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**Investigating Bejaia's Online Video Gamers' Perception on  
the Development of Their English Vocabulary**

**A dissertation submitted in partial fulfillment of the requirements for a  
Master's degree in Linguistics**

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## Abstract

Vocabulary is a challenging aspect in teaching and learning a foreign language. On the light of vocabulary significance, the present study investigates the Bejaia's gamers' perception of the development of their English vocabulary. It is specifically based on gamers who play online video games using the English language. The main aim is to demonstrate the role of online video games in developing the vocabulary of participants and the way it is developed if there is any. To collect relevant data on this topic, a mixed method was opted for. An online questionnaire was distributed on the online video gamers. The findings show that playing online video games contribute in enriching the gamers' vocabulary repertoire through speaking and chatting with other gamers (with their friends or foreign gamers), etc. The results also reveal that online video games develop language skills mainly speaking and listening; in addition to coordination and cognitive skills. Therefore, it is important to reconsider the so-called harmful effects of gaming as a complementing tool for learning a foreign language.

**Key words:** Online video games, learning vocabulary, Bejaia gamers, English as a foreign language.

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**Agzul**

## List of Abbreviations

**3G:** 3<sup>rd</sup> Generation

**4G:** 4<sup>th</sup> Generation

**ADSL:** Asymmetric Digital Subscriber Line

**AR:** Augmented Reality

**ICT:** Information and Communication Technologies

**LTE:** Long Term Evolution

**MMO:** Massively Multiplayer Online

**MMRPG:** Massively Multiplayer Role Playing Games

**PUBG:** PlayerUnknown's Battlegrounds

**RPG:** Role Playing Games

**SPSS:** Statistical Package for the Social Sciences

**VR:** Virtual Reality

**Wi-Fi:** Wireless Fidelity

**IOS:** iPhone Operating System

## Definition of Terms

**Vocabulary:** “All the words that a person knows or uses: to have a **wide\limited vocabulary**\* your **active vocabulary** (= the words that you use) \* your **passive vocabulary** (= the words that you understand but don’t use)” (Hornby,2010, p. 1722).

**Game:** Hornby defined games as “an activity or sports with rules in which people or teams compete against each other (2010, p. 637).

**Video Games:** according to Bros (2017), “A video is a graphical application” (para.1). They are a remarkable new form of entertainment. The latter has different forms from jigsaw puzzles to chess simulations to games related to fiction and action concept that provide simulations of a series of aspects of reality like playing racing or playing soccer video games. The point is that video games are different from mere games that we play in real life, they provide the player with interactive means and which immerses the player in a “virtual reality”. The key reason to why video games have become popular is to explore the gratifications linked to the interactive form. In addition, video games do not require internet connection in order to play (Grodal, 2000).

**Online Video Games:** in contrast to Video games, online video games are digitally based games that require internet connection. These games allow the players to play solely or collectively and get to know each other via box chats or vocal chats. They are available on computers, tablets or consoles. Online video games are interactive games in which the gamers follow some instructions to level up and win against other players. Online video games are also called internet games that need internet network or a web browser (Arjoranta, 2019).

## General Introduction

The revolution of technology in Algeria has opened up to various prospects in different domains. Nowadays, the Algerian adolescents are changing their behaviour and habits; they even changed their ways of entertainments. Indeed, they shifted from traditional games towards online video games. The latter, is starting to become part of the adolescents' life. Online video games are assumed to have a positive effect on gamers (Bowen, 2014). They offer multiple opportunities (Adair, 2022) for instance, enhancing players' strategic and problem solving skills, developing the cooperative spirit of gamers since most online video games have the possibility to play in pairs or in groups. Finally, yet importantly, online video games improve gamers' language proficiency.

According to Derbouche (2016), online video games have a great impact on the language learning mainly communicative and vocabulary skills. While playing online video games, communication with other players is required in order to succeed in the game. Therefore, players must agree on one language (lingua franca) as their means of communication since there are gamers from other countries. Additionally, most of the time, Algerian gamers prefer using English for different reasons, such as having background knowledge about the language. As a result, gamers are constantly learning and adding new words to their vocabulary repertoire.

There are two important types of online video games with important vocabulary background. The first type is the Battle Royal Games. It is a multiplayer type (around 100 players) in which gamers fight each other until there remains one survivor (Masterclass, 2021). An example of this type: *PlayerUnknown's Battle Ground (PUBG)* and *FREE FIRE*. Such games contain five thousand to ten thousands of words. The other type is named: Role-Playing Games (RPG) for example *GINSHIN IMPACT* game. Similar games can have fifty

thousand to hundred thousands of words (List of longest video game scripts, 2021). According to Krashen (1992), being exposed to sufficient amount of input is a major aspect in acquiring a language. So gamers are exposed to a very important body language, which may enhance and enrich the gamers' vocabulary.

Gamers spend much of their leisure playing, statistics done in 2021, shows that gamers spend eight hours and twenty-seven minutes a week playing video games (Combs, 2021). Therefore, considering the time spent playing and the language a game consists of; language and mainly vocabulary might develop. There have been many studies done on this particular area (Camacho & Ovalle 2019, Alshaiji 2015, Ebrahimzadeh 2016, Zheng & Bischoff & Gilliland 2015 and Prensky 2001) which showed that online video games have the capacity to enhance language mainly vocabulary.

### **I. Statement of the Problem**

Nearly all teenagers spend around 14% of their time playing video games (Sidhwani, 2021). Some gamers prefer to use the English language as their lingua franca because they are in contact with foreigners so they do not speak the same language especially with English native speakers; so sharing one language is important in order to succeed in playing games (Vidlund, 2013). Furthermore, it is observed that English language is starting to take place in the Algerian society (Mammeri & Mohadeb, 2018). Online video games offer a great opportunity for Algerian gamers to enhance their English knowledge mainly vocabulary; since those games consist of long scripts in addition to the possibility to communicate with other players (oral or written messages) (Cabraja, 2016). This current research investigates the development of English vocabulary among gamers of Bejaia city who are playing online video games.

## **II. Research Questions**

This research is guided by the following questions:

- What are the most played online video games by the sample?
- Does playing online video games develop gamers' vocabulary?
- Does the English language acquired by gamers serve them in other contexts other than games?
- Which type of vocabulary online video gamers develop?
- Do online video games have other benefits than language learning?

## **III. Aim of the Study**

This research aims at finding out the gamers' perception of the development of their English vocabulary while playing online video games. It investigates whether online games enrich the gamers' vocabulary and whether the acquired language has served them in other contexts beyond gaming such as educational and communicative purposes. Besides, whether games really boost the English vocabulary proficiency. It also examines the kind of English gamers are exposed to i.e. formal or informal English. Additionally, checking the limitedness of vocabulary.

## **IV. The Significance of the Study**

Algeria has always been a multilingual country. Its population has the competence to use multiple languages effectively and interchangeably (Benrabah, 2007). This competence allows Algerian gamers to add a new language to their repertoire. The current study is significant because the Algerian gamers are adopting English as a new language while playing online video games which might lead to develop their language proficiency. In addition, the investigation sheds light on a new topic which has not been dealt with before in the department of English at the university of Bejaia.



## **V. Population and Sample**

The population that is concerned with in this research involves gamers of Bejaia province who play online video games. Thirty-one gamers volunteered to take part of the study.

## **VI. Methodology and Research Design**

The current study is an exploratory design. It was conducted using a mixed method to achieve the main objective of the research. The data was collected by an online questionnaire distributed on thirty-one gamers from Bejaia. The analysis of data was done using the “FormApp” application and SPSS software.

## **VII. Description of the Study**

The present work is divided into two chapters. The first chapter is dedicated to the theoretical background. It consists of two sections. The first section introduces the definitions of games and online video games, their advantages, drawbacks and types, in addition to online video games in relation to technology, language learning, gamers, age and gaming materials. The second section is devoted to definition, types and importance of vocabulary; furthermore, learning difficulties, traditional and modern techniques of teaching and learning vocabulary, learning vocabulary through online video games and the status English language in Algeria.

The second chapter is the methodological part. It is divided into three sections. Section one describes the study and *PlayerUnknown's BattleGrounds* games. Section two is devoted to the interpretation of the findings and the discussion. The last section deals with the recommendations and suggestions for further researches.

## **Chapter One: Theoretical Background**

Chapter one discusses the previous works done on online video games in relation to vocabulary development. It is divided into two sections. The first one is about online video games meanwhile, the second section is dedicated to vocabulary.

### **Section One: Online Video Games**

#### **Introduction**

This investigation searches about online video games in relation to vocabulary proficiency of the players. Before diving into that, this section is needed to have global ideas about online video games. In this part of the theoretical background, we tackle what games are in particular and what they are not. This section deals with games before the emergence of technology. In addition, it provides information about games genres, types of games and how to play them; furthermore, it advises us about the advantages of online video games and warn us about their disadvantages.

#### **1. What exactly a Game is?**

A game is a system defined by rules in which players engage in enjoyable activities to decide who the winner is by following certain procedures (Derbouche & Hamadouche, 2016). Game can be offline as it can be online. Offline games can be either traditional such as chess, hide and seek, and scrabble as they can be games downloaded and do not need internet to be played. Online games are more abstract; they are every game that is electronically stored in computers and played through internet that is connected to the World Wide Network (Ray, 2021). What makes a game a game is its structured form in which it is undertaken for fun and entertainment and its main components are challenge, objectives and interaction (Webroot, 2019).

## 2. What a Game is not?

Every human activity that is governed by rules and that is done for fun and entertainment can be described as a game (Tosca, 2016). However, a non-game is when the game loses its form of entertainment, which does not really have a winner or even a real conclusion of the game; in addition, there is no interaction in the game (Suits, 1967). To play does not necessarily mean a game for example playing with toys is considered a non-game since it lacks the features of a game that is to say; when there is no interaction between players and when players do not challenge each other. Besides, when there is no objective of the game (What does non-game mean, 2020).

## 3. What Online Video Games are?

They are digitally based games typically played on personal computers, phones and tablets or dedicated gaming devices like consoles (Xbox, play station) (Poepsel, 2020). They are interactive video games in which players challenge each other to win (Arjoranta, 2019). These games are usually played collectively in which two or more players can interact with each other during the whole game and they can even talk with each other via chats or direct chatting via earphones. They are also called internet games because they need internet network, a web browser or a console (Roberts, 2021). There are a lot of online video games that can be mentioned especially the ones played via Facebook web site like *UNO*, *Criminal Case*.... They create a challenging and interactive environment between players of the games. Compared to multiplayer games with virtual universes in which sometimes real money is involved (Ray, 2021). The term online video games are different from offline games either traditional games or downloaded ones. Some games are purchased and installed on devices; others are downloaded from the internet, while some are played exclusively online.

#### **4. Games before Technology**

The world of games before the emergence of technology, computers and internet were simple and plain. In other words, there are many games that are played in real life. Games used to be strategic and athletic which are played by children and even adults for example *puzzles, chess, scrabbles, hide and seek, hopscotch, table tennis, rope* (Shaffran, 2021); they need cognitive skills in order to succeed in the game. Furthermore, games used to be face to face and in groups of friend or family.

#### **5. Playing Games and Age**

It is impossible to limit games to a certain age; games are popular at all ages. Adults, teenagers or children are all interested in games. However, when it comes to online video games, the gaming industry sets a certain age on CDs for instance to limit the age and make a difference between children, teenagers and adults just like they are doing in the movies industry (Miler C, 2021).

#### **6. Advantages of Online Video Games**

Online video games can have multiple positive effects. In the first place, gamers would get the chance to socialize with others while having fun. Online gaming allows communication and interactions between people of different parts of the world (University of Jyvaeskylae, 2007). In the second place, when frequently playing online video games children develop their memory power and concentration. Since some games require extensive planning and problem solving skills to complete levels, they stay mentally concentrated and active (Internet matters, 2021). In the third place, online video games increase the analytical skills of players that make them easily open to problem solving (Reporter, 2021). In the fourth place, video games are known to promote relaxation. It is also beneficial for people with anxiety and

depression because it helps them relieve stress (Scott, 2020). Finally, yet importantly, playing video games especially for children improves imaginative and creative thinking (Indo Asian News Service, 2019). Furthermore, video games promote teamwork and build confidence that is to say; multiplayer games allow children to take on a number of roles that allow them to learn how to manage a team if they are the leader or negotiate ways to win as part of a group (Keith et al, 2018). The shared experience can be a great way to collaborate and learn from each other to build children's confidence (Belsky, 2022).

## **7. Drawbacks of Online Video Games**

As much as online gaming is fun, it is also disadvantageous. There are drawbacks that can be mentioned. Firstly, online video games require spending a lot of money on upgrading and in game purchases; such games push gamers to spend a huge amount of cash that is considered such a waste of money (Gardner, 2020). Secondly, online video gaming is not secure because of hacking and scamming (Martin, 2016). If a hacker manages to hack information, they could use it for illegal activities. As a result, the reputation of the player could be destroyed within seconds. On the internet, a simple click can show your personal data, there is also kidnapping of children. Thirdly and most importantly, there is a high risk of players getting addicted to the games and isolating themselves away from the real world (BlueFire, 2020). Moreover, playing online video games for an extended period may result in gamers forgetting their life responsibilities like studies or work and even families. Furthermore, gamers are a target of cyber bullying all the time, some people find it as a way to bully others especially underage children by distracting them; they could even be cheated with their money (Assistant Secretary for Public Affairs, 2021). Besides, prolonged time of video gaming can result in bad effects on health for example, it can affect the eyesight including blurry vision, sitting in the same position without any physical activity can result in shoulder or back pain for most gamers (Roomi, 2021). Additionally, teenagers and especially

children are object to violence; they are exposed to violence by watching television, or playing video games. Children who view violence on screens such as television are more likely to behave in an aggressive manner; Children also become fearful of the world and afraid that they would be the victim of violence (Zagata, 2020).

## **8. Games and English Learning**

Some researchers drew a conclusion that there is a correlation between playing games and the improvement of the English vocabulary of the gamers (Sundqvist & Sylvén, 2012). Playing online video games might improve the English proficiency which is the aim of this study. Most video and online video games have instructions, storylines and chats written in English. When people engage in these kinds of activities they might learn English continuously, it seems credible when such an interaction could improve the players' English vocabulary by using English as a lingua franca (Vidlund, 2013). Playing video and online games for a reasonable amount of time plays an important role in learning the English skills including listening, speaking, reading and writing. The positive role of digital games based learning has been confirmed in the domain of learning a language through technology (Chen, 2019).

## **9. Types of Gamers**

There are two types of gamers when it comes to learning the English language. There are implicit players who learn the English language accidentally or unintentionally; in other words, those gamers do not play because they want to learn more about the language and its culture. However, the explicit type of gamers refers to those who learn English language intentionally; in other words, they are immersed deeply in the language and its culture. They often play in order to develop vocabulary as much as possible, to be good at using it in their daily discourse or using it to deal well when playing with foreign gamers (Chou, 2013).

