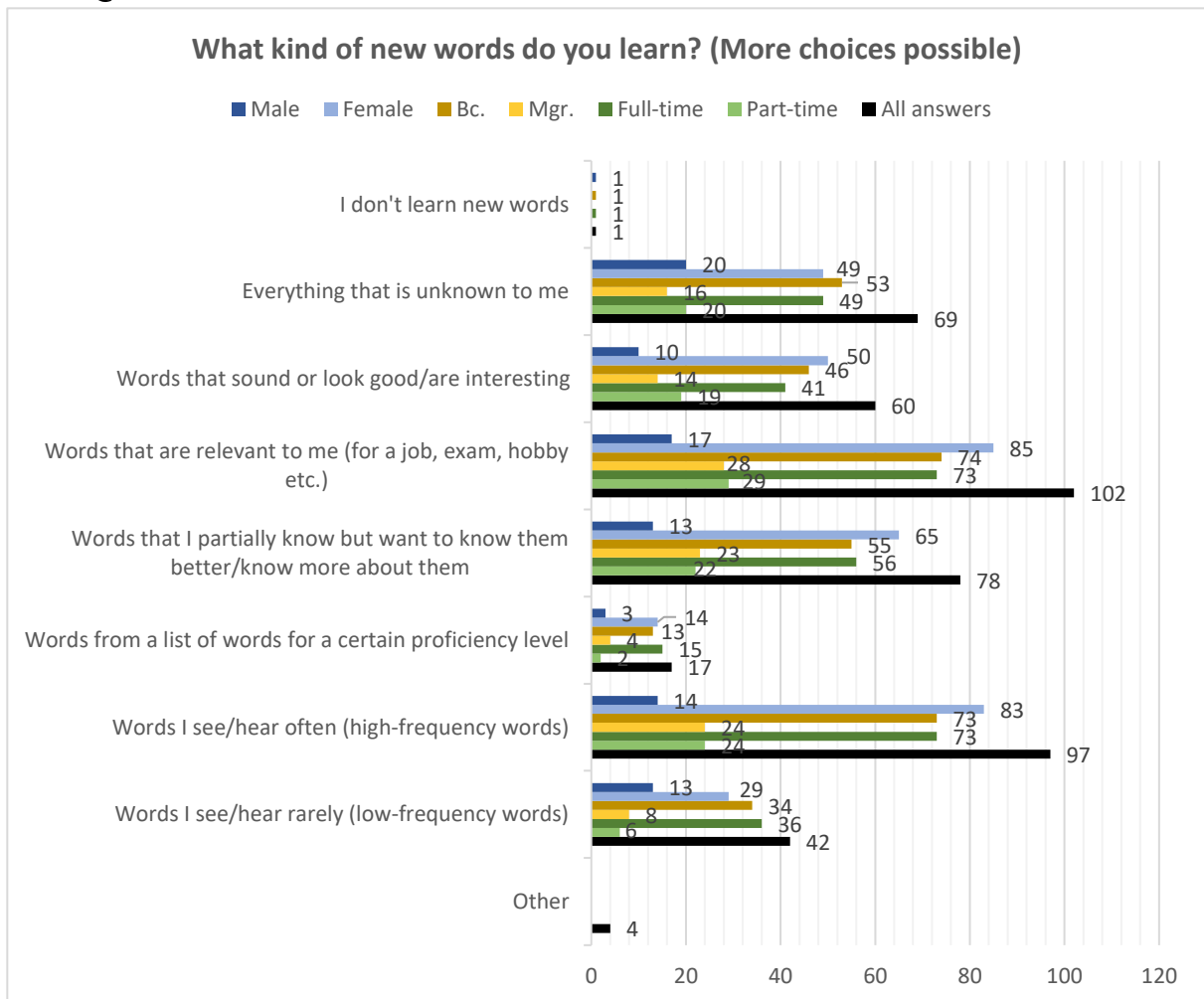
6.10 Question 10

Figure 10: Types of New Words

In this question, respondents were allowed to choose multiple options. 70.8% of all respondents learn words that are relevant to them. If students learn words that they know they will either use or come across later (e.g. an exam or hobby), there is a higher probability that the words will be encountered more than once and thus also more likely to be remembered. The same applies for words that we can see or hear often. This kind of vocabulary was selected by 67.4% of respondents. The third most commonly chosen option (54.2%) were partially known words which students want to know better or learn more about them. This serves two purposes – students consolidate what they already know, and connect new knowledge to the previous one. 47.9% of students learn everything that is unknown to them. Learning words that sound or look interesting chose 41.7% of respondents. This may make the process of learning them more efficient because the interest functions as motivation which deepens the processing of the word. The more we process something, the better we retain it (p. 11). Two least selected kinds of vocabulary are words seen or heard rarely (29.2%) and words from a proficiency level lists (11.8%). There was only one respondent who claimed to not learn new words. However, he also claimed to learn words spontaneously, selected to learn 10 or less words a month, and he does not need to consciously study a word in order to learn it. Therefore, we may assume that he does not learn new words intentionally. Four respondents provided their own answers (see appendix 2), which did not give any valuable information.

