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ACQUISITION OF THE ENGLISH LANGUAGE THROUGH VIDEO GAMES

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I confirm that this thesis is my own work written using solely the sources and literature properly quoted and acknowledged as works cited.

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ANOTACE

Osvojování cizího jazyka je dlouhodobý proces a výsledků není možné dosáhnout pouze studiem ve škole. V současném digitálním věku mají studenti přístup k nespočetnému množství materiálů v jazyce, který se učí. Tato práce se zabývá jedním konkrétním zdrojem, který je stále populárnější mezi mladými lidmi, a to videohrami. Cílem této práce je zjistit jaké jazykové schopnosti videohry nejvíce ovlivňují, zda má hraní her nějaké výhody v otázce osvojování anglického jazyka, a jaká je motivace hráčů hrát zrovna v anglickém jazyce.

Práce se skládá ze dvou hlavních částí. První část tvoří odborná literatura, která se zaměřuje na vysvětlení vybraných videoherních žánrů a vztahu videoher a osvojování jazyka. Dále tato část obsahuje popis a vztah jednotlivých jazykových kompetencí a videoher obecně. Poslední sekce představuje Krashenův Monitor Model, zejména dvě jeho hypotézy the Acquisition-Learning Hypothesis a the Input Hypothesis, a objasňuje, jak tyto koncepty souvisí s osvojováním jazyka skrze videohry.

Druhá část práce se zaměřuje na empirický výzkum, který byl provedený dotazníkovou formou, a který shromáždil data od 64 respondentů. V této části je podrobně popsaná metodika, analýza odpovědí a diskuze, která je založena na zjištění z první části. Výsledky nabízejí vhled do herních zkušeností hráčů a to, jestli vnímají zlepšení jejich jazykových schopností díky vlivu videoher.

Klíčová slova: video hry; osvojování druhého jazyka (SLA); osvojování angličtiny; jazykové dovednosti

ABSTRACT

The acquisition of a foreign language is a complex and ongoing process, and achieving proficiency cannot solely rely on school education. In the digital age, learners have access to an abundance of language materials beyond the classroom. This study explores the potential of video games as tools for language acquisition, particularly focusing on the English language. The primary aim is to identify which language skills are most likely to improve through gaming and to evaluate the overall benefits of this approach.

The thesis comprises two main sections. The first part is a literature review, explaining selected video game genres and the second language acquisition. This part includes the main language competencies and how they can be potentially improved by video games in general. Finally, the last chapter of the literature review section is dedicated to the Krashen's Monitor Model, emphasising the Acquisition-Learning Hypothesis and the Input Hypothesis, and how these concepts align with language learning through video games.

The second part of the thesis presents the empirical study conducted through a questionnaire, which gathered data from 64 respondents. This section details the methodology, analyses the responses, and discusses the findings in the context of the theoretical framework provided in the literature review. The results offer insights into the gaming experiences of players and their perceived improvements in language competence.

Key words: video games; second language acquisition (SLA); acquisition of the English language; language skills

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INTRODUCTION

The video game industry started as a home-based hobby and in the past few decades it turned into a multi-billion dollar business. Video games have become one of the major forms of leisure, and lately, they also gained recognition for their potential in educational and learning contexts, including language acquisition. Since they are created for most devices, they are accessible basically to anyone, and with the English language becoming the lingua franca, this rapidly developing entertainment industry became one of the ways to improve language skills. While much remains to be explored regarding the connection between video games and language acquisition, it is undeniable that video games facilitate learning. Many people claim that video games have improved their language skills, and it is no surprise that many gamers possess knowledge of the English language. Without it, it would be challenging to enjoy many games, as they are primarily produced in English (Exploring the Role of English). Consequently, in countries where gaming communities are smaller and less significant, access to translation in the native language may be unavailable. For instance, Czech speakers must either rely on their second language, typically English, or wait for localization. If localization does not occur, they may ultimately decide not to play the game at all (Skoták; Langová).

Thanks to many previous researches that examined the effects of video games on language competencies, there is no doubt that video games facilitate language learning and language acquisition. Therefore, the objective of this thesis is to explore some of the main things connected to gaming. Firstly, is there an intentional effort to use video games as a facilitating medium, or is the language acquisition primarily a side benefit? Assuming that many people realise how different media can enhance their language skills, it is expected that they will be more likely to play in English on purpose. If it is only a side benefit, then what is the overall motivation to play in a foreign language. Secondly, Which language competencies are most likely to be improved through playing video games? And perhaps what are the other benefits gaming provides to players. To answer these questions, a literature review has been done to examine the theoretical effects of video games on language acquisition. Then a questionnaire, which questions were based on the gained knowledge from literature, has been distributed and the answers from 64 participants were carefully analysed.

The first chapter is an insight into video games, including their characteristics, a brief historical overview, a few of the chosen main genres and their characteristics, and a summary

of their connection to language acquisition. The second chapter, a literature review, starts with describing potential benefits of video games in general to each language competency, followed by explaining what second language acquisition is and how video games can be useful in facilitating language skills. Krashen's' Monitor model theory is included, specifically his two hypotheses: the Acquisition-learning hypothesis and the Input hypothesis, which I consider to be the most relevant for this research. The decision to include Krashen's theory was based on its foundational understanding of how language acquisition occurs through exposure to comprehensible input in meaningful contexts, which is highly relevant to the use of video games as language learning tools. Specifically, both the Acquisition-learning hypothesis and the Input hypothesis emphasise the importance of natural language, immersion, and comprehensible input, which align with the input that video games can provide. Therefore, the focus is not purely on acquisition through games but it is expected that the learners, and the questionnaire participants, had some learning background or that they are still learning English. The methodology chapter discusses the questions that have been chosen for the questionnaire, data collection, and their analysis. In the fourth chapter, the results are presented as well as the limitations of the research. The fifth chapter is a summary of the key findings and a conclusion.

1 VIDEO GAMES

Firstly, a brief introduction to video games will be provided, including a definition of video games, their modes of play, key elements, and multiplayer options. Understanding their complexity and diversity is crucial for better comprehension of the subsequent chapters, which will focus on language acquisition.

1.1 Characteristics

Video games are a form of interactive entertainment media that involves user interaction to create visual feedback. This interaction is made by the user interface, which can be a keyboard, controller, motion sensing devices, etc. Players control their characters, or avatars, in a virtual world, and usually, their goal is to complete challenges and achieve goals. Video games can be played on several devices, such as personal computers (PC), gaming consoles, mobile devices, or by using virtual reality headsets (VR).

Video games (further referred to as only "games") can be single-player, such games can come in a variety of genres, however, they are often based on a story through which the player progresses. Another type is multiplayer games, these games are designed to be played by multiple players, either cooperatively or competitively. Although the multiplayer game's characteristics would more likely be the competitiveness. Players can be part of a team, trying to win against the enemy team, they can play as individuals competing with the others to achieve the highest score, or they can play games that feature the "last man standing" matches. Nonetheless, the noncompetitive games, such as Massively Multiplayer Online games (MMOs), cannot be forgotten as they allow a large number of players to interact with each other. Within multiplayer there are cooperative (co-op) games. As the name suggests, co-op only includes the cooperative type of gameplay. Furthermore, games labelled as co-op typically have a set number of players (2-4 players). Another difference between multiplayer and co-op is that multiplayer only takes place in the virtual setting, while co-op can be online or local, which means that players can play on the same screen (Ikonomi).

The very first games lacked the previously mentioned characteristics, thus, could not provide any language input or output. The next section will briefly discuss the history to offer a closer look at the evolution and rise in popularity.

1.2 History

The first computers appeared in the 1940s and they took up a lot of space, in fact, they took entire rooms. Despite the space they required, they would not be able to compete with today's portable and compact devices such as mobile phones. Their main use back in the early days was mostly calculating artillery tables during World War II.

In 1951 the first gaming computer was introduced to the public by Ferranti. This was the first computer built solely for the purpose of having fun as it has a custom-built game called Nim. In 1952 a game called OXO was developed and this was an important moment because it was the first game to include artificial intelligence. The most important moment was the development of a space combat game Spacewar! in 1962. Spacewar! happened to be the first known video game, but it was still nothing more than moving shapes (History.com Editors). In 1975 the first multiplayer combat shooter game Gunfight was created. This game was important as it was the first one featuring human-to-human combat, which has become one of the main themes for the upcoming games. As consoles grew in popularity, personal computers improved technologically, and the internet became more accessible due to the lowering prices, the number of people playing video games gradually increased (Chikhani).

It is obvious that games could not offer any kind of narrative in the past since computers were not advanced enough. With the development of technology and the rising popularity of video games, there came an improvement not only in the graphics, but also in the various platforms, and of course, the gameplay. Games gradually started becoming more complex and began offering active language interactions with other players around the world, as well as within the virtual environment itself. The importance of technology improvement has been also mentioned by Gee and Hayes: "Now the oral word could be used for communication across time and space when people were not face-to-face or co-present" (9).

1.3 Genres

It would be hard to determine the most common or most popular game genres, as it depends on many factors such as preferred platforms, age, gender, or country. Besides that, games are usually not categorized under a single genre. While there will be some dominant aspects, most games will fall within multiple genres. These aspects are usually a combination of elements such as gameplay mechanics, thematic elements, multiplayer interaction, etc. The following section describes some of the main genres in more detail to provide a better understanding of what they offer language-wise, and how that can be potentially beneficial to language acquisition.

Since the vast diversity of game genres presents a challenge in determining the most common or popular games, the selected genres are determined by my recognition of the common language and playstyle features, such as the amount of text-based information, multiplayer experience, or game objectives. Although inspired by the Operational Study of Video Games' Genres by Qaffas, genres like Adventure are not classified here as a separate game genre due to its focus on exploration and narration, which are often included in many other genres. In Qaffas' study, many RPGs are also classified as Adventures, but Adventure elements can be found in various other genres, such as Platform or Puzzle games. As a result, many genres mentioned in his study, along with the Horror genre highlighted by questionnaire respondents, are not categorized in this thesis as stand-alone genres due to their high overlapping tendency and irrelevance to language acquisition, as they do not offer distinctive language features.

First Person Shooter (FPS)

FPS is a subgenre of action games. This genre is fast-paced and includes a lot of shooting from a first-person perspective. Games within this category may be useful for the learner, but it highly depends on the genre they are combined with.

Games such as *Counter-Strike*,[1] or *Valorant*,[2] are team-based and more tactical because your main goal is to win. They usually include time-limited rounds within which you are supposed to destroy or defend an objective. These rounds take place in specifically designed closed areas (maps), which have several strategic locations. While these games may offer characters with some kind of background story, there is no further story development with dialogues or quests, which makes them good for competitive playing but unsuitable for language acquisition.

However, there are also FPS games with elements of, for example, adventure or role-playing. Good examples are games such as *Borderlands*,[3] *Call of Duty*,[4] or *Metro series*.[5] These games offer players a compelling storyline set in an alternative or fictional universe, where they engage in completing quests for other non-playable characters (NPCs) and gain experience to unlock more skills and progress in the story.

Role-Playing Game (RPG)

RPG is a genre where players control a character, that was created or chosen by them, in a world with immersive storytelling. It tends to be more adventurous than action-focused. Most RPGs have the option to create one's character from scratch, while some may give the player pre-determined characters with customizable features. Besides appearance, players often have a lot of skills or abilities to choose from, to be able to create a character that best fits their play style.

Since RPGs tend to be more adventurous, they are focused on the exploration and interaction with the surroundings rather than progressing through combat as in the FPS genre. RPGs typically feature large, open worlds which players can explore at their own pace and while the combat system may vary, generally it involves some kind of strategy (Wirtz).

Massively Multiplayer Online (MMO)

MMOs are games, where hundreds or thousands of people can interact with each other in an open world. An important difference, compared to single-player games, is that the world is persistent, meaning that it continues to exist even without the player. Any change made by other players can influence how the world will look for others. MMOs are often mixed with the role-playing aspects and are then called MMORPGs. Due to its multiplayer feature, you are usually involved in more social interaction, because a huge component of the gameplay includes forming some sort of guilds or alliances, where you are expected to be cooperating (Wirtz).

Multiplayer Online Battle Arena (MOBA)

This is a genre where two teams compete against each other and their goal is to destroy the opponent's base, located on the other side of the arena. Each player controls a character, or a hero, with unique abilities and these characters also usually belong to some class, such as healer, tank, assassin etc. These class differences make communication and coordination important, as usually it is not possible to win on your own. The main differences

between MOBA and FPS are that MOBA is from a top-down perspective and that it includes computer-controlled units, which if destroyed by the player will give them experience and gold.

