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BAKALÁŘSKÁ PRÁCE

Usage of English in Videogames and its Effects on Vocabulary of Gamers

Užití angličtiny ve videohrách a její vliv na slovní zásobu hráčů

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podpis

Firstly, I would like to express my sincere thanks to the supervisor of my thesis PhDr. Klára Matuchová, PhD. The thesis would have never been finished, if it was not for her indispensable insight and advice. The quickness with which she replied to all my questions is very much appreciated. The next ones to thank are my family and my partner Marcela Šubrtová, whose compassion and support carried me through all the tough times I had to face.

ANOTACE

Tato bakalářská práce si klade za cíl prozkoumat případnou existenci spojitosti mezi hraním počítačových her a slovní zásobou hráčů. Teoretická část práce se věnuje vymezení pojmu osvojování cizího jazyka, různým přístupům k této problematice a charakterizování rozdílu mezi osvojováním jazyka mateřského a jazyka cizího. Praktická část se zabývá analýzou výsledků dotazníku, který byl vytvořen pro účely práce a je obsažen v příloze. Výsledky jsou zkoumány z různých pohledů, jejichž syntéza by měla poskytnout vypovídající závěr o existenci, nebo neexistenci, výše zmíněného vztahu.

KLÍČOVÁ SLOVA

Slovní zásoba, Počítačové hry, Osvojování cizího jazyka, Teorie univerzální gramatiky, Mentální lexikon

ANNOTATION

The aim of this bachelor thesis is to reveal the possible correlation between playing videogames and vocabulary of gamers. The theoretical part of the thesis contains a brief definition of the second language acquisition, description of various approaches to this issue and the basic differences between first and second language acquisition. The practical part comprises analysis of the results of the questionnaire that was designed specifically for the purpose of the thesis and which is included in the appendix. The results are analyzed from different perspectives and synthesis of those should offer objective information about the existence, or nonexistence, of the aforementioned correlation.

KEYWORDS

Vocabulary, Videogames, Second language acquisition, Theory of universal grammar, Mental lexicon

Table of Contents

1	Introduction	7
2	Theoretical Part	9
2.1	First and Second Language Acquisition	9
2.2	SLA Theories	10
2.2.1	Behaviourist Learning Theory.....	10
2.2.2	Mentalist Theory of Language Learning.....	11
2.2.3	Interactionist Theory of SLA	12
2.3	Differences between FLA and SLA.....	14
2.3.1	Grammar Acquisition.....	14
2.3.2	Vocabulary Acquisition.....	15
2.4	Learning Types.....	17
2.5	Overview of Videogame Genres	19
2.5.1	FPS	19
2.5.2	RPG	19
2.5.3	Strategies	19
2.5.4	Sport and Racing games	20
2.5.5	Puzzle games	20
2.5.6	Educatory games	20
3	Practical part.....	21
3.1	Description of the Research	21
3.2	Expected Results	24
3.3	Presentation and Analysis of Results	26
3.3.1	Single Lexeme Translations and the Deviations from Expected Results.....	27
3.3.2	Score Frequency Distribution.....	30
3.3.3	Gender of Participants	32
3.3.4	Length of Previous English Studies	34
3.3.5	Length of Previous Gaming Experience	36

3.4	Presentation and Analysis of Gaming to Non-gaming Categories Comparison	38
4	Conclusion	42
5	References	44
5.1	Primary Sources	44
5.2	Secondary Sources	44
6	Appendix	46

1 Introduction

Firstly, it is vital to mention the motivation behind the research. In the modern society there is a considerable controversy concerning videogames and their usefulness. While there are various studies proving that playing video games containing violence may promote aggressive behaviour especially in children (cf. Anderson et al.), there are also studies showing how videogames are capable of serving as a supportive media for educational purposes, (cf. Shute and Ventura).

The purpose of the following research is not to prove any of those sides right or wrong but to find out whether there is any actual correlation between playing videogames and increased passive vocabulary concerning topics generally covered in video games such as weaponry, human attributes and mythical creatures. This kind of correlation would suggest that playing videogames, which are generally in English, unconsciously increases passive vocabulary of the player, hence gives him or her an advantage for the future study of English and improves his or her reading or listening comprehension and indirectly also the productive skills.

Supposing this relation does exist, the proposed thesis would be a modest proof that the videogame industry and its use of English as a main language is one of the reasons why the number of English language speakers is constantly growing. Considering that most of the videogames are now designed with an option to be played online with people from all over the world, and English being the most convenient language to use, this correlation suggests that English, or some language derived from it, will maintain its position as the main language of the internet and online communication (Crystal 117).

Even though a research concerning videogames is not rare, the approach chosen for this study is rather uncommon. There are mainly studies focused on psychological effects videogames have on players with few exceptions concentrating on the usage of videogames for educational purposes (see the aforementioned studies). However, despite the author's endeavour no studies published in English or in Czech were found concerning the effect of videogames on players' English vocabulary. This is understandable for research that would take place in the English speaking countries because the effects on L1 of players would probably be marginal. Studies conducted in

the Czech Republic are generally focused more on the psychological effects on players, therefore the language aspect tends to be omitted.

This paper is divided into two main parts, the theoretical and practical one, which are further divided into several subchapters. The aim of the theoretical part is to acquaint the reader with the basic concept of second language acquisition, different approaches to this issue throughout the history and with the basic differences between first and second language acquisition, in subchapters 2.1-2.3. The information contained in these chapters is based on publications by Saville-Troike, Ellis, Corder, Krashen, White, Singleton and Jiang.

Subchapter 2.4, which is based on the paper published by Hawk and Shah, focuses on different learning types and brief description of how players of different learning types can benefit from playing videogames. Those conclusions were drawn by the author with respect to his own gaming experience and their validity should be subjected to further study,

The last section of the theoretical part, subchapter 2.5, serves as an elementary overview of several game genres for readers who are not familiar with them. The description of genres is based on examples from popular games belonging to each genre.

In the practical part of the thesis there is a presentation and an analysis of data gathered through the questionnaire included in the appendix of the paper. This questionnaire was distributed to 446 respondents from 11 to 52 years of age and with different length of previous English studies and gaming experience. The data should serve as a convincing evidence of existence, or nonexistence, of a correlation between playing videogames and vocabulary of gamers, concerning topics frequently present in videogames. Subchapters 3.1-3.3 address the issue of validity of the questionnaire and the objectivity of the results with regard to the aim of the research.

The rest of the practical part, namely subchapters 3.3 and 3.4, focuses on presentation of the results and their evaluation from different perspectives. The analysis in subchapter 3.4 should offer the answer whether the hypothesis is correct and playing videogames increases passive vocabulary of gamers and gives gamers certain advantage while learning English over those who do not play videogames.

2 Theoretical Part

2.1 First and Second Language Acquisition

What is a Second Language Acquisition (SLA)? In order to understand what SLA is, it is vital to explain what is classified as a first language and consequently what is a second language.

First language, as one can expect, is the mother tongue/native language/primary language. Even though these terms are roughly synonymous they all have slightly different connotations. However, all the relevant features for the purposes of this thesis are shared by all those terms and for that reason they will be used as synonyms. The common features are the acquisition during early childhood, generally before the age of three, and contact with the language on a daily basis (Saville-Troike 4).

It would seem appropriate to call the second language one learns a second language and potentially to continue with respect to chronological order. However, it is not the case. Rod Ellis defines second language as:

any language that is learnt subsequent to the mother tongue. Thus it can refer to the learning of a third or fourth language. Also 'second' is not intended to contrast with 'foreign'. Whether you are learning a language naturally as a result of living in a country where it is spoken, or learning it in a classroom through instruction, it is customary to speak generically of 'second' language acquisition. (Ellis 3)

This results from the fact that the acquisition of all languages, with the exception of the mother tongue, more or less follows the same principles. The differences between FLA and SLA are more thoroughly examined in subchapter 2.3, p. 14.

The language other than the mother tongue one is trying to acquire is generally referred to as a target language (TL). There are numerous ways of getting into contact with the TL but they can be divided in two main categories: informal learning and formal learning. The former occurs mainly when a learner lives in an environment where the TL is used on a daily basis. The latter happens primarily during lessons designed to teach the TL (Saville-Troike 2).

2.2 SLA Theories

SLA is a phenomenon explained by various different theories disagreeing with each other. This is caused by different approaches of researchers and by different principles they focus on. Some of them are primarily concerned with language pedagogy, while others are more concerned with linguistic aspects of SLA. For this reason, it is beneficial for SLA not to agree on one single explanation but rather to simultaneously offer multiple perspectives (Ellis 89-90). The three most important theories throughout the history of SLA studies will be discussed below separately.

2.2.1 Behaviourist Learning Theory

This is the oldest of all three theories and it was dominant in the 1950s and 1960s. The main goal of the behaviourist approach was primarily pedagogical: to increase efficiency in L2 teaching and testing (Saville-Troike 34). It treated the language learning the same way as learning anything else and claimed that learning is a habit based process. Ellis comments on the habit acquisition: “Habits are formed when learners respond to stimuli in the environment and subsequently have their responses reinforced so that they are remembered. Thus, a habit is a stimulus-response connection“ (31).

Concerning the SLA, behaviourists believed that there is a transfer of elements acquired in L1 to the TL. This transfer can be either positive or negative. The positive transfer applies to elements that are valid in both languages, an example would be plural -s ending in Spanish to English transformation. The negative transfer refers to L1 features invalid for the TL, for example in the additional transfer of Spanish plural -s to a modifier in number agreement with the noun resulting in incorrect expressions such as greens beans (Saville-Troike 35).

Behaviourism is connected with an approach to SLA called Contrastive Analysis (CA). This approach concentrates on similarities and differences between L1 and L2 and on consequent problems for the learner which arise from the comparison of those languages (Saville-Troike 34).

This theory is already out-dated and it is no longer considered accurate from SLA perspective because it could not explain how it is possible that learners frequently produce output exceeding the input (Ellis 32). As Saville-Troike says, “Chomsky

argued convincingly that the behaviourist theory of language acquisition is wrong because it cannot explain the creative aspects of our linguistic ability“ (25).

