Univerzita Palackého v Olomouci

Pedagogická fakulta

Ústav cizích jazyků

Video games and their influence on students of English

Bakalářská práce

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Olomouc 2023

Čestné Prohlášení

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V Olomouci dne 19.6.2023

…........................

Jakub Twardzik

Poděkování

Tímto bych chtěl poděkovat mé vedoucí Mgr. Petře Charvátové za poctivé vedení bakalářské práce, rychlou a nápomocnou zpětnou vazbu a ochotu.

Dále chci také poděkovat svým přátelům a mé rodině za psychickou podporu při mých studiích.

Obsah

Abstract

Nowadays video games are a common free time activity and influence players in many ways. This thesis aims to describe the potential influence of video games on second language acquisition. The theoretical part focuses on the description of video games, their genres and the ways video games may influence their players. It mentions subtitles and how they may influence language acquisition combined with video games. The research attempts to describe the most suitable game genres for language acquisition, find out whether Czech players believe that their level is related to playing video games and what language skills playing video games might influence. Lastly, we will attempt to see whether it would be possible to include video games in a school environment.

Introduction

Video games have become a massive medium in modern society. Some consider it as a fun way to spend their time and some may think of video games as a waste of time and money. However, are video games only good as a free time activity to waste someone's time? Are there some other benefits that video games can provide a player? This thesis will try and focus on these questions. Its main purpose is to take a look at video games and their potential for second language acquisition.

The thesis is divided into two parts, theoretical and research part. In the first part, we will attempt to define video games as a medium and describe their most popular genres. After covering the general theory, the focus will shift to language. The thesis will cover different ways video games might influence players' language abilities and cover how video games might be used as a learning tool. In the last part of the theoretical part, the focus will be on video games' limitations and shortcomings in terms of language acquisition.

In the second part, the focus is going to be the analysis and discussion of data gathered via a questionnaire. The research will focus on Czech video game players and their opinion concerning video games and their English knowledge. The empirical part will try to discover video games that might be the best suited for second language learning. It will try to discover whether the Czech player considers video games as a useful medium for language acquisition. In the next part of our research, the focus will move on to the subtitles. It will try to discover the usage of subtitles among Czech players and whether they play a role in the acquisition of a second language in video games. Lastly, we will try to determine what is important for a video game in order for it to be enjoyable according to Czech gamers and try to find out if it is possible to include such games in formal education.

1. Defining videogames

In this section, the main focus will be to attempt to define video games as a medium. It will feature different definitions by many authors and provide reasons why defining video games proves to be problematic.

There is no universal definition of video games and many authors struggle with its definition due to the huge variety of games. According to Bergonse (2017), there are three main difficulties when it comes to their definition. The first one is the previously mentioned variety. The scale videogames cover is massive from simple indie (usually developed by a small team or one person) games made for any machine to triple A games (games developed by the biggest game developing companies in the world) designed for the newest consoles and computers with dedicated graphic cards. This variety causes a problem with identifying common traits among video games making it fairly difficult with their definition (Bergonse 2017).

The second main difficulty according to Bergonse (2017) is that researchers do not distinguish the terms *videogame* and *game* enough. Many definitions describe video games as a category of games and do not consider them as completely separate media.

The last problem is that video games can be approached from many different angles, so the definition depends on what angle does the author looks at video games. These three factors gave birth to many definitions of video games. Salen and Zimmerman (2003) describe video games as "a system in which players engage in an artificial conflict, defined by rules that result in a quantifiable outcome." According to Esposito (2005), "a videogame is a *game* which we *play* thanks to an *audiovisual apparatus* and which can be based on a *story*." These two ways to understand what video games are, proves vast differences between definitions. However, one of the most commonly agreed upon is by Jesper Juul. He defines videogames as:

"A rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are negotiable." (Jule, 2005, p.36)

However, Glas (2012) argues that such a definition is not sufficient for all video games. He gives an example of role-play games more specifically massively multiplayer online role-playing games (MMORPGs) where the quantifiable outcomes are not present. Aarseth (2014) takes a completely different approach and presents the idea that video games cannot be defined

by a simple definition. He gives examples of two games *Tetris* and *Word of Warcraft* and argues that although they are games, they have nothing in common. He states that to study games' definition is not necessary despite the fact that we could make a mistake and study something different. In my opinion, this is the best approach since video games are such a huge medium and spread into so many different forms and genres that there is always an exception for every definition.

2. Different genres

Since defining video games can be quite problematic Those criteria are called videogame genres. Reinhardt (2019) describes them as a category for games that have similar mechanics, player behaviours and themes. Instead, the focus will be only on the most popular and influential genres of video games. However, even in this section authors are not consistent and there are differences between what genres are considered the most important. Juule (2005, p.131-132) suggests that there are only four types of video games which are abstract, iconic, incoherent word, coherent word and staged games. On the other hand, Wolf (2002) divides video games into 42 different genres based on similar features. Reinhardt (2019) talks about six main categories of videogames and Wolf and Perron (2014) discuss seven main categories excluding action-adventure from Reinhardt (2019), but expand it by adding shooting and sports videogames which Reinhardt considered a sub-category of action videogames. Judging by this diversity we can claim that genres are indeed subjective and depend on individuals' points of view and experiences with video games. So, in this part, I chose a few genres which are the most popular among video game players according to data provided by Clement (2022). By being popular most of the players often comes in contact with them which means that these type of game might be the most influential in term of language acquisition.

2.1. Action games

These types of games require players to control a character and their movement (Kim, Song, Lockee and Burton, 2018). They require physical (hand-eye-body) coordination (Reinhardt, 2019), test players' reflexes and most of the time put players in some kind of urgency. Action games have many sub-genres, the most popular being shooting games (*Doom Eternal, Neon White, Ultrakill*) and fighting games (*Super Smash Bros, Street Fighter, Guilty Gear*). Where shooting games are considered to be the most popular ones. Research by Clement (2022) shows that shooter games are considered to be one of the most popular among gamers. This popularity started in the 90s with games like *Doom* and *Wolfenstein 3D*. Especially the option of LAN multiplayer made this game a hit among people. (Berens and Howard, 2008). However, it is important to understand that all genres intervene through one another and there is no such thing as just an action game. Reinhardt (2019) states that genres are often hybridized into others and gives examples of action-adventure which features games like *Assassin's Creed series* and *God of War 2018*. Kim, Song, Lockee and Burton (2018) share the same opinion and

point out that action and adventure games often blend together and create an action-adventure genre which shares characteristics of both categories.

2.2 Adventure games

According to Vara (2014), adventure games are one of the first genres in video game history. She argues that the reason for their long history and popularity to this day is their versatility and ability to experiment with interfaces and storytelling. These are the games where the player explores, most of the time fictional, words and solves problems connected to its characters. The player is driven by narrative (Kim, Song, Lockee and Burton, 2018) and is encouraged to critically think and solve problems by finding solutions with his own efforts. It is an interactive story about a character whom the player control. (Adams, 2006, p.87) Oblinger (2006) points out that adventure games can help players develop their problem-solving abilities. Reinhardt (2019) presents a few subcategories of this genre. Visual novels (*Doki Doki Literature Club!; Steins: Gate; Phoenix Wright: Ace Attorney Trilogy*), text adventure (*Franchise Hockey Manager 9; Citizen Sleeper; Papers, Please*) and hidden object games (*Path of Sin: Greed*). He mentions that the player is encouraged to learn the language since he wants to understand the story, be able to make decisions and solve puzzles. He gives an example of research done by Shintaku (2016) on the game *Mysteries in a Haunted House* to support his claims.

2.3 Sports games

There is no denying that sports games played a major part in the history of video games. Even today they remain to be one of the most profitable on the market. (Baerg; 2014). Big companies like EA create yearly games such as *FIFA, Madden NFL and NHL series*. Players continuously enjoy them every year due to the immersive aspect they offer. Especially nowadays they are more immersive than before with the development of virtual reality, wearable devices and motion detection (Kim, Song, Lockee and Burton, 2018). Nevertheless, it is important to point out that sport games do not always simulate or try to represent real-life sports. A game like *Rocket League* is a clear example of this exception. It undeniably is a sports game but does not try to imitate real life in the slightest. Some authors do not consider sports games as a genre. Reinhardt (2019) considers it to be a subgenre of action games. However, Kim, Song, Lockee and Burton (2018) describe it as a separate category. The same process is done by Salen and Zimmerman (2003) who describe the sports genre separately. DeHaan (2005)

has researched how playing sports videogames can positively affect foreign language acquisition. In his study, he observed a 27-year-old American student who was studying Japanese. The student played a Japanese baseball game without being able to switch to English and without subtitles. He was asked to play at least 30 minutes twice a week for a month. After 30 days he took the same test as in the beginning and improved in his writing, listening and reading abilities. The subject of the research mentioned that games helped him more with language learning than movies due to the repetition factor in a video game.

2.4 Simulation games

Simulation games are one of the hardest genres to define. When a gamer hears the term simulation game *SimCity* and *Civilization* are the game that usually comes to mind. But their mechanics and characteristic features fall more into the strategy games category like *Age of Empires*. They try to reproduce a real process. (Adams, 2006) Simulation games include many completely different games. (Giddings, 2014). Gidding (2014) suggests that the closest they have to defining generic characteristics is their sandbox format, meaning that players have a lot of freedom and many options when it comes to game progression. In contrast, Kim, Song, Lockee and Burton (2018) describe them as a game type that simulates a real word or a fictional situation where the player experiences these situations that they would not normally experience in the real world. Reinhardt (2019) states that simulation games involve building or managing a representation of a system, like a city, country or theme park. In my opinion, this is not a good statement since not all simulation games have these features. He does later list subgenres that have different characteristics. But does not correct his statement about all the simulation games.

3. Learning a second language through video games

In this section, the main focus will be to determine in what way may video games influence language acquisition. It will mention research done concerning this topic and present arguments as to why video games might positively influence one's language abilities.

The potential of acquiring knowledge from video games had already been recognized during their emergence in the 1950s. One of these examples is *Tennis For Two*, which was developed in 1958. It was a game which aimed to tutor guests at Brookhaven National Laboratory about gravity (Berens and Howard, 2008). Many school subjects can be taught through video games. History through the *Assassin's Creed* series (Karsenti and Parent 2020), science through *Minecraft* (Smaldone, Thompson, Evans, Voit, 2017) or a second language in *World of Warcraft* (Zheng, Newgarden, Young, 2012). the main focus of this section is to discuss second language acquisition through video games. Today video games and their influence on second language acquisition have been a popular subject among researchers and many of them such as Reinhardt (2018), Smaldone, Thompson, Evans and Voit (2017) or deHaan (2005) have proven their positive influence on second language learning.

Many teachers may look at video games and see them as something negative which takes away their students' attention from learning. However, Mawer and Stanley (2008) present an argument that instead of trying to avoid video games they should use them and make learners interested in the learning process. Of course, it might be impossible to learn by playing popular video games in class due to the high financial cost (see chapter 4), but Mawer and Stanley (2008) point out that just by referencing them learners might be more interested in the lecture. Many teachers ask their learners about what books they enjoy and movies they like, however, modern trends change and nowadays it is common for people to play video games in their free time instead of watching a movie or reading a book. This is further supported by statistics in an article by Howarth (2023) where he states that there are over 3 billion video game players worldwide.

3.1 Game-enhanced learning

Reinhardt (2018) presents three methods that use video games as an application for second language teaching and learning (L2TL) game-enhanced learning, game-based learning and game-informed learning. Game-enhanced learning utilizes games that are intended entirely for entertainment. Developers did not design them with the intent of second language

acquisition, however, by playing the game in a second language the player is encouraged to learn of his own free will. This method mainly works with materials that help the individual to focus on the language use through dialogues in the game. These dialogues not only expose learners to new vocabulary and grammar but may also introduce different accents and commonly used colloquial language. Silva (2014) points this out and uses an example from a game called *Breath of Fire IV* where dialogues such as *If I was you* and *'round here* are present in the game. These are very attractive to students since their original design is focused on entertainment. (Smaldone, Thompson, Evans, Voit, 2017).

One of the studies in this category of video games was conducted by Zheng, Newgarden and Young. The research focused on the game World of Warcraft (WoW) and states that the most common communicative activities between players of World of Warcraft are calling for help, providing directions, apologizing, planning strategies, greeting and leave-taking rituals. "Language is central to planning for action" (Zheng, Newgarden, Young 2012, p.335). Meaning that without a proper understanding of language and the ability to communicate players will fail and lose the game. These are all examples of bridging activities, which connect in-class activities and digital experiences. Zheng, Newgarden and Young (2012) point out that quests (tasks which players are supposed to complete) are the most valuable in terms of language learning. Players share a common goal and are encouraged to cooperate in order to complete the quest and acquire rewards. During the analysis of dialogues between the players, the research states that many of the exchanges between participants are like those we can find in English as a second language (ESL) textbooks as a part of task-based activities. However, unlike in the classroom, the conversations in games occur naturally and invite realistic participation which further develops the player's ability to be more flexible in future communication (Zheng, 2012).

One of the recent examples of this process is a game called *Pokémon GO*, which is a game that connects reality with the game world. With the usage of GPS, players travel around the real world to gather recourses and try to find and catch rare Pokémon. According to Wang and Skjervold (2021) playing *Pokémon GO* has a significant positive impact on the physical and social levels of gamers. 2191 participants took part in their research. The results state that 64% of people who did not meet WHO's minimum recommended physical activity met the recommended minimum after they started playing the game.