## **10. What Motivates Gamers to Play Online Video Games**

Understanding what motivates players is important. Video gaming continues to grow. The motivations of players of different ages and different genders differ from one person to another. Most players are driven by the motivation of having fun and get entertained by games. Gamers look forward to overcome all challenges in the games and challenge other gamers. The pursuit of a challenge is the prevalent motivation reported by regular gamers of both genders. Some players play in order to interact with other gamers from all around the world and befriend them (Bousher, 2020). According to Reid, gamers who escape from activities, such as studying, may increase the risk of engaging in addiction-related behaviours (2017). Moreover, another reason is when a certain game becomes trendy and publicized by gamers, other players get motivated to explore it out of curiosity (Allaire, 2021).

Firstly, there is extrinsic motivation that comes from outside that is triggered by the anticipation of a reward. In games, an extrinsic motivation is something like an achievement, a quest reward for completing an action, or even daily rewards in many free-to-play titles (Sennett, 2022). Secondly, there is an intrinsic motivation that comes from within and reflects your desires and wants. These desires make you feel good without the expectation of external reward. Socialising is a great example of intrinsic motivation (Vriend, 2017). In games, intrinsic motivations might be curiosity leading someone to explore a world map, or joining a clan in games because you find quests more fun with other people. However, there are gamers who play games because they are highly interested in the language with which they play (Bousher, 2020).

## **11. Games Genres**

There are many genres of games. The following list is one of the notable games genres (Grace, 2005):

### **11.1.Action Games**

Action games are typified by fast-paced events and movements (Phillip, 2020). Some sub-types of genres are worth to be mentioned for instance fighting, racing and shooters.

### **11.2.Adventure Games**

Adventure games offer an exploration and puzzle solving. They require creativity, reasoning and curiosity as the main skills to be a good adventure game player for instance, *legend of Zelda* and *God of War* (Fritts, 2021).

### **11.3. Puzzle Games**

These types of games require the player to solve puzzles or problems that need the exercise of logic, memory and pattern matching for instance: *Tetris*, *Lemmings* and *Minesweeper* (Academic Dictionaries and Encyclopaedias, 2010).

### **11.4.Role-Playing Games (RPG)**

RPGs offer the players to immerse themselves in the game in which they assume the roles of the characters. For instance, the famous game called *The World of Warcraft* (TechTarget, 2011).

### **11.5.Simulation Games**

In these games, the primary element is to be able to match real world situations. They are games designed to mimic activities you would see in the real world. For example, it includes social situation simulation like in *Sims* (AppLovin, 2021).



### **11.6.Strategy Games**

These games are primarily tactical and balance games in which the player is in control of the game. Chess is the most famous strategic game (Childers, 2021).

### **11.7.Educational Games**

Educational games aim at developing the players' new skills through games in which they are required to use their intelligence, different skills and background knowledge to solve problems and succeed in the games (Farber, 2021).

### **11.8.Traditional Games**

Traditional games represent all the computerised versions of board, *cards* and word games including *chess*, *checkers* and *scrabble* (Antonietti& Mellone, 2003).

## **12.Types of Online Video Games**

After having an idea about the types of games in general, it is important now to move from general to specific. The following list represents the most notable types of online video games:

### **12.1. First Person Shooter**

First person shooter games are action games in which the perspective is first person view; in other words, the player is behind the eyes of the character. Notable examples include *Half-Life*, *Far Cry* and *F.E.A.R* (Phillip, 2020).

### **12.2. Massively Multiplayer Role Playing Games**

They are called massively multiplayer online role-playing games. In these games, players are involved in a game populated by thousands of other players. *World of Warcraft*

and *Battlefield* hold the honourable position for being the most famous games. In addition, there are other famous games like *Fortnite*, *Minecraft* and *Roblox* (Fritts, 2021).

### **12.3. Cross Platform Games**

Cross platform games are when it does not matter from which device you are playing but the point is the actual winner of the games. It is called cross platform games because these types of games allow the players to enjoy the game regardless of the device they play on for instance *FIFA* and *Mortal Combat* (Conroy, 2021).

### **12.4. Board Games**

Board games like *monopoly*, *UNO*, *scrabble* and *LUDO* are now available on internet in which multiple players can play at the same time. Board games are social games in their essence and it is easy to play online that is why there are many versions of them (Davies, 2020).

### **12.5. Sports Games**

Online sports games are similar to the ones we play in real life; however; the only difference is that you are not physically moving as in reality. With the advent of virtual reality, things can change indeed (Davies, 2020).

### **12.6. Simulation Games**

Simulation games are when players play games as if they are in the real world. They aim to simulate physical activities with much realism as possible like flying an aircraft, football or playing golf. Simulation games main aim is to replicate real life situations (Danley, 2020).

### **12.7. Battle Royal Games**

Battle royal games are like war games. This type of fun games is considered as the best-selling games across all the gaming population, among which: *Fortnite* and *PUBG* (Danley, 2020).

### **12.8. Racing Games**

Racing games typically place the player behind the wheel and race against other players to win rewards for instance *Forza*, *Asphalt* and *Need for Speed* (Download Free Games, 2005).

## **13. Online Gaming: How and where to Play**

Gamers can play online video games through many means. This includes free games found on the internet, games on smartphones, tablets and handheld consoles, as well as downloadable and boxed games on PCs and consoles such as the PlayStation or Xbox. Here are some of the most common devices on which online games are played (Childnet International, 2020).

### **13.1. Consoles**

They are devices connected into TV that can be connected to internet through a home network for instance, Xbox, PlayStation, and Nintendo (Daniel, 2012).

### **13.2. Mobile App Games**

Mobile app games are simply games that can be downloaded free on mobile phones. They can be downloaded through app stores like Google play, Galaxy Store and Apple Store (Consumer Acquisition, 2021).

### **13.3.Web Games**

Some games are accessed through unique websites. They are most of the time free for young people.

### **13.4.PC Games**

PC games are played on computers as other software programmes. These games are free to download through internet but sometimes require payment to download the full version of the games. Many PC games make use of internet in which players meet and interact with each other through massively multiplayer online games (MMOG) (Techopedia, 2016).

### **13.5.Augmented Reality**

It is abbreviated AR. It allows players to experience situations as if it is in real life. It is usually achieved by using a camera on a mobile device and can be seen in games like *Pokémon Go* in which a Pokémon appears in front of you (Hyes, 2020).

### **13.6.Virtual Reality**

It is also abbreviated VR. It is a wearable VR headset that allows you to immerse yourself in the game; in other words, to experience things like you are actually there (Bardi, 2020).

## **14.Technology in Algeria**

Technology is an important element when it comes to playing online video games in Algeria in particular. Technology involves putting into practice all the scientific knowledge; it is also the manipulation of human life and human environment (Britannica, 2021). The International Trade Administration mentions that “Algeria’s ICT sector is dynamic and continuously evolving and serves as the pillar of the country’s digital transformation program” (The International Trade Administration, 2021, para. 1). In other words; technology

is holding an important position in Algeria and it has taken a great time of the human life. It is popular among all ages either children, teenagers or adults in the form of 3G and 4G LTE for mobile telecommunications and ADSL and fiber for fixed telecommunication. Technology plays a significant factor in the exportation of gas and oil industry. Indeed, Algeria invests a huge amount of money on ICTs; each year Algeria is deploying and expanding 3G services into 4G services. The government has shown a great interest in ICTs by modernizing and digitalizing their records. This is a best prospect industry sector for this country that includes a market overview and trade data (Privacy Shield Network, 2021).

### **15. Gaming in Algeria**

According to a report from Research and Markets.com mobile gaming is gaining popularity in remote parts of Africa including Algeria. More than 290 million people in North Africa use mobile phones and the mobile market in the region generates \$90 billion annually. According to the survey, some facts can be highlighted other than gender; for example, 74% of Algerian adults play video games. Algerian gamers spend more than 3.5 hours per day playing online video games. Algerian gamers prefer adventure, action, racing, sports and puzzle online video games. Top personal interests are music, food and mostly technology. While watching TV, Algerian gamers either check their emails, chatting with friends, using social media and playing online video games especially through Facebook or mobile phone games (Jean, 2020).

Moreover, according to a survey on AdColony, games in Algeria, are now the basis of new massive online communities. They are evolving into third spaces where players can socialize on their own terms. The survey also found out other facts for instance 84% of internet users play online video games at least once per device (Jean, 2020).

## **Conclusion**

In conclusion, the aim of this theoretical background was to establish solid information and knowledge about video and online games. At the same time, this section exposed that engaging in those leisure activities might lead to learning situations (Vidlund, 2013). There are thousands of games available; the content involved anything imaginable in both education and entertainments genres (Buckely & Anderson, 2006). This theoretical background presented an idea about what are games in general and what are online video games in particular. It also informed about gamers and their motivations in addition to the development of their English vocabulary proficiency through playing online video games. Then, moving on to the games genres and diving in gaming in Algeria.

## **Section two: Vocabulary**

### **Introduction**

Vocabulary is a major aspect of language (Derbouche & Hamadouche, 2016). This section tackles the definition of vocabulary, its types, its importance, difficulties in learning vocabulary, techniques of teaching and learning vocabulary and teaching vocabulary through technology and online video games.

#### **1. Definition of Vocabulary**

Vocabulary is an important aspect of language; it is regarded as a crucial aspect in learning a second or foreign language (Derbouche & Hamadouche 2016). As Thornbury said, “without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (2002, p. 13). This is why teachers emphasize on teaching vocabulary using multiple techniques and materials for instance, visuals, realia, video games... etc. (Tennant, n.d.).

Vocabulary refers to the words that constitute a language (vocabulary.com, n.d.). According to Hornby (2010), vocabulary refers “to all words that a person knows or uses”

(p.1722). Neuman and Dwyer believed that vocabulary refers to all the words a person has to know in order to communicate effectively ideas and meanings (2009). This means that having a strong vocabulary repertoire is required to achieve comprehension and language usage. Heibert and Kamil (2005) defined it as “the knowledge of meaning of words” (p.2); the knowledge of words refers to the information that a person knows about words, such as definition and morphology; besides, words’ appropriateness (*Vocabulary Knowledge*, 2021) Moreover, Nation (2001) believed that vocabulary knowledge is highly important and must be taught while introducing new words in the foreign language.

People are using language differently and creatively as Chomsky said, “even the interpretation and the use of words involve a process of free creation” (*The Linguistic Theory of Noam Chomsky*, 2021, para. 4). This is due to a person’s quantity and quality of vocabulary. According to Bauer, individuals are estimated to know between three thousands and two hundred sixteen thousands of words in their lives (1998). So, vocabulary is a fundamental aspect in learning a foreign language because with insufficient amount of words, a learner will not be able to understand nor express his\ her ideas (Rohmatillah, 2014). Moreover, knowing a word is not limited to its definition but it also consists of some other aspects; first, the ability to translate the word into the mother tongue. Second, learners must use the words in different contexts appropriately. Finally, the capacity to combine the vocabulary items with other words which they fit together, these are called word collocations. (Ferreira, 2007).

It was assumed that vocabulary is flexible and used naturally; its development depends on time and language exposure (Derbouche, 2016). Therefore, the amount of words known by a person will determine the successfulness and comprehension of the message conveyed.

Vocabulary is related to three concepts: lexicon, word and lexis. So what is the difference between these three key terms? Firstly, Kiparsky defined the lexicon as “a kind of appendix to the grammar, whose function is to list what is unpredictable and irregular about the words of a language” (1982, para.1). In other words, the lexicon refers to the word changes and exceptions. He also added that these items cannot stand alone in a sentence. Some examples of lexicons are inflection, affixes, etc. Secondly, the second concept is word. According to Oxford dictionary, words refers to “free standing items of language that have meaning” (Oxford dictionary, 2010, p. 1775). So, it is a small unit that represents an object, feeling, etc. Lastly, the last concept related to vocabulary is lexis. According to Carter (2012), it is also called full words or content words; he said that lexical items “carry a higher information content and, as we have seen, are syntactically structured by the grammatical words” (p. 24); Lexis then, refers to nouns, adjectives, verbs and adverbs. In a nutshell, vocabulary consists of words that contain meaning and contents adding to that, word irregularities and changes.

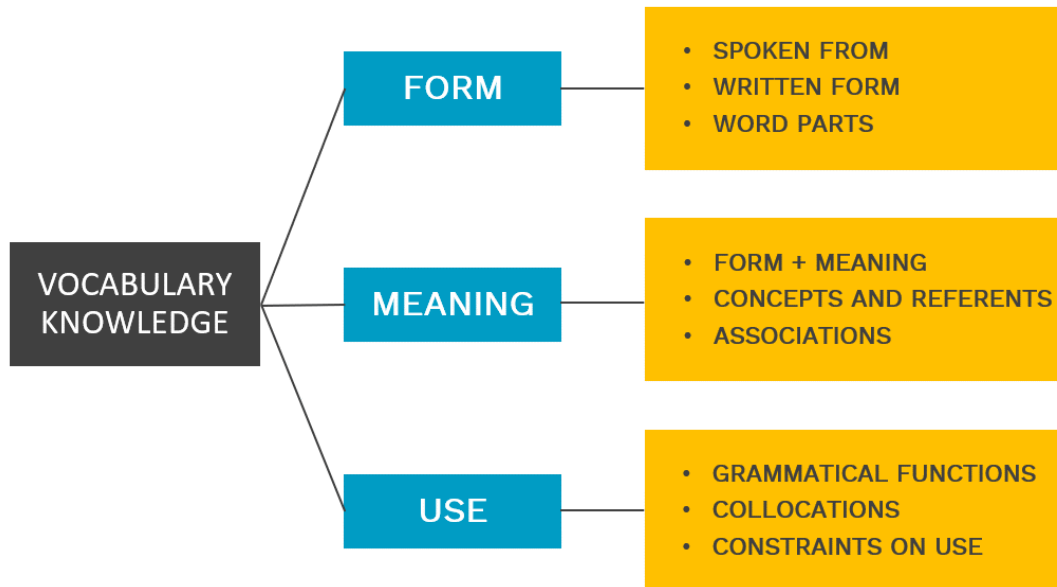
For a learner to master a new word, its meaning, spelling and pronunciation are not sufficient. There are three other aspects that contribute to learning new vocabulary items (Carroll, 2013). First grammatical patterns, a learner must know the grammatical changes of a given word—for instance whether the verb is regular or not, etc. (Perry & MacDonal, 2001) Second, introducing new words accompanied with their appropriate use in different contexts is very important because it facilitates storing them in the long term memory (Stemberg, 1978). Finally, collocations, some words are combined or co-occur with some other specific items (Cowan, 1989). To sum up, it is compulsory to have knowledge about a given word in order to learn and remember a word.

The following figure shows the components of word knowledge that are needed to know in order to retain a new word:



**Figure 1**

*Components of vocabulary knowledge (European EdTech Network, 2019)*



## 2. Types of Vocabulary

### 2.1. Productive and Receptive Vocabulary

Gairns and Redman stated that Receptive vocabulary means words that are understood in context for instance while reading, listening, etc. or the words that are known but are not used productively; however, productive vocabulary refers to all the words that a person appeals and uses in both writing and speaking. Gairns and Redman assumed that receptive vocabulary is larger than the productive one saying that, “native speakers’ receptive vocabulary exceeds productive one; they are able to understand forty-five thousand to sixty thousands of words.” (1986, p. 64). A study was done on Chinese EFL college learners to measure their productive and receptive vocabulary size. The findings showed that the mean of receptive vocabulary (23.444) is higher than the one of productive vocabulary (10.604) (Zhou, 2010).

