OLGA RUTE GIL LEMOS DE ALBUQERQUE CARVALHO CACHIDE

VIOLÊNCIA E VIDEO JOGOS NA VIDA DOS JOVENS

VIOLENCE AND VIDEO GAMES IN YOUNGSTERS' LIVES

OLGA RUTE GIL LEMOS DE ALBUQUERQUE CARVALHO CACHIDE

VIOLÊNCIA E VIDEO JOGOS NA VIDA DOS JOVENS

VIOLENCE AND VIDEO GAMES IN YOUNGSTERS' LIVES

Dissertação apresentada à Universidade de Aveiro para cumprimento dos requisitos necessários à obtenção do grau de Mestre em Línguas, Literaturas e Culturas, realizada sob a orientação científica da Dra. Gillian Grace Owen Moreira, Professora Auxiliar do Departamento de Línguas e Culturas da Universidade de Aveiro

To my parents, husband and sons

o júri

Presidente   Doutor Kenneth David Callahan
Professor Associado da Universidade de Aveiro

Vogais   Doutora Lídia de Jesus Oliveira Loureiro da Silva
Professora Auxiliar da Universidade de Aveiro

Doutora Gillian Grace Owen Moreira
Professora Auxiliar da Universidade de Aveiro

agradecimentos

Many thanks are due to my excellent supervisor, Dr. Gillian Grace Owen Moreira, for her timely and useful comments and guidance, along with her unlimited support and encouragement.

A word of appreciation is also due to Dr. Anthony David Barker, for his invaluable knowledge, as well as for his words of praise, which gave me confidence to achieve my goals.

I would also like to thank my husband and sons, who were always there for me. To them, all my love.

palavras-chave

Video jogos, meios de comunicação de entretenimento, representações violentas, efeitos dos meios de comunicação, adicção, comportamentos agressivos

resumo

O presente trabalho propõe-se divulgar o impacto que os vídeo jogos têm na vida dos pré-adolescentes e adolescentes; quais os seus vídeo jogos preferidos e o controlo que pais e lojas exercem sobre o uso de vídeo jogos por parte destes adolescentes. Este trabalho também visa contribuir para o debate em curso sobre uma possível associação entre o consumo de vídeo jogos violentos e comportamentos agressivos e violentos.

Depois de estudar a literatura existente sobre os possíveis efeitos da exposição à violência transmitida pelos meios de comunicação, foram conduzidos questionários e entrevistas com alunos de diversas faixas etárias. Os resultados demonstram que os vídeo jogos são o meio de entretenimento mais extensivamente utilizado pelos jovens, confirmando a ideia de que afectam a sua vida de diferentes maneiras. Através da análise do conteúdo dos vídeo jogos mais jogados, demonstra-se como a violência está explicitamente expressa e como os jogos são projectados para ser viciantes.

Estes resultados abrem caminho para posterior pesquisa sobre os efeitos sociais e culturais dos vídeo jogos.

keywords Video games, media entertainment, violent representations, media effects, addiction, aggressive behaviours

abstract This dissertation examines the impact of video games on the lives of youngsters; their prime video games, and the control that parents and shops exert over the use of video games by youngsters. It also aims at contributing to the ongoing debate about media effects by analyzing a probable association between violent video games and violent and aggressive behaviours.

After studying the existing literature on the effects of exposure to media violence, questionnaires and interviews were conducted with students of different age groups in order to determine the impact that videogames have on their lives. It was found that video games are indeed the most extensively-used entertainment media among youngsters, confirming the view that they affect young people's lives in several ways. Through content analysis of the prime video games, it is demonstrated how violence is explicitly expressed and how these games are designed to be addictive.

These findings lead the way to more extensive studies on the social and cultural effects of videogames.

CONTENTS

INTRODUCTION

Many parents and teachers are concerned about how young people are affected by the media, particularly by televised violence, but very little attention is being devoted by researchers of Cultural and Media Studies to the effects of a constant exposure and immersion in the virtual world of video games. Video games have become one of young people's most favourite leisure activities and their impact on the lives of youngsters worldwide is undeniable.

The rapid evolution of information and communication technologies poses a meaningful challenge to understanding their impact on the environment and in our lives. We live now in a period of constant development and transformation of new media technologies and, as they evolve, so do their properties, their uses and effects. Nowadays we can no longer refer to the influence of the media on our lives without mentioning how we also influence the development of the media. The possibility of interacting with the media is bringing about a decisive change in the power of the audience: we are all becoming editors and producers as well as users. This sense of power may be exciting but it may also be frightening, especially when it comes to children and adolescents and the use they make of the new media entertainment – video games.

The way we consume video games is considerably different to how we consume other media. The act of understanding a media text is never a passive activity: we always make meaning of it according to our own cultural experiences and interpretations of reality (Julian McDougall & Wayne O'Brien: 2008). But when playing a video game we get into the story ourselves in order to read it; we become a character either through an avatar that we have been given or that we have created or we may even have the chance to make our own image appear on screen. Video games also have the potential to almost perfectly represent reality and gamers have the possibility to interact with that same 'reality' and contribute to its evolution and change. If we consider the huge range of games available, we may say that all these characteristics together very often lead to a total *immersion* (McDougall & O'Brien: 2008) of gamers in the game, making them identify themselves with the hero or with the villain, the latter appearing to be the latest tendency in video games. Some virtual model representations may even be

transported to real life situations by gamers who can no longer establish the line between fiction and reality. Some recent news on street violence, youth gangs and school shootings have been associated to the playing of violent video games, for example, the Columbine High School Massacre perpetrated by a fan of *Doom* and *Wolfenstein* video games; the killing of three police officers by the American Devin Moore, who claimed in trial that he had been inspired by *Grand Theft Auto III* or the most recent news in Germany, where 15 people were shot dead by Tim Kretschmer, a 17-year-old boy, obsessed with guns and violent video games, particularly the video game *Counter Strike.* In addition, new studies carried out by several researchers indicate that there is a causal link between the increase of aggressiveness and violence among young people and video games, for example, Anderson and Dill (2000), Huesmann (1994) and Grossmann (1999), to name just a few.

As a mother of two young boys and as a High School teacher I am getting more and more worried about the increase of violence and aggressiveness in children's behaviour nowadays. Kids have always got into fights, especially boys, we all know that. What is really worrying is that children seem to be imitating violent media models in too many aspects: they wrestle instead of playing, they shout and insult each other all the time, they watch someone being kicked and laugh, they do not respect authority or older people any longer. Children appear to be desensitized and they seem to live in a virtual world, where we, adults, play no important role and where life is a game, a mere simulation – whatever they do, everything will turn out just fine. Even though we cannot solely blame video games for the high rates of aggressiveness, violence and criminality that exist nowadays among young people, we can certainly question whether they are a factor in the decline of social values and skills and whether they pose a threat to the healthy development of young people. Furthermore, school performance is unquestionably being affected as well, mainly due to the amount of time spent by our children in front of computer games, as many researchers worldwide have demonstrated, for example, Sharif and Sargent (2006). However, young people do not seem to be aware that their school results are not good at all; on the contrary, they seem to consider them quite reasonable.

As far as video games are concerned, there is also much to be said about the role of parents and parental supervision. If, on the one hand, many parents have always tried to control the television programmes that their children could watch, trying to prevent them from being in contact with violent and pornographic images, the same cannot be said about video games – rules seem to be practically non-existent. Moreover, not many parents seem to know all the games that their children play, whereas others might do but would still allow them to play violent games rated 18 or 18+. However, even if parents wanted to control the games their children play, they would probably be surprised by the kind of games that are considered suitable for children and teenagers – the amount of violence contained in some cartoonish children's games is sometimes astonishingly similar to that found in games rated for teenagers (Anderson, Gentile & Buckley: 2007). In addition, research has been conducted that has demonstrated that the rating system is not as valid as it should be (Walsh and Gentile: 2001), though the video game industry obviously disagrees with this opinion as well as with the claim that violent video games lead to aggressive behaviour. Governments have not done much to control violent content in video games or young people's access to those games – apparently it is not difficult for a teenager to play or obtain 18-rated games in shops or even to download them from the Internet.

On the basis of these considerations, our objectives in carrying out research into the impact of video games on the lives of children, preteens and teenagers can be identified as follows: to determine the ways in which video games are consumed by them, to find out what the most popular video games are, to analyse their violent content, and to assess the control parents and shops exert over the use of video games by young people. It is our general aim to make a contribution to the research on the effects of video games, and to demonstrate that there are solid theoretical and practical reasons to believe in the causal relationship between violent video games and the increase of violent and aggressive behaviour.

After reviewing the literature and the current arguments on the subject of media effects and media violence, a case study into the consumption habits and representations of youngsters will be carried out. This will involve the distribution of

questionnaires to students of the 1st, 2nd and 3rd Cycles of Basic Schooling (age range 9 to 15 years) and the carrying out of interviews with students of the 3rd Cycle. In addition, the content of the prime games will be examined to demonstrate how they present themselves, how they are classified, how violence is expressed and how addictive they can be. Conclusions will be drawn on the role and impact that video games have on young people's lives, attitudes and behaviour, on the lack of parent, government and retail control over the use of video games and suggestions will be made in relation to reducing the negative effects of video games. I will approach all these topics from the participants' perspective and, aware of the tendency to transform these issues into moral panics, I will attempt to maintain a neutral observer stance on these emotive issues (McDougall & O'Brien: 2008). In this way I hope to contribute to the research on the effects of video games, and to the as yet undecided debate on the causal relation between video games and the increase of violent and aggressive behaviour amongst young people.

I - VIOLENCE IN THE MEDIA AND ITS EFFECTS

I.1 VIOLENCE IN THE MEDIA IN GENERAL

When studying the media, it is vital to remember that by definition all media texts are representations of reality. However, as they are purposely written, framed, branded, targeted and censored by their producers, they become artificial versions of reality, representations of someone's concepts of reality, a combination of signs and symbols meant to be read by a targeted audience. On the other hand, it is fair to say that without the media, our perception of reality would be too limited - we need the media to regulate our view of the world, to give us an extended experience of reality. When debating about violence in the media, many issues arise not from *what* is represented but from *how* it is represented. Violent events can be represented as justified, cool, glamorous, easy or rewarding, thus inciting to copycat behaviour, and violence can be gratuitous and overemphasized, which may very likely cultivate violence or desensitization. Critics of media violence say that it is the manner that media producers choose to represent a violent event that can have a bad effect on the viewer. Therefore, media-makers must assume some responsibility for the effects that those representations of violence may cause[1].

Before analyzing violence in the media in general, it is also important to clarify what we understand as violence. As far as children and adolescents are concerned, it is surprisingly difficult to find a definition of violence, especially because there is uncertainty as to whether violence is limited to physical abuse or whether it also consists of verbal and psychological abuse. However, at present, there is a tendency towards viewing aggression, bullying and violence as being synonymous. An example may be found in a school syllabus in Ireland, 'Exploring Masculinity', where violence is defined as a combination of emotional and physical abuse. Emotional abuse includes verbal attacks, taunting and shouting[2]. Anderson et al. (2007:13) also refer that '(…) physical aggression should be conceived as existing along a severity

---

[1] Source: http://www.mediaknowall.com/representation.html

[2] Source: http://www.comune.torino.it/novasres/newviolencedefinition.htm

continuum ranging from mild (e.g., a pinch) to severe (e.g., shooting), and that violence (or violent behaviour) refers to physical aggression toward the severe end to this continuum'.

Bearing in mind these concepts, we could argue that the globalization of the media and the development of new technologies have contributed to the rapid worldwide appearance of a youth culture of violence, which is strongly influenced by the media. Nowadays we cannot dissociate culture from technology, so modern culture may as well be called *technoculture* (Lemos, 2002). Through the media, mainly through television and the Internet, everyone can have access to numerous forms of entertainment and communication: videos, games, music, films, news, chat rooms, which may transmit or promote violence. The media literate exchange thoughts, feelings and opinions through the Internet often without even knowing who they are actually talking to: online communication and virtual communities are transforming communication and socialization in the traditional sense and young people are relating to each other in ways which seem to be based more on a relationship with technology than with other people.

 Extremely violent lyrics and music videos have become successful on a worldwide scale, invading our children's lives, influencing their language, thoughts, opinions, attitudes, dress code, and, in a worst case scenario, inciting them to violence. Virtual violence is a reality: any child can download violent lyrics or visit websites, for instance, *YouTube*, where anyone can place violent images and video clips about almost anything, despite the restrictions which are in place. Several other networking sites besides *YouTube,* for example *MySpace*, have also become highly popular, especially due to their wide variety of content which offers almost anything for nearly everyone. However, these sites have been recently criticized for enabling easy access to violent and uncensored content, and for inciting similar behaviour. A recent example of behaviour attributed to online violence happened this year on March 30, when six Florida teenagers beat their former friend, 16-year-old Victoria Lindsay, recorded it and threatened to post the video for revenge on the two top visited sites. It is believed that they came up with the idea after viewing similar sites on the Internet. It is estimated that there are more than 100 million sites featuring varied

levels of language, sexual content and violence. Although the Internet Content Rating Association (ICRA) is developing a rating system for Web sites, they concede that this measure will probably be ineffective due to the immense number of sites available and to the fact that more Web sites with similar content will continue to be uploaded[3], and even if the clips are censored they may be found in other sites. On the NBC site,[4] it is reported how dangerous videos tempt teenagers, whether on *Youtube, Facebook* or any other site. These videos, which are being accessed by teenagers or even younger children, teach how to smoke crack, how to get someone high by choking them unconscious, how to drink 6 beers in 10 seconds; one shows a girl licking beer from the floor, and another one shows an adult insisting with a child to take drugs. According to this article, the favourite site of American children aged 2 to 11 years is *YouTube,* not *Disney* or *Cartoon*; 1 in 20 teenagers who are logged on have already viewed drug-related videos, and the average age of the first exposure to pornography online is 11. In addition, 80% of 15 to 17 years-old have already been exposed to hardcore pornography, turning themselves into potential victims of online predators. It is very worrying that many of these teenagers may be posting on the Internet information that should be kept private, such as their address, phone number or when the family is going on holidays. The Internet may also be used as a medium for spreading hatred against groups, ethnic minorities, for example, or against individuals. *Facebook,* for instance, has been accused of encouraging online bullying by allowing users to post anonymous comments about other members of the site. Based on the Common Sense Media's Poll Of Social Networking (2009)[5], 51% of the teenagers surveyed check their sites more than once a day, 22% check their sites more than 10 times a day, 39% have posted something they later regretted, 37% have used sites to make fun of other students, 25% have created a profile with a false identity, 24% have hacked into someone else's social networking account, and 13%

---

3 Source: http://findarticles.com/p/articles/mi_qn4183/is_20080418/ai_n27515852/

4 Source: http://today.msnbc.msn.com/id/26184891/vp/27064388#27064388 accessed 15th August 2009

5 Source: http://www.frankwbaker.com/mediause.htm, accessed 19th August 2009

have posted a nude or semi-nude pictures or videos of themselves or others online. These studies seem to indicate that teenagers' usage of the Internet is partly dedicated to committing illegal or disapproving acts. Some of these behaviours would not probably be undertaken or considered acceptable by those same teenagers in the real world, but teenagers do not always self-censor online, in the digital world. As they are not in the same place as the person, they consider it less personal, almost like a simulated behaviour, which will not bring along any serious consequences.

Television has also been affecting our lives in many ways for many years. Nowadays most children around the world have a television in their home and, according to a UNESCO survey, "On average, children in the 23 countries surveyed watch television three hours each day, and spend 50 per cent more time watching the small screen than they spend on any other activity outside of school" (UNESCO, 1998)[6]. The situation has even got worse in the last years according to the most recent study on media consumption in the United States: Nielsen (2009) found that the average American teenager watches television 3 hours and 20 minutes per day, and that nearly 115 million homes had an average of 2.86 TV sets, which '(...) computes to nearly 329 million TV sets, more than the entire US population, estimated at 307 million by the US Census Bureau.'[7] Some of the surveyed children have a television set in their own bedroom which turns parental supervision into a very difficult task. To protect our children from television violence sometimes seems to be an impossible task, since violence appears on all major television channels and cable stations. Systematic content analysis of television has proved that this is in fact a violent medium: 61% of TV shows are violent, 40% of violent television scenes include humour, 51% of television violence shows no pain, 54% of the violence is lethal, of the 9,000 shows analysed over four years, only 4% contained an anti-violent theme, and violence is on the rise on both cable and broadcast networks[8].

---

[6] Source: http://www.unesco.org/bpi/eng/unescopress/98-32e.htm accessed 16th November 2008

[7] Source: http://www.frankwbaker.com/mediause.htm, accessed 19th August 2009

[8] Source: http://philosophyfivehundred.blogspot.com/2005/02/violence-and-media-effects-oh-my.html accessed 20th August 2009

Video games should also be considered a medium that has a strong impact nowadays, since it is undeniable that playing video games has become a major worldwide leisure activity and a hugely successful business. Moreover, video games appeal to young people's taste for excitement and adventure, often communicated through physical activities and sensorial experiences frequently associated to violence. According to a report from the Cable & Telecommunications Association for Marketing in 2009, 40% of US homes have a video game system, and the recent NPD Group Survey also found that the figure for personal media players is 30%, of which 37% of children aged 4 to 14 who use a portable gaming console actually own them. The same NPD Group in the report *Gamer Segmentation 2009* says that the number of females playing video games on gaming consoles is increasing. The Pew Internet & American Life Project has also revealed in 2008 that 97% of children play video games, 53% of American adults play computer games, and one in five (21%) play every day. They also found that the game playing experiences are universal and varied, being the most popular games within the racing, puzzle, sports, action and adventures genres. Another important finding is that video game playing sometimes exposes children and teenagers to mature content, with almost a third of teens playing games rated for older people than they are[9]. In addition, according to the *American Kids Study 2008* from the Mediamark Research & Intelligence (MRI), 86.8% of youths play a video game, 81.2% reported accessing the web to play online video games, and 29.1% play a video game on a cell phone[10]. A 2001 review published in Children Now of the 70 mostly sold video games, revealed that 89% contained some kind of violence, 49% contained serious violence, and 40% had comic violence. Furthermore, in 17% of the games, violence was the main theme of the game itself, and in 41% of the games violence was not indispensable for the perpetrators to achieve their goals.[11]

---

[9] Source: http://www.pewinternet.org/Reports/2008/Teens-Video-Games-and-Civics.aspx

[10] Source: http://www.frankwbaker.com/mediause.htm

[11] Source: http://www.safeyouth.org/scripts/faq/mediaviolstats.asp

The widespread playing of violent video games by children is a cause for concern for researchers, not only because the interactive characteristics of video games may increase the probability of children learning violent and aggressive behaviour, but also because the extraordinary realism present in the latest video games may lead to a deeper identification with the avatars and to imitation of video game models. There are numerous studies on media effects, but, to date, research on violent video games and their impact on youth aggression, is still very small.

I.2 - MEDIA VIOLENCE AND VIOLENT AND AGGRESSIVE BEHAVIOUR

There are incessant debates about whether or not exposure to media violence causes increased levels of aggression and violence in young people. Some experts argue that children who consume high levels of media violence are more likely to be aggressive in the real world. Even if the exposure to media violence is small, some researchers consistently and significantly demonstrate that it can increase the probability of harmful effects. Concern has been expressed about the negative impact that fictional representations of violence may have on children, particularly the ones which glamorize crime and violence or trivialize it to such an extent that audiences feel encouraged to consider it as mere entertainment. It is claimed that by portraying violent and criminal characters as heroes, the media lead audiences to imitate aggressive and anti-social attitudes. Furthermore, the increasing depiction of violence by the media just to sustain ratings may also result in a desensitization of the audiences when faced with real violent situations.

Over the years, several studies and laboratory experiments have been undertaken to study the effects of exposure to violence on children's behaviour. In 1963, the laboratory experiments conducted by Bandura, Ross and Ross with preschool children to study the effect of exposure to real-world violence, television violence, and cartoon violence showed that all the groups of children who had been exposed to violence, responded with more aggression to frustrating situations than the control group of children who had not watched anything. Bandura's major premise is that we learn by observing others. The *social learning model* has been used by Bandura and

others concerned with mass communication specifically to explain media effects. According to Bandura, children and adults learn and acquire attitudes, behaviours and emotional reactions through filmed and televised modelling (Bandura: 1977). Equally important is *the information processing model*, which is based primarily on the work of Crick and Dodge (1994) and where aggressive behaviour is seen as a result of systematic biases in the processing and understanding of social cues and behaviours: when children are confronted with a specific social event, they seem to respond to social cues, which are frequently dependent on their past memories of similar experiences; *the cognitive-neoassociationistic model*, based on the work of Berkowitz (1993), is also relevant in its implications for understanding the connections between children's aggressive behaviour and such variables as hormone levels, prior exposure to violence, and noxious environmental conditions.

There have also been attempts to prove the relationship between media violence and aggressive and violent behaviour outside the laboratory. For example, Huesmann argues that there is a higher possibility for children to become aggressive if they watch violent television programs very frequently, if they believe that those programs are a real representation of life, and if they identify themselves strongly with the aggressive characters in the shows (Huesmann: 1994). By watching aggression, children learn how to be aggressive in new ways and the children who see TV characters getting what they want by hitting are more likely to get into fights in imitation. Huesmann, in his study to examine the longitudinal relations between TV-violence viewing at ages 6 to 10 and adult aggressive behaviour about 15 years later for a sample growing up in the 1970s and 1980s, concluded that both boys and girls from all social classes and all levels of initial aggressiveness face an increased risk for the development of adult aggressive and violent behaviour when they frequently watch violent TV shows in early childhood (Huesmann: 2003).

Equally meaningful is Anderson's conclusion that, regardless of the method used in the research (e.g. experimental, cross-sectional, longitudinal), there is evidence of a relation between violent media and aggressive behaviour (Anderson et al., 2007). He argues that the lack of scientific evidence in the violent media effects research cannot

be used as a justification for rejecting this link, due to the *probabilistic nature of modern science*: multiple causal factors have to be considered when analyzing medical, psychological and behavioural phenomena. When people state that they have always played video games and they have not murdered anyone, Anderson counters this argument by exemplifying with the act of smoking: we all know that smoking increases the probability of contracting cancer, but not everyone who smokes gets cancer. However, the risk is latent.

Grossman concludes that the numerous studies conducted so far have shown that the amount of dramatized acts of violence per day that children have contact with through the media contributes to desensitization towards violence. Furthermore, as children's exposure to violence grows, so does their taste for it (Grossman: 1999). In the critical media debate there is reference to the phenomenon of *compassion fatigue* (Tester: 2001), which can be defined as the lack of empathy that is felt towards the amount of suffering, misery or dreadful events transmitted by the media.

Still on media violence, Josephson (1995) argues that children and adolescents are more susceptible to violence than adults. She reports that at ages 6 to 11, children probably develop a surprising preference for horror movies as a way to deliberately frighten themselves and overcome their own fears. If on the one hand, they are desensitizing themselves to fear, violence and aggression, on the other hand, they will probably become more tolerant when facing real violent situations. This report also states that adolescents (age 12 to 17) are particularly interested in movies, television programs or music videos that deal with themes such as, independence, sex, romance and horror, which would be acceptable if these themes were not so frequently approached in a negative way. In addition, it is argued that teenagers are the most susceptible age group to imitating the crimes, violent acts or even suicides they watch on television, since at this age they develop a tendency to defy conventional authority.

Despite the fact that there is no scientific evidence proving the relationship between media violence and real-world aggression, researchers tend to agree that children who consume high levels of media violence will probably be more aggressive in the real world. As Kirsch argues, the fact that children consume media violence does not

mean that they will become *hyper-violent,* serial killers or create their own *fight clubs.* Nevertheless, they are being negatively influenced by the consumption of media violence (Kirsch, 2006). In her report to the Canadian Radio-television and Telecommunications Commission (CRTC), Martinez concluded that most studies support a positive relationship between exposure to media violence and aggressive behaviour (Martinez, 1992). Researchers also agree that some kids may be more affected by media violence than others. Besides age, personality could play a role, and the gender of the children also matters. Boys seem to be more affected than girls, but more work is needed in this area. Mental health problems might also make a difference, although little research has been done on this.

There is another group of researchers who state that media violence and violent and aggressive behaviour are indeed associated, but that there is no causal connection. They argue that people are not passive recipients of media contents and, therefore, they are capable of differentiating between fictional and real violence and appropriately responding to real violent or aggressive situations. Other media researchers claim that violent and aggressive behaviour may be caused by some third factor. Harris (1999) warned that the media may not be considered the only factor that contributes to violence in society. In fact, he argues that negative social conditions, the quite easy availability of weapons and an underclass subculture are far more prejudicial than television (Harris, 1999). Dodge and Petit (2003), in their review of the multiple risk factors for the development of antisocial conduct problems, argue that, similar to heart disease, it is impossible to find one single causal factor in aggressive behaviour.

It is also believed that there may be a substantial decrease in aggressive thoughts, feelings and emotions if one experiences and expresses those same aggressive thoughts and emotions (Bushman, 2002; Bushman, Baumeister, & Stack, 1999). This idea from ancient Greece and later made known by Breuer and Freud (1893–1895/1955) is now usually called *venting*, and it states that if you watch, read or sing about anger and aggression you will reduce your own aggressive impulses (Bryant & Zillmann, 2002). On this issue Gunter and McAleer conclude that television may be

used as a channel through which aggressive and hostile impulses can be dispersed (Gunter & McAleer, 1990). It is claimed that repeat viewing of violent imagery may help children to cope with their negative feelings and conquer their fears. However, according to Anderson, Gentile and Buckley, the phenomenon of catharsis applied to violent media effects is not a valid one, since 'aggression is not a drive that must be vented' and 'we do not become less likely to learn something by practicing it' (Anderson et al., 2007: 148).

Finally, there are researchers who maintain that there is no scientific evidence that being exposed to media violence actually leads to more aggressive or violent behaviour. Gauntlett argues that the lack of answers after decades of research and hundreds of studies must lead to the conclusion that there are no effects to be found *(*Gauntlett, 1995). Freedman agrees, arguing that despite the considerable amount of research on the topic, the results do not demonstrate a link between exposure to media violence and violent or aggressive behaviour. Moreover, he indicates divorce, single parents, women working outside the home, drugs or alcohol abuse, the gap between rich and poor as the social factors that had a crucial role in the increase of crime between 1960 and 1985. However, he also points out, that this period of time coincides with the availability of television in Canada and the United States. According to this researcher, the introduction of television caused all these vast changes in our societies, and these factors are the ones that actually played a significant role in the increase of crime (Freedman, 2002). About the effects of video games, Bryant and Zillmann claim that

> At the same time that a segment of the population finds electronic depictions of violence highly entertaining, other segments of society express concern about the potential harmful effects of such depictions. More recently, the controversy has extended to violent videogames in the aftermath of the Columbine High school shootings, when authorities discovered that the perpetrators had an appetite for this sort of entertainment. (Bryant and Zillmann, 2002: 269)

Despite its ascent as the fastest growing entertainment industry, there is remarkably little academic study of the development and acceptance of this new medium and

even less of its impact on children's culture. The first comprehensive review of the violent video game literature was carried out by Dill and Dill (1998), who concluded that there were similar negative effects in playing video games to the ones found by the research on television/ film effects. Anderson and Bushman's comprehensive meta-analytic review (2001) presented results that confirmed Dill and Dill's research. They found that exposure to violent video games was related to an increase in *aggressive behaviour*, *aggressive cognition*, *aggressive affect*, and *physiological arousal* and that there was a 'negative association with helping or prosocial behaviour' (Anderson et al., 2007: 358), meaning that a steady diet of violent video games will make players less prone to engage in activities with the single purpose of helping a fellow human.

Another very important piece of research on this subject was conducted by Anderson and Dill. In the summary and conclusion of their article "Video Games and Aggressive Thoughts, Feelings, and Behaviour in the Laboratory and in Life" in the Journal of Personality and Social Psychology, they write that

> Violent video games provide a forum for learning and practicing aggressive solutions to conflict situations. The effect of violent video games appears to be cognitive in nature. In the short term, playing a violent video game appears to affect aggression by priming aggressive thoughts. Longer-term effects are likely to be longer lasting as well, as the player learns and practices new aggression-related scripts that become more and more accessible for use when real-life conflict situations arise. (Anderson and Dill, 2000: 17)

In addition, in a study on the effects of exposure to video games, Bartholow, Bushman and Sestir conclude that their findings suggest that "chronic exposure to violent video games specifically – and not just frequent playing of any video games – has lasting deleterious effects on brain function and behaviour" (Bartholow et al., 2005: 538). They consider their study the first to relate video game violence exposure, desensitization, and aggressive behaviour to brain processes in the *aversive motivational system*. Recent studies into the effects of exposure to violent video games, conducted by Anderson, Gentile and Buckley (Anderson et al., 2007) clearly contribute to remedying the research and knowledge scarcity in this field. They

found that playing video games always adds additional risk of an increase in violent and aggressive behaviour.

Another effect of chronic videogame play seems to be poor school performance as Lieberman et al. (1988) concluded in their study on the uses of mass media: children who frequently play computer video games have a poorer performance at school than those who use computers to do school work. Another study conducted by Sharif and Sargent found that there were detrimental associations between both exposure and screen time and school performance. Moreover, they argue that the data collected supports '(...) the recommendation that parents limit weekday television and video game time to < 1 hour and restrict access to adult media by limiting exposure to cable movie channels and R-rated movies and videos' (Sharif and Sargent, 2006: e1069).

It has also been argued, e.g. Provenzo (1991), that the video game industry is probably an extension of the controversial past TV culture and contributes to the development of interactive television, which can be considered a cause for alarm due to the violent, sexist and racist content of the recently developed video games. Although the first video games appeared in the 1970s, it was only during the 1990s that violent video games started to be widely consumed. In a 2001 study, Anderson and Bushman (2001) reviewed 35 different studies on violent video games, and found that 80% of video game industry revenues came from the selling of violent video games, while sports and other video game formats accounted for only 20% of the market. They also concluded that children favoured violent video games: in one study of seventh- and eighth-grade students, 50% of the preferred games were violent, only 2% were educational. Soon it became clear for video game producers that the more violence games contained, the better they sold, so a whole new market of video games was about to begin, a totally different one from the first arcade games, a market which may be producing a violent generation.