Simulation

This genre aims to simulate real-life activities, from managing businesses and cities to controlling people and their development. Games in this genre can also include some form of strategy as planning may be needed in order to succeed.

There are a few different types, starting with life simulation, which simulates different aspects of real life and deals with managing a household. Next is a business simulation, here players usually start with a small business and their goal is to turn it into a high-profiting company. They can do so by managing production, marketing, and staff. Similar management is also needed in city-building simulations.

Simulation games can be a great educational tool because the player can gain knowledge about fields or industries that they would not be able to access in real life, such as farming.

Survival

The survival genre focuses on surviving in a challenging environment, where players typically start with minimal or no equipment. The exploration of a large open world is included because that is how the player can gather resources and craft tools from them. Games from this genre are usually set anywhere from post-apocalyptic to tropical or frozen worlds. Depending on the setting, survival may also include some basic combat system so that the player can defend themselves from hostile creatures or players. Typical for this genre are also the bars where players can see different needs decreasing. Except for a common health bar, the player may need to take care of the characters' hunger, thirst, exhaustion, or treat their wounds and illnesses (Lane).

Survival can be both single-player and/or multiplayer. *Rust,*[6] or *DayZ,*[7] are primarily designed for a multiplayer mode. In these games, the player can expect a more competitive and challenging environment, as well as a chance to collaborate with others.

On the other hand, survival designed as a single-player or co-op will not include such competitiveness, but it may offer more story elements instead. While it is not always the case, as some may be simply open-ended, some of the popular titles such as *The Forest,*[8] *Subnautica,*[9] or *The Long Dark* include a storyline.[10] In the case of *The Long Dark,* the player can even choose between story mode or survival mode in the menu. If the story mode is chosen, the player will have certain goals to complete before being able to progress further.

However, it is not common to have this division between the modes. Usually, the progression in the story will not affect the gameplay or the areas explored.

Creative

In this genre players can build, design, or create things from scratch, using different tools or materials. Creative games often feature elements or are mixed with other genres, such as survival, where you typically need to build a hiding spot or a base. A popular title *The Sims*,[11] for example, offers plenty of tools for house building or creating and customizing your characters, both visually and in a character development way.

Real-Time Strategy (RTS)

RTS involves strategic gameplay in a real-time environment, which means that there are no turns where the player would have time to prepare. The main focus is on resource management and planning. As it happens in real-time, players must be able to adapt to changing circumstances and usually do multitasking, such as unit production or combat management.

The popularity of the RTS genre has decreased over the past years, so while there are some dedicated fan bases around popular games such as *StarCraft*,[12] or *Warcraft III: Reign of Chaos*,[13] players will not encounter many new titles on the market.

To conclude this chapter, there are countless genres offering various experiences, from casual single-player to multi-player competitive modes, each incorporating engaging factors such as measurable progress, autonomy, collecting, or socialization, which maintain player interest even when played in a second language (Adair). Owing to their interactive nature, engaging content, and immersive experiences, games offer several potential means for language acquisition, including contextualized language through interaction with in-game characters, dialogues, texts, and narratives, providing learners with authentic English exposure. Multi-player games then allow for communicative opportunities when collaborating with others. Additionally, games can enhance cultural and global awareness through diverse settings, characters, and cultural references, which will be discussed in the literature review.

2 LITERATURE REVIEW

Firstly, this chapter discusses the four language competencies (listening, reading, writing, and speaking) in relation to video games, exploring the potential benefits they can have on acquisition. Intercultural competence is also described here, as it undoubtedly plays an important role in today's globalised world. Secondly, the section provides a brief introduction to second language acquisition and how it differs from learning. A description of language aspects characterized by Gass is also included, followed by Krashen's Monitor Model and two of its chosen hypotheses.

2.1 Language Competency and Development

The four essential language skills required for fluency are listening, reading, writing, and speaking. Passive skills are being practiced during reading or listening, while active skills are developed through speaking or writing (White). In the previous chapter, a few of the main game genres have been described to show some of the main characteristics which can enhance different language skills. This section focuses on these basic language skills, especially the passive ones which are most likely to be improved, and comments on how games in general can reinforce and enhance them. The section explores the overall impact of video games rather than genres alone because isolating the competencies allow for a more detailed examination of how they are enhanced through games. Additionally, intercultural competence is addressed, acknowledging the significance, in today's interconnected world, of not only effective communication but also understanding cultural variance and customs.

Listening

Games can enhance listening skills in several ways. Most importantly, many games, especially those focussed on narrative storytelling, include authentic audio recordings, usually in a form of character dialogs or story telling monologues. The voice-over plays a crucial role for the immersion, as it brings the characters to life (The Role of Voice over). As mentioned before, many developers aim for the international market, that is, they create games in English. This is one of the reasons why not every game receives full localization. While they may receive a high-quality translation in a form of subtitles, hiring professionals for voice-overs would be costly and less profitable for smaller markets, including the Czech market (Skoták). As a result of this incomplete localization, players are exposed to natural language use due to the original English audio remaining unchanged. This provides advantages such as hearing intonation, pronunciation, and various dialects and accents. This may not apply for

games created by small creators or companies for reasons that will be explained in the SLA chapter.

However, this may be overwhelming for beginners, people who have not developed their listening skill enough or it may cause confusion when coming across a new word. The fast-paced and colloquial language used in games can be daunting for those new to the language. Even learners who have some foundation in listening might find the variety of accents, slang, and rapid speech used in games difficult to understand. While not always available, this can be helped with by turning on English subtitles, which leads to the next skill.

Reading

Reading is closely connected to listening, as voice acting is typically accompanied by the option to enable subtitles. Subtitles can be extremely beneficial when encountering new words in English, as players can see the spelling while simultaneously hearing the correct pronunciation. It is also common to come across text-based games. Although these do not offer the advantage of hearing the pronunciation, they allow learners to look up unfamiliar vocabulary in dictionaries if necessary. Regardless of whether a dictionary is used during gameplay, the benefits of expanding vocabulary and understanding grammar remain (How video games can help you learn English). The text-based information may be distributed by various means such as in-game e-mails, books, journals, notes (Fig. 1). Such text-based information can contain lore background, item description, quest description, etc.

One of the primary benefits of subtitles is that they can make complex dialogue more accessible. For players who struggle with understanding spoken language, subtitles provide a visual aid that can bridge the gap between what they hear and what they comprehend. Potentially, the link between hearing and seeing the words can also solidify the correct pronunciation.

An obvious disadvantage to the text-based material is that if it is too complex or lengthy, beginner or intermediate learners may find it overwhelming and unengaging. Faced with dense paragraphs or intricate plot points, these learners might feel discouraged and choose to skip or ignore the material entirely. While this can result in missing important information, such as background lore or details about the characters, the fundamental idea of the story still should be understood with the help of visual cues.
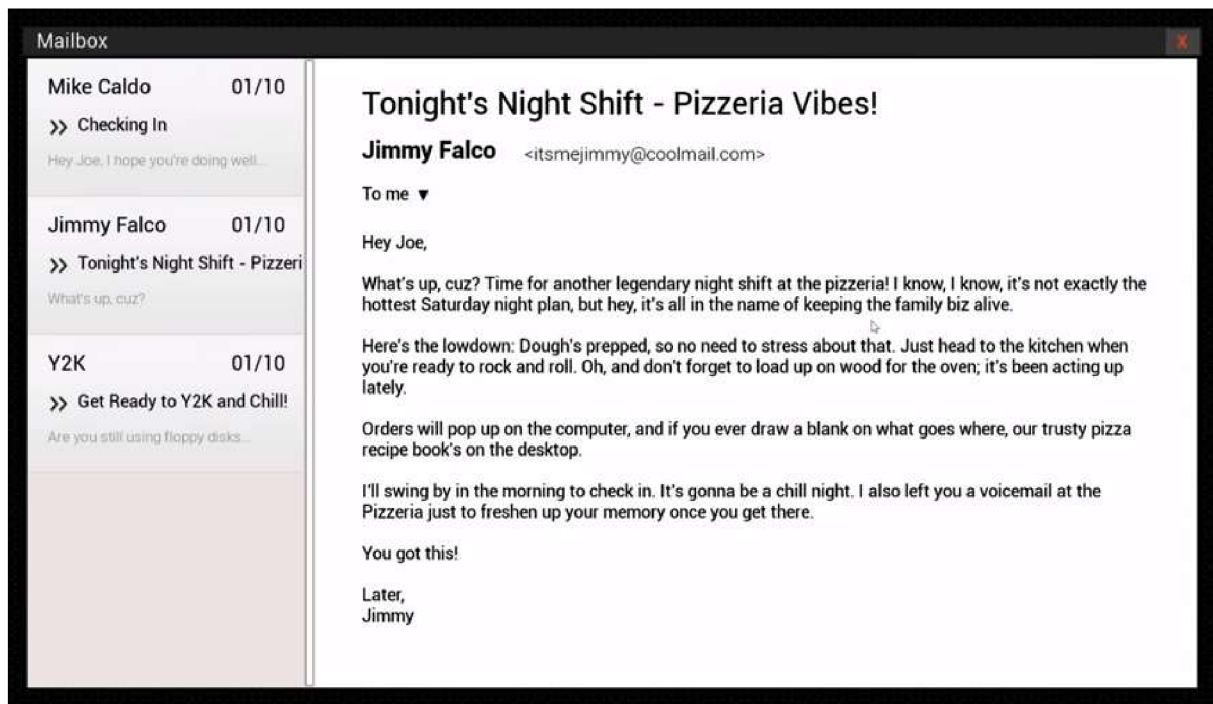
Fig. 1 From the game *At Tony's*. One of the introductory e-mails the player receives, which includes several slang words and phrases such as cuz, biz, lowdown, or draw a blank.

Writing

Out of the main four skills, writing is probably the least likely to be practised, depending on the genre of the game. Although some multiplayer games require cooperation, if learners lack confidence in their skills, they may respond using simple sentences and only complete tasks as instructed. Even if learners are eager to communicate, the chatting option is available only in multiplayer games, and again, depending on the game genre it may be more convenient to use a voice chat instead. Regardless of which communication method is preferred, writing is closely connected to reading and overall literacy. A survey conducted by the National Literacy Trust in 2019 showed that 4 in 5 people who play video games also read materials related to them, and 3 in 5 people write something related to the games, such as reviews or advice for other players. This motivation to further engage in game-related activities may encourage players to use more complex language and become more comfortable with their overall language skills over time.

Speaking

Like writing, speaking skills can be improved if the learner is willing to communicate with his teammates. Often, multiplayer games require quick thinking and decision-making. Therefore, the desire to win may motivate the learner enough to share his opinion in the voice

chat and communicate. The more one communicates, the easier it becomes to share their thoughts and opinions in the real world (Vainius). Unfortunately, single-player games essentially do not provide the learner with the option to practice their speaking. What the learners can do instead is practice the shadowing method. Shadowing is a technique that helps the learner to improve their pronunciation by repeating what was said (Venner). Not only this can help with phonological accuracy, but it might also help with remembering words or phrases that can be used in different situations.

Intercultural competence

Lastly, it is important to mention intercultural competence. A skill required for an effective interaction. As Byram (1997) stated, "Even the exchange of information is dependent upon understanding how what one says or writes will be perceived and interpreted in another cultural context; it depends on the ability to decentre and take up the perspective of the listener or reader". Games are a great place for cultural representation as many of them incorporate diverse cultures and settings. These settings include narratives with complex social issues, where players have a chance to experience the world from a different perspective (Fig.2). Players also have a chance to be part of historical events or practices, which can potentially make them more interested in the culture and deepen their understanding. One of the famous examples is the *Assassin's Creed* series, developed and published by Ubisoft since 2007, where each game is set in a different country and during a certain historical event (Fig.3). These games allow players to explore historical cities, understand cultural practices, and engage with historical figures, thus providing a deep and interactive learning experience. Lastly, of course, the multiplayer games bring together players from different countries and cultural backgrounds, which encourages the players to develop respect and understanding for each other.

Fig. 2 From the game *Parasocial*. The developer Chilla's Art is small Japanese indie game studio so the environment is always related to Japan, and so are some of the story themes. The main story of *Parasocial* is based around a female streamer who is being stalked, and stalking is widely spread problem in Japan (Number of Reported Stalking Cases).