Moreover, Hiebert and Kamil (2010) made a distinction between the two types of vocabulary. Productive vocabulary refers to the words that are frequently used by a person. That is to say, words that individuals know and are familiar with. However, receptive vocabulary refers to “words for which an individual can assign meaning” (p. 3). Some words are not used spontaneously; due to the lack of knowledge about them. As a result, memory tends to partially forget such items but could recall and remember them once they are mentioned.

Moving words from receptive to productive vocabulary goes through a gradual process. Items that are understood only when heard are transferred to be classified in the productive vocabulary whenever a person is over exposed to a given word, understand its full meaning and its appropriate use. At this stage, an individual can start using those words correctly and appropriately; in other words, productively (Gairns and Redman, 1986).

## **2.2. Implicit and Explicit Vocabulary Learning**

Implicit vocabulary learning is the situation where words are not learnt but acquired and grasped while reading texts, watching movies, playing video games, etc. When Vocabulary is learnt incidentally, it means that words are stored in learners' memory while focusing on something different from vocabulary. Whereas for explicit vocabulary learning, learners are involved in activities and tasks in which the focus is exclusively on vocabulary learning. Moreover, teachers use different techniques and strategies for instance: synonyms, illustrations, etc in order to help their learners build strong vocabulary lists (Mirzaii, 2012).

The distinction between implicit and explicit vocabulary learning is related to consciousness. Human memory consists of two types, implicit and explicit memory. The implicit one refers to all information that are retained unconsciously (Cherry, 2019). Strobach and Natalia (2012) said that implicit memory “has been conceptualized as the unintentional

influence of prior learning on cognitive performance” (p. 2). Conversely, explicit memory stores all what have been learnt consciously (Mcdermott, 2002).

Likewise, Folse (2004) believed that most of words are acquired; he argued that “explicit attention to vocabulary is rare.” (p. 9). So, learners build most of their vocabulary incidentally (Derbouche, 2016). They acquire most of words while dealing with other language aspects such as grammar, reading texts, etc and this demonstrates that vocabulary is neither taught nor learnt directly.

### **3. Importance of Vocabulary in Foreign Language Learning**

Vocabulary is considered as an essential aspect for language learning as well as its use (Alharbi, 2015). At the same time, vocabulary is regarded as a major source of problem for second and foreign language learning because lack of vocabulary hinders language proficiency and communication (Afzal, 2019). Moreover, vocabulary is regarded as a complex language aspect since words are arbitrary and do not follow rules to be constructed in contrast to grammar (*Is English Grammar and Vocabulary Hard to Learn?*, 2017).

According to Ramadhan (2017), “vocabulary is essential for successful second language use” (p.5); because with poor vocabulary, foreign language learners are not going to make structures nor use them appropriately while speaking or writing. An example of this situation is when learners are writing a text, sometimes they either have a meaning of a word or its equivalent in their mother tongue, but not the appropriate word in English; and this may cause gaps in their writings. It is also similar while speaking; learners are not able to communicate fluently because of the lack of vocabulary. As a result, the flow breaks and meanings are not clearly stated.

It is essential to teach vocabulary using multiple techniques and strategies such as word lists, dictionaries, visual aids, etc; moreover, teaching new words with their appropriate contexts facilitates retrieving and recalling (Tennant, n.d.).

While learning a foreign language, knowing its vocabulary items has a significant role in the language four skills: speaking, listening, writing, and reading (Alqahtani, 2015). So what is the role of vocabulary in the language skills?

### **3.1. Vocabulary and the Speaking Skill**

Words are small units that are arranged systematically to form upper units such as clauses, sentences, etc. These structures contain ideas and meanings that are conveyed orally while speaking. It is important to note that a “person’s speaking skill is very dependent on the quality and quantity of her/ his vocabulary” (Suryanto et al, 2021, p. 11). In other words, individuals who have great body language and words knowledge are going to speak fluently; in contrast to others who lack such knowledge would struggle in order to express their ideas and communicate effectively.

### **3.2. Vocabulary and the Listening Skill**

Listening is regarded as a complex process that most learners fear (Graham, 2006) because a listener is constantly decoding what a speaker is saying. To avoid misunderstanding, sufficient amount of vocabulary knowledge is required.

In this context, it is claimed that “learners with larger vocabulary size might go on to acquire more words from aural input because they comprehend more of the input in the first place” (Zhang & Graham, 2020, p. 1019). In the same way, children start listening to the language used by people who surround them before starting to speak; learners also acquire vocabulary and knowledge of words while they are exposed to the target language. Krashen

believed that being exposed to language and sufficient amount of input helps learners to build comprehensible knowledge and acquire new items easily (Krashen, 1992).

### **3.3. Vocabulary and the Writing Skill**

In order to write a good paragraph, some steps are required: planning, organizing ideas, drafting, revising, and lastly writing the final written piece. However, still the choice of appropriate words is a crucial step to make a good production. The challenging aspect in this skill is specialized vocabularies (Olinghouse & Wilson, 2012). A writer must use the appropriate register that is specific to the theme he/she is writing about.

### **3.4. Vocabulary and the Reading Skill**

Seifert believes that vocabulary is an important aspect that improves reading comprehension (2017). Vocabulary knowledge is highly related to reading comprehension (Mebarki, 2011). In other words, the more words are known the more comprehension occurs. The quality of the knowledge of words has an important role in understanding both explicit and implicit meaning.

## **4. Difficulties in Learning Vocabulary**

Vocabulary is very important while learning a foreign language (Rohmatillah, 2014). MacNeil believed that if foreign language learners know around eight hundred to one thousand English words they will be able to understand seventy-five percent of the target language (2018). However, most learners struggle to build their vocabulary repertoire (Shelby, n.d.). In other words, foreign language learners find difficulties to retain and recall the target language's words. Many researches were done in order to identify the difficulties in learning vocabulary (Surmanov 2020, Rahmatillah 2014, Bjork 2015 and Susanto 2021).

The aforementioned researches identified some reasons behind the difficulties in learning vocabulary. First, choosing the appropriate words is challenging for foreign language learners (Kao & Reynolds, 2020). Alqhtani declared that there must be emphasis on the meaning of words while learning new items, especially words that have different meaning (2015) because providing a clear explanation and their different usage boosts the retention of words (*Vocabulary*, n.d.). A study conducted on Saudi Arabian EFL learners, showed that most learners found difficulties to discover the exact meaning of words. As a result, they rapidly forget the new introduced vocabulary items (Afzal, 2019).

Second, most learners find difficulties to pronounce and spell words correctly (Rohmatillah, 2014). Karakas argued that mispronunciation and spelling mistakes are directly linked to the influence of the learners' mother tongue (2020). This demonstrates that learners struggle to pronounce and write correctly because of the negative transfer between their mother tongue and the foreign language. As a result, they tend to avoid using words that are difficult to pronounce or complicated to write and through time they forget these words (Ye, 2016).

Lastly, knowing a word is not limited to its meaning, spelling and pronunciation but it relies on many other aspects that make learning and retrieving a given word more efficient (Carroll, 2013). There are multiple aspects that contribute in learning new words for instance grammatical pattern, appropriateness and collocations (Perry & MacDonal, 2001). In other words, to remember a word and use it productively, a learner must know the word's definition, spelling and pronunciation; adding to that, some knowledge about the grammatical aspects for instance word class; next, the appropriate use of words in different contexts. Finally, word collocation which refers to "a combination of two or more words that are commonly used together" (Danileviciene & Vaznoniene, 2012). Above all, knowing a word

involves much more than knowing its definition; that is why learners struggle to learn new vocabulary items (See figure 1, p. 21).

To conclude, difficulties in learning vocabulary are related to multiple aspects such as words choice, negative transfer from learners' mother tongue to their target language, and aspects of word knowledge. The aspects of words are compulsory to be known by a foreign language learner in order to learn new vocabulary items and use them productively.

## **5. Techniques for Teaching and Learning Vocabulary**

For second and foreign language learners, vocabulary is regarded as a primary challenge towards foreign language learning (Siyanova-Chanturia & Webb, 2016). According to Gairns and Redman (1986), there are some traditional ways to teach vocabulary explicitly; they classified those techniques into three categories:

### **5.1. Verbal Techniques**

Teachers usually give the explanation of the new words by providing their definitions or using different techniques such as: synonymy, oral or written illustration, examples, etc. (Rendman & Gairns, 1986).

### **5.2. Translation**

Second and foreign language learners learn their target language with the help of their mother tongue; this is why, teachers tend to give the equivalent of words in L1 (Hummel, 2010). In a nutshell, this category is regarded to be efficient because learners will directly understand the meaning. Adding to that, it does not require much efforts and materials to explain words.

### **5.3. Visuals**

Vocabulary is better learnt and stored when new words are directly accompanied with their meanings using photographs, realia; drawings, charts, etc (Tahir, et al, 2020). Using concrete elements facilitates not only learning but also remembering the words. In doing so, the process of relating a word to its sign is made rapidly. Besides, teachers may perform the actions using gestures, mimes, etc.

## **6. Teaching and Learning Vocabulary through Technology**

Technology did not only bring new approaches to the educational field but it has also created multiple opportunities to learn language outside the classroom (Purdue Online, n. d.). Moreover, the new learning environments such as language-learning applications, YouTube, online video games, etc expose the learners to authentic language. Adding to that, they cover all aspects of a language that any learner needs in order to develop his/ her linguistic competences (Clark, 2013).

With the revolution in technology, teaching and learning has taken new prospects. Nowadays, teachers are using more technological devices and techniques to teach language, mainly vocabulary, such as: videos, records, computer laboratories, games, etc. Accordingly, implicit learning is becoming more frequent among foreign language classrooms (Ma, 2017).

There are multiple techniques for teaching and learning vocabulary through technology among them:

### **6.1. YouTube Videos**

Videos from YouTube are among the technologies that can be used in teaching and learning a language. According to Hariyono, YouTube made learning more interesting and funny because it consists of infinite subjects, rich body language, etc (2020). Furthermore,



YouTube videos are observed to increase learners' participation and involvement in the classroom besides, it enhances the receptive vocabulary (Heriyanto, 2015).

## **6.2. Online Vocabulary Games**

Digital game-based learning is considered as a new technological tool for teaching and learning vocabulary (Sahrir & Yusri, 2012). There are multiple games that focus on teaching vocabulary for instance: *Lost Objects*, *Flocabulary*, *Wordcraft*, etc.

## **6.3. Corpora**

Digitalized corpora are a tool for teaching and learning vocabulary. A corpus refers to a collection of written and spoken texts that are stored electronically; it consists of large numbers of words (Aston, 2001). An example of corpora is Concordance.

## **7. Learning Vocabulary through Online Video Games**

According to Ebrahimzadeh and Alavi (2016), "digital video games are believed to have inherent characteristics such as competition, narrative, fantasy, climax, and visualization that promote enjoyment and task engagement which can result in deeper acquisition of knowledge" (p. 2). This demonstrates that games have the power of teaching knowledge because they offer much more opportunities for learning and acquiring due to some characteristics that an online video game consists of such as speaking with other players, narration, etc

Language learning requires a positive environment and online video games consist of a positive atmosphere in addition to the language that can be learnt (Derbouche, 2016). Prensky stated that "a brain enjoying itself is functioning more efficiently" (p. 5). The source of motivation and pleasure is principally generated from gaming and fun. This means that learning happens more when gamers are at ease and fun; because they put more effort while

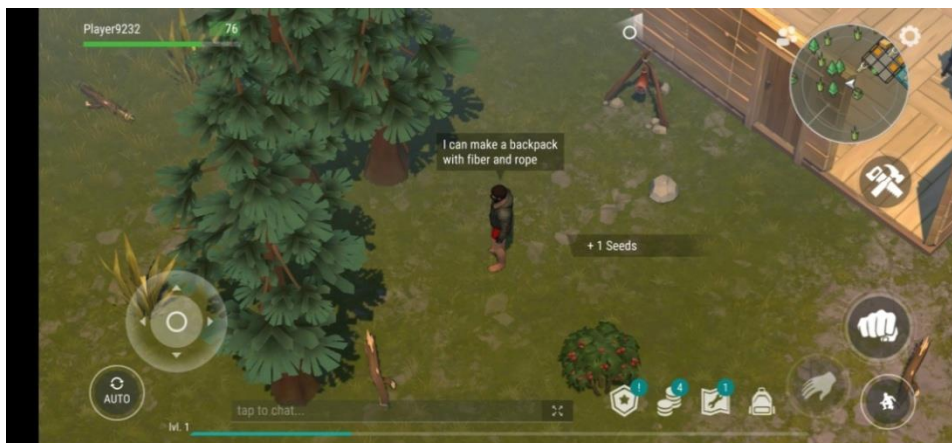
playing online video games. The pleasure that online video games are offering, creates a perfect environment that enables learners to learn and acquire a language besides, a new context to practice and use the language (2001).

Gamers are observed to change their attitudes while playing games. They become more attentive and engaging (Camacho & Ovalle, 2019). Gamers spent more energy and use all their skills in order to follow correctly the instruction given by the game; as a result, they improve their attention adding to that their cognitive development such as memory (Dykstra, 2020). In a nutshell, while playing video games, it is important to keep an eye on all the elements that may lead to failure, consequently, attention and engagement are enhanced along with language mainly vocabulary.

Vocabulary is improved while playing online video games, most of the time explicitly, but when approaching it from a gamer's perspective, it can be regarded as implicit. In other words, at first levels of games, key words of the game are introduced explicitly by giving simple instructions, hints, explanations, etc to accomplish missions. As these screenshots from *Last Day On earth* game shows:

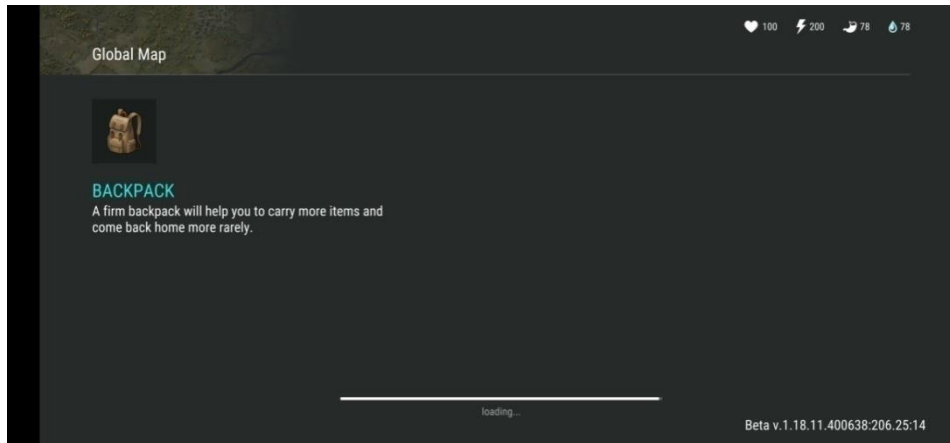
## Figure 02

*With what a backpack is made (Last Day on Earth, 2017).*



**Figure 3:**

*Definition, function and image of a backpack (Last Day on Earth, 2017).*



These two pictures give all the necessary knowledge related to the word 'backpack: its definition, function and basic materials of a backpack. Furthermore, these information are all stated explicitly. Accordingly, those explanations would contribute in learning and word retention because they consist of sufficient amount of input (Derakhshan, 2015). From gamers' perspective, words are acquired rather than learnt because they are not playing for the purpose of learning; they are just following the instructions to level up in the game. Furthermore, players are not aware of the learning capacity that games are offering. This leads to the incidental vocabulary learning (Qasim, 2021).