The most prominent differences when comparing gender were in the options about interesting words, relevance, partially known words, and high-frequency words. In these kinds of words, the percentage of females who chose this option was usually 20-30% higher than the percentage of males. Regarding study programs and form of studies there were no significant disproportions.

6.11 Overall Conclusion from the Results

The first research question wanted to examine how students of English approach learning vocabulary. The results of the questionnaire show that students perceive vocabulary as very important. Although they mostly want to be able to use words productively, there is a considerable group for whom passive knowledge is more important. Students usually learn small amounts of relevant vocabulary, but, at the same time, they can learn words unintentionally too. The most common sources of new vocabulary are audio sources (movies, TV series, songs, videos). Nevertheless, texts also provide lots of new words. Learning, as well as reviewing, is mostly spontaneous. Only the minority of respondents uses one or two

techniques of learning vocabulary. The rest combines more methods together. The amount of forgetting ranged greatly, but on average students forget half of what they have learnt.

When we compare the findings of the practical part to the findings of the theoretical one, we can see that most students adopt at least some efficient principles into their learning. These regard more sources of vocabulary, where words can be seen in different contexts, and combination of more learning methods (the more a word is processed, the better it is remembered). In addition to this, a great proportion (but not the majority) of students learn collocations, or use words in sentences (= learning in greater units). Most respondents take a contextualized learning approach by means of reading, whereas decontextualized learning is less frequent (although also important). However, one aspect of efficient learning is missing in students' approach – spaced repetition. Implementing it could improve their learning. Overall, we might say that, even though there are exceptions and not all students learn according to the principles in the theoretical part, efficient aspects of learning are present by the majority of students. Nevertheless, there is still room for improvement by all students.

The only factors which seem to have impact on students' learning are the importance of vocabulary and type of knowledge (active or passive). Students for whom vocabulary is more important tend to learn and review more often than those for whom it is less important. Similarly, students who want to know new words productively tend to use more learning methods, and thus process the word more thoroughly.

Regarding the factors of gender, study program, and form of studies, the only substantial differences were in the importance of vocabulary, where females and bachelors perceive vocabulary as more important in contrast to males and masters, and the amount of vocabulary students learn in a month, where males and bachelors seem to learn more than females and masters.

However, all findings and resulting generalizations must be perceived with the fact in mind that the questionnaire was based on respondents' opinions or estimations and not on actual measurements (e.g. the amount of forgetting). This applies for many of the questions, such as the number of techniques students use when learning new words. To obtain completely valid data, respondents would have to be observed when studying vocabulary. Furthermore, the comparisons of gender, study programs, and forms of studies were made with obvious disproportion between the representatives in each group. Again, to acquire more accurate data, the ratio of respondents in each group would have to be equal.

Conclusion

The central purpose of this study was to make a case for the superiority of greater units (or combination) over isolation. The theoretical part discussed what is perceived as greater units.

Firstly, we could see that words are not isolated units that can be acquired by learning only their translations. Knowing a word means knowing a combination of its aspects, such as collocations, grammar, conditions of use, etc.

Secondly, it was emphasized that learning words is most efficient if we use approaches which enhance long-term retention of vocabulary. These include, for example, the deliberate study of a word, multiple encounters of the same item in different contexts, or making connections between new words and already acquired knowledge of other words. Furthermore, the long-term effects may be boosted if we review learnt words systematically by means of spaced repetition together with testing our knowledge actively. The best results occur when we implement a combination of more methods into our learning. Additionally, it is important to supplement conscious study of words with large quantities of unintentional learning.

Thirdly, examples of word connections were presented. Individual words enter into many relations with other words. They form greater units, such as collocations or sentences, which provide us with more valuable information than isolated items. These larger units create the real language. Therefore, it seems logical to learn with the help of these combinations. Other word relations, such as synonymy, antonymy, register, or grammatical structures, were discussed. These connections to other words may also aid our learning.

Lastly, selected techniques of learning words were described. Again, a combination of more methods is the best approach to acquire vocabulary. Reading is not only a valuable source of new words but also an important aid in deepening knowledge of partially known ones.