My belief that violent video games have a prejudicial effect on minors is strongly supported by the latest decision of the European Commission (EU) to create a stronger ratings system for games, one that would encompass the entire European

Union and would be designed to help educate parents about video games. Among the 27 Member States, only 15 have legislation concerning the sale of video games with harmful content to minors in shops. Until now, only Germany, Ireland, Italy and UK have banned some violent video games. Viviane Reding, EU Commissioner for the Information Society and Media, clearly understands the benefit that the video game industry brings to Europe when she says that "Video games have become a strong pillar of Europe's content industry and are experiencing booming sales across Europe" but she also warned the same industry that this "(...) implies greater responsibility for the industry to ensure that parents know what kind of games their children play." [12] She has also called on Member States and the industry to govern the sale of video games in shops to respect the fundamental need to protect minors.

On the basis of this overview of the available literature on the relationship between media violence and its effects, we believe it is vital to analyze the development and growth in importance of video games as a post modern medium if we are to understand the increasing impact of video games worldwide.

---

[12] Source: http://ec.europa.eu/ireland/press_office/news_of_the_day/videogames_en.htm

II - THE NATURE AND IMPACT OF THE VIDEO GAME PHENOMENON

II.1 THE ARRIVAL, DEVELOPMENT AND NATURE OF VIDEO GAMES

Video games have remained popular since their introduction into the United States in the 1970s. Although the first video game *Tennis for Two* was invented in 1958, it was only possible to play it in a military context. Then, in 1973, an arcade version of this game, *Pong,* was produced by Atari, one of the most powerful companies in the industry at this time. The success of *Pong* led the company to create a home version of this game: in 1975 the era of the console game had arrived. Until then, playing videogames was only possible in an arcade or at a bar, which made it a totally social activity. Since then, new formats, platforms, consoles and technologies have been invented at such a pace that it makes it difficult, especially for us adults, to keep updated – amazingly as it may seem, we have already reached the seventh generation of game consoles.

That videogame culture is now significantly present in most people's lives is unquestionable; however, video games are regarded by some researchers as an infant medium that has not reached its mature form yet, in spite of the fast development of everything that is connected with the world of video games (Atkins & Krzywinska, 2007). According to these researchers, there is a functional dimension and a textual relationship between game and player that makes this medium different from all the others – without the player's interference and engagement, a game is merely a dead code, and because of this, several issues related to playing video games should be addressed: issues of politics, ethics, gender and identity, or why playing in the skin of an avatar is so appealing to many people. On this matter, McDougall and O'Brien also state that 'the way we consume games is profoundly different to how we consume other media' (2008:7) because we need to play the game in order to read it and make sense out of it. In fact, they call our attention to what it means *to be literate* in the 21st century, since the development of new technologies have caused an increase in *multimodal literacy*, where the player adopts a new identity. The issue of video games as intermodal/ interactive texts is equally important for these researchers, since the narrative of video games 'functions as a combination of interactive and non-interactive elements'. For Newman, video games create an interactive audience,

which is immediately 'empowered and placed at the centre of these new media experiences' (2004: 26), so that while other media texts, such as novels or cinema just create readers, video games place the 'user, in a specific role, at the heart of the narrative' (2004: 100).

Time and Space must also be considered as differentiating characteristics of videogames from other media texts. Genette (1982) suggests that classical narratives have the *story time,* the *discourse time* and the *viewing* or *reading time (*cited in Newman, 2004*).* As for videogame narratives, the story time, the discourse time, and the playing time is 'now'. Space, as well as time, plays a different role in video games: players have the possibility of exploring, interacting, and travelling through varied worlds and, frequently, spatiality is in itself a challenge to players, since they have to master their abilities to conquer all the levels of a game. In conclusion, playing video games is a totally different spatial and temporal experience than the other existing media.

Video games are very often designed in such a way as to become addictive - they make players want to play more and more in order to improve their playing skills over time, while experiencing a challenging, surprising and delightful experience. Understanding when 'playing at' turns into 'interpellation' or 'immersion' is one of the reasons why there are numerous debates about the effects of video games. Some researchers argue that games lead players into taking specific roles, 'positioning' them as 'subjects' in society - 'interpellation' - and they suggest that games actually have a real-effect on players, shaping them into something. The military psychologist Dave Grossman argues that video games, especially first-person shooter games, can effectively train people to become potential killers (Grossmann, 1999). Besides, the advances in the graphics of video games in recent years have been enormous: the speed and variety of movements, the intensity of colour, the sounds of explosions, the blood pools, the possibility of bodily mutilation, the recent shift in video games design from 2-D to 3-D, the changing of the camera angle and perspective and a first-person point of view allow players to experience a much deeper sense of 'immersion', a sense of personal involvement in whatever happens in the story of the virtual world. Moreover, the plot or story-line for most games is practically non-existent: it is

simple, short and very similar from one game to another, which enhances the contrast with 'the extravagance of the spectacle, the violence and the action' (Weaver and Carter, 2006: 326). The narrative is, therefore, totally dominated by the graphic excess of image, colour and sound. In addition, videogame narratives very often present 'flat' characters, characters that are only important and chosen by players for their capacities to defeat enemies, explore and conquer different worlds, and find solutions for conflicts. Unlike other media texts, videogame characters have practically no emotional involvement in the story (Newman, 2004). Due to the characters' lack of personality, players often transfer their own personalities to them and refer to the character as 'me'. As Fuller and Jenkins (1995) so well put it 'The character is little more than a cursor which mediates the player's relationship to the story world' (cited in Newman, 2004: 130).

However, other researchers argue that we should consider the experience of videogame play as a positive one, since people are just 'playing at', experiencing the game as *a game* and not really being trained to do something (Geoff King's essay in Atkins & Krzywinska, 2007). These researchers advocate that much of the pleasure that gamers take from playing a game comes from the fact that they are aware of the distinction between the real and the fantasy world, and from the realization that most of what exists in the game is unavailable to them in the real world. According to them, gamers also know that whatever happens in the 'gameplay' does not have consequences in the real world, which makes it even more enjoyable and appealing. Some research equally suggests positive benefits of video games, stating that playing video games may improve our reaction time and eye-hand coordination, and as some games are fun and challenging, they can be used as motivating educational tools. An example would be the many video games which aim at educating children and that can be considered 'edutainment'. Unfortunately, the research to date on the positive aspects of video games has been limited, which is only regrettable considering the growing popularity, especially among young people, and the increasing social, cultural and economic impact of this form of entertainment.

II.2 THE IMPACT OF VIDEO GAMES

The size of the video games industry is impressive and getting bigger: 'US games sales were a record $9.4 billion last year – topping the previous 1999 record by about $3 billion, and exceeding the Hollywood box office by $1 billion' (cited in Newman, 2004: 3). Therefore, it seems correct to state that the use of video games has become universal and has infiltrated into the free-time activities of youngsters in different countries, including Portugal. A recent survey conducted by Woodward and Gridina (2000) found that 74% of American families with school-age children own video game equipment, and school-age children play video games an average of 53 minutes per day. Parents are less likely to supervise their children's use of video games than they are to supervise their use of television. While most parents (88%) report regularly supervising their children's use of television, only about half report regularly supervising their children's use of video games (48%). According to a study conducted by Gentile et al. (2004) on the effects of violent videogames, the average amount of time 8th- and 9th-grade American students spent playing video games was 9 hours per week. Another project conducted by Lenheart et al. (2008) on *Teens, Video Games and Civics*, found the stereotype that only boys play video games to be far from the truth, as girls constituted a large percentage of total gamers: 99% of the sampled boys play games, as do 94% of girls. This study found that while almost all girls as well as almost all boys play video games, boys typically play games with greater frequency and duration than girls; boys are significantly more likely to play games daily than girls, with 39% of boys reporting daily game play and 22% of girls reporting the same; boys are also more likely than girls to play games on any given day (60% of boys did so, compared with 39% of girls), and when boys play, they play for longer periods of time.

In Canada, the report *Video Game Culture: leisure and Play Preferences of B.C. Teens* by Fraser (1998) shows that playing video games has become a common leisure activity among Canadian teenagers: 85% of teens played at least occasionally and the average amount of time was 5 hours a week. This survey also revealed that boys played twice as much as girls.

In Britain, the results of the Office for National Statistics in 2002 were that 98% of young people aged 5 to 18 used computers at home. For children aged between 11 and 18, 90% used the computer for college work and 70% for playing games. Equally significant are the statistics from the Entertainment Retailers' Association that suggest that gaming is the star performer amongst leisure activites in the United Kingdom. A recent national study by Pratchett (2005) of 6- to 65-year-olds in the United Kingdom also found that children are the most probable group to play video games ' with 100% of 6- to 10-year-olds, 97% of 11- to 15-year-olds, and 82% of 16- to 24-year-olds playing video games at least occasionally'.

In Australia, a study conducted by Brand (2007) on the computer and video game industry found out that of the 1606 Australian households surveyed at random about their use of computer and video games, 79% have computer or video games. Also the market research company GFK Australia claims sales for console and PC games in Australia (excluding hardware) were $338 million in 2002 and in 2003, the total was $433 million showing a clear increase in video gaming.

In China, online gaming is one of the largest and fastest growing Internet business sectors, with 220 million currently active players. China has now the largest online user base in the world. According to statistics from the China Internet Network Information Centre, in 2007 31 million Chinese Internet owners engaged in some kind of game play.

In Portugal, according to the data from Consumidor 2006 of Marktest, 571 thousand Portuguese over the age of 15 living on the mainland downloaded games from the Internet. This study also found that this activity was more popular among young people aged 15 to 17. Another study conducted by Beatriz Capaz in 2008[13], director of the market research company GFK, revealed the frequency and duration of

---

[13] Source: http://www.marktest.com/wap/a/p/id~9b.aspx

entertainment activities in Portugal. This study found that young people watch less television but dedicate much of their free time to playing video games.

Mark Griffiths and colleagues (2004) in their research, document how much time is being spent by a variety of differently aged people on Massively Multi-player Online Role-Playing Games. The research focuses on the game *Everquest*, which reportedly has more than 400,000 players world-wide.

Having established the undeniable impact of video games on our societies we will now proceed towards a characterization of this new medium in order to clarify what a video game is, what types of video games there are, and the different ways in which they are represented and consumed.

III–VIDEO GAMES – CHARACTERIZATION, TYPES, REPRESENTATIONS AND CONSUMPTION

III.1 CHARACTERIZATION AND TYPES

Video games have been considered for a long time a children's medium and a low form of art, and for these reasons they have been neglected, essentially by scholars of media and cultural studies. However, due to the popularity they have reached among people of all ages and to the enormous size of the video games industry, video games have achieved the status of a '(...) major cultural form, and may well soon replace cinema, cable and broadcast television as the dominant popular medium' (cited in Newman, 2004: 2). Therefore, nowadays there is still some ongoing debate on how to study and define video games, particularly because the constant appearance of new types of games makes this task a very difficult one. In addition, as explained earlier in this study, video games are profoundly different from other media, especially when we consider the way we consume this fairly recent medium.

The simplest definition that could be given is that video games are electronic games that require a *platform* (computers, consoles, mobile phones) in order to be played, and interaction with a *user interface* (graphical elements that allow you to perform actions through direct manipulation). To play a video game you also need to use a joystick, a mouse, a remote or a keyboard, and speakers or headphones, because sound plays a crucial role in providing realism, interaction and information to the player. However, video game play is much more than just playing a game: according to Newman it is a '(...) sense of first-hand participation in a gameworld generated by computer (...) a form of embodied experience' (Newman, 2004: 27). These feelings are the result of the constant interactivity and the increasingly better graphics and audio and visual realism present in current video games.

Most games can be included within a specific category, but some cover different gaming styles, and thus they may appear under more than one category simultaneously. If a new game tries a different approach to electronic entertainment and becomes successful enough, then a new genre appears. There are many types or

genres of video games, but for the purpose of this study we will only mention and define the most common ones[14]:

<u>Shooter</u> – this is one of the oldest genres of video game, which requires the player to shoot against enemies or objects in order to survive and continue playing. An example would be *Space Invaders;*

<u>First-Person-Shooter (FPS)</u> – originally this was a sub-genre but soon it became as popular as to have turned itself into a new genre. In this kind of games players have a first-person perspective, shooting everyone and everything in real time fast-paced actions. These are usually very violent games. The most popular games within this category are *Doom, Wolfenstein, Duke, Quake, Halo* and *GoldenEye;*

<u>Adventure</u> – this is also a very old genre and it consists mainly of puzzle-solving based on text. A well-known game of this genre is *Indiana Jones;*

<u>Platform</u> – this kind of game usually requires players to navigate environments, timing and jumping in order to get to a destination while avoiding or defeating enemies along the way. The most famous games are *Mario* and *Sonic;*

<u>Role-Playing Games(RPGs)</u> – despite being an adventure type of game, RPGs must include a predetermined quest, the evolution of characters through experience to improve the capacity to deal with deadlier enemies, and the acquisition and management of weapons, healing items, food and other necessary tools for the quest. *Zelda, Dungeons and Dragons,* and *Final* Fantasy are famous video games that belong to this category;

<u>Puzzle </u>– puzzle video games are very similar to traditional puzzles, differing mostly in the kind of environments they offer. Two well-known games are *Tetris* and *Puzzle Bubble;*

---

[14] Source: http://www.thocp.net/software/games/reference/genres.htm

Simulation – this type of games try to accurately recreate an experience, whether it is the management of a business, piloting a plane or driving a car. *SimCity* and *Gran Turismo* fall into this category;

Strategy – this is a genre of video games that emphasizes skilful thinking and planning in face of strategic, tactical, and sometimes logistical challenges in order to win the game. They also try to create a sense of realism; however, they are often turn-based (when the player is allowed some time to analyse a situation before committing to a game action) as opposed to realtime action. *Medal of Honor, Command and Conquer and World of Warcraft* fit within this category;

Sports – sport games give the player not only the opportunity of simulating the experience of playing a sport, but also enabling him/ her to customize teams or even own and manage them, such as in some football video games. Some famous sports video games are *FIFA* and *PES*;

Fighting – in these games the player usually fights against another player with the aim of defeating him/ her, trying to demonstrate his/ her gaming prowess over him/ her. There are many games that fall into this category, such as *Mortal Kombat, WWE, Tekken,* or *Street Fighter;*

Dance/ Rhythm – games in this genre focus either on simulating the playing of musical instruments or on dancing. Players should press a button at a given time so that they can dance or play the instrument correctly, according to a sequence directed by the game. *Guitar Hero* and *Dance Dance Revolution* are two well-known games of this genre;

Survival Horror – this genre is an evolution of the horror genre. The main aim consists of surviving in an environment where fantastic, supernatural, frightening and disturbing elements predominate. These games are usually rated for adults only. *Resident Evil* and *Silent Hill* fit in this category;

Action – this genre emphasizes physical challenges, where hand-eye coordination and reaction-time are the most important abilities the player must possess. In an action game, the player has to control the avatar of a protagonist, and navigate through

game levels, collecting objects, overcoming obstacles and defeat enemies. Enemies and obstacles deplete the avatar's health and lives, and the game finishes when the player runs out of lives. Fighting games, shooter games, beat-'em-ups, and platform games may also be considered action subgenres. *Grand Theft Auto (GTA)* is one the most famous video games of this genre;

Virtual Worlds – in this kind of video games the player inhabits a virtual world, and interacts through avatars with other players. In the computer-based simulated environment, which can depict reality or invent fantasy worlds, the player can manipulate elements of the virtual world, buy and sell property or mere products, communicate, make friends, get married, have sex, travel, study, and almost any other activity that he/ she can perform in real life. Some of these games, for example *Second Life*, are even giving the players the opportunity to earn money through the creation of a brand or a business in this virtual world. Another game that belongs to this genre is *Habbo.*

Edutainment – this genre title is formed by the words education and entertainment and aims at creating video games for more serious purposes, the *serious games*. These are usually simple types of games designed to address specific learning skills or to aid in educating students and adults about different fields of knowledge. Two games within this genre are *Democracy* and *Big Brain Academy: Wii degree.*

Although it is not considered a game genre, due to the popularity these games have reached among players, it is necessary to clarify the term MMOGs (Massive Multiplayer Online Games), games which feature a virtual world and are played simultaneously by hundreds or thousands of players who can cooperate, compete and sometimes interact meaningfully with each other on a large scale around the world. MMGOs include several games genres, being one of the most famous the video game *EverQuest (EQ),* a fantasy-themed MMORPG (Massive Multiplayer Online Role-Playing Game). It is also important to note that to play some of these games you need a credit card to buy an account key which will allow you to create a trial or new account. This kind of video game is considered very addictive, because there is no end to the game unless you turn off the computer, and has been forbidden in several countries, for

example in Brazil. The game *EverQuest* is so addictive that the most devoted players refer to it as 'evercrack'[15].

When studying video games, it is also important to consider the rating system and the content descriptors that appear on their covers, since we will be referring to them when analyzing the students' mostly played video games. However, we must not forget that quite often the same game is given totally different ratings, whether from one rating system to the other or even within the same rating system but for different platforms. Moreover, some studies have shown that too many games are not correctly rated, as Thompson's study (2001) presented in the following piece of news from CBS so well exemplifies:

> A new study shows that despite the fact that video games rated "E" are supposed to be appropriate for "everyone" and suitable for players ages 6 and older, they contain an inappropriate amount of violence. (…) The study also found that although there was a high correlation between games with a "violence content" descriptor and actual violence in the games, 14 of 32 games without violence descriptors contained acts of violence anyway. (...) "The definition for the E rating states that the game `may contain minimal violence,' yet our experience shows that many E-games contain a significant amount of violence and demonstrates ambiguity in what constitutes `minimal violence.'" They add, "an E rating does not automatically signify a level of violence acceptable for very young players. Physicians and parents should understand that popular E-rated video games may be a source of exposure to violence for children that rewards them for violent actions." (...)[16]

---

[15] Source: http://www.cbsnews.com/stories/2002/05/28/earlyshow/living/caught/main510302.shtml

[16] Source: http://www.cbsnews.com/stories/2002/01/31/health/main327254.shtml

As there are several rating systems, we have chosen to present here the American one, the Entertainment Software Rating System (ESRB), as it is one of the most detailed ones, especially when it comes to the content descriptors[17]:

ESRB Rating Symbols

EARLY CHILDHOOD
Titles rated **EC (Early Childhood)** have content that may be suitable for ages 3 and older. Contains no material that parents would find inappropriate.

EVERYONE
Titles rated **E (Everyone)** have content that may be suitable for ages 6 and older. Titles in this category may contain minimal cartoon, fantasy or mild violence and/or infrequent use of mild language.

EVERYONE 10+
Titles rated **E10+ (Everyone 10 and older)** have content that may be suitable for ages 10 and older. Titles in this category may contain more cartoon, fantasy or mild violence, mild language and/or minimal suggestive themes.

TEEN
Titles rated **T (Teen)** have content that may be suitable for ages 13 and older. Titles in this category may contain violence, suggestive themes, crude humor, minimal blood, simulated gambling, and/or infrequent use of strong language.

MATURE

Titles rated **M (Mature)** have content that may be suitable for persons ages 17 and older. Titles in this category may contain intense violence, blood and gore, sexual content and/or strong language.

ADULTS ONLY

Titles rated **AO (Adults Only)** have content that should only be played by persons 18 years and older. Titles in this category may include prolonged scenes of intense violence and/or graphic sexual content and nudity.

RATING PENDING

Titles listed as **RP (Rating Pending)** have been submitted to the ESRB and are awaiting final rating. (This symbol appears only in advertising prior to a game's release.)

ESRB Content Descriptors

Alcohol Reference - Reference to and/or images of alcoholic beverages

Animated Blood - Discoloured and/or unrealistic depictions of blood

Blood - Depictions of blood

Blood and Gore - Depictions of blood or the mutilation of body parts

Cartoon Violence - Violent actions involving cartoon-like situations and characters. May include violence where a character is unharmed after the action has been inflicted

Comic Mischief - Depictions or dialogue involving slapstick or suggestive humour

Crude Humour - Depictions or dialogue involving vulgar antics, including "bathroom" humour

Drug Reference - Reference to and/or images of illegal drugs

Fantasy Violence - Violent actions of a fantasy nature, involving human or non-human characters in situations easily distinguishable from real life

Intense Violence - Graphic and realistic-looking depictions of physical conflict. May involve extreme and/or realistic blood, gore, weapons and depictions of human injury and death

Language - Mild to moderate use of profanity

Lyrics - Mild references to profanity, sexuality, violence, alcohol or drug use in music

Mature Humour - Depictions or dialogue involving "adult" humour, including sexual references

Nudity - Graphic or prolonged depictions of nudity

> **Partial Nudity** - Brief and/or mild depictions of nudity
>
> **Real Gambling** - Player can gamble, including betting or wagering real cash or currency
>
> **Sexual Content** - Non-explicit depictions of sexual behaviour, possibly including partial nudity
>
> **Sexual Themes** - References to sex or sexuality
>
> **Sexual Violence** - Depictions of rape or other violent sexual acts
>
> **Simulated Gambling** - Player can gamble without betting or wagering real cash or currency
>
> **Strong Language** - Explicit and/or frequent use of profanity
>
> **Strong Lyrics** - Explicit and/or frequent references to profanity, sex, violence, alcohol or drug use in music
>
> **Strong Sexual Content** - Explicit and/or frequent depictions of sexual behaviour, possibly including nudity
>
> **Suggestive Themes** - Mild provocative references or materials
>
> **Tobacco Reference** - Reference to and/or images of tobacco products
>
> **Use of Drugs** - The consumption or use of illegal drugs
>
> **Use of Alcohol** - The consumption of alcoholic beverages
>
> **Use of Tobacco** - The consumption of tobacco products
>
> **Violence** - Scenes involving aggressive conflict. May contain bloodless dismemberment
>
> **Violent References** - References to violent acts

An analysis of the top-selling video games would prove relevant to understanding which games have the strongest impact on the market, but as there are too many consoles, and the list of the mostly played games differs according to each game console or platform, we will present the list of *PlayStation 2* best-selling video games, since it is the console that presents more video games sold - a total of 1.24 billion by March 31, 2007[18]:

1. *Grand Theft Auto : San Andreas* (12 million)
2. *Gran Turismo 3: A-Spec* (9.53 million approximately)
3. *Grand Theft Auto: Vice City* (9.21 million approximately)
4. *Grand Theft Auto III* (7.509 approximately)
5. *Metal Gear Solid 2: Sons of Liberty* (7 million)
6. *Final Fantasy X* (6.6 million)
7. *Final fantasy XII* (5.2 million)

---

[18] Source: http://en.wikipedia.org/wiki/List_of_best-selling_video_games#Franchises

8. *Kingdom Hearts* (4.68 million approximately)
9. *Dragon Quest VIII: Journey of the Cursed King* (4,44 million approximately)
10. *Madden NFL 2005* (4.35 million)

Of this list of video games, numbers 1, 3, 4 and 5 belong to the action genre and are rated M (Mature), which means that they should be played only by adults; number 6 and 9 are action role-playing games rated T (Teenager), while number 7 is rated for 16+; number 2 is a racing game and is rated E (Everyone); number 8 is an action role-playing video game rated E, and number 10 is a sports game also rated E. We can conclude that the action genre is the favourite one, especially when it involves role-playing, and that mature content games are the most played worldwide not only by adults but also by children and teenagers, as the number of adults playing video games would not justify such sales numbers. In order to understand these preferences for video games, it is essential to analyse how video games are represented and made known to the public, and how they are consumed by such a wide audience.

III.2 REPRESENTATIONS AND CONSUMPTION OF VIDEO GAMES

Based on my readings of Chandler (2007) representation can be defined as the construction in all media of aspects of 'reality', such as places, objects, people, cultural identities and other abstract concepts. This term combines both processes and products, meaning that it involves not only the way identities are represented or constructed within the text, but also how they are decoded by the people who get to read, hear or see the text. As we have already mentioned, the video games medium reveal characteristics that make it unique among the other media, for example, its interactivity and intermodal qualities.

When researching about violent video games representations, it cannot be forgotten that video games rely on critics for their success. Between the game developer and the public there are analysts writing reviews, game site posts, ESRB ratings, even judicial and political opinions. It all starts with the advertising campaigns or the previews, so that even before playing the game, young people have already been exposed to some nasty and violent slogans and imagery. For instance, one of the advertising slogans for the game *Carmageddon* was "As easy as killing babies with axes" or "Carmageddon: it's murder on the streets. The nastiest driving game in the world... ever!";[19] for the game *God of War* it is "The power of the Gods in the Palm of your Hand";[20] for the game *Silent Hill,* it is "Fear has a New Name" and the picture that goes along with the slogan is an image of someone who finds a dead body with no legs and no head in a pool of blood next to a toilet; [21] for *WWE: Smackdown vs Raw 2008* an advertising site writes that the game "(...) will let players take the fight into their own hands"[22] or "(...)to inflict damage on opponents in new and unique ways. New high-impact combination moves let you take the power of WWE Superstars into your own hands. (...) Grab weapons and other items from fans or throw opponents into the

---

[19] Source: Advertising copy of *Carmageddon*.

[20] Magazine *Maxiconsolas*, May 2008, page 17

[21] Magazine *Maxiconsolas,* May 2008, page 22

[22] http://www.worthdownloading.com/game.php?gid=2816

stands and take the action to the next level."[23]; for *Burnout3 Takedown* "Take a trip down Adrenaline lane, SLAM the competition (...) Go fast... go for crash"; for *GTA IV* it is "So good it's criminal" and there is also a trailer in the Internet where the main character of the game, when asked about what motivates him, answers "I don't care if I live or die". [24] Even the most famous brand of coke took advantage of the popularity of the game to make a commercial based on it. Besides persuading children to drink coke, they are inciting children to play the game. All these slogans and visual images used try to convince young people that they have to play the games to be in control and they may help them become indifferent or accustomed to violent imagery.

After the advertising campaigns come the reviews, which contribute a great deal to selling the game no matter what they actually say about it. Sometimes the worse they say, the more it sells. The *Grand Theft Auto* games*,* for example, "(...) have been criticized for depicting violence including beatings, carjackings, drive-by shootings, drunk driving and prostitution"[25] and the ads of *GTA IV* ads were pulled out "(...) following a report by a Fox News affiliate that questioned why the ad was allowed to run after a wave of violent crimes in Chicago"[26]. However, Matt Selman of Time Magazine in his article about the game, though in a jocular way, invites children to play the game and drink alcohol:"(Kids, try getting actually drunk, then driving drunk in the game, and see what happens.)."[27]He also writes that "The online multiplayer experience is outstanding. Exciting, chilling, and oh-I-just-got-run-over-by-a-garbage-truck messed up. Racing, sniping, exploding, hiding — the diversity of attack strategies available allows for a ride that will never get boring." Moreover, all the news about the game's sales numbers probably make children curious about how good it must be: "Because the eagerly awaited video game Grand Theft Auto IV went on sale yesterday across the world and is expected to sell 6m copies within the next

[23] http://www.xbox.com/en-US/games/w/wwesmackdownvsraw2007xbox360/default.htm

[24] http://www.rockstargames.com/IV/#?page=videos&content=commercial

[25] Source: Reuters, Information Week, May 5, 2008

[26] Source: Reuters, Information Week, May 5, 2008

[27] Selman, Matt. Time Magazine: *Grand Theft Auto IV: The 6.24% Review.* April 30, 2008

week, earning its makers more than \$300m by next Tuesday. The 18-rated game is also likely to break retail records to become the biggest-selling entertainment title of all time, eclipsing DVD and music sales."[28] An indication of the effect of video games on young people is presented in the following piece of news: "Because the game is rated M for Mature, there were a few eager teens milling around in the parking lot, trying to bribe cool adults to get them a copy." and "Man stabbed as he waits in Grand Theft Auto queue".[29]

Another way of looking at video games representations is to understand their reception by the public in general. Computers, video games, and the Internet have become established features of our daily lives. Computer use has reached beyond work and is now a major source of fun and entertainment for many people. For most people, computer use and video game play is integrated into their lives in a balanced healthy manner. For others, time spent on the computer or video game is out of balance, and has displaced work, school, friends, and even family. Anyone who has experienced playing computer or video games knows all too well that gaming addiction is real. Scientists have classically restricted their use of the term addiction to substances that cause physical dependence. However, recent knowledge suggests that when it comes to the brain, a reward is always a reward, whether it results from a substance or an experience, and when there is a reward there is always the risk of getting caught in a compulsion.

Although video game overuse has failed to be officially recognized as a mental disorder, research is showing that people of all ages, especially teens and pre-teens, are sometimes facing very severe consequences associated to compulsive use of video and computer games. Clinicians in the area of psychology and mental disorders have often described video game addicts as showing many symptoms and behaviours similar to other addictions: sleeping disturbances, poor work or school performance,

[28] Source: Belfast Telegraph: *Grand Theft Auto: everything you need to know about the gaming phenomenon,* April 30, 2008

[29] Selman, Matt. Time Magazine: *Grand Theft Auto IV: The 6.24% Review.* April 30, 2008

lying and paying less attention to friends and family, carelessness over personal hygiene, and incapacity to stop playing games. There have been a variety of well-documented deaths around the world caused directly by exhaustion from playing games for excessive periods of time, as the example that follows: 'Last October a Taiwanese man died of exhaustion after playing computer games non-stop for 32 hours in an Internet cafe. He was found in the cafe's toilets, bleeding from the nose and foaming at the mouth, and died before he reached hospital. Just days earlier a South Korean man perished in similar circumstances, after spending 86 hours in an Internet cafe'[30]. In addition, it is now believed that game playing is not only a psychological but also a physiological addiction. Researchers at Hammersmith Hospital in London conducted a study in 2005 and concluded that dopamine levels in players' brains doubled while they were playing. The findings of this study indicate that game playing could actually be considered chemically addictive. Another consideration is that some people are more vulnerable to addiction of any kind than others. Kids who get easily bored, have a dysfunctional family, are bullied at school, or tend toward sensation-seeking are more easily drawn into video game addiction because they see it as a way to fill a gap in their lives and satisfy needs that cannot be attended elsewhere.

One of the main issues around video game playing is where the line between fun and addiction lies, and although nowadays theorists focus on the built-in reward systems of the games to explain their addictive nature, we should also consider other causes. Video games are becoming more and more complex, very detailed and targeting a growing audience of international players. Video game producers and designers are constantly looking for new ways to make their games more appealing and increase the amount of time people will spend playing them. They develop better graphics; use more realistic characters, and greater strategic challenges, such as 'the high score' or the 'beating the game', which keep the player playing for hours in order to beat the score or reach the highest level of the game; they use 'role-playing' features, which

---

[30] Source: http://app1.chinadaily.com.cn/star/2003/0501/vo2-4.html

allow players to create a character and embark on adventures, thus establishing an emotional attachment between the two, making it more difficult to stop playing; they develop 'discovery' strategies, which can be very thrilling and compelling, since they lead players to spend the game exploring imaginary worlds; and they use the 'relationships' hook, which allows players to build relationships with other players and create an online community where they feel most accepted, something that very frequently does not happen to children and especially to teenagers in real life.