However, not all games are multiplayer meaning that not all games offer an opportunity to interact with other players in the game. Instead, players interact with non-playable characters

(NPCs) to progress through the game. Silva (2014) presents an argument that interaction with NPCs exposes learners to new vocabulary. These interactions used to be bland and poorly written in older video games, however, today the situation is different. As Mawer and Stanley (2008) point out interactions and dialogues between players and NPCs are way more sophisticated nowadays. But it is not only vocabulary that is affected by playing video games. Zheng, Newgarden and Young (2012) present an argument that video games do not affect only language acquisition. Certain activities involve collective effort and encourage the development of coordination and asking and understanding other people's opinions.

3.2 Game-based learning

The second method is game-based learning. This term focuses entirely on games that are completely designed for L2TL. As in games intended for entertainment purposes, there is a variety of different games. They could be downloaded and installed on a PC, accessed via a web browser, an app on a mobile phone or a combination of previously mentioned (Reinhardt, 2018). These games are usually seen negatively by gamers since they usually take away the fun aspect of a game.

"I wouldn't buy a game just for the educational benefit, it has to be enjoyable too. Some educational games are fun, but usually, the fun ones are very well disguised as educational games, so they sell more." (Kayla, 14, BBC, 2004 as cited in Mawer and Stanley, 2008, p.3)

Meaning that by taking away the fun aspect of a game learners will not show more interest in the learning process. Unfortunately, there is not a substantial number of these types of games yet. According to Reinhardt (2018) developing games require skilled personnel such as a designer, programmer and graphics artists which causes the cost of the development to be around a hundred of thousands of dollars. However, Mawer and Stanley (2008) further argue that instead of trying to find these games it might be easier to choose a game intended for fun and to build tasks around them to exploit language. This way the learners will not be appalled by the idea of a game made for learning and experience better motivation in the learning process. (Mawer and Stanley, 2008).

3.3 Game-informed learning

Lastly, game-informed learning does not use video games to teach a second language. It utilizes theories of games and play in the broad practice of second language (L2) teaching and learning (Reinhardt, 2018). It attempts to infuse traditional L2 practices with insights from theories of the game and play. The main focus of this method is to use mechanics and game-design techniques to increase learners' engagement and motivation (Gros 2006). Gee (2007) argues that using game principles in language acquisition helps individuals increase their language knowledge at a faster pace than in curricular education. Such mechanics are immediate feedback, rewards and immersion. As Zheng, Newgarden and Young (2012) state playfulness in games allows players a risk-free experimentation with a language. Kapp (2012) calls this process of introducing game elements in real-life learning "gamification". In his book, Kapp (2012) presents an example of this process, where with the usage of gamification people were more motivated to use stairs instead of escalators in a subway station. In a few towns around the world, stairs were transformed into a set of white and black piano keys, where each individual step produced a different note when stepped on. After the construction, the usage of the staircase increased by 66 per cent.

Reinhardt (2018) argues that L2 learning should be more goal-oriented and that learners should have at least a small amount of influence about what task or activity is going to be used for learning. In games, players use language in order to accomplish a task that is not simply just using the language, but rather to do something meaningful with it. "Language needs to be embedded in discourse, otherwise it is meaningless" (Silva, 2014). Furthermore, players can set their own objectives and means to achieve them which further motivates them to complete the task (Reinhardt 2018). Sykes and Reinhardt (2012) present an argument that when a learner has no control over choosing the objective of a learning task, he will probably not be interested in the outcome of the learning activity. A well-formed task should let a learner know what the objective is and allow the learner some say in the way and order they complete them. However, it is important to maintain a balance between giving learners freedom and following the curriculum since having too much freedom in learning activities may confuse learners and make them anxious (Reinhardt 2018).

Mawr and Stanley (2008) present different approaches to converting games intended for fun to educational. One of them is the usage of walkthroughs. The term walkthrough refers to a written or spoken guide about the game. Walkthroughs usually give players tips and tricks on

how to overcome more difficult areas of a game or suggest different ways to play the game. As an example, Mawr and Stanley (2008) call one of these methods "observe and write". The main aim of this activity is for students to create their own walkthrough of a game they would play. While playing students take notes about actions they took and later present a guide in the form of a narrative. Mawr and Stanley (2008) state that this is especially effective for past-tense practice.

However, these mechanics are not something new and unknown. Some of them have already been partly implemented in present-day schools. Reinhardt (2018) mentions the importance of contextualized language learning. He argues that in a L2 classroom, the language is usually presented in a thematically coherent way. However, game-informed language learning uses the contextualization and attempts to situate the language in a narrative and goal-directed behaviour (Reinhardt 2018). To simplify learners are encouraged to use the language, that they are supposed to learn, in a meaningful way. This process of immersion and usage of language in a meaningful way is present in role-play and simulation pedagogies (Reinhardt 2018), which are commonly practised nowadays.

3.4 Influence of subtitles

Due to the massive popularity of video games around the world subtitles are a standard in every new release. According to an article published on the official website, of one of the largest video game developer companies Ubisoft, which discussed accessibility and importance of subtitles 60% of all owners and 70% of owners of the PC version of a game called *Assassin's Creed Origins* use the subtitles option (Ubisoft.com, 2018). This statement is further supported by one of the employees. Project Manager David Tisserand stated that in the game *Far Cry New Dawn* which has subtitles turned on by default only 3% of players disabled them. The same can be observed in *Assassin's Creed Odyssey* where around 5% of players turned the subtitles off (Smith, 2019). Considering these statistics, we can discuss and talk about how and in what way might video game subtitles influence the language capabilities of L2 learners. Unfortunately, not much research has been done regarding video game subtitles. This is why most of the source materials below focus mainly on online media such as movies or TV shows. Nevertheless, in my opinion, the difference between reading movie or TV show subtitles and video game subtitles is very slim. Especially if we look at video games that might be the most suitable for L2 learning (see chapter 4, paragraph 4). Due to the heavy focus on the story of these games, a big part of their playtime is consumed by cutscenes which refers to the animated

part of a video game that cannot be influenced by a player and the main objective of a cutscene is to showcase part of a game story. To put it simply if we take a movie and cut it into for example 30 pieces and then put a gameplay between them, those pieces would be called cutscenes. The main difference is that in video games players have the opportunity to influence the final outcome of the story.

Lei (2023) suggests that subtitles promote learning because people want to understand what is happening on their screens. She states that when a person is watching a movie, he is able to read subtitles in the process of listening to the dialogue and form their own understanding of certain words. Furthermore, a theory by Mayer (2014) states that people learn more from words and pictures than from words alone. Mayer calls this process multimedia learning. In his theory, he believes that humans possess separate information processing channels for visually represented material and verbally represented material. Each of these separate channels have a limited capacity of information they can process at a time. That is why Mayer believes that if we use both of these channels at the same time our learning process can be significantly more effective than using only one (Mayer, 2014).

3.4.1 Listening abilities

In relation to the benefits of subtitles for L2 language, listening is probably the last skill someone might consider. It may seem as if reading a text on screen might have little to no impact on a person's ability to understand spoken language. However, according to an experiment done by Han Yanmei where 80 non-English major students were divided into two groups. The first would watch a movie with subtitles and the second group without them. The participants who watched movies with subtitles scored better results in a listening test than the second party (Han, 2010 as cited in Lei, 2023). A study done by Bird and Williams (2002) whose main focus was on implicit and explicit L2 learning, implicit standing for unconscious memory and explicit for conscious memory, observed 16 English native and 16 advanced non-native speakers. During their experiment, the result showed that those stated in the caption condition were better able to implicitly recall phonological information they processed (Bird and Williams, 2002 as cited in Danan 2002). To simplify subtitles may help with memorizing the pronunciation of certain words. Danan (2002) further states that subtitles may improve learners' ability to process new language more efficiently and for longer periods of time.

3.4.2 Authenticity of grammar

As mentioned in chapter 4 if we give learners interesting context and narrative it will motivate students to learn the language by themselves. This applies not just to video games but also to movies, TV shows and even school activities we normally use in L2 learning such as role-play. By being immersive the activity helps students grasp the L2 expression more quickly and accurately (Lei, 2023). Because in English as a second language (ESL) countries students do not encounter authentic language the use of audio-visual material might provide learners with the authentic material they do not receive on a regular basis (Torrens, 2022). However, what does it mean for a language to be authentic? Gilmore (2007) defines it as a "language that is produced by a real speaker/writer for a real audience and designed to convey a real message of some sort". As Torrens (2022) points out the important part about this definition is that the text or speech that is being created has no purpose for language learning and therefore is faithful to what a real language user would use. Furthermore, Gilmore (2007) argues that language presented in textbooks is a poor representation of a real interactions. In spite of the fact that there has been improvement in textbook language, there still remain numerous gaps (Gilmore, 2007). If we combine Gilmore's definition with Meyer's theory of multimedia learning video game cutscenes may become an excellent way to experience authentic language through both visual channel and verbal channels. One of the advantages of the usage of authentic language is that learners are able to see the relevance between what they are taught at school and how it is used in everyday communication. This will have a positive effect on their motivation in class and make their approach towards the learning process more positive (Torrens, 2022).

In his research, Torrens (2022) tested subtitles' influence on the acquisition of cleft sentences. Ten participants who were learning English as L2 with similar knowledge concerning cleft sentences were selected. All of them watched part of the *Harry Potter and the Philosopher's Stone* movie. However, one half saw the movie with subtitles and the second half without them. After the movie, both of these groups took tests about their improvement of knowledge and use of cleft sentences. The group which watched the subtitled version of the movie performed significantly better. These results show that subtitles may have a positive effect on better acquisition and understanding of grammatical structure in sentences.

3.4.3 Vocabulary

For the vocabulary retention subtitles may be a great help with memorizing certain words. However, as Lei (2023) points out it is important to distinguish English subtitles and native language subtitles. She argues that if we use subtitles in the native language the learners might remember more vocabulary. She further supports this statement by listing an experiment performed by Hao (2020, as cited in Lei 2023). In his experiment, Hao created two groups of L2 learners and each group watched the same movie. The first one with English subtitles and the second one with subtitles in their native language which in this case was Chinese. The students from the first group performed significantly worse than those in the second. However, by using first language (L1) subtitles learners might lose the benefits of spelling acquisition and as previously mentioned speaking and grammar acquisition.

Nevertheless, even though L1 subtitles may help vocabulary retention more than L2 it does not mean that L2 subtitles do nothing at all. According to a study done by Vicencio and Vicencio (2020) where they compared vocabulary acquisition with and without subtitles on 14-year-old English learners, the group with subtitles had an easier time remembering vocabulary and participants stated that with their help it is easier for them to understand faster-paced dialogues.

On the other hand, video game subtitles have one limitation compared to the movie or TV show subtitles. The quality of video game subtitles may be poor in comparison. As Hamilton (2019) stated at a game developer conference in San Francisco the size of the writing is usually small and hard to read. He points out three main issues which are size, contrast and the amount of text on the screen. He argues that the size problem might be related to the different environments of a player and a developer. Since developers usually have big high-resolution screens, they may see them clearly during the development, however, for a regular player that may not be the case.

4. Limitation of video games

Up until now this thesis mainly focused on the positive aspects of video games and their influence on English students. However, video games are not perfect for acquiring a second language and bring some problems and limitations with them. In this part of the thesis, the main focus will be to describe these problems in an attempt to find out in which part of language acquisition may video games lack compared to the traditional learning methods.

One of the limitations is the lack of learners' attention to learning. Since students need to focus on playing the game itself some games that may be difficult to play could grab most of their attention which may result in a poor learning experience. A study by deHaan, Reed and Kuwada (2010) confirmed this statement. In their study eighty (65 males and 15 females, ages 18-24) undergraduates from Japan who were learning English as their second language were divided into two groups. Both groups were previously tested on their vocabulary knowledge which is part of the game they played or observed and had similar results. The first group was instructed to play a music rhythm game called *Parappa the Rapper 2* while the other group was instructed to only observe the gameplay. This way the participants were divided into 40 pairs. After each pair repeated one specific video game level five times they completed a cognitive load test, an opinion test and lastly the vocabulary test to see if there was any distinction in vocabulary acquisition. The players pointed out that it was difficult for them to concentrate on the game and language simultaneously. (deHaan, Reed, Kuwada 2010) If they attempted to pay more attention to the language, they would fail the level and had to restart from the beginning. On the other hand, the observers had no difficulties concentrating on the game's vocabulary. Due to this, the game observers managed to remember significantly more vocabulary than the players.

As stated in the first chapter there is a huge variety of video games. While diversity might serve as a clear advantage for entertainment purposes. In learning and second language acquisition, the enormous amount of video games causes a problem in choosing the most beneficial one for learning. The same problem was mentioned in the research in the previous paragraph. "One player commented that other video game genres would be better reading practice" (deHaan, Reed, Kuwada 2010). For example, if we take a look at the video game called *Tetris* which is according to an article released by IGN the best-selling video game of all time (Sirani, 2022). It is a game that takes place in a 10 × 20 well of empty unit cells (Tsuruda, 2010). Random block piece starts slowly falling from the centre of the well and the player's

task is to position it in a way that will fill the bottom row. Once the bottom row has been filled the blocks disappear, the player is awarded points and all the blocks above fall down one block. The speed of the falling pieces increases with time as the game increases. (Tsuruda, 2010). This process repeats until the player is not able to keep up with the speed and the cell above row 20 is occupied resulting in the game over. According to a study done by Okagaki and Frensch (1994) playing *Tetris* has a positive effect on spatial skills such as spatial perception, mental rotation (ability to rotate mental representation of two or three-dimensional objects) and spatial visualization. A study done by Biomed Central (2009) states that playing *Tetris* increases brain efficiency. However, we would not be able to find any aspects of the game that may help learners with second language acquisition.