2.2.2 *Mentalist Theory of Language Learning*

The imperfections of Behaviourist Theory lead to the establishment of Mentalist Theory that modified the focus of research and concentrated also on the inner factors influencing learner's capability to learn an L2.

This shift can be attributed to the introduction of Noam Chomsky's concept of Transformational-Generative Grammar. This concept claims that:

Languages have only a relatively small number of Essentials rules which account for their basic sentence structures, plus a limited set of transformational rules which allow these basic sentences to be modified (by deletions, additions, substitutions, and changes in word order). The finite number of basic rules and transformations in any language accounts for an infinite number of possible grammatical utterances. (Saville-Troike 35)

Keeping this in mind, it is obvious that language production cannot be explained just by stimulus-response connection as Behaviourists claimed.

In contrast to CA, mentalists focus on error analysis (EA). One of the publications with significant influence on the EA approach was S. Pit Corder's article on significance of learner's errors (Saville-Troike 38). In this article Corder mentions three reasons for the aforementioned significance:

First to the teacher, in that they tell him, if he undertakes a systematic analysis, how far towards the goal the learner has progressed and, consequently, what remains for him to learn. Second, they provide to the researcher evidence of how language is learned or acquired, what strategies or procedures the learner, is employing in his discovery of the language. Thirdly (and in a sense this is their most important aspect) they are indispensable to the learner himself, because we can regard the making of errors as a device the learner uses in order to learn. It is a way the learner has of testing his hypotheses about the nature of the language he is learning. The making of errors then is a strategy employed both by children

acquiring their mother- tongue and by those learning a second language. (Corder 167)

Apparently, Corder already implies the existence of a language system factor influencing learner's view on the TL. According to Corder, learners adjust this system correspondingly to the information they get from the reaction to their utterance. Therefore "errors are not to be regarded as signs of inhibition, but simply as evidence of his strategies of learning" (Corder 166). This system of language is generally referred to as interlanguage.

2.2.3 *Interactionist Theory of SLA*

While behaviourists consider language learning to be dependent only on the external factors and mentalists attribute it primarily to the inner factors, interactionists acknowledge the importance of both. They claim that "learning takes place as a result of a complex interaction between the linguistic environment and the learner's internal mechanisms" (Ellis 44).

Focusing on interactions, a question arises whether there is any difference between the discourse in which only native speakers participate and the one with some learners present. This difference does indeed exist, it is similar to adult to child interaction and it is called foreigner talk (Saville-Troike 106).

Foreigner talk can be either ungrammatical or grammatical. Ungrammatical talk is characterized by deletion of certain grammatical features, it is often considered to be impolite and "implies a lack of respect on the part of the native speaker" (Ellis 45). On the other hand, grammatical foreigner talk is considered to be normal. It generally involves slower speaking and simplification of grammatical features and vocabulary. In order to convey the meaning as clearly as possible sentences are usually longer and paraphrased (Ellis 46).

Obviously, this adjustment of the way native speakers speak to non-native speakers is beneficial for both sides. This phenomenon proved to be the most useful for learners if it follows the rules of the input hypothesis. The input hypothesis, formulated by Stephen Krashen, suggests that "L2 acquisition takes place when a learner understands input that contains grammatical forms that are at 'i + 1' (i.e. are a little more advanced than the current state of the learner's interlanguage)" (Ellis 47). According to

Krashen, this input is secured automatically and it is the level of input when the message is clear for the learner (Krashen 2).

When the learner does not understand the message that other participants of the discussion are trying to convey they will engage in the negotiation of meaning and try to clarify what the meaning of the message is. Interestingly, this does not take place only between native and non-native speakers or teachers and learners but also between learners themselves. This way they are able to correct each other's mistakes and consent on a form of utterance which they would not be able to produce on their own. This process is called scaffolding.

2.3 Differences between FLA and SLA

The difference between the first and the second language is most transparent in grammar acquisition. However, the research carried out as a practical part of the thesis focuses on L2 vocabulary acquisition therefore both parts will be covered separately.

2.3.1 Grammar Acquisition

The generally accepted theory concerning grammar acquisition is Chomsky's theory of Universal Grammar which is "proposed as part of an innate biologically endowed language faculty, which permits the L1 acquirer to arrive at a grammar on the basis of linguistic experience (exposure to input)" (White 2). In other words, it is a system of principles applying to language learning one is born with independently on his or her origin.

Understandably, it would automatically seem that SLA follows the same principles as FLA but this theory was proven to be incorrect (White 22-54). Those principles do apply to a certain extent however their effectiveness diminishes as learners get older. This finding led to formulation of the critical period hypothesis. This hypothesis suggests that the capacity to achieve native-like proficiency declines gradually, becoming complete at about the age of sixteen. Concerning pronunciation the threshold is much earlier, approximately about the age of six (Ellis 68).

The level of access to UG that learners have based on their age has always been a subject of discussion. Unfortunately, no final consensus has been reached. However, there is a prevalent theory assuming that there is a certain access to UG available to all L2 learners, be it directly or through L1. Therefore as White says, "As hypotheses about UG access developed, interest began to shift from overarching questions like 'Is UG available?' or 'What kind of UG access is there in L2?'" (17).

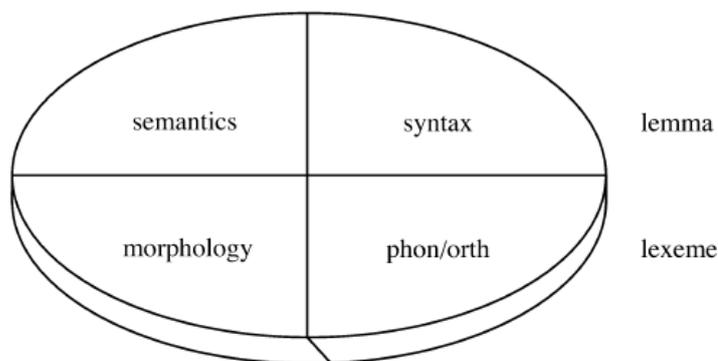
Another important phenomenon concerning Chomsky's Universal Grammar and its significance to SLA is markedness. It is a term referring to a division of grammatical structures to marked and unmarked ones. Where unmarked structures are those governed by UG, therefore more basic ones, and they require only minimal evidence for acquisition. These structures are acquired before more marked ones correspondingly to the research (Ellis 70).

2.3.2 Vocabulary Acquisition

Opposed to the grammar acquisition, vocabulary acquisition is not considered to be based on any concept which would diminish over time, even though it must be noted that children learn new vocabulary much faster than adults, and all L2 learners “appear to be quite successful in learning vocabulary in general” (White 195). However, there is a mental system that should be mentioned concerning vocabulary acquisition. It is a concept of mental lexicon.

This term applies to a mental storage system of one’s vocabulary. It is similar to a dictionary however its lexical entries are not sorted alphabetically but rather by syntagmatic (for children) or paradigmatic (for adults) relations between words (Singleton 76). Existence of those relations was checked by association tests. Forming of a mental lexicon is a process which differs significantly for L1 and L2 vocabulary acquisition.

In order to explain the difference it is necessary to describe the structure of a single lexical entry. It consists of two components, namely lexeme and lemma. Lemma contains semantic and syntactic information and lexeme contains morphological and formal (phonological and orthographic) information (Jiang 48). See Graph 1.



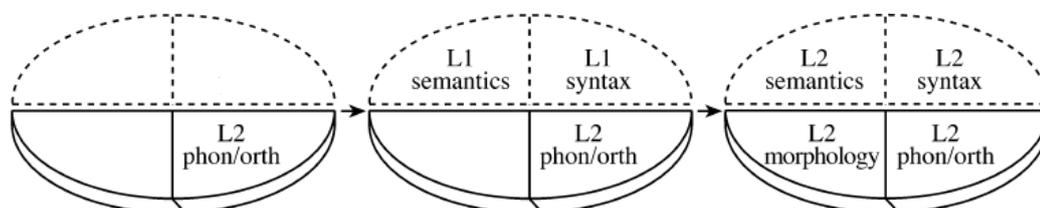
Graph 1 - The internal structure of the lexical entry. (Adapted from Jiang 48)

For L1 vocabulary it is typical that as soon as the entry is created all four parts are available even though they may not be completely accurate (Jiang 49). The situation with L2 vocabulary is more complicated.

According to Jiang, acquisition of L2 vocabulary consists of three stages. Firstly, there is a connection formed between L2 word and its L1 translation. This connection supplies the lexical entry by the formal features of the word, that is spelling and pronunciation. The semantic reference is still mediated by the L1 translation (50).

Secondly, as learner's proficiency in L2 increases the connection between L2 word and its L1 translation tightens and eventually lemma information of the L1 translation gets copied to the lexical entry of the L2 word. At this stage, the morphological part of lexical entry is still missing because morphological information is usually language-specific (Jiang 52). To illustrate the point with an example, the English word door and its Czech translation dveře are both nouns which refer to the same object, but morphologically word door takes -s ending in plural, however Czech word dveře has the same form in plural. For that reason Czech learners of English language can incorrectly use the word door in plural.

The third stage of L2 vocabulary adoption occurs when all four parts of the lexical entry are "extracted from exposure and use and integrated into the lexical entry. At this stage, a lexical entry in L2 will be very similar to a lexical entry in L1 in terms of both representation and processing" (Jiang 53). The whole process of L2 vocabulary adaptation is shown in Graph 2.



