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GAMING IN THE EYES OF PORTUGUESE SOCIETY: AN EXPLORATORY STUDY

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Abstract

Every day we see new technologies appearing and taking their place in society, with countless possibilities of using technology, whether as support for professional or leisure activities. Gaming is one of those possibilities, at the leisure level, in which we can enter a completely virtual world, "diving" into a video game and abstracting ourselves from the real world that surrounds us. Although this activity is of great adherence, there are divergent opinions regarding the consequences that may result from it and the purposes this activity can serve - such as the example of using gaming in teaching. An exploratory study was conducted through individual interviews with 6 individuals, aged between 20 and 52 years old, and with different, if any, contact with this activity. This study aims, in particular, to understand the perspective of Portuguese adults regarding gaming and what potential they associate to gaming activities as possible teaching tools. The data obtained from the interviews was analysed using online content analysis software - the Leximancer platform. Concepts such as impacts on gaming, gaming on teaching and attitudes towards life merged out of this analysis. Participants consider that gaming is not just a useful way for fun and relaxation, but also a good stimulus and facilitator for learning. Although they consider that there are some negative points in gaming, such as increased aggression by those who play more violent games, or even a possibility of practice becoming addictive, they tend to have a positive opinion on gaming if used with limits. The items and concepts considered were also used to develop a questionnaire, answered by a population of Portuguese adults, in a subsequent study.

Keywords: Gaming, videogames, society, gaming in teaching.

1 INTRODUCTION

In the "digital age", as the 21st century is also referred to [3], we see new technologies appearing and taking their place in society daily. There are countless possibilities of using technology, either as support for professional or leisure activities.

Among leisure activities, one of the possibilities of entering a completely virtual world, is "diving" into a video game and abstracting ourselves from the real or social world that surrounds us, for as long as we want or can. This activity is often referred to as gaming. In 2000, this term did not exist in the popular lexicon. It had its initial appearances in some academic papers, most notably in papers related to business, political science or urban simulation. In comparison, these days, the term is much more common, and you can find several references to gaming, whether in newspapers, national magazines, and a variety of public documents.

On the one hand, computer games played at home were a phenomenon that emerged in the 90s with the development of several dedicated game consoles, such as Sony's PlayStation, Sega's DreamCast and Nintendo's Super Nintendo [6]. The term "game", on the other hand, has been common for several hundred years, often used to refer to entertainment [4].

As with technology, the activities that derive from it, such as gaming, have not only positive opinions. If, on the one hand, Henriques and Correia write: "After they finish playing, students reveal greater relaxation and joy, the same is true regarding the cognitive dimension (...), denoting a greater development of competitive skills" [7], on the other hand, both positive and negative points of this practice are identified, since "studies generally show that playing violent video games is a significant risk factor for aggression (...) studies show that the practice of playing video games can improve various visual and spatial capabilities [9].

The controversy regarding gaming is not limited to the positive and negative points that this activity causes, but it also encompasses other stereotypes, such as the age of gamers, their nationality,

education level and even gender. The study by Griffiths, Davies and Chappell, shows us that these stereotypes are just that, and that gamers are represented by people with different characteristics [6].

1.1 Video game player profile

Focusing a little on the profile of a video game player, gaming is mostly associated with a young male population. Is this a correct generalization?

There are studies whose interest is to represent video game players by gender, race and age, as an example from the 2009 study that concludes that, in relation to the United States of America (USA), the adult Caucasian male profile is over represented, compared with the population of this country. These representations result at the expense of minority groups - such as Latinos and Native Americans, women, children and the elderly [12].

A study carried out in Portugal, in 2009, investigates the profile of video game players, addressing the themes of young adults and the importance of video games in the dynamics of their identity paths, concluding that the main reasons for young people looking for games are the pleasure, fun, relaxation, free time, competition and social interaction [8]. The study also states that "young university students are of the opinion that video games develop attention, memory, concentration, reasoning, and speed and strategy" and that "they are motivated by competition and fun" [8].