So, what type of video games might provide both language acquisition and fun? According to Reinhardt (2018), one of the most important aspects of language acquisition in video games is vocabulary contextualized in narrative in which the player is able to interact with and complete meaningful tasks. Kapp (2012) presents a similar opinion and argues that storytelling is the most essential part of gamification. Kapp (2012) believes that story provides player relevance and meaning to the experience. As Gee (2007) states "Good videogames reverse a lot of our cherished beliefs. They show that pleasure and emotional involvement are central to thinking and learning. They show that language has its true home in action, the world, and dialogue, not in dictionaries and text alone." If we take these arguments into consideration previously defined adventure games (see chapter 2.2) might be ideal for L2 acquisition since they offer both investing story and give player power and influence to make choices inside that story. Another category that might be ideal for learning are action-adventure games such as *God of War: Ragnarok* or *The Last of Us*. On the other hand, games with no story that focus entirely on gameplay such as *Risk of Rain 2* or *Enter the Gungeon* may bring less benefits or none at all concerning second language acquisition. Because these games solely focus on gameplay and nothing else the game themselves do not have much language to offer to the player.

A lot of research has been done studying how video games influence L2 learners. Nevertheless, most of the research done is focused on the acquisition of informal language. This brings us to the limitation that we should mention which is the lack of formal English in video games. Language in video games tends to be casual and colloquial. If a learner often plays video games and his learning process is heavily influenced by them, he might experience troubles with forming formal sentences which could poorly influence his academic writing. For some,

the lack of formal English may evolve into a new problem of using vulgar words naturally. A study done by Ali, Mohd, Atma, Nazri, Azmi and Hassan (2020) addressed this problem. Their study observed the language progress of a 7-year-old girl playing *Final Fantasy*. While the research states that her language abilities improved it also presents an argument that learning through video games is a double-edged sword. During the testing the girl uttered words such as "Damn", "Shite", "Bastard", and "Screw it" (Ali, Mohd, Atma, Nazri, Azmi and Hassan 2020). After the researchers asked her about these remarks in an attempt to explain that such words should not be casually used the girl believed that those words meant little to no hostility. Due to the fact that swear words are commonly used in video games and media a considerable amount of learners consider them acceptable for everyday use. However, this does not mean that formal language is completely absent in video games. Silva (2014) presents an example of a game *Breath of Fire IV* and its inclusion of formal language but these formal exchanges between the player and a NPCs are very rare and do not occur often compared to the informal dialogues.

The last drawback that is in my opinion not addressed much are the substantial expenses of using video games as L2 learning tool. chapter 3 mentioned that according to Reinhardt (2018), game development costs hundred of thousands of dollars. However, developing a game is not need in order to use it for L2 learning. We could just buy it and use it for L2 learning. Nevertheless, the price of videogames is not cheap with the new releases priced around 60 to 70 dollars (1320 – 1540 Czech crowns). Of course, there are cheaper games with a price tag of around 20 – 30 dollars (440 – 660 Czech crowns), however, when we consider that we need to buy around 30 for a whole class the price can go as high up as 2100 dollars (46 206 Czech crowns). However, games same like modern technology get outdated. Due to this more games would need to be purchased in the future. Another financial problem is that games need a good hardware to run on. The price of one console is around 546 dollars (12000 Czech crowns) and a computer with the same performance would be even more expensive. Due to these high expenses, it might be difficult to use video games in a school environment.

5. Research

Now that we have covered the theory of what video games are, what spectrum they cover, in what ways they influence L2 acquisition and how they might influence L2 abilities. We will move to the practical part of the thesis. The research was done via a questionnaire (see appendix) with both closed and open-ended questions.

5.1 Aim and goals

The aim of this research was to investigate video games' influence on Czech video game players who learned or are learning English as a second language and to see if the research results are similar to research done abroad. There has not been much research done in the Czech Republic and their influence on L2 learning compared to other countries so this research could serve as a starting ground and call for other research done in the future since as we mentioned in the theoretical part there might indeed be a potential for L2 learning in video games and their correct usage might improve one's language abilities.

The main goals of the research are:

1. To investigate which video games might be the best suited for language learning
2. To find out if Czech video game players consider their English level positively influenced by playing video games
3. To determine whether Czech gamers often use subtitles while playing and their influence on language abilities
4. What is important for a game to be enjoyable and is it possible to use video games in a school environment?

All these goals are closely related to the previous chapters and will be discussed and compared with the theoretical part.

5.2 Methodology

The research was done via a questionnaire (see appendix) consisting of 21 questions. Most of these questions were closed-ended while two of them were open-ended. However, in most cases, respondents had the option to write their own answers to closed-ended questions. Similarly, only three of these questions were branching-type questions which split the respondents into different categories which will be discussed later.

The questionnaire was created on the platform www.vyplnto.cz and included a short introduction which informed potential respondents what the questionnaire is about and who should and should not take part of the research since the focus of the questionnaire were Czech video game players. Therefore, all questions were written in the Czech language. After the questionnaire was created, it was distributed on different social media such as Twitch, Discord, Instagram, Facebook and Messenger and the research was conducted and open to the public from the 6th of June 2023 to the 9th of June 2023. The closed-ended questions were automatically processed by www.vyplnto.cz and the open-ended questions were analysed and will be discussed down below.

5.3 Respondents

During the time of being open to the public 133 respondents took part in the research and answered the questionnaire. From all the respondents 95 were male (71,4%), 37 were female (27,8%) and one was genderfluid male (0,8%) (see figure 1). These statistics suggest that video games are more popular among the male population in the Czech Republic. However, a survey done by the Interactive Software Federation of Europe (ISFE) (2021) states that 47,8% of players in Europe are women. But their survey also states that the data for the research was collected in France, Germany, Italy, Spain and the UK which might be the reason for slight differences in the results. The situation in the Czech Republic might be different than in other European countries mentioned above. Another explanation for the differences might be the way the questionnaire was distributed. Due to the fact that most respondents were acquired by sharing the questionnaire via Discord, where according to data published by Ceci (2023) 67,7% of all Discord users are male compared to 32,3% of females. Due to the similarity of female and male representation of Discord users and data collected by this research, this indeed might be the reason for different results compared to data presented by ISFE (2021). However, it is important to note that this research was conducted on a much smaller scale which could also be an argument for these differences.
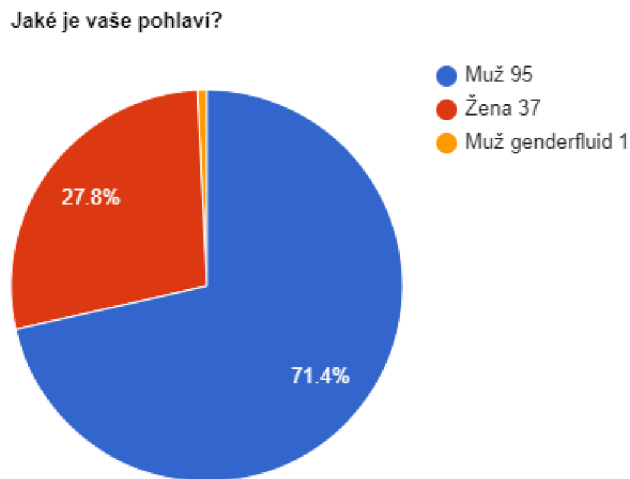
Figure 1. Respondents gender

Source: https://www.justfreetools.com/cs/vysecovy-graf

The figure 1 above was created on a different site mentioned above due to two respondents writing their gender as an attack helicopter as a joke. However, did state in a bracket that they were male. Therefore, the graph had to be recreated and statistics calculated separately. The rest of the research will use graphs generated by www.vyplnto.cz as mentioned in the previous chapter.

The most common age among respondents ranged from 20 – 30 years old (62,41%) where 83 of all respondents selected this option. The second most numerous group were respondents aged between 13-19 years old (23,31%). After that followed 11 respondents of age between 31 – 40 years old (8,27%), 4 respondents aged between 41 – 50 years old (3,01%), 3 respondents aged over 60 years old (2,26%) and lastly one respondent aged less than 12 years old (0,75%) (see figure 2). Again, these results differ compared to the survey done by ISFE (2021). However, again these results suggest that the differences are closely related to the method of distribution since these results are similar to the age groups of discord users published by Ceci (2022).
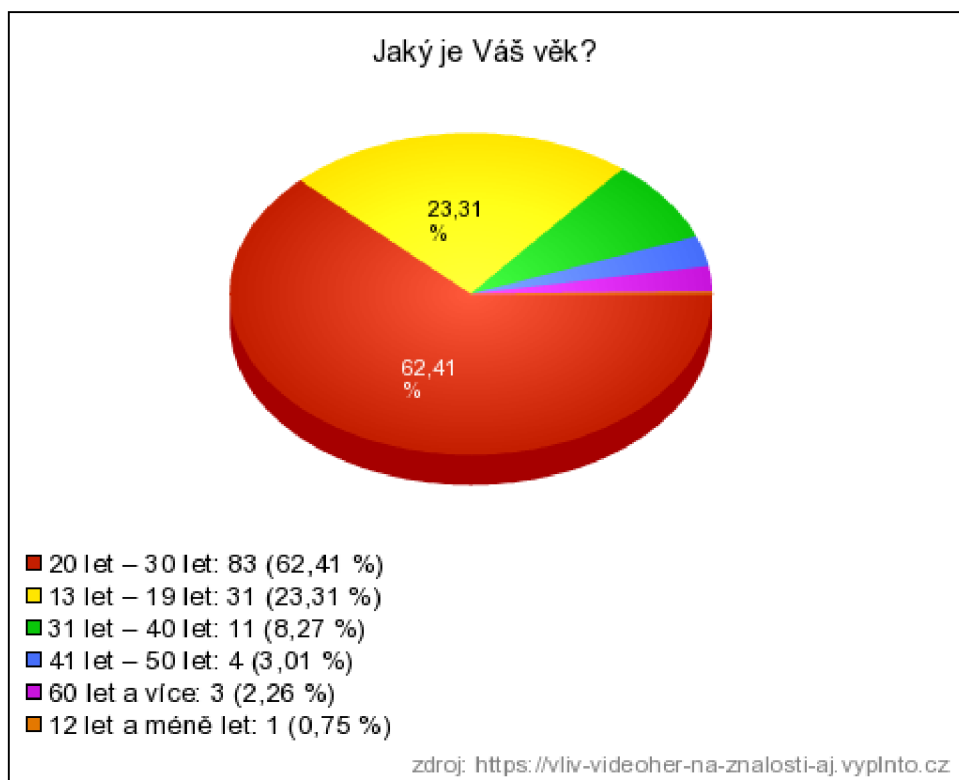
Figure 2: Age of respondents

English level among respondents had two main options chosen which were C1 and B2. Both categories were represented by exactly 45 respondents each (33,83%). After that came respondents with B1 level represented by 20 respondents (15,04%), A2 with 11 respondents (8,27%), C2 with 7 respondents (5,26%) and lastly 5 respondents with A1 English level representing 3,76% (see figure 3). The lesser number of lower English levels might be due to the fact that playing video games already requires some language knowledge and understanding video game dialogues and gameplay might prove difficult for beginners. This argument is further supported when we observe A1 and A2 level respondents and their answers. More than half of them (56,25%) play video games in Czech whereas for all other levels, most respondents play video games in English (88,89%). The same can be observed with the usage of subtitles where respondents with A1 or A2 level of English use Czech subtitles in 71,43% of all cases. It is the other way around for all the other levels where 68, 9% of respondents use them in English.
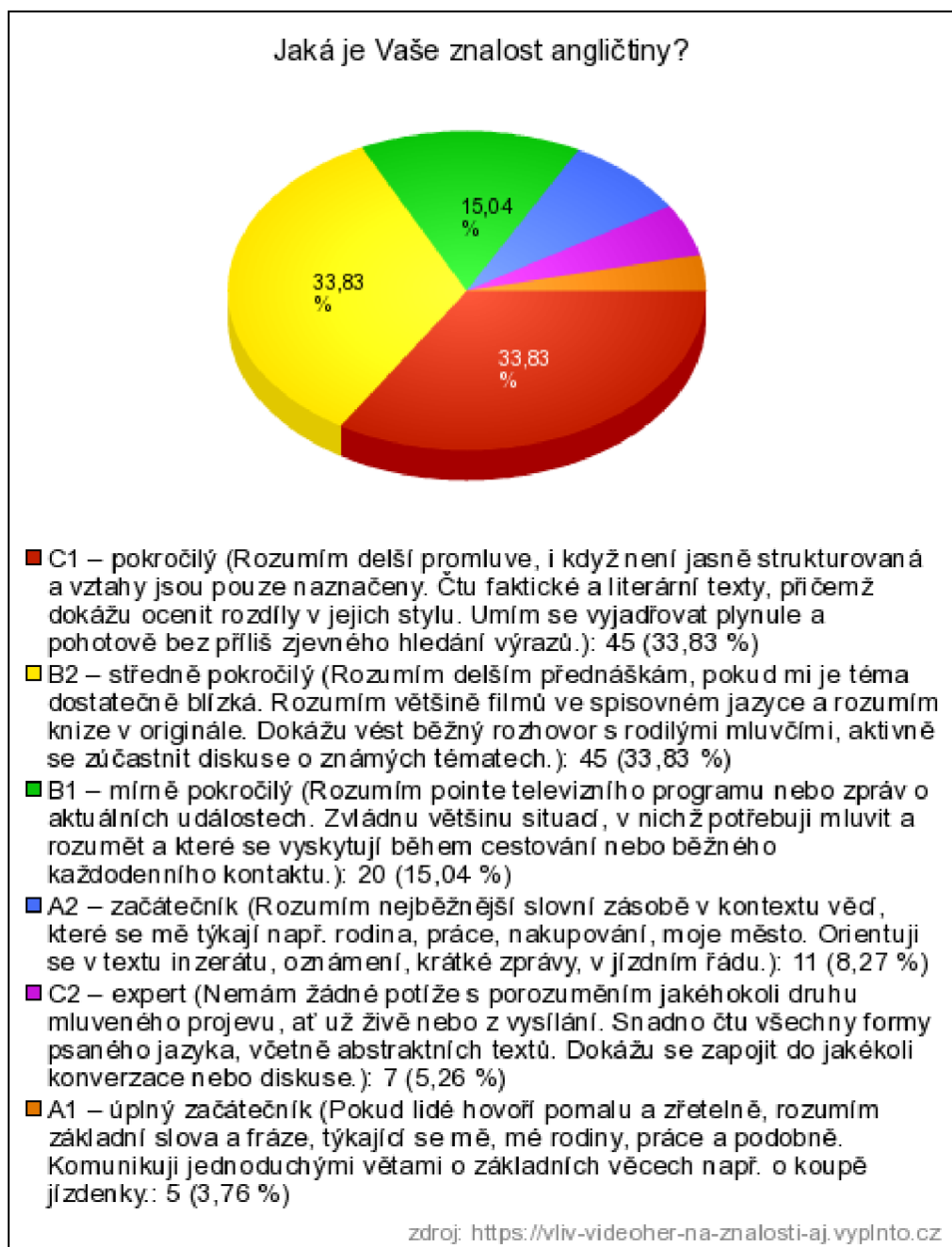
Jaká je Vaše znalost angličtiny?