Moreover, celebrities are also used as a marketing strategy to sell more video games, either through their names, images, voices or music. Looking at all these exciting opportunities and experiences that video and computer games provide, it is not surprising that children and teenagers would rather play the latest video game than hang out with their friends, play sports, or even watch television.

The impact of video games containing violence has recently become a focus of research because children and teenagers are theoretically more susceptible to behavioural influences when they are active participants than when they are observers. According to Anderson (2007), as children retain more information by actively participating in activities than by just watching them, video games can have the most profound influence on them. The issue is that the video game culture often relies on violent content for entertainment, which is not surprising because violence seems to grab the attention of most people, and this alone may increase the likelihood of violent and aggressive behaviour (Anderson et al., 2007). In most games, players have to assume the identity of the violent avatars, and therefore make aggressive decisions or even take violent physical action. Some people would say that players are totally aware of the distinction between fantasy and real worlds, but game designers have other goals: they are always improving video games, so that the feeling of immersion is achieved and the experience of game playing becomes as credible as possible. Furthermore, players get used to violent imagery very quickly, so game designers have to increase the level of violence in order to keep their attention and keep selling the games (Anderson et al., 2007). Of course the problem is that children and teenagers become desensitized to the true consequences of violent actions and are more likely to imitate the aggressive and violent attitudes and behaviour they

have been adopting and practising so repeatedly in their fantasy worlds. In video games violent attitudes and strategies result most often in rewards; violence is continuously presented as justified, without negative consequences, and fun. As a consequence, students may have difficulty in developing empathy, which is essential to the process of moral evaluation, to have a positive socialization and a prosocial behaviour (Anderson et al., 2007).

When we hear or read news about street violence, carjacking, youth gangs or school shootings the association to copycat behaviour due to the consumption of video games is only natural: "Thirty two are reported dead, and about the same number injured, in a massacre at Virginia Tech University in Blacksburg, Va." or "(…) Columbine High School in Littleton, a Denver suburb."[31] April 20, 1999- American High School students Eric Harris Dylan Klebold killed 13 people and themselves. They had been fans of the *Doom and Wolfenstein* 3D videogames. June 7, 2003: 18-year-old American Devin Moore shot and killed three police officers. At trial he claimed he had been inspired by the video game *Grand Auto Theft*. Devin Moore was just 18 when he was taken to an Alabama police station for questioning about a stolen car. He was initially cooperative, but then lunged for his captor's gun. He shot the man twice and ran out into the hallway where he shot a second policeman three times. He let off five shots at a third man before making his escape in a police car. All three men died from shots to the head. When Moore was finally captured, he is reported to have said, "Life is like a video game. You have to die sometime." Two years on, he sits on death row. [32] In Portugal the crime of carjacking has increased 55 per cent in the first six months of 2008 when compared to the same period of 2007[33]. It is difficult to establish a direct relationship between these tendencies and video games, but it certainly makes us think that it might be worth further research on this subject, for example, whether the

---

[31] Source: http://whyfiles.org/065school_violence/

[32] Helen Phillips, Mind-altering media. Source: http://technology.newscientist.com/article/mg19426001.900 , 19 April 2007

[33] Source: http://jn.sapo.pt/PaginaInicial/Policia/Interior.aspx?content_id=968922

appearance of the video game series *GTA* is related to the increase of the crime of carjacking.

Nowadays young people seem to be not only more violent but also more afraid of being victimized: "Ever since one of their classmates was shot down just a block from school last month (…) The suspect in the shooting is a 15-year-old boy from the same neighbourhood (…) "We could be standing here talking and somebody over there could start shooting right now," said Anthony Robinson, 16, "You just don't know."[34] Research (Barthalow et al., 2005) has also found that exposure to violent video games can desensitize individuals to real-life violence and the following examples can illustrate this potential link: "Too many guns, too many gangs (…) We've got to get children back into being children," Superintendent Weis said. "Not cold-blooded killers."[35] "It usually starts outside McDonald's — that's the hot spot," explains one London youth. "You might go with one mate, then you get a phone call. Give it an hour, there'll be 10 people there, with nothing to do. Intimidating people is something to do, a way of getting kicks. Like, 'Oh my God, did you see how they ran?' (…) it's the increase in nasty teenage crime that really has Britain spooked. Violent offenses by British under-18s rose 37% in the three years to 2006."[36] "Each year, 3 million young people in the United States fall victim to crimes at school. Almost 2 million of these incidents involve violence."[37] Furthermore, the comparative study conducted in 2008 between Portugal and Spain about School Violence and Public Policies concluded that 17.7 per cent of the children surveyed (7-13 years old) had been frequently attacked/ assaulted and 42.1 per cent had been victims of at least one or two aggressive

---

[34] Saulny, Susan. The New York Times: *After Killings, Escorts for Chicago Students.* April 27, 2008

[35] Source: The Associated Press: *Rash of Shootings Is Seen in Chicago*

[36] Mayer, Catherine. Time Magazine: *Britan's Mean Streets*, March 26, 2008.

[37] Source: Constitutional Rights Foundation - http://www.crf-usa.org/violence/intro.html

behaviours. This study has also revealed that the children are victims of bullying during recesses, in the school halls and in classrooms.[38]

These astonishing indications of an increase in violence among young children across societies are a strong motivation for looking more closely at the gaming habits of our youngsters.

---

[38] Source: http://tv1.rtp.pt/noticias/?t=Portugal-e-Espanha-no-niveis-de-bullying-semelhante---estudo.rtp&article=63233&visual=3&layout=10&tm=8

IV – CASE STUDY

IV. 1 - RESEARCH QUESTIONS

As noted earlier, there is very little research into the effects of habitual video game exposure in Portugal. After reviewing the literature and the current arguments on the subject of media effects and media violence, and after analyzing the extent of video game playing worldwide, a case study was carried out into the consumption and impact of video games on the lives of youngsters from a small city in Portugal.

This case study has been designed to address knowledge gaps in the video game research literature, more specifically about the impact of video games on the lives of young Portuguese youngsters.

When I set out on this study, I established as primary goals a) to determine the way video games are consumed by young students, b) to find out what the most played video games are, and c) to assess the control parents and shops exert over the use of video games by young people. However, as this study was being developed, other questions arose, which allowed the establishment of several supplementary aims:

1. to find out whether students dedicate more time to studying or to playing video games;

2. to check whether playing video games affects students' sleeping hours;

3. to ascertain students' possession of consoles and computers;

4. to determine students' compliance to the video games rating system;

5. to check whether playing video games is a social or isolating activity;

6. to determine whether gender and age influence the respondents' usage and preference of video games;

IV.2 - METHODOLOGY AND SAMPLE

For the purpose of conducting research into the impact of video games on young students' lives, a case study was designed using both quantitative and qualitative techniques. Questionnaires were developed and randomly applied to six classes of students in Basic Schooling, two in the 1st Cycle, two in the 2nd Cycle, and two in the 3rd Cycle, to a total of 136 students aged 9 to 15. A pilot questionnaire was first applied to a sample of ten students in order to determine whether the questionnaire was likely to provide reliable results. Following the administration of the main questionnaire, interviews were conducted with about twenty students from the 3rd Cycle to support the collected data and to clarify some of the issues arising from the questionnaire. The participation of different classes in the study depended on students' classroom schedules on the day and time of the administration of the questionnaires and interviews.

The methodology followed in the application of the questionnaires and interviewing respected the following procedures: identifying the researcher and asking for the participants´ collaboration, explaining the background of the research, ensuring confidentiality and eliciting sincere answers, so as not to invalidate the results and clarifying any questions or doubts.

IV.3 - CHARACTERIZATION OF THE COMMUNITY AND THE SCHOOL
IV.3.1 - THE COMMUNITY

Being a teacher at Escola Secundária da Gafanha da Nazaré (ESGN) at the time this case study was carried out, it was decided that the respondents should be chosen among the schools of this locality. The small coastal city of Gafanha da Nazaré is situated in the county of Ílhavo, in the centre of Portugal. Currently with 20 thousand inhabitants, this city is traditionally associated with maritime activities, especially with fishing and the fish processing industry. In recent years, however, a great number of local plants have closed down, and the fisheries sector is facing a serious crisis, which has caused a significant increase in the unemployment rates.

The city of Gafanha da Nazaré has two different teaching units: the *Agrupamento de Escolas da Gafanha da Nazaré*, which includes the schools of the 1st, 2nd, 3rd Cycles of Basic Schooling, and the *ESGN*, where you can study from the 3rd Cycle until the end of Secondary Schooling. Most of the population in Ílhavo have very low qualifications: 66% of the local people have only completed Basic Schooling (32% only completed the 1st Cycle), 11% finished Secondary School, 1% have completed Middle School, and 8% have a taken a university degree. Moreover, 14% of the population in the county of Ílhavo can read and write but have no qualifications whatsoever. The sociological characteristics of Gafanha da Nazaré have caused a great impact on the schools dynamic, since the low qualifications and the precarious working conditions lead to a very low commitment to children's schooling. Most of the time, school is seen as a mere obligation, or as a safe house where you can 'dump' your children for hours without any notion of the rules, rights and duties that are supposed to be taken seriously. In addition, children are encouraged by their parents to start working instead of studying, so that they can help support the families' expenses.

IV.3.2 - THE SCHOOL

Similar to all the Portuguese schools built in the 1980s, the ESGN is constituted by 4 separated buildings of classrooms, a gymnasium, and another building where the canteen, the bar, the students' room, and the stationery office are situated. The school has 19 classrooms, a chemistry laboratory, a Science laboratory, 7 classrooms equipped for Information and Technology, 1 Arts classroom, a Library, a Study Room and a Resources Centre. There are other specific classrooms, such as the Maths Office, the Portuguese Office, the Educational Support Office, the Psychologist's Office, the Student's Support Office, the Teaching Staff's Room, the Non-Teaching Staff Room, and the Form Teachers' room. The diversity of educational levels and the wide range of courses offered imply a complete occupation of all the school facilities. While the school has been able to meet all its curricular requirements, there is no possibility of carrying out extra-curricular activities during school time due to the lack of space.

In the current year the school was attended by 771 students, 340 in the 3rd Cycle of Basic Schooling and 431 in Secondary Schooling, 10.4% of the students being of a

nationality other than Portuguese. In most cases, (82.8% in the 3rd Cycle and 74.4% in Secondary Schooling) the mother is the tutor. In the 3rd Cycle, only 60.8% of the fathers and 54.6% of the mothers had a steady job, and in the Secondary Schooling, the percentage was 40.7% and 38.2% respectively. The unemployment rates in the 3rd Cycle are around 10% in the case of mothers and 4% for fathers; in Secondary Schooling the rates are 7% and 5% respectively. The percentage of temporary workers, retired and 'others' exceeds 20%. There is also an increasing number of parents/ tutors that are not living with their children, either because they have emigrated or simply because they live somewhere else, leaving their children to the care of older brothers/ sisters or grandparents. The parents' social-economic characteristics have clear correspondence in the 33.1% of the students who receive some kind of financial help from Social Services. In addition, according to the *Projecto Educativo da Escola Secundária da Gafanha da Nazaré*, there has been an increase in students who come to this school already supervised by the Juvenile Court and other child protection institutions on account of minor crimes and offenses and cases of extremely irregular attendance.

As far as school performance is concerned, it has been noticed that there are low expectations and clear uncertainty regarding future careers on the part of students in general: students' dropout rate between Basic and Secondary Schooling is very high. Besides, 33.3% of the students who attend Secondary Schooling have already failed one or more years. The complexity of Secondary curricula and the requirement of study habits, which students most frequently do not possess, together with the necessity of getting a job could explain some of the lack of motivation felt by students towards Secondary Schooling. In addition, we must also consider as contributing factors, parents' low expectations regarding school and the benefits of education, the inadequate monitoring of their children's education, and also the fact that many 3rd Cycle students progress with various grades inferior to 3, often at subjects essential

to the courses they will later attend[39]. According to a study conducted by the Health School of the University of Aveiro on the health and lifestyles of 293 students of the 3rd Cycle of Basic Schooling in ESGN, 10 students admit having the habit of smoking, 234 have tried an alcoholic drink, 22 confess to having already been drunk, 62 take exercise every day, 70 watch an average of half to three hours of television a day, 30 spend one to three hours on the computer per week, and 15 drink coffee every day[40]. 32% of students in ESGN have a computer and Internet at home.

IV.4 - RESEARCH INSTRUMENTS

In order to achieve the primary goals of this study and find the answers to the research questions, it was decided to gather data through two different instruments: a questionnaire and an interview to support the collected data. The questionnaire (appendix 2) is divided into three parts: Part I aims to gather data concerning the participants' gender and age. Part II records the participants' study habits and school performance. Part III is concerned with the participants' video game playing habits, parental supervision, a ranking of respondents' favourite video games, and their compliance with the rating system. Throughout the questionnaire, participants are asked to put a cross against the answer that best suits their personal characteristics, their study habits and video game playing habits. In questions 1, 2, 3, 7, 9, 10 and 11 of Part III, the respondents are given the possibility to include another variable if the ones suggested do not offer them an appropriate answer. Question 12 is an open question, where participants have to list their three favourite video games. Question 14, about the participants' compliance with the rating system, offers the respondents the possibility to answer 'yes', 'no' or 'sometimes'. After trying out the pilot questionnaire with a sample of ten students, question 1 of Part II about the students' study habits seemed to lack the option 'never'. However, it was decided not to include this as participants might choose it just to 'show off' and because there might not be a

---

[39] Source: http://www.cme.cm-ilhavo.pt/portalmoderno/Portals/0/documentos/Carta%20Educativa%20do%20Munic%C3%ADpio%20de%20Ilhavo.pdf

[40] Source: www.ua.pt/essua/ReadObject.aspx?obj=6213

significant part of our student population who never studies at all. To analyze the data the number of answers given was considered rather than the number of students the questionnaires were given to, because occasionally some students forgot to answer one or other question.

The interviews conducted followed a previously elaborated script (appendix 4) related to the questions included in the questionnaire but also focusing on issues concerning the effects of exposure to violent video games on students' behaviour and school performance. It was decided not only to record the interviews but also to fill in a table (appendices 4.1 and 4.2) with the students' answers as there was the possibility of some noise interference, since the interviews were recorded at school. Both the questionnaire and the interview were elaborated in Portuguese, the mother language of the study group.

IV.5 – PRESENTATION AND ANALYSIS OF THE COLLECTED DATA

An initial analysis of the collected data was carried out using the *Statistical Package for Social Sciences* (SPSS). The presentation of the results is done through tables, graphs and figures, where the most relevant data will be shown and where the source will be omitted. The data was collected using the previously described research instruments, and a database created containing all the collected information (appendices 2.1, 2.2 and 2.3 – questionnaire results; appendix 3 – questionnaire results by gender; appendix 4.1 – interview results; appendix 5 – students' favourite video games).

IV.5.1 - QUESTIONNAIRE RESULTS

As mentioned earlier, the questionnaires (appendix 2) were applied to 136 students from the 1st, 2nd and 3rd Cycles of Basic Schooling. Two classes of each Cycle answered the questionnaires, so the number of students per Cycle was dependent on the number of students per class, but the result was relatively balanced, as well as the gender division (figures 1 and 2):
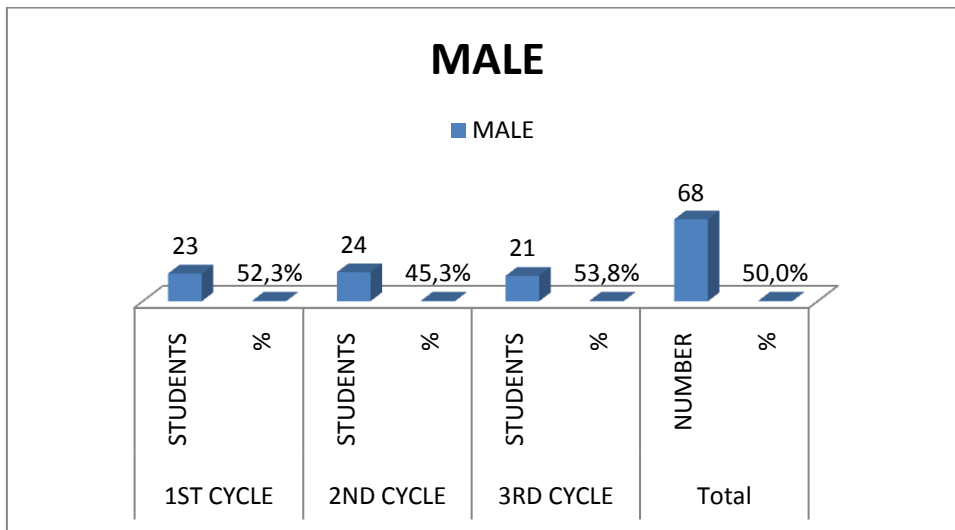
Figure 1 - Number and percentage of male participants per Cycle

FEMALE

	1ST CYCLE		2ND CYCLE		3RD CYCLE		Total	
	STUDENTS	%	STUDENTS	%	STUDENTS	%	NUMBER	%
FEMALE	21	47,7%	29	54,7%	18	46,2%	68	50,0%
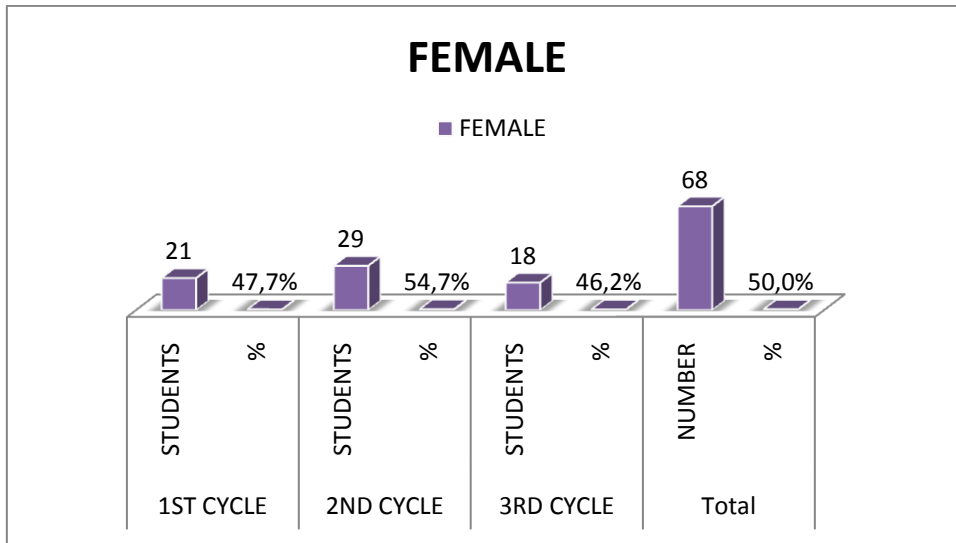
Figure 2 - Number and percentage of female participants per Cycle

Regarding the study habits, there is not a significant difference in results when comparing the three Cycles: in the 1st and 3rd Cycles, the majority of students reported that they only study before the tests, while in the 2nd Cycle, half of the students study weekly. It is relevant the low percentage of students who study on a daily basis in all the three Cycles (figure 3).

Studying Frequency

	1º Ciclo			2º Ciclo			3º Ciclo		
Tempo Estudo Diariamente	9	44	20,5%	9	53	17,0%	8	39	20,5%
Tempo Estudo Semanalmente	17		38,6%	26		49,1%	14		35,9%
Tempo Estudo Vespera Testes	18		40,9%	18		34,0%	17		43,6%
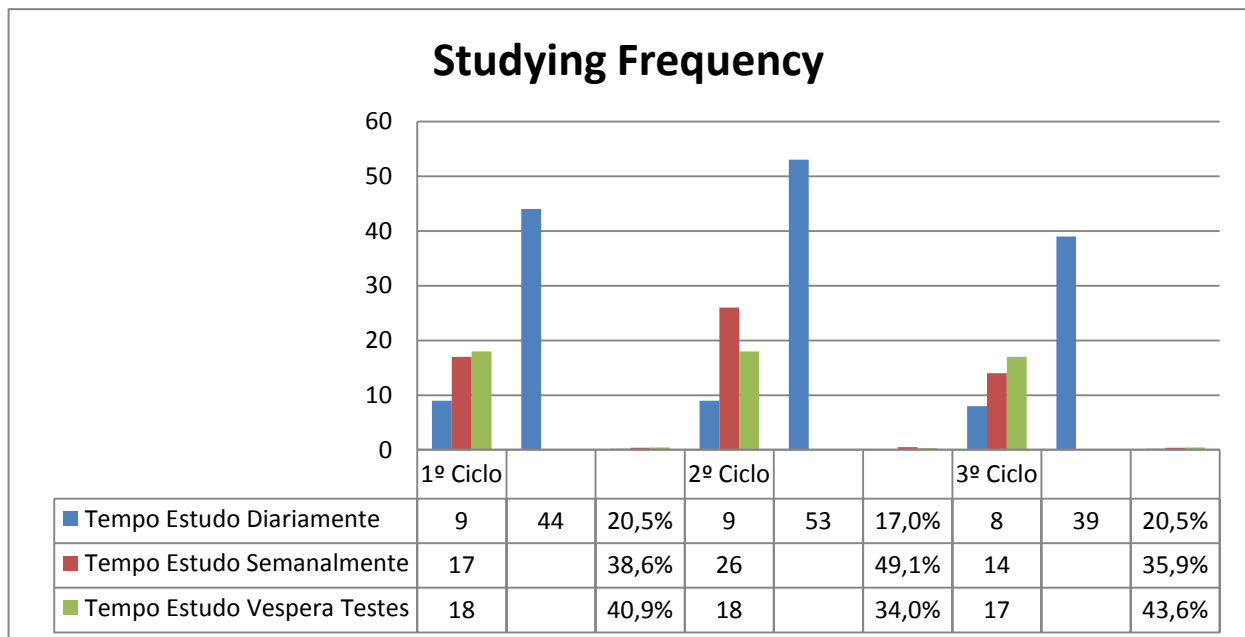
Figure 3 – How often do you study? Daily, weekly or only before tests?

When comparing boys to girls the results show that in all three Cycles there are more girls studying on a daily basis than boys and more boys studying only before tests, except in the 3rd Cycle, where the results of studying only before tests are similar for girls and boys, 44.4% and 42.9% respectively (appendix 3).

When analyzing the data of the three Cycles concerning the time students dedicate without interruption to studying, it is significant that only a low percentage of students study for two hours or more in a row and that most of them study only 0 to 1 hour at a time. In the 1st and 3rd Cycles, the variables 0 to 1h and 1 to 2h present practically the same percentage: a difference of 2.2% in the first Cycle and 2.5% in the 3rd Cycle (figure 4).

Studying Duration

	1º Ciclo			2º Ciclo			3º Ciclo		
■ Tempo Seguido de Estudo 0-1 H	17	44	38,6%	31	53	58,5%	16	39	41,0%
■ Tempo Seguido de Estudo 1-2 H	16		36,4%	20		37,7%	15		38,5%
■ Tempo Seguido de Estudo + 2 H	11		25,0%	2		3,8%	8		20,5%
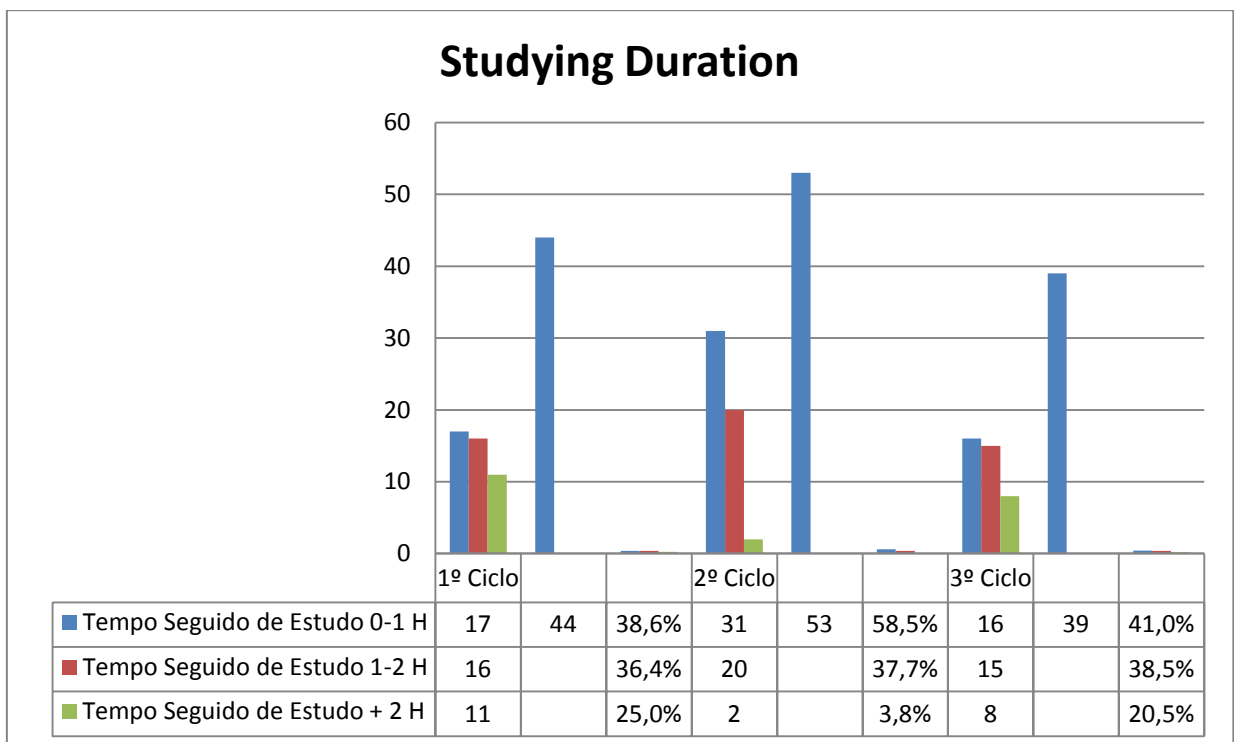
Figure 4 – How much time do you spend studying without interruption?

When comparing the answers given by boys to those of the girls, we can see that in the 1st Cycle, boys study for longer periods of time but less frequently, but as they grow older, there is a reverse in the results: in the 3rd Cycle, most boys study only 0-1 hour, while most girls study 1-2 hours (appendix 3).

As far as School performance is concerned, the data seems to indicate that the respondents are quite reasonable students, especially in the 2nd Cycle, where 60.4% of the students considered their school results as Good. However, in the 3rd Cycle, most students classify their school results as Sufficient and, when compared to the other Cycles, there is a significant increase in the number of students who report their school results as Insufficient.

School Performance

	1º Ciclo			2º Ciclo			3º ciclo		
■ Resultados Escolares MB	5	44	11,4%	9	53	17,0%	3	39	7,7%
■ Resultados Escolares B	22		50,0%	32		60,4%	13		33,3%
■ Resultados Escolares M	15		34,1%	12		22,6%	18		46,2%
■ Resultados Escolares F	2		4,5%	0		0,0%	5		12,8%
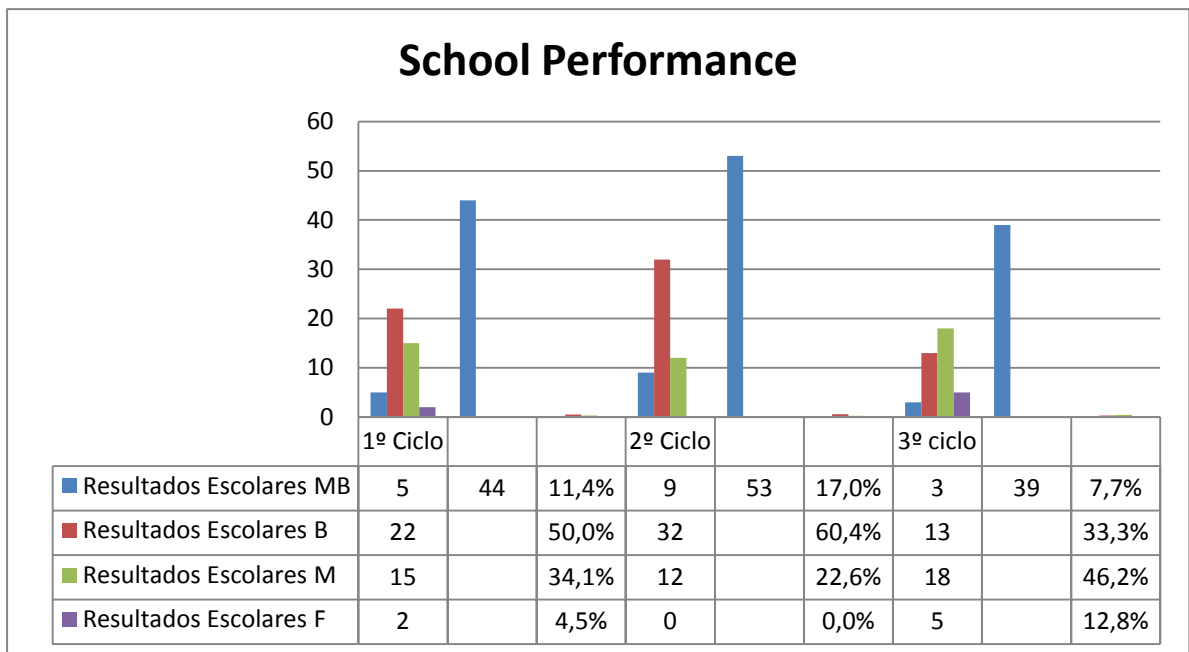
Figure 5 –How do you classify your school results? MB – Muito Bons, B- Bons, M – Médios, F-Fracos / Very Good, Good, Sufficient, Insufficient.

When comparing boys' and girls' school results, the data indicates that in the 1st and 3rd Cycles, their school performance is very similar, showing no significant disparity in the given answers. In the 2nd Cycle, 89.3% of girls report having Very Good or Good results as opposed to 62.5% of boys (appendix 3).

When asked about the frequency of their videogame playing most students answered that they played on a daily basis, apart from 2nd graders who present 34.6% and 38.5% for a daily and weekly basis respectively (figure 6). The few students who chose the option 'other' wrote that they only played when they did not have any tests,

which can be understood as students who play daily or weekly, except when they have tests. One student in the 1st Cycle, one in the 2nd and two in the 3rd said that they never played, so they did not answer the remaining questions.

Playing Frequency

	1º Ciclo			2º Ciclo			3º ciclo		
■ Tempo de Jogo Diariamente	22	43	51,2%	18	52	34,6%	15	37	40,5%
■ Tempo de Jogo Semanalmente	10		23,3%	20		38,5%	10		27,0%
■ Tempo de Jogo Mensalmente	2		4,7%	8		15,4%	1		2,7%
■ Tempo de Jogo Nas férias	5		11,6%	6		11,5%	7		18,9%
■ Tempo de Jogo Outro	4		9,3%	0		0,0%	4		10,8%
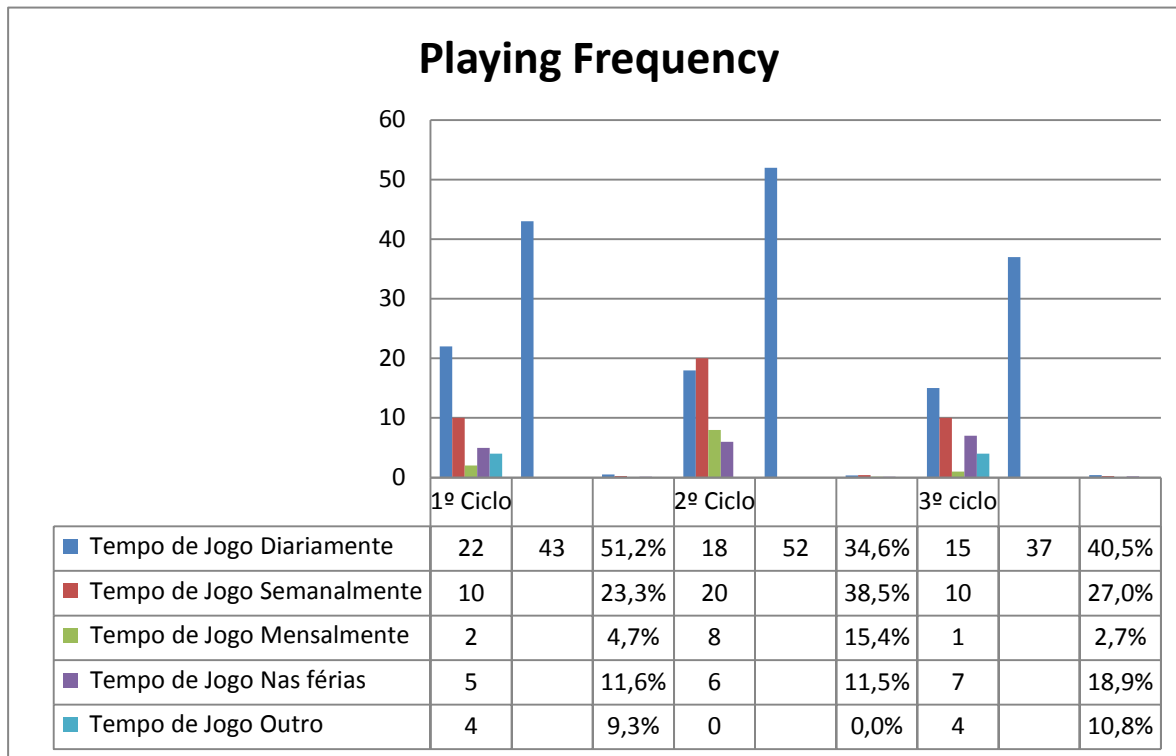
Figure 6 –How often do you play video games? Daily, weekly, monthly, on holidays or other?

The percentage of boys who play on a daily basis is consistently higher than the girls' percentage: 65.2% against 40% in the 1st Cycle, 37.5% against 32.1% in the 2nd, and 61.9% against 12.5% in the 3rd Cycle (appendix 3).

As for the part of the day when youngsters play video games, the majority of our sample play in the afternoon (more than 70% in all three Cycles), when they do not have classes and/ or when they come back from school. However, it is still very relevant the percentage of respondents who reported playing at night (41.9% in the 1st Cycle, 40.4% in the 2nd, and 37.8% in the 3rd) or through the night (7.7% in the 2nd

Cycle and 24.3% in the 3rd Cycle), as can be seen in figure 7. Some students chose more than one option.

Time of the Day

	1º Ciclo			2º ciclo			3º ciclo		
■ Manhã	4	43	9,3%	15	52	28,8%	13	37	35,1%
■ Tarde	31		72,1%	41		78,8%	32		86,5%
■ Noite	18		41,9%	21		40,4%	14		37,8%
■ Madrugada	0		0,0%	4		7,7%	9		24,3%
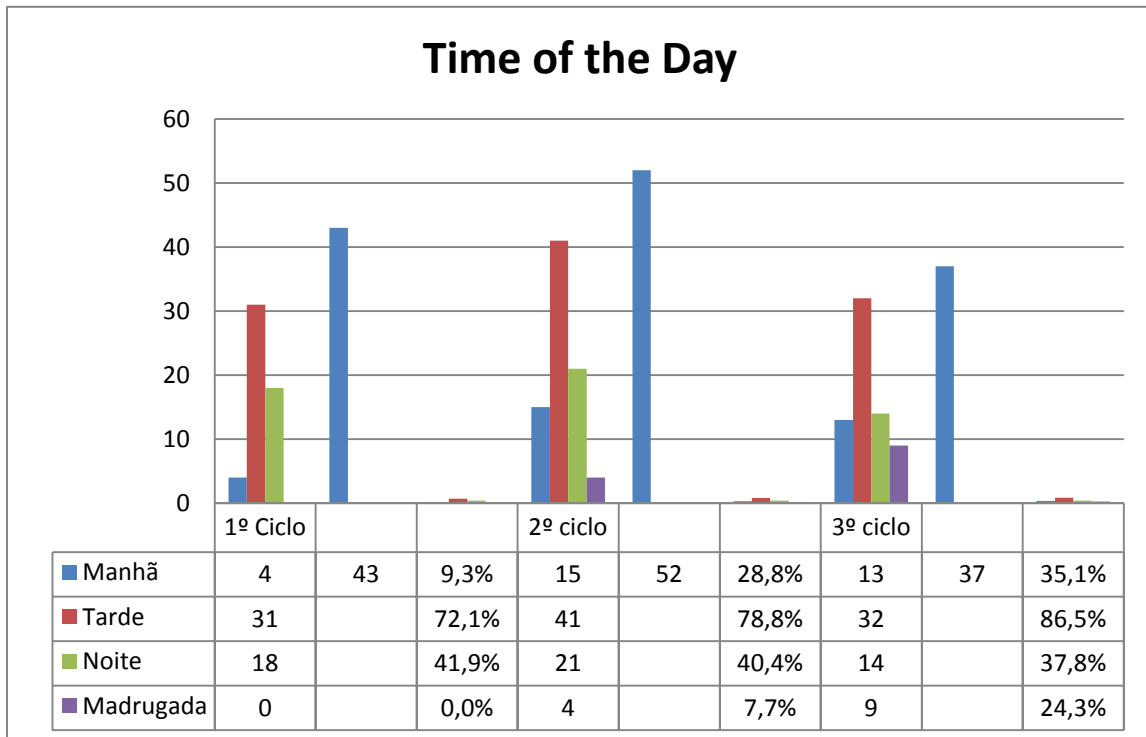
Figure 7 – When do you play video games? In the morning, afternoon, evening or through the night?

As for the duration of their playing, the results vary significantly according to the Cycle the respondents belong to. In the 1st Cycle, 62.8% of the students play only 0 to 1 hours without interruption and 20.9% play 1 to 2 hours. In the 2nd Cycle, these two options present the same data: 34.6% each. In the 3rd Cycle, there is an increase in the duration of playing: 37.8% of students play 1 to 2 hours and only 27% play less than one hour at a time. When comparing the three Cycles, the increase in the percentage

of students who play for 3 hours or more is also very relevant: 9.3% in the 1st Cycle, 15.4% in the 2nd and 27% in the 3rd (figure 8).

Duration of Playing

	1º Ciclo			2º Ciclo			3º Ciclo		
0-1 H	27	43	62,8%	18	52	34,6%	10	37	27,0%
1 - 2 H	9		20,9%	18		34,6%	14		37,8%
2-3 H	4		9,3%	8		15,4%	3		8,1%
+ 3 H	4		9,3%	8		15,4%	10		27,0%
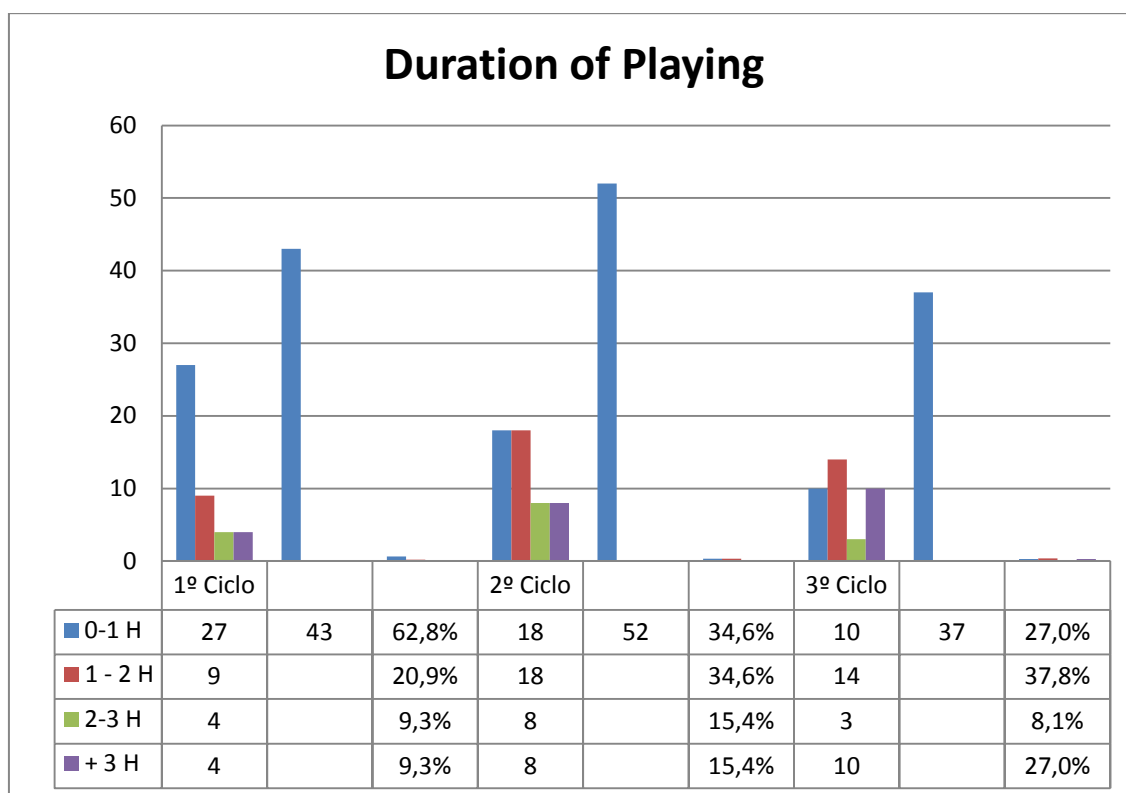
Figure 8 – How much time do you spend playing games without interruption?

The data also shows that boys play for longer periods of time than girls. In the 1st Cycle, 13% play for 2-3 hours in a row and another 13% play more than 3 hours, while only 5% of girls play 2-3 hours and none plays more than 3 hours; in the 2nd Cycle, 12.5% of boys play 2-3 hours and 25% play more than 3h, whereas 17.9% of girls play 2-3 hours and 7.1% play more than 3 hours; in the 3rd Cycle, 5,3% of boys play 2-3h and 36,8% play more than 3 hours, while 14,3% of girls play 2-3h and 21,4% play more than 3 hours (appendix 3).

More than 90% of students from all Cycles play video games in their own home, whereas about 30% reported that occasionally they also play at their friends' houses. A low percentage of students said that they played at school or at shops. The students who chose the variable 'other' added that they sometimes played at the house of a relative. Some students chose more than one option (figure 9).

Playing place

	1º ciclo			2º Ciclo			3º ciclo		
■ Casa	39	43	90,7%	47	52	90,4%	36	37	97,3%
■ Escola	6		14,0%	3		5,8%	4		10,8%
■ Lojas	2		4,7%	0		0,0%	3		8,1%
■ Casa de Amigos	13		30,2%	15		28,8%	13		35,1%
■ Outro	3		7,0%	6		11,5%	2		5,4%
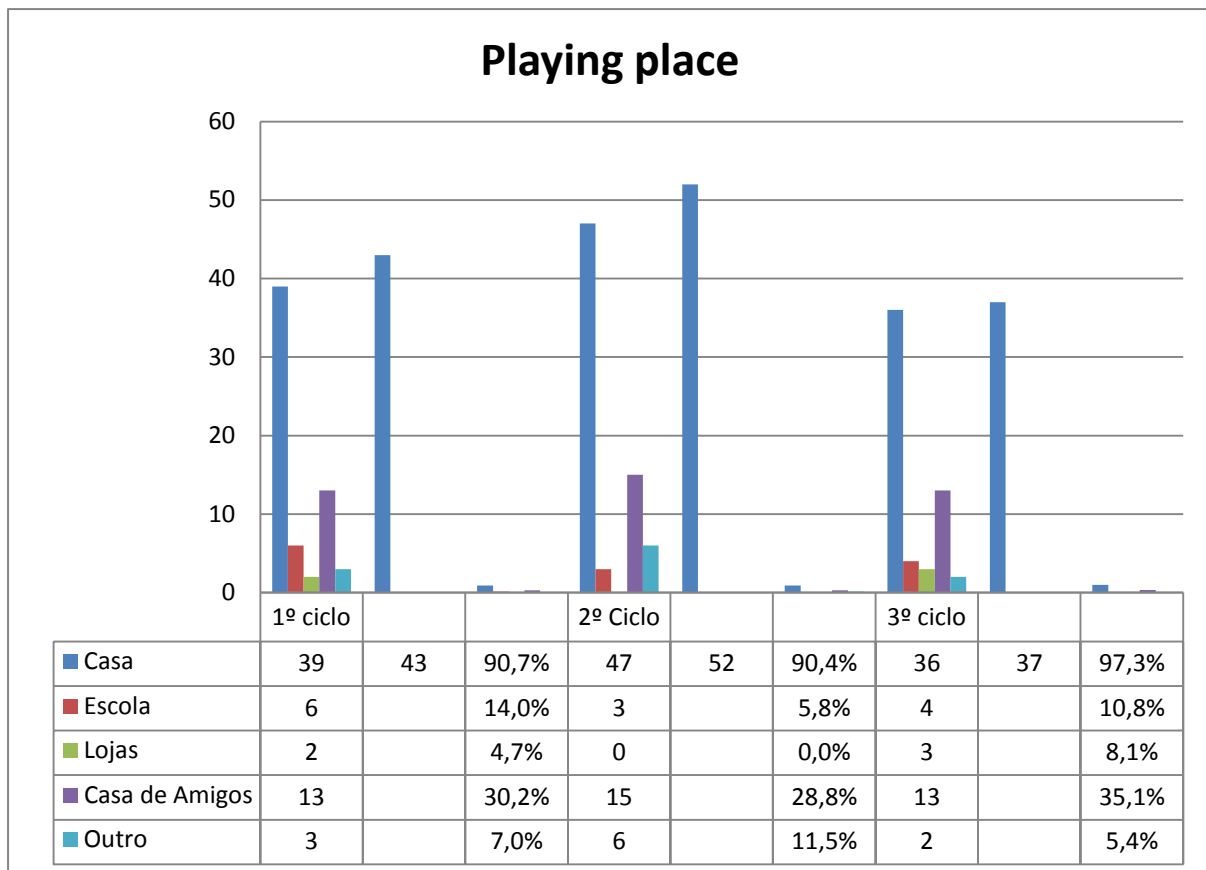
Figure 9 –Where do you play video games? At home, at school, in shops, at friends' house or another place?

To verify whether playing video games is a social or an isolating activity, students were also asked who they played video games with. In all three Cycles most respondents answered that they played alone: 51.2% in the 1st Cycle, 82.7% in the 2nd Cycle and 73% in the 3rd Cycle. However, some of these students also said that they occasionally played with their brothers or sisters and with their friends, in person or online. It is interesting to notice that only in the 1st Cycle is the percentage of 'parents' a relevant variable: 30.2%. Some students chose more than one option (figure 10).

Playing companions...

	1º Ciclo			2º Ciclo			3º Ciclo		
Sozinho	22	43	51,2%	43	52	82,7%	27	37	73,0%
Pais	13		30,2%	6		11,5%	6		16,2%
Irmãos	14		32,6%	19		36,5%	14		37,8%
Amigos	16		37,2%	15		28,8%	19		51,4%
Amigos online	5		11,6%	17		32,7%	7		18,9%
Desconhecidos online	0		0,0%	4		7,7%	4		10,8%
Outro	1		2,3%	2		3,8%	1		2,7%
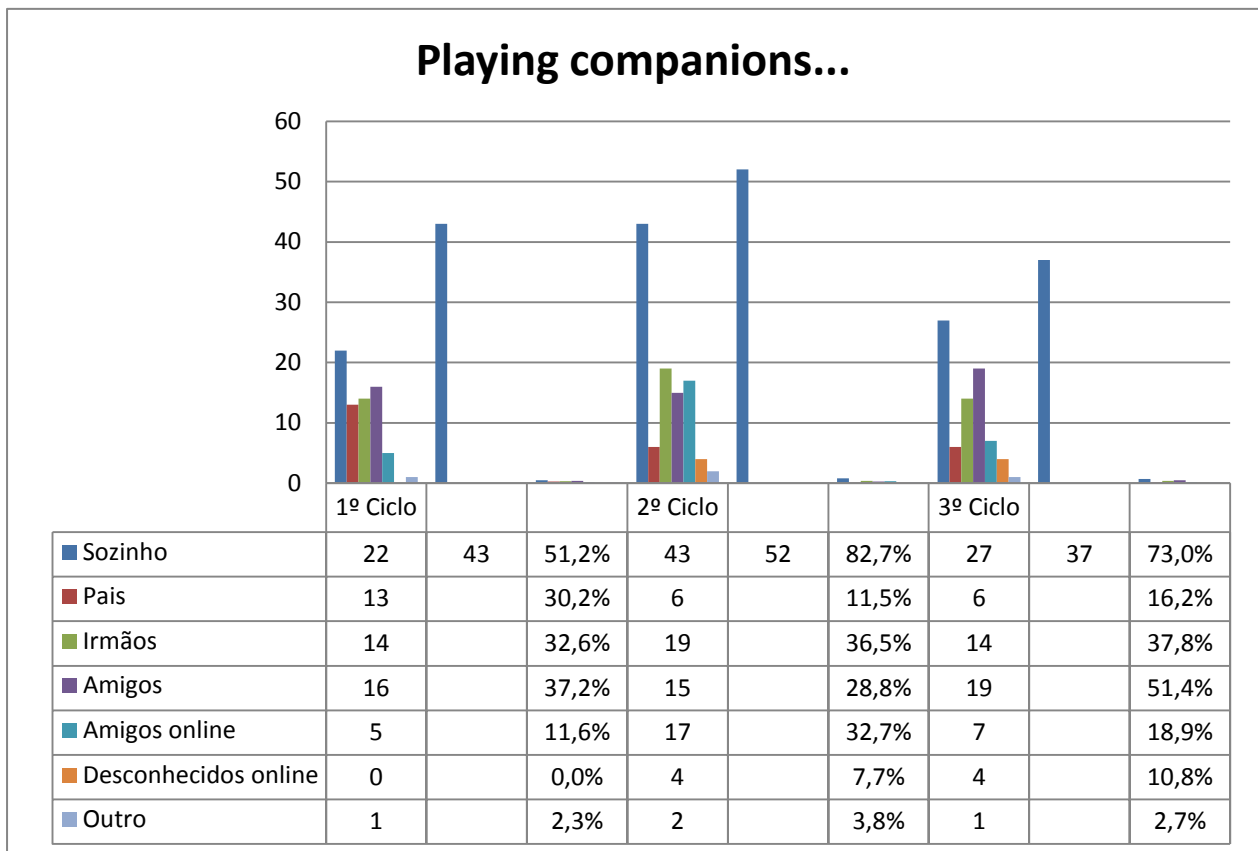
Figure 10 – Who do you play video games with? Parents, brothers/ sisters, friends, friends online, strangers online, alone or other?

To determine the role of parents and parental supervision over videogame playing, the next three questions were essential. First, students were asked whether their parents established any rules concerning this activity. As we can see from figure 11, in the 1st and 2nd Cycles, the majority of parents only sometimes set rules for videogame playing, whereas in the 3rd Cycle, almost half of the parents do not set any rules at all: 48.6%. The percentage of parents who establish rules in the three Cycles is very small: 25.6% in the 1st Cycle, 30.8% in the 2nd and 21.6% in the 3rd.

Rules

	1º Ciclo			2º Ciclo			3º Ciclo		
■ Sim	11	43	25,6%	16	52	30,8%	8	37	21,6%
■ Não	11		25,6%	17		32,7%	18		48,6%
■ Às vezes	21		48,8%	19		36,5%	11		29,7%

Figure 11 – Do parents set any rules? Yes, No or Sometimes?

In the 1st Cycle, girls seem to be more submitted to rules than boys, since the percentage of girls who answered 'yes' or 'sometimes' equals 85%, while the percentage of boys is only 65.2%. In the 2nd Cycle, the results are similar, but still a little higher score for girls. In the 3rd Cycle, the data shows the opposite of the 1st cycle: now 68.5% of boys have rules, even if only 'sometimes', against 35.7% of girls (appendix 3).

Secondly, students were asked about the nature of those rules – if they concerned the duration of play, the time of day, the kind of games or other. In all three Cycles, the highest percentage refers to the duration of play (48.8% in the 1st Cycle 39.5% in the 2nd and 69.6% in the 3rd), although in the 2nd Cycle it equals the percentage concerning the time of day. It is very significant that the variable 'kind of games' presents such a low and decreasing percentage from the 1st to the 3rd Cycles (23.3% in the 1st Cycle, 15.8% in the 2nd and 8.7% in the 3rd). The respondents who chose the variable 'other' reported that their parents only let them play when there were not any tests. Some students chose more than one variable (figure 12).

Rules refer to...

	1º Ciclo			2º Ciclo			3º Ciclo		
■ As regras referem-se a: À duração	21	45	48,8%	15	38	39,5%	16	23	69,6%
■ As regras referem-se a: Altura do dia	6		14,0%	15		39,5%	4		17,4%
■ As regras referem-se a: Tipo de jogos	10		23,3%	6		15,8%	2		8,7%
■ As regras referem-se a: Outro	3		7,0%	2		5,3%	1		4,3%
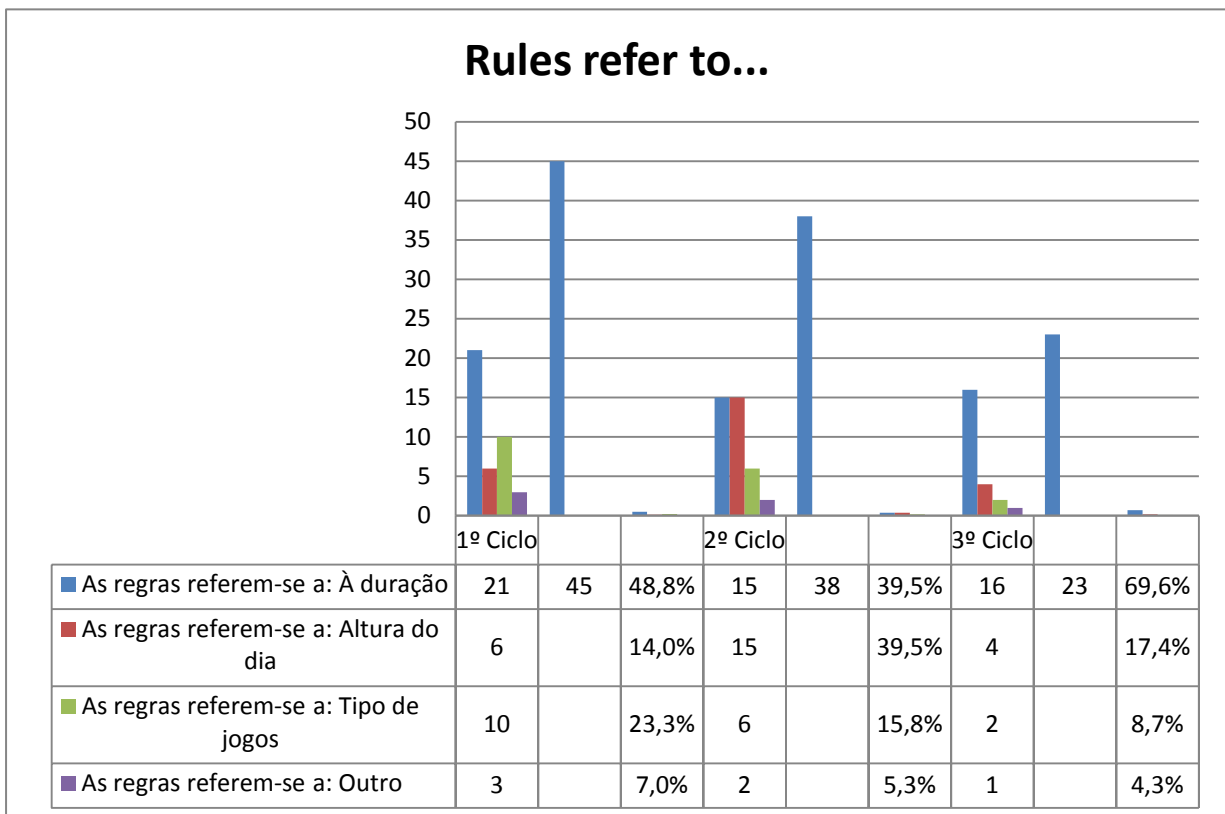
Figure 12 – What do the rules refer to? Duration, time of the day, kind of games or other?

Thirdly, students had to answer whether their parents know the games they play (figure 13). In the 1st Cycle, most parents are reported as actually knowing their children's games, but still, a significant percentage – 30.2% - only know some of them; in the 2nd Cycle, we get the same percentage for those parents who do know the games and those who only know some of them – 42.3%; in the 3rd Cycle, the majority of parents know the games, 18.9% only know some of them and another 18.9% do not know them at all. It is important to notice that while in the 1st Cycle, no respondent chose the 'no' variable, there is an increase in the 2nd and 3rd Cycles of parents who do not have a single idea of the games their children play.

Parents' knowledge of games

	1º Ciclo			2º Ciclo			3º Ciclo		
■ Pais/EE conhecem os jogos Sim	30	43	69,8%	22	52	42,3%	23	37	62,2%
■ Pais/EE conhecem os jogos Não	0		0,0%	8		15,4%	7		18,9%
■ Pais/EE conhecem os jogos Alguns	13		30,2%	22		42,3%	7		18,9%
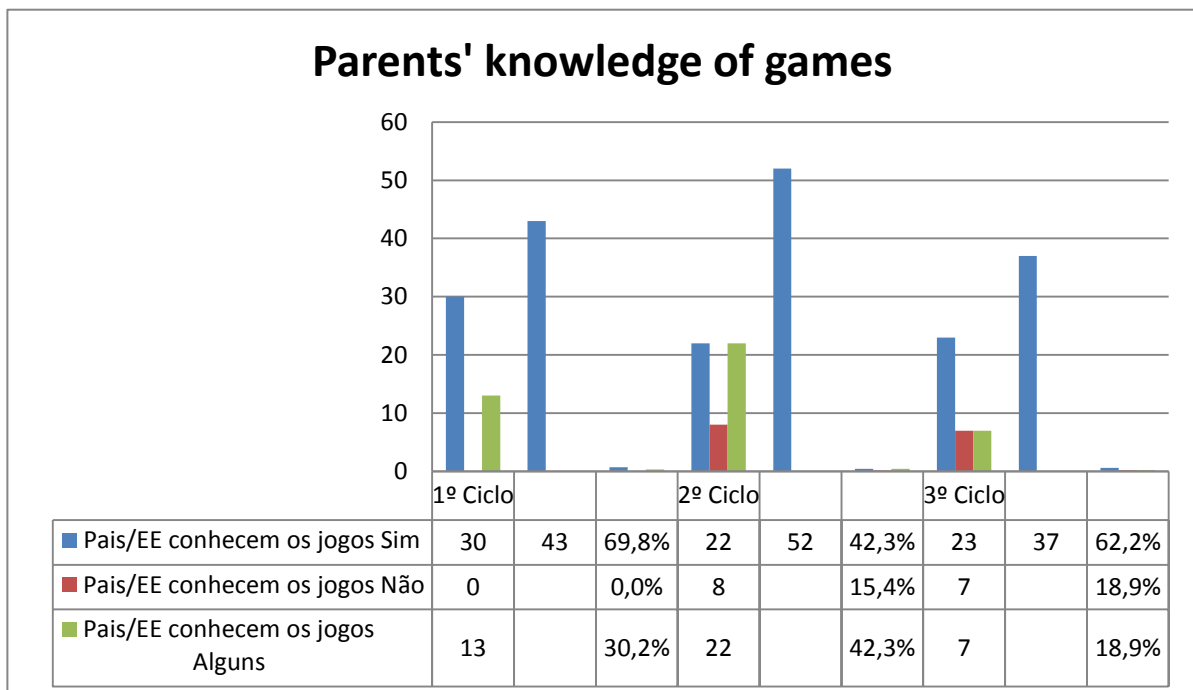
Figure 13 – Do parents know the games? Yes, No or Some of them?

Students were also asked what kind of software/ hardware they used to play video games, and computer games was the mostly chosen response: 60.5% in the 1st Cycle, 71.2% in the 2nd and 81.1% in the 3rd Cycle, which is consistent with the preferred way of finding new games, the Internet. Although some students hear about new games through friends, television or magazines, the great majority searches for them on the Internet: 51.2% in the 1st Cycle, 59.6% in the 2nd, and 67.6% in the 3rd (appendices 2.1, 2.2, 2.3). As for the genre of games they prefer, the answers were so varied that it seems that students like to play almost all kinds of games. Besides, this

answer is not totally consistent with the question where students were asked to refer to their three favourite games, which seems to indicate that they probably do not know very well how to classify the games they play. Although the 'action' genre is the one most selected in the 1st Cycle (48.8%), 'adventure' in the 2nd Cycle (55.8%) and 'sports' in the 3rd (67.6%), we can say that the mostly appreciated genres in the three Cycles are 'sports', 'racing', 'action', 'adventure', 'fighting', 'simulation' and 'virtual worlds'. It is noticeable that the strategy and First Person Shooter genres show an increasing tendency from the 1st to the 3rd Cycles (figure 14).

	Racing/Corridas (ex: NASCAR)	Puzzle (ex: Tetris)	Sports/Desporto (ex: FIFA)	Action/Acção (ex: GTA)	Adventure/Aventura (ex: Tom Raider)	Rhythm/Ritmo (ex: Guitar Hero)	Strategy/Estratégia (ex: Command and Conquer)	Simulation/Simulação (ex: The Sims)	Fighting/Luta (ex: Wrestling)	First-person shooter (ex: Counter-Strike)	Role-playing (ex: Final Fantasy)	MMOGs (ex. World Warcraft)	Virtual Worlds/Mundos Virtuais (ex: Habbo Hotel)	Outro
1º Ciclo	13	3	18	21	16	3	3	11	12	5	3	2	10	8
	30,2%	7,0%	41,9%	48,8%	37,2%	7,0%	7,0%	25,6%	27,9%	11,6%	7,0%	4,7%	23,3%	18,6%
2º Ciclo	21	11	27	20	29	2	13	15	18	13	6	3	21	12
	40,4%	21,2%	51,9%	38,5%	55,8%	3,8%	25,0%	28,8%	34,6%	25,0%	11,5%	5,8%	40,4%	23,1%
3º Ciclo	22	6	25	20	9	7	10	19	14	15	3	8	5	2
	59,5%	16,2%	67,6%	54,1%	24,3%	18,9%	27,0%	51,4%	37,8%	40,5%	8,1%	21,6%	13,5%	5,4%

Figure 14 – What genre of game do you prefer?

Boys and girls have different preferences as far as video games are concerned. The girls' first choice in the 1st and 3rd Cycles is 'simulation' games - 45% and 62.5% respectively, and in the 2nd Cycle, 60.7% chose 'virtual worlds'. In the 1st Cycle, the boys' favourite genre is 'action' with a percentage of 78.3%, and in the 2nd and 3rd Cycles, they prefer 'sports' with a corresponding percentage of 75% and 81%. As second choice, girls indicate 'racing' games in the 1st and 3rd Cycles, and 'adventure' in the 2nd, while boys choose evenly 'sports', 'adventure' and 'fighting' games in the 1st Cycle, 'adventure' in the 2nd and 'racing' in the 3rd Cycle. 'Sports' and 'action' is girls'

What kind of games?

	Raci ng/C orrid as (ex: NAS CAR)	Puzzl e (ex: Tetri s)	Spor ts/D espo rto (ex: FIFA)	Actio n/Ac ção (ex: GTA)	Adve ntur e/Av entu ra (ex: Tom Raid er)	Rhyt hm/ Ritm o (ex: Guit ar Hero)	Strat egy/ Estra tégia (ex: Com man d and Con quer)	Simu latio n/Si mula ção (ex: The Sims)	Fight ing/L uta (ex: Wre stlin g)	First- pers on shoo ter (ex: Cou nter- Strik e)	Role - playi ng (ex: Final Fant asy)	MM OGs (ex. Worl d War craft)	Virtu al Worl ds/ Mun dos Virtu ais (ex: Hab bo Hote l)
							Que tipo de jogos						
■ 1º CICLO Feminino	7	4	5	5	1	0	0	9	0	0	0	0	5
■ 1º CICLO Feminino	35,0%	20,0%	25,0%	25,0%	5,0%	0,0%	0,0%	45,0%	0,0%	0,0%	0,0%	0,0%	25,0%
■ 1º CICLO Masculino	7	0	10	18	10	3	1	7	10	6	2	2	7
■ 1º CICLO Masculino	30,4%	0,0%	43,5%	78,3%	43,5%	13,0%	4,3%	30,4%	43,5%	26,1%	8,7%	8,7%	30,4%

Figure 15 –Boys' and girls' favourite genres of video games – 1st Cycle

third favourite genre, except in the 2nd Cycle, where that position is occupied by the 'simulation' genre. Boys indicated as their third preference 'racing', 'simulation' and virtual worlds' in the 1st Cycle; 'racing', 'action' and 'fighting' games in the 2nd Cycle; 'action' and 'First Person Shooter (FPS)' in the 3rd Cycles. It is significant that in the 3rd Cycle, 66.7% of the male respondents play 'FPS' games, and only 6.3% of the girls indicated this genre as a playable one (figures 15, 16 and 17).

What kind of games?

	Racing /Corridas (ex: NASCAR)	Puzzle (ex: Tetris)	Sports /Desporto (ex: FIFA)	Action /Acção (ex: GTA)	Adventure/Aventura (ex: Tom Raider)	Rhythm/Ritmo (ex: Guitar Hero)	Strategy/Estratégia (ex: Command and Conquer)	Simulation/ Simulação (ex: The Sims)	Fighting/Luta (ex: Wrestling)	First-person shooter (ex: Counter-Strike)	Role-playing (ex: Final Fantasy)	MMOGs (ex. World Warcraft)	Virtual Worlds/Mundos Virtuais (ex: Habbo Hotel)
								Que tipo de jogos					
2º CICLO Feminino	8	10	9	7	14	1	8	12	5	4	5	0	17
2º CICLO Feminino	28,6%	35,7%	32,1%	25,0%	50,0%	3,6%	28,6%	42,9%	17,9%	14,3%	17,9%	0,0%	60,7%
2º CICLO Masculino	13	1	18	13	15	1	4	3	13	9	1	3	4
2º CICLO Masculino	54,2%	4,2%	75,0%	54,2%	62,5%	4,2%	16,7%	12,5%	54,2%	37,5%	4,2%	12,5%	16,7%

Figure 16 – Boys' and girls' favourite genres of video games – 2nd Cycle

What kind of games?

	Racing /Corridas (ex: NASCAR)	Puzzle (ex: Tetris)	Sports /Desporto (ex: FIFA)	Action /Acção (ex: GTA)	Adventure/Aventura (ex: Tom Raider)	Rhythm/Ritmo (ex: Guitar Hero)	Strategy/Estratégia (ex: Command and Conquer)	Simulation/Simulação (ex: The Sims)	Fighting/Luta (ex: Wrestling)	First-person shooter (ex: Counter-Strike)	Role-playing (ex: Final Fantasy)	MMOGs (ex. World Warcraft)	Virtual Worlds/Mundos Virtuais (ex: Habbo Hotel)
							Que tipo de jogos						
3º CICLO Feminino	7	5	6	6	5	3	2	10	5	1	2	1	3
3º CICLO Feminino	43,8%	31,3%	37,5%	37,5%	31,3%	18,8%	12,5%	62,5%	31,3%	6,3%	12,5%	6,3%	18,8%
3º CICLO Masculino	15	0	17	14	6	4	8	10	10	14	2	7	2
3º CICLO Masculino	71,4%	0,0%	81,0%	66,7%	28,6%	19,0%	38,1%	47,6%	47,6%	66,7%	9,5%	33,3%	9,5%

Figure 17 - Boys' and girls' favourite genres of video games – 3rd Cycle

When asked about their three favourite and mostly played games 25.6% the 1st Cycle students referred to *GTA (action genre),* 18.6% *to FIFA/ PES (sports genre),* and 14% to *WWE Smackdown* (fighting genre)*;* students of the 2nd Cycle chose first *FIFA/ PES* (32.7%), in second place *GTA* (19.2%) and *WWE Smackdown* (19.2%) and in third place the life simulation video game genre *The Sims* (13.5%); the favourite video

games in the 3rd Cycle were *FIFA/ PES* (40.5%), the racing video game genre *Burnout/ Need4Speed* (27%), and thirdly with a percentage of 21.6% both the video games *GTA* and *The Sims* (figures 18, 19 and 20)*.

Students' favourite games

	GTA	FIFA/ PES	WWE	POKEMON	BUZZ	THE SIMS
■ 1ºCiclo	11	8	6	5	5	4
■ 1ºCiclo	25,6%	18,6%	14,0%	11,6%	11,6%	9,3%

Jogos favoritos
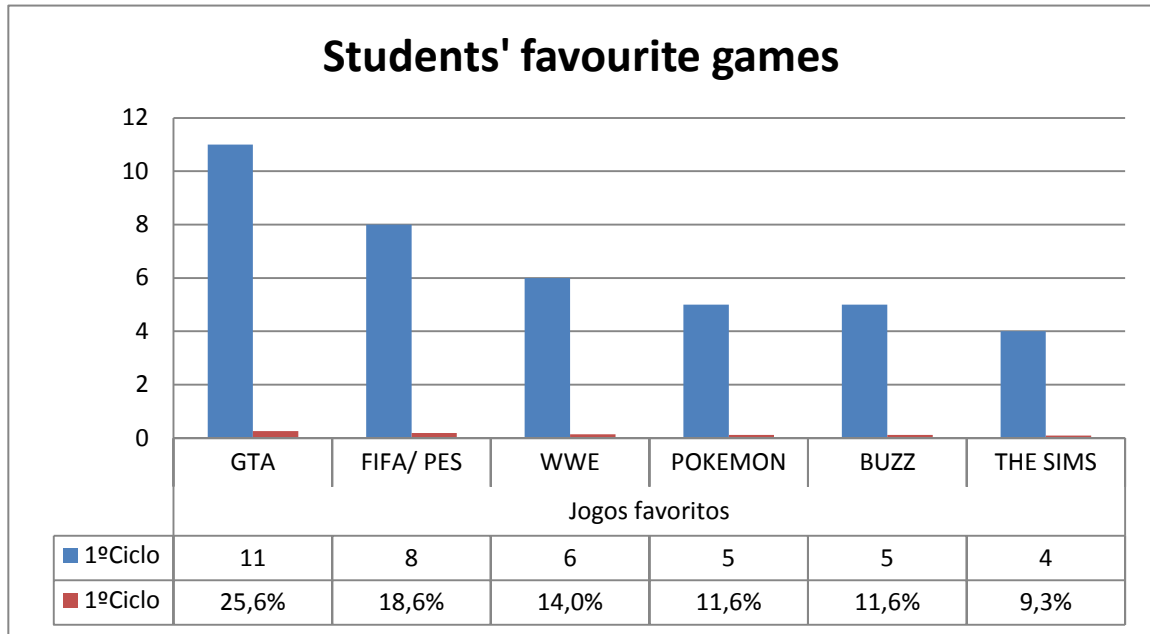
Figure 18 – Students' favourite video games – 1st Cycle

Students' favourite games

	FIFA/ PES	GTA	WWE	THE SIMS	RACING	HABBO
■ 2ºCiclo	17	10	10	7	6	6
■ 2ºCiclo	32,7%	19,2%	19,2%	13,5%	11,5%	11,5%

Jogos favoritos
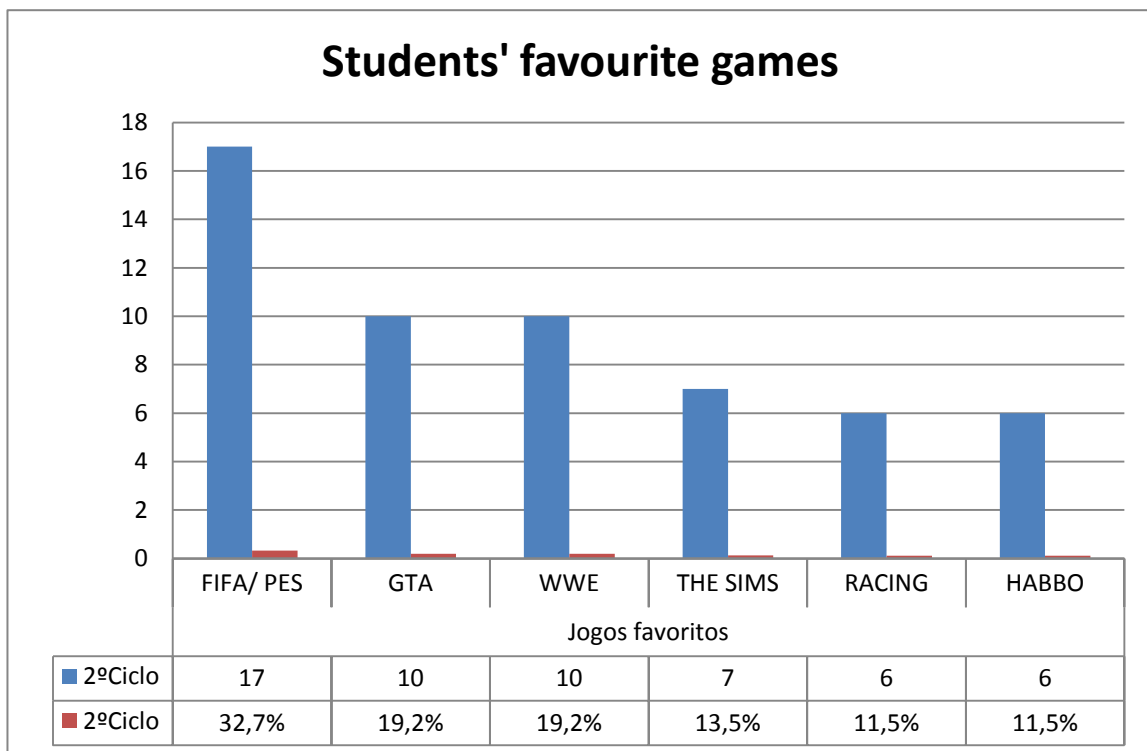
Figure 19 – Students' favourite games – 2nd Cycle

Students' favourite games

	FIFA/ PES	BURNOUT / NEED FOR SPEED	GTA	THE SIMS	COUNTERSTRIKE	WWE
■ 3ºCiclo	15	10	8	8	7	5
■ 3ºCiclo	40,5%	27,0%	21,6%	21,6%	18,9%	13,5%

Jogos favoritos
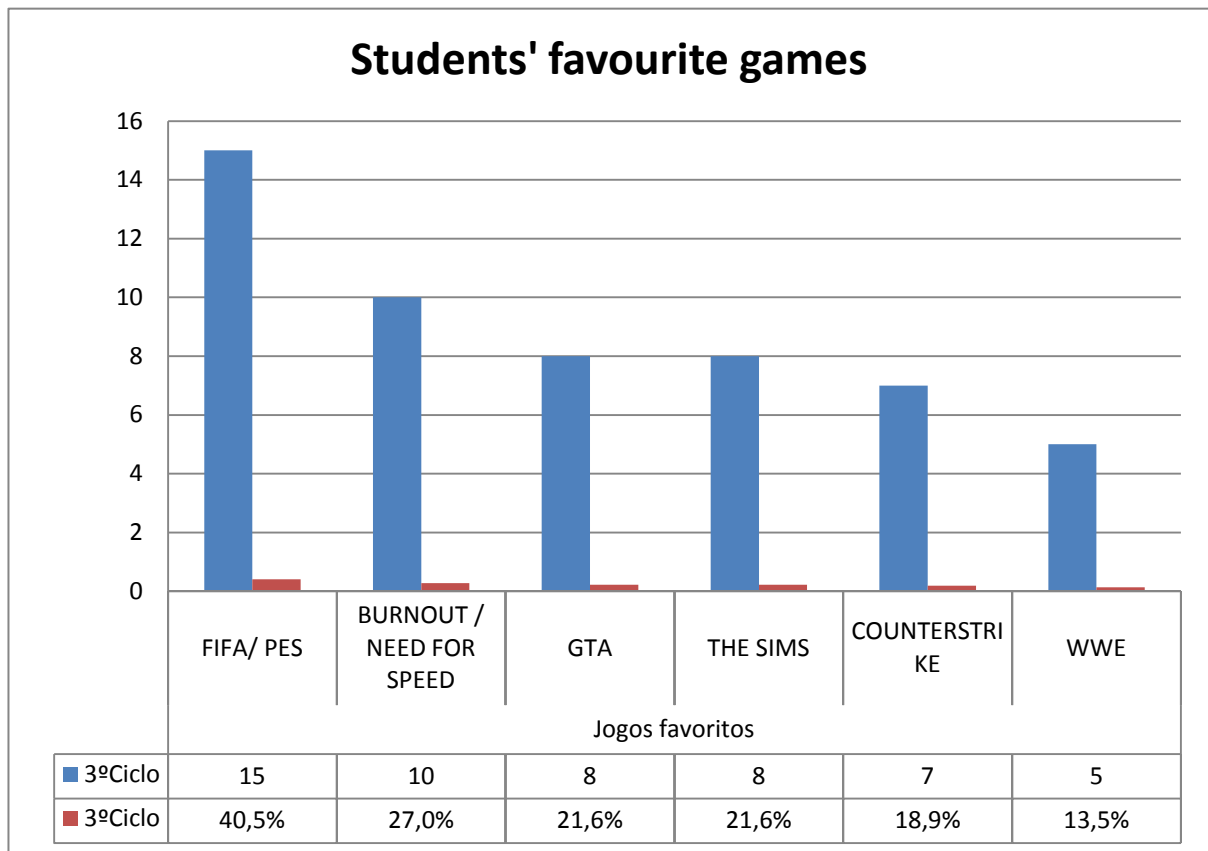
Figure 20 - Students' favourite games –3rd Cycle

To find out if the games children and adolescents play are suitable for their age, they were questioned about the ratings of the games they most frequently play. The results may be quite surprising, since in the 1st Cycle, most students do not comply with the rating system: a great number of students are playing games rated for 16, 18 or older than 18. In the 2nd Cycle, despite considering that students can already play games rated for 12-year-olds, there is still a high percentage of students who play games which are not fit for their age: about 30% play games rated for 16 and 18. In

the 3ʳᵈ Cycle, the majority of students (about 50%) already play games rated for 16 and/ or 18. Students were allowed to choose more than one option (figure 21).

Games ratings

	1º Ciclo			2º Ciclo			3º Ciclo		
■ Nível de classificação etária dos que + jogas 4 anos	10	43	23,3%	7	52	13,5%	3	37	8,1%
■ Nível de classificação etária dos que + jogas 6 anos	23		53,5%	12		23,1%	5		13,5%
■ Nível de classificação etária dos que + jogas 12 anos	12		27,9%	37		71,2%	24		64,9%
■ Nível de classificação etária dos que + jogas 16 anos	10		23,3%	17		32,7%	20		54,1%
■ Nível de classificação etária dos que + jogas 18 anos	14		32,6%	12		23,1%	17		45,9%

Figure 21 – How are your mostly frequently played games rated?

After analyzing both boys' and girls' answers, it is worth mentioning that in the 1ˢᵗ and 2ⁿᵈ Cycles, there are many more boys playing games for 16 and 18 year olds than girls. In the 3ʳᵈ Cycle, most girls play games for 16 year olds but 20.7% of them are already playing games for Age 18. While most boys play games rated for age 12 (and this result is not consistent with the next answer), 22.5% play games rated for age 16 and 27.5% play games rated for age 18 (appendix 3).

As for the next question, about the ratings compliance, all the 'sometimes' answers were converted into 'no' answers – if you answer 'sometimes' then you do not respect the rating system. The intention of including this option was to avoid making respondents feel guilty or ashamed or lying because of their lack of compliance with the rating system. As we can see from figure 22, the majority of students from all three Cycles do not respect the rating system of video games: 60.5% in the 1st Cycle, 86.5% in the 2nd, and 81.1% in the 3rd.

Ratings compliance

	1	2	3	4	5	6	7	8	9
■ Respeitas os níveis de classif. Etária Sim	17	43	39,5%	7	52	13,5%	7	37	18,9%
■ Respeitas os níveis de classif. Etária Não	26		60,5%	45		86,5%	30		81,1%
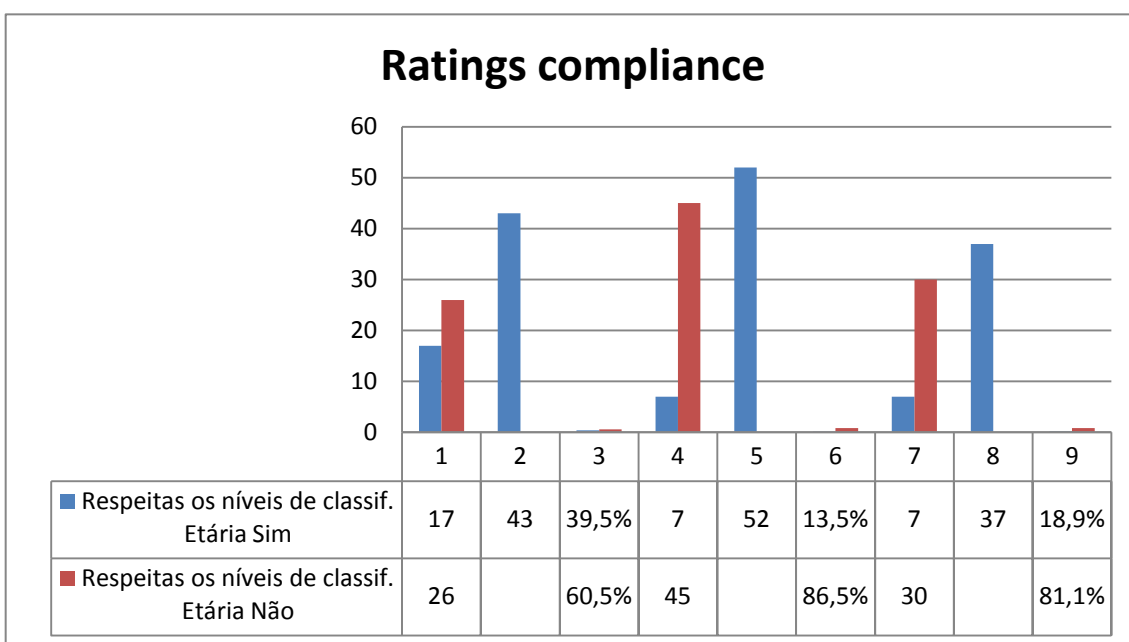
Figure 22 – Do you usually respect the games ratings? Yes or No?

In all the three Cycles, girls always claim to comply more with the rating system than boys, particularly in the 1st Cycle, where 65% of girls do comply and 82.6% of boys do not. In the 2nd and 3rd Cycles, there is a very low percentage of boys submitting to the rating system: 4.2% and 4.8% respectively, against 21.4% and 37.5% of girls (appendix 3).

IV.5.2 - INTERVIEW RESULTS

The interviews (appendices 4.1 and 4.2) were conducted with twenty students from the 3rd Cycle, ten boys and ten girls, who had already answered the questionnaires. The main objective was to see if the answers supported the results obtained in the questionnaires but also to approach issues concerning the effects of exposure to violent video games on students' behaviour and school performance.

The first question, whether students have a computer or a game console in their bedrooms, was intended to determine how easy or difficult it is for parents to supervise their children's playing habits. Although 12 students answered 'No', of these, 5 girls never play video games, which implies that of the 15 students that actually play video games, 8 or 53.3% of them have a computer or a games console in their bedroom.

When asked about the playing frequency, 33.3% of the 15 students answered that they played every day, which is not far from the 40.5% result of the questionnaire; 4 students played twice a week, 1 student played three times a week, 1 four times a week and another played only at the weekend.

Question number three about parents' rules on playing video games, had a much more significant result than the questionnaires: 15 students answered that there were no rules at all, while from the 5 students that answered 'yes', 4 reported having some kind of control on how long they played, and only 1 student on the kind of games played. One teenager said "Yes, I have rules, but I don't follow them. I don't care." This answer is very significant to this study, because it suggests that probably other students who said that they had rules, do not actually follow them.

Similar to the questionnaire was the result to question number four about parents' knowledge about the type of games played: 9 students confirmed that parents know that they play sports, racing, action, fighting or Super Mario games, and 6 said that their parents have no idea of what games they are playing.

On the other hand, there seems to be little control when students are playing computer games: 65% of the students are not controlled, 20% are controlled and

15% are only controlled occasionally. 83.3% of the controlled students mentioned the duration of their playing as the main factor of control and only one student, the kind of games he played.

When asked whether most video games are violent or not, 80% of the students confirmed that they are. According to one of the interviewees "Even Super Mario has violence". 60% of the students usually play violent video games, 2 students play them once in a while, and one student, answered that she plays but not very violent ones. Mentioned as their favourite violent games were *Counterstrike, GTA IV, Medal of Honour, WWE, Mission Impossible, World of Warcraft* and some racing and sporting games. The reasons given for enjoying violent games were mostly because they contained shooting, fights, killing other people, the thrill they make you feel, the chance they provide to be in the avatar's shoes, and because some of them are online. To quote one female interviewee, "I pretend that's who I am and I get a kick out of that." These reasons provide us with an insight into the issues of immersion and interactivity when playing video games that have been earlier mentioned.

Question number eight was intended to determine the control shops exert over the selling of video games and according to 65% of the students, it is very easy to buy games rated 18 or 18+ even if you are younger and all by yourself; only one student answered 'no' and 30% had no idea if it is easy or not.

About their opinion on the video games rating system, 30% of the students answered that they agreed with it, 35% said that they did not agree, 30% agreed with some of them, and one student replied that he did not know. The motives for not agreeing with it were mainly related to the violent ones not being suitable for children or, on the contrary, some rated for 18 or 18+ not having anything wrong or inadequate for teenagers, which is not very consistent with their opinion that most video games are violent. Another female interviewee told us "Some video games are very violent but they are rated for teenagers!".

Question number ten was meant to assess the accessibility of violent games through the Internet, and 75% of the students reported that it is very easy, since the only

thing required is to write that you are in fact 18 years old. The other 25% answered that they did not know whether it is easy or not.

When asked if children and teenagers should play violent video games, the answers differed according to the age group playing the games. According to 85% of the students, children should not play them, because they are going to imitate what they see. A male teenager answered "No, children should not play those games because they can get crazy". Two students thought that they should play them, because this way they would learn how to react to violence. One student said that he did not have any opinion on this issue. On the other hand, 50% of the students believe that there is nothing wrong with adolescents playing violent video games, while 40% think that they should not be allowed to play them, and two students were not sure about it.

Surprisingly, therefore, is the result of the following question, whether violent video games may turn children and teenagers into more aggressive and violent individuals: 95% of the students answered 'yes', and only one student, answered 'sometimes'.

Most of those interviewed, a percentage of 90%, recognize in their classmates attitudes, behaviour or language that was somehow influenced by video games. 46.6% said that some of them adopted language expressions, such as *wanna fight* or *headshot;* 20% answered that some of the students got involved in wrestling fights, and 13.3% reported that some of their classmates had already wrestled when they were in the 2nd Cycle; the same percentage of students said that they recognized the influence of the games in all the mentioned aspects, and one student, answered that sometimes they adopted violent attitudes but added that they were only doing it for fun. One of our interviewees informed us: "When I was in the 2nd Cycle, a friend of mine had to be taken into hospital because he got seriously hurt when he was wrestling with some other boy". 'Another confirmed this idea when he said "Yes, I could see that influence mainly when I was in the 2nd Cycle".

Students were asked if they usually get into some kind of conflict with other students, teachers or parents, and 75% denied it, while 25% admitted having this problem. One student answered that he did not get into conflict himself but he liked to watch others doing so. Students were also asked whether they had already been involved in

bullying situations where they had been the perpetrators: 60% of the students confirmed that they had, although one of them said that he was only kidding. Apparently, students do not consider 'bullying' a question of having conflicts with other students. When asked how they would react if someone bumped into them by accident, 14 students answered that they would remain calm if the person apologized and would not do anything about it; 4 students said that they would make some kind of comment like *watch out, see where you are going* or *open your eyes*; 1 student said that he would also bump into that person, and another one said that he would punch the other student.

Question number seventeen asked the students if they had already become addicted to playing video games, and here the percentage was equally divided into 'yes' and 'no' answers. Two interviewees claimed openly: "I am still addicted to video games".

The last question was intended to determine whether students establish any connection between playing video games and their school results: 12 students stated that it did not affect their school performance, but if we exclude the five students who do not play, then we get a percentage of 46.6% who are not affected and 53.3% who admit that their school results are affected by the time they spend playing video games. One interviewee said "I leave my studies aside so that I can have time to play". Another student added that playing video games helped him to become more concentrated at school, but as his teacher I can assure that he used to be much more concentrated at school when he did not play so much and that his school results have got much worse.

IV.6 - STUDENTS' FAVOURITE VIDEO GAMES

One of our objectives was to identify and analyze the respondents' most-played video games (appendices 5 and 5.1). Researchers from various disciplines have applied different methodologies and criteria to the analyzis of computer and video games, and thus, the youngest academic field of game studies is still in a state of relative chaos. When Brooker analyzes the game J*etman* he values such elements as institution, authorship, character and narrative, genre and socio-political connotations and remakes (2001). Konzack (2002) suggests that any computer game analysis should look into hardware, program code, functionality, gameplay, meaning, referentiality and socioculture (2002: 91-98). Aarseth (2003) tries to simplify Konzack's typology, arguing that there are three ways of getting to know a game: studying the design, rules and mechanics of the game, observing others playing or reading reports and reviews about the games, and playing the game ourselves (2003: 3). The previous methodologies are too broad to be undertaken in this study, so our primary focus was to analyze the content of video games in regards to issues such as levels of violence and aggression, relying mainly on aesthetic, cultural and communicative aspects of the prime games in order to understand why these games are so appealing and sometimes addictive to lots of young children and teenagers. This analysis was carried out through the playing of the games, the analysis of video games covers, the search of game sites posts, game reviews and game news, and the reading of books and research papers on video games analysis. In most cases, the video games we found had Portuguese covers, so we decided to translate the texts into English.

As mentioned earlier, the respondents elected as their favourite video games *FIFA/ PES, GTA, WWE Smackdown, Burnout/ NeedforSpeed and The Sims.* The analysis of the video games which follows respects the order of students' preferences.
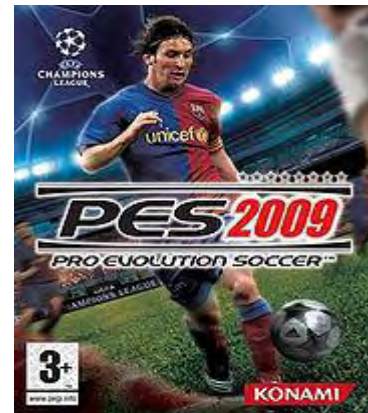
FIFA, also known as *FIFA Football* or *FIFA Soccer*, is a series of football video games, which was first released in 1993 with the official license from FIFA, the world governing body of football. The several series include many exclusively-licensed leagues and teams from around the world; well-known football commentators, such as Martin Taylor in England or David Carvalho in Portugal; famous singers and bands, such as The Script, Oasis, Robbie Williams or Duffy, and football celebrities feature on the covers, like Ronaldinho and a different player for each region. The latest instalments of the game contain great improvements in responsiveness (the time between the player using the controller, and the results appearing on the screen) and likeliness (the probability of a specified outcome) in the "Be a Pro" mode and in the online game. *FIFA* is rated E[41]. In the cover of the video game *FIFA 10* we can read all sorts of suggestive statements to persuade gamers that playing this game will be a unique and real experience, and words such as *new, authentic and realism* are systematically used:

> *Pure football authenticity* – *the brand new and authentic team styles*
> *guarantee a football realism never seen before; Represent your country*
> – *play to conquer a place in the team of your country in the 2010 World*

---

[41] Source: http://www.fifa09.ea.com/pt/gameinfo/dynpid/11811

Cup Be a Pro; <u>Fight for Supremacy</u> – play a full season with your favourite squad in the authentic season mode.

Furthermore, this video game was given a score of 9/10 by both games sites Videogamer and Eurogamer and it got an excellent review as it can be seen in the text below:

> FIFA 10 offers the best gameplay in the series' history and includes even more features and game modes to boot. (...) This year's game also introduces a revitalised Manager mode and a brand-new Virtual Pro feature, allowing you to put yourself in the game and unlock new abilities across nearly every game mode. The result is an unparalleled game of football, whether you're playing a quick game with your mates or sitting in the manager's chair over several seasons. (...) FIFA 10 is without a doubt the best football game yet, and it's a package that no football fan will want to be without.[42]

Pro Evolution Soccer (PES) is also a football video games series with pretty much the same characteristics as *FIFA*, though lacking the latter's vast volume of licenses for the use of football teams and football players' names[43]. In the cover of *PES 2009*, a game also rated E, the headlines are even more appealing or suggestive than in *FIFA*'s cover:

> *Exciting game modes – Detailed animations – Great gameplay. <u>Rise to stardom</u> – this brand new and exciting mode allows you to create your own unique character that you will lead over an exceptional career in professional football. You will reach the top clubs and the national team. <u>Major League</u> – it is more complex and it includes the loyalty of the players; it is not enough to run the club, you also have to do everything*

---

[42] Source: http://www.gamespot.com/xbox360/sports/fifasoccer10/review.html
[43] Source: http://www.gamezplay.org/2009/08/pro-evolution-soccer-2010-pes-video.html

to keep your best players with you. Gameplay – the incredibly realistic
physics of the ball recreates a feeling like no other true simulation of
football. Graphics – detailed similarities of the player with unique and
spectacular animations.

When reading this text, it is noticeable the use of appealing words and phrases such as *exciting, stardom, unique, exceptional, professional, top, incredibly realistic, spectacular.* There is also a clear attempt to convince the player that if he plays the game, he will succeed as the manager of his own created character and reach the best teams and the national team. It has been given a score of 8/10 by both games sites Videogamer and Eurogamer and one of the reviews says that "(...) online play actually works, which is absolutely great. PES might be feature light in comparison to FIFA's packed offering, but it still offers a fun game of virtual football."[44]

As we could see from the questionnaires, both games are highly appreciated among children and teenagers in the three Cycles of Basic Schooling (18.6% in the 1st Cycle, 32.7% in the 2nd Cycle and 40.5% in the 3rd), but it is also appreciated worldwide, as we can see from the following piece of news: "ELSPA (the Entertainment and Leisure Software Publishers Association), has today announced that FIFA 09 was the best selling videogame of 2008. The market figure estimates state that approx 1.9 million units of the game have been purchased in the UK alone."[45] These games do not have a violent content except for the usual fouls that are committed in a football match, and they are rated E, but the feeling of immersion is high, because you really start thinking that you are that famous football player, and when you finish playing the game your heart is beating fast. We have found that gamers are especially boys who have always loved playing football and probably dream of becoming football celebrities like Cristiano Ronaldo, Ronaldinho or Kaká. Nowadays some media are always showing how easy it is to reach a life of richness and fame and become a football star, a soap opera actor or a singer superstar. What these games do is to keep feeding the illusion that when you play the games you are one of those football

---

[44] Source: http://www.videogamer.com/pc/pes_2009/review.html
[45] Source: http://www.elspa.com/?i=7937&s=1111&f=49&archive=

celebrities; strategies like using real names of teams, the real equipments, the image of famous football players, the voice of well-known football commentators, soundtracks of popular bands, and the texts in the games covers only contribute to the sense of immersion that the player is supposed to feel, and to his/ her wish to keep on playing in order to do better and feel self- realised each time he/ she plays. It is a reality that among students there are a great number of boys (and some girls too) who want to be football players, and who believe that they do not have to study much, because like Cristiano, they are going to be rich and famous.

IV.6.2 – GRAND THEFT AUTO

Grand Theft Auto (GTA), is a video games series, which began in 1997, and that has currently nine stand-alone games and several extension packs, including two for the latest console instalment, *GTA IV.* Its name refers to motor vehicle theft, and the game play focuses around different main characters who try to rise through the ranks of the criminal world, in a mixture of violent actions, adventures, driving and racing and occasional role-playing[46]. The antagonists are usually characters who have betrayed the protagonist or their organization, or someone who has the power to impede their progress. The series has provoked controversies and complaints for its adult nature and violent themes, particularly with the release of *GTA III.* The criticism focuses

---

[46] Source: http://www.rockstargames.com/grandtheftauto/

mainly on the fact that the games allow people to take on the role of a criminal, in opposition to traditional heroic roles, who has to accomplish various missions, such as assassinations, the killing of police officers, military personnel, taxi driving, fire fighting, pimping and racing, in order to progress through the storyline of the game. Some of the games were equally criticized for featuring exploitative, discriminating and violent attitudes toward women, by using the service of prostitutes and later murder and rob them (GTA III and IV); for instigating hate crimes and racism against minority ethnic groups (*GTA: Vice City);* for containing sex mini-games (games which allow your character to perform virtual sex acts with your virtual girlfriend within the game) that were never intended to be playable in the final version but whose code was left in the game, discovered later by hackers and made well-known among players (*GTA: San Andreas*); for showing full-frontal nudity (*The Lost and Damned-expansion pack);* for drunk driving (GTA IV) and carjacking in all of them. All these controversies have led PEGI, in Europe, and the Entertainment Software Rating Board (ESRB), in Canada and the United States to rate these games for 18+ and M (Mature) respectively. However, the fact that video game covers actually show the ratings and content descriptors does not seem to be working out, since too many underaged people are playing the *GTA* video games. The text in the cover of *GTA LibertyCityStories,* for example, should be enough to discourage any parent to buy the game:

> The streets of Liberty City are in turmoil (...) the town begins to self-destruct under waves of political corruption, organized crime, drug trafficking and union strikes. No one can be trusted as Toni tries to clean up the mess of the city's chaotic underworld. Deranged hit men, morally depraved tycoons, cynical politicians and his own mother stand in his way as Toni tries to bring the city under Leone's control. (...) Toni must use any means necessary to secure his place in the leadership of the Leone family in a town up for the grabs.

All the games portray several aspects of American culture through radio stations and radio personalities; disc jockeys; talk radio; rock, rap, hip pop, reggae and house music from famous singers and bands, like *Rage Against the Machine's* "Killing in the

name" or *2 Pac's* "I don't Give a Fuck"; fictional cities that look much like some American cities such as New York or Miami, and film celebrities that give voice to some of the main characters – Samuel L. Jackson, James Woods and Ray Liotta are only three of them. Do all these facts together impress young people and make them identify with the American culture, contributing at the same time to make them feel anxious to play the games and appreciate them even more? It would certainly be worth studying this aspect in further research.

Violence and sex have always helped to sell, and video games, the most appreciated medium among teenagers, have already taken that into account. As we could understand from the interviews, students like violent video games because it feels good and it is a great fun to shoot and kill other people, and personally, we cannot deny we felt pretty much the same when we played the game, which in itself is even more intriguing: why do people have great fun doing violent, aggressive and forbidden things? It actually makes you feel excited to drive recklessly, without any limits, and do all the other things that in real life you are not allowed to. The sense of immersion is huge, not because you identify yourself with the main character but because it looks like you are taking part in a film. It arouses you a lot, and when you finish playing it, you feel tremendously agitated. The *Grand Theft Auto* series, which has become a huge success among players of all ages, including children as earlier mentioned, has an extremely violent content; however, it has already sold over 70 million copies worldwide. It has also generated very good reviews and scores among several multimedia magazines and websites, which in itself is a huge way of influencing video game fans. For example, GTA IV obtained a score of 5/5 and 10/10 by Gamepro and Playstation Official Magazine UK respectively, and its review in the *gamespot site* says that

> (...) you can tell immediately that Rockstar North's latest offering is something
> quite special. Yes, this is another GTA game in which you'll likely spend the
> bulk of your time stealing cars and gunning down cops and criminals, but it's
> also much more than that. GTA IV is a game with a compelling and nonlinear
> storyline, a game with a great protagonist who you can't help but like, and a
> game that boasts a plethora of online multiplayer features in addition to its

lengthy story mode. (...) a living, breathing urban environment than anything that you've seen in a game before. Some of the more imaginative missions sprinkled throughout the story include a kidnapping, a bank heist, and a job interview. The cinematic cutscenes associated with story missions are superbly presented and are the sequences in which the game's characters really shine. Without exception, the characters you encounter benefit from great animation, great voice work, and superbly expressive faces. [47]

IV.6.3 – WORLD WRESTLING ENTERTAINMENT SMACKDOWN

World Wrestling Entertainment SmackDown (WEE) is a series of professional wrestling video games, which was first released in 2000 under the name *SmackDown!,* and it is based on different professional match types, in which the player can choose from a variety of superstars to fight with, through a series of storylines that may involve challenging for championships or selecting options that may affect the superstar's career. Professional wrestling is a non-competitive professional and simulated sport that combines fighting with acting and theatre, catch wrestling and mock combat. Although real matches are predetermined by

---

[47] Source: http://www.gamespot.com/ps3/action/grandtheftauto4/review.html

managers and booking staff, wrestling is still considered a sport due to the intense training and serious injuries which may be involved. In the games you can decide the intensity of pain you want to inflict on your opponents - the more blood you cause, the more points you get - how to lay the smack down, where to smash your opponent's head – into the steel ring steps, for example – and you can choose some extreme humiliating fighting which is also supposed to be hilarious. The graphics are very advanced: the character's grimaces look stunningly life-like; you can see the muscles working under the skin and the perspiration intensifying as the match progresses. Superstars' entrances are also motion captured to give an extra touch of authenticity[48]. All these facts together may help players feel as if they were experiencing a real wrestling match, and probably make it more difficult, especially for children and teenagers, to keep this sport within the game play. Furthermore, the characters used in games are famous and well-known to children and teenagers, since real matches are shown on the Portuguese television on Saturday mornings, prime time for this age group. It is very common nowadays to see children and teenagers wrestling with each other and consequently getting seriously hurt, as was mentioned by the interviewed students. *WWE Smackdown* is an enormous success among players, with "(...) 47 million copies shipped as of 2009"[49], and it has been rated 16+ by PEGI and T (teenager) by ESRB, although it is played by gamers of all ages worldwide[50]. The experience of playing the game is not a pleasant one, mainly due to the fact that all you do is fight violently and inflict damage on your opponents, and sometimes to defeat them you have to keep pressing down the analog command button continuously and endlessly. At the end, you feel nervous, agitated, tired and you get sore fingers.

---

[48] Source: http://us.wwe.com/?cid=200901PORTUGAL-02

[49] Source: cited in http://en.wikipedia.org/wiki/WWE_SmackDown_(video_game_series)

[50] Source: http://www.gamespot.com/sports/blogs/sportsblog/909097139/27006692/smackdown-vs-raw-2010-creation-is-king.html?tag=topslot;subtitle;1

To persuade young players to buy the game, some appealing sentences, which also prove how violent the game is, appear in the cover of the *WWE* series, as for example in the cover of the video game *Smackdown vs Raw 2007:*

> Don't just watch it ... live it. Experience the thrill of being a WWE superstar, like never before, in and beyond the ring. <u>All new analog control system</u> makes gameplay more realistic and intuitive than ever. <u>New Environmental Hotsopts</u> – use steel steps, ringposts, and any other object available to inflict damage on opponents in and out of the ring. <u>Ultimate control moves</u> – take the power of WWE superstars into your own hands with new levels of choice and control. <u>New Interactive Fighting Areawithin the Crowd</u> – battle beyond the ring and feel the intensity of a WWE event – grab weapons and other items from fans to take the action to the next level. <u>The next generation of WWE video games is here!</u>

The average score given by the critics to the video game WWE Smackdown vs Raw 2009 is 7.7/10 and the following review, apart from praising the game, clearly indicates how violent the game is:

> You win up to five stars for each match by earning points in three areas: match results, technical, and excitement. These categories encourage you to get into the WWE superstar mindset by rewarding you for both pummeling and mocking your opponent. (...) You'll also earn amusing awards for things such as striking your opponent 35 times or breaking a barbed-wire-wrapped plank over his or her back. (...) This action-packed Career mode is the perfect complement to the Create a Superstar mode, and winning belt after belt as you bulk up your created character is satisfying and fun.[51]

Nevertheless, and once again, none of these aspects seem to be taken into account when it comes to buying or letting children and teenagers play the video game.

---

[51] Source:
http://www.gamespot.com/ps2/sports/wwesmackdownvsraw2009/review.html?tag=tabs;reviews

IV.6.4 – BURNOUT AND NEEDFORSPEED

Burnout was released for Playstation2 in 2001 and it was the first in a series of high-speed racing games, famous for its over the top crashes, high risk game play mechanics, impressive graphics and sense of speed[52]. *Burnout3 Takedown,* the newest instalment of the games, has five play modes, including two race modes and three crash modes. In the race modes, the player gains 'boost' by driving in the oncoming traffic lanes, narrowly avoiding traffic, drifting around bends, getting air time, and by causing competitors' cars to crash (called a 'Takedown'). In the crash modes, the player is not really racing opponents on a track. Instead, in each crash attempt, the player races at high speeds towards an intersection and tries to do as much damage to vehicles there as possible, while collecting cash and multiplier bonuses. In either mode, medals are awarded for achieving certain scores[53]. Although this game portrays very violent crashes and dangerous driving, it has been rated for 3+ by PEGI and E by ESRB. However, there seems to be some disagreement on the matter, since the Office of Film and Literature Classification (OFLC) in Australia has rated the film for 15+ and the Entertainment and Leisure Software Publishers Association (ELSPA) in the United Kingdom has rated the film for 11+. *Burnout*

---

[52] Source: Cover of the video game *Burnout*

[53] Source:
http://www.gamespot.com/xbox/driving/burnout3/review.html?om_act=convert&om_clk=gssummary&tag=summary;read-review

Dominator, another E rated game of the series Burnout, contains in the cover statements that perfectly depict the violence of this game:

> Drive to the limit. Run the risks and collect the rewards in the maniac mode.
> Fight a whole new world tour to get into the exciting dominator series. Crush
> your rivals into the barriers to unlock shortcuts. Feel the thrill of a chain of
> Burnouts for an unprecedented speed race.

In the site Gamespot you can learn that the average critic score for this game is 7.5/10, and Burnout Dominator is a great driving game that keeps things moving with a sense of speed and variety of events. Still according to this site the Burnout series has always been about driving dangerously, meaning that the more dangerously you drive, the more you are rewarded.

NeedforSpeed, like *Burnout,* consists also of a series of high-speed racing games, the goal being to win the race. In some games, the cars can suffer mechanical and visual damage and they may include police pursuits, where the player can choose to be either the felon or the police officer; as a felon, the player must elude the police; as a policeman, he/ she must pursue and arrest the felon. The earlier games in the series focused mainly on the mechanics of the car rather than the looks of it; in the sequels,

the focus has shifted from racing exotic sports cars on the open road to street racing in urban settings and metropolitan cities with the importation of tuning subculture. The customization of vehicles is based on the 2001 film *The Fast and the Furious,* which was also highly appreciated among children and teenagers[54]. *NeedforSpeed Most Wanted,* one of the greatest instalment of the game, was given an average score of 8.2 by the critic, and has fantastic reviews due to its *hysterical cutscenes and extremely tense police chases.* It is also highly appreciated for the *outstanding sound effects, sharp graphics and mind-blowing full-motion video cutscenes.* Through the cover of this video game everyone can perceive how twisted the values in this game are:

> Become infamous. Explore the open world as you master the art of escaping the police. Customize your machine to escape the police in Pursuit Challenges. Win races, rise in the Blacklist, fill in your Rap Sheet and become the Most Wanted.

When playing both games, you realize that one theme is predominant: fast driving and crashing is exciting and you get rewarded for doing it. Therefore, it has been suggested that the popularity of illegal night races and tuning competitions, intentional crashes, and driving on the wrong lane or in the wrong direction in highways are connected to these games, as in the following case: 'Two teenage friends who were driving their parents' luxury vehicles face criminal charges after an alleged drag race on Mount Pleasant Road killed a taxi driver who was scheduled to become a Canadian citizen tomorrow. Police said NeedForSpeed, a video game about driving recklessly through city streets, was found on the passenger seat of one of the cars'[55]. Often, these dangerous escapades are done by teenagers who do not even have a driving license yet, and who perhaps believe that doing it for real must be much more

---

[54] Source:
http://eastore.ea.com/store/eaemea/pt_PT/DisplayProductDetailsPage/ThemeID.850300/productID.106419200

[55] Source: http://www.nationalpost.com/news/story.html?id=74b79e64-81b9-44a5-bce7-bd4243418462&k=77682&p=1

exciting than just playing a video game. It may also be true that these games intensify boys' tendency to wrestle and their love for car races.

IV.6.5 – THE SIMS

The Sims is one of the most successful video games series of all times: the franchise has sold more than 100 million copies worldwide. These games lack any defined goals; the player can create virtual people called 'Sims', place them in houses, define their moods and satisfy their desires. Players can also choose between pre-constructed houses or build the houses themselves. The player is in control of their virtual world and their daily activities, such as sleeping, eating, reading, and bathing. The games can be replayed unlimitedly, in that there is no way to win the game; however, states of failure do exist in *The Sims* and consequently the characters may die. The characters of these games even have their own language, the 'simlish', but usually the players understand what they want through their movements. There are numerous expansion packs, which include new inventories, new interactions, new objects, new emotions, such as fury when you catch a spouse cheating, and new non-player characters, such as DJs or vampires, which is just a strategy to keep players addicted to the game[56]. This series of video games is not as innocent as it may appear, and to prove it is the fact that the symbols of violence (a fist) and of sex (the symbols of male and female united) appear in the cover of *The Sims 3*. Moreover, in the description of the game it says *you can be a thief, rock star or world leader.*

---

[56] Source: http://news.softpedia.com/news/Simlish-Should-Become-an-Official-Language-83595.shtml

This series of games has been rated for 12+ by PEGI and T by ESRB, but it is also widely played by children: 'The Sims 3 has retained the top spot on the UK all formats chart, despite a 48 percent drop in weekly sales'[57]. This game has been given a score of 8.7/10 by the critics and has received excellent reviews. It is an extremely addictive video game, mainly due to the vast amount of expansion packs and to the fact that it never ends. Besides, the sense of immersion is very deep. When you are playing the game, you start believing that you live in that virtual world. These characteristics of the game are confirmed in the review below:

> It's been difficult to escape the popular franchise's web, what with two full games and a seemingly endless stream of expansions. (...) Most importantly, the free-to-explore town makes you feel like part of an entire virtual society--a feature approximated but never fully realized in the previous games. By blending together the old and the new, developer Maxis has created the best, most charming game yet in the series.[58]

The controversy around these life simulation games focuses mainly on the fact that they give players the possibility to play around with social structures, and that they may lead them to aspire to a certain way of life, which will inevitably create a feeling of frustration when they realize that their virtual worlds do not match reality at all. In real life it is not advisable to play with other people's emotions and feelings; it is not easy to get a good house, a good car and other life commodities; we cannot always decide who we want to be or what we want to do, and it is not possible to click and turn off the 'world' which is no longer pleasing us. All in all, these games are just a simplification of real life and an escape for those who do not wish to see life as it really is.

---

[57] Source: http://www.edge-online.com/news/the-sims-3-retains-uk-chart-lead

[58] Source: http://www.gamespot.com/pc/strategy/thesims3/review.html?tag=tabs;reviews

IV.7 – CONCLUSIONS OF THE CASE STUDY

When I decided to do my dissertation on the way video games are consumed by young people, I had some opinions on this issue due to my experience as a teacher and as a mother of two video game *aficionados*. However, after analyzing the data from the questionnaires and interviews, I was surprised to find out that the impact of video games on students' lives was much deeper than I had foreseen.

According to the questionnaire results, students today no longer study on a daily basis; quite the contrary, in the 1st and 3rd Cycles, most students study only before tests but play every day, and in the 2nd Cycle the majority studies and plays once a week, although more than 30% also play video games on a daily basis, but only 17% study every day. The data also shows that as they grow older, they spend much more time playing video games without interruption than studying.

We could say that playing video games is affecting not only students' study habits but their sleeping hours as well, since about 40% of the students reported playing at night and the percentage of students who play through the night increases significantly from the 1st to the 3rd Cycle. This was partly confirmed by 40% of the interviewed students who reported having a computer and/ or a games console in their bedrooms, which is definitely a step towards escaping parental supervision.

In fact, according to the data, parents do not seem to be very preoccupied with the role that video games are taking assuming in their children's lives, as most parents only sometimes establish rules, and the percentage of parents who do not define any rules on playing video games increases from the 1st to the 3rd Cycles. Besides, when they do set some rules, it is usually about the duration of play, and in the 2nd Cycle, also about the time of the day when children can play video games. It is very surprising to realize that only a very small number of parents impose some rules on the kind of games their children play, mainly because, as it appears, most of them know what video games their children are playing. Still, a significant percentage of parents only know some of the games. Strangely enough, 65% of the interviewed students said that they were not controlled by their parents when they were playing on the computer, and as we could notice most of them prefer to play video games on

the computer. As it is, how can parents possibly know the games their children are playing if they do not control them when they are at the computer? One must not forget, as was stated by 75% of the interviewed students, that it is very easy to access violent games or games rated for 18 or 18+ through the Internet: all you have to do is to 'confirm' that you are indeed eighteen years old. Furthermore, shops do not exert any kind of control over the selling of video games either, as most students and the manager of a big store confirmed.

With this lack of control from all sides, it is not difficult to understand why so many students are playing games which are not appropriate for their age, and that most of them do not comply with the video games rating system. Why are we so permissive as far as video games are concerned? We do not let children watch everything they want on television, so why should we allow them to play any video game they choose? Is it the play side of video games? Do we really believe that because it is a game it will not be prejudicial to our children? Do we use or consider video games as babysitters? Or do we prefer to have our children safe at home playing video games, no matter how violent they are, than having them outside, running the risk of suffering an accident, being kidnapped or being negatively influenced by other children? Even students seem to be more aware of the influence of video games than their parents: in spite of playing them, most of the interviewed students admit that the majority of video games contain violence, and 95% of the students believe that they may turn children and teenagers into more aggressive and violent individuals.

On the other hand, most students see themselves as calm people; still, 30% of the interviewed students would have some kind of aggressive or violent attitude if someone bumped into them accidently. They also recognize the influence of video games in their way of being, either in their behaviour, wrestling with others, or in some language expressions, such as *wanna fight* or *headshot.* Some people would say that this means that playing video games is a social activity, which provides tools for children to interact with each other, and in some ways this is true: a child who does not play video games will probably be discriminated against or ostracized by other children, mainly at school, because he/ she will not know what they are talking about, understand their language expressions or know how to wrestle. Moreover, 25% of

the interviewed students admitted getting easily in conflict with other students, teachers and parents, and 60% of them having already been involved in bullying situations. There has always been bullying at schools, but it has been suggested that these acts of aggression and violence are associated to the time students spend in front of a screen. According to a study conducted by Margarida Carvalhosa about violence at school, the results suggest that, in general, young people who engage in acts of violence have problems in relation to home, family and school. They are also more involved with tobacco and drug consumption, engage in more fights and carry guns. In addition, violent students referred more often watching television four or more hours per day[59].

Most of the students questioned in our study reported that they usually play alone, and only occasionally do they play with relatives or friends. If we bear in mind the frequency and duration of their play, how can we possibly consider playing video games a social activity? On the contrary, we may classify it as an isolating activity, since too many students play video games alone in their bedrooms on a daily basis, without any contact with their families or friends for long periods of time. We cannot forget that only in the 1st Cycle is the percentage of parents who play along with their children a significant one.

Furthermore, half of the interviewed students admitted having already become addicted to playing video games, and some of them that their school performance is affected by the time they spend playing video games. Although the majority of the students questioned considered their school results as 'Good', according to the experience I have with some of those students, this does not correspond to the truth: their school results are average or even below the average. This may be understood as students not having the capacity to assess their school performance or as being quite satisfied with the results they get, even if they are not actually 'Good'. I feel inclined to believe in the latter assumption, since nowadays most students do not show great motivation, commitment or ambition as far as their studies and future

---

[59] Source: http://www.fmh.utl.pt/aventurasocial/pdf/Violencia.pdf

careers are concerned. It would be interesting to do a more systematic evaluation of the relation between playing game habits and school performance.

It was very important to determine whether gender and age influence the students' study habits and their use and preference of video games. According to the data, girls are the ones who study more, especially on a daily basis, and boys the ones who play video games more frequently and for longer periods of time. Additionally, as they get older, girls tend to study for longer periods of time and play less, while boys seem to study practically the same but play much more, sometimes more than three hours at a time. This could also be related to the fact that in the 1st Cycle, students spend the whole day at school, whereas in the 2nd and 3rd Cycles, they start having some free mornings or afternoons, which boys apparently use to play video games.

The genre of video games they elected as their favourite also differs from boys to girls: girls tend to prefer the simulation and virtual worlds genres, while boys choose to play sports, racing, fighting, and action games. However, the percentage of girls who also like to play racing, sports and action video games is also noticeable. The analysis of these games has shown that game designers and producers try to persuade children and teenagers to play the video games, mainly by explaining to them how violent the game is, what a cruel villain they can turn themselves into, what a realistic experience it will be, what a fantastic reward they will receive if they beat and damage their opponents or drive dangerously and crash into other's cars, how wonderful life can be if you escape into a virtual world. It has equally proved that those video games that we used to label as 'harmless' or 'innocent' and rated E, such as racing or simulation video games, may also expose players to violent and sex content and have a negative effect on them. Moreover, it was found that those video games contain characteristics that certainly intend to turn you into a video game addict: giving you the chance to identify yourself with celebrities, letting you create and live a perfect life, involving yourself in an endless game, or making you feel so immersed and excited that it is impossible to stop playing the games.

Another relevant aspect is the fact that 1st Cycle students chose the action genre and the video game *GTA* as their favourite one, while in the 2nd and 3rd Cycles it only

appears as a second and third choice respectively. Some people would say that probably boys start losing interest in this kind of game as they grow older; on the contrary, I would say that what we see nowadays is that boys (and some girls too) are being allowed to play those video games at a very early stage of their lives, something which did not use to happen some years ago, when children and teenagers were accustomed to playing only racing, sports and adventure video games. Besides, in the 3rd Cycle students start getting interested in other game genres, such as 'FPS', 'Strategy' and 'MMOGs', as we could see by the games referred as favourites by the students interviewed, and most of these games are very violent, and even more addictive, because they do not have an ending.

V - FINAL CONSIDERATIONS

Considering that the definition for video game addiction or overuse is the excessive or compulsive use of computer and video games that interferes with daily life[60], I would say that our findings suggest that a high percentage of the surveyed students are indeed addicted to playing video games, as some of them so honestly admitted. According to the collected data, much more time is being dedicated to playing than to studying, which necessarily implies a significant decline in school work productivity and performance. When a student comes home after school and starts playing video games straightaway, he will not easily stop playing to study. We argue that video games do not help a child understand the importance of school; quite the opposite, they contribute to making school look less appealing, especially in localities where investment in children's education is already undervalued.

This study also found that there are serious reasons for believing that video game playing may be one of the causes for some physical and psychological problems among youngsters today: a significant number of students play at night or through the night, which interferes with their sleeping hours; they sit for hours playing

---

[60] Source: http://www.webmd.com/mental-health/features/video-game-addiction-no-fun

instead of taking some kind of exercise, which may lead to obesity; half of the students play video games alone in their bedrooms neglecting the opportunity to socialize either with their family or friends, and meeting new people, thus being at risk of lacking social skills. In most cases, parents and other adults do not engage actively in their children's gaming cultures, so playing video games is not a common project of the family. On the contrary, there is evidence that electronic gaming may lead to social isolation. This study also reveals that many students have already been involved in bullying situations or in wrestling fights; others have not, but like to watch their classmates doing it; and a significant number of them have frequent conflicts with their families, friends and teachers. Although it was not our objective to empirically prove the effects of violent video games on youngsters, our findings clearly highlight that digital games have a strong impact on students' language, attitudes and behaviour. If nowadays we have students playing very violent video games at a younger age, we may as well suggest that all this game playing will cause negative long-term effects, along with the short- term ones that have already been argued. Confusion between real and unreal, desensitization towards violence, and aggressive and violent behaviours, are only some of the negative effects that young and impressionable children may suffer for being exposed to such a great amount of realistic and interactive violence.

Obviously, not all players are addicts - a great number of students can play video games for a few hours a week, successfully balancing school work, grades, family obligations and friends, but this balance is probably achieved when there is parental control, which does not seem to be the case of parents nowadays. Our study strongly suggests that parents are unaware of the games that their children play: first, because most students play alone in their bedrooms, which makes it difficult for parents to supervise and see what they are playing; secondly, they do not comply with the rating system and may play very violent video games. I would rather assume that parents do not actually know what their children are playing and that video games have a rating system, than believe that they do and still let their children be exposed to such violent content. I think that once they saw what video games their children are consuming it would be a shock to them, and they would become more mindful and make some

changes in the rules of video game playing. It should definitely be parents' responsibility to set limitations on leisurely playing video games.

It is time for parents, teachers, governments and shops to become aware of how deeply video game playing is affecting young people's lives and start taking action to prevent further and more severe consequences. Besides setting limitations on leisurely playing video games, thus limiting their children's exposure to violent content, parents should also spend more quality time with their children so that they can give them the opportunity of learning behaviours from their parents and not from video games or other media. Teachers should be more active and talk about these issues with students and their parents, raising awareness of what consequences may derive from gaming overuse. Governments must create campaigns to inform parents of the existing rating system and the violent content of most video games, and adopt effective measures to supervise the selling of video games to children and teenagers in every shop. Playing video games could be an excellent and enriching activity if all the previous considerations were taken into account and if game producers decided to give a better chance to educational games.

While I have argued out of theoretical positions withdrawn from cultural psychology that video games must be considered the prime medium for exposing youngsters to violence, certainly there is room for other researchers from Media Studies, and other disciplines, to contribute to this debate. Having presented a case study with a small sample of Portuguese students, my hope is that future research on video games might focus in a wider naturalistic study of video game-playing experiences in Portugal – how and why people play games, and in what environments – and more specifically on language, understandings, practices, and roles that emerge when people are engaged in playing video games.

VI - BIBLIOGRAPHY

- Anderson, C. A. "Effects of violent movies and trait hostility on hostile feelings and aggressive thoughts." <u>Aggressive Behavior</u> 23 (1997): 161- 178.

- Anderson, C. A., & Bushman, B. J. "Effects of violent video games on aggressive behaviour, aggressive cognition, aggressive affect, physiological arousal, and prosocial behaviour: a meta-analytic review of the scientific literature." <u>Psychological Science</u> 12 (2001): 353-359.

- Anderson, Craig A., Douglas A. Gentile, and Katherine E. Buckley. <u>Violent Video game Effects on Children and Adolescents – Theory, Research and Public Policy.</u> New York: Oxford University Press, 2007.

- Anderson, C. A., & Ford, C. M. "Affect of the game player: Short term effects of highly and mildly aggressive video games." <u>Personality and Social Psychology Bulletin</u> 12 (1986): 390-402.

- Anderson, Craig A., Karen E. Dill. "Video Games and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life." <u>Journal of Personality and Social Psychology</u> 78.4 (2000): 772-790.

- Anderson, Craig A., Nicholas L. Carnegey, Eubanks Janie. "Exposure to Violent Media: The Effects of Songs With Violent Lyrics on Aggressive Thoughts and Feelings." <u>American Psychological Association</u> 84.5 (2003): 960–971.

- Atkins, Barry. <u>More than a Game - the computer game as fictional form.</u> Manchester: Manchester University Press, 2003.

- Atkins, Barry, and Tanya Krzywinska. <u>Videogame, Player, Text.</u> New York: Manchester University Press, 2007.

- Ballard, M. E., & Weist, J. R. "Mortal Kombat: The effects of violent video game play on males' hostility and cardiovascular responding." <u>Journal of Applied Social Psychology</u> 26 (1996):717-730.

- Bandura, Albert. <u>Social Learning Theory.</u> New Jersey: Prentice-Hall, Englewood Cliffs, 1977.

- Bandura, A., & Huston, Aletha C. "Identification as a process of incidental learning." <u>Journal of Abnormal Psychology</u> 63 (1961): 311-318.

- Bandura, A., Ross, D., & Ross, S. A. "Imitation of film-mediated aggressive models." Journal of Abnormal and Social Psychology 66 (1963): 3-11.

- Bandura, A., & Walters, R. H. Adolescent aggression. New York: Ronald, 1959.

- Barthlow et al. "Chronic violent video game exposure and desensitization to violence: Behavioral and event-related brain potential data." Journal of Experimental Social Psychology 2.4. Elsevier Inc. (2005).

- Berkowitz, L. Aggression: its causes, consequences and control. New York: McGraw-Hill, 1993.

- Berkowitz, L. "Some effects of thoughts on anti- and prosocial influence of media events: A cognitive neoassociationist analysis." Psychological Bulletin 95 (1984): 410-427.

- Berkowitz, L., & LePage, A. "Weapons as aggression-eliciting stimuli." Journal of Personality and Social Psychology 7 (1967): 202-207.

- Bogost, Ian. Unit Operations. An Approach to Video Game Criticism. Massachusetts: MIT Press Paperback edition, 2008.

- Brand, Jeffrey E. "Interactive Australia 2007: facts about the Australian computer and video game industry". February 2007. Humanities & Social Science Papers. Accessed on 09 February 2009. <http://epublications.bond.edu.au/hss_pubs/95/>

- Brazil, Terry M. "Some Video Game Industry Statistics That May Shock You". 14 August 2008. ArticleSphere.com. Accessed on 09 February 2009.<http://www.articlesphere.com/Article/Some-Video-Game-Industry-Statistics-That-May-Shock-You/159946>

- Bryant, Jennings, and Dolf Zillmann. Advances in Media Research. NJ: Lawrence Erlbaum Associates, Inc., Publishers, 2002.

- Bushman, B. J. "Moderating role of trait aggressiveness in the effects of violent media on aggression." Journal of Personality and Social Psychology 69 (1995): 950-960.

- Bushman, B. J., Baumeister, R. F., & Stack, A. D. "Catharsis, aggression, and persuasive influence: self-fulfilling or self-defeating?" Journal of Personality and Social Psychology 76 (1999): 367-376.

- Buss, A. H., & Perry, M. P. "The aggression questionnaire." <u>Journal of Personality and Social Psychology</u> 63 (1992): 452-459.

- Carvalhosa, Margarida. "Violência na Escola: vitimas, provocadores e outros." 2.1. September 2001. <u>FMH</u>. Accessed on 26 August 2009. <http://www.fmh.utl.pt/aventurasocial/pdf/Violencia.pdf >

- Chambers, J. H., & Ascione, F. R. "The effects of prosocial and aggressive video games on children's donating and helping." <u>Journal of Genetic Psychology</u> 148 (1987): 499-505.

- Chandler, Daniel. <u>Semiotics: The Basics.</u> NY: Routledge, 2002.

- <u>Children Now</u> 2001 "Fair Play: Violence, Gender, and Race in Video Games." Accessed on 08 September 2008. <http://publications.childrennow.org/publications/media/fairplay_2001.cfm>

- Cooper, J., & Mackie, D. "Video games and aggression in children<u>." Journal of Applied Social Psychology</u> 16 (1986): 726-744.

- Creasey, G. L., & Myers, B. J. "Video games and children: Effects on leisure activities, schoolwork, and peer involvement." <u>Merrill Palmer Quarterly</u> 32 (1986): 251-262.

- Crick, N. R., & Dodge, K. A. "A review and reformulation of social information-processing mechanisms in children's social adjustment." <u>Psychological Bulletin</u> 115 (1994).

- Dietz, T. L. "An examination of violence and gender role portrayals in video games: Implications for gender socialization and aggressive behavior. " <u>Sex Roles</u> 38 (1998): 425-442.

- Dill, K. E., Anderson, C. A., Anderson, K. B., & Deuser, W. E. "Effects of aggressive personality on social expectations and social perceptions." <u>Journal of Research in Personality</u> 31 (1997): 272-292.

- Dill, K. E., & Dill, J. C. "Video game violence: A review of the empirical literature." <u>Aggression and Violent Behavior: A Review Journal</u> 3 (1998): 407-428.

- Dodge, K. A., & Crick, N. R. "Social information-processing bases of aggressive behavior in children." <u>Personality and Social Psychology Bulletin</u> 16 (1990): 8-22.

- Dodge, K.A., & Petit, G. S. "A biopsychosocial model of the development of chronic conduct problems in adolescence." <u>Developmental Psychology</u> 39 (2003): 349-371.

- Dominick, J. R. "Videogames, television violence, and aggression in teenagers." <u>Journal of Communication</u> 34 (1984): 136-147.

- Dovey, Jon, and Helen W. Kennedy. <u>Game Cultures, Computer games as New Media</u>. New York: Open University Press, 2006.

- Elmer-Dewitt, P. "The amazing video game boom." <u>Time</u> 27 September 1993: 66—73.

- Emes, C. E. "Is Mr. Pac Man eating our children? A review of the effect of video games on children." <u>Canadian Journal of Psychiatry</u> 42 (1997): 409-414.

- Fling, S., Smith, L., Rodriguez, T., Thornton, D., Atkins, E., & Nixon, K. "Videogames, aggression, and self-esteem: A survey." <u>Social Behavior and Personality</u> 20 (1992): 39-46

- Fraser, Simon. "Video Game Culture: Leisure and Play Preferences of B.C. Teens". <u>Media Analysis Laboratory.</u> October 1998. <u>Media Awareness Network</u> 2009. Accessed on 09 February 2009. <http://www.mediaawareness.ca/english/resources/research_documents/studies/video_games/video_game_culture.cfm>

- Freedman, Jonathan L. <u>Media Violence and its effect on Aggression: Assessing the Scientific Evidence</u>. Canada: University of Toronto Press Incorporated, 2002.

- Fuller, M. and Jenkins, H. "Nintendo and New world Travel writing: a dialogue" in Jones, S.G. (ed.) <u>Cybersociety: Computer-Mediated Communication and Community.</u> <u>Thousand Oaks, CA: Sage Publications</u> (1995).

- Gauntlett, David. <u>Moving Experiences: Understanding Television's Influences and Effects</u>. London: John Libbey, 1995.

- Geen, R. G., Stonner, D., & Shope, G. L. "The facilitation of aggression by aggression: Evidence against the catharsis hypothesis." <u>Journal of Personality and Social Psychology</u> 31 (1975): 721-726.

- Gentile, D. A., & Walsh, D. A. "A normative study of family media habits." <u>Applied Developmental Psychology</u> 23 (2002): 157-178.

- Gentile et al. "The effects of violent video game habits on adolescent hostility, aggressive behaviors, and school performance." <u>Journal of Adolescence</u> 27 (2204): 5–22.

- Genette, G. <u>Narrative Discourse</u>. Oxford: Basil Blackwell, 1982.

- "Grand Theft Auto: everything you need to know about the gaming phenomenon". <u>Belfast Telegraph</u>. 30 April 2008 <http://www.belfasttelegraph.co.uk/>

- Graybill, D., Strawniak, M., Hunter, T., & O'Leary, M. "Effects of playing versus observing violent versus nonviolent video games on children's aggression." <u>Psychology: A Quarterly Journal of Human Behavior</u> 24 (1987): 1-8.

- Griffiths, M. D., & Hunt, N. "Dependence on computer games by adolescents." <u>Psychological Reports</u> 82 (1998): 475-480.

- Grossman, D., and Gloria DeGaetano. <u>Stop Teaching our Kids to Kill, A call to Action Against TV, Movie & Video Game Violence.</u> New York: Crown Publishers, 1999.

- Gunter, Barrie, and Jill McAleer. <u>Children & Television</u>. London: Routledge, 1990.

- Harris, M. B., & Williams, R. "Video games and school performance." <u>Education</u> 105 (1985): 306-309.

- Harris, Richard Jackson. <u>A Cognitive Psychology of Mass Communication</u>. NJ: Lawrence Erlbaum associates, Inc. Publishers, 1999.

- Hillis, Scott. "*Grand Theft Auto 4* set to entertain and inflame". 26 April 2008. <u>Reuters</u>. Accessed on 05 May 2009. http://www.reuters.com/article/technologyNews/idUSN2116666620080426

- Huesmann, L. Rowell. <u>Aggressive Behaviour. Current Perspectives</u>. New York: Plenum Press, 1994.

- King, Geoff. "Play, modality and claims of realism in *Full Spectrum Warrior."* Comp.

- Huesmann, L. R. "Longitudinal Relations Between Children's Exposure to TV Violence and Their Aggressive and Violent Behavior in Young Adulthood: 1977–1992." <u>Developmental Psychology</u> 39.2 (2003): 201–221.

- Huesmann, L.R., and L.D. Eron. <u>Television and the Aggressive Child: A Cross-National Comparison.</u> NJ: Lawrence Erlbaum Associates, 1986.

- Huesmann, L. R., & Miller, L. S. "Long-term effects of repeated exposure to media violence in childhood." in L. R. Huesmann (ed.) <u>Aggressive behavior: Current perspectives</u> (1994): 153-188. <u>New York: Plenum Press</u>.

- Irwin, A. R., & Gross, A. M. "Cognitive tempo, violent video games, and aggressive behavior in young boys." <u>Journal of Family Violence</u> 10 (1995): 337-350.

- Josephson,Wendy L. "Television Violence: A Review of the Effects on Children of Different Ages." February 1995. <u>Public Health Agency of Canada.</u> Accessed on 08 September 2008. <http://www.phacaspc.gc.ca/ncfvcnivf/publications/nfntseffevage-eng.php>

- Kirsh, S. J. "Seeing the world through Mortal Kombat-colored glasses: Violent video games and the development of a short-term hostile attribution bias." <u>Childhood</u> 5 (1998): 177-184.

- Kutner, Lawrence, and Cheryl K. Olson. <u>Grand Theft Childhood, The Surprising Truth About Violent Video Games* And What Parents Can Do.</u> New York: Simon & Schuster, 2008.

- Kirsch, Steven J. <u>Children, Adolescent, and Media Violence: A Critical look at the Research.</u> California: Sage Publications, Inc., 2006.

- Lehnheart et al. "Teens, Video Games and Civics." 16 September 2008 <u>Pew Internet & American Life Project</u>. Accessed on 15 October 2008.<http://www.pewinternet.org/Reports/2008/Teens-Video-Games-and-Civics.aspx>

- Lemos, André. <u>Cibercultura.</u> Porto Alegre: Editora Sulina, 2002.

- Leyens, J. P., & Picus, S. "Identification with the winner of a fight and name mediation: Their differential effects upon subsequent aggressive behavior." <u>British Journal of Social and Clinical Psychology</u> 12 (1973): 374-377.

- Lieberman, D. A., Chaffee, S. H., & Roberts, D. F. "Computers, mass media, and schooling: Functional equivalence in uses of new media." <u>Social Science Computer Review</u> 6 (1988): 224–241.

- Lindsay, J. J., & Anderson, C. A. "From antecedent conditions to violent actions: A general affective aggression model." <u>Personality and Social Psychology Bulletin</u>. 26.5. 2000: 533-547.

- Loftus, G. A., and Loftus, E. F. <u>Mind at play: The psychology of video games.</u> New York: Basic Books, 1983.

- Mark D. Griffiths, Mark N.O. Davies, Darren Chappell. "*EverQuest*—It's Just a Computer Game, Right? An Interpretative Phenomenological Analysis of Online Gaming Addiction". 4.3. 1 July 2006. <u>International Journal of Mental health and Addiction</u>. accessed on 05 March 2009. <http://www.ijmajournal.com/content/abstracts/4/3/00004>

- Martinez, Andrea. "Scientific Knowledge About Television Violence." May 1992. <u>CRTC Television Programming Directorate.</u> Accessed on 13 September 2008. <http://www.mediaawareness.ca/english/resources/research_documents/reports/violence/upload/Scientific-Knowledge-about-Television-Violence-Report.pdf>

- Mayer, Catherine. "Britain's Mean Streets". <u>Time Magazine</u>. 26 March 2008.

- McDougall, Julian, and Wayne O'Brien. <u>Studying Videogames</u>. Leighton Buzzard: Auteur, 2008.

- Moreillon, Jacques, and Jo Groebel. "UNESCO Global Study on Media Violence". February 19. Accessed on 13 September 2008. <http://www.unesco.org/bpi/eng/unescopress/98-32e.htm>

- Nelson, T. M., & Carlson, D. R. "Determining factors in choice of arcade games and their consequences upon young male players." <u>Journal of Applied Social Psychology</u> 15 (1985): 124-139.

- Newman, James. <u>Videogames.</u> Oxon: Routledge, 2004.

- Phillips, Helen. "Mind-altering media." 19 April 2007. <u>NewScientist</u> 2600. Accessed on 25 August 2009. <http://technology.newscientist.com/article/mg19426001.900>

- Pratchett, R. "Gamers in the UK: Digital Play, digital lifestyles." 27 January 2006. <u>News Media Research</u>. Accessed on 05 March 2009.<http://open.bbc.co.uk/newmediaresearch/2006/01/bbc_uk_games_research.html>

- Provenzo E., <u>Video Kids: Making Sense of Nintendo</u> Cambridge, MA: Harvard University Press, 1991.

- Schutte, N. S., Malouff, J. M., Post-Gorden, J. C, & Rodasta, A. L. "Effects of playing video games on children's aggressive and other behaviors." <u>Journal of Applied Social Psychology</u> 18 (1988): 454-460.

- Scott, D. "The effect of video games on feelings of aggression." <u>The Journal of Psychology</u> 129 (1995): 121-132.

- Selman, Matt. "Grand Theft Auto IV: The 6.24% Review." <u>Time Magazine</u>. 30 April 2008.

- Sharif, Iman & James D. Sargent. "Association Between Television, Movie, and Video Game Exposure and School Performance." October 2006. <u>Pediatrics</u> 118.4: e1061-e1070.

- Silvern, S. B., & Williamson, P. A. "The effects of video game play on young children's aggression, fantasy and prosocial behavior." <u>Journal of Applied Developmental Psychology</u> 8 (1987): 453-462.

- Saulny, Susan. "After Killings, Escorts for Chicago Students." <u>The New York Times</u> 27 April 2008.

- Tester, K. <u>Compassion, Morality and the Media</u>. Buckingham: Open University Press, 2001.

- The Associated Press. "Rash of Shootings Is Seen in Chicago". <u>The New York Times</u>. 21 April 2008.

- Van Schie, E. G. M., & Wiegman, O. "Children and video games: Leisure activities, aggression, social integration, and school performance." Journal of Applied Social Psychology 27 (1997): 1175-1194.

- Weaver, C. Kay, and Cynthia Carter. Critical Readings: Violence and the Media. London: Open University Press, 2006.

- Winkel, M., Novak, D. M., & Hopson, M. "Personality factors, subject gender and the effects of aggressive video games on aggression in adolescents." Journal of Research in Personality 21 (1987): 211-223.

- Woodard, E. H. & Gridina, N. "Media in the Home 2000, The fifth annual survey of parents and children." 2000. The Annenberg Public Policy Center of the University of Pennsylvania. Accessed on 3 April 2009. <http://www.appcpenn.org/Downloads/Media_and_Developing_Child/media survey/survey7.pdf>

- Zillmann, D. "Cognition-excitation interdependencies in aggressive behavior." Aggressive Behavior 14 (1983): 51-64.

- Zillmann, Dolf, and Peter Vorderer. Media Entertainment- the psychology of its appeal. NJ: Lawrence Erlbaum Associates, Inc., 2000.

VII - NETGRAPHY

VII.1 SITES ACCORDING TO DISSERTATION REFERENCES

1. http://www.mediaknowall.com/representation.html accessed on 19 August 2009

2. http://www.comune.torino.it/novasres/newviolencedefinition.htm accessed on 20 August 2009

3. http://findarticles.com/p/articles/mi_qn4183/is_20080418/ai_n27515852/

4. http://today.msnbc.msn.com/id/26184891/vp/27064388#27064388 accessed on 15 August 2009

5. http://www.frankwbaker.com/mediause.htm accessed on 19 August 2009

6. http://www.unesco.org/bpi/eng/unescopress/98-32e.htm accessed on 16 November 2008

7. http://www.frankwbaker.com/mediause.htm, accessed on 19 August 2009

8. http://philosophyfivehundred.blogspot.com/2005/02/violence-and-media-effects-oh-my.html accessed on 20 August 2009

9. http://www.pewinternet.org/Reports/2008/Teens-Video-Games-and-Civics.aspx accessed on 15 October 2008

10. http://www.frankwbaker.com/mediause.htm accessed on 19 August 2009

11. http://www.safeyouth.org/scripts/faq/mediaviolstats.asp accessed on 05 July 2009

12. http://ec.europa.eu/ireland/press_office/news_of_the_day/videogames_en.htm accessed on 04 December 2008

13. http://www.marktest.com/wap/a/p/id~9b.aspx accessed on 15 October 2008

14. http://www.thocp.net/software/games/reference/genres.htm accessed on 10 August 2009

15. http://www.cbsnews.com/stories/2002/05/28/earlyshow/living/caught/main510302.shtml accessed on 22 August 2009

16. http://www.cbsnews.com/stories/2002/01/31/health/main327254.shtml

17. http://www.esrb.org/ratings/ratings_guide.jsp#rating_symbols accessed on 22 August 2009

18. http://en.wikipedia.org/wiki/List_of_best-selling_video_games#Franchises accessed on 21 August 2009

22. http://www.worthdownloading.com/game.php?gid=2816 accessed on 20 October 2008

23. http://www.xbox.com/enUS/games/w/wwesmackdownvsraw2007xbox360/default.htm accessed on 20 October 2008

24. http://www.rockstargames.com/IV/#?page=videos&content=commercial accessed on 21 October 2008

30. http://app1.chinadaily.com.cn/star/2003/0501/vo2-4.html accessed on 15 July 2009 July

31. http://whyfiles.org/065school_violence/ accessed on 04 December 2008

32. http://technology.newscientist.com/article/mg19426001.900 accessed on 25 August 2009

33. http://jn.sapo.pt/PaginaInicial/Policia/Interior.aspx?content_id=968922 accessed on 04 December 2008

37. http://www.crf-usa.org/violence/intro.html accessed on 13 July 2009

38. http://tv1.rtp.pt/noticias/?t=Portugal-e-Espanha-no-niveis-de-bullying-semelhante---estudo.rtp&article=63233&visual=3&layout=10&tm=8 accessed on 13 July 2009

39.http://www.cme.cmilhavo.pt/portalmoderno/Portals/0/documentos/Carta%20Educativa%20do%20Munic%C3%ADpio%20de%20Ilhavo.pdf accessed on 22 May 2009

40. www.ua.pt/essua/ReadObject.aspx?obj=6213 accessed on 22 May 2009

 41. http://www.fifa09.ea.com/pt/gameinfo/dynpid/11811 accessed on 23 May 2009

42. http://www.gamezplay.org/2009/08/pro-evolution-soccer-2010-pes-video.html accessed 23 May 2009

43. http://www.rockstargames.com/grandtheftauto/ accessed on 24 May 2009

44. http://us.wwe.com/?cid=200901PORTUGAL-02 accessed on 25 May 2009

45. http://www.gamespot.com/sports/blogs/sports-blog/909097139/27006692/smackdown-vs-raw-2010-creation-is-king.html?tag=topslot;subtitle;1 accessed on 26 May 2009

47.http://www.gamespot.com/xbox/driving/burnout3/review.html?om_act=convert&om_clk=gssummary&tag=summary;read-review accessed on 26 May 2009

48.http://eastore.ea.com/store/eaemea/pt_PT/DisplayProductDetailsPage/ThemeID.850300/productID.106419200 accessed on 27 May 2009

49. http://www.nationalpost.com/news/story.html?id=74b79e64-81b9-44a5-bce7-bd4243418462&k=77682&p=1 accessed on 27 May 2009

50. http://news.softpedia.com/news/Simlish-Should-Become-an-Official-Language-83595.shtml accessed on 28 May 2009

51. http://www.edge-online.com/news/the-sims-3-retains-uk-chart-lead accessed on 28 May 2009

52. http://www.fmh.utl.pt/aventurasocial/pdf/Violencia.pdf accessed on 6 June 2009

VII.2 WEBSITES CONSULTED

http://books.google.com/books accessed on 10 September 2008

http://www.acys.info/publications/books/youth_crime_media accessed on 23 August 2009

http://www.bullying.co.uk/young_people/index.aspx accessed on 5 July 2008

http://www.thebigproject.co.uk/news/ accessed on 15 July 2008

http://www.thebigproject.co.uk/USNewspapers/ accessed on 15 July 2008

http://www.world-newspapers.com/uk.html accessed on 16 July 2008

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WJB-4H8MP81- accessed on 20 June 2009

http://www.statistics.gov.uk/StatBase/ssdataset.asp?vlnk=7206 accessed on 6 July 2008

http://www.gfk.com.au/ accessed on 6 July 2008

http://www.cnnic.cn/html/Dir/2008/09/01/5265.htm accessed on 8 August 2008

http://www.gforum.tv/board/1033/197809/tempos-livres-dos-portugueses.html accessed on 20 August 2008

http://quiosque.aeiou.pt/gen.pl?p=stories&op=view&fokey=ae.stories/9191 accessed on 20 August 2008

http://www.kewego.com.pt/video/iLyROoaftETR.html accessed on 17 September 2008

http://www.ua.pt/essua/ReadObject.aspx?obj=6213 accessed on 24 August 2009

VIII - PRIMARY SOURCES

VIII.1 WEBSITES

facebook.com

youtube.com

VIII.2 MAGAZINES

Maxiconsolas. May 2008:17

Maxiconsolas. May 2008:22

VIII.3 VIDEO GAMES

Burnout series

Counterstrike

Doom

Everquest

FIFA series

Carmageddon

God of War

Grand Theft Auto series

NeedforSpeed

PES series

Silent Hill

Tennis for Two/ Pong

The Sims series

Wolfenstein

World of Warcraft

WWE: Smack Down! Series

VIII.4 VIDEO GAME COVERS

Burnout Dominator

FIFA10

GTA LibertyCityStories

NeedforSpeed Most Wanted

PES 2009

Smackdown vs Raw 2007

The Sims 3

VIII.5 FILM

The Fast and the Furious

VIII.6 TELEVISION PROGRAMME

Wrestling: WWE: Smack Down

VIII.7 COMMERCIAL SPOT

"New Amazing Grand Theft Auto Like Coke Commercial". 11 August 2006. Google. <http://video.google.com/videoplay?docid=3913745262811179417> accessed on 17 September 2008.

IX - APPENDICES

APPENDIX 1 – QUESTIONNAIRE

Questionário

Este questionário faz parte de um projecto de investigação no âmbito de um curso de Mestrado em Línguas, Literaturas e Culturas e tem como objectivo conhecer o impacto dos videojogos na vida das crianças e jovens. Para esse efeito a tua colaboração é fundamental. As tuas respostas são anónimas e confidenciais, pelo que agradecemos que respondas a todas as questões com sinceridade. Agradeço desde já a tua disponibilidade.

Assinala com uma cruz (x) a resposta que se adequa às tuas características pessoais.

I

1. <u>Sexo:</u>

      Masculino   ☐

      Feminino   ☐

2. <u>Idade:</u>

      5 - 9 anos   ☐

      10 – 14 anos   ☐

      15 – 18 anos   ☐

      mais de 18 anos   ☐

3. Ciclo de Ensino:

1º Ciclo ☐   2º Ciclo ☐   3º Ciclo ☐

II

Coloca uma cruz (X) na hipótese que melhor se adequa aos teus hábitos de estudo.

1. Estudas:
Diariamente ☐   Semanalmente ☐   Em véspera dos testes ☐

2. Quanto tempo seguido costumas estudar?
0 -1h ☐   1h - 2h ☐   + de 2h ☐

3. Os teus resultados escolares são habitualmente:
Muito Bons ☐   Bons ☐   Médios ☐   Fracos ☐

III

Assinala com uma cruz (x) a resposta que <u>melhor</u> descreve os teus hábitos relativamente aos videojogos. Se nunca jogaste, termina aqui o teu inquérito.

1. Jogas:

Diariamente   ☐

Semanalmente   ☐

Mensalmente   ☐

Nas férias   ☐

Outro   ☐ _____

2. <u>Onde</u>?

Casa ☐

Escola ☐

Lojas ☐

Casa de amigos ☐

Outro ☐ _____

3. <u>Como</u>?

Sozinho ☐

Com Pais ☐

Com irmãos ☐

Com amigos ☐

Com amigos online ☐

Com desconhecidos online ☐

Outro ☐ _____

4. <u>Quando</u>?

Manhã ☐

Tarde ☐

Noite ☐

Madrugada ☐

5. <u>Quanto tempo seguido?</u>

0 - 1h ☐

1h – 2h ☐

2h – 3h ☐

Mais de 3h ☐

6. <u>Os teus Pais/ Encarregados de Educação estabelecem regras para jogares?</u>
Sim ☐   Não ☐ Às vezes ☐

7. <u>Se respondeste 'Sim' ou 'Às vezes' responde a esta questão também. As</u> regras referem-se:

À duração ☐

À altura do dia ☐

Ao tipo de jogos ☐

Outro ☐ _____

8. <u>Os teus Pais/ Encarregados de Educação conhecem os jogos que jogas?</u>
Sim ☐   Não ☐   Alguns ☐

9. <u>Jogas mais:</u>

Consola (PS, XBOX, etc)   ☐

Consola Portátil (Gameboy, Nintendo, etc)   ☐

Jogos de computador   ☐

Jogos online   ☐

Outro   ☐ _____

10. <u>Como descobres os novos videojogos?</u>

Na Internet ☐

Na televisão ☐

Em revistas ☐

Com amigos ☐

Outro ☐ _____

11. <u>Que tipo de jogos?</u>

Racing/ Corridas (ex: NASCAR) ☐

Puzzle (ex: Tetris) ☐

Sports/ Desporto (ex: FIFA) ☐

Action/ Acção (ex: GTA) ☐

Adventure/ Aventura (ex: Tom Raider) ☐

Rhythm/ Ritmo (ex: Guitar Hero) ☐

Strategy/ Estratégia (ex: Command and Conquer) ☐

Simulation/ Simulação (ex: The Sims) ☐

Fighting/ Luta (ex: Wrestling) ☐

First-person shooter (ex: Counter-strike) ☐

Role-playing (ex: Final Fantasy) ☐

MMOGs (ex: World of Warcraft) ☐

Virtual Worlds/ Mundos Virtuais (ex: Habbo Hotel) ☐

Outro ☐ _____

12. <u>Escreve o nome dos teus 3 jogos preferidos:</u>

1. _____

2. _____

3. _____

13. Qual o nível de classificação etária dos jogos que mais jogas?

    4 anos   ☐

    6 anos   ☐

    12 anos   ☐

    16 anos   ☐

    18 anos   ☐

14. Costumas respeitar os níveis de classificação etária dos jogos?

Sim ☐   Não ☐   Às vezes ☐

Fim

APPENDIX 2- QUESTIONNAIRE RESULTS

APPENDIX 2.1 – 1st Cycle (table)

1ºCiclo

ID	NºInquéritos	Casos	Ocorrências	Totais	Casos	Percentagem
1	Sexo	M	23	23	44	52,3%
		F	21	21		47,7%
2	Idades	5-9	41	41		93,2%
		10-14	3	3	44	6,8%
		15-18	0	0		0,0%
		+18	0	0		0,0%
4	Tempo Estudo	Diariamente	9	9		20,5%
		Semanalmente	17	17	44	38,6%
		Vespera Testes	18	18		40,9%
5	Tempo Seguido de Estudo	0-1 H	17	17		38,6%
		1-2 H	16	16	44	36,4%
		+ 2 H	11	11		25,0%
6	Reultados Escolares	MB	5	5		11,4%
		B	22	22	44	50,0%
		Med	15	15		34,1%
		Fracos	2	2		4,5%
7	Altura de Jogo	Diariamente	23	23		53,5%
		Semanalmente	9	9		20,9%
		Mensalmente	2	2	43	4,7%
		Nas férias	5	5		11,6%
		Outro	4	4		9,3%

#	Categoria	Opção								Total	N	%
8	Onde Jogas	Casa	39	0	0	0				39		90,7%
		Escola	1	5	0	0				6		14,0%
		Lojas	0	1	1	0				2	43	4,7%
		Casa de Amigos	2	8	3	0				13		30,2%
		Outro	0	2	0	1	0			3		7,0%
9	Com quem jogas	Sozinho	22	0	0	0	0	0	0	22		51,2%
		Pais	10	3	0	0	0	0	0	13		30,2%
		Irmãos	6	8	0	0	0	0	0	14		32,6%
		Amigos	4	4	7	1	0	0	0	16	43	37,2%
		Amigos online	1	0	3	1	0	0	0	5		11,6%
		Desconhecidos online	0	0	0	0	0	0	0	0		0,0%
		Outro	0	1	0	0	0	0	0	1		2,3%
10	Período do dia em que jogas	Manhã	4	0	0					4		9,3%
		Tarde	27	4	0					31	43	72,1%
		Noite	10	6	2					18		41,9%
		Madrugada	0	0	0					0		0,0%
11	Tempo seguido de Jogo	0-1 H	27							27		62,8%
		1 - 2 H	9							9	43	20,9%
		2-3 H	4							4		9,3%
		+ 3 H	4							4		9,3%
12	Pais/EE estabelecem regras de Jogo	Sim	11							11		25,6%
		Não	11							11	43	25,6%
		Às vezes	21							21		48,8%
13	As regras referem-se a:	À duração	20	1	0	0				21		48,8%
		Altura do dia	4	2	0	0				6	43	14,0%
		Tipo de jogos	4	5	1	0				10		23,3%
		Outro	2	1	0	0				3		7,0%

14	Pais/EE conhecem os jogos	Sim	30					30		69,8%
		Não	1					1	43	2,3%
		Alguns	12					12		27,9%

15	Tipo de Hardware	Consolas (PSX, XBOX, etc.)	21	1	0	0	0	22		51,2%
		Consola Portátil(GameBoy, Nintendo, etc.)	10	8	0	0	0	18		41,9%
		Jogos de Computador	10	11	5	0	0	26	43	60,5%
		Jogos online	0	1	2	4	0	7		16,3%
		Outro	2	0	0	0	0	2		4,7%

16	Como descobres os videojogos?	Na Internet	22	0	0	0	0	22		51,2%
		Na televisao	7	9	0	0	0	16		37,2%
		Em revistas	4	5	2	0	0	11	43	25,6%
		Com amigos	7	7	6	1	0	21		48,8%
		Outro	3	0	0	0	0	3		7,0%

17	Que tipo de jogos	Racing/Corridas (ex: NASCAR)	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13		30,2%
		Puzzle (ex: Tetris)	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3		7,0%
		Sports/Desporto (ex: FIFA)	8	8	2	0	0	0	0	0	0	0	0	0	0	0	18		41,9%
		Action/Acção (ex: GTA)	8	7	5	1	0	0	0	0	0	0	0	0	0	0	21		48,8%
		Adventure/Aventura (ex: Tom Raider)	3	6	2	4	1	0	0	0	0	0	0	0	0	0	16		37,2%
		Rhythm/Ritmo (ex: Guitar Hero)	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3		7,0%
		Strategy/Estratégia (ex: Command and Conquer)	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	43	7,0%
		Simulation/Simulação (ex: The Sims)	2	0	6	1	1	0	1	0	0	0	0	0	0	0	11		25,6%
		Fighting/Luta (ex: Wrestling)	0	1	2	3	2	1	2	1	0	0	0	0	0	0	12		27,9%
		First-person shooter (ex: Counter-Strike)	0	0	1	0	2	1	0	1	0	0	0	0	0	0	5		11,6%
		Role-playing (ex: Final Fantasy)	0	0	0	0	0	1	1	0	1	0	0	0	0	0	3		7,0%
		MMOGs (ex. World Warcraft)	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2		4,7%
		Virtual Worlds/Mundos Virtuais (ex: Habbo Hotel)	2	1	0	2	1	1	0	2	1	0	0	0	0	0	10		23,3%
		Outro	5	2	0	0	0	0	0	0	1	0	0	0	0	0	8		18,6%

8	Nome dos teus 3 Jogos Preferidos	GTA	11					11		25,6%
		FIFA/ PES	8					8	43	18,6%
		WWE	6					6		14,0%
19	Nível de classificação etária dos que + jogas	4 anos	10	0	0	0	0	10		23,3%
		6 anos	17	6	0	0	0	23		53,5%
		12 anos	5	2	5	0	0	12	43	27,9%
		16 anos	3	2	2	3	0	10		23,3%
		18 anos	8	2	0	0	4	14		32,6%
20	Respeitas os níveis de classif. Etária	Sim	17					17		39,5%
		Não	26					26	43	60,5%
		Às vezes	0							0,0%

APPENDIX 2.2 – 2nd Cycle (table)

2ºCiclo

ID	NºInquéritos	Casos	Ocorrências	Totais	Casos	Percentagem
1	Sexo	M	24	24	53	45,3%
		F	29	29		54,7%
2	Idades	5-9	0	0	53	0,0%
		10-14	53	53		100,0%
		15-18	0	0		0,0%
		+18	0	0		0,0%
4	Tempo Estudo	Diariamente	9	9	53	17,0%
		Semanalmente	26	26		49,1%
		Vespera Testes	18	18		34,0%
5	Tempo Seguido de Estudo	0-1 H	31	31	53	58,5%
		1-2 H	20	20		37,7%
		+ 2 H	2	2		3,8%
6	Resultados Escolares	MB	9	9	53	17,0%
		B	32	32		60,4%
		Med	12	12		22,6%
		Fracos	0	0		0,0%
7	Altura de Jogo	Diariamente	18	18	52	34,6%
		Semanalmente	20	20		38,5%
		Mensalmente	8	8		15,4%
		Nas férias	6	6		11,5%
		Outro	0	0		0,0%
8	Onde Jogas	Casa	47 0 0 0 0	47	52	90,4%
		Escola	1 2 0 0 0	3		5,8%
		Lojas	0 0 0 0 0	0		0,0%
		Casa de Amigos	2 11 2 0 0	15		28,8%
		Outro	2 4 0 0 0	6		11,5%

9	Com quem jogas	Sozinho	43	0	0	0	0	0	0		43		82,7%
		Pais	1	5	0	0	0	0	0		6		11,5%
		Irmãos	4	13	2	0	0	0	0		19		36,5%
		Amigos	1	8	5	1	0	0	0		15	52	28,8%
		Amigos online	1	10	1	4	1	0	0		17		32,7%
		Desconhecidos online	1	2	1	0	0	0	0		4		7,7%
		Outro	1	0	0	0	1	0	0		2		3,8%
10	Período do dia em que jogas	Manhã	15	0	0						15		28,8%
		Tarde	29	12	0						41	52	78,8%
		Noite	8	10	3						21		40,4%
		Madrugada	0	1	3						4		7,7%
11	Tempo seguido de Jogo	0-1 H	18								18		34,6%
		1 - 2 H	18								18	52	34,6%
		2-3 H	8								8		15,4%
		+ 3 H	8								8		15,4%
12	Pais/EE estabelecem regras de Jogo	Sim	16								16		30,8%
		Não	17								17	52	32,7%
		Às vezes	19								19		36,5%
13	As regras referem-se a:	À duração	15	0	0	0					15		39,5%
		Altura do dia	12	3	0	0					15	38	39,5%
		Tipo de jogos	4	2	0	0					6		15,8%
		Outro	1	1	0	0					2		5,3%
14	Pais/EE conhecem os jogos	Sim	22								22		42,3%
		Não	8								8	52	15,4%
		Alguns	22								22		42,3%
15	Tipo de Hardware	Consolas (PSX, XBOX, etc.)	23	0	0	0	0				23		44,2%
		Consola Portátil(GameBoy, Nintendo, etc.)	6	6	1	0	0				13		25,0%
		Jogos de Computador	21	12	4	0	0				37	52	71,2%
		Jogos online	2	7	6	4	0				19		36,5%
		Outro	0	1	0	0	0				1		1,9%

#	Pergunta	Resposta																	Total	N	%
16	Como descobres os videojogos?	Na Internet	31	0	0	0	0												31		59,6%
		Na televisao	7	7	0	0	0												14		26,9%
		Em revistas	5	5	2	0	0												12	52	23,1%
		Com amigos	8	17	5	1	0												31		59,6%
		Outro	1	0	0	0	1												2		3,8%
17	Que tipo de jogos	Racing/Corridas (ex: NASCAR)	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21		40,4%
		Puzzle (ex: Tetris)	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11		21,2%
		Sports/Desporto (ex: FIFA)	10	16	1	0	0	0	0	0	0	0	0	0	0	0	27		51,9%
		Action/Acção (ex: GTA)	3	8	8	1	0	0	0	0	0	0	0	0	0	0	20		38,5%
		Adventure/Aventura (ex: Tom Raider)	4	7	10	7	1	0	0	0	0	0	0	0	0	0	29		55,8%
		Rhythm/Ritmo (ex: Guitar Hero)	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2		3,8%
		Strategy/Estratégia (ex: Command and Conquer)	1	0	5	4	3	0	0	0	0	0	0	0	0	0	13	52	25,0%
		Simulation/Simulação (ex: The Sims)	2	4	1	4	2	2	0	0	0	0	0	0	0	0	15		28,8%
		Fighting/Luta (ex: Wrestling)	0	2	3	4	4	3	2	0	0	0	0	0	0	0	18		34,6%
		First-person shooter (ex: Counter-Strike)	0	1	3	1	2	3	1	2	0	0	0	0	0	0	13		25,0%
		Role-playing (ex: Final Fantasy)	0	1	0	0	1	1	1	0	2	0	0	0	0	0	6		11,5%
		MMOGs (ex. World Warcraft)	0	0	0	0	1	0	0	1	0	1	0	0	0	0	3		5,8%
		Virtual Worlds/Mundos Virtuais (ex: Habbo Hotel)	1	4	3	3	2	2	3	1	1	1	0	0	0	0	21		40,4%
		Outro	0	4	2	0	3	1	2	0	0	0	0	0	0	0	12		23,1%
18	Nome dos teus 3 Jogos Preferidos	FIFA/ PES	17																17		32,7%
		GTA/ WEE	10																10	52	19,2%
		The Sims	7																7		13,5%
19	Nível de classificação etária dos que + jogas	4 anos	0	7	0	0	0												7		13,5%
		6 anos	0	11	1	0	0												12		23,1%
		12 anos	1	24	11	1	0												37	52	71,2%
		16 anos	1	6	6	4	0												17		32,7%
		18 anos	0	4	3	2	3												12		23,1%
20	Respeitas os níveis de classif. Etária	Sim	7																7		13,5%
		Não	45																45	52	86,5%
		Às vezes	0																0		0,0%

3ºCiclo

ID	NºInquéritos	Casos	Ocorrências					Totais	Casos	Percentagem
1	Sexo	M	21					21	39	53,8%
		F	18					18		46,2%
2	Idades	5-9	0					0	39	0,0%
		10-14	36					36		92,3%
		15-18	3					3		7,7%
		+18	0					0		0,0%
4	Tempo Estudo	Diariamente	8					8	39	20,5%
		Semanalmente	14					14		35,9%
		Vespera Testes	17					17		43,6%
5	Tempo Seguido de Estudo	0-1 H	16					16	39	41,0%
		1-2 H	15					15		38,5%
		+ 2 H	8					8		20,5%
6	Reultados Escolares	MB	4					4	39	10,3%
		B	13					13		33,3%
		Med	18					18		46,2%
		Fracos	4					4		10,3%
7	Altura de Jogo	Diariamente	15					15	37	40,5%
		Semanalmente	10					10		27,0%
		Mensalmente	1					1		2,7%
		Nas férias	7					7		18,9%
		Outro	4					4		10,8%
8	Onde Jogas	Casa	36	0	0	0	0	36	37	97,3%
		Escola	0	3	1	0	0	4		10,8%
		Lojas	0	1	2	0	0	3		8,1%
		Casa de Amigos	0	0	1 0	3	0	13		35,1%
		Outro	1	0	1	0	0	2		5,4%

9	Com quem jogas	Sozinho	27	0	0	0	0	0	0		27		73,0%
		Pais	0	6	0	0	0	0	0		6		16,2%
		Irmãos	6	4	4	0	0	0	0		14		37,8%
		Amigos	3	6	6	4	0	0	0		19	37	51,4%
		Amigos online	1	2	1	1	2	0	0		7		18,9%
		Desconhecidos online	0	1	1	1	1	0	0		4		10,8%
		Outro	0	0	1	0	0	0	0		1		2,7%
10	Período do dia em que jogas	Manhã	13	0	0						13		35,1%
		Tarde	19	13	0						32	37	86,5%
		Noite	4	7	3						14		37,8%
		Madrugada	1	1	7						9		24,3%
11	Tempo seguido de Jogo	0-1 H	10								10		27,0%
		1 - 2 H	14								14	37	37,8%
		2-3 H	3								3		8,1%
		+ 3 H	10								10		27,0%
12	Pais/EE estabelecem regras de Jogo	Sim	8								8		21,6%
		Não	18								18	37	48,6%
		Às vezes	11								11		29,7%
13	As regras referem-se a:	À duração	16	0	0	0					16		69,6%
		Altura do dia	2	2	0	0					4	23	17,4%
		Tipo de jogos	0	2	0	0					2		8,7%
		Outro	1	0	0	0					1		4,3%
14	Pais/EE conhecem os jogos	Sim	2								24		64,9%
		Não	6								6	37	16,2%
		Alguns	7								7		18,9%
15	Tipo de Hardware	Consolas (PSX, XBOX, etc.)	20	0	0	0	0				20		54,1%
		Consola Portátil(GameBoy, Nintendo, etc.)	3	6	0	0	0				9	37	24,3%
		Jogos de Computador	13	12	5	0	0				30		81,1%

#	Pergunta	Opção	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	Total	N	%
		Jogos online	1	6	3	4	0										14		37,8%
		Outro	0	0	0	0	1										1		2,7%
16	Como descobres os videojogos?	Na Internet	24	1	0	0	0										25		67,6%
		Na televisao	5	13	0	0	0										18	37	48,6%
		Em revistas	1	3	7	0	0										11		29,7%
		Com amigos	6	5	5	6	0										22		59,5%
		Outro	1	1	1	1	1										5		13,5%
17	Que tipo de jogos	Racing/Corridas (ex: NASCAR)	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22		59,5%
		Puzzle (ex: Tetris)	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6		16,2%
		Sports/Desporto (ex: FIFA)	5	17	3	0	0	0	0	0	0	0	0	0	0	0	25		67,6%
		Action/Acção (ex: GTA)	1	3	12	4	0	0	0	0	0	0	0	0	0	0	20		54,1%
		Adventure/Aventura (ex: Tom Raider)	0	2	3	3	1	0	0	0	0	0	0	0	0	0	9		24,3%
		Rhythm/Ritmo (ex: Guitar Hero)	1	1	2	1	1	1	0	0	0	0	0	0	0	0	7		18,9%
		Strategy/Estratégia (ex: Command and Conquer)	0	0	2	4	2	1	1	0	0	0	0	0	0	0	10	37	27,0%
		Simulation/Simulação (ex: The Sims)	3	2	0	7	5	1	0	1	0	0	0	0	0	0	19		51,4%
		Fighting/Luta (ex: Wrestling)	1	1	2	1	5	1	2	0	0	1	0	0	0	0	14		37,8%
		First-person shooter (ex: Counter-Strike)	0	2	0	3	3	4	1	1	1	0	0	0	0	0	15		40,5%
		Role-playing (ex: Final Fantasy)	0	0	0	0	0	1	1	0	0	0	1	0	0	0	3		8,1%
		MMOGs (ex. World Warcraft)	0	1	1	0	2	1	0	1	1	0	0	1	0	0	8		21,6%
		Virtual Worlds/Mundos Virtuais (ex: Habbo Hotel)	0	1	0	0	0	1	0	1	1	0	0	0	1	0	5		13,5%
		Outro	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2		5,4%
18	Nome dos teus 3 Jogos Preferidos	FIFA/ PES	15														15		40,5%
		Burnout/ Need4Speed	10														10	37	27,0%
		GTA	8														8		21,6%

19	Nível de classificação etária dos que + jogas	4 anos	3 0 0 0 0		3		8,1%
		6 anos	2 3 0 0 0		5	37	13,5%
		12 anos	12 2 3 1 0		24		64,9%
		16 anos	7 9 0 1 0		20		54,1%
		18 anos	5 2 6 0 2		17		45,9%
20	Respeitas os níveis de classif. Etária	Sim	7		7		18,9%
		Não	30		30	37	81,1%
		Às vezes	0		0		0,0%

APPENDIX 3 – QUESTIONNAIRE RESULTS BY GENDER

APPENDIX 3.1 – 1st Cycle (table)

1º CICLO					
		1º CICLO			
		Feminino		**Masculino**	
Tempo Estudo	Diariamente	5	23,8%	4	17,4%
	Semanalmente	8	38,1%	9	39,1%
	Vespera Testes	8	38,1%	10	43,5%
		1º CICLO			
		Feminino		**Masculino**	
Tempo Seguido de Estudo	0-1 H	13	61,9%	4	17,4%
	1-2 H	6	28,6%	10	43,5%
	+ 2 H	2	9,5%	9	39,1%
		1º CICLO			
		Feminino		**Masculino**	
Altura de Jogo	Diariamente	8	40,0%	15	65,2%
	Semanalmente	7	35,0%	2	8,7%
	Mensalmente	1	5,0%	1	4,3%
	Nas férias	3	15,0%	2	8,7%
	Outro	1	5,0%	3	13,0%
		1º CICLO			
		Feminino		**Masculino**	
Tempo seguido de Jogo	0-1 H	17	85,0%	10	43,5%
	1 - 2 H	2	10,0%	7	30,4%
	2-3 H	1	5,0%	3	13,0%
	+ 3 H	0	0,0%	3	13,0%
		1º CICLO			
		Feminino		**Masculino**	
Resultados Escolares	MB	0	0,0%	5	21,7%
	B	13	59,1%	9	39,1%
	Médios	6	27,3%	9	39,1%
	Fracos	3	13,6%	0	0,0%
		1º CICLO			
		Feminino		**Masculino**	
Pais/EE estabelecem regras de Jogo	Sim	2	10,0%	9	39,1%
	Não	3	15,0%	8	34,8%
	Às vezes	15	75,0%	6	26,1%

		1º CICLO			
		Feminino		Masculino	
As regras referem-se a:	À duração	13	65,0%	8	40,0%
	Altura do dia	1	5,0%	5	25,0%
	Tipo de jogos	5	25,0%	5	25,0%
	Outro	1	5,0%	2	10,0%
		1º CICLO			
		Feminino		Masculino	
Pais/EE conhecem os jogos	Sim	15	75,0%	15	65,2%
	Não	1	5,0%	0	0,0%
	Alguns	4	20,0%	8	34,8%
		1º CICLO			
		Feminino		Masculino	
Que tipo de jogos	Racing/Corridas (ex: NASCAR)	7	35,0%	7	30,4%
	Puzzle (ex: Tetris)	4	20,0%	0	0,0%
	Sports/Desporto (ex: FIFA)	5	25,0%	10	43,5%
	Action/Acção (ex: GTA)	5	25,0%	18	78,3%
	Adventure/Aventura (ex: Tom Raider)	1	5,0%	10	43,5%
	Rhythm/Ritmo (ex: Guitar Hero)	0	0,0%	3	13,0%
	Strategy/Estratégia (ex: Command and Conquer)	0	0,0%	1	4,3%
	Simulation/Simulação (ex: The Sims)	9	45,0%	7	30,4%
	Fighting/Luta (ex: Wrestling)	0	0,0%	10	43,5%
	First-person shooter (ex: Counter-Strike)	0	0,0%	6	26,1%
	Role-playing (ex: Final Fantasy)	0	0,0%	2	8,7%
	MMOGs (ex. World Warcraft)	0	0,0%	2	8,7%
	Virtual Worlds/Mundos Virtuais (ex: Habbo Hotel)	5	25,0%	7	30,4%
		1º CICLO			
		Feminino		Masculino	
Nível de classificação etária dos que + jogas	4 anos	4	15,4%	6	14,0%
	6 anos	16	61,5%	7	16,3%
	12 anos	4	15,4%	8	18,6%
	16 anos	1	3,8%	9	20,9%
	18 anos	1	3,8%	13	30,2%
		1º CICLO			
		Feminino		Masculino	
Respeitas os níveis de classif. Etária	Sim	13	65,0%	4	17,4%
	Não	7	35,0%	19	82,6%

APPENDIX 3.2 – 2nd Cycle (table)

2º CICLO					
		2º CICLO			
		Feminino		Masculino	
Tempo Estudo	Diariamente	5	17,2%	4	16,7%
	Semanalmente	15	51,7%	11	45,8%
	Vespera Testes	9	31,0%	9	37,5%
		2º CICLO			
		Feminino		Masculino	
Tempo Seguido de Estudo	0-1 H	15	51,7%	16	66,7%
	1-2 H	13	44,8%	7	29,2%
	+ 2 H	1	3,4%	1	4,2%
		2º CICLO			
		Feminino		Masculino	
Altura de Jogo	Diariamente	9	32,1%	9	37,5%
	Semanalmente	11	39,3%	9	37,5%
	Mensalmente	5	17,9%	3	12,5%
	Nas férias	3	10,7%	3	12,5%
	Outro	0	0,0%	0	0,0%
		2º CICLO			
		Feminino		Masculino	
Tempo seguido de Jogo	0-1 H	12	42,9%	6	25,0%
	1 - 2 H	9	32,1%	9	37,5%
	2-3 H	5	17,9%	3	12,5%
	+ 3 H	2	7,1%	6	25,0%
		2º CICLO			
		Feminino		Masculino	
Resultados Escolares	MB	5	17,2%	4	16,7%
	B	21	72,4%	11	45,8%
	Médios	3	10,3%	9	37,5%
	Fracos	0	0,0%	0	0,0%
		2º CICLO			
		Feminino		Masculino	
Pais/EE estabelecem regras de Jogo	Sim	8	28,6%	8	33,3%
	Não	9	32,1%	8	33,3%
	Às vezes	11	39,3%	8	33,3%
		2º CICLO			
		Feminino		Masculino	
As regras referem-se a:	À duração	7	38,9%	7	36,8%
	Altura do dia	6	33,3%	9	47,4%
	Tipo de jogos	4	22,2%	2	10,5%
	Outro	1	5,6%	1	5,3%

		2º CICLO			
		Feminino		Masculino	
Pais/EE conhecem os jogos	Sim	12	42,9%	10	41,7%
	Não	3	10,7%	5	20,8%
	Alguns	13	46,4%	9	37,5%
		2º CICLO			
		Feminino		Masculino	
Que tipo de jogos	Racing/Corridas (ex: NASCAR)	8	28,6%	13	54,2%
	Puzzle (ex: Tetris)	10	35,7%	1	4,2%
	Sports/Desporto (ex: FIFA)	9	32,1%	18	75,0%
	Action/Acção (ex: GTA)	7	25,0%	13	54,2%
	Adventure/Aventura (ex: Tom Raider)	14	50,0%	15	62,5%
	Rhythm/Ritmo (ex: Guitar Hero)	1	3,6%	1	4,2%
	Strategy/Estratégia (ex: Command and Conquer)	8	28,6%	4	16,7%
	Simulation/Simulação (ex: The Sims)	12	42,9%	3	12,5%
	Fighting/Luta (ex: Wrestling)	5	17,9%	13	54,2%
	First-person shooter (ex: Counter-Strike)	4	14,3%	9	37,5%
	Role-playing (ex: Final Fantasy)	5	17,9%	1	4,2%
	MMOGs (ex. World Warcraft)	0	0,0%	3	12,5%
	Virtual Worlds/Mundos Virtuais (ex: Habbo Hotel)	17	60,7%	4	16,7%
		2º CICLO			
		Feminino		Masculino	
Nível de classificação etária dos que + jogas	4 anos	1	2,6%	6	12,2%
	6 anos	8	21,1%	4	8,2%
	12 anos	21	55,3%	16	32,7%
	16 anos	5	13,2%	12	24,5%
	18 anos	3	7,9%	11	22,4%
		2º CICLO			
		Feminino		Masculino	
Respeitas os níveis de classif. Etária	Sim	6	21,4%	1	4,2%
	Não	22	78,6%	23	95,8%

APPENDIX 3.3 – 3rd Cycle (table)

3º CICLO					
		3º CICLO			
		Feminino		Masculino	
Tempo Estudo	Diariamente	5	27,8%	3	14,3%
	Semanalmente	5	27,8%	9	42,9%
	Vespera Testes	8	44,4%	9	42,9%
		3º CICLO			
		Feminino		Masculino	
Tempo Seguido de Estudo	0-1 H	5	27,8%	11	52,4%
	1-2 H	10	55,6%	5	23,8%
	+ 2 H	3	16,7%	5	23,8%
		3º CICLO			
		Feminino		Masculino	
Altura de Jogo	Diariamente	2	12,5%	13	61,9%
	Semanalmente	4	25,0%	6	28,6%
	Mensalmente	1	6,3%	0	0,0%
	Nas férias	5	31,3%	2	9,5%
	Outro	4	25,0%	0	0,0%
		3º CICLO			
		Feminino		Masculino	
Tempo seguido de Jogo	0-1 H	7	43,8%	3	14,3%
	1 - 2 H	4	25,0%	10	47,6%
	2-3 H	2	12,5%	1	4,8%
	+ 3 H	3	18,8%	7	33,3%
		3º CICLO			
		Feminino		Masculino	
Resultados Escolares	MB	1	5,6%	3	14,3%
	B	7	38,9%	6	28,6%
	Médios	8	44,4%	10	47,6%
	Fracos	2	11,1%	2	9,5%
		3º CICLO			
		Feminino		Masculino	
Pais/EE estabelecem regras de Jogo	Sim	4	25,0%	4	19,0%
	Não	10	62,5%	8	38,1%
	Às vezes	2	12,5%	9	42,9%
		3º CICLO			
		Feminino		Masculino	
As regras referem-se a:	À duração	5	83,3%	11	64,7%
	Altura do dia	0	0,0%	4	23,5%
	Tipo de jogos	0	0,0%	2	11,8%
	Outro	1	16,7%	0	0,0%

		3º CICLO			
		Feminino		Masculino	
Pais/EE conhecem os jogos	Sim	11	68,8%	13	61,9%
	Não	4	25,0%	2	9,5%
	Alguns	1	6,3%	6	28,6%
		3º CICLO			
		Feminino		Masculino	
Que tipo de jogos	Racing/Corridas (ex: NASCAR)	7	43,8%	15	71,4%
	Puzzle (ex: Tetris)	5	31,3%	0	0,0%
	Sports/Desporto (ex: FIFA)	6	37,5%	17	81,0%
	Action/Acção (ex: GTA)	6	37,5%	14	66,7%
	Adventure/Aventura (ex: Tom Raider)	5	31,3%	6	28,6%
	Rhythm/Ritmo (ex: Guitar Hero)	3	18,8%	4	19,0%
	Strategy/Estratégia (ex: Command and Conquer)	2	12,5%	8	38,1%
	Simulation/Simulação (ex: The Sims)	10	62,5%	10	47,6%
	Fighting/Luta (ex: Wrestling)	5	31,3%	10	47,6%
	First-person shooter (ex: Counter-Strike)	1	6,3%	14	66,7%
	Role-playing (ex: Final Fantasy)	2	12,5%	2	9,5%
	MMOGs (ex. World Warcraft)	1	6,3%	7	33,3%
	Virtual Worlds/Mundos Virtuais (ex: Habbo Hotel)	3	18,8%	2	9,5%
		3º CICLO			
		Feminino		Masculino	
Nível de classificação etária dos que + jogas	4 anos	1	3,4%	2	5,0%
	6 anos	2	6,9%	3	7,5%
	12 anos	9	31,0%	15	37,5%
	16 anos	11	37,9%	9	22,5%
	18 anos	6	20,7%	11	27,5%
		3º CICLO			
		Feminino		Masculino	
Respeitas os níveis de classif. Etária	Sim	6	37,5%	1	4,8%
	Não	10	62,5%	20	95,2%

APPENDIX 4- INTERVIEW GUIDE

GUIÃO PARA A ENTREVISTA

PERGUNTAS	ALUNO:	ALUNO:
1. Tens computador/ consola no quarto?		
2. Com que frequência jogas?		
3. Os teus Pais definem regras quanto aos jogos? Quais?		
4. Eles conhecem os teus jogos? Quais?		
5. Controlam-te quando estás no computador a jogar? De que modo?		
6. Achas que a maioria dos jogos contém violência?		
7. Costumas jogar jogos violentos? Com que frequência? Qual o teu favorito? Porquê?		
8. É fácil comprar jogos para 18 anos?		
9. Concordas com a classificação etária atribuída aos jogos?		
10. É fácil ter acesso a jogos violentos na Internet?		
11. Achas que as crianças deviam jogá-los? E os adolescentes?		
12. Consideras que os jogos podem tornar as crianças mais agressivas/ violentas?		
13. Reconheces atitudes, comportamentos e / ou linguagem utilizados no jogos nos teus colegas? Outras pessoas?		
14. Costumas entrar em conflito com outros colegas/ pais/ Professores?		
15.Já te envolveste em situações de bullying?		
16. Se alguém te der um encontrão acidental na escola, como reages?		
17. Já alguma vez ficaste viciado em videojogos?		
18. Consideras que os videojogos afectam os teus resultados escolares?		

APPENDIX 4.1 –INTERVIEW RESULTS (TABLE)

ID	Inquérito	