This study also makes revelations regarding the age of the players, that "in contrast to the typical image of the players being young adults, the findings in a large online sample show that it is the older adults who report more loaded game patterns" [8], creating some controversy with the study carried out in the USA.

According to statistics from the GamingScan website [14], in the USA the average age of gamers is 33 years old, with players over the age of 18 representing 70% of the population that plays video games. About 60% of Americans play video games daily. Regarding gender, females represent 46% of the players, with an average age of 34 years, while men represent the rest of the population (54%), with an average age of 32 years old.

1.2 Gaming in teaching

Within the various existing studies on video games and gaming, several focus on the benefits of video games, focusing on their effects on children and young people. There are also those who consider that studies regarding benefits should deepen the theme regarding video games in learning. This is the case of the study carried out by Ana Torres, Nelson Zagalo and Vasco Branco that argues that the benefits studied in video games "continue to be quite underused in terms of psych pedagogical strategies" [10]. According to the conclusions of this study, video games can be defended as "Psych pedagogical Devices", since their educational and skills development skills, both cognitive and social, as well as emotional control, are clear. The authors also consider it pertinent that video games "should be taken into account in psych pedagogical practice, similar to other recreational activities that are already taken into account, such as crosswords and letter soup" [10].

The study carried out in Portugal, previously mentioned, shows that more than 57% of adult students believe that "it is possible to learn from video games, namely using foreign languages, understanding rules and the way to play different sports, using Information Technologies Information and Communication, employing cognitive strategies, improving concentration and decision-making capacity" [2].

2 METHODOLOGY

In this investigation, the starting question is: "To what extent are Portuguese adults interested in gaming and perceive it as something important in their daily practices or in their life?".

From the literature review, having been consolidated by the concepts identified in the individual interviews, we deduce the objectives that guide this investigation:

- Identify what people think and how they feel about gaming;
- Check which type of video games are most common, or preferred;
- Check if some typical behaviors are associated with the practice of gaming;

- Check the most common attitudes towards life;
- Analyze the possible associations between the time played, the importance given to games, the type of preferred games, and the most common attitudes towards life;
- Check what potential is attributed to gaming activities as possible teaching tools;
- Find out if the concept of eSports is recognized as a profession, in Portugal.

An exploratory study was carried out, through six semi-structured interviews, in person or via video call, to individuals who had or did not have contact with gaming. The interviews lasted an average of 32 minutes and the distribution by sex was from one male to 5 female members, aged between 20 and 52 years. All participants were informed that their participation in the study was voluntary and that no personal or private information should be collected. All interviews were recorded on audio support, after the participants' consent.

The choice of individual interviews as an instrument for this study proved to be the best approach to deepen concepts, since one of the main advantages of interviews for the qualitative research of the work is to give the possibility of in-depth investigation [13]. Each interview was conducted based on a previously defined script with questions such as:

- What strengths do you see in gaming? What negative points do you think gaming brings?
- Do you consider this practice beneficial or not?
- How do your feelings differ depending on the type of game?
- How do you think gaming can have an impact on social behaviors?
- How do you think the type of game can affect social behaviors?
- How do you think playing time can affect social behaviors?
- Do you consider eSports a profession? What do you think of eSports being considered a profession abroad?

The plan was to address various topics and see how the different concepts were approached, related and deepened.

The texts obtained in the various questions of the script were grouped into 2 essential components: impacts of gaming, gaming in education.

These texts, once grouped, were analyzed using the online tool Leximancer. The main concepts and their interconnections for each of the components were identified, and a fourth analysis considered the entire text collected in the interviews.

This analysis process had several iterations aiming at refining the identified concepts and removing any concepts not relevant to the study.

Finally, graphics were generated for each component of the study and an additional graphic that incorporates all the text compiled in the interviews, comprising the identification and interconnection of all identified concepts. All graphs were analyzed.