Fig. 3 From the game *Assassin's Creed Odyssey* (Abood). *AC Odyssey* is set in Ancient Greece, and the plot presents a mythological retelling of the Peloponnesian War.

2.2 Applying SLA Theories to Video Game-Based Language Learning

This sub-heading highlights the integration of Second Language Acquisition (SLA) theories with the practical application of using video games as language learning tools, offering a comprehensive overview of relevant theories and their implications for the research.

It is important to note that there is an ongoing debate on whether the process of learning and acquisition are different. Learning focuses on studying vocabulary and grammar, usually with formal instruction. On the other hand, the acquisition process is unconscious, natural, and it happens through exposure and interaction. This is also suggested by Krashen (1981), whose hypotheses will be discussed in more detail in the following chapter. Although the differences between the terms might not be clearly defined or agreed upon, this thesis will focus on Krashen's definition of acquisition, that is, the subconscious, and what he perceives as a far more important process (1).

A second language (L2) can also be referred to as a target language (TL) because it refers to any language beyond our native one. SLA generally focuses on both, formal and informal learning, that is, learning in classes and learning through natural context, as it seeks to understand how is the L2 learned. Gass also mentions the difference between Foreign Language learning and Second language acquisition, saying that SLA refers to "the learning of a nonnative language in the environment in which that language is spoken" (7). As covered in the previous chapter, games have a complex nature, and different genres provide players with various learning opportunities. Games offer a unique environment that aligns with Gass' definition due to their immersive and (usually) natural and rich environment, which will be the main focus of this thesis and it will be further supported by Krashen's hypotheses.

It is necessary to point out that there is a "logical problem" of language acquisition, as mentioned by Saville-Troike. The problem is referred to as an innate capacity for language learning. This ability allows us to learn L1 in the same way, and master it around the same age, whether it is English, Chinese, Russian or any other language. Yet beyond a certain age, the acquisition cannot be completed (14). Lenneberg proposed the Critical Period Hypothesis, which suggests that there is a biologically determined period after which learning becomes more difficult. Children, who do not receive linguistic input, within this period, lose the ability to ever learn language normally, due to the physiological changes and loss of the brain's plasticity (179). The hypothesis has been influential in the field of SLA, and according

to Lenneberg, it explains why most L2 learners have a "foreign accent" when they learn after puberty. A series of experimental studies to investigate the critical period hypothesis was also conducted by Newport (1990). Despite not being able to determine the exact reason why this happens, she found that younger learners are more likely to achieve native-like proficiency. Since many gamers start playing games at a younger age, this would mean that thanks to exposure and immersion, they should have a higher probability of becoming fluent. Moreover, this is reinforced by the naturalistic input and engaging nature of the game, which maintains the players' interest even when they may not fully understand the meaning. The engaging nature plays an important role for adult learners as well, as it means that they can achieve similar results thanks to meaningful interaction and comprehensible input.

Regarding engaging nature, the motivation factor needs to be mentioned. Saville-Troike states that motivation is one of the factors contributing to the success of some learners, along with age, sex, etc. Gass even says "In general, motivation appears to be the second strongest predictor of success, trailing only aptitude" (426). Despite its various definitions, the two most widely recognized types, mentioned by Saville-Troike, are integrative and instrumental motivation. "Integrative motivation is based on interest in learning L2 because of a desire to learn about or associate with the people who use it (e.g. for romantic reasons), or because of an intention to participate or integrate in the L2-using speech community ... Instrumental motivation involves perception of purely practical value in learning the L2, such as increasing occupational ..." (85-86). Both Saville-Troike and Gass point out the difficulty of researching motivation and the problem of the diverse definitions. Despite the unreliability of most research, there is thought to be a high correlation between motivation and language achievements. Consequently, it can be expected that the motivation of gamers would be mostly integrative, as they will want to connect with people who share the same interests. As a result, players might be less likely to give up on language studying because they will have a practical use for it and will be able to practice it.

According to Gass, it is also necessary to understand what needs to be learned. She then proceeds with the description of some language aspects. Starting with the sound systems, each speaker knows their native language and they can distinguish what sounds are possible in it. If we, as learners, encounter and recognize a syllable that is not familiar to us, we typically substitute the sound with something similar. This sound substitution usually results in having a foreign accent. Both pronunciation and accent acquisition may be potentially facilitated by games, especially during the critical period, because games often include audio

versions of dialogues or cut scenes. Moreover, this exposure to language sounds will assist beginner learners in quickly grasping when to blend sounds and when to keep them distinct.

Following this, here is a concise overview of syntax and morphology. Syntax, "frequently known as grammar, referring primarily to the knowledge we have of the order of elements in a sentence" (Gass 9), is something that is usually learned at school. However, at school, the emphasis is placed on the prescriptive grammar. While learning prescriptive grammar is crucial, at least in the early stage, it is also important to know that these rules can and often are violated by native speakers. When it comes to the usage of prescriptive or descriptive grammar in video games, they will typically lean toward one or another, depending on the game's objective. Therefore, players have a chance to experience both of these approaches through contextualized language use and repetition. The same can be applied to semantics. The constant repetition of words containing the same or similar suffixes might enhance players' vocabulary, word comprehension, and overall language proficiency.

Lastly, there is semantics and pragmatics. Semantics studies the literal meaning of the words and pragmatics is concerned with the meaning of the words, in a specific context. For example, understanding homonyms can significantly enhance one's comprehension of the language. There are also words with fuzzy boundaries, meaning their definitions can be vague, context-dependent, or cultural-dependent, making them difficult to distinguish. Here, games can be beneficial because of the visual cues and situational context that can clarify the meanings, which can enhance the semantic understanding. Pragmatics also plays a crucial role for the learners, as it enhances their recognition and comprehension of the subtle nuances of meaning and the intention being conveyed. It also helps develop sociocultural competence, which may reduce potential misunderstandings. This can be achieved through various means. Not only though dialogues between the NPCs, but through the social interactions in multi-player games, role-playing, problem-solving challenges (such as making requests, collaborating, etc.) and the cultural setting.

Gass also briefly describes a system called an interlanguage (IL). IL is a system on its own, including elements from both the native and the second language. An important concept within this system is the fossilization. Fossilization refers to the permanent establishment of the forms and rules, regardless of further exposure to the L2. This happens because in the early stages, we have to focus on understanding the basics, and as we automatize the usage through practice, any further exposure seems to be less effective. However, the problem is that there are not enough studies that would explain the process of fossilization. Since games

often involve a significant amount of text-based information, social interactions and they provide a context-rich environment, all of which could potentially help to address the problem of fossilization. On the other hand, the input needs to be natural, which cannot be always guaranteed. Games are being developed by companies, or even individuals, from all over the world. When these developers aim for an international market, they have to undergo the process of localization. Localization includes not only the translation, but also cultural adaptation, technical changes, or even music changes following licensing restrictions (Game Localization). While many big companies can afford this, the small creators usually cannot. Therefore, the game is being only translated, which may be done by the creators themselves or by volunteers or freelancers, resulting in an unnatural or low-quality language input. Additionally, some small creators may decide to include their own voice acting, but the overall quality and the quality of the translation would also depend on several factors. Poor translation might reinforce the process of fossilization caused by the interlanguage, which is a point that is mentioned in the following chapter.

2.3 The Monitor Model and Language Learning

Krashen's The Monitor Model is an influential theory in the field of SLA based on five main theories: the Monitor hypothesis, the Acquisition-Learning hypothesis, the Natural Order hypothesis, the Input hypothesis, and lastly the Affective Filter hypothesis. The main idea of the theory is that learners can acquire language if they are exposed to a meaningful language input, as well as when they are immersed. As mentioned before, Krashen distinguished learning and acquisition, and according to him, conscious learning plays only a limited role in the acquisition (Krashen, 1981). The reason why I see Krashen's theory as important for this thesis is that it provides theoretical framework focused on the importance of the meaningful context, which is relevant for the purpose of exploring how video games can be a medium for language skill enhancement. This thesis primarily examines average gaming experiences rather than gamification in education so the distinction between conscious and unconscious learning is a key element. Nevertheless, this thesis is not focusing on video games as the main and only source for learning or acquiring language, therefore, it needs to be noted that some elements of Krashen's hypotheses may not align with, and could even conflict with, the focus of this thesis.

Generally, it needs to be mentioned that Krashen criticised the use of simple codes and any modified forms of language that has been, and are still used today, in language teaching. He discussed three types of simplification: teacher-talk, interlanguage-talk and foreigner-talk

(128). According to him "even if simple codes are useful, if the acquirer hears only these codes we can expect fossilization", because the talk will be really limited (131). As mentioned previously, the problem of fossilization could be potentially minimized by the authentic and natural use of language in video games, however, the quality cannot be always guaranteed. Similarly, the players will not be encountering only English native speakers in the multiplayer games, and are more likely to engage in the interlanguage and foreigner-talk.

Although Krashen did not include motivation in his five hypotheses, he did acknowledge its significant role in language learning. According to him, motivation is crucial for acquisition because if the learner finds material engaging and relevant they will be more likely to acquire the language. As a result, he saw the instrumental motivation as less effective than integrative motivation, saying "with instrumental motivation, language acquisition may cease as soon as enough is acquired to get the job done" (22). However, Dervić and Spahić (2018) point out that acquisition can occur whether it is conscious or sub-conscious, therefore, the motivation to learn may not be as relevant. From this thesis' perspective, both motivations are equally important as they both play an important role by keeping the player engaged and interested.

Despite its influence, the Monitor Theory was rejected by many professionals and discussions about whether the theory is adequate arose. Some examples of the criticism include the difficulty to determine what has been learned and what acquired, limited empirical research, unspecified or undefined terms (e.g.: "structure" or "comprehensible") (Lichtman and Vanpattern). His focus on unconscious learning downplayed the explicit instructing, and to this day, there is an ongoing discussion on how to effectively convert his theory into a teaching practice.

The Acquisition-learning hypothesis

The most important hypothesis for this research is the Acquisition-learning hypothesis. This hypothesis emphasises the difference between the conscious (aptitude) and the subconscious (attitude). Krashen says "both language aptitude, as measured by standard tests, and attitude (affective variables) appear to be related to second language achievement, but are not related to each other" (5). He also points out the importance of self-confidence, which is presumably connected to language acquisition by encouraging intake and having a lower filter. According to psychologist R. Vitelli from Psychology Today, video games can boost self-esteem by allowing people to work their way through obstacles and by providing

immediate feedback. Additionally, many studies also show that anonymity provides a feeling of safety. As a result, people are more likely to be open about various topics, or in this case, they may feel more confident in using their second language (Dawson).

What also seems to be one of the advantages of games is connected to Krashen's "silent period". The "silent period" is a stage during which the learner is hesitant to produce any output. Krashen says that comprehension precedes this period, which can last several months, and that competence is being slowly built up by listening and absorbing the target language before the learner becomes comfortable enough to use the language (111). He also mentions that only children are allowed this period and suggests to allow it to all learners (8). The benefit of the games is that they create an environment, which allows for this silent period since even in multi-player games the players do not need to participate in the conversation unless they decide to. This is associated with the aforementioned self-esteem and lower filter, as the player is not pressured to talk unless they want to, and they do not feel ashamed of making mistakes thanks to the anonymity. On the other hand, in single-player games, the option for active participation is very limited. The most widely spread way of interacting with the NPCs is through predetermined dialogue options, which may or may not affect the gameplay (see Fig. 4). As a result, while single-players offer comprehension and decision-making practice it does not provide any actual practice for a spontaneous production.

This hypothesis appears to be problematic not only for the lack of precise definitions, but also because Krashen compares the acquiring process to the child language acquisition (1). The idea that native speakers will modify their utterances to help the learner understand does not apply to digital media. When using digital media, such as games, the input will not be modified to meet the learners needs because it is not made for learning purposes. Related to this, Krashen deprecates the need of error correction, which may appear in games in a certain form. For example, choosing the wrong dialogue option due to a misunderstanding may result in an unwanted reactions of the NPCs or even bad game endings. Additionally, the idea of natives modifying their language seems to be no different to the simple codes that Krashen criticised. While it is understandable why foreign-talk might be harmful, it is debatable that the teacher-talk would be inappropriate, considering that the teacher might even be a native speaker.