Graph 2 - Lexical development in L2: from the formal stage to the integration stage. (Adapted from Jiang 54)

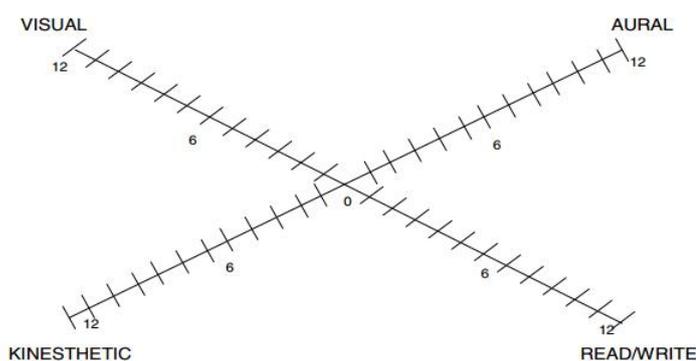
Unfortunately, there is no consistent evidence of this phenomenon present in the research carried out in the practical part of the thesis. In order to explore and confirm this process it would be necessary to use modified questionnaire that would focus more on the separate phases of the mental lexicon formation.

2.4 Learning Types

Even though the language acquisition has some specific characteristics (e.g. universal grammar), it is still a learning process and it follows certain principles which apply to learning in general. One of those principles is the learners' susceptibility to certain learning strategies. There are several theories concerning this topic for example Kolb Experimental Learning Model, Gregorc Learning Style Model, Felder and Silverman Learning Style Model, Dunn and Dunn Model and last but not least VARK Model that is the most recent from the mentioned ones (Hawk and Shah 11). While all these models have their differences for the purposes of this paper it will be sufficient to only cover one of the theories. Because of its popularity (21,261 participants during the month of March, 2015¹), the VARK model was picked.

The acronym VARK stands for Visual, Aural, Read/Write, Kinesthetic. This model is based on Flaming's publication *Teaching and learning styles: VARK strategies* published in 2001. However, research concerning this model is still continuing via the website vark-learn.com. According to Flaming, learning style is: "an individual's characteristics and preferred ways of gathering, organizing, and thinking about information. VARK is the category of instructional preference because it deals with perceptual modes. It is focused on different ways that we take in and give out information" (1).

Students are matched with the learning strategy most efficient for them based on the answers to the questionnaire available on-line¹. Answers are then entered into the Graph 3. Affiliation to a certain type is apparent from the answer distribution.



Graph 3 - VARK learning model (Adapted from Hawk and Shah)

¹ <http://vark-learn.com/the-vark-questionnaire/>

Since the research carried out in the practical part of this thesis is focused on vocabulary gained from playing videogames all the study types will be described in context of a videogame gameplay. The preferences of each type come from Fleming's publication and the shift to the videogame setting is applied by the author of the thesis.

Visual type of students learn with ease from objects that are somehow visually distinctive from the rest. Therefore the interaction with environment is ideal for them. With the constantly improving level of graphic details in videogames the visual type of students will probably have an advantage in the vocabulary acquisition. Also objects that the player can interact with are generally provided with descriptions and highlights on the mouse-over cue.

Aural type of learners learn through sounds. In order to learn vocabulary through a videogame that way, the game must be narrated. This feature was not so common in older games but current games have at least few lines narrated in order to give the game more realistic feeling. The most beneficial aspect of the games with voiceovers is the possibility for the player to perceive correct pronunciation, providing that the voiceover is a native speaker.

Learners prone to Read/Write strategy will probably gain vocabulary from games without any difficulties. Almost all games are based on reading, be it reading of quest objectives or item descriptions. Writing is not so usual aspect, however with the increased multiplayer availability the need to write messages grows. Those messages will inevitably contain certain gaming vocabulary therefore it should help the player to remember it correctly.

Kinaesthetic strategy almost seems to be created for learning through videogames. Learners susceptible to kinaesthetic strategy learn through roleplaying and through doing things and videogame environment offers almost unlimited options for it.

2.5 Overview of Videogame Genres

This chapter is not meant to be a thorough analysis of the given videogame genres but rather to serve as a reference for those who are not familiar with the basic features of those genres.

2.5.1 FPS

First Person Shooters, as their name suggests, involve firearms usage, they are generally objective based with storyline present throughout the whole single-player gameplay. It can sometimes feature some RPG (see below) elements. The Majority of them is set in either historical or fictional wars. The *Call of Duty* series can serve as an example. This genre is also closely connected to the so called Action videogames, example of those would be the *Grand Theft Auto* series.

2.5.2 RPG

Role-Playing Games are even more objective and storyline based than FPSs. As the name suggests, players choose one or more characters that are set into the story. The Important aspect to this genre is a progression. It is usually done through experience based system where completion of partial goals gains experience points for the character. Those points directly or indirectly increase the character's power. Classic example of RPG genre is *The Elder Scrolls* series.

2.5.3 Strategies

In strategies player takes the place of a commander responsible for a nation, tribe, city or any other structure in need of leadership, and by careful planning leads it to the goal, be it extermination of enemy army or certain level of prosperity. Strategies generally feature resource based development therefore forcing the player to cope with certain economical problems which may occur. A perfect example of turn based strategy is the *Heroes of Might and Magic* series and an example of real time strategy is the *Age of Empires* series.

2.5.4 *Sport and Racing games*

These games normally revolve around real-life sports, follow the same rules and frequently feature real life-sport events. This would apply to the popular *NHL*, *FIFA* or *NBA* series. However, there are many exceptions and some games belonging to this group focus on fictional sports, such as Quidditch from the Harry Potter novels, or just modify basic racing games by unreal alternations. The *Mario Kart* game would be a typical example.

2.5.5 *Puzzle games*

This genre is really broad and it is generally divided into more categories. Puzzle games are logical games focused on problem solving but the conception can range from *Checkers*, over *World of Goo* to the *Portal* series. This specific genre flourishes recently, because of the booming in smartphone game industry, and according to the IAB research, puzzle games are the most favourite of 33% of people in UK (Stuart).

2.5.6 *Educatory games*

Educatory games form a group different from all the other games because its primary purpose is not just to entertain but also to educate. However, it is quite difficult to maintain the balance and not to focus too excessively on the educational side. Those games are often reduced to mere flashcards and for that reason they are not so popular. However, there are exceptions such as the *Abaku* game that unobtrusively develops the players' computational skills.

3 Practical part

3.1 Description of the Research

The research was realized through a questionnaire included in appendix of the thesis. It was distributed to 446 respondents from 11 to 52 years of age. The participants were of both genders and of different levels of English. Length of their English studies varied from 0 to 25 years and length of their previous gaming experience was from 0 to 28 years. The group of respondents consisted mainly of two main groups, lower secondary school pupils and university students. As a result of this variety the questionnaire should give fairly objective results. Consequently, the questionnaire had to be made exclusively in the Czech language in order to avoid possible confusion of less skilled respondents.

First part of the questionnaire is a series of questions focusing on gathering information about participants, their previous gaming experience and their English studies. This part offers necessary background information crucial to the result evaluation. However, the questionnaire is anonymous because it was used in English classes and the obligation to sign it could have lead to the impression that it is an obligatory test resulting in a mark, therefore encourage cheating which would had affected the research. Anonymous questionnaires thus increase the truthfulness of participants (Bradburn, Sudman and Wansink 325).

The second part consists of 100 multiple-choice word translations from English to Czech divided into 10 categories each containing 10 questions. Total number of questions had to be subjected to a compromise between a length acceptable for most respondents and the informative value the questionnaire has. It was also necessary to make all translations from English to Czech because the main aim of the research lied in investigating the possible correlation between playing videogames and the scope of passive vocabulary in certain areas.

In order to fit the needs of the research the categories were separated to gaming and non-gaming ones. It was anticipated that players of videogames would have reached higher score in gaming categories, namely Animals, Weapons, Human Attributes, Mythical Creatures and Professions, than in the rest of the questionnaire. Vocabulary from those topics is frequently present in various videogame genres, mainly in role-playing games situated into fantasy/medieval era. Non-gaming categories, namely

School, Travelling, Clothing, Body Parts and Actions, are some of usual lesson topics of text books used in the Czech Republic and they served as a reference for the comparison during evaluation of the results.

In order to receive objective results while maintaining the highest possible diversity of participants, it was crucial to design the questionnaire in a way that even respondents who had never studied English before would have been able to answer some of the questions and those who had studied English extensively would have still made mistakes. For this reason, CEFR level division was used and every non-gaming category consists of 4 words of A1-A2 difficulty, 3 words of B1-B2 difficulty and 3 words of C1-C2 difficulty. Words were chosen by English Vocabulary Profile website² and from *New Headway Student's Book* series unless the classification differed too much from the standard practice of English education in the Czech Republic, for example word glue which is taught in first grade being classified as C2 vocabulary. For gaming categories, words were chosen by the author based on common occurrence in videogames of various genres while maintaining the same or higher difficulty of entries in comparison to non-gaming categories. The videogames were used based on the number of players, for example World of Warcraft which surpassed 10 million of subscribers in November 13, 2014 (Blizzard.gamespress.com) or League of Legends with 67 million of monthly active unique players in 2014 (Riot Games).

For multiple-choice tests it is recommended to use all false options as distractors, as Burton says:

The purpose of the distractors is to appear as plausible solutions to the problem for those students who have not achieved the objective being measured by the test item. Conversely, the distractors must appear as implausible solutions for those students who have achieved the objective. Only the answer should appear plausible to these students. (Burton 3)

However, this strategy was not followed. While this is a preferable way to prepare multiple-choice question test, where the information student had to learn are the same for everyone, it is not ideal for wide range of people with different English skills. Therefore the number of distractors in the questionnaire was lowered and the pattern for

² <http://vocabulary.englishprofile.org/>

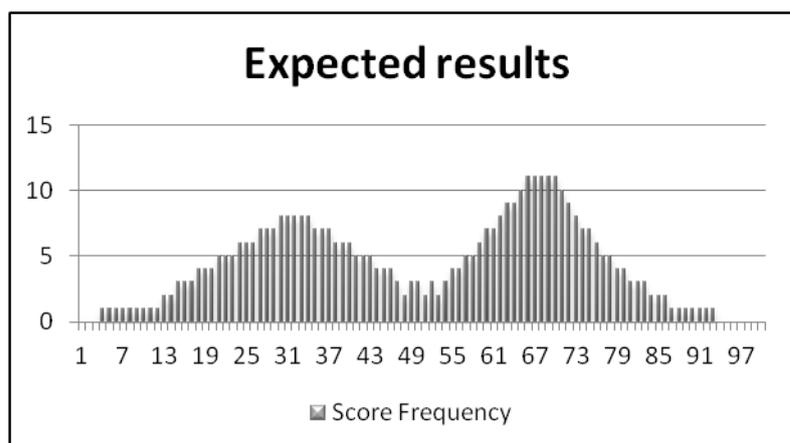
each multiple-choice question is following, one right answer, one similar or otherwise distracting answer, one plausible for less-skilled respondents, one even less plausible answer and the “I don’t know” option.