Online video games consist of all aspects that are compulsory in order to learn and acquire a language and mainly vocabulary; such as words in context, their meanings, explanation (verbal/ non-verbal), positive atmosphere, and motivation, etc. For this reason, online video games can really be beneficial for gamers' vocabulary development.

## **8. The Status of English in Algeria**

Algeria is known for its cultural diversity due to the establishment of many civilizations such as Romans, Carthaginians, Ottomans, etc (Mouade, 2016). This diversity is

also reflected in the country's languages (Boukhchem & Varro, 2013). The languages used in Algeria are multiple: Kabyle, Arabic, French and English; in addition to dialects. In the Algerian context, English is classified as the second foreign language. Though the dominance of French in Algeria, English is taking a tremendous place these last years due to globalization, to the exchange programs offered by the US and UK in Algeria (Belmihoub, 2018); and to lately, social media.

Algerian learners are introduced to English language at middle school where they study it three times a week. In all, English is taught for seven years or more. However, the level of English in Algeria is very low due to different reasons (Zemali, n. d.). First, the Algerian government is encouraging the use of Arabic in all domains. Arabization is a language policy that Algeria has adopted in order to maintain the Muslim identity and values in addition to diminish the French language use (Hadj & Boukli, 2019). Second, France imposed its language for a long period of time that is why French is widely spread in Algeria; not only for communication but it is also present in administrations and academic settings (Benrabah, 2007). Finally, according to Belalem (2020), English did not succeed in Algeria because when the government introduced English as first foreign language in the 1990s, only 1% of children chose to study it at elementary school; their parents as well preferred to maintain French. She also argued that the unsuccessfulness of English language is related to the lack of contexts to use English. That is to say, the use of English in the Algerian society is restricted except for some magazines and blogs such as: 50 Fifty Magazine, The Teal Tadjine, etc.

**Conclusion**

To conclude, vocabulary is a challenging aspect of language especially that its importance appears in the four language skills. However, second and foreign language learners find difficulties in learning and developing their vocabulary (Shelby, n. d.). Now that technology is taking great place in individuals' life, language sources are accessible anytime, everywhere and through multiple means among them online video games. This section dealt with the definition of vocabulary, its types, importance, difficulties in learning vocabulary, techniques of teaching and learning vocabulary, in addition to teaching vocabulary through technology and online video games.

Chapter one introduced the theoretical framework of the current study; it is divided into two sections. The first one provided background information on gaming and online video games. The second section discussed vocabulary teaching and learning. The next chapter is devoted to the methodological part.

## **Chapter Two: Research Design, Methodology and Results**

The topic under research sheds light on the online video gamers' perception of the development of their English vocabulary. This study aims to find whether playing online video games develops the gamers' vocabulary or not and how it is developed. The following chapter represents to the readers the practical part. It is divided into three sections. The first is dedicated to the description of this investigation. The second is devoted to the interpretation and discussion of the findings. The last section is about the implications, limitations and suggestions for further researches.

### **Section One: The Description of the Study**

#### **Introduction**

This section describes the present investigation. It provides information on population and sample, research design and instruments that have been used, in addition to the description of the questionnaire and *PUBG* game which is the most played game by the sample.

#### **1. Population and Sample**

The population that is targeted in this research are online video gamers from Bejaia province who use the English language while gaming.

Thirty-one gamers of different ages and genders from Bejaia volunteered to participate in the current investigation. The emails and FaceBook accounts of the sample were collected to send them the questionnaire online. The participants must play using the English language version of the game; otherwise, they are not concerned with this study. Moreover, they must be regular players. the aspect of age and gender are not determined because online video

games are generally designed for all ages (children, teenagers, youth and adults) and both genders.

## **2. Research Variables**

The current study investigates the effectiveness of playing online video games on the development of gamers' English vocabulary. There are two variables. The first one is playing online video games and it is the independent variable. The second dependent variable is Vocabulary. The main aim of this study is to check whether playing online video games can really develop gamers' English vocabulary or not.

## **3. Methodology and Research Design**

The current investigation is an exploratory research that describes the development of English vocabulary among gamers of Bejaia province. Thirty-one gamers took part in this investigation. The choice made for the data collection is both quantitative and qualitative; that is to say, a mixed method research. Using a mixed method is beneficial for the final findings. It enhances its verifiability; furthermore; it makes the investigation more productive and reliable by collecting both numeral and descriptive data.

To check the validity of vocabulary development among gamers of Bejaia, the data was collected through an online questionnaire using the "Form App" application. The questionnaire was sent via Facebook and email; The analysis and treatment of data were done automatically by the application "Forms App". Adding to that, SPSS was used to treat the data collected from the aforementioned tool.

## **4. Data Collection Tools**

To collect relevant data on this study, an online questionnaire was opted for.

### **5. Aim of The Online Questionnaire**

To achieve the aims of this research, an online questionnaire was distributed on thirty-one gamers from bejaia. It aimed to discover the gamers' perception of vocabulary through playing online video games; next, if they observed any development in their repertoire, how vocabulary is developed; lastly the benefits of playing online video games.

### **6. The Description of the Online Questionnaire**

A questionnaire is a research tool that contains a series of purposeful questions (open and closed ended questions) (Research Tools 3: Questionnaire, 2019). It is regarded as the easiest research tool used by most researchers (Blazques-Sanchez, 2017). According to Phillips (2016), this research tool is generally used to discover "what the masses are thinking" (para. 10). This means that questionnaires are used with large numbers to collect data on people's opinions, feedbacks, etc on a given topic. Questionnaires can be classified as both qualitative and quantitative method (Questionnaires, n. d.). This demonstrates that a questionnaire with open-ended questions is regarded as a qualitative; whereas for closed-ended questions, they are analyzed in a quantitative method.

The data of this research was collected using an online questionnaire via Facebook and email. The questionnaire designed for this undertaken investigation allowed to collect both qualitative and quantitative data on the development of English vocabulary while playing online video games by using open and closed ended questions.

The questionnaire was designed and digitalized using the "Forms App". It was distributed online via both Facebook and email after collecting the participants' emails and Facebook accounts days before. The questionnaire consists of an instruction which guides the participants on the way to answer the questionnaire. Furthermore, the respondents were asked



to be honest in order to avoid biased answers. Finally, the participants were informed that their answers are going to be anonymous.

The questionnaire contains eighteen questions that are divided into four parts. The first part is dedicated to general information of the respondents (age, gender and social status). The second part is related to games. It has six open and closed ended questions. The third part deals with playing online video games and language learning mainly vocabulary development. It consists of eight questions: open-ended and closed-ended questions. This section allows collecting data on gamers' motivations, vocabulary development, etc. Finally, the fourth section is dedicated to the gamers' suggestions and comments concerning our topic.

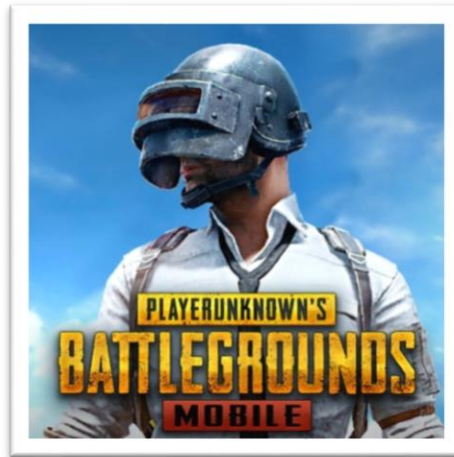
Thirty-one answers were collected. Some of them were automatically analyzed by the application "Forms App" and the others were analyzed by SPSS Program.

## **7. The Description of *PUBG* as a Sample of Online Video Games**

In this section, we will tackle one of the biggest e-sports in the world (Henningson, 2020) and provide some information about it. This description focuses on the mobile version of *PUBG* since it is considered as one of the most downloaded and played games on both Android and iOS since the date of its publication and its phase of huge popularity started around March 19<sup>th</sup>, 2018 (Hall, 2021). *PUBG* is basically an abbreviation for *PlayerUnknown's BattleGrounds*. It is a battle royal game published by Tencent Games in 2018 and it is available for Android and iOS users. *PlayerUnknown's BattleGrounds* Mobile Game is exclusively an online video game which requires internet connection to play via mobile network or WI-FI. The game is about being the last man standing out of 100 people joining from across the world on a virtual island. *PUBG* can be played solo, duo or in a squad of four persons. The following image demonstrates the logo of *PUBG* that can be found on mobile phones.

**Figure 4**

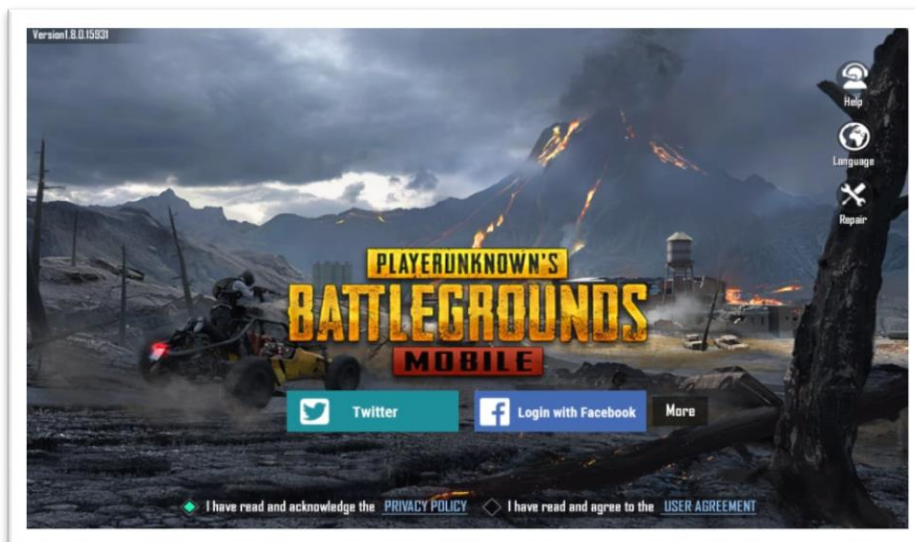
*PUBG's logo (PUBG Mobile, 2018)*



The game play and instructions of the game are easy and simple to follow. When downloading the game is finished, it requires first to create an account and log in to the game play with a Twitter, Facebook or you can click more to choose another platform (Figure 5).

**Figure 5:**

*Sign up (PUBG Mobile, 2018)*



The gamer and the other 99 players will be dropped from a fighter plane after choosing the place you want to be dropped on the map as this figure shows:

**Figure 6:**

*Plane Fighter (PUBG Mobile, 2018)*



*PUBG* starts with a casual playback and becomes seriously difficult later. After deciding on which area on the map to land in, the game starts when you get parachuted of the airship together with up to 99 players into the map with large proportions (figure 7). After you have hit the ground, the main objective of the game is to be the last standing person or team on the battlefield. In *PUBG*, the players are left in the island without weapons and supplies. The next objective will be to collect everything that you need to stay alive and protect yourself. The game starts with a big circular play zone then it starts to become smaller as the game continues and kill each other while trying to stay alive until the end.

**Figure 7:**

*Parachute (PUBG Mobile, 2018)*



Once the game starts, you will get to speak to your friends via vocal chat in squad mode or chat with them by using an on screen chat box (figure 8). After each game, your performance is judged based on parameters like survival instincts; damage done, total kills, supplies collected and support provided to team members.

**Figure 8:**

*Vocal and Box Chat (PUBG Mobile, 2018)*



Vocal Chat

Written Chat Box

The supplies, gear and clothes are spread out in empty buildings, ghost towns, sheds, warehouses around the massive map. Vehicles are also available to offer mobility. In order to keep the players moving, the playable area shrinks in stages until it becomes a random and a small location on the map. If players are got outside that location which is called “safe zone”, they will take damage until they are in the safe zone again or else they become dead. The game ends when one player or one team is the only one that remains alive.

## Section Two: Analysis and Discussion of results

This section is dedicated to the interpretation of the data collected from the gamers’ online questionnaire; in addition to the discussion of the findings. The data are presented in the form of pie and line charts as well as tables.

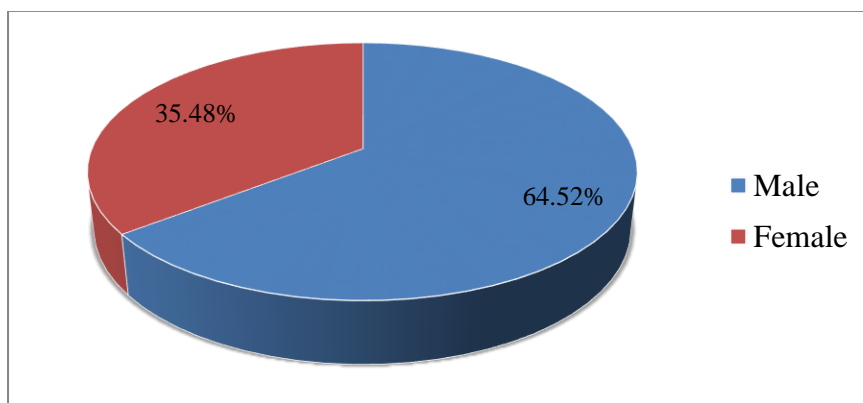
### 1. Analysis of the Results of the Gamers’ Questionnaire

#### Section one: General Information

**Question 1:** What is your gender?

**Figure 9**

*Gender Variation*

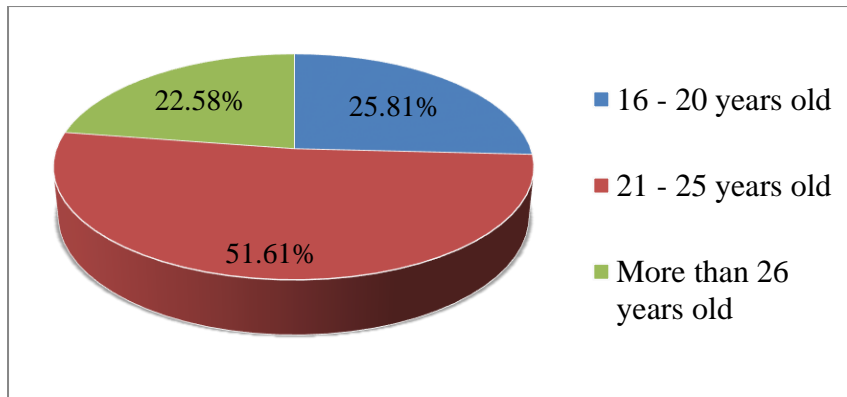


From figure 9, we notice that male gamers are more than female (64. 52% are male and 35. 48% are female).