3 RESULTS

3.1 General graph

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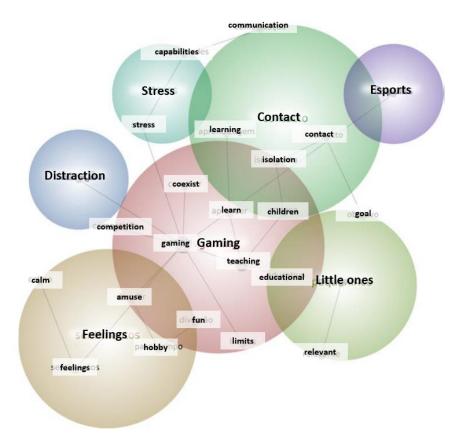


Figure 1 - Gaming analysis/perception

In the generated graphic (Figure 1), an intersection between **little ones** and **gaming** is visible, verifying the idea that people consider that the gaming used in teaching will be <u>more relevant</u> for younger ages. This idea is shared by more than one participant, having been given opinions such as "For the little ones it would be easier to capture their attention, it would be beneficial, but maybe, at a college or... I am not sure what kind of relevance could have ... ", which demonstrates that the idea that the implementation of gaming at younger ages would have more results than at older ages, as the statement of another participant" I think the biggest impact would be on younger children ", Whose opinion is similar to the previous one. According to the Literature Review, there is evidence that gaming at young ages has good results [10], however, there is no direct comparison between the results obtained from the implementation of gaming at younger ages. and the results obtained from implementation at older ages.

We also verified an intersection between **gaming** and **contact**, in which the first includes the concepts of learning and educational and the last includes the concept of communication, reinforcing the idea that communication skills can be developed through gaming [2]. This idea is shared by interview participants, as is the case with Individual C, who says that "people communicate a lot with people from other countries, and so this is good, even for the improvement of languages". Individual A, on the other hand, states that "a large part of my ability to speak English when I was younger was due to gaming and having learned English through dialogue in games".

The previous intersection includes, however, the concept of isolation, which reinforces the idea that contact with gaming ends up increasing the isolation of the practitioner, as was verified in the analysis of the impacts of gaming and was mentioned by Individual F in his interview: "isolation,

because everyone is at home and instead of being in person, they are behind screens.... Or sometimes they are able to be in the same room and each one is playing their game instead of talking ...".

Another of the existing intersections happens between the gaming theme and the feelings. From it we can infer that the interviewees use gaming as a hobby and form of fun, and this practice causes them feelings that make them feel calm. Individual A says that he feels that gaming "is a place where people go to unwind, relax and have fun." This view is further supported by the intersection between the

themes of gaming and distraction. In the literary review, we verified the existence of a study that goes against this idea because it verifies that adults play as a form of distraction and relaxation [11].

3.2 Component: The impacts of gaming

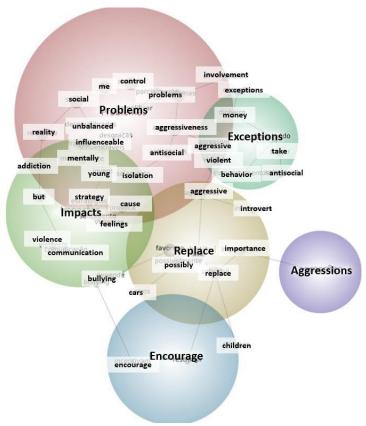


Figure 2 - Negative impacts on gaming

The graph above (Figure 2) was generated from the responses given regarding the impacts of gaming.

We can see the existence of two major themes: **Problems** and **Impacts**. These themes encompass many concepts.