The research of the practical part enabled us to look at how students learn and what are their attitudes towards vocabulary. Most students approach learning spontaneously. They learn small amounts of vocabulary irregularly and review acquired words infrequently. Furthermore, they usually forget a significant part of what they have learnt. The survey also evaluated the efficiency of their learning. The majority of students use a variety of learning techniques and sources of new vocabulary, which is a good precondition for making the process of vocabulary

acquisition efficient. However, students could benefit considerably more from implementation of spaced repetition into their learning. This method was used almost by no one.

The findings from both the theoretical and practical part may serve students to improve the process of vocabulary acquisition. The results can help teachers understand how students learn and thus adjust their lessons to make teaching words more conscious and efficient.

In conclusion, the bachelor's project provided solid arguments and clear evidence for the thesis that learning in greater units (combinations) is superior to learning in isolation. However, it does not mean that the other approach is incorrect. It only shows that if we can make vocabulary acquisition more efficient, we should do it.

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Appendices

Appendix 1: *Blank questionnaire*

Vocabulary learning

Dear Student of English,

my name is Pavel Nimmrichter and I am a student of English myself. This year I am writing my Bachelor's project on vocabulary acquisition.

The purpose of this questionnaire is to provide data for analysis as part of my research. Your answers will shed some light on people's vocabulary learning styles and ultimately lead to insights on more efficient learning.

First, you will be asked to give some basic information about yourself. But do not worry, the questionnaire is anonymous! Then we'll move on to questions about how you handle vocabulary.

The whole questionnaire will take only a few minutes.

Thank you for your time!

What is your gender?

- ☐ Male
- ☐ Female

Which study programme do you study?

- ☐ Bachelor's (Bc.)
- ☐ Master's (Mgr.)

What is your form of studies?

- ☐ Full-time studies (prezenční)
- ☐ Part-time studies (kombinované)

In your opinion, how important is learning vocabulary in a foreign language?

Not important at all	1	2	3	4	5	6	7	8	9	10	Most important
	○	○	○	○	○	○	○	○	○	○	

What is more important to you?

- ☐ Knowing the word actively (being able to use it when speaking, writing)
- ☐ Knowing the word passively (being able to understand it when seen or heard)

How often do you learn new vocabulary?

- ☐ Never
- ☐ Only before a test/an exam

- ☐ Every day
- ☐ Once a week
- ☐ Several times a week
- ☐ Once a month
- ☐ Spontaneously (irregularly)

Where do you get new vocabulary? (You can choose more options)

- ☐ Songs
- ☐ Movies/TV series
- ☐ Books/newspapers/magazines
- ☐ Online articles
- ☐ TV
- ☐ Radio
- ☐ YouTube
- ☐ Social media
- ☐ Speaking with people
- ☐ Texting with people
- ☐ School (lectures, lessons)
- ☐ Job
- ☐ Computer games
- ☐ Textbooks (not used in school)
- ☐ Other:

How do you learn vocabulary? (You can choose more options)

- ☐ Repeating translations of words until I feel I know them
- ☐ Writing lists
- ☐ Flashcards (handwritten)
- ☐ Flashcards (digital)
- ☐ Making associations (mental images, stories, connecting to personal experience, etc.)
- ☐ Learning collocations (combination of words that are used frequently together – e.g. red carpet, take a shower etc.)
- ☐ Creating own sentences/phrases
- ☐ Learning only its translation
- ☐ Studying the word's dictionary entry (definition) in English
- ☐ Reading (learning from context without translating)
- ☐ Reading (learning from context with checking the meaning)
- ☐ Using pictures
- ☐ From videos
- ☐ Finding connections with your mother tongue (e.g. phonological/visual/grammatical similarities)
- ☐ Learning also the word's synonyms, antonyms
- ☐ Other:

How much vocabulary do you think you forget after learning it?

	0	1	2	3	4	5	6	7	8	9	10	
Nothing	○	○	○	○	○	○	○	○	○	○	○	Everything

Do you need to consciously/intentionally study a word in order to learn it?

- ☐ Yes
- ☐ Usually yes
- ☐ I can learn some words unconsciously/unintentionally
- ☐ Usually no
- ☐ No

How many new words do you usually learn in a month?

- ☐ 0
- ☐ ≤10
- ☐ ≤25
- ☐ ≤50
- ☐ ≤100
- ☐ >100

How often do you review learned words?