**Question 2:** How old are you?

**Figure 10**

*Gamers' Age.*

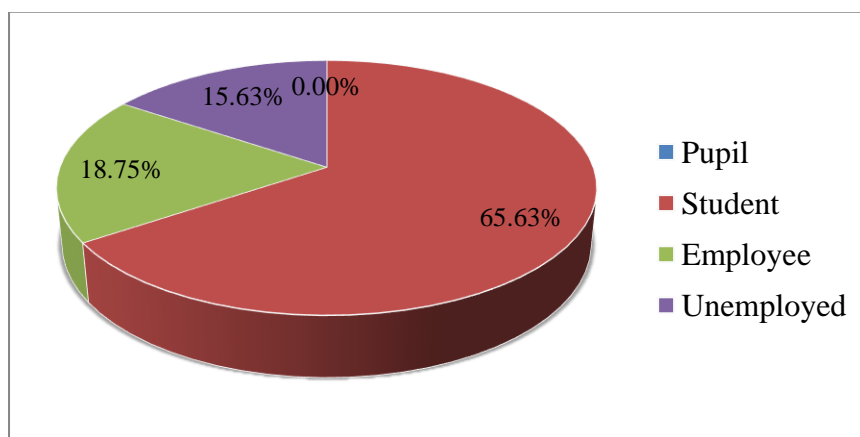


According to figure 10, half of the respondents' age is between 21 – 25 years old (51.61%). 25.81% of the gamers are aged between 16 and 20 years old. Finally, 22.58% of the gamers are 26 years old or more. In a nutshell, the majority of the sample is youth.

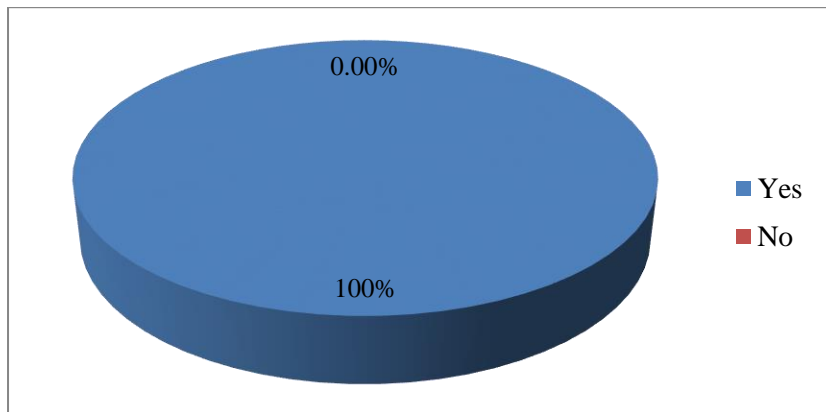
**Question 3:** Are you a: pupil, student, employee, or unemployed?

**Figure 11**

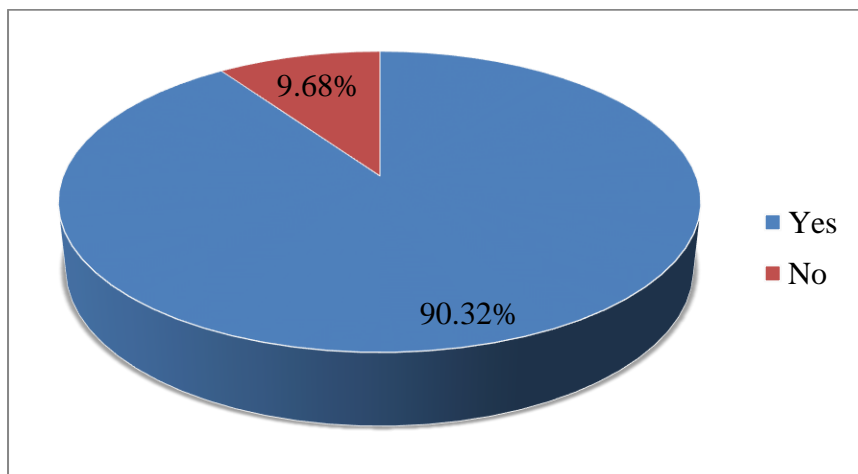
*Gamers' Social Status.*



As the pie shows, most of the participants are students. They represent 65.63%. 18.75% are employees and 15.63% are unemployed. However, there are no pupils

**Section Two: Playing Games and Online Video Games****Question 4:** Do you play games?**Figure 12***Playing Games.*

All the participants answered that they play games. The question did not specify the type or the genre of the game but it referred to games in general.

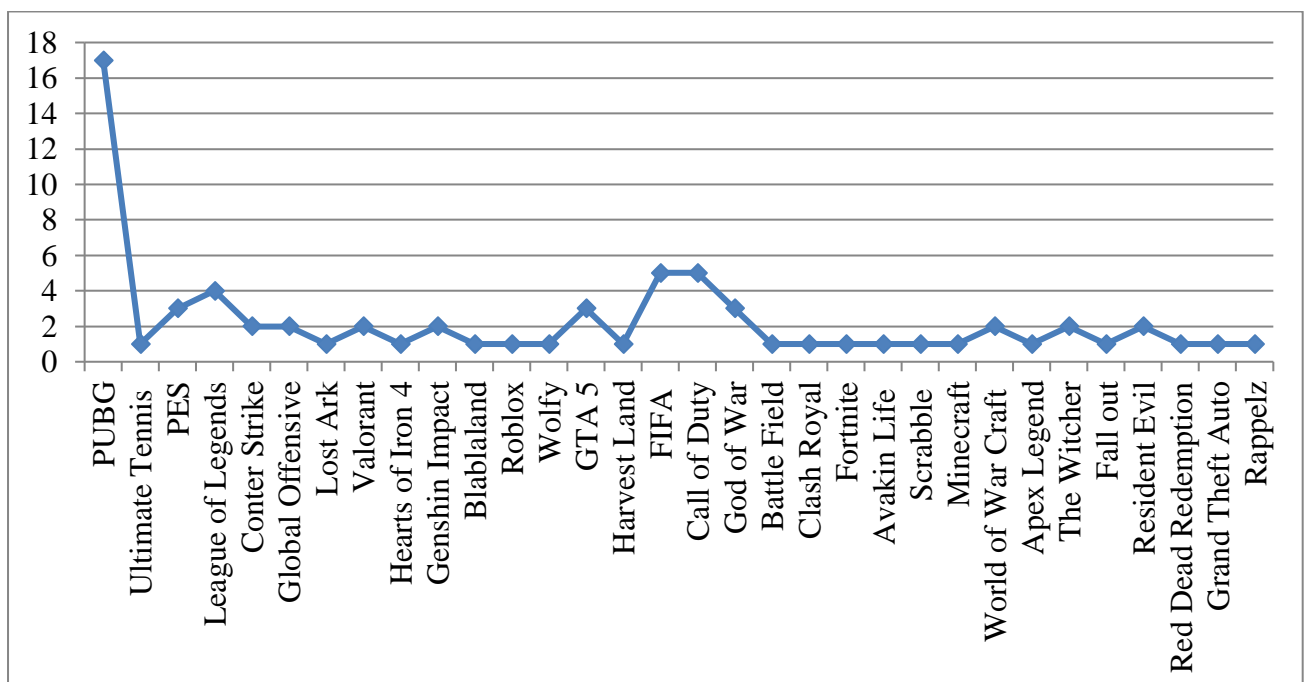
**Question 5:** Do you play online video games?**Figure13***Playing Online Video Games*

90. 32% of the respondents said that they play online video games; this means that 28 of them are playing online video games. However, three participants are not online gamers (9.68%).

**Question 6:** What games do you play?

**Figure 14**

*Online Video Games Played by the Sample.*

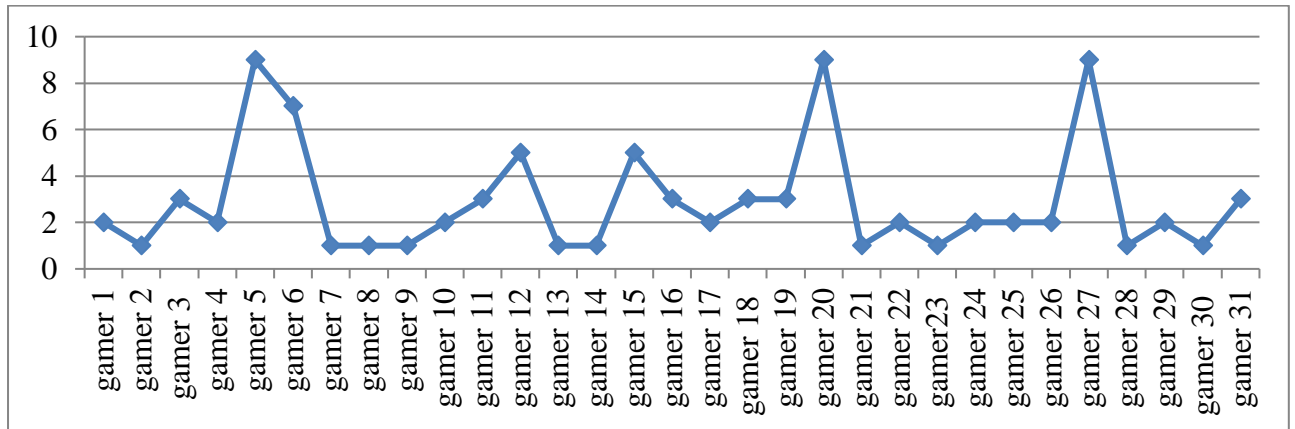


According to figure 14, we observe that *PlayerUnknown's BattleGrounds (PUBG)* is the most played game played by 17 gamers. *Call of Duty* and *FIFA* are classified as the second most played games (5 gamers for each game). The remaining games are played by one or two gamers. It is important to note that some participant-gamers play more than two games; one respondent wrote that he\ she plays nine games of different types for instance, War games, Role Playing games (RPG), etc as the following figure shows:



**Figure 15**

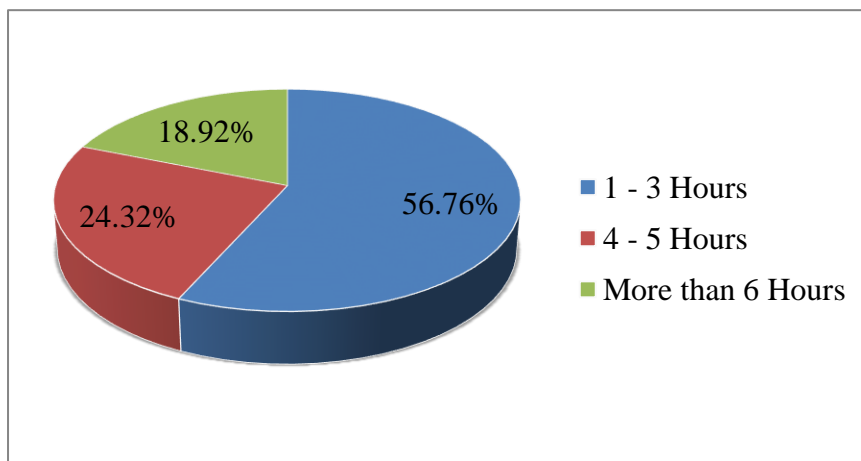
*Number of Games Played by Each Gamer.*



**Question 7:** How many hours do you spend in playing online video games a day?

**Figure 16**

*Hours Spent Playing Online Video Games.*

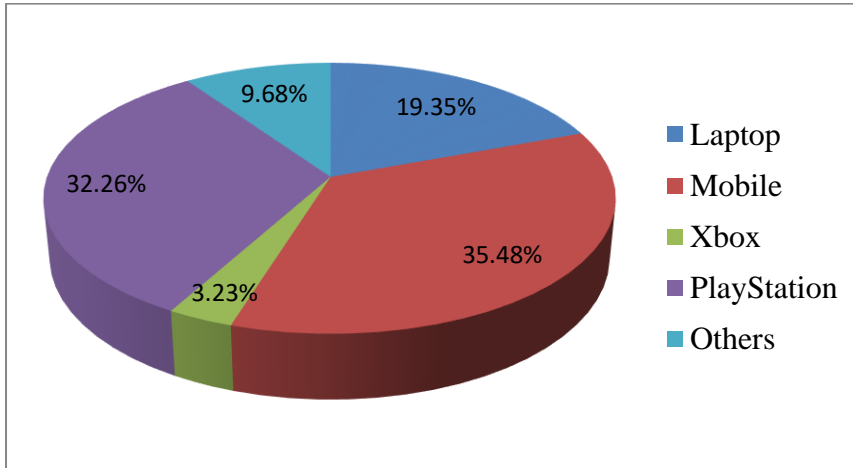


According to the data collected from figure 16, the majority of gamers (56.76%) spend one to three hours a day playing online video games. The others (24.32%) play four to five hours a day. Then, seven participants (19.92%) spend six or more hours a day.

**Question 8:** On which device do you play online video games?

**Figure 17**

*Devices Used to Play Online Video Games.*

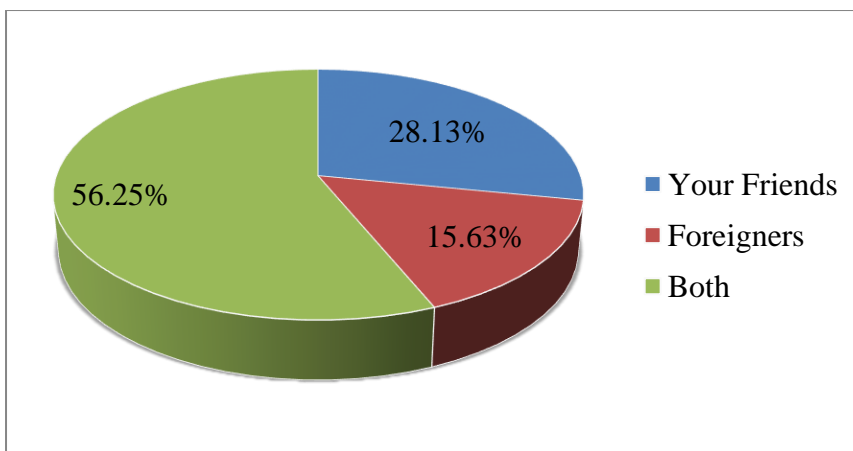


The majority of respondents are playing online video games using their mobiles (35.48%) and PlayStation (32.26%). The rest 19.35% are using laptop. Some other gamers are using other devices and only one participant is using the Xbox device.