In the theme of Problems, we can find concepts such as <u>aggressiveness</u> and <u>isolation</u>. The first concept was widely mentioned in the literature review. As the study by Anderson argues, which states that playing violent video games increases cognitions, feelings and aggressive behaviours [1]. This link between the aggressiveness caused by the impact of gaming with games with aggressive content is also visible in the graph. Individual C also shows the same line of ideas when he mentions that "if a child plays that type of games longer, I think he will behave more aggressively than a child who plays less time", including the dimension of playing time. game, also referred to in the Literary Review that demonstrates that the way the practitioner manages the amount of time in the game can affect the impacts of aggression caused [5]. The concept of isolation will be closely linked to the concept of antisocial and ends up being closely related to the amount of time played, since the longer you stay in the game, the more you will physically isolate yourself from the people around you.

Another of the major concerns that plagued the participants of the interviews is that gamers can be so influential that they are influenced by the content they play. This refers to the violent aspect, as mentioned by Individual C, who defends that "the more time connected to the game, the more the person is influenced by the game in real life.", but also refers to the age of the players, since the Individual B says that "if they are too young, they may be more influential", putting the possibility that there should be greater control over the content of games played by younger players, since they will be more influential from the outset than older players.

Another concept referred to in the Impacts theme is communication. Although, in the interviews conducted, positive points were touched on what gaming causes in the communication skills of its

practitioners, a negative impact of this practice on communicative ability was also mentioned. Individual C, shows concern about the possibility of this ability in the "real world" being lost, as an example is his statement that "as people get so used to interacting on a virtual level, I think that afterwards they may lose their ability to real, physical communication".

3.3 Component: Gaming in education

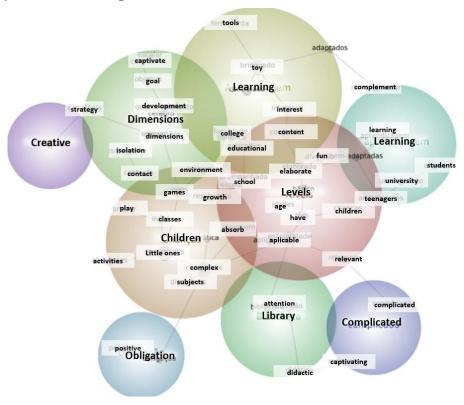


Figure 3 - Gaming in education

Figure 3 presents the concept map generated from the answers given in relation to gaming in education.

In the graph, we can see that one of the great themes is children, having concepts such as <u>little ones</u>, <u>play</u> and <u>growth</u>. In fact, some participants in the interviews mentioned having the opinion that the use of gaming for teaching will be more relevant the younger the age of the students. Because they consider that the youngest would better <u>absorb</u> what would be taught through activity in video games. An example of this is Individual B who "would consider more relevant, and more important, for the little ones. And as I get older, I think less". Participants consider that for children, the implementation of gaming in teaching will have a greater relevance since when playing they would be learning. They also consider that this implementation could help brain development and could be a way to captivate them to learn.

As for older students, the participants consider that the results of this implementation would be better achieved if there were different levels for the games created, depending on the different ages. For university learning, for example, these games should be well-adapted to ages, education levels and teaching areas, and should only be a complement to other teaching tools and not the only one, as is the opinion of the Individual F who considers that he should "have the base as a book but have a tool that complements the book, in this case that tool was the game."

4 CONCLUSIONS

With this study, we found that opinions on different topics vary slightly among respondents. Some of the less disparate conclusions focus on the potential attributed to gaming as a teaching tool as long as it is adapted to the needs and characteristics of the recipients, and that the targets whose results they consider to be best achieved are the younger students, being of the opinion that the more new ones,

the greater the impact. This conclusion is in line with the study [8], which argues that video games can facilitate the learning of children and adolescents.

Participants also agree that gaming is a way to unwind and relax, being in line with the conclusions drawn from several of the studies mentioned.

Regarding the question of violent games making players of this type of games more aggressive, there is no unanimity, and, by the sample, the more contact there is with the practice of gaming, the less agreement with this statement.

This being a qualitative investigation, carried out based on 6 individuals, after this work a questionnaire will be developed that should confirm some of the conclusions drawn from this study.

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