As can be seen, the hypothesis does not align completely with the acquisition through video games since the main difference remains that games are supposed to be a supportive medium rather than a main tool for acquisition. Video games provide a valuable exposure to

English encouraging the unconscious process through interactive environment and giving the player enough time to overcome the silent period. Moreover, games provide ample opportunities for communication within the game as well as out of the game, e.g.: forums, reviews, communities.

Fig. 4 From the game *The Walking Dead*, where the dialogue options can heavily influence the outcomes. These dialogues tend to be time limited (as seen at the bottom) so they require a quick decision-making and misunderstanding may result in undesired reactions.

The Input hypothesis

Another key hypothesis is the Input hypothesis, closely connected to the Natural Order. The central idea of this hypothesis suggests that acquisition occurs when learners are exposed to a language input slightly beyond their current level. This is known as the "i+1" principle, where i represents the learners current level. The problem here is that Krashen did not characterize i, nor did he explain what 1 is, so measuring this principle is impossible. The main idea is that comprehensible input should be assured, as long as the input is not too complex. "Learners will naturally access and use what they need, allowing acquisition to take place spontaneously as long as they are exposed to this rich and comprehensible input" (VanPattern and Williams 27).

Games can certainly provide an input, although the extent to which it is comprehensible and rich depends highly on the game genre. Certain genres can create particularly challenging environments for beginner learners whose proficiency levels are not high enough. If these learners choose a narrative-focused game, they may find themselves easily overwhelmed, as there is no way to make the input appropriate for them. The opposite is true for advanced learners who would only play games that do not include much narration and are focused on a single objective, such as FPS games. Such input would not be beneficial except for the preservation of knowledge. In short, while video games have the potential to offer comprehensible input that aligns with Krashen's Input Hypothesis, the suitability of the input depends on the game's genre and the learner's proficiency, and for any intentional effort of improving language skills through playing, a careful selection of the game may be needed.

Overall, it can be anticipated that even beginners will select games they are interested in due to high motivation and entertainment, despite the necessity of playing them in English if their native language is unavailable. As a result, they will be regularly exposed to rich and contextual input, potentially increasing their vocabulary knowledge and enhancing their overall language skills over time. This would imply that the i+1 principle is theoretically being applied each time the learner engages with the virtual environment, even if the input is way beyond their current level. This would be connected to "accessing and using what they need", starting with the simple commands (quests) and gradually acquiring more language through dialogues and narrative descriptions as they advance. Supporting elements to the language complexity include the visual representation and feedback provided by the game, which are essential for acquisition.

3 METHODOLOGY

This section provides a comprehensive overview of the questionnaire, which served as the primary research tool. Firstly, this chapter details the research design, including the research approach and sample characteristics. Secondly, it explains the data collection methods, providing insights into the process of answer collection and a description of all questions and their results. Thirdly, the data analysis procedures section covers data preparation and the software tools used.

3.1 Research Design

The questionnaire was created using Google Forms and consisted of 27 questions, excluding the introductory section where respondents were informed about the purpose of the study, consent for data usage, and assurances of anonymity. Anyone interested in the questionnaire results could voluntarily provide their email address at the end of the survey form. The entire questionnaire was written in formal English, specifically targeting more proficient learners. This is reflected in the results of the question "According to CEFR, what is your current level in English?", where 42 respondents indicated they are at level B2 or higher (Fig. 5).
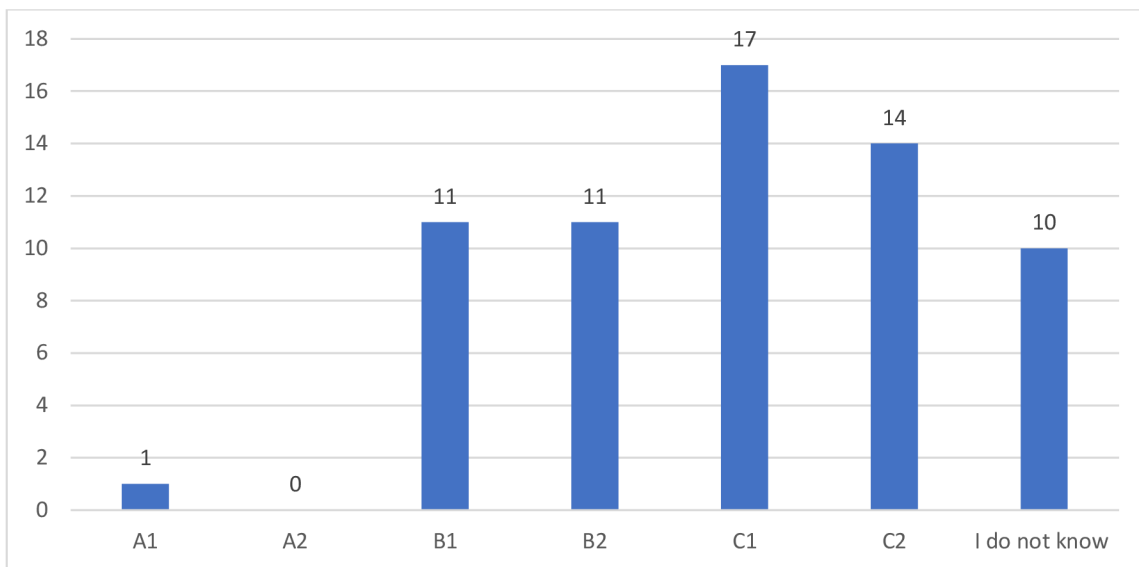
(Fig. 5) Levels according to CEFR.

Out of the 27 questions, 22 were obligatory, while 6 were follow-ups based on previous responses. The employed methodology was mixed: some questions were closed or multiple choice, while others were open-ended to gather more detailed responses. The first section focused on collecting general information and the gaming experience of the

participants. The second section examined the participants' language competencies, including their history of studying English and whether they are actively learning the language. The third and final section, comprising of four questions, was based on the respondents' perception of whether the games helped them improve their language skills. All questions were based on the knowledge gained from the literature review and my personal experience with gaming and language acquisition through video games.

3.2 Data Collection Methods

Before launching the final version of the questionnaire, a pilot version was administered to a small sample of five people to identify potential issues with the questions and overall survey design. Based on the feedback, various aspects of the survey were adjusted. Some questions were clarified and rephrased, and the overall length was extended as several questions were added to gather more detailed responses.

The questionnaire was administered online and primarily distributed via the Discord platform to ensure heterogeneous data.[14] Additionally, this ensured that the respondents were both gamers and English learners, and it reduced the risk of anyone intentionally providing false responses, as it was shared through communities of which I am a member.

Demographic and Video Game Habits

The survey included 64 participants, with 50% identifying as male, 34% as female, and the remaining 16% opting not to disclose their gender. Since there was no specific goal connected to the importance of gender differences, no other options (besides "Male", "Female" and "Prefer not to say") were presented to maintain simplicity in data collection and analysis. Only 8% of the respondents were under the age of 18 (Fig. 6). This demographic distribution is also reflected in the responses to the question "How long have you been learning English?"; 83% indicated they had been learning English for over 10 years, and 12% reported a span of 7-9 years. As seen in Fig. 1, 66% of respondents claimed to have knowledge of English at level B2 or higher. According to EF Education First, it takes 900-1200 hours of instruction to reach level C2. Hence, this data corresponds with the results of the previous question; however, numerous factors influence these results, and a more detailed study would be necessary. Additionally, 15% of respondents were unsure about their level. At a minimum, they reported that they are able to hold a conversation. Other identified issues include having lower active skills compared to passive skills, lacking a rich vocabulary, and

forgetting words. Overall, it can be said that this 15% were at an intermediate level at the lowest. The ratio of language level and time spent learning English can be seen in Fig. 7.
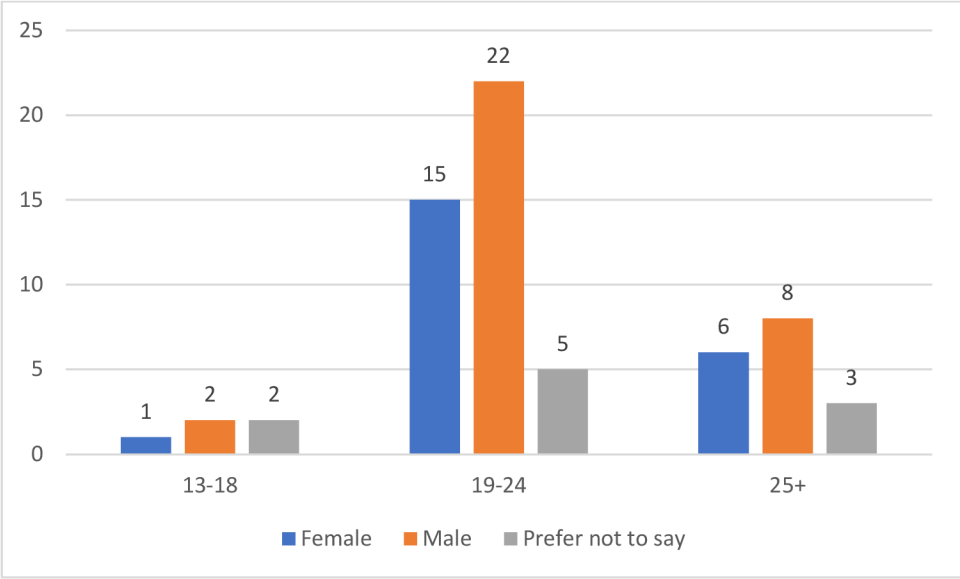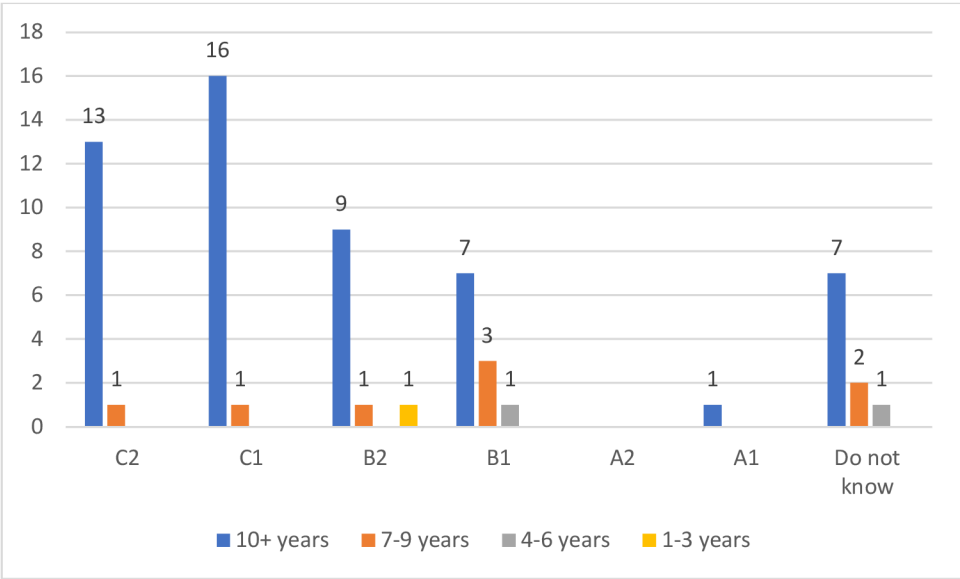

Fig. 6 Gender and age contrast.

Fig. 7 CEFR level and years of learning English.