3.2 Expected Results

The main reason for carrying out the research is to prove, or disprove the fundamental hypothesis of this paper. *Does playing videogames increase one's vocabulary in certain areas of English language frequently featuring in videogame environment?* The author of this thesis is convinced that such correlation does exist, therefore it is expected that gamers will have higher scores in the questionnaire than non-gamers, providing they are at the same level of English.

However, there was no reliable way of identifying those with the same level of acquired skills in English. In order to solve this issue, the questionnaire was designed with both gamer and non-gamer categories and there is no comparison between gamers' and non-gamers' results, but rather between the ratios of their scores in gaming and non-gaming categories. Following this strategy it is possible to completely avoid comparing scores of different people, which leads to a considerably larger pool of responses valid for the research and it also nullifies an impact of possible differences in difficulty of gaming and non-gaming categories, because under these conditions the score ratio of participants with videogame experience should still be higher than that of non-gamers, considering that the hypothesis is valid.

As it was stated earlier, the questionnaire was designed in a way which should limit the number of respondents reaching scores of 0% or 100% because those results have no informative value for the research. All the other scores are useful and diverse distribution of the results would lead to increased objectivity of conclusions drawn from the outcome as well as would the highest number of participants possible. Distribution of the score's frequency for homogenous group follows the normal distribution rule and the graph copies the bell-shaped function, called the Gauss' curve (Chráska 65). However, group of participants for this research is not homogenous and since it mainly consisted of participants belonging to two different groups it was probable that the graph of score's frequency will contain two concave peaks, similarly to Graph 4.



Graph 4 – Estimate of number of participants reaching certain score.

In spite of significant differences between the participants, there were several other possible predictions. Firstly, because of the usage of words throughout the spectrum of CEFR levels it is likely that higher number of participants performs better in translations of A-level words than of C-level ones. The ratio of correct answers in A, B, C parts is likely to change, however the percentage of correct answers of each respondent in A-level translations should generally be higher than in B-level translations and the same rule applies to B-level to C-level comparison. Concerning percentages of the total success rate in different levels, it was anticipated that all A-level questions should have approximately 70–100% of correct answers, B-level 40–70% of correct answers and C-level 0–40% of correct answers, those percentages were estimated because the number of university students responding to the questionnaire is likely to exceed the number of secondary school pupils.

All the previously mentioned estimates were based on the form of the questionnaire, types of its questions and also on the expected number of respondents and their English skills. If those estimates correspond with the actual results, it will confirm that the questionnaire was created accordingly to its purpose.

3.3 Presentation and Analysis of Results

This chapter is presenting the results of the questionnaire while evaluating them from different perspectives. In order to keep the data well organized and not to confuse the reader it is divided into six separate subchapters. Each of the subchapters contains a demonstration of all the relevant data followed by the analysis of the reasons why those results were achieved and of the information they consequently imply.

In order to draw adequate conclusions from the research, it is necessary to use some of the elementary statistical methods connected with basic terms, namely mean, median and normal distribution. These terms and reasons for their usage are vital for understanding the analysis, however they are not relevant to the topic of the thesis, therefore the author assumes the reader is familiar with them as they can be found in any statistics' textbook.

Despite the author's endeavour, no previous research on this topic was found. It is quite understandable concerning the English-speaking countries where similar research is irrelevant, because it would no longer focus on the acquisition of English as a second language. In the Czech Republic the vast majority of studies concerning effects of videogames is focused on the downsides of gaming, especially its effect on aggressive behaviour of gamers. For that reason, all the assumptions based on the results of the research conducted in this thesis are solely the interpretations of the author and are not confronted with any other research on this topic.

3.3.1 Single Lexeme Translations and the Deviations from Expected Results

The results of the questionnaire with percentage of correct answers for each question can be found in Table 1 below. (A), (B), (C) signify the difficulty of the given question. The fields with gray background stand for deviation from the expected results.

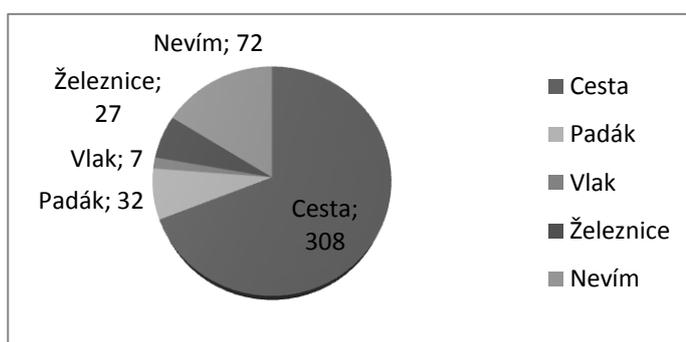
	Animals	School	Weapons	Travelling	Human Attributes	Clothing	Mythical Creatures	Body Parts	Professions	Actions
1(A)	95%	80%	75%	89%	74%	47%	76%	92%	71%	81%
2(A)	99%	92%	72%	81%	94%	88%	95%	80%	75%	94%
3(A)	98%	86%	76%	69%	61%	70%	87%	90%	91%	92%
4(A)	99%	98%	86%	88%	57%	67%	87%	79%	73%	76%
5(B)	53%	80%	64%	68%	44%	60%	76%	74%	54%	94%
6(B)	83%	86%	59%	69%	49%	59%	94%	72%	61%	84%
7(B)	57%	75%	72%	46%	55%	79%	73%	56%	52%	63%
8(C)	39%	24%	44%	41%	39%	43%	61%	60%	50%	46%
9(C)	43%	28%	59%	30%	25%	20%	67%	56%	65%	39%
10(C)	57%	46%	46%	69%	21%	34%	30%	37%	57%	38%

Table 1 – The success rate for each question.

Deviation from the expectations occurred in total of 35 out of 100 questions, however 30 of those entries scored better results than it was assumed, this was probably caused by an increased number of university students participating in the research, of whom significant amount studies English language. Aforementioned fact has also influenced final distribution of the score frequency when 37,67% of participants scored over 80%. Other anomalies have grey background in the Table 1. and will be covered separately.

Journey

Cesta	308	69%
Padák	32	7%
Vlak	7	2%
Železnice	27	6%
Nevím	72	16%



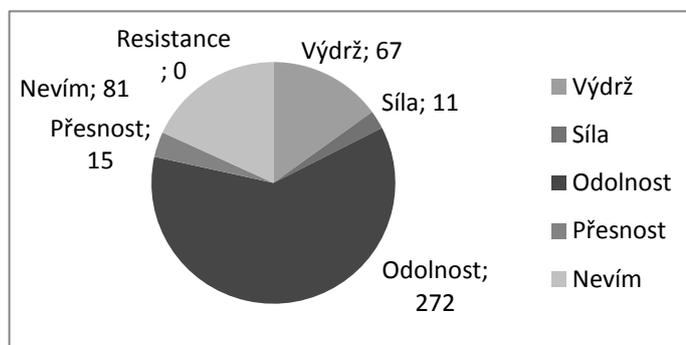
Graph 5 – Distribution of answers to the question.

This lexeme translation, unlike some others, does not have one frequently chosen incorrect answer. A probable reason why the score is slightly out of the expected range is a common choice of the “Nevím” (I do not know) option. This might have been caused by the fact that respondents usually know one of the more frequent words used

in a similar context, the hyponym for the word journey, road. For that reason they might have considered the answer “Cesta” to be incorrect and chosen the option “Nevím”.

Resistance

Výdrž	67	15%
Síla	11	2%
Odolnost	272	61%
Přesnost	15	3%
Nevím	81	18%

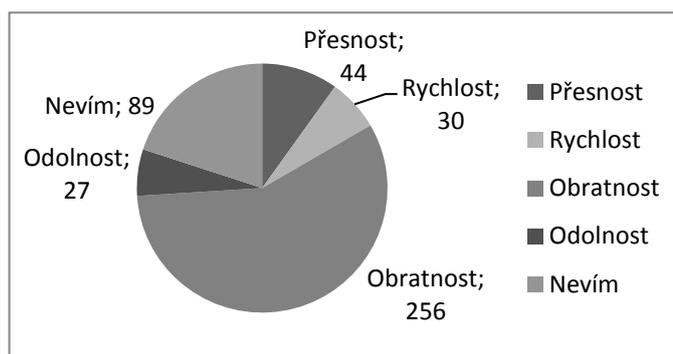


Graph 6 - Distribution of answers to the question.

For this entry, leaving out the correct answer, there are two options with higher representation, options “Nevím” and “Výdrž”. Some participants might know the word as a synonym to rebellion or as a term concerning electricity and that might have confused them.

Agility

Přesnost	44	10%
Rychlost	30	7%
Obratnost	256	57%
Odolnost	27	6%
Nevím	89	20%

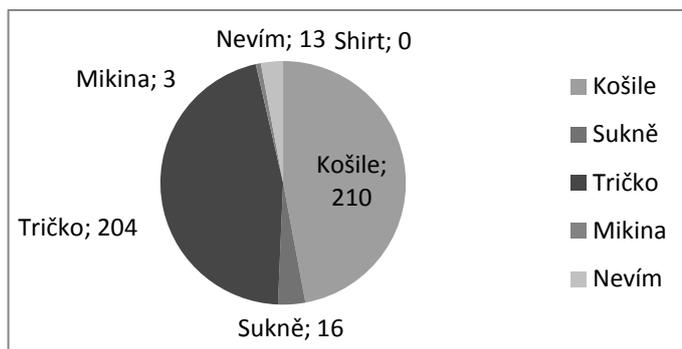


Graph 7 - Distribution of answers to the question.