**Question 9:** Do you play with your friends, foreigners, or both?

**Figure 18**

*Multiplayer Games.*



As the pie shows, 56. 25% of the participants are playing online video games with both their friends and foreigners. 28. 13% play only with their friends. The remaining ones play with foreigners. They represent 15. 63%.

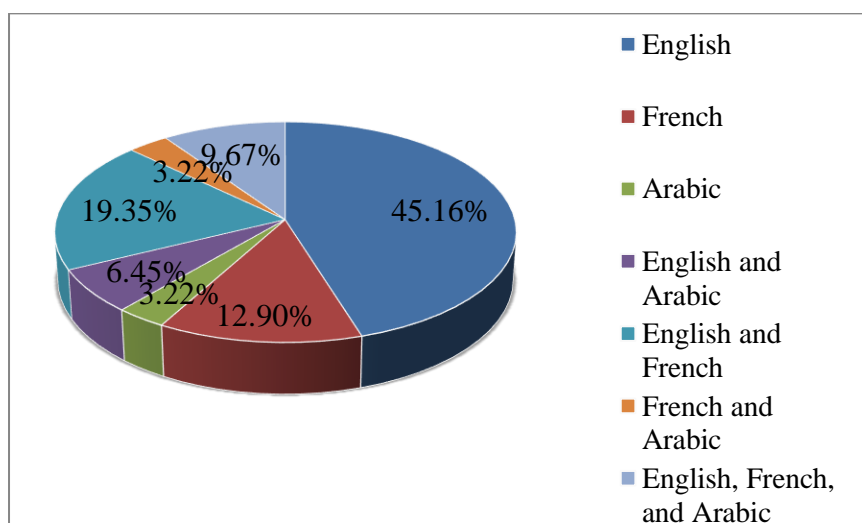
### Section Three: Playing Online Video Games and Language Mainly Vocabulary

#### Development

**Question 10:** In which language do you play online video games?

**Figure 19**

*Language Used While Playing Online Video Games.*



According to the figure, we observe that nearly half of the participants (45. 16%) are using English while playing online video games. 19. 35% of the gamers prefer playing in both English and French. Others are using three different languages: English, French and Arabic. They represent 9. 67%. However, only two gamers play in both French and Arabic (6. 45%). Finally, there are only two gamers who play in one language, one of them is using Arabic and the other is using French. It is important to highlight that 54. 3% of the gamers selected English as the language used while plying online video games as the following table shows:

**Table 01***Language Used by Gamers.*

	Responses	
	N	Percent
English	25	54,3%
French	14	30,4%
Arabic	7	15,2%
Total	46	100%

The table represents the languages used by the respondents while playing online video games. We notice that 25 gamers are using English. 30. 4% of the gamers are playing using the French language. The others (15. 2%) are playing online video Games in Arabic.

**Question 11:** If you play in English, what motivates you to play in this language?

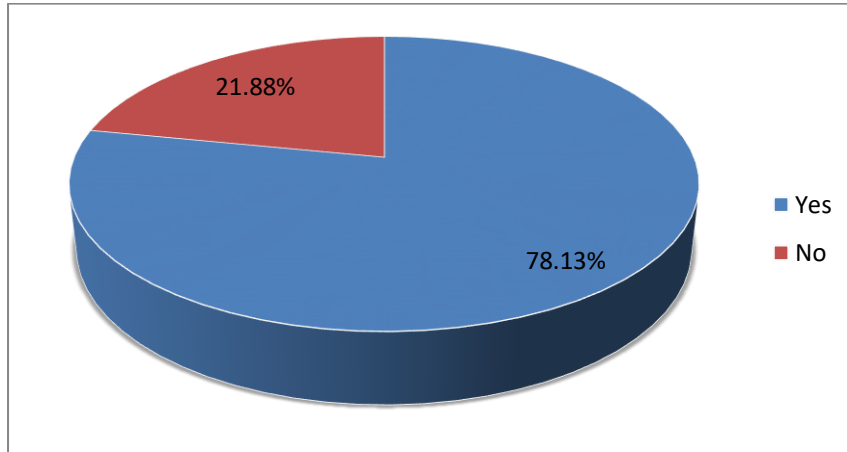
From the analysis of the gamers' answers to this question, we deduce that the respondents' motives for using English while playing online video games are multiple. These motivations are presented under two main types:

- Language Learning
- Cultural diversity

**Question 12:** do you think that online video games are beneficial?

**Figure 20**

*Gamers' Perception of the Benefits of Online Video Games.*



From the pie, we deduce that 78.13% of the gamers participated in this research believe that online video games are beneficial. In contrast to others (21.88%), they think that playing online video games does not have benefits.

**Question 13:** According to you, what are the benefits of online video games?

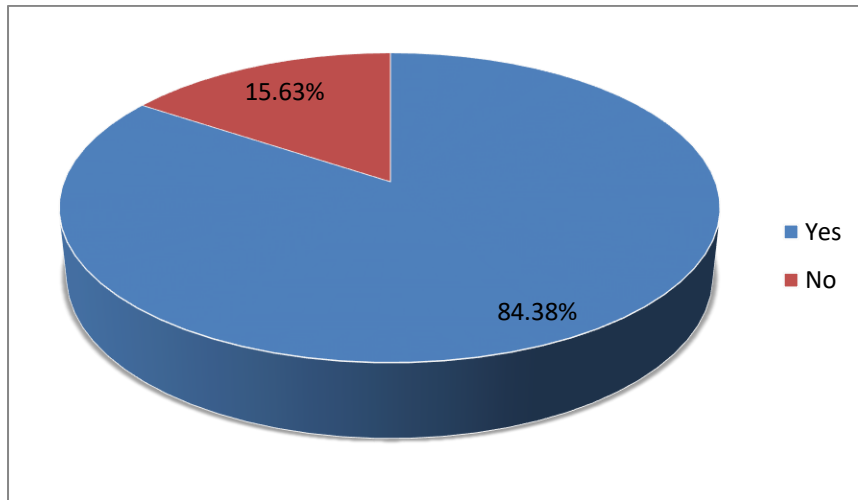
The benefits suggested by the gamers who took part in this study are presented under five benefits:

- Language learning
- Cultural exchange
- Cognitive skills
- Source of pleasure and incomes
- Beyond playing online video games.

**Question 14:** Do you learn English while playing online video games?

**Figure 21**

*Gamers' Perception of Learning English through Online Video Games.*

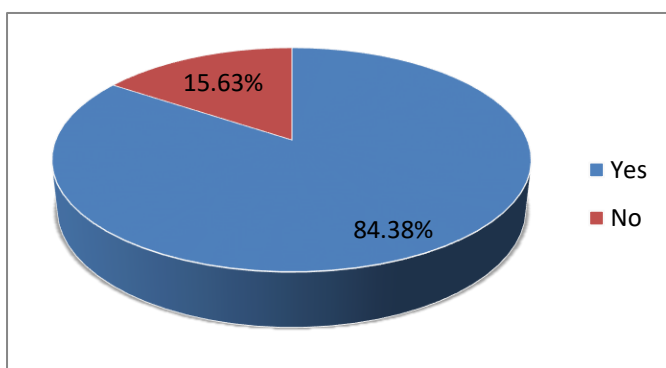


The majority of the respondents answered that they learn English while playing online video games; this category represents (84.38%). Whereas, 15.63% assume that they do not learn English via online video games.

**Question 15:** Have you noticed any progress in your English vocabulary since you started playing online video games?

**Figure 22**

*Gamers' Perception of Vocabulary Development.*

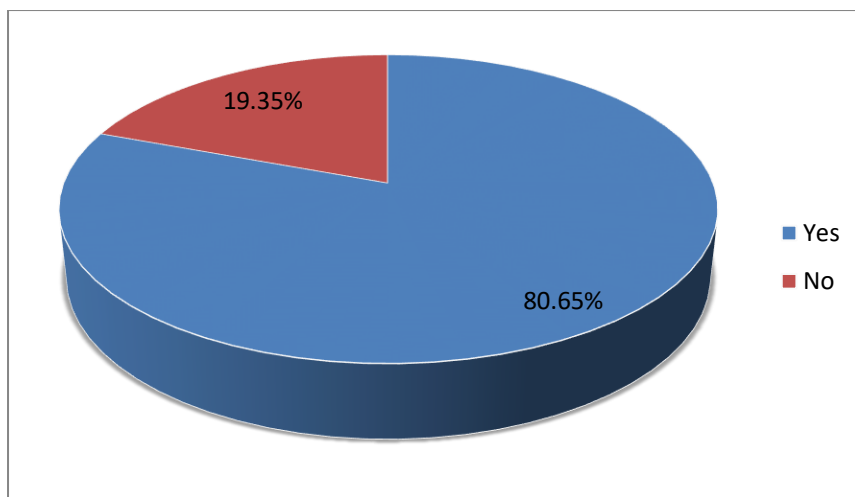


According to figure 22, we observe that 84.38% of the participants have noticed a progress in their English vocabulary repertoire since they started playing online video games. However, 15.63% have not noticed any progress.

**Question 16:** Do you use the vocabulary you have learnt while playing online video games at school or in other contexts?

**Figure 23**

*Use of Vocabulary Learnt in Online Video Games in other Contexts.*



80.65% of the respondents answered that they use the vocabulary items learnt while playing online video games in other contexts. The remaining 19.35% of the participants answered that they do not use the words learnt beyond online video games context.

**Question 17:** According to you, how do playing online video games develop vocabulary?

From the answers of the participants, vocabulary is developed according to the following headings:

- Exposure to language
  - Spoken language
  - Written language

## ➤ Listening

- Communication

**Section Four: Further Suggestions.**

**Question 18:** If you have any suggestions or comments about our topic, please feel free to add them in the following space.

In this question, gamers were asked to give their opinions and comments concerning this investigation. The comments suggested by the gamers are categorized under the following statements:

- It is important to play online video games moderately.
- The development of a language is not limited to vocabulary and grammar but it relies on four fundamental aspects: speaking, listening, writing and reading.
- Online video games can be an interesting tool to learn English outside the classroom.
- Single-player and non-online video games contribute in developing vocabulary.
- Online video games develop the language skills mainly speaking, listening and writing.
- Speaking skill and vocabulary are required while playing online video games with foreigners in order to succeed in the games' missions.
- Learning new words and expressions in their appropriate contexts.
- *PUBG* does not develop vocabulary in contrast to Harvest Land which contributes a lot in vocabulary enrichment.
- Not all foreign players are natives as a result not all of them use English correctly.
- Online video games helped gamers to distinguish between academic language and social language.



- People are not aware of the importance of playing online video games in learning language.
- Online video games facilitate vocabulary learning because gamers are constantly experiencing and acting actions and events of the games.

## **2. The Discussion of the Results**

The results revealed that the males (64. 52%) have more interest in playing online video games in contrast to females. Besides half of the sample (51. 61%) are young aged between twenty-one and twenty-five years old and the majority of this category is students. Pupils did not participate in this study because the pupils we have asked, before handing the questionnaire, were all playing online video games using only the Arabic version of the games. From the answers of the participants, some students and unemployed gamers are the ones who spend much time playing online video games (4 hours or more) in contrast to others. The age and gender of the participants were not limited because games are designed for both genders and for all ages. In fact, Ghaffour and Sarnou (2021) spoke about this matter saying that age and gender are factors that do not affect the results when speaking about online video games.

Most of the respondents are young and are aware of the negative side of playing online video games; most of them evoked the necessity to play these games moderately. According to Perterson (2021), psychologists and researchers of San Diego state university limited the safe gaming time for teenagers between one and two hours a day. Considering the time spent by the majority of the sample (1 – 3 hours a day), it seems to be reasonable and safe. Hence, the sample of this study does not cross the limits of danger.

Granic et al (2014) argue that though many psychologists believe that playing video games leads to addiction, violence, etc. However, the benefits of playing games are

increasingly important. These advantages resulted from the technological development as video games have become more complex, diverse, social, realistic, etc. After analyzing the data collected from the sample, 21.88% consider that online video games are not beneficial, yet 78.13% of the participants are aware of the benefits of playing online video games. According to those respondents, the advantages of playing online video games are multiple. First, the respondents highlighted the fact that playing online video games is the source of incomes for many gamers. According to Stegner (2021), there are multiple ways to gain money from playing online video games. Among them: streaming their game play either on YouTube or in Twitch and Discord platforms. In doing so, gamers who have larger audience get paid by the platforms; as they can monetize ads in their streaming (sponsorship). However, in Algeria it is not the same case. Making money through playing games is not that common due to different reasons. First, the unreliability of online money transfers. Adding to that, e-commerce is not yet fully adopted in Algeria (Tarik, 2020). Second, the gaming tools are expensive; indeed, the majority of our sample is playing using their phone (35.48%) and PlayStation (32.26%). These two materials especially some editions of PlayStations are available and less expensive in Algeria in contrast to Xbox and gaming laptops though allowing many extra advantages, they are very expensive; some gaming furniture reaches 45 million dinars (Gaming Equipment, 2022).

Most of the participants evoked the fact that online video games enhance the gamers' cognitive skills for instance, multitasking, decision making, problem solving, attention, and focus. While playing online video games, a gamer spends much cognitive effort in order to win the game and level up. These efforts cause some changes in the players' brain by developing their attention, coordination skills, etc (ANI, 2020). Coordination skills refer to, "the coordination of the different muscle groups depending on what our senses perceive" (Coordination, 2017, para. 8).

Another benefit is that playing games improves communication and socialization. In order to win in the game, communicating with other players while playing in groups or pairs is required (Vidlund, 2013). When chatting and playing with other co-players, gamers enhance their social skills, interaction and communication in addition to language since they chat using English (as appendices C shows it). Some gamers said that online video games give them the opportunity to make new friendships with foreigners with whom they share similar interests and goals. Gamers tend to chat with their co-players and share their experiences, information and ideas concerning gaming and other fields. In a nutshell, playing online video games develop the social skills by making new friends from the same community. As a result, these new relationships permits the exchange of cultures.

As Shliakhovchuk (2019) claimed:

Video games have the potential to reinforce or weaken stereotypes; help to acquire cultural knowledge and develop intercultural literacy, and socio-cultural literacy, cultural awareness, self-awareness, and the cultural understanding of different geopolitical spaces; and to some extent also facilitate the development of intercultural skills (p. 175).

Speaking of culture, some online video games, especially historical games, narrate real events and facts of nations for instance: Assassin's Creed game is based on the history of the American Revolution, crusades, etc (Scheinman, 2021).

Language development is a benefit that was evoked by almost all participants. Based on the responses, playing online video games enhances language learning mainly speaking, listening, writing and vocabulary. First, the speaking skill is developed while interacting with other gamers using the English language. Second, listening is enhanced, according to a participant, through "*the dialogue that takes place between the characters of the game*".

Lastly, Vocabulary was mentioned by most of the participants. According to them, playing online video games has a great impact on vocabulary development. Experts agree that one hour a day is enough to progress in learning a new language (Lufkin, 2019). According to Rudis and Postic (2017), online video games play a big role in developing the English language. Therefore, considering the number of hours spent by the participants playing online video games (see figure16, p. 44) the experts' belief and the findings of the aforementioned study of Rudis and Posstic, we deduce that the language of gamers might be developed.