Although the survey did not target a specific language group, native English speakers were excluded from participation to align with the research focus on English language acquisition. Consequently, the majority of respondents included 46 Czech and Russian participants, with the remaining 18 representing various other nationalities (Fig. 8). The results of the subsequent question "What is your first language?" corresponded as there were 29 native Czech speakers and 19 native Russian speakers, among whom were Belarusian and Ukrainian nationals (Fig. 9).
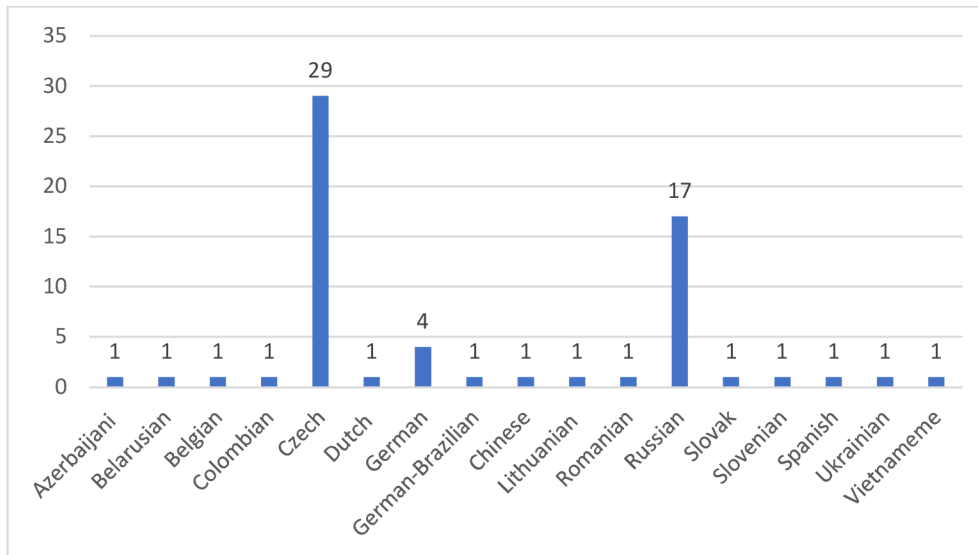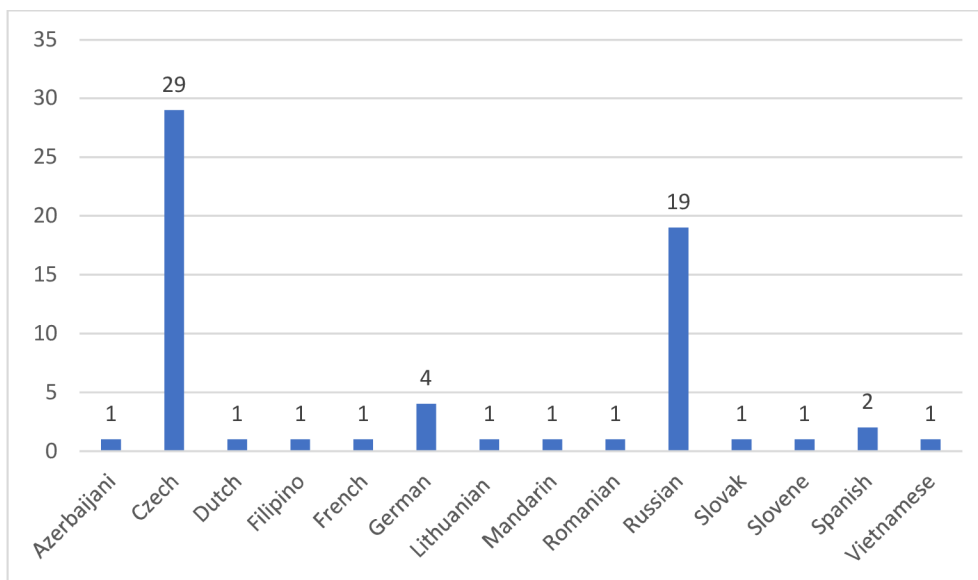
Fig. 8 Nationality.

Fig. 9 First language.

When it comes to gaming habits, three questions were asked. The first one "How often do you play video games?" was concerned with the frequency of playing per week. The option "less often" signals that the frequency of playing is infrequent and that the respondent plays only rarely. 38% reported playing daily, 31% at least 3-4 times a week, and the remaining 31% played less than three times a week. Closely connected was the question "When you do play, for how many hours a day? (on average)". Only 8% of all the respondents reported playing less than 1 hour a day; 51% 2-3 hours per day, and 41% reported playing more than 4 hours a day (Fig. 10). Another question connected to gaming habits, that plays a crucial role, was the question concerned with the preferred genres. Respondents could choose from the genres presented in the first chapter and they could pick as many options as

appropriate. Respondents also could have opted for the "other" option, which 10% did. Answers that appeared several times included visual novels, horror games, and puzzles. Out of these three concepts, the visual novels would be the most suitable as their own genre due to their heavily narrative story and character interactions. However, horror and puzzle games were not separated in this thesis because their elements are often integrated into various other genres. The most popular among the respondents was the RPG and Creative genre, followed by the Simulation (Fig. 11).
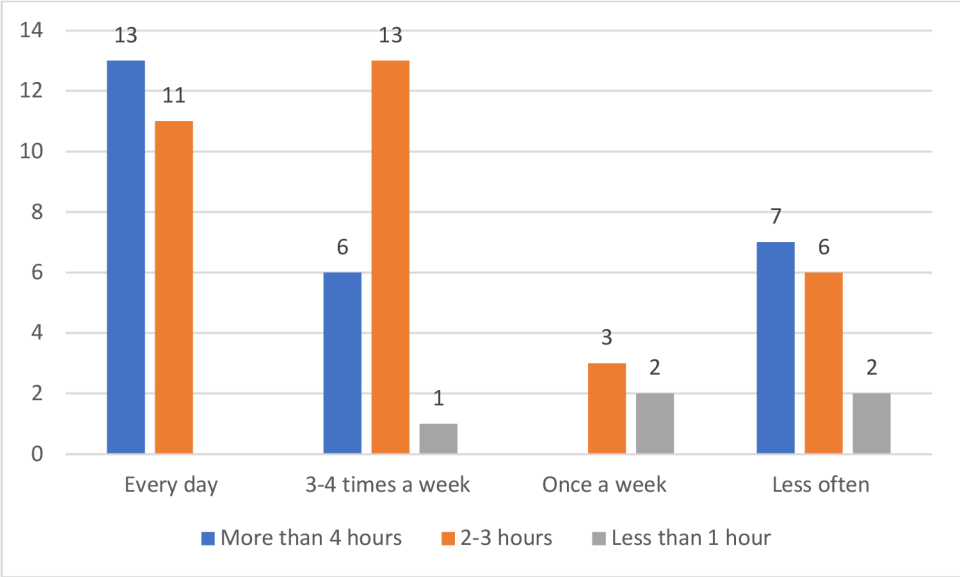

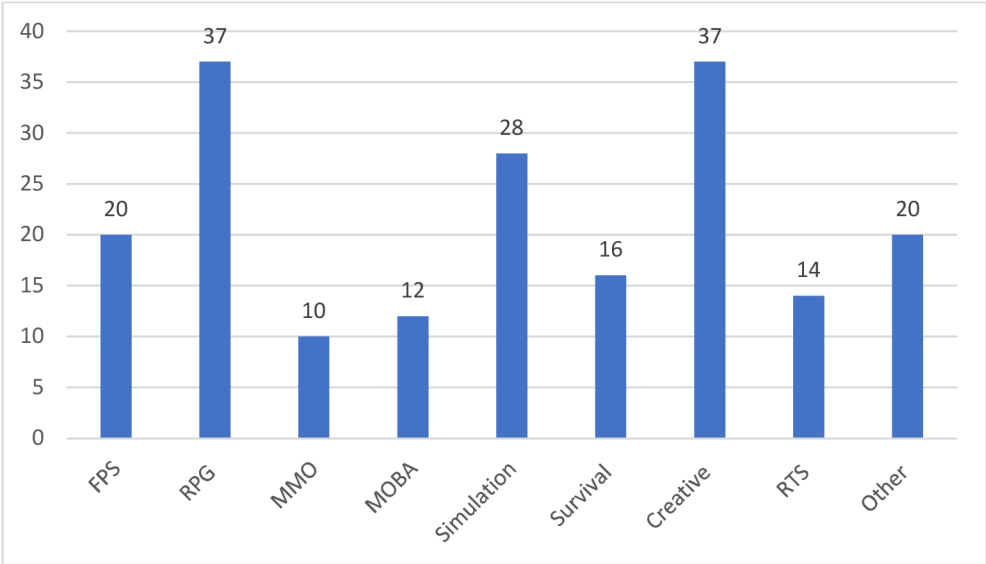Fig. 10 Frequency and the amount of time spent playing video games.

Fig. 11 Preferred video game genre.

Language Use and Preferences in Gaming

To learn more about the language use and gaming, five questions were asked. Firstly, the question "What language do you usually prefer to play video games in?" made it clear that 74% of the respondents play games in English (Fig. 12). The following question asked for more details regarding the previous response. It appears that for people who prefer to play games in English, the main reason is that they prefer the original language the game was made in, which often happens to be English. Other notable reasons included the distrust for translations due to their poor quality and losing meaning in translation or being used to English so that they are more comfortable with it. As for the 23% who prefer playing in their native language, the main reason was to be able to enjoy the more narrative-based games that include a lot of text. However, most people added that if there is no translation they do not mind playing in English.
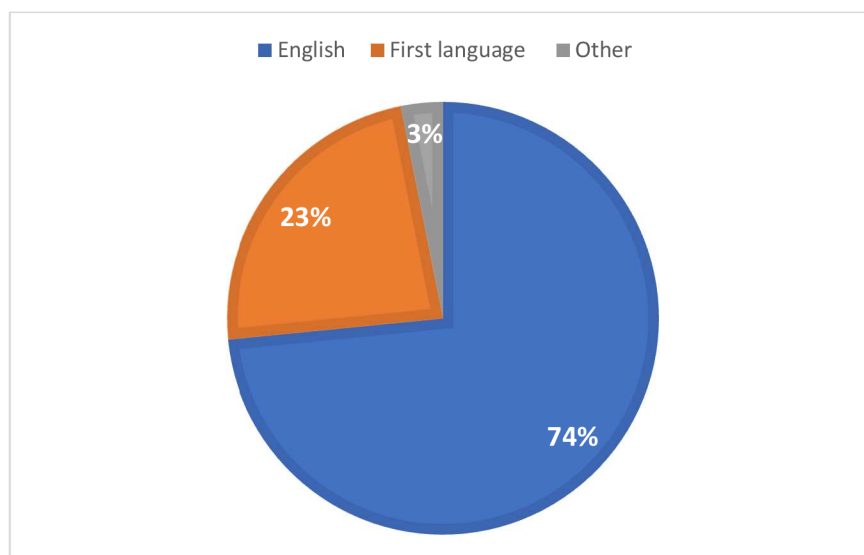

Fig. 12 Preferred language in video games.

Regarding the topic of language acquisition, there was also an interest in knowing whether people play in English with the purpose of improving. To the question "Do you actively play video games in English with the purpose of improving your language proficiency, or do you consider any language improvement to be incidental?" 77% responded that it is a side benefit, while only 14% stated that they are playing with the purpose of improving their English skills (Fig. 13). The subsequent question requested elaboration on the previous answer. However, answering was optional so only 15 people responded, and three main points emerged. If they are learning, then games are their primary source; they retain their knowledge this way; they are not able to learn anything new due to high proficiency.

Those who opted for the answer "other" and were willing to provide the detailed response said that it is both, for improving and for maintaining their knowledge.
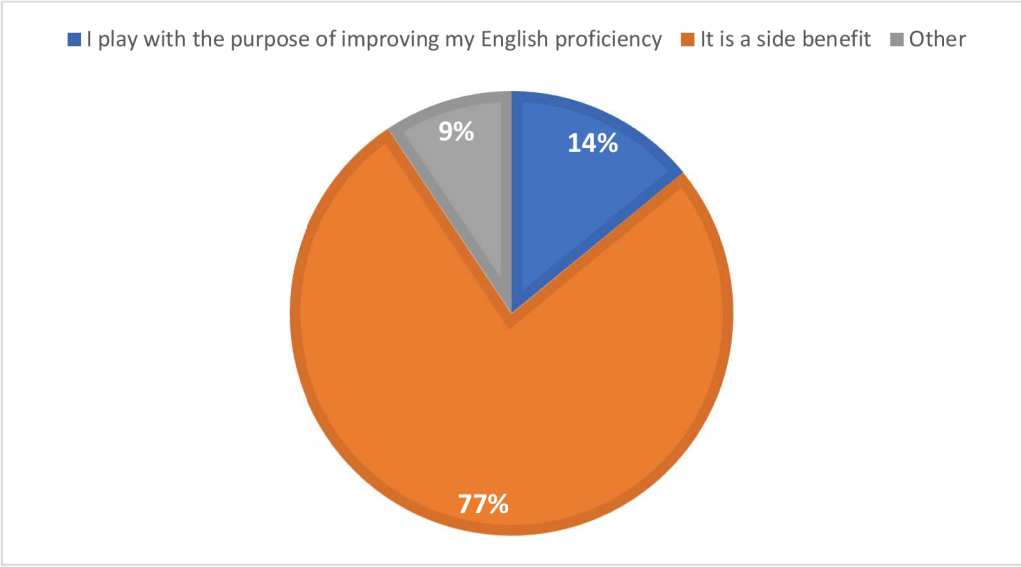

Fig. 13 Purposeful and a side benefit contrast.