Even though agility is sometimes classified as C-level vocabulary it is quite common in several videogame genres, for example RPGs, Strategies and Action games. That is the most probable reason why the “Nevím” option was chosen so much by non-gamers, 66% of participants who chose this option stated that their previous gaming experience is less than or equal to 5 years. Gamers who are familiar with this word in the videogame context but not with its translation were more likely to guess. For this reason the distractors might have been chosen more often.

Shirt

Košile	210	47%
Sukně	16	4%
Tričko	204	46%
Mikina	3	1%
Nevím	13	3%

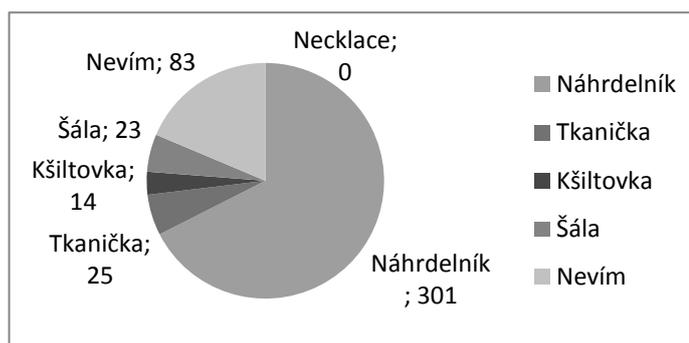


Graph 8 - Distribution of answers to the question.

Even though shirt is a word belonging to completely elementary vocabulary, which every English learner gets to know during the first year of his or her studies, the success rate for this entry is only 47%. This is caused solely by one of the distractors, namely “Tričko” (T-Shirt). Correctness of the question may be a little questionable because Shirt is commonly used instead of T-Shirt in spoken English.

Necklace

Náhrdelník	301	67%
Tkanička	25	6%
Kšiltovka	14	3%
Šála	23	5%
Nevím	83	19%

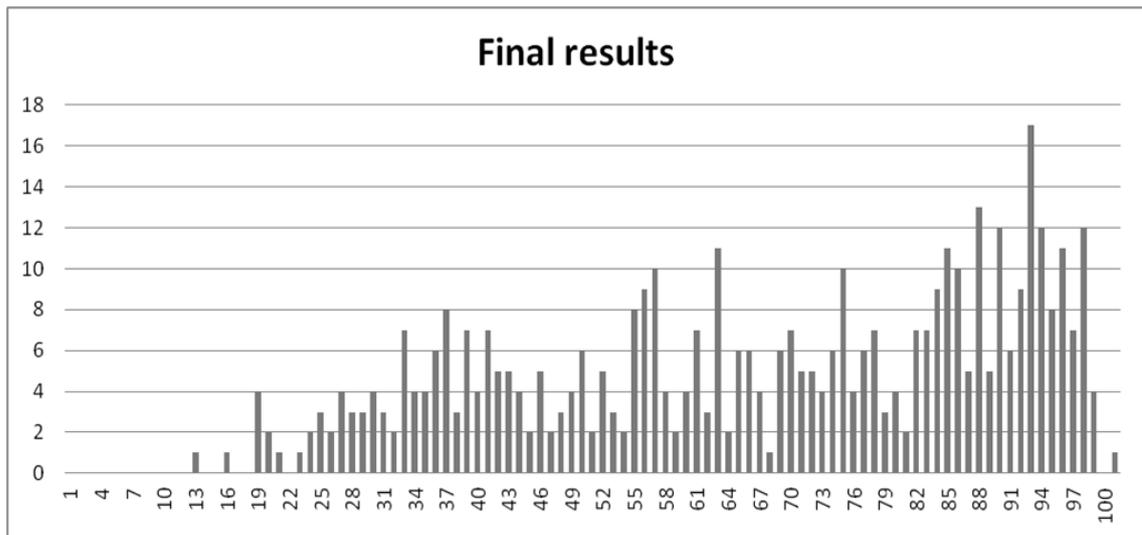


Graph 9 - Distribution of answers to the question.

This entry is only slightly off from the expected value, the probable reason for this are the distractors once again. Considering that lace is “Tkanička” in Czech, it is understandable that some respondents chose it as an answer, the same thing applies to the option “Šála”, a scarf in Czech, which may be considered a thick lace of some sort used to cover ones neck.

3.3.2 Score Frequency Distribution

It was already mentioned that the questionnaire was designed in a way which should limit the number of 0% and 100% results, this goal was achieved and there was only one participant who scored 100%, 24-year-old male studying English for 14 years and with 14 year length of his previous gaming experience. Distribution of the score frequency is shown in Graph 10 below.



Graph 10 – Number of participants in relation to their final scores

It was expected that the graph of score distribution will have two bell-shaped peaks however, as it is apparent from the Graph 10, there are three of them. Reason for this is an unexpected number of respondents from 15 to 20 years of age (55 of them) and a surprising diversity in the results of respondent from 20 to 25 years of age

The first group of respondents with scores between 22 and 47 points primarily consists of participants from the lower secondary school, average age of respondents within this range is 13.5 year and average length of their English studies is 6.9 years. The second one, from score of 49 to score of 80, is the broadest of the three. From its incomplete shape it is obvious that there were not enough respondents at this level of English in order to fully form the bell-shape of the curve. Presumably, it consists of upper secondary students and college students with B1-B2 level of English. This estimate is based on average age of respondents achieving this score, which is 17.5 year, and on average length of their English studies, that is 8 years. The third peak from 80 to 100 points of score generally comes from results of college students, probably

specializing in English language, average respondent from this group is 22 years old and studies English for 11 years.

From Graph 10 it is apparent that the graph curve, which should be centred in an ideal scenario, is shifted to the right side of the spectrum. Therefore for this group of respondents it would be ideal to use series of more difficult questions in order to obtain better results with higher informative value for the research. On the other hand, there is only one participant with flawless score, therefore the difference would not be significant.

It is also to be noted that even though the data do not fit the theory of normal distribution perfectly, they are not far from it. In order to illustrate the extent of the deviation it is necessary to compare mean and median of the total score for each category, and if those two values are similar it means that there is a normal distribution of the data (Rubin 77). Comparison of those values can be found in Table 2 below.

Score	Total	Gaming categories	Non-Gaming categories	A-level Entries	B-level Entries	C-level Entries
Mean	66,07%	65,81%	66,34%	82,03%	67,11%	43,75%
Median	69,00%	69,00%	69,00%	90,00%	73,33%	40,00%

Table 2 – Mean and Median results for each category.

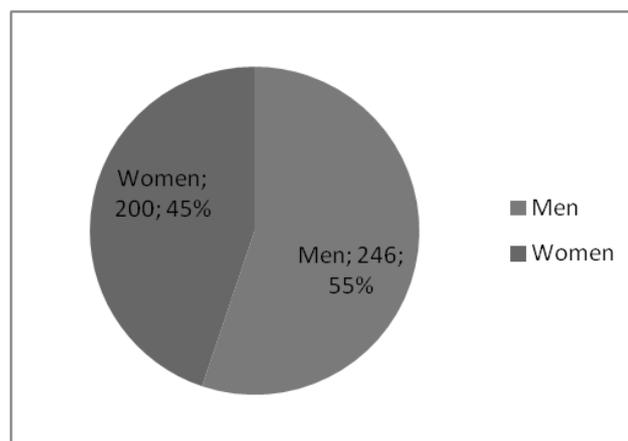
As it was expected, the total ratio of correct answers in A, B and C categories has a decreasing tendency. However, both the median and the mean of the scores in each category are significantly higher than predicted. The reason for this is the previously mentioned distribution of score frequencies together with the fact that over 37% of respondents answered correctly more than 80 questions.

In order to confirm the validity of the words selected to each category, the results of all participants were analysed individually and there are only two respondents who had better result in more difficult category by more than 10%. Consequently, results of more than 99,5% of respondents fit the expectations.

3.3.3 Gender of Participants

Videogames are usually considered to be male-oriented entertainment business that is very rarely appealing to women but according to the research made by IAB (Internet Advertising Bureau) this assumption is no longer valid and there are more women playing videogames than men (Jayanth). However, it should be noted that this research took place in the United Kingdom and the situation in the Czech Republic might be different. The IAB research has also classified various smart phone games as videogames and even though this may have caused the deviation while comparing to other studies with different classification it is in accordance with the definition of videogames used in this paper.

The above mentioned fact could imply that there is almost the same amount of male and female respondents to the questionnaire however, this assumption would be wrong because there is a majority of male participants, the distribution can be seen in Graph 11.



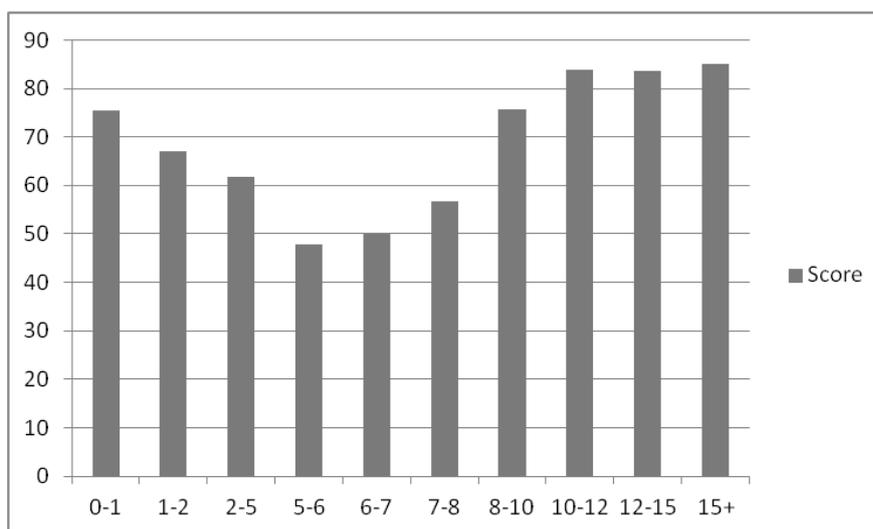
Graph 11 – Number of male and female respondents.