The following suggestions are the benefits of online video games provided by the respondents:

- **Language learning**
  - Vocabulary development,
  - Improving speaking, and listening.
- **Cultural exchange and history**
  - Cultural exchange.
  - Speaking with foreigners and professional gamers in gaming forums for instance Twitch and Discord.
  - Socialize, develop communication, and interaction especially during COVID-19.
  - Knowing the history of nations and countries.
- **Source of pleasure and incomes**
  - Pleasure and fun.
  - Source of incomes.
- **Enhance gamers' cognitive skills**

- problem solving, decision making, attention, concentration, and coordination skills.
- **Beyond playing online video games**
  - Learning secrets of gaming through watching others playing online video game (streaming).

According to the gamers, these are the benefits of online video games:

- **Language learning**
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  - Improving speaking, and listening.
- **Cultural exchange and history**
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  - Speaking with foreigners and professional gamers in gaming forums for instance Twitch and Discord.
  - Socialize, develop communication, and interaction especially during COVID-19.
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  - Pleasure and fun.
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- **Enhance gamers' cognitive skills**
  - problem solving, decision making, attention, concentration, and coordination skills.
- **Beyond playing online video games**

- Learning secrets of gaming through watching others playing online video game (streaming).

The participants who took part in this investigation are all playing games; among them, very few are not playing online video games. This category suggested that even playing non-online video games and one single player games develop the gamers' English language; though these games do not afford the chance for communication and interaction. The ones who are playing online video games (84. 38%) confirmed that they learn English while playing. According to table 1 (p. 47), we deduce that 54, 3% are using English while playing online video games. Yet, it is important to shed light on the fact that gamers are playing using three different languages: English, French and Arabic; as figure 19 (p. 46) shows it. From the analysis of the questionnaire, we observed that gamers who play with both foreigners and their friends (56. 23%) use more English than French or Arabic. Whereas 28. 13% of the participants play only with foreigners. This category uses mostly English and French. Others who play with only their friends use English, French, and Arabic interchangeably.

As mentioned before, 54, 3% of the gamers who took part in this investigation use English while playing online video games; this is related to different motives. According to the participants, they use this language for the sake of learning it (development of; vocabulary, listening, communication, pronunciation and speaking). They consider online video games as a positive environment in which they can use English communicatively and freely. Indeed, according to Derbouche (2016), online video games are regarded as a positive atmosphere which allows the language learning and acquisition. Furthermore, some players prefer to use English because for them it is the easiest language besides, it is an international language. Adding to that, English is the language used by most gamers in the world; as one of the respondents said, *"Most of gamers play in English because it's generally the language that any co-player can understand"*. Thus, this language allows them to be part of a larger

community of gamers especially in famous platforms such as Discord, Twitch and YouTube. When gamers engage in these platforms, they follow some professional gamers and influencers around the world from whom they learn tips and ways to succeed in the games. For instance, YouTube channels like: *“I Win to Lose Gaming”*, *“Enviosity”*, *“Tectone”*, etc. these professional gamers host episodes of gaming that are in English. Gamers watching such videos are not only developing gaming skills but at the same time learning the involved language unconsciously. This language development can be related to watching YouTube videos; noting that YouTube videos are proved to be an efficient tool to use in foreign language classrooms (Sahrir & Yusri, 2012). Among the respondents’ answers concerning their motives for playing in English:

- **Language learning:**

- Playing online video games in English is cool and realistic.
- It provides a large context to use English communicatively.
- English is the easiest and best language.
- Vocabulary enrichment.
- English is the international language.
- English is the lingua franca of most gamers.
- Learn the English language.
- The original version of games is in English.
- Most of gaming terms are in English.

- **Cultural diversity:**

- To be part of a large gaming community.
- Cultural exchange.

Many participants stated that English is the easiest and it is their preferred language, that is why they play in this language. Moreover, playing in the original version of the games is more realistic, cool and rich. As one of the respondents said, “*when I play with English version i feel that the game i play is more realistic than other language (...) i feel that commentators gives the best when they are dubbing games or give voices to that game more than any other language*”. To clarify this point of view, the participant was asked more questions about this matter. According to him, it means that a game designed for example in French language, much efforts are done while translating it to English; first, to make the game more realistic. The second reason is that English is the language used by most gamers.

Some participants shed light on the development of their communication skill. This is due to the possibility to speak with foreigners while playing online video games, either through written messages (see appendices C) or orally. Furthermore, the majority of the participants answered that playing online video games motivates them to learn English. A respondent argued that “*the authenticity of the dialogues*” is his motivation towards playing online video games; speaking of authenticity, appendices B is an example of the language used in an online video game (main character of *Genshin Impact* game narrating events). According to Mishan (2005), authenticity has to be the basis of language teaching and learning. Others directed their motivation towards vocabulary. A participant said that he plays in English because it helps him to enrich his vocabulary repertoire. Another respondent argued that “*sole words make more sens in game*”. Finally, playing online video games push gamers to open up to the world and be part of a larger community. As a result, they are constantly exchanging their cultures, knowledge, etc with their foreign friends.

Many studies, among them Prensky’s (2001), argued that playing online video games enrich and develop the vocabulary repertoire of the gamers. In fact, after questioning the sample, 84.38% answered that they have noticed a progress in their vocabulary since the day



they started playing. This development is linked, according to the respondents, to different reasons. First, gamers are constantly speaking with other players and making new friendships thus, gamers are always learning new words from each other. a participant argued that he\ she learns many new words and expressions while speaking with foreigners. It is important to consider the fact that not all foreigners are natives; consequently, not all gamers are speaking English fluently and accurately. They make mistakes and learn from each other; about this matter, a gamer said that *“I speak without the guilt of making mistakes”*. It is important to note that fear from negative feedback while making mistakes is detrimental (Dastpak & Sadighi, 2017). Second, according to the participants, online video games narrate and describe stories, events, etc using the written form. As a result, gamers are learning the spelling of words that is an important aspect of vocabulary knowledge as figure 1 (p. 21) shows it. Moreover, the written instructions, chats, etc, according to the respondents, they help grasping new vocabulary items and common expressions in their appropriate context. Furthermore, there are discussions between characters of the games indeed, a participant argued about this fact, *“you’ll see different words\expressions that push you to translate them”*. It is important to mention that while playing online video games, gamers are introduced to words that are most of the time accompanied with their definitions, images; furthermore, gamers are constantly acting and performing the actions, this process has a great impact on retrieving new words; as in figure 2 and 3 (p. 31). Another participant said that there are some word games that reinforce their memory; as a result, these games help to recall and learn words, definitions, and their spelling. when gamers are listening to or reading the language provided in the games for instance storytelling, dialogues between the characters of the games, instructions, chats, etc; their brains grasp many new words. A respondent argues that *“it lets your catch new words easily”*. Furthermore, English is the lingua franca of most gamers as a result being exposed to a community that uses English, the vocabulary will be developed

quickly. Adding to that, the participants highlighted that they learned some common expressions and specific registers related to gaming besides, recalling words and phrases they already know. It is worth mentioning that 80.65% of the gamers who participated in the study use the vocabulary learnt productively in other contexts other than the gaming environment. This demonstrates that each game provides specific vocabulary related to its theme for instance the jargon of *FIFA* is completely related to sport meanwhile *God of War*'s jargon is about wars and history as Vidlund said, "The vocabularies the players of these games are exposed to can be argued to differ depending on the game" (2013, p.23). It can be considered that the vocabulary of games is limited to its context; however, gamers are playing more than one game of different types; most of the gamers who participated in this investigation play multiple games at the same time (see figure 15, p. 44). Therefore, they develop a variety of vocabularies related to different fields. *PUBG* is the most played game among the sample. Though a respondent argued that *PUBG* did not contribute a lot in developing his\ her vocabulary since most gamers with whom he\ she plays with are not native speakers, the majority of gamers are playing other games besides *PUBG*, so their vocabulary might be enhanced by other games. The latter, added that playing online video games helps to make the difference between academic and social language. Online video games consist of corpus (the games' script) in addition to the language used by gamers while interacting with each other (*Video Game Corpus of Speech and Text* –, 2019). This body language, according to Da Silva (2014), offers the opportunity for the gamers to learn informal English. These are the answers provided by the respondents:

- **Exposure to language**
  - Spoken language
    - Speaking with foreign gamers.
  - Written language

- games' instructions, written chats between gamers.
- Listening
  - Listening to English provided in the game: dialogue between the games' characters, story of the games, etc.
- **Communication**
  - English is the lingua franca of gamers
  - Learn common expressions, recalling words and developing a gaming register.

After all, playing online video games is a leisure that provides a huge amount of pleasure and fun (Linden, 2010). The participants argued that playing online video games helps to adjust their mood and socialize with others especially during the COVID-19 pandemic. Nowadays playing online video games should be considered as an electronic sport because gamers make much effort while playing; moreover, there are multiple online video games competitions (Kane & Spradley, 2017). Examples of these tournaments are: *Call of Duty*, *League of Legends*, etc. Therefore, this popularity led to a gaming jargon created by the gamers (Hanney, 2016). A respondent gave some examples on this matter, *a bad player is called "Noob" whereas a good player is called "Pro"*. Gamers also use some abbreviations such as: GG (good game), GL (good luck), etc.

## **Conclusion**

To conclude, the two previous sections dealt with the interpretation of the data collected from the questionnaire and it discussed the findings of the undertaken investigation. The next section will deal with the implications and suggestions for further researches.

### **Section Three: Recommendations, Limitations and Suggestions for Further Researches**

This section provides to the readers the implications, limitations of the research under investigation in addition to some suggestions for further researches.

#### **1. Recommendations**

Since the creation of online video games, children, teenagers and adults are spending much of their time playing. This amount of time spent playing has aroused worries among researchers on the negative impact of online video games that is why people ignore the opportunities that these games suggest (Griffiths et al, 2012). This current study focused on one among many positive aspects of playing games which is vocabulary development. The results of this study might change people as well as teachers' perspective about playing online video games; that is why it is important to set some implications.

Watching videos and songs on some platforms hypnotize and hinder the children's brain functions (Capronner, 2018). This habit could be replaced by playing online video games. They would develop the children's vocabulary in addition to some language skills, cognitive and coordination skills. There are many video games designed specifically for children that aim to develop vocabulary at the same time enhance their intelligence, reflection, etc for example: "*coloring and learning*". Yet it is compulsory to follow the time restrictions that say no screens before 3 years old and maximum of one hour a day (Montessori, 2021).

Second, it is necessary to raise players' awareness on the contributions of playing online video games. In doing so, gamers would use this leisure wisely and intelligently. Playing online video games will no more be a way of spending time and having fun but it would become a means for enhancing players' foreign languages and more importantly enriching their vocabulary; furthermore, improving the gamers' social cognitive skills that are important in real life. People might also change their views concerning playing online video

games consequently; they may even encourage the use of online video games creatively in different fields and why not develop new online video games that might be more beneficial, informative and instructive.

Finally, the main concern of this investigation is to find the effectiveness of playing online video games in developing gamers' English vocabulary. On the light of teaching and learning English as a foreign language, teachers and researchers are constantly looking for innovative techniques and tools to engage and motivate learners and facilitate the process of teaching and learning. Online video games can be an effective tool that could be used outside schools to complement what have been done in classrooms. It is important to mention that online video games consist of necessary elements that lead to learning: body language, interaction, motivations (Klimova & Kacet, 2017). Therefore, teachers could use gaming to answer to the shortcomings of a classroom environment such as anxiety, fear from negative feedback... etc.

Online video games could be used differently due to the unlimited kinds and genres of games. Shedding light on vocabulary, there are some online video games that teach vocabulary indirectly such as *Hidden Objects* games. Such games could be used outside classrooms in order to develop the foreign language learners' vocabulary repertoire, especially for beginners. Teachers could select a game that is related to the same theme of a lesson and advise the learners to play it; as they could organize some quizzes after playing that game in order to encourage and engage the learners. Consequently, vocabulary would be enhanced and teachers might optimize some time during the sessions. We could provide a more concrete example. In a second year middle school English subject, the second sequence is entitled, "Me and My Shopping"; in this sequence, learners are taught names of vegetables, fruits, foods, etc. to facilitate the retention of this particular vocabulary, teachers could advise

the learners to play the games “*Guess The Name: Foods*” which can be downloaded on both PlayStore for Android and AppStore for IOS devices for free.

Based on the finding, playing online video games could be classified as a means for learning not only vocabulary but also for developing communication, speaking, listening and writing skills depending on the type of games. Accordingly, teachers could use them creatively in different subjects to help and facilitate foreign language learning in an ideal, educative and fun context.

## **2. Limitations of the Study**

This research investigates the development of the English vocabulary among gamers of Bejaia who use the English language for the online video games, and as their lingua franca while gaming. Some limitations must be highlighted. The study was challenging. Trying to reach out our sample was somehow hard because some of the gamers were not cooperative and did not answer the questions with complete honesty.

Furthermore, the great problem was to find appropriate sources and references that would contribute to our research since online video games in relation to English learning is not well studied in Algeria. Another issue that we have faced is that the majority of gamers do not play in English and have little background knowledge about English hence they prefer to play in Arabic and Kabyle especially pupils.

Finally, gaming furniture are expensive for this reason Algerian gamers generally use simple smart phones that do not support the games as a result many bugs happen while playing. Therefore, many gamers abandon playing online video games. So the challenge was to find regular players in order to achieve reliable data.

### 3. Suggestions for Further Researches

The current research paper investigated an important matter in the era of technology. The positive impact of online video games on developing the English language vocabulary was highlighted in many researches all over the world. However, further research could be conducted on the influence of online video games in many other areas.

The amount of time gamers spend to chat with their friends especially with the foreign ones could improve the development of both the writing and listening skills (Rudis & Postic, 2017), hence research could illustrate the extent of such development. When gamers chat regularly or listen to the storytelling while gaming they adapt to the language easily and get to understand it without adding subtitles.

Besides the writing and listening skills, a research could be done on how playing online video games might develop the communication, social and speaking skills when players engage in interaction with each other. When gamers use the English language productively while speaking, they unconsciously develop their English fluency and learn to distinguish between accents and dialects (Ghaffour & Sarnou, 2021).

This research paper also suggests the study of the integration of online video games in the classroom. It would be beneficial to make a study on how online video games contribute in developing cultural knowledge and learning about history (mainly in the modules of literature and civilization) through playing war and historical games for example: *Assassin's Creed* series. Jikic (2022) assumes that playing online video games can be a way to introduce the learners to history because it provides the gamers with a detailed, attractive and a new way to dive into the historical events.

Overall, there are varieties of research themes that could be derived about playing online video games that might go beyond language learning including mental and

psychological themes like mood adjustments, coordination, and concentration (Granic, 2021). The more researches are conducted the more the advantages of online video games are promoted. In this sense, people's prejudice about online video games would change to the best.