Closely connected was the question related to language use in multi-player games "In multi-player games, do you communicate in English?". 47 people answered as those who stated they do not communicate at all were not asked this question. The answers were as follows:
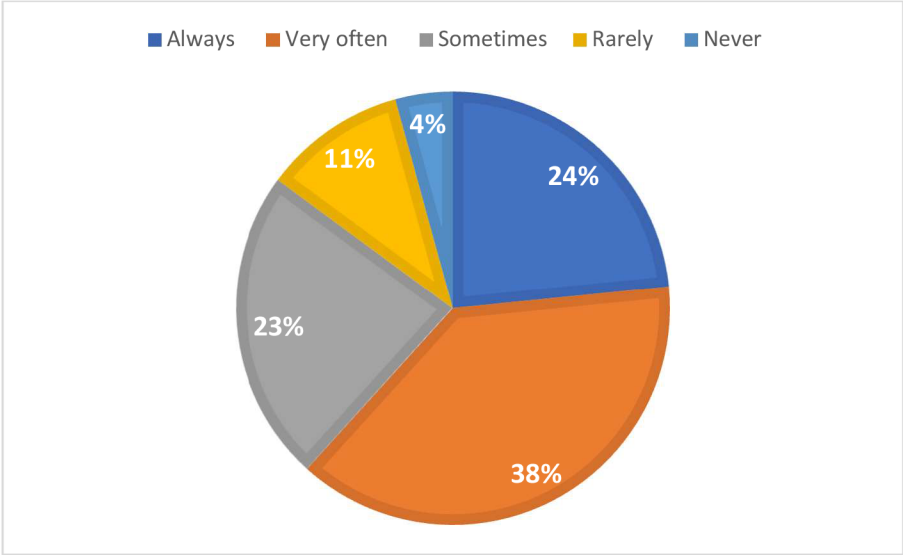

Fig. 14 Language used for communication in multi-player games.

Communication and Interaction in Multi-Player Games

When it comes to communication and interaction, four questions were asked. The question "Do you prefer single-player or multi-player games?" shows that more than half of

the respondents like to play both, single and multi-player games, while 38% prefer just single-player (Fig. 15). Since the previous question was concerned with the preference, the assumption was, that everyone at least sometimes plays or have played a multi-player game. Therefore, the next question "Do you communicate while playing multi-player games?" was obligatory for every respondent. More than half of the respondents claimed to communicate at least sometimes (Fig. 16). The next question "How do you usually communicate while playing multi-player games? (please tick as many as appropriate)" was only visible to people who answered "yes" or "sometimes" to the previous question. There were 47 responses and the respondents were asked to provide more detail or explanation to their answer. The results are, as shown in the Fig. 17, 50/50. According to the results of the open-ended question, those who opted for text chat stated it is either to avoid communication and only use it when needed or they prefer text chat with strangers due to anxiety or because of the feeling of embarrassment due to their low language skills. Conversely, those who opted for voice chat mainly stated that it is more convenient as it is easier and faster, or that they are glad to meet new people this way.
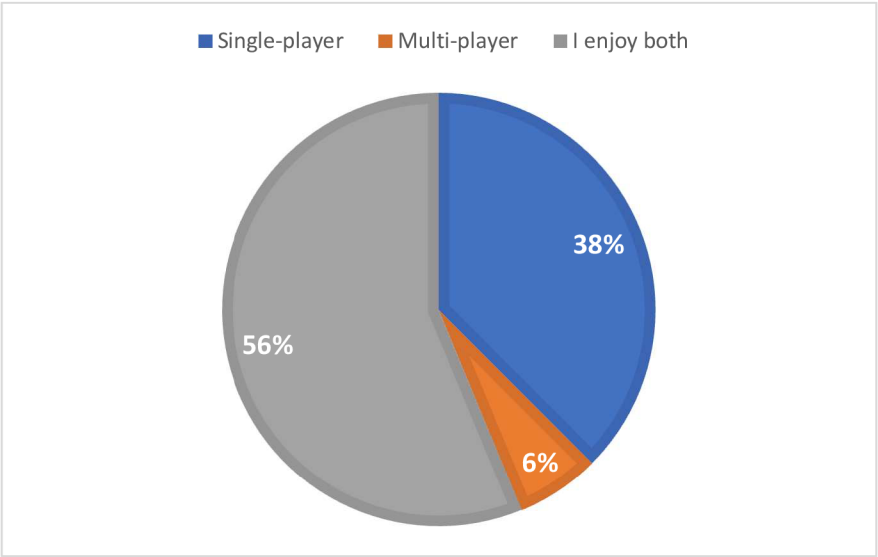

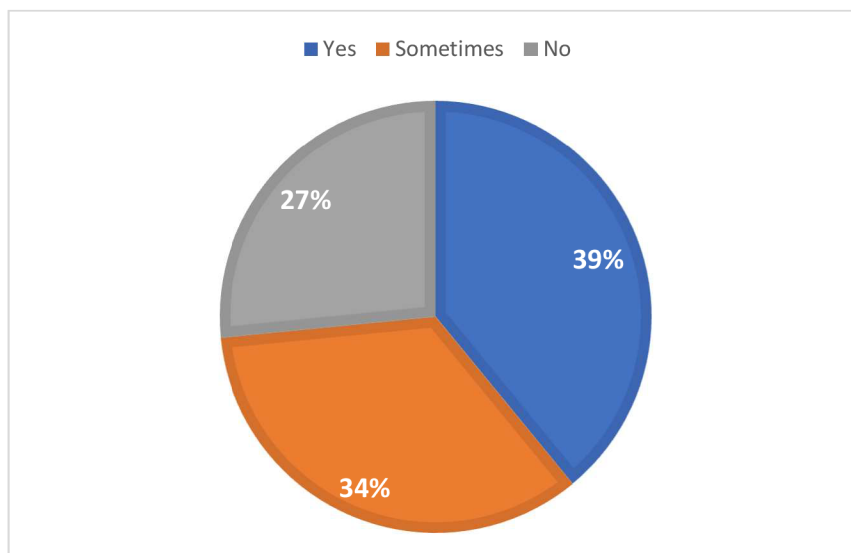Fig. 15 Single-player and multi-player preference.

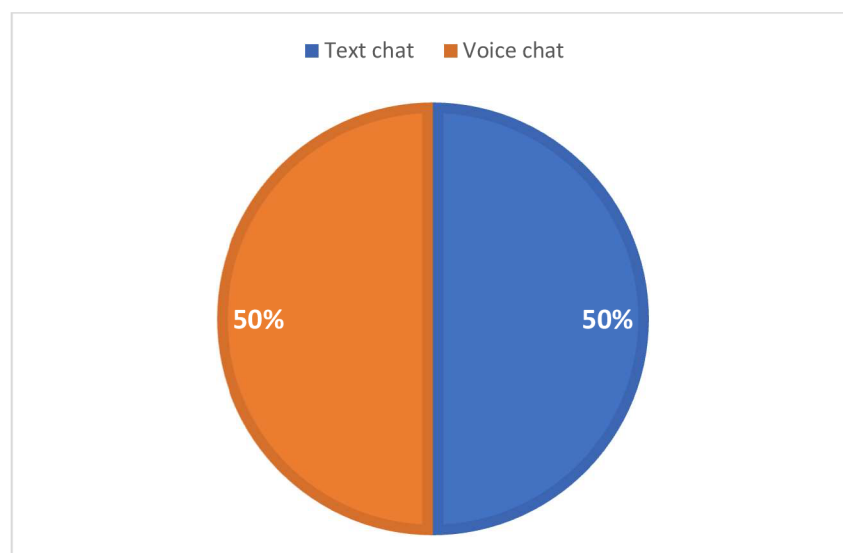Fig. 16 The frequency of communication in multi-player games.

Fig. 17 Preferred means of communication in multi-player games.

Learning Resources and Language Improvement

Related to the language used for communication in multi-player games, respondents were asked "If you at least rarely communicate in English, can you identify any benefits it has had on your language proficiency or knowledge?". This question was optional and 58% of people responded. The recurrent themes included improved conversational skills as well as listening, because of the various accents people were exposed to. Some people claimed they gained fluency only once they started speaking with others via games. This correlates with answers that mentioned increased confidence thanks to communication in games. Notable were also mentions of maintaining the level of proficiency, expansion of vocabulary, and the advantage of natives providing explanations or correcting mistakes. On the other hand, one

respondent pointed out the degradation of his proficiency due to the low communication skills of the players he meets, which could be the result of the foreigner-talk, mentioned in Krashen's Monitor Model.

Respondents were also asked about any specific challenges they recalled facing; the exact phrasing of the question was "When playing games in English, can you identify any challenges specifically related to the English language as the medium of the game?". Answering was non-compulsory, and 47 people shared their experiences. The reoccurring challenges seem to be "overly sophisticated/unique words", as well as slang or phrases tied to the culture of English-speaking countries; dialects of other players; and the overwhelming narration.

It is obvious that people consume other types of media and that they are in contact with the language even outside of the virtual world, which also has an impact on their acquisition. Therefore, three questions were designed to learn more about the peoples' media consumption that can be then taken into account. The first question "Except for video games, how often do you consume other content in English?" was focused on the most popular media which people tend to consume, and the results are as seen in Fig. 18. The next question, focused on additional learning resources, was asked to provide a clearer understanding of the activity of the learner, as active learning would greatly affect the acquisition itself. The question "Do you use any additional learning resources? (you can choose more options)" was followed by asking for further explanation to which 40 people provided more detailed answers. As shown in Fig. 19, most people stated that they are either already proficient enough and use no additional resources, or that they study/studied English at school or university. Besides preserving their language knowledge through the media mentioned in the previous question, a few people also pointed out they are using English in their working sphere. Except for two mentions of the usage of some learning applications, those who provided more detailed response do not seem to be actively learning English, nor they have mentioned actively learning it in the past outside of the school. This would mean that their knowledge and fluency were heavily influenced by the media they consume.
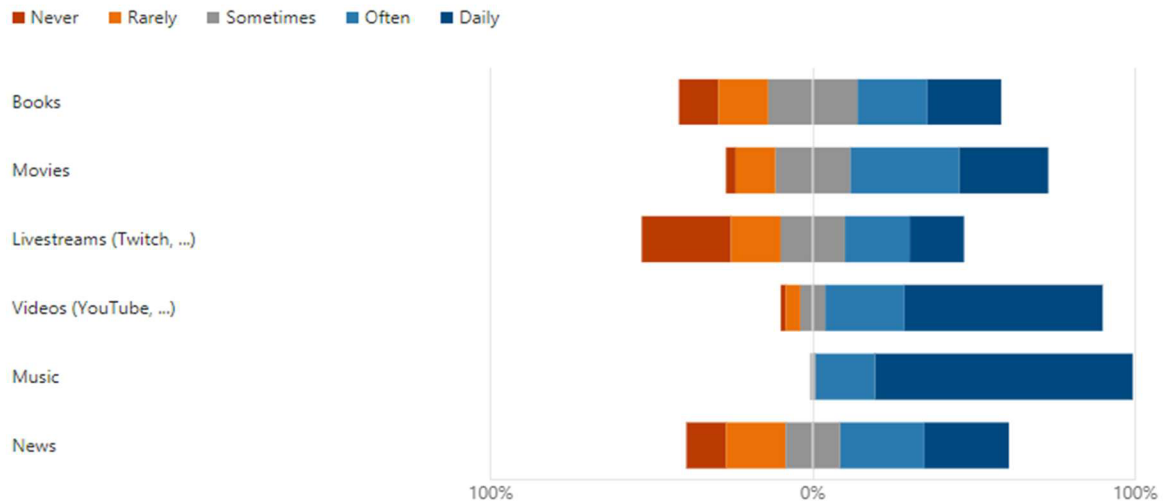
Fig. 18 The frequency of different media consumption.
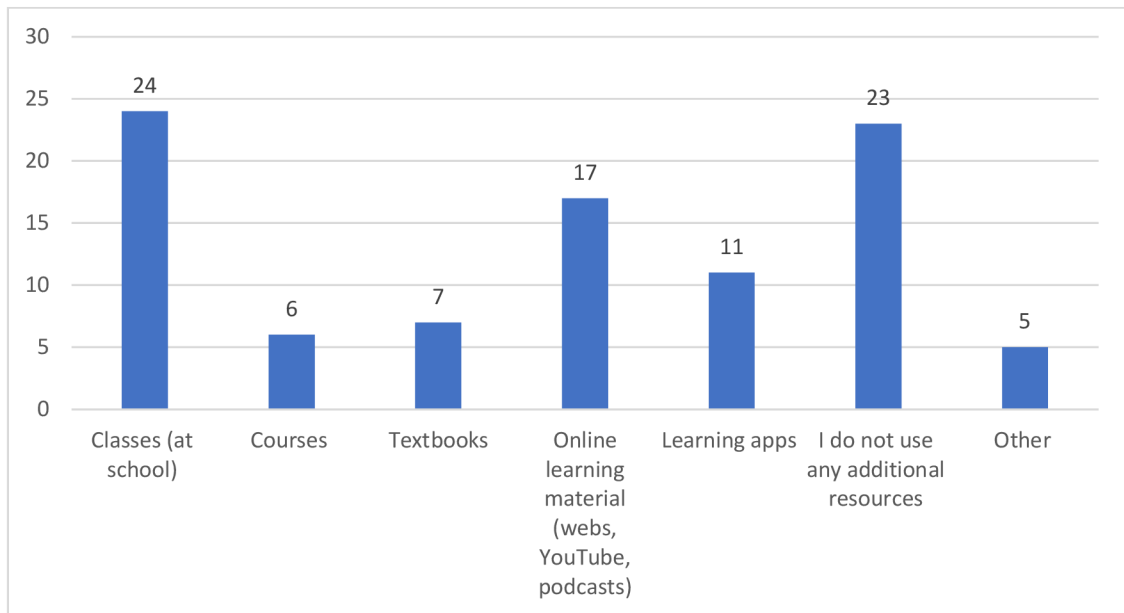
Fig. 19 Additional learning resources used by the learners.