This discrepancy is almost nonexistent for lower secondary students that participated in the research and it is more significant for the older participants. The reason for that is probably a different way of the questionnaire distribution. The questionnaire was given to the lower secondary students in class, therefore they may have felt obligated to fill it in. However, the older participants were just asked to participate in the research by completing the questionnaire at home. It is understandable that the respondents interested in the topic were more likely to actually fill in the questionnaire and that is why there is a majority of male participants.

The uneven number of male and female respondents is not significant for the research because there were studies focusing on the effect of videogames on the player, which have proven that the effects are the same for both sexes. A study done by Dorval and Pepin, which states that “Benefits gained from playing videogames are the same for both men and women” (5), can serve as an example.

3.3.4 Length of Previous English Studies

While this criterion can be considered so obvious that it is not worth testing, the opposite turned out to be true. The expectation was simple, those who stated that they have studied English for a long period of time will get better results compared to those who have just started learning English. The average results of participants with different length of previous English studies can be seen in Graph 12.



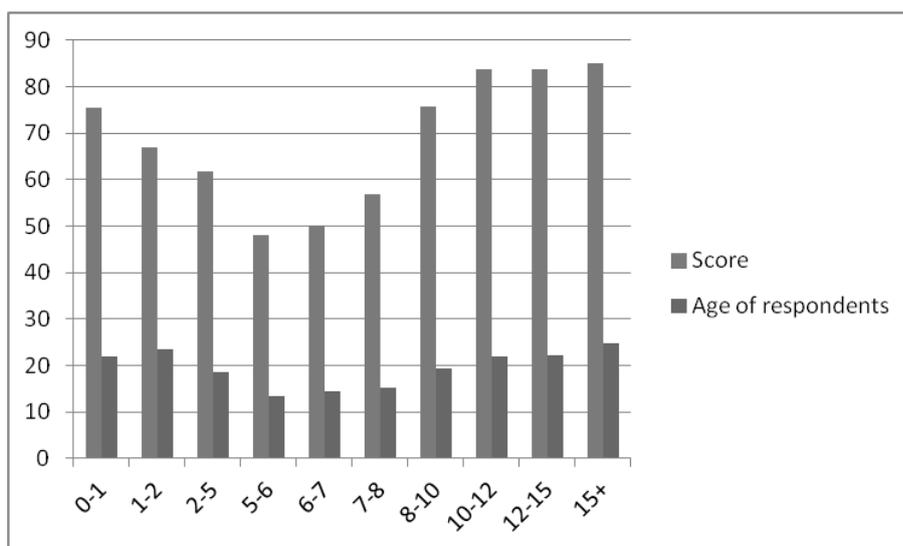
Graph 12 – The average score of participants depending on the length of their previous English studies.

It is apparent from the graph that respondents who stated that they have been learning English for less than 5 years have achieved higher score than those who proclaimed to have studied English for 5–6 years. This fact seems to be completely irrational however, there are several possible explanations to it and the real reason for it is probably a combination of those.

Firstly, it is possible that some respondents cheated during the test because most of them took it online without any supervision. However, even though participants with shorter period of previous English studies may be more likely to cheat in order to compensate for their lack of knowledge, it is almost impossible that this would cause such a discrepancy because the participants with more thorough knowledge could have cheated as well.

Secondly, the problem can be caused by different understanding of what the “previous study of English language” means. If that was the case it would be plausible that participants of different age understand the question differently. Secondary school pupils would be likely to count each school year, in which they have been taught

English, as a year of previous study of English independently of the efficiency of those lessons. On the contrary, adults participating in the research may have been more sceptical and while answering this question may have only taken into account those years of effective studies. In order to decide whether this explanation is plausible the average age of the participants was divided into categories by the length of their previous studies and taken into consideration. See the Graph 13.



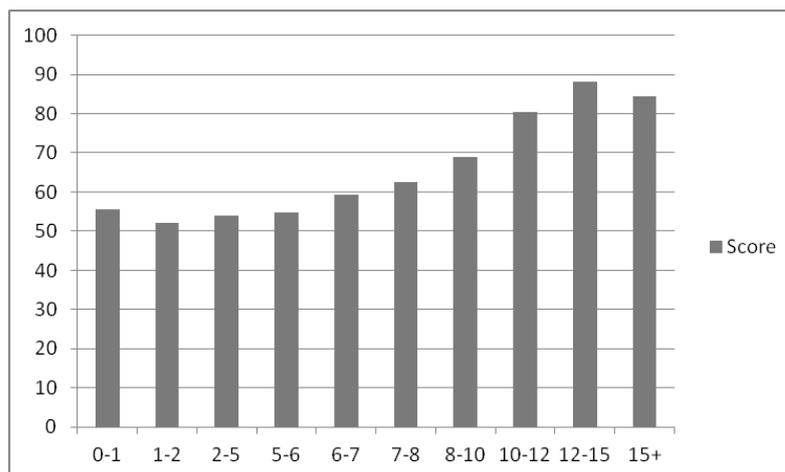
Graph 13 - The average score and age of participants depending on the length of their previous English studies.

Apparently, there is a connection between the score and the age of respondents while they are divided into groups based on the length of their previous English studies. The average age of those who belong to the category from one to five years is higher than that of those belonging to the category from five to eight years. The reason for it may be the above-mentioned one or the fact that older people have studied more efficiently.

This fact is not based on the data gathered from the questionnaire but it may be influenced by the approach of the participants to the study of English. While usual English classes taken in school have to be adjusted to the slower students therefore the progress is not that fast, various private language schools, visited mainly by adults, offer lessons designed specifically to the needs of each student. This combines with the generally higher intensity for adult learners and it might be a partial reason for the variance shown in Graph 12.

3.3.5 Length of Previous Gaming Experience

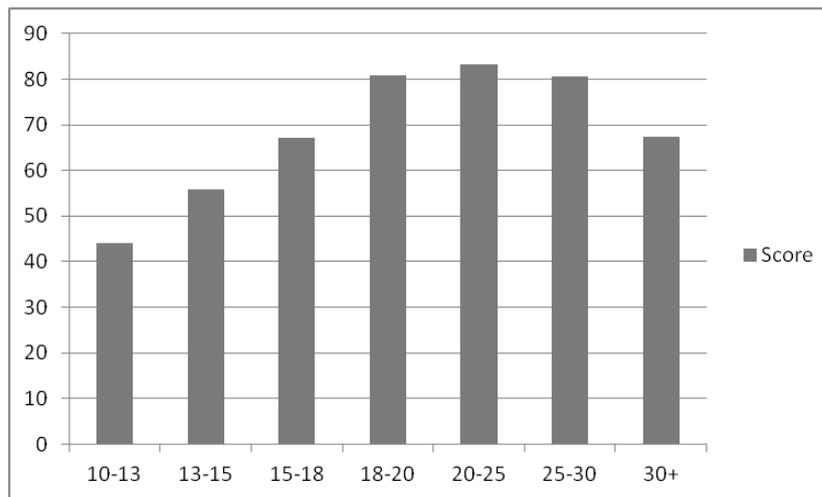
Even though length of previous gaming experience may appear to be the most important point of view concerning the main hypothesis, it is not. Results do suggest that there is a connection between the length of the period spent playing videogames and the total score in the questionnaire (see Graph 14).



Graph 14 – Total score of participants based on their previous gaming experience.

However, it would be wrong to assume that this proves the connection between playing videogames and the range of vocabulary because there are many other factors involved. It is obvious that the increased length of previous gaming experience is likely to be accompanied by the higher age of participants. While this probably would not apply to older people who prefer other leisure time activities, it does apply to the vast majority of the participants of this research.

The most important factor influencing the graph is probably the knowledge of English vocabulary gained outside of the videogames which comes with the higher age of said participants. This connection is slightly weakened when the participants over 30 years of age are taken into consideration. See Graph 15. Obviously, this does not mean that older people have wider vocabulary. It just shows that there are similar factors, as those in Graph 14, influencing the score. For example a person who is 30 years old could have studied English for 20 years but a person who is 15 years old obviously could not.



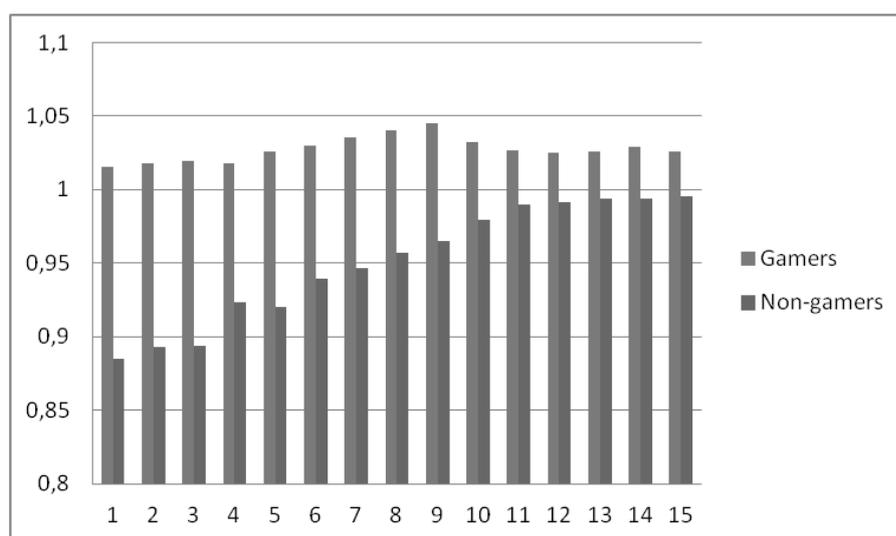
Graph 15 - Total score of participants based on their age.