- ☐ Never
- ☐ Every day
- ☐ I use spaced repetition learning (learning words in increasing intervals – e.g. repeating it an hour after learning it, then the next day, a week later, 2 weeks later, a month later etc.)
- ☐ I repeat them in set intervals (e.g. every Friday or every 3 days etc.)
- ☐ I repeat a word only once or twice and if I know it, I don't review it anymore
- ☐ Spontaneously (irregularly)

What kind of new words do you learn? (You can choose more options)

- ☐ I don't learn new words
- ☐ Everything that is unknown to me
- ☐ Words that sound or look good/are interesting
- ☐ Words that are relevant to me (for a job, exam, hobby etc.)
- ☐ Words that I partially know but want to know them better/know more about them
- ☐ Words from a list of words for a certain proficiency level (e.g. B2, C1)
- ☐ Words I see/hear often (high-frequency words)
- ☐ Words I see/hear rarely (low-frequency words)

Appendix 2: *Respondents' answers to the "other" options*

Question 4: Where do you get new vocabulary?

‒ Duolingo, Cake and similar applications

‒ everywhere

‒ from speaking with my friends

‒ mobile app for language learning

‒ Sometimes I just think that I don't know how to say a word in English and search for it intentionally.

‒ Mainly reading books

Question 5: How do you learn vocabulary?

‒ As I read or listen, I just pick up words and their meanings automatically.

‒ I used to be a big fan of Memrise but I haven't done a revision for ages now. Also, my other subject is German for which I make a conscious effort to look up words anywhere I can, making lists even, and revise them somewhat regularly.

‒ Communication with English speakers

Question 10: What kind of new words do you learn?

‒ Those that I don't know yet

‒ The words I'm currently not fully familiar with are usually found in specialized science papers or have fallen mostly out of use. I automatically learn them as I read stuff that interests me, I don't hunt after them.

‒ When I want to express myself and I need a word that reflects my thoughts more accurately than what my current vocabulary can

‒ It differs to the time I need it, feel like it. It is really hard to generalize.

Resumé

Bakalářská práce se zabývá tématem získávání slovní zásoby. Ústřední myšlenkou je tvrzení, že učení se ve větších celcích je efektivnější než učení se slovíček izolovaně. Teoretická část práce zpočátku vysvětluje propojenost slov s mnohými aspekty jazyka, jako je například gramatika či kolokace, a zároveň zdůrazňuje, že k úplnému osvojení slova nestačí pouhý překlad. V další části se práce věnuje paměti a typům učení se. Kombinace více druhů učení se a aktivit se slovem urychluje osvojování slovíček a zlepšuje dlouhodobou paměť. Poté se práce zabývá popisem toho, jak se slova v jazyce spojují, čímž tvoří větší celky, a jaké jsou mezi různými slovy vztahy. Studiem těchto aspektů můžeme celý proces získávání slovní zásoby urychlit. Závěr teoretické části se věnuje vybraným metodám učení se. Užívání více technik je mnohem efektivnější než používání pouze jedné. Praktická část bakalářské práce zkoumá za pomoci dotazníku, jakým způsobem se studenti anglického jazyka na Palackého Univerzitě učí slovíčka. Výsledky jsou zároveň porovnávány se zjištěními z teoretické části.

ANOTACE

Jméno a příjmení:	Pavel Nimmrichter
Katedra:	Ústav cizích jazyků
Vedoucí práce:	Dr hab. Konrad Szcześniak
Rok obhajoby:	2021

Název práce:	Získávání slovní zásoby – učení se slov izolovaně a ve větších celcích
Název v angličtině:	Vocabulary acquisition – learning words in isolation and in greater units
Anotace práce:	Bakalářská práce se zabývá efektivním učením se slovní zásoby ve větších celcích. Teoretická část nejdříve popisuje, co znamená znát slovo. Dále pohlíží na učení z hlediska paměti. Poté ukazuje, jak slovíčka vytváří větší celky. Nakonec popisuje několik metod, jak se lze slovíčka učit. Praktická část následně zkoumá, jestli se studenti učí efektivně podle zjištění z teoretické části.
Klíčová slova:	Efektivní učení, kombinace, paměť, slovní zásoba, způsoby učení
Anotace v angličtině:	The bachelor's project deals with the efficient learning of vocabulary in greater units. The theoretical part firstly describes what it means to know a word. Further, it looks at learning from the point of view of memory. Then it shows how words create larger units. Lastly, it describes several methods of learning vocabulary. The practical part examines whether students learn efficiently according to the findings from the theoretical part.
Klíčová slova v angličtině:	Efficient learning, combination, memory, vocabulary, learning methods
Přílohy vázané v práci:	2
Rozsah práce:	31
Jazyk práce:	Angličtina