### **Conclusion**

To conclude, online video games are perceived by the sample to develop their English vocabulary alongside with other skills, language, cognitive and coordination skills. This chapter was dedicated to the practical part of the undertaken investigation. First, it described the research methodology and design. Second, it analysed and discussed the data obtained from the questionnaire given to the participants. Third, the last section provided some implications, limitations and suggestions for further researches.





## General Conclusion

The English language is obviously the lingua franca of many people nowadays; this makes it the language used in almost all games and gamers considering the success of the industry of the English language speaking countries like the USA and the UK. Those countries contributed in spreading the cultural knowledge and breaking language boundaries with other non-speaking English people. This success has made people more interested in learning the English. Though online video games have always been under a negative highlight considering its drawbacks (Srinivas, 2021), gaming has a direct impact on the English language comprehension. A study published in CALICO journal found that young gamers who played in the English language has scored higher on English vocabulary tests than their peers who did not (Struck, 2020)

Our study investigated the relationship between playing online video games with the secret of the development of the English language of gamers, and vocabulary in particular. The aim has been to discover whether online video games contribute in the enrichment of the vocabulary of gamers who play the games with the English language. The population of this research involved the gamers of online video games meanwhile our sample is limited to the gamers of Bejaia City. This investigation opted for a mixed method by distributing an online questionnaire and thirty-one participants have answered, additionally, screenshots of the online video game that is played by most of the sample participating in this investigation (PUBG) were described.

Furthermore, this dissertation is divided into the theoretical background of our study which contains two sections, one is dedicated to games and online video games and the other one is dedicated to vocabulary knowledge. The second chapter contains the practical or the methodological part of the work in which we presented the interpretation, the analysis and the

discussion of the results obtained from the questionnaire. In addition to the implications, limitations and suggestions for further researches.

The study's research questions involved, w 1) what are the most played online video games by the Bejaia City's gamers? 2) Does playing online video games develop gamers' vocabulary? 3) Does the English language acquired by gamers serve them in other contexts other than games? 4) Which type of vocabulary online video games do gamers develop? 5) Do online video games have other benefits than language learning?

Therefore, the findings obtained showed that there is indeed an enhancement of the English vocabulary of the online video gamers who participated in this study. The results of the questionnaire have answered the questions of the study, it showed that the Algerian young play action and war games most of the time. In addition, the findings reveal that the gamers actually use the vocabulary they have learned during gaming outside the gaming context that helps them inside the classroom. Moreover, it showed that gamers are exposed to a limited vocabulary specialised for a certain type of game for example action war games are related to military and guns meanwhile historical games teach culture and civilizations. Even though each game has its own vocabulary, gamers do not play only one genre of games but vary from one to another which helps them to learn varieties of vocabulary. Finally, in the analysis of the data, the participants answered that online video games are beneficial and that they are aware of the bad effects of online video games hence, they know how to manage their time. All the aforementioned findings have confirmed our assumptions and have answered all our research questions.

Overall, this dissertation goes hand in hand with several studies (Derbouche 2016, Prensky 2001, Alshaiji 2015) on the development of the English language vocabulary through playing online video games. Camacho and Ovalle (2019) claim that online video games have

become popular and a new trend for purposes of pleasure; however, they are becoming a medium in the educational field; in other words, video gaming has become an alternative to learn. They also claimed that video gaming has captivated a new public and people become more interested in the gaming industry because of their complexity and diversity and that video games have become an important part in people's lives and that they are spending more time on games than they used to do in the past. Derakhshan and Khatir (2015) also argued that one of the difficult parts of learning a target language for English language learners is the acquisition of vocabulary. Using online video games such as educational games for teaching vocabulary has been very popular for several decades.

Kayaaltı (2018) assumed:

A teacher should do everything to teach the students in a way they like. Online games are one of the way students like. In the last years, there is a pop in online games. Therefore, teachers can combine online games and language learning in classrooms” (p. 313).

This means that it would be better to promote the integration of playing online video games inside the classroom.

Accordingly, since this study focuses only on the development of vocabulary of online video gamers, it would be interesting for further experimental investigations to be conducted. Online video games are a vast subject matter and an interesting one that can be linked to learning; so, we suggest further research on this matter to promote the positive side of gaming.

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## Appendices

### Appendices A

#### Questionnaire

This research is investigating the development of English vocabulary among Algerian gamers in Bejaia City. We assure you that your answers are going to be anonymous. We kindly request you to be honest and cooperate with us. We truly thank you in advance for your collaboration

Please put a tick ✓ in the box next to the answer of your choice or write in the space provided

**1. What is your gender?**

Female  Male

**2. What is your age?**

16- 20  21- 25  + 26

**3. Are you a pupil, a student, an employee or unemployed?**

Pupil  Student  Employee  Unemployed

**4. Do you play games?**

Yes  No

**5. Do you play online video games?**

Yes  No

**6. If yes, what games do you play?**

.....  
.....

**7. How many hours do you spend in playing online video game a day?**

1-3 hours  4- 5 hours  + 6 hours

**8. On which device do you play online video games?**

Laptop  Mobile  Xbox  PlayStation  others

**9. Do you play with**

Your friends  Foreigners  Both

**10. In which language do you play those games?**

English  French  Arabic

**11. If you play in English, what motivates you to play in this language?**

.....  
.....  
.....

**12. Do you think that online video games are beneficial?**

Yes  No

**13. According to you what are their benefits?**

.....  
.....  
.....

**14. Do you learn English while playing online video games?**

Yes  No

**15. Have you noticed any progress in your English vocabulary since you started playing online video games?**

Yes  No

**16. Do you use the vocabulary you have learnt while playing online video games at school or in other contexts?**

Yes  No

**17. According to you, how do playing online video games develop vocabulary?**

.....  
.....  
.....

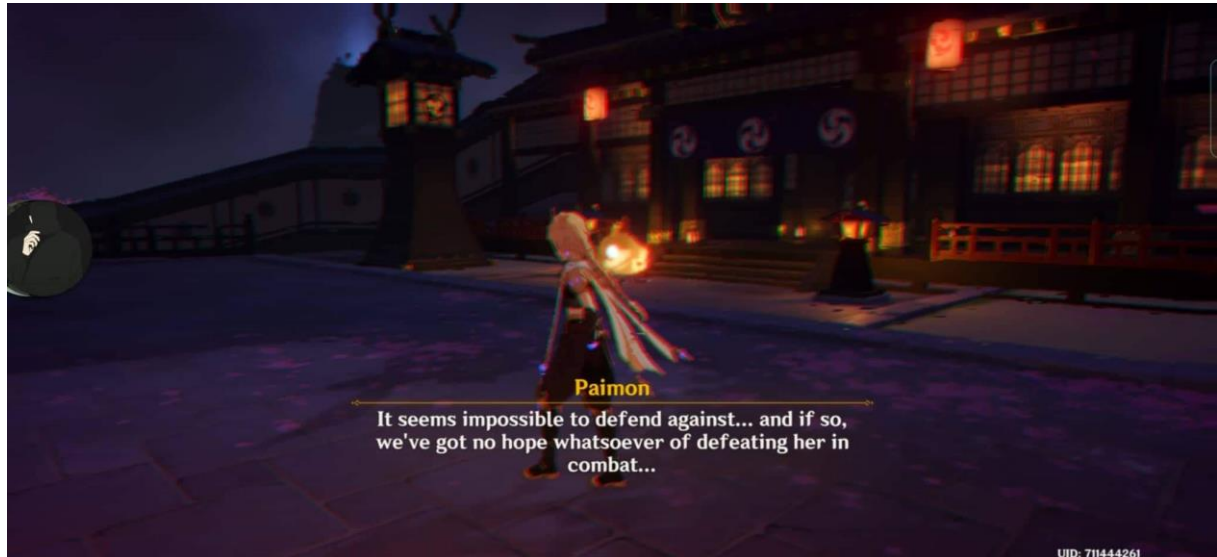
**18. If you have any suggestions or comments about our topic, please feel free to add them in the space below: in any language you want.**

.....  
.....  
.....  
.....  
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.....

Thank you for your collaboration

## Appendices B

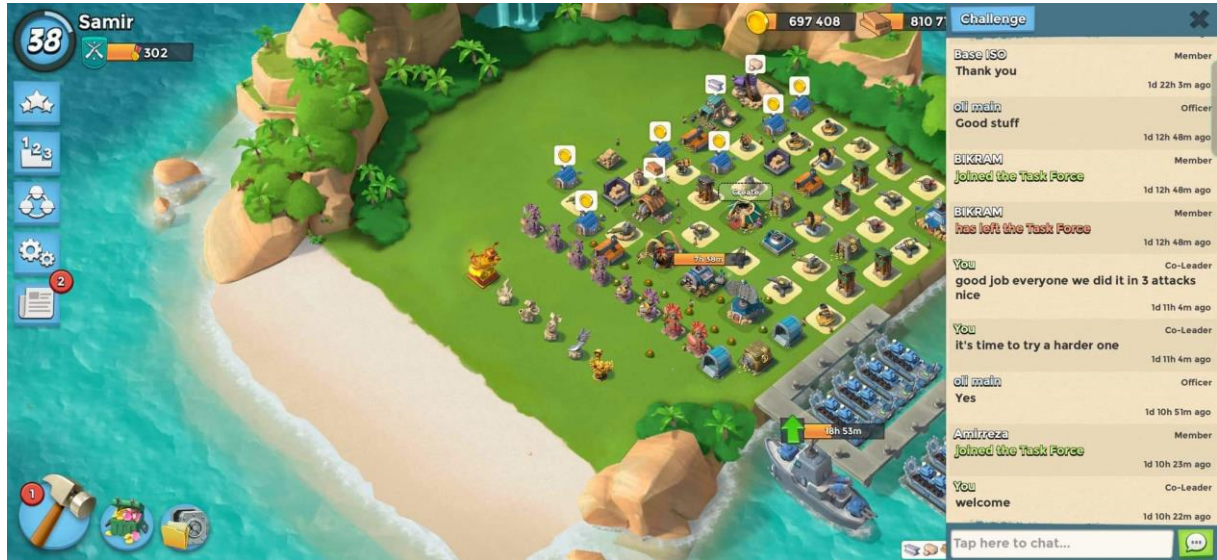
Extracted from (Genshin Impact, 2020)



The above figure is a screenshot taken from *Genshin Impact* game. It demonstrates the main character of the game Paimon narrating an event using simple and plain English language.

## Appendices C

Extracted from (Boom Beach, 2014).



The above screenshot focuses on the discussion between the gamers after completing a game's mission. From the box chat, we deduce that gamers (Algerians and foreigners) are chatting, supporting and thanking each other for their teamwork and success using the English language.

## Résumé

Le vocabulaire est un élément fondamental dans l'enseignement et l'apprentissage d'une langue étrangère. Cette étude enquête sur la perception des joueurs vis-à-vis du développement de leur vocabulaire Anglais. Elle se base essentiellement sur ceux qui jouent en utilisant la langue anglaise. L'objectif principal est de démontrer le rôle des jeux vidéos en ligne dans le développement du vocabulaire des participants et la manière de ce développement s'il y'a lieu. Afin de collecter les informations nécessaires à notre recherche, la méthode mixte a été adoptée. Un questionnaire en ligne a été distribué aux joueurs des jeux vidéos en ligne. Les résultats ont montré que jouer aux jeux vidéo en ligne contribuent à l'enrichissement du vocabulaire ; et ce, durant les moments chats et discussions avec les autres joueurs (avec leurs amis (e) ou étrangers), etc. Les résultats ont aussi révélé que les jeux vidéo online impactent positivement les compétences linguistiques principalement L'oral et l'écoute ; en plus des compétences cognitives et de coordination. De ce fait, il est important de reconsidérer les effets dit néfastes des jeux vidéo en ligne en les adoptant comme outil d'apprentissage complémentaire.

**Mots clés :** jeux vidéo en ligne, apprentissage du vocabulaire, joueurs de Bejaia, anglais langue étrangère.



## ملخص

تشكل المفردات تحديا في تعليم وتعلم لغة أجنبية. لان المفردات مهمة، هذه الدراسة الحالية تحقق في تصور لاعبي بجاية لتطور مفرداتهم الإنجليزية. وهذا يعتمد بشكل خاص على اللاعبين الذين يلعبون باستخدام اللغة الإنجليزية. الهدف الرئيسي هو إظهار دور الألعاب الالكترونية عبر الانترنت في إثراء مفردات المشتركين وكيف، إن كان هنالك. لقد تم اختيار أسلوب مختلط من اجل جمع معلومات ذو صلة بهذا الموضوع تم توزيع استبيان على لاعبي الألعاب الإلكترونية عبر الانترنت. النتائج تبين إن تشغيل الألعاب الالكترونية عبر الانترنت قد ساهم في إثراء مفردات اللاعبين من خلال الكلام والردشة مع اللاعبين الآخرين، القصص (مع اصدقائهم او اللاعبين الأجانب) إلى أخره. النتائج قد بينت أيضا ان للألعاب الالكترونية عبر الانترنت تأثيرا إيجابيا على المهارات اللغوية خاصة مهارات الكلام والسمع بالإضافة إلى مهارات التنسيق والمهارات المعرفية. لذلك من المهم إعادة النظر في التأثير الضار المزعوم للعب، لأن الألعاب الالكترونية عبر الانترنت يمكن اعتبارها كأداة مكملة لتعلم لغة أجنبية.

**الكلمات المفتاحية:** الألعاب الإلكترونية عبر الانترنت، تعلم المفردات، لاعبي ولاية بجاية، اللغة الإنجليزية كلغة اجنبية

## Agzul

Tamawalt d aferdis agejdan deg uselmed d ulmad n tutlayt taberranit. Tazrawt-a tettnadi yef tneflit (annerni) n tmawalt n tegnizit n yimuraren n temdint n Bgayet. Tefka azal i yimuraren yessemrasen tutlayt tagnizit. Iswi agejdan d askan n temlilt n wuraren n tbdyutin yellan deg uzetta deg userni n tmawalt n wid yetturaren, d wamek i d-yettili userni ticki i d-yella. Akken ad d-negmer isallen i iwulmen i unadi-nney, nessemres tarrayt tasemsayt. Nefreq asastan s ttawil n uzetta i yimuraren i d-yettufernen seg tazwara. Igmaḍ seknen-d dakken urar n wuraren n tbdyutin deg uzetta yetteawan deg userni n tmawalt, aya yettili-d deg lawan n umbadal n tmeslayt gar yimuraren... Igmaḍ-a seknen-d dayan dakken uraren n tbdyutin yellan deg uzetta ttawin-d ayen yelhan i tzemmar tisnilsanin, abeḍda timawt akked tmesliwt, i d-yernan i tzemmar n tedmi (axemmem) akked tyuni (amsefham gar wid yetturaren, wid yettmeslayen). Ilmend n waya, ilaq dayan ad yettunef wazal i wayen n dir s i zemren ad d-glun wuraren n tbdyutin yella deg uzetta akken ad ten-nessemres d ttawil n ulmad ara d-yernun sufalla.

**Awalen igejdanen:** uraren n tbdyutin n uzetta, almad n tmawalt, imuraren n Bgayet, tagnizit tutlayt taberranit.