3.4 Presentation and Analysis of Gaming to Non-gaming Categories Comparison

This chapter focuses on proving or disproving of the hypothesis that playing videogames increases player's vocabulary in certain lexical fields of English frequently featuring in the videogame environment.

Firstly, it is important to emphasize that the question was not whether the participant plays English videogames but whether he or she plays videogames in general. Therefore if the hypothesis is proven right it will mean that either most of the games are English by default or that even playing the games translated from English or of another origin improves player's vocabulary.

In order to decide whether gamers have higher gaming to non-gaming category score ratio, hereinafter referred to as the ratio, than non-gamers it is important to define who the gamer is. This turned out to be a weaker point of the questionnaire, because the question about previous gaming experience is not specific enough, this occurred due to the effort to avoid possible confusion of the respondents. To deal with this problem the comparison of gamers' and non-gamers' ratio was done with different thresholds, from 1 to 15 years of previous game experience, for considering a participant to be a gamer. The result of this comparison can be seen in Graph 16.



Graph 16 – Average gaming to non-gaming category score ratio based on the length of previous gaming experience.

It is obvious that the threshold plays an important role in the differences between gamers and non-gamers. If everyone with previous gaming experience longer than one

year was considered to be gamer, then there would be a 13,04% difference between the ratio of gamers and non-gamers. If the threshold was moved to 15 years of playing videogames, the difference would be only 3%.

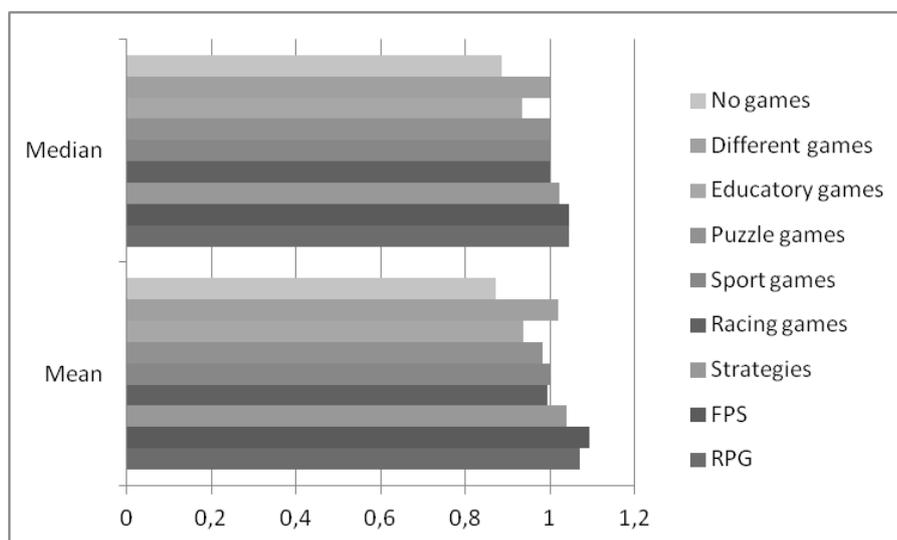
In order to pick the data that are statistically relevant it is necessary to take a closer look on the number of gamers and non-gamers for each situation. See Table 3 below.

Number of years	Gamers	Non-gamers	Percentual difference of the ratio	Number of gamers	Number of non-gamers
1	1,02	0,89	13,04%	393	53
2	1,02	0,89	12,52%	382	64
3	1,02	0,89	12,61%	376	70
4	1,02	0,92	9,50%	361	85
5	1,03	0,92	10,57%	335	111
6	1,03	0,94	9,11%	298	148
7	1,04	0,95	8,88%	266	180
8	1,04	0,96	8,35%	231	215
9	1,05	0,97	8,01%	193	253
10	1,03	0,98	5,33%	172	274
11	1,03	0,99	3,64%	119	327
12	1,03	0,99	3,37%	108	338
13	1,03	0,99	3,25%	87	359
14	1,03	0,99	3,49%	75	371
15	1,03	1,00	3,00%	62	384

Table 3 – The score ratios of gamers and non-gamers and their difference based on experience necessary to be considered a gamer.

Apparently, the data with thresholds of 1-5 years and of 10-15 years are not so statistically relevant because of the uneven distribution of the respondents between the gamers and the non-gamers. However, the ratio of gamers is in all cases higher than that of non-gamers so it is evident that the hypothesis was confirmed in the group of respondents to the questionnaire, because the participants with longer gaming experience generally had a better score ratio than those with shorter gaming experience. If the threshold of 8 years of previous gaming experience is used, the distribution of respondents between gamers, 231 of respondents, and non-gamers, 215 of them, is almost even and the difference between their average ratios is 8,35%. *Therefore it can be assumed that playing videogames in general does increase the passive vocabulary of gamers and gives gamers small advantage while learning English over those who do not play videogames.*

Even though gamers in general achieved higher score ratio, it should be noted that the results also depended on the preferred genre of the games. See Graph 17.



Graph 17 – Median and Mean of gaming to non-gaming category score ratio based on the type of games played.

Apparently, the highest ratio in average was achieved by those who play FPS (First Person Shooter games) closely followed by players of RPGs (Role Playing Games) and strategies. To understand why those videogame genres influence the vocabulary of gamers so much it is crucial to examine the setting of games belonging to those genres more closely.

RPG games frequently feature thoroughly designed environments with many objects which the player needs to interact with, those objects are generally tagged with their name and that allows the player to connect the signifier and the signified.

Another feature, more or less exclusive to those genres, is a quest based progression in the game. This means that players have to complete certain quests in order to move forward in the story line. Those quests almost always require interaction with the environment and without the understanding of the objective it is almost impossible to finish the quest.

Speaking about an in-game progression, those three genres are the ones most frequently based on a sophisticated plot. All the quests and their objectives are connected to the plot and are integrated in the story by offering background information about certain characters, places or items appearing in the game. Those quests and story sequences are sometimes narrated or even accompanied by video cut-scenes. This increases the influence the game has on the players' vocabulary immensely, because

they can read the subtitles and simultaneously hear the pronunciation and they are required to understand the commands in a way which allows them to complete the mission. If they do not understand the objective it often forces them to look up a translation or if they prefer to learn by trial and error they will remember what is necessary to be done when they are given this command in order to quicken their future progression.

The story lines of some games of those genres are also based on players' actions and their decisions can completely alter the course of the game. This approach is used for example in the *Mass Effect* trilogy or in the *Star Wars - the Old Republic*. It is obvious that in this type of games the players are even more cautious about their actions and therefore try to understand the dialogues as well as they can.

On the other side of the spectrum there are educational games, the genre which has the lowest average score ratio of its players in the questionnaire. However strange it may seem it is easily explained by its unpopularity, only 51 out of 446 respondents stated that they play educational games. This unpopularity is probably caused by excessive prioritizing of the educational aspects in the games. As Peirce and Wade say:

The most significant challenge being that the objectives of instructional design and engaging game-play can conflict. This evidently requires compromises in either game-play or learning personalisation. Although prioritising the learning personalisation is desirable in an educational game, it can in fact result in a worse learning experience. (163)

Educational games designed in this manner resemble school too much and their educational focus is usually too narrow. This causes their low popularity and is the main reason why they are not an ideal educational tools even though they are supposed to be.

4 Conclusion

The results of the research carried out as the practical part of this paper suggest that there indeed is a correlation between playing videogames and increased vocabulary knowledge of the lexical fields featuring in those games. Consequently, this confirms the hypothesis formulated in the introduction of the thesis.

This conviction is based on the results of the questionnaire, included in the appendix of the thesis, which was proven to be designed adequately to its purpose and, as it was shown in the subchapters 3.2 and 3.3, the conclusions drawn from the results can be considered fairly objective. Undoubtedly, further objectification would be possible with an increased number of participants and with higher diversity of the sample but this proved to be a difficult task to manage without any external motivation of the participants. Even though the first example of external motivation that comes to mind is financial motivation, there are other possibilities that could be as useful. For instance a considerable amount of respondents expressed the desire to know the results and their scores compared to others.

From the analysis covered in the subchapter 3.4 it is apparent that it is difficult to draw a line between gamers and non-gamers. A person who drinks one glass of beer per week is not automatically considered to be an alcoholic and the same rule applies to being a gamer. In order to tackle this issue more efficiently it would be advisable to use more concrete and thorough questions concerning participants' previous gaming experience. Despite this ambiguity the results are clear because the hypothesis was confirmed independently of the manner in which the threshold had been set.

Another interesting matter arose from the fact that the participants were not asked a question about their previous experience with English videogames but with the videogames in general, and yet the hypothesis was still confirmed. However improbable it is, it may be the case that all the participants who have ever played games only played them in English. But it is more probable that it was caused by the dominance of English in the gaming industry. This dominance is one of the side effects of English being the global language and especially the language of the Internet (Crystal 117).

Concerning alterations which should be made to the questionnaire, should it be used for further research, the problem with ambiguity of questions, discussed in the subchapter 3.3.4, must be addressed. The question on length of the previous English

studies should be defined more unambiguously in order to draw any conclusions concerning the correlation between the length of previous English studies and the score reached in the testing part of the questionnaire.

It would also be beneficial to broaden the subject of research from passive vocabulary to active vocabulary and also to measure the relation between the knowledge of a word and the structure of the corresponding entry in the mental lexicon of the participant. This research would probably have to be more quality oriented and ideally it should involve communication between the researcher and the participants. It could not be based on the same questionnaire that was used for the research concerning passive vocabulary because it consists only of translations therefore there is no way of identifying the level of acquisition of the given entry in one's mental lexicon.

Keeping the findings in mind, it should be stated that playing videogames is not just the useless activity it is sometimes believed to be. It has positive effects on the player, at least concerning his English vocabulary, and should be accepted as a potentially beneficial activity. The ease with which players learn through videogames and the commitment they have to increasing efficiency of their gameplay, thus unconsciously learning new vocabulary, is something which should not be overlooked. In the ideal scenario teachers will one day learn how to use this situation to their, and more importantly to students', advantage during the learning process.