The last four questions were focused specifically on respondents' opinion and experience when it comes to anything they have learned thanks to video games. The question "Which of your language skills do you think video games have improved the most? (consider everything connected to video games: teammate communication, participating in game forums, etc.)" presented respondents with the four language competencies, and asked them to rank them up (Fig. 16). Unfortunately, there was no follow-up question asking for more details that would explain the preference of reading over listening or speaking over writing.

Fig. 20 Which of the language skills are most likely to be improved by playing video games.

The other question was interested in anything specific that they had learned through games. The question "Can you think of anything specific that you have learned thanks to video games? (e.g.: idioms, accent, slang, overall fluency, ...)" was optional, and 51 people answered. The majority of the answers pointed out slang, casual speech, synonyms and idioms, topic-related vocabulary, and slurs. Several responses then also mentioned pronunciation, namely the American accent; historical and geographical knowledge enrichment; understanding cultural references; and overall fluency. As to the overall fluency, one of the responses read "I'd say overall fluency and the ability to figure out the meaning of a word I don't know based on context. English stopped being a table of words and forms that I put together like a puzzle (as we learned in school by memory) and started being more instinctive"; such answers once again point out to Krashen's Monitor model, but this will be discussed in the following chapter.

One question was focused solely on intercultural competence, asking "Have you ever learned something new about a different culture through a video game? If yes, please provide some examples.". While 43 people replied to this question, only 63% were actual answers, and the other 37% replied by either saying "no" or that they could not think of anything. The rest of the answers have been organized into the following categories: befriending foreigners, hence learning about their culture from them; history-related information, e.g. about WWII; learning about different daily habits, beliefs, politics, music, cuisine, and others. Although the majority of answers were general, some specific examples provided were: "countries have their own communication culture", "white is the colour of mourning in Japan, not black".

The last question was also optional, therefore, answered by 30 people. It gave respondents the freedom to add anything that might have been omitted in the questionnaire. The question read "Is there anything else you would like to mention, concerning the topic of video games and language acquisition?" and people mostly shared their opinion on the importance of video games as a medium or how games improved their language knowledge.

3.3 Analysis Procedures

As previously stated, the questionnaire was created using Google Forms, which allowed for the conversion of obtained data into an Excel table where all responses were analysed. Before the analysis, it was necessary to prepare the data. Initially, there were 65 respondents, however, one was a native English speaker and therefore had to be excluded. The responses of this respondent were not featured in the final data set.

Due to the lack of instruction to complete the questionnaire in English, two respondents replied in their native languages, one in Russian and the other in Czech. These responses were translated and included with the rest. Another issue arose with the Czech respondent who, despite being a gamer, stated that they do not play games in English, consume other English media, nor actively study English outside of class. However, they also claimed to play video games with the purpose of learning English. Although their answers were contradictory, they were included as the respondent met the requirements of being a gamer and having English as a second language.

Due to the non-uniformity of answers to some open-ended questions, such as nationality or native language, where the software distinguished identical answers differently (e.g., due to non-capital letters or full sentence answers), the data had to be manually counted, and only then were converted into charts. All answers to closed questions were converted into pie and bar charts using Excel. Conversely, the data obtained from open-ended questions were thoroughly analysed and categorized based on similarities.

Lastly, there was one obvious mistake made by a respondent who indicated their English level according to the CEFR as A1, even though their responses to open-ended questions were grammatically correct and overall complex. Another sign was, that they were learning English for 10+ years. However, as there was no way to verify this potential misunderstanding, the data remained unchanged.

4 RESULTS OF THE RESEARCH

4.1 Overview of Findings

To maintain clarity, the findings are divided into the same four categories presented in the Data Collection Methods.

Starting with the demographics and video game habits, the results show that 92% of the gamers are over the age of 18, which correlates with the statistics from the article "How Many Gamers Are There?" from January 2024, indicating that 4 in 5 (80%) gamers are over 18. Such high percentage of gamers over the age 18 in this survey has been likely influenced by the focus on more advanced learners. This is further supported by the fact that respondents reported they are advanced and upper-intermediate learners and that 83% of respondents has been learning English for over 10 years. Additionally, the article's data on the distribution of gamers by gender reflects a trend where males are still predominant in the gaming community. In this thesis' research, this trend is also evident, with a higher proportion of male gamers.

Regarding gaming habits, the finding was that 38% of the respondents play games daily, with 54% of these individuals playing for more than four hours per day, and the remaining 46% playing for at least two to three hours daily. The most popular genres among the respondents were the RPG, Creative, and Simulation genres, which are more narrative and text-based, which explains the high claims of vocabulary increase among respondents, likely linked to the Krashen's Input hypothesis due to the engagement with the in-game environment. This might also explain why the respondents rated reading as the skill that can be most likely improved via games.

As for language preference, the results in Fig. 12 show that 74% prefer to play in English. Respondents reported that the main reasons include the preference of playing in the original language of the game, that they want to avoid low-quality translations, or that they feel more comfortable playing in English due to years of experience. It was also discovered that the remaining 26% either do not mind playing in English if their native language is unavailable and that the preference may depend on the genre, i.e. if the game is heavily story-based they prefer their native language for a deeper engagement. Consequently, 77% of respondents stated that learning English was a side benefit. Based on the results of the

previous questions, this seems to stem from the necessity of playing in English as well as the number of years most respondents have been learning English.

Even though based on the preferred genres being rather single or co-op games, over half of the respondents indicated that they enjoy both types of games (Fig.15), and little over half stated that they communicate in English at least "Very often" (Fig. 14). An interesting result appeared in the question related to preferred means of communication, where 50% chose text chat, and 50% opted for voice chat. Respondents who use text chat explained that it is primarily for unavoidable communication and generally preferred when talking to strangers. In contrast, those who use voice chat valued its convenience and mostly preferred it for communicating with friends rather than strangers.

The last section, dedicated to other learning resources, was important because it was expected that the respondents would be consuming other media, and in case they were actively learning English, the result in acquisition through video games might have been different. As expected, the major influence of other media that may play a part in English acquisition included Music, Videos and Movies, closely followed by Books and News, while Livestreams came as the least popular form, with 27% stating they never watch them (Fig. 18). These media types provide continuous and varied exposure to the target language the same way games do but some of them can be more accessible as they are not limited by the interface that is required for games. Consequently, while 38% stated their additional learning resource are school classes, few people in the open-ended questions answered about them in the past tense, signalling that now they no longer use any resources, therefore the results in Fig. 19 might be slightly inaccurate. When asked about anything specific learned through video games, the answers were heavily vocabulary-related and partially included skills such as pronunciation, overall fluency, or knowledge from other fields, like history or geography. Similarly, when asking about any benefits related to communication in English, the expansion of vocabulary was frequently mentioned, along with overall fluency thanks to improving conversational skills and listening. At the same time, vocabulary was highlighted as the most challenging part in people's gaming experience and the frequently mentioned reason was their uncommonness or topic exclusivity. This aligns with the i+1 principle, where learners are exposed to language input slightly above their current proficiency level. However, as previously discussed, games primarily feature natural language that may be significantly beyond the learner's current level, explaining why vocabulary was both the most improved area and the most challenging aspect for respondents. The Acquisition-Learning Hypothesis,

on the other hand, would explain the proposed improvement in conversational skills by suggesting a lower affective filter, the allowance for a silent period, and most importantly, the unconscious nature of the learning process, as the majority of respondents indicated they do not play with the intention to learn.

4.2 Discussion

As can be seen, the research presents a strong connection between playing video games and language acquisition, particularly in terms of motivation, vocabulary enhancement, and conversational skills. These factors will now be further discussed separately.

Motivation

Saville-Troike and Gass highlighted motivation as a critical factor in language learning success. The high level of engagement among respondents, with 69% playing games at minimum 3-4 times a week, and 41% of all the respondents playing for more than 4 hours on average, indicates that video games must be highly engaging so that even a possible language barrier is not considered an obstacle. This is further evidenced by the 26% of respondents who, despite not choosing English as their first choice for gaming, stated that they do not mind playing in English if their native language is unavailable. The motivational reasons were not further explored, nor were they the primary focus of this thesis. However, from the responses related to communication in English in multi-player games it can be said that the prevailing type of motivation is integrative since players will either communicate if they have a shared goal within the game or if they befriended someone new. The aforementioned unwillingness to communicate unless necessary appears to be linked to self-confidence as well as the "silent period" mentioned in the Acquisition-learning hypothesis. There was a common theme among some of the answers stating they are either not confident in their pronunciation or their overall skills. This would explain why people who lack self-confidence prefer text chat, as the level of anonymity would decrease if they used voice chat. Text chatting also gives them more time to produce any output, as well as giving them the option to stay silent and just comprehend the input. Furthermore, those who overcome the initial stress through text chatting will likely increasingly grow confident in their skills which might lead them to try using a voice chat. Unfortunately, details about this were not asked and no respondent mentioned such development.

Conversational Skills and Vocabulary

Related to the above-mentioned are the results of people stating their confidence and overall proficiency had increased after they started communicating in multi-player games. Among the 47 respondents who communicate at least "Sometimes", over half of them stated they use English in multi-player games "Very often". This demonstrates the practical language use facilitated by multi-player games. The frequent use of English for real-time communication aligns with both of the Krashen's hypotheses because the players engage in meaningful interactions and are also being immersed. The preference for text chat among less confident respondents allows for a "silent period" during which the learners can observe and internalize language before producing it. Although mentioned only by one respondent, it is important to keep in mind that this communication might result in the interlanguage or foreigner-talk, potentially harming one's language acquisition. On the other hand, communication with other non-native English speakers offers cultural exchange, which had been proposed by the respondents as well.

Most respondents emphasised vocabulary gains, such as slang, casual speech, idioms, and topic-related vocabulary. The popularity of certain game genres aligns with their language-related elements; for example, Creative and Simulation genres typically provide a wider range of topic-related vocabulary, while RPGs are heavily story-focused, featuring dialogues rich in slang, casual speech, and idioms. Given that most respondents were upper-intermediate or advanced learners, this acquisition likely falls under the Input Hypothesis, as they often understand unknown words through context.

4.3 Challenges and Limitations

This study undoubtedly faced a few challenges and it has limitations that need to be noted. The main limitation is the small sample size of 64 respondents as well as their high proficiency. The expected average proficiency was upper-intermediate (B2) and advanced (C1), however, the exact level would be impossible to secure as many people do not have any certification. Regarding this problem, it needs to be addressed that people might had overestimated or underestimated their English proficiency. Such limitation could be solved by firstly providing a short English test that would then be evaluated. However, such measures would require more time and a controlled environment, for example in the form of a classroom.

Similar to the proficiency issue, the overall questionnaire was not as detailed as it perhaps needed to be. This is mainly due to the complexity of the acquisition itself, which led

to an already long questionnaire, where both the gaming experience and the language skills needed to be surveyed. Making the questionnaire longer would have rendered a higher risk of people not completing it or providing vague explanations for the open-ended questions.

A closely related problem is the acquired vs learned distinction. The answers provided by the respondents are based on their thoughts and opinions, rather than facts, as no one measured or kept a record of what words became solidified in their knowledge through video games. While some people provided a very complex and deep insight into how they believe video games improved their language skills, other answers were more concise, and would perhaps need a further explanation. Additionally, considering that all of the respondents consume other media in English, it is difficult to state which media has the biggest impact, and the main supporting evidence remains the high amount and frequency of playtime. This limitation would likely be solved by a different form of data collection, such as interviews and observation in a controlled environment where the participants would play games and take regular tests.

Lastly, there was a challenge presented by the video game genres. The immense number of genres and their overlapping tendency create difficulty when it comes to their separation and identification. Consequently, many respondents for example suggested Horror as a separate genre that they like to play. However, this genre itself does not include any language-specific elements that would distinguish it from those divided in this thesis. As a result, the problematic nature of game genres might have caused some confusion, as the respondents were unaware of the motivation for such a selection of genres.

5 CONCLUSION

This research aimed to investigate the impact of video games on SLA, namely if video games are used intentionally as a medium for language skill enhancement. The secondary aim was to explore how various features of video games contribute to SLA as well as other skills.

The survey used to explore the relation of video games and SLA had 64 respondents, all of whom were non-native English speakers. The analysis of the acquired data, particularly from the open-ended questions, reveals that respondents believe games have had a significant impact on their vocabulary and communication skills. This supports theories of natural language acquisition and the benefits of contextual learning environments as proposed by Gass and Krashen because most of the respondents were not actively studying the language outside the school, therefore, the input came primarily from other media. The sole influence of video games on language acquisition remains debatable, given that all respondents also consume other forms of media. Additionally, motivation plays an important role, which corresponds with the engaging nature of games because even people who preferred playing in their native language stated they are willing to play in English if their native language is unavailable, despite the potential difficulty in understanding heavily narrative or text-based games. Similarly, individuals who did not prefer communicating in multi-player games stated that they are willing to communicate at least via text chat if necessary. This willingness to engage with English, whether through gaming or communication, underscores the motivational appeal of games.

What remains disputable is the effects of games on fossilisation. As explained by Gass, fossilisation occurs through automatization of one's language usage and after that further exposure seems to be inefficient. Video games have a potential to address the fossilisation thanks to the immersive and varied input, which was also recognised by the respondents when they ranked the reading and listening skills highest according to the presumable influence. However, the quality of the language input or the translations might not be natural in some cases, for reasons discussed in the literature review section. Moreover, while this was addressed by only one respondent, the foreigner-talk in multi-player games might present a risk in solidifying the interlanguage system.

Krashen's Input Hypothesis states that language acquisition occurs when learners are exposed to comprehensible input slightly beyond their current level, promoting natural learning processes. The questionnaire findings suggest that video games, particularly those

with narrative elements, often provide input that is rather complex and can present challenge even for advanced learners, especially in terms of unusual or archaic vocabulary. The Acquisition-learning hypothesis, on the other hand, emphasises the significance of motivation and a low-anxiety environment in promoting the willingness to communicate and interact in English. The enjoyable nature of gaming seems to reduce learners' affective filter encouraging them to engage with English language content even when faced with challenges.

The other benefits the research highlighted are that video games can enhance cultural awareness and sensitivity by either befriending people from different countries through multi-player games and learning about their cultures or by exposing players to games that display different cultural settings. This was suggested in the intercultural competence section and evidenced by the empirical research. As shown in the literature review, single-player games tend to include various topics and themes, except for fictional games, that can be related to foreign cultures or history, potentially motivating the players to learn more about these topics outside the game. On the contrary, multi-player games offer communication with people of different ethnicities, religions, etc. This can lead to an expansion of knowledge about various groups and traditions, as well as increased familiarity with different English accents, thereby enhancing listening skills. These potential benefits were evidenced by the 42% of respondents who reported learning something new about a different culture through a video game.

In conclusion, based on the literature review and the conducted research, it is evident that video games have a notable impact on language acquisition, which is primarily based on the natural input and the required interaction with the virtual environment. While other media also play a substantial role in the acquisition process, as evidenced by the questionnaire results, video games offer the unique advantage of engagement that can keep players motivated for extended periods of time. Additionally, through the literature review, it has been observed that wide variety in game genres offers different benefits and potential skills enhancements. The most popular genres among respondents were RPG, Creative, and Simulation, which are predominantly text-based, aligning with reported improvements in vocabulary skills among players.

6 IMPLICATIONS AND RECOMMENDATIONS

Considering the findings of this research, several implications and recommendations can be made. Firstly, early exposure to video games seems to correlate with higher language proficiency, suggesting that introducing video games to younger learners might be particularly beneficial as they are exposed to natural and contextualised language. However, further research on the video games and its effects on acquisition needs to be done, as it is not the only influential medium. Secondly, during the data analysis, what emerged as an important factor was the motivation to play video games. Motivation appears to be a crucial factor since the engaging nature of video games can sustain learners' interest and willingness to use the target language, even in challenging contexts. This motivation can be observed in respondents who stated they prefer playing in their first language, while claiming they do not mind playing in English if necessary. This should be considered in the gamification of learning approach because the players primarily play the game for entertainment, not to make their learning more fun or interesting process. Consequently, as suggested by some of the respondents, culturally rich environments appeared to have a higher potential to motivate the learners to learn about the topic outside the game.

Future research should aim to address the limitations identified in this study, such as the sample size, the language proficiency issue, the various media consumption, or the problem of genre identification. Further investigation into video game-based language learning, particularly regarding fossilization, the silent period, and the development of productive language skills like writing and speaking, is recommended. Additionally, empirical studies on the impact of specific game genres would provide more nuanced insights into how those genres affect the SLA.

NOTES

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[1] *Counter-Strike*, developed and published by Valve Corporation, was first released on November 9, 2000. The game is a multiplayer tactical FPS and is based on the competition between two teams - the Terrorists and Counter Terrorists. Communicating can be done via text chat or voice chat.

[2] *Valorant*, published by Riot Games on June 2, 2020, is tactical hero FPS. There are two teams, where one is the attacking, and the other is the defending team. In Valorant players choose "agents", that each has their unique abilities. In both, *Counter-Strike* and *Valorant*, there are several other game modes, each with a slightly different goal or gameplay. Communication with your teammates can be done either via text chat or a voice chat.

[3] *Borderlands* is a franchise with a space science fantasy setting. It was developed by Gearbox Software and published by 2K. The first game *Borderlands* was released on October 20, 2009, and the latest game *New Tales from the Borderlands* on October 21, 2022. Players can choose one of the Vault Hunters, each with its special abilities and skills, and they travel through an open world while completing quests. The game offers immersive storytelling via dialogues, cut-scenes and mission descriptions. It can be played as a co-op, however, the game does not offer a voice chat, therefore, players must rely on a third-party applications.

[4] *Call of Duty* is a video game franchise that covers a wide range of historical periods and events. Namely World War II, the war in Afghanistan or the Cold War. The first game *Call of Duty* was published by Activision in 2003, and the most recent title on November 10, 2023. *Call of Duty* offers diverse range of gameplay experience. There are single-player modes, offering an immersive storytelling, as well as multiplayer modes, where players can use both text chat and voice chat. Additionally, the games may include a co-op mode. The availability of different modes and means of communication can vary depending on the specific game title and platform.

[5] *Metro* is a post-apocalyptic series based on the novels written by Dmitry Glukhovsky. The first game *Metro 2033* was published by THQ in 2010, and the latest *Metro Exodus* was published by Deep Silver on February 15, 2019. *Metro* is set in a fictional universe, mainly in the tunnels of the Moscow Metro, except for the *Metro Exodus*, which is set in the wasteland. The game offers only singleplayer, and dialogues between the characters are significant. Besides the dialogues players also collect notes or journals, providing additional context and learning about the mission objectives.

[6] *Rust* is a multiplayer survival video game, published by Facepunch Studios. The full release was in 2018. The objective is to survive by managing your needs, health, and fighting off hostile animals. However, the main threat comes from other players as the game is solely multiplayer. Players can communicate via voice chat, text chat or signs and notes, that can be crafted and left for others to read.

[7] *DayZ* originated as a mod for the military simulation game *Arma 2* before it received its full release in December 2018. The game was developed and published by Bohemia Interactive, and is set in a fictional post-Soviet Republic, where a plague took over and turned most of the population into the "infected". For communication purposes you can use voice chat and text chat as well as the gesture system.

[8] *The Forest* is a survival horror game released in 2018 by Endnight Games. The player's character is a father who is searching for his son after a plane crash. However, the game does not follow a linear narrative with a clear plot progression. Instead, it is an open-world, sandbox-style game, where the player is free to decide their own goals. Overall, the main focus is on survival, building, and exploration.

[9] *Subnautica* was published by Unknown Worlds Entertainment in 2018. In the game the player plays as the only survivor of a spaceship crash on an oceanic planet. The primary objective is the survival and exploration of the alien planet, while completing tasks to progress in the storyline. The game is solely a single-player and players will encounter various text-based descriptions, such as blueprints or data logs.

[10] *The Long Dark* is survival video game published by Hinterland Studio on August 1, 2017. The game is set in a Canadian wilderness and the player can choose between two main modes: survival or story mode. The survival mode offers an open-ended sandbox experience, while the story mode provides the player with structured and narrative-driven predetermined objectives and plot progression. While the game only offers a single-player experience, it also provides ample amount of text-based information such as notes, journal entries, crafting recipes, etc.

[11] *The Sims* is series published by Electronic Arts. The first game *The Sims* was released in 2000, and the latest, the 15th expansion pack for *The Sims 4*, *The Sims 4: For Rent* was released on December 7, 2023. The game is mainly a sandbox game, giving the players an option to create their "Sims", houses and manage the Sims' lives. Due to its storytelling and role-playing character, players can improve their vocabulary and reading comprehension.

[12] *StarCraft*, developed and published by Blizzard Entertainment in 1998, is set in a science fiction universe, where three different species are fighting for dominance of the galaxy. *StarCraft* features a significant amount of text-based content. It includes a single-player campaign as well as a multiplayer mode, where players can communicate through a text chat or a voice chat.

[13] *Warcraft III: Reign of Chaos*, published by Blizzard Entertainment in 2002, is an RTS video game, where your goal is to collect resources and build bases to achieve various goals. The game offers a single-player campaign, where you follow a storyline, or you can compete against other players in the multiplayer campaigns. While

playing the multiplayer you have the option to use text chat, however, the game does not have a built-in voice chat.

[14] Discord is a social platform that started off as an app for gamers and allows communication through voice calls and text messaging. Communication can be private, or it can take place in communities that are usually referred to as "servers".

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APPENDIX

The introductory message to questionnaire:

Dear respondent,

I am a student at the University of South Bohemia, Czech Republic, currently working on my bachelor's thesis. The primary objective of my thesis is to investigate the potential role of video games in facilitating the acquisition of the English language as a second language.

This survey is specifically designed for **non-native English speakers**, and your participation in this questionnaire is greatly appreciated. It is estimated that completing the questionnaire will require approximately 20 minutes of your time. If you are a native English speaker, please **do not** fill in the questionnaire, as your responses will not be included.

The data collected will remain anonymous and the results will be used solely for academic purposes.

Thank you for your participation in this study. Your input is crucial to advancing my understanding of the topic.

Sincerely,

Natálie Filousová

The first question:

1. Please indicate your agreement to allow the questionnaire data to be used for research purposes. *

   ○ Yes, I agree.

The ending message:

Thank you for answering the questions!

If you would like to receive the results of this questionnaire, please provide your email address.

Providing your email is **optional**. Your email will only be used for this purpose, and your data will remain confidential.