15,04 %

33,83 %

33,83 %

■ C1 – pokročilý (Rozumím delší promluve, i když není jasně strukturovaná a vztahy jsou pouze naznačeny. Čtu faktické a literární texty, přičemž dokážu ocenit rozdíly v jejich stylu. Umím se vyjadřovat plynule a pohotově bez příliš zjevného hledání výrazů.): 45 (33,83 %)

■ B2 – středně pokročilý (Rozumím delším přednáškám, pokud mi je téma dostatečně blízká. Rozumím většině filmů ve spisovném jazyce a rozumím knize v originále. Dokážu vést běžný rozhovor s rodilými mluvčími, aktivně se zúčastnit diskuse o známých tématech.): 45 (33,83 %)

■ B1 – mírně pokročilý (Rozumím pointe televizního programu nebo zpráv o aktuálních událostech. Zvládnu většinu situací, v nichž potřebuji mluvit a rozumět a které se vyskytují během cestování nebo běžného každodenního kontaktu.): 20 (15,04 %)

■ A2 – začátečník (Rozumím nejběžnější slovní zásobě v kontextu věcí, které se mě týkají např. rodina, práce, nakupování, moje město. Orientuji se v textu inzerátu, oznámení, krátké zprávy, v jízdním řádu.): 11 (8,27 %)

■ C2 – expert (Nemám žádné potíže s porozuměním jakéhokoli druhu mluveného projevu, ať už živě nebo z vysílání. Snadno čtu všechny formy psaného jazyka, včetně abstraktních textů. Dokážu se zapojit do jakékoli konverzace nebo diskuse.): 7 (5,26 %)

■ A1 – úplný začátečník (Pokud lidé hovoří pomalu a zřetelně, rozumím základní slova a fráze, týkající se mě, mé rodiny, práce a podobně. Komunikuji jednoduchými větami o základních věcech např. o koupě jízdenky.: 5 (3,76 %)

zdroj: https://vliv-videoher-na-znalosti-aj.vyplnto.cz

Figure 3: Respondents' level of English

The last grouping question distributed the respondents into 5 categories depending on their status. The most numerous group being employed respondents represented by 52 people (39,1%) followed by 49 university students (36,84%). Then the less numerous groups were high school students represented by 26 (19,55%) respondents, primary school students represented by 4 (3,01%) respondents and lastly 2 retired people (1,5%) (see figure 4).
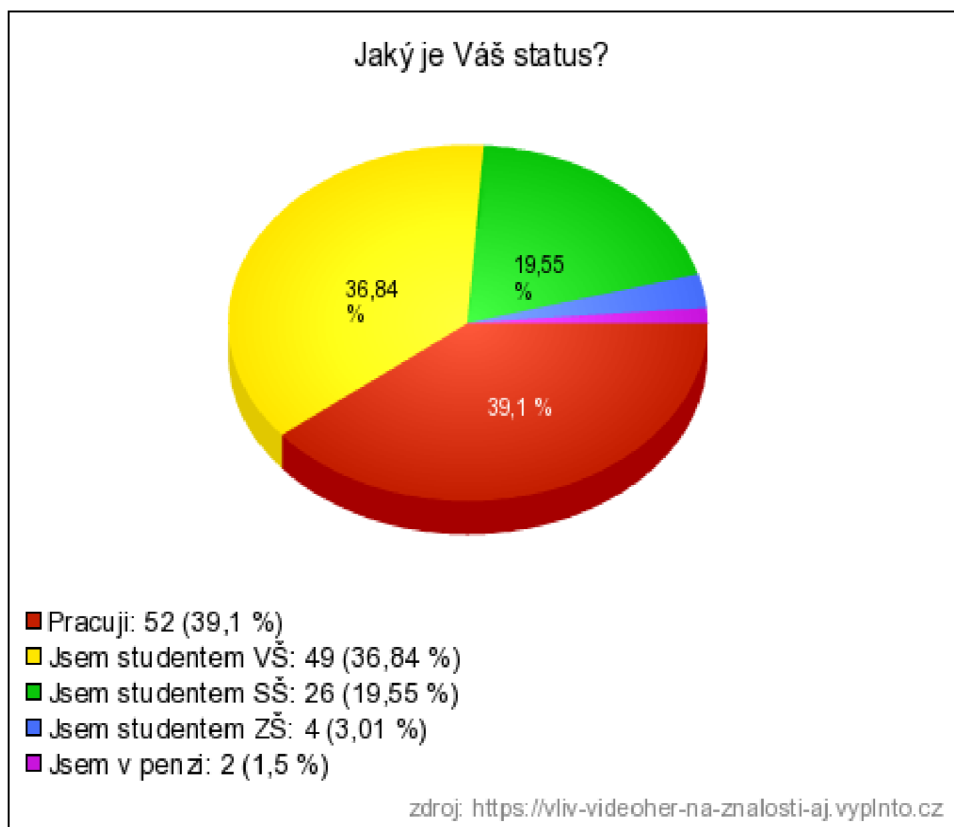
Figure 4: Status of respondents

5.4 Results and discussion

In this chapter, we will attempt to answer our research goals and provide important results of the questionnaire. Since 111 (83,46%) of all respondents stated that they play video games in English we can discuss how it may influence their language proficiency. All data provided below will concern only those who play video games in English. Those who play in Czech are not exposed to the new language therefore it is pointless to include them in the results and statistics below.

34 (30,63%) of the respondents state that they play video games every day and 28 (25,23%) play video games 4 to 6 times a week, 25 (22,52%) players play 1 or 3 times a week and the rest of 24 (21,62%) plays a few times a month (see figure 5). This seems like all the players are equally distributed and it seems like a large group of respondents is not truly influenced much by video games since they do not play as often. But is it needed to play video games often in order to improve one's language abilities? As research mentioned in chapter 2.3 suggests players do not need to play often to be positively influenced in their language capabilities. In this particular experiment, the learner played only 30 minutes two times a week and results show that all his language abilities did improve. Therefore, if we look at it from this

perspective 87 (73%) of all respondents' language abilities might be positively influenced. This statement will be further discussed in a later subchapter when we will focus on in what ways video games might influence players.
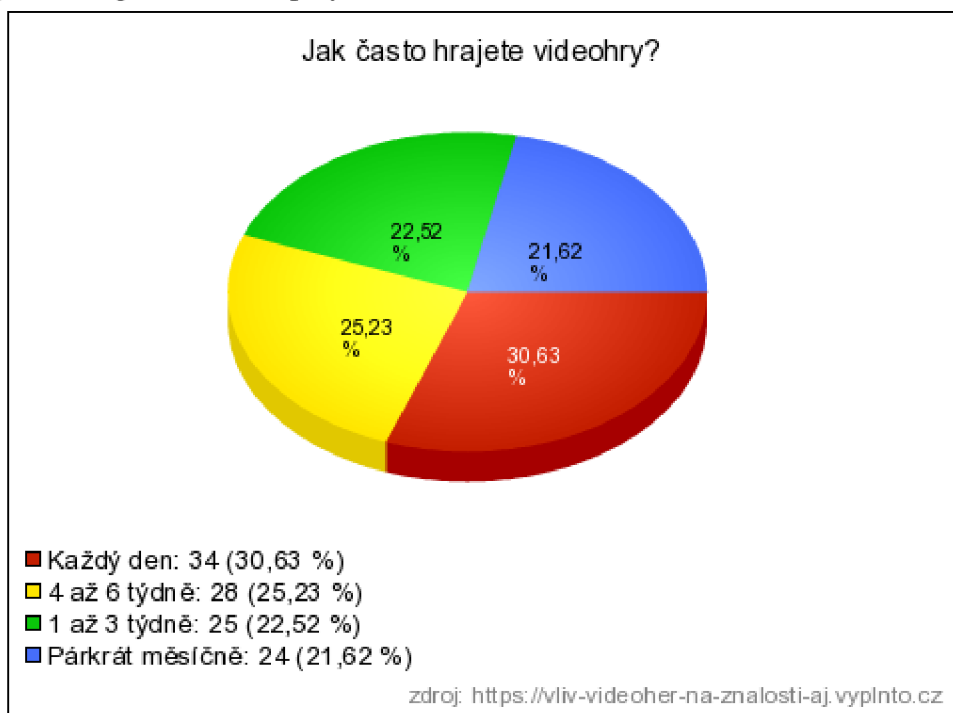
Figure 5: How frequently do respondents play video games

5.4.1 Subtitles and language acquisition

In this subchapter, the focus will be on the usage of subtitles among Czech video game players. We will mention the language in which the players use them. Then we will focus on gamers' view on the possible L2 acquisition with the usage of subtitles.

Among all 111 participants, 81 (72,97%) stated that they use subtitles while playing video games (see figure 6). This data is similar to the one we mentioned in chapter 3.4 where according to Ubisoft (2018) around 70% of their players used subtitles in one of their titles. Furthermore, from the 81 players that use subtitles 53 (65,43%) use them in English language rather than Czech. When the respondents were asked if they believe that the usage of subtitles had a positive effect on their English knowledge 76 (92,59%) of them answered yes.
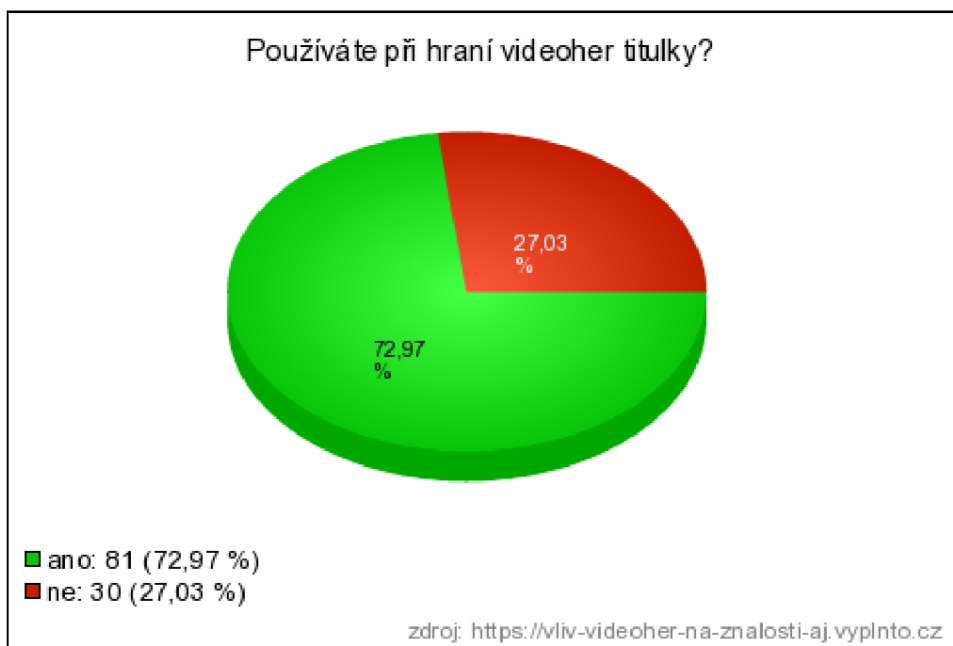
Figure 6. Usage of subtitles among Czech video game players

Figure 7. Do you think that the usage of subtitles had a positive impact on your knowledge of English?

In the next few questions respondents were asked whether they *strongly agree, agree, don't know, disagree, or strongly disagree* with the statements mentioned below. In the sentence *"Subtitles help me with the acquisition of new vocabulary"* 54 (72%) of respondents voted for the *strongly agree* option followed by 18 (24%) choosing *agree* option. The next three options were all represented by 1 (1,33%) responded each (see figure 8). The next statement *"Subtitles help me with my listening abilities"* acquired a similar result with 46(61,33%) of

respondents choosing the *strongly agree* option and 21(28%) voting for *agree* option. Other options were represented by 6 (8%) respondents choosing *don't know*, 1 (1,33%) choosing *disagree* and 1 (1,33%) choosing *strongly disagree* (see figure 9). However, the next two sentences were not entirely one-sided for the *strongly agree* option. In the statement *"Subtitles help me understand unknown grammar"* 35 (46,67%) of respondents chose strongly agree, 28 (37,33%) voted to agree, 7 (9,33%) choose don't know, 3 (4%) voted to disagree and lastly 2 (2,67%) for strongly disagree (see figure 10). In the next sentence *"Subtitles help me write English words correctly"* 39 respondents answered *strongly agree*, 23 (30,67%) *agree*, 9 (12%) *don't know*, 3 (4%) *disagree* and lastly 1 (1,33%) *strongly disagree* (see figure 11).

Figure 8. Subtitles help me with the understanding of unknown vocabulary.
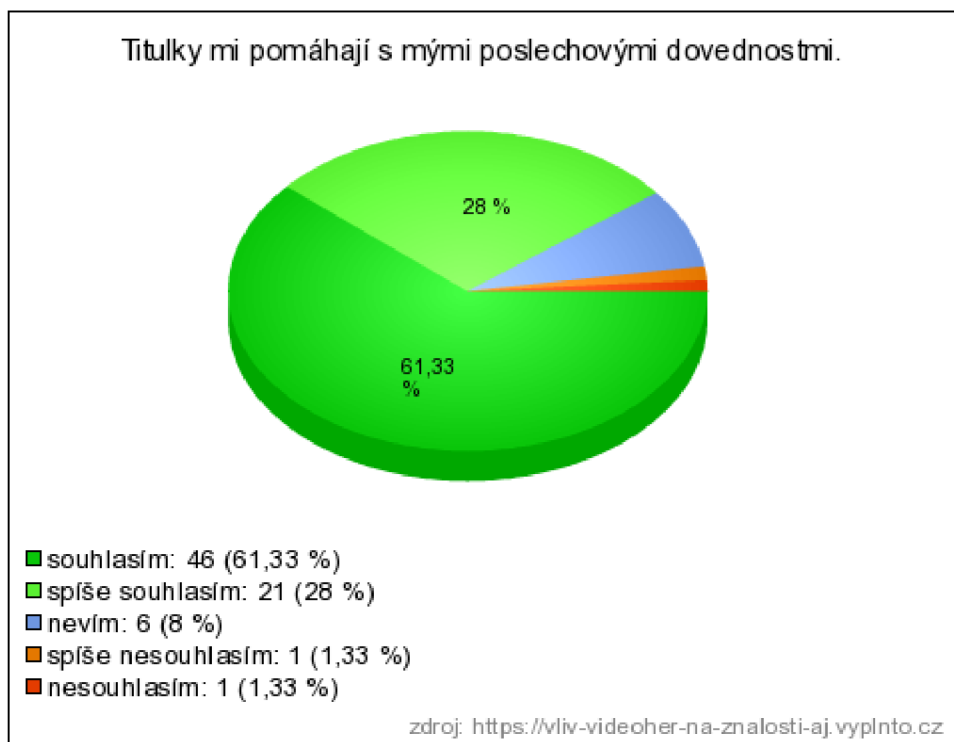
Figure 9. Subtitles help me with my listening skills.

Figure 10. Subtitles help me understand unknown grammar
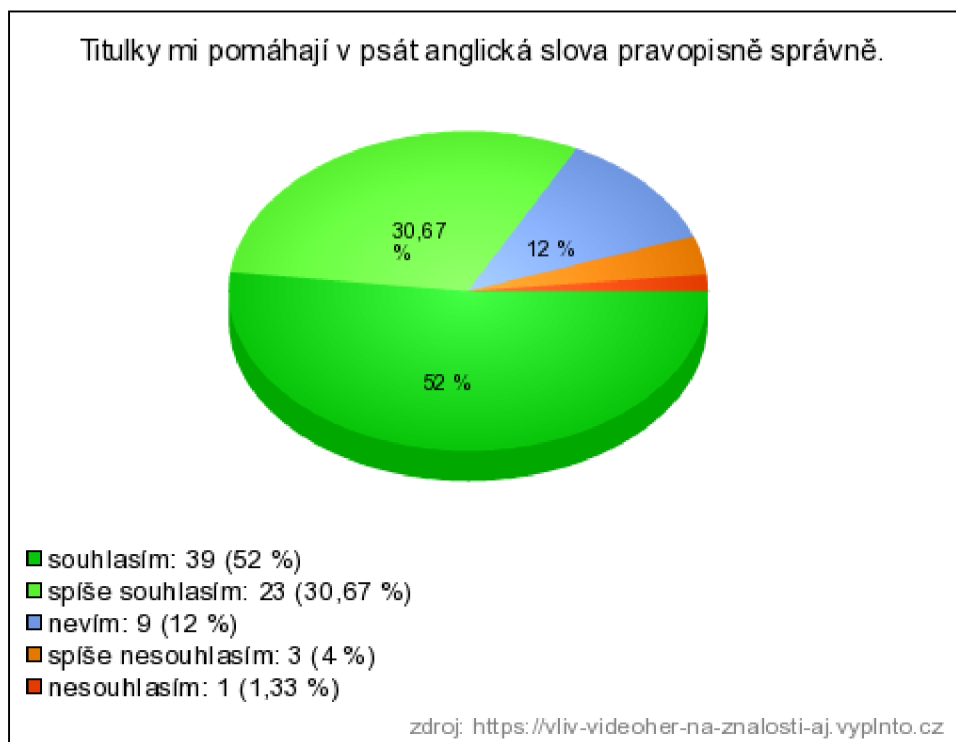
Figure 11. Subtitles help me write English words correctly.

From the data above we can observe that Czech video game players consider subtitles a great helping tool for understanding the English language in video games. However, some abilities are considered to be influenced more than others. In questions concerning vocabulary and listening capabilities the *strongly agree* option was a clear winner among the respondents, but in questions concerning grammar and writing the answers were more split among *agree*, *don't know* and *strongly agree*. We could argue that when it comes to writing abilities most respondents in fact answered *strongly agree*. Nevertheless 39 (52%) of respondents still fall short in comparison to 72% and 61,33% of respondents in the first two questions. The reason for this difference might be related to the Mayers' (2014) theory mentioned in the theoretical part (see chapter 3.4). According to Mayer (2014), humans poses different channels for each visually represented material and verbally represented material. However, Mayer (2014) also believes that each channel has a limited capacity. When players play a game, their main focus will be on two things hearing what was said and understanding what it means so they can understand the story if a game has one and know how to progress further through the game. Therefore, vocabulary knowledge and listening abilities are the most essential for a player. Focus on grammar and writing of the language used in the subtitles comes in second place since it is not essential for game progression. Therefore, most of the players' channel's capacity might be filled with a focus on vocabulary and listening while grammar and writing might only be grasping a minor part of the players' channel.

However, not all players in our research use subtitles. Thirty (27%) respondents do not use subtitles when playing video games. These respondents were asked to describe why they do not use subtitles. The most common answer among the respondents was that they feel no need to use subtitles because they understand everything without problems. It could be related to the level of English of our respondents since most of them have either a C1 or B2 level of English and therefore there might be no need for them to use them. Furthermore, if we look at respondents who do not use subtitles closer, we will discover that none of the A1 or A2 level respondents voted for this option and only 3 of the B1 level choose this option, which further supports the previous statement. The second most common answer was that the games players play do not offer subtitles as an option. This statement relates to the limitation of video game subtitles as we mentioned in chapter 3.4. Hamilton (2019) mentions the same problem at his game developer conference in San Francisco.

To conclude this part. Considering the data gathered above and the information mentioned in the theoretical part (chapter 3.4). Subtitles in video games may influence players' language abilities in a positive way. Even though some abilities might experience less influence than others it does not mean they are neglected. However, it is important to mention that a good deal of video games offer poor-quality subtitles compared to TV shows or videos on social media.

5.4.2 Best video games for language acquisition according to Czech players

In this subchapter, the main focus will be to discover which type of games might be the most beneficial for language learning and which may provide little to no benefits to language acquisition. The questionnaire data will be presented discussed and analysed in the hope to define what games might provide the most benefits for L2 learning.

Question 14 asked respondents which game genre they consider the most beneficial for language acquisition. 73 (68,87%) respondents answered adventure games, 25 (23,58%) answered role play games (RPG), 2 (1,89%) shooter games, 2 (1,89%) strategy games and 4 (3,76%) respondents wrote their own answers (see figure 12). This supports claims made in the theoretical part, where in chapter 4 we mentioned that adventure games might be the best for language acquisition due to their investing story and players' own involvement in its outcome. Furthermore, the second most voted option were RPG games, which also feature a story and a

world that the player can influence with his choices. The next question asked respondents what game genre they consider to be the least beneficial for language learning. Here the answers were spread among 3 genres and the one with the most votes being racing games with 41 (38,68%) respondents, followed by shooter games with 34(32,08%) answers and lastly sport games with a total of 30 (28,3%) votes (see figure 13). Again, this supports our claims made in chapter 4 since none of the 3 most common answers do not feature much in terms of story and characters. However, it is important to note that even though they might lack to other games in terms of L2 learning it does not mean that they do not provide any benefits. If we take a look at the experiments mentioned in previous chapters many of them were done on game genres that according to our research might provide fewer benefits but still displayed positive results.

However, when the players were asked to write down the game that in their opinion improved their language abilities the most, the most common answer was the game *Minecraft*. This contradicts all of our claims above since *Minecraft* does not have any interesting characters in fact it has none at all and it also has no story at all. So, why do players feel like this is the game that improved their English knowledge the most? More so since the respondents themselves believed that adventure games are indeed the most beneficial for language learning. Few arguments will be presented as to why previously mentioned adventure games might look like the best option on paper however, even though they might be the best video games for language acquisition does not make them the best for language acquisition in every case.

The first reason for this game being chosen by the players might be related to the age of our respondents. Most of the respondents are aged between 20 – 30 years old. If we travel back in time to years around 2011 – 2013 where our respondents would be around 8 – 18 years old. During this time *Minecraft* was growing at a rapid rate and according to an article published by Curry (2023) between the years 2011 – 2013 *Minecraft* sales went from 4 million in 2011 to 33 million in 2013 making these years the first big boom in terms of *Minecraft* players. During these years most of the video game players played *Minecraft* including our respondents. This was the time when most players were learning English as L2 in schools. Today most of our respondents are already employed and finished their studies so they were not able to observe the effect of more modern titles on their English knowledge at exams and tests at schools.

Another reason might be related to the communication among players and gaming communities. According to an article by Woodward (2023), 80% of *Minecraft* players play in the company of other players. Language is essential for players and their plans for action as a study by Zheng, Newgarden and Young (2012) states (see chapter 3). This is further supported

by question 12 of our questionnaire where the players themselves confirmed that they use chat as a way to communicate with other players. This game might not have a story and characters but instead motivates players to communicate among themselves which might improve their language abilities. Furthermore, a lot of players may have an emotional attachment to the game which is why their language might have been influenced more than other titles. As (Zheng, Newgarden, Young 2012) argue, video game experiences tend to benefit language development because these experiences are more personal and have a meaning for the player. Meaning that by having a personal investment in the game itself the player's language abilities might be influenced heavily by this emotional attachment to the game.

To summarise according to the data, we gathered in the theoretical part and the answers of our respondents' adventure games and other games like RPGs which feature interesting story, characters and world that can be influenced by the player might be the most suited for language acquisition. On the other hand, games which feature little or no story at all like racing and shooter games might provide less benefits in comparison. However, it is important to note that communication among players in the game and personal investment also plays an important role in the acquisition of L2 as Zhang, Newgarden and Young (2012) state in their research and answers of respondents demonstrated.
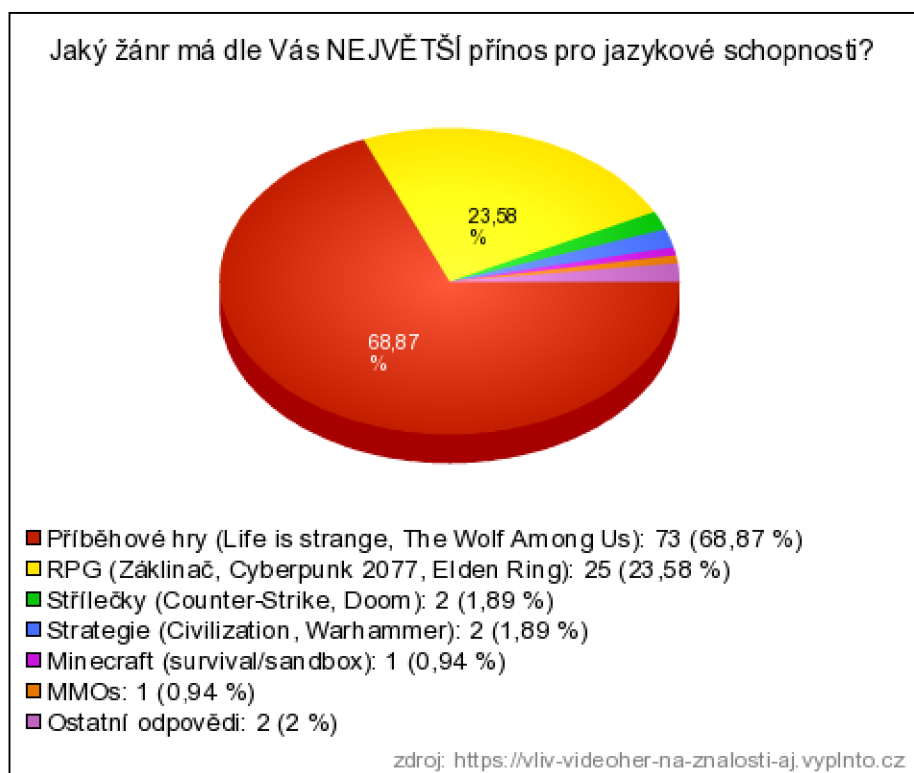
Figure 12. What video game genre is the most beneficial for language acquisition according to respondents.
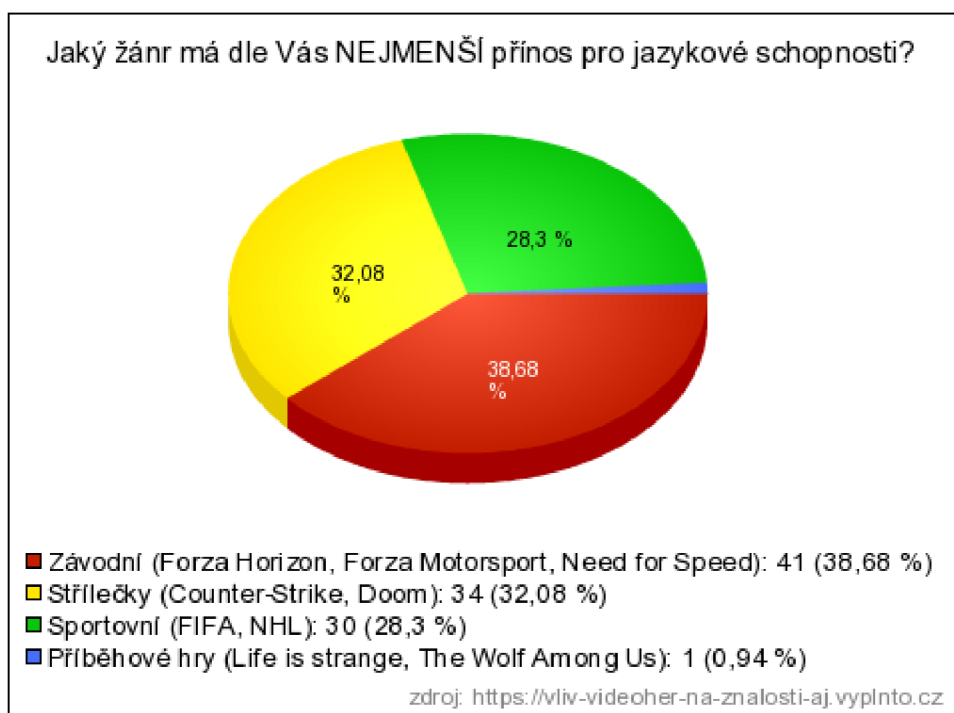
Figure 13. What video game genre is the least beneficial for language acquisition according to respondents.

5.4.3 Players' preferences and possible degree of L2 influence

This chapter will follow up on the previous chapter concerning the best video games for L2 learning. In this part, the main goal will be to analyse what types of games are most popular among the players and how much these games might influence their language abilities. Further, we will discuss the opinions of players about what is crucial for a game to be enjoyable and discuss how difficult it might be to make such a game for the school environment.

When players were asked what type of games they play the most, RPG came in first place with 44 (42,7%), followed by shooter games with 17 (16,5%) votes, adventure games with 13 (12,6%), multiplayer online battle arena (MOBA) 10 (9,7%), strategy 8 (7,8%) racing 3 (2.9%) and lastly, 8 (7,8%) of players answered with their own favourite genre (see figure 14). If we analyse the data above, we could argue that most Czech video game players may be positively influenced by playing since the most numerous category are RPG games which as mentioned in the previous chapter may provide more benefits than other games. Furthermore, shooter and MOBA games both support communication between players because a common feature among these games are team matches where communication is key to winning a game. Adventure games are also quite common among Czech players according to questionnaire answers which further supports that respondents' language abilities might be positively

influenced. When we observe games that might prove less beneficial for L2 learning, they are a minority among Czech gamers.
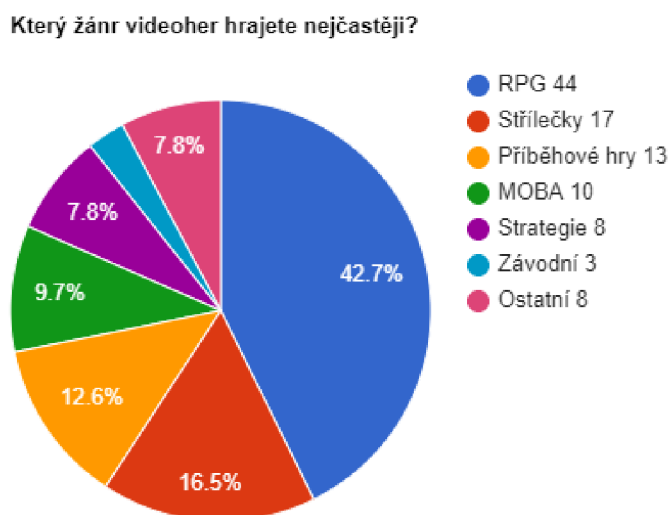

Figure 14. What genre do respondents play the most

Source: https://www.justfreetools.com/cs/vysecovy-graf

5.4.4 Language abilities influenced by video games

This sub-chapter will discuss results concerning video games and their influence on one's language abilities. The main goal is to find out which language skills might be influenced more than the others and why.

When players were asked question number 11 concerning which language skills they think video games helped them improve. According to answers filled by respondents 102 (96,23%) believed that their vocabulary knowledge was positively influenced by playing video games, 82 (77,36%) choose listening abilities, 62 (58,49%) speaking abilities, 47 (44,34%) writing skills and lastly 43 (40,57%) grammar knowledge (see figure 15). These results suggest that all areas of language might be influenced by video games to some degree. Furthermore, it

suggests that vocabulary knowledge might be the most influential area for video game players. This is further supported in question number 12 which asked respondents what language ability they think is most influenced by playing video games. In this question, 68 (64,15%) answered vocabulary, 20 (18,87%) listening abilities, 12 (11,32%) pronunciation, 4 (3,77%) writing skills and 2 (1,89%) grammar knowledge (see figure 16). These results relate to the previous sub-chapter 5.4.1 about subtitles where we mention how vocabulary and listening abilities are the most essential for a player. Therefore, players pay more attention to these two skills more than others which might explain why they believe that these areas are most influenced.
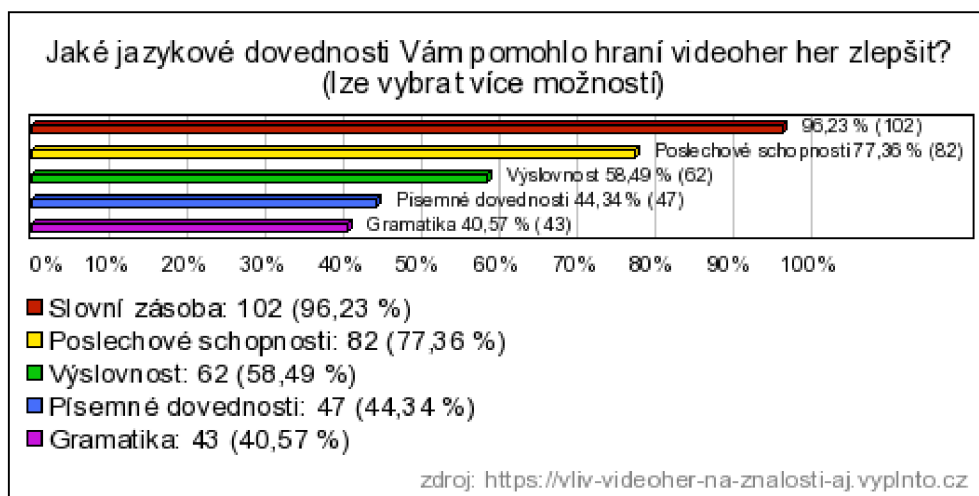
Figure 15. What language abilities did playing video games help you improve?
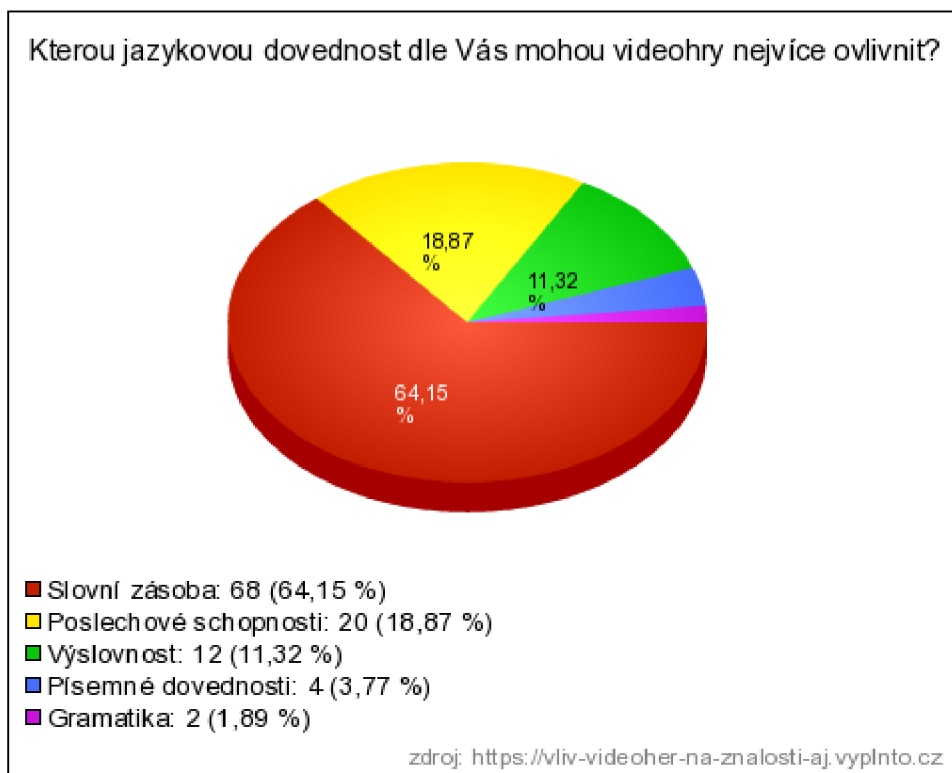
Figure 16. What language ability may video games influence the most.

5.4.5 What is important for a game to be enjoyable

In chapter 4 where we discussed the limitations of video games. One of the arguments was that video games are expensive in terms of development or if we do not want to develop a game purchasing one for a whole class might be difficult from a financial standpoint. That is why in this section we will focus on what players consider important for a game to be enjoyable and discuss whether it would be possible to cut down on expenses and bring video games into the school environment.

In the next few questions respondents were asked whether they *strongly agree, agree, don't know, disagree, or strongly disagree* with the statements mentioned below. The first sentence was *"I consider story an important aspect of video games"*. 66 (59,46%) of respondents *strongly agree* with this statement, 33 (29,73%) *agree*, 6 (5,41%) *don't know*, 4 (3,6%) *disagree* and lastly 2 (1,8%) strongly *disagree* (see figure 17). The next question focused on graphics of video games and with the sentence *"I consider graphics an important aspect of video games"* 30 (27%) respondents chose strongly agree, 47 (42,34%) agree, 7 (6,36%) don't know, 23 (20,72%) disagree and 4 (3,6%) strongly disagree option (see figure 18). The last sentence we will cover in this section is *"I consider gameplay mechanics an important aspect*

of video games". To this statement 77 (69,37%) chose strongly agree, 29 (26,13%) agree, 2 (1,8%) don't know, 3 (2,7%) disagree option (see figure 19).

The data above clearly displays that game mechanics and story are essential for Czech video game players. However, game graphics might be less important than the other categories since 24,32% of respondents do not consider graphics too important. Of course, the rest of the respondents do consider graphics in games important making it a majority. However, considering the one-sided win for other categories saving up money on graphics might be the best for cheaper development or purchase of games for L2 learning. This is especially great for the development part since graphic design takes a huge part of a budget when it comes to given development. This may significantly reduce the resources needed for the usage of video games in the formal learning process. Nevertheless, the data provided above shows that video game players are not so easily pleased, and it might be difficult to use video games as a tool for L2 learning in a formal setting in the near future.
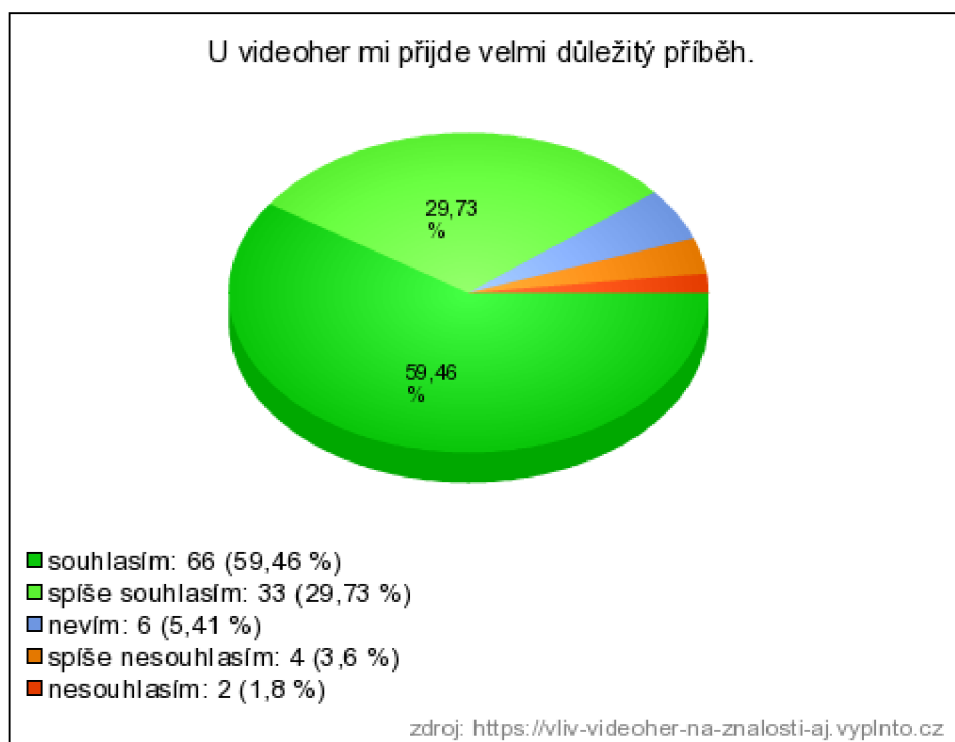
Figure 17. *I consider story an important aspect of video games*
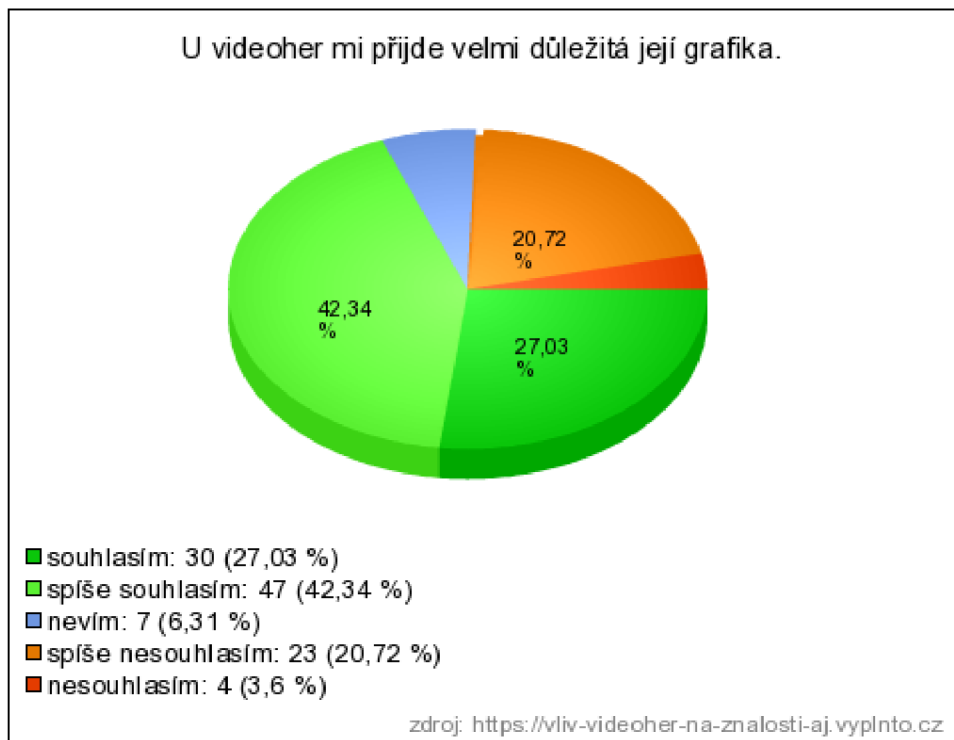
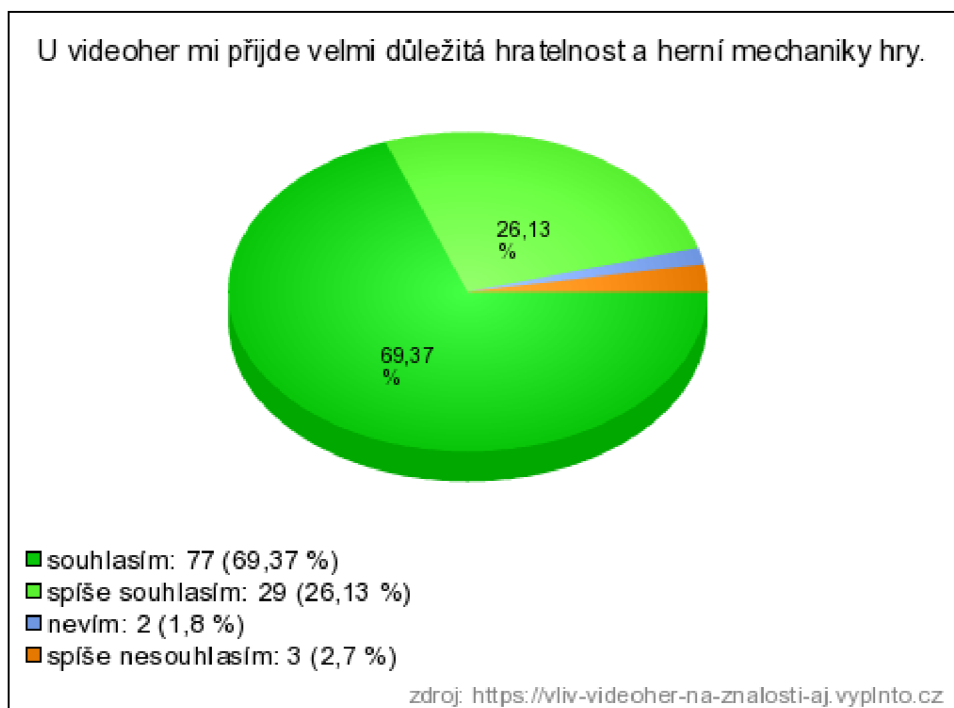Figure 18. *I consider graphics an important aspect of video games*

Figure 19. *I consider game mechanics an important aspect of video games.*

Conclusion

Video games are a massive media that might be difficult to define due to their huge variety. However, it is possible to find common features among them that help us to distinguish video games into different genres. With this knowledge, we are capable to determine which of these genres might be more beneficial for language acquisition. In this thesis, we attempted to discover them and came to the conclusion that video games which include story and characters that players can interact with might provide more benefits due to the emotional involvement of the player. These types are adventure games and RPGs.

Furthermore, the data provided by our questionnaire revealed that there might be a relation between English knowledge and playing video games. According to our statistics, all main areas (vocabulary, speaking, listening, writing, grammar) may be influenced by playing. These claims are further supported by research mentioned in the theoretical part and the arguments of experts about this topic. Nevertheless, some abilities like vocabulary and listening abilities might experience greater growth than other skills due to being more essential for the player.

Lastly, the questionnaire discovered that most Czech players use English subtitles in video games and believe that their use helps them with understanding of conversations happening in-game. This again supports claims made in the theoretical part where we made an argument that subtitles should further help gamers with language acquisition.

However, it is important to note that video games are not perfect for language acquisition and carry some limitations. The presence of academic language in video games is quite poor which makes them terrible for someone who wants to improve their academic abilities. Furthermore, the incorporation of video games as a learning tool for formal education is difficult due to the high price and standards of Czech players discovered via questionnaire.

Annotation

Jméno a příjmení	Jakub Twardzik
Katedra nebo ústav	Ústav cizích jazyků
Vedoucí práce	Mgr. Petra Charvátová
Rok obhajoby	2023

Název práce	Videohry a jejich vliv na studenty angličtiny
Název v angličtině	Video games and their influence on students of English
Anotace práce	Dnes jsou videohry běžná volnočasová aktivita, která své hráče ovlivňuje mnoha způsoby. Tato bakalářská práce se pokusí popsat potencionální vliv videoher na osvojování cizích jazykových dovedností. Teoretická část se zaměřuje na popis videoher, jejich žánry a jakým způsobem mohou ovlivnit hráče. Zmíní také titulky a jak v kombinaci s videohrami mohou ovlivnit jazykové znalosti hráče. Výzkum se pokusí popsat a najít žánr videoher, který je nejideálnější pro získávání jazykových dovedností, zjistit, zda čeští hráči si myslí, že jim hraní her pomohlo s jejich znalostmi cizího jazyka a jaké jazykové dovednosti mohou videohry ovlivnit. Nakonec se pokusíme zjistit, zda by bylo možné implementovat hry ve školním prostředí.
Klíčová slova	Videohry, osvojování si cizího jazyka, gamifikace, učení pomocí hraní videoher, titulky, žánry videoher
Anotace v angličtině	Nowadays video games are a common free time activity and influence players in many ways. This thesis aims to describe the potential influence of video games on second language acquisition. The theoretical part focuses on the description of video games, their genres and the ways video games may influence their players. It mentions subtitles and how they may influence language acquisition combined with video games. The research attempts to describe the most suitable game genres for language acquisition, find out whether Czech players believe that their level is related to playing video games and what language skills playing video games might influence. Lastly, we will attempt to see whether it would be possible to include video games in a school environment.
Klíčová slova v angličtině	Video games, second language acquisition, gamification, game-enhanced learning, video game genres
Přílohy vázané v práci	-
Rozsah práce	38
Jazyk práce	Anglický jazyk

References:

ADAMS, Ernest. *Fundamentals of Game Design*. Third edition. USA: New Riders, 2013. ISBN 978-0-321-92967-9.

ALI, Mohamad, MOHD, Ahsan, ATMA, Ali, NAZRI, Mohd, AZMI, Latiff and HASSAN, Isyaku, 2020. The Influence of Modern Video Games on Children's Second Language Acquisition. *International Journal of Scientific & Technology Research*. August 2020. Vol. 9, p. 319–323. DOI 10.2139/ssrn.3680020

BERGONSE, Rafaello, 2017. Fifty Years on, What Exactly is a Videogame? An Essentialistic Definitional Approach. *The Computer Games Journal*. 1 December 2017. Vol. 6, no. 4, p. 239–255. DOI 10.1007/s40869-017-0045-4.

BERENS, Kate a Geoff HOWARD. *The Rough Guide to Videogames*. London, England: Rough Guides, 2008. ISBN 978-1-84353-995-7.

BOLITHO, Rod, Ronald CARTER, Rebecca HUGHES, Roz IVANIC, Hitomi MASUHARA a Brian TOMLINSON. Ten questions about language awareness. *ELT Journal*. 2003, 251-259. ISSN 1477-4526. Available at: doi:10.1093/elt/57.3.251

CECI, L. Global discord user distribution by gender 2022. *Statista* [online]. 16 May 2023. [Accessed 13 June 2023]. Available from: https://www.statista.com/statistics/1327650/distribution-of-users-on-discord-worldwide-gender/

CECI, L. Discord users by age 2022. *Statista* [online]. 16 September 2022. [Accessed 13 June 2023]. Available from: https://www.statista.com/statistics/1327674/discord-user-age-worldwide/

CURRY, David. Minecraft revenue and Usage Statistics (2023). *Business of Apps* [online]. 9 January 2023. [Accessed 13 June 2023]. Available from: https://www.businessofapps.com/data/minecraft-statistics/

DEHAAN, Jonathan William, 2005. Acquisition of Japanese as a Foreign Language Through a Baseball Video Game. *Foreign Language Annals*. 2005. Vol. 38, no. 2, p. 278–282. DOI 10.1111/j.1944-9720.2005.tb02492.x.

DANAN, Martine, 2004. Captioning and Subtitling: Undervalued Language Learning Strategies. *Meta*. 1 April 2004. Vol. 49, p. 67–77. DOI 10.7202/009021ar.

DEHAAN, Jonathan, REED, W Michael and KUWADA, Katsuko, [2010]. The Effect of Interactivity with a Music Video Game on Second Language Vocabulary Recall. *Language Learning*.

ESPOSITO, Nicolas. A Short and Simple Definition of What a Videogame Is. In: *DiGRA Conference*. 2005.

GEE, James Paul. *What video games have to teach us about learning and literacy*. Second edition. New York, USA: St. Martin's Press, 2003. ISBN 978-1-4039-8453-1

GILMORE, Alex, 2007. Authentic materials and authenticity in foreign language learning. *Language Teaching*. 1 April 2007. Vol. 40, p. 97–118. DOI 10.1017/S0261444807004144.

GLAS, René, 2012. *Battlefields of Negotiation: Control, Agency, and Ownership in World of Warcraft*. Online. Amsterdam University Press. [Accessed 14 January 2023]. ISBN 978-90-8964-500-5. Available from: https://www.jstor.org/stable/j.ctt4cg5np

GROS, Begoña, 2006. Digital Games in Education: The Design of Game-Based Learning Environments. *J Res Tech Educ*. 30 November 2006. Vol. 40.

HASSAN, Isyaku, 2020. *The Influence of Modern Video Games on Children's Second Language Acquisition*. Online. SSRN Scholarly Paper. 24 August 2020. Rochester, NY. 3680020. [Accessed 16 May 2023].

How ubisoft is putting the spotlight on accessibility. *Ubisoft® - Official Ubisoft News, Previews and Features* [online]. [Accessed 23 May 2023]. Available from: https://news.ubisoft.com/en-us/article/1etr8zW1Vo6XCeh0UM5KJO/how-ubisoft-is-putting-the-spotlight-on-accessibility

HOWARTH, Josh. How many gamers are there? (New 2023 statistics). *Exploding Topics* [online]. 18 January 2023. [Accessed 31 May 2023]. Available from: https://explodingtopics.com/blog/number-of-gamers

Is Tetris Good For The Brain?, [no date]. *ScienceDaily*. Online. [Accessed 22 May 2023]. Available from: https://www.sciencedaily.com/releases/2009/09/090901082851.htm

JUUL, Jesper. *Half-Real Video Games between Real Rules and Fictional Worlds*. London, England: The MIT Press, 2005. ISBN 978-0-262-10110-3.

KARSENTI, Thierry a Simon PARENT. Teaching history with the video game Assassin's Creed: effective teaching practices and reported learning. *Pasithee*. 2020, 27-45. Available at: doi:10.26220/rev.3278

KIM, Sangkyun, Kibong SONG, Barbara LOCKEE a John BURTON. *Gamification in learning and education: enjoy learning like gaming*. Cham, Switzerland: Springer International Publishing, [2018]. Advances in game-based learning. ISBN 978-3-319-47282-9.

KLIMOVA, Blanka and KACET, Jaroslav, 2017. Efficacy of Computer Games on Language Learning. *The Turkish Online Journal of Educational Technology*. 2017. Vol. 16, no. 4.

LEI, Siying, 2023. The Role of Videos' Subtitles in Second Language Acquisition. *Journal of Education, Humanities and Social Sciences*. 11 May 2023. Vol. 13, p. 12–20. DOI 10.54097/ehss.v13i.7848.

MAY 9, Jordan Sirani Updated:, MAY 8, 2023 5:25 Pm Posted: and PM, 2023 5:59, 2023. The 10 Best-Selling Video Games of All Time. *IGN*. Online. 8 May 2023. [Accessed 22 May 2023]. Available from: https://www.ign.com/articles/best-selling-video-games-of-all-time-grand-theft-auto-minecraft-tetris

OBLINGER, Diana G., ed. *Learning Spaces*. USA: Educause, 2006. ISBN 978-0967285375.

OKAGAKI, Lynn and FRENSCH, Peter A., 1994. Effects of video game playing on measures of spatial performance: Gender effects in late adolescence. *Journal of Applied Developmental Psychology*. 1 January 1994. Vol. 15, no. 1, p. 33–58. DOI 10.1016/0193-3973(94)90005-1.

REINHARDT, Jonathon. *Gameful Second and Foreign Language Teaching and Learning Theory, Research, and Practice*. Cham, Switzerland: Springer Nature, 2019. ISBN 978-3-030-04728-3.

REINHARDT, Jonathon. Reinhardt, J. & Sykes, J. (2012). Conceptualizing digital game-mediated L2 learning and pedagogy: game-enhanced and game-based research and practice In H. Reinders (Ed.), Digital Games in Language Learning and Teaching, 32-49. Palgrave Macmillan. Online. [Accessed 12 May 2023]. Available from: https://www.academia.edu/1972126/Reinhardt_J_and_Sykes_J_2012_Conceptualizing_digital_game_mediated_L2_learning_and_pedagogy_game_enhanced_and_game_based_research_and_practice_In_H_Reinders_Ed_Digital_Games_in_Language_Learning_and_Teaching_32_49_Palgrave_Macmillan

SILVA, Rafael L. da, SILVA, R. L. (2014). VIDEO GAMES AS OPPORTUNITY FOR INFORMAL ENGLISH LANGUAGE LEARNING: THEORETICAL CONSIDERATIONS. Online. [Accessed 31 May 2023]. Available from: https://www.academia.edu/9933636/SILVA_R_L_2014_VIDEO_GAMES_AS_OPPORTUNITY_FOR_INFORMAL_ENGLISH_LANGUAGE_LEARNING_THEORETICAL_CONSIDERATIONS

SIRANI, Jordan. The 10 best-selling video games of all time. *IGN* [online]. 9 May 2023. [Accessed 22 May 2023]. Available from: https://www.ign.com/articles/best-selling-video-games-of-all-time-grand-theft-auto-minecraft-tetris

SMALDONE, Ronald A., THOMPSON, Christina M., EVANS, Monica and VOIT, Walter. Teaching science through video games. *Nature Chemistry*. 2016. Vol. 9, no. 2, p. 97–102. DOI 10.1038/nchem.2694.

SMITH, Rebecca. New insights from Ubisoft show how important subtitles are to modern gamers. *TrueAchievements* [online]. 26 June 2019. [Accessed 23 May 2023]. Available from: https://www.trueachievements.com/n38283/assassins-creed-ubisoft-subtitles

STANLEY, Graham, 2008. Language Learners & Computer Games: From Space Invaders to Second Life. *Tesl Ejtesl Ej*. Online. 1 March 2008. [Accessed 31 May 2023]. Available from: https://www.academia.edu/32759548/Language_Learners_and_Computer_Games_From_Space_Invaders_to_Second_Life

Subtitles Are Changing, Don't Be Left Behind, Online. [Accessed 31 May 2023]. Available from: https://www.gdcvault.com/play/1025738/Subtitles-Are-Changing-Don-t

Top video game genres worldwide by age 2022, *Statista*. Online. [Accessed 15 June 2023]. Available from: https://www.statista.com/statistics/1263585/top-video-game-genres-worldwide-by-age/

TORRENS LLABRÉS, Mercè, 2022. The Role of Subtitles in the Acquisition of L2 English Grammar: A Case of Study of Cleft Sentences and Harry Potter and the Philosopher's Stone. Online. 4 August 2022. [Accessed 24 May 2023]. Available from: http://dspace.uib.es/xmlui/handle/11201/159563

TSURUDA, Kaitlyn, [2011]. A CLOSER LOOK AT TETRIS: ANALYSIS OF A VARIANT GAME. .

Úrovně Angličtiny (Serr / CEFR). *Tracktest Česko* [online]. 15 February 2023. [Accessed 31 May 2023]. Available from: https://tracktest.eu/cz/urovne-jazyka/

VICENCIO, Christopher and VICENCIO, Christina, 2020. *Effectiveness of Subtitles in Second Language Acquisition.* .

WANG, Alf Inge and SKJERVOLD, Audun, 2021a. Health and social impacts of playing Pokémon Go on various player groups. *Entertainment Computing*. 1 August 2021. Vol. 39, p. 100443. DOI 10.1016/j.entcom.2021.100443.

WOODWARD, Matthew. Minecraft user statistics: How many people play minecraft in 2023? *SearchLogistics* [online]. 12 June 2023. [Accessed 14 June 2023]. Available from: https://www.searchlogistics.com/learn/statistics/minecraft-user-statistics/

WOLF, Mark J. P. a Bernard PERRON, ed. *The Routledge Companion to Video Game Studies*.

New York, USA: Routledge, 2014. ISBN 978–0–415–53332–4.

WOLF, Mark J.P., ed. *The Video Game Explosion: A History from PONG to PlayStation and Beyond*. London, England: Greenwood Press, 2008. ISBN 978–0–313–33868–7.

WOLF, Mark J.P *The Medium of the Video Game*. USA: University of Texas Press, 2002. ISBN 978-0292791503.

WONG, Fiona, 2017. Influence of Pokémon Go on physical activity levels of university players: A cross-sectional study. *International Journal of Health Geographics*. February 2017. Vol. 16. DOI 10.1186/s12942-017-0080-1.

ZHENG, Dongping, NEWGARDEN, Kristi and YOUNG, Michael, 2012. Multimodal analysis of language learning in World of Warcraft play: Languaging as Values-realizing. *ReCALL*. September 2012. Vol. 24. DOI 10.1017/S0958344012000183.

ZIMMERMAN, Eric a Katie SALEN. *Rules of Play: Game Design Fundamentals*. USA: MIT Press, 2003. ISBN 978-0262240451.

List of figures

Appendix

1. V jakém jazyce převážně hrajete videohry?

a) Anglický

b) Český

c) Jiný (uveďte)

2. Jak často hrajete videohry?

a) Každý den

b) 4 až 6 týdně

c) 1 až 3 týdně

d) Párkrát měsíčně

3. Používáte při hraní videoher titulky? (větvící otázka)

a) ano

b) ne

4. (pokud ano) V jakém jazyce máte titulky nastaveny?

a) Český

b) Anglický

5. (pokud ano) Myslíte si, že používání titulků má kladný vliv na Vaši znalost angličtiny?

a) Ano

b) Ne

6. (pokud ne u otázky č. 3) Uveďte, z jakého důvodu nepoužíváte titulky?

......

7. Uveďte, do jaké míry souhlasíte/nesouhlasíte s následujícími tvrzeními.

a) Titulky mi pomáhají odvodit si význam neznámé slovní zásoby

Souhlasím.   Spíše souhlasím.   Nevím.   Spíše nesouhlasím.   Nesouhlasím

b) Titulky mi pomáhají s mými poslechovými dovednostmi.

Souhlasím.   Spíše souhlasím.   Nevím.   Spíše nesouhlasím.   Nesouhlasím

c) Titulky mi pomáhají pochopit neznámou gramatiku.

Souhlasím.   Spíše souhlasím.   Nevím.   Spíše nesouhlasím.   Nesouhlasím

d) Titulky mi pomáhají v psát anglická slova pravopisně správně.

Souhlasím.   Spíše souhlasím.   Nevím.   Spíše nesouhlasím.   Nesouhlasím

8. Jak často používáte při hraní funkci voice chat?

a) Nepoužívám tuto funkci

b) Funkci využívám do 30 procent případů, kdy hraji

c) Funkci využívám v 30–60 procentech případů, kdy hraji

d) Funkci využívám v 60–80 procentech případů, kdy hraji

e) Funkci využívám ve více než 80 procentech případů, kdy hraji

9. Jak často komunikujete s ostatními hráči pomocí písemného chatu?

a) Nepoužívám chat

b) Funkci využívám do 30 procent případů, kdy hraji

c) Funkci využívám v 30–60 procentech případů, kdy hraji

d) Funkci využívám v 60–80 procentech případů, kdy hraji

e) Funkci využívám ve více než 80 procentech případů, kdy hraji

10. Myslíte si, že hraní videoher mělo pozitivní vliv na Vaši úroveň angličtiny? (větvící otázka)

a) Ano

b) Ne

11. (pokud ano) Jaké jazykové dovednosti Vám pomohlo hraní videoher her zlepšit? (lze vybrat více možností)

a) Slovní zásoba

b) Výslovnost

c) Gramatika

d) Písemné dovednosti

e) Poslechové schopnosti

12. Kterou jazykovou dovednost dle Vás mohou videohry nejvíce ovlivnit?

a) Slovní zásoba

b) Výslovnost

c) Gramatika

d) Písemné dovednosti

e) Poslechové schopnosti

13. Který žánr videoher je hrajete nejčastěji?

a) RPG (Záklinač, Cyberpunk 2077, Elden Ring)

b) Příběhové hry (Life is strange, The Wolf Among Us)

c) Střílečky (Counter-Strike, Doom)

d) Strategie (Civilization, Warhammer)

e) Sportovní (FIFA, NHL)

f) Závodní (Forza Horizon, Forza Motorsport, Need for Speed)

g) Jiné (uveďte):

14. Jaký žánr má dle Vás největší přínos pro jazykové schopnosti?

a) RPG (Záklinač, Cyberpunk 2077, Elden Ring)

b) Příběhové hry (Life is strange, The Wolf Among Us)

c) Střílečky (Counter-Strike, Doom)

d) Strategie (Civilization, Warhammer)

e) Sportovní (FIFA, NHL)

f) Závodní (Forza Horizon, Forza Motorsport, Need for Speed)

g) Jiné (uveďte):

15. Jaký žánr má dle Vás nejmenší přínos pro jazykové schopnosti?

a) RPG (Záklinač, Cyberpunk 2077, Elden Ring)

b) Příběhové hry (Life is strange, The Wolf Among Us)

c) Střílečky (Counter-Strike, Doom)

d) Strategie (Civilization, Warhammer)

e) Sportovní (FIFA, NHL)

f) Závodní (Forza Horizon, Forza Motorsport, Need for Speed)

g) Jiné (uveďte):

16. Dokážete uvést nějakou videohru, která Vám značně pomohla v rozvoji vašeho jazyka?

a) Ano (uveďte):

b) Ne

17. Ohodnoťte, do jaké míry souhlasíte/nesouhlasíte s následujícími tvrzeními.

a) U videoher mi přijde velmi důležitý příběh.

Souhlasím.   Spíše souhlasím.   Nevím.   Spíše nesouhlasím.   Nesouhlasím

b) U videoher mi přijde velmi důležitá její grafika.

Souhlasím.   Spíše souhlasím.   Nevím.   Spíše nesouhlasím.   Nesouhlasím

c) U videoher mi přijde velmi důležitá hratelnost a herní mechaniky hry.

Souhlasím.   Spíše souhlasím.   Nevím.   Spíše nesouhlasím.   Nesouhlasím

d) Při hraní se soustředím i na jazyk

Souhlasím.   Spíše souhlasím.   Nevím.   Spíše nesouhlasím.   Nesouhlasím

18. Jaký je Váš věk?

a) 12 let a méně let

b) 13 let – 19 let

c) 20 let – 30 let

d) 31 let – 40 let

e) 41 let – 50 let

f) 60 let a více

19. Jaké je vaše pohlaví?

    a) Muž

    b) Žena

    c) Jiné (uveďte):

20. Jaký je Váš status?

    a) Jsem studentem ZŠ

    b) Jsem studentem SŠ

    c) Jsem studentem VŠ

    d) Pracuji

    e) Jsem v penzi

21. Jaká je vaše znalost angličtiny?

a) A1 – úplný začátečník (Pokud lidé hovoří pomalu a zřetelně, rozumím základní slova a fráze, týkající se mě, mé rodiny, práce a podobně. Komunikuji jednoduchými větami o základních věcech např. o koupě jízdenky.)

b) A2 – začátečník (Rozumím nejběžnější slovní zásobě v kontextu věcí, které se mě týkají např. rodina, práce, nakupování, moje město. Orientuji se v textu inzerátu, oznámení, krátké zprávy, v jízdním řádu)

c) B1 – mírně pokročilý (Rozumím pointe televizního programu nebo zpráv o aktuálních událostech.
Zvládnu většinu situací, v nichž potřebuji mluvit a rozumět a které se vyskytují během cestování nebo běžného každodenního kontaktu.)

d) B2 – středně pokročilý (Rozumím delším přednáškám, pokud mi je téma dostatečně blízká.
Rozumím většině filmů ve spisovném jazyce a rozumím knize v originále. Dokážu vést běžný rozhovor s rodilými mluvčími, aktivně se zúčastnit diskuse o známých tématech)

e) C1 – pokročilý (Rozumím delší promluve, i když není jasně strukturovaná a vztahy jsou pouze naznačeny.
Čtu faktické a literární texty, přičemž dokážu ocenit rozdíly v jejich stylu. Umím se vyjadřovat plynule a pohotově bez příliš zjevného hledání výrazů)

f) C2 – expert (Nemám žádné potíže s porozuměním jakéhokoli druhu mluveného projevu, ať už živě nebo z vysílání.
Snadno čtu všechny formy psaného jazyka, včetně abstraktních textů. Dokážu se zapojit do jakékoli konverzace nebo diskuse.)