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6 Appendix

Kolik je Vám let? _____

Kolik let studujete angličtinu? _____

Kolik hodin týdně průměrně věnujete studiu angličtiny? _____

Kolik měsíců jste celkem strávil/a v anglicky mluvící zemi? _____

Kolik let hrajete počítačové hry? _____

Kolik hodin týdně průměrně strávíte hraním počítačových her? _____

Jaké žánry počítačových her hrajete nejvíce? _____

RPG	FPS	Strategie	Závodní	Sportovní	Logické	Vzdělávací
Jiné	Žádné					

Označte vždy **JEDNU** odpověď, která podle Vás nejlépe odpovídá překladu anglického slova. Pokud nevíte, označte odpověď e) nevím.

- | | | | | | | |
|-----|---------------|-------------|---------------|-------------|-------------|----------|
| 1. | Cat | a) myš | b) kočka | c) liška | d) racek | e) nevím |
| 2. | Dog | a) vlk | b) kráva | c) holub | d) pes | e) nevím |
| 3. | Bear | a) medvěd | b) králík | c) kojot | d) vlk | e) nevím |
| 4. | Snake | a) ještěrka | b) had | c) slimák | d) ryba | e) nevím |
| 5. | Dove | a) havran | b) holubice | c) skřivan | d) hlemýžď | e) nevím |
| 6. | Seal | a) kapr | b) vrána | c) tuleň | d) mravenec | e) nevím |
| 7. | Wasp | a) vosa | b) kobylka | c) včela | d) kos | e) nevím |
| 8. | Trout | a) štika | b) koza | c) křepelka | d) pstruh | e) nevím |
| 9. | Stag | a) býk | b) jelen | c) panter | d) orel | e) nevím |
| 10. | Boar | a) jestřáb | b) myš | c) kanec | d) zmije | e) nevím |
| 11. | Pen | a) kniha | b) tužka | c) židle | d) pero | e) nevím |
| 12. | Rubber | a) penál | b) ořezávátko | c) kružítko | d) guma | e) nevím |
| 13. | Glue | a) barva | b) kalkulačka | c) lepidlo | d) desky | e) nevím |

14. **Blackboard** a) tabule b) katedra c) lavice d) skříň e) nevím
15. **Paint brush** a) štětec b) barva c) pastelka d) omalovánky e) nevím
16. **Ruler** a) ořezávátko b) pravítko c) kružítko d) houba e) nevím
17. **Register** a) papír b) rozhlas c) služba d) třídnice e) nevím
18. **Protractor** a) modelína b) úhломěr c) ukazovátko d) nůžky e) nevím
19. **Compass** a) podložka b) úhломěr c) kružítko d) pravítko e) nevím
20. **Stapler** a) sešívačka b) děrovačka c) sponka d) počítadlo e) nevím
21. **Sword** a) nůž b) kopí c) palcát d) meč e) nevím
22. **Shield** a) puška b) brnění c) štít d) pevnost e) nevím
23. **Bow** a) kanón b) puška c) luk d) oštěp e) nevím
24. **Knife** a) kord b) šavle c) píka d) nůž e) nevím
25. **Crossbow** a) kuše b) sekera c) prak d) balista e) nevím
26. **Rifle** a) řemdih b) puška c) dělo d) munice e) nevím
27. **Dagger** a) dýka b) luk c) šíp d) meč e) nevím
28. **Club** a) palice b) kladivo c) prak d) sekera e) nevím
29. **Whip** a) nůž b) tomahavk c) kolt d) bič e) nevím
30. **Halberd** a) píka b) oštěp c) halapartna d) mušketa e) nevím
31. **Cycling** a) plavání b) kolo c) cyklistika d) kroužit e) nevím
32. **Flight** a) plavba b) cesta c) letadlo d) let e) nevím
33. **Journey** a) cesta b) padák c) vlak d) železnice e) nevím
34. **Airport** a) přístav b) nádraží c) letiště d) letadlo e) nevím
35. **Backpack** a) kufr b) batoh c) spacák d) karimatka e) nevím
36. **Harbour** a) stan b) vlak c) loď d) přístav e) nevím

37. **Steering wheel** a) ruční brzda b) kolo c) volant d) řadící páka e) nevím
38. **Shuttle** a) cesta b) spacák c) raketoplán d) zavírací doba e) nevím
39. **Carriage** a) padák b) přístav c) zavazadlo d) kočár e) nevím
40. **Wreck** a) vrak b) metro c) vlak d) raketa e) nevím
41. **Strength** a) rychlost b) síla c) váha d) chytrost e) nevím
42. **Intelligence** a) inteligence b) zkušenost c) hloupost d) šikovnost e) nevím
43. **Resistance** a) výdrž b) síla c) odolnost d) přesnost e) nevím
44. **Agility** a) přesnost b) rychlost c) obratnost d) odolnost e) nevím
45. **Dignity** a) čestnost b) důstojnost c) rychlost d) vytrvalost e) nevím
46. **Endurance** a) vytrvalost b) odolnost c) prohnalost d) rychlost e) nevím
47. **Stamina** a) stabilita b) výdrž c) přesnost d) rychlost e) nevím
48. **Dexterity** a) zručnost b) nešikovnost c) vytrvalost d) přesnost e) nevím
49. **Cunning** a) šikovnost b) náladovost c) povrchnost d) prohnalost e) nevím
50. **Resilience** a) pružnost b) laskavost c) skromnost d) zdatnost e) nevím
51. **Shirt** a) košile b) sukně c) tričko d) mikina e) nevím
52. **Trousers** a) boty b) kalhoty c) svetr d) čepice e) nevím
53. **Belt** a) batoh b) kapsa c) bunda d) pásek e) nevím
54. **Necklace** a) náhrdelník b) tkanička c) kšiltovka d) šála e) nevím
55. **Bracelet** a) náramek b) kraťasy c) pláštěnka d) rukáv e) nevím
56. **Collar** a) náušnice b) brýle c) kabát d) límec e) nevím
57. **Jewel** a) kabelka b) šperk c) čepice d) mikina e) nevím
58. **Disguise** a) pláštěnka b) klobouk c) převlek d) buřinka e) nevím
59. **Girdle** a) opasek b) čelenka c) svetr d) šaty e) nevím

60. **Cardigan** a) lakýrky b) motýlek c) pletený svetr d) šerpa e) nevím
61. **Giant** a) leprík b) bludička c) obr d) gorila e) nevím
62. **Dragon** a) strašidlo b) drak c) jednorožec d) drákula e) nevím
63. **Skeleton** a) přízrak b) zombie c) upír d) kostlivec e) nevím
64. **Ghost** a) ghúl b) obluda c) duch d) hejkal e) nevím
65. **Unicorn** a) jednorožec b) fénix c) kentaur d) bílá paní e) nevím
66. **Vampire** a) kostlivec b) upír c) trpaslík d) bludička e) nevím
67. **Elf** a) skřítek b) gnóm c) vodník d) víla e) nevím
68. **Wraith** a) vlkodlak b) anděl c) přízrak d) mořská víla e) nevím
69. **Orc** a) zombie b) skřet c) trpaslík d) ďábel e) nevím
70. **Imp** a) víla b) goblin c) mumie d) skřítek e) nevím
71. **Head** a) ucho b) prst c) hlava d) rameno e) nevím
72. **Hand** a) paže b) koleno c) ruka d) loket e) nevím
73. **Leg** a) předloktí b) nos c) nárt d) noha e) nevím
74. **Neck** a) krk b) lýtko c) malíček d) hrudník e) nevím
75. **Shoulder** a) žaludek b) rameno c) záda d) pata e) nevím
76. **Knee** a) brada b) loket c) zápěstí d) koleno e) nevím
77. **Ankle** a) ukazovák b) kotník c) chodidlo d) čelo e) nevím
78. **Torso** a) břicho b) bok c) trup d) plíce e) nevím
79. **Wrist** a) zápěstí b) zátylek c) palec d) čelist e) nevím
80. **Thigh** a) záda b) lýtko c) předloktí d) stehno e) nevím
81. **Actor** a) uklízečka b) herec c) úředník d) voják e) nevím
82. **Guard** a) strážný b) kovář c) dělník d) farmář e) nevím

83. **Driver** a) školník b) ředitel c) řidič d) námořník e) nevím
84. **Miner** a) horník b) obchodník c) kněz d) detektiv e) nevím
85. **Barber** a) bankéř b) holič c) pekař d) barman e) nevím
86. **Butcher** a) hlídač b) řezník c) vrátný d) hostinský e) nevím
87. **Lumberjack** a) vinař b) učedník c) dřevorubec d) číšník e) nevím
88. **Blacksmith** a) uhlíř b) horník c) kominík d) kovář e) nevím
89. **Surgeon** a) kuchař b) cukrář c) ředitel d) chirurg e) nevím
90. **Merchant** a) voják b) kupec c) doktor d) pekař e) nevím
91. **to Walk** a) stát b) mávat c) sedět d) chodit e) nevím
92. **to Swim** a) plavat b) křičet c) potápět se d) švihnout e) nevím
93. **to Run** a) plazit se b) ležet c) běhat d) klečat e) nevím
94. **to Kick** a) ležet b) kopat c) mlátit d) uhýbat e) nevím
95. **to Jump** a) sehnout se b) padat c) otočit d) skákat e) nevím
96. **to Push** a) tlačit b) zastavit c) táhnout d) pochopit e) nevím
97. **to Capture** a) zajmout b) skrčit se c) stavět d) bojovat e) nevím
98. **to Crawl** a) výt b) plazit se c) třást se d) přetřhnout e) nevím
99. **to Grasp** a) šeptat b) nést c) číst d) popadnout e) nevím
100. **to Mount** a) uspat b) přenést c) nasednout na d) lézt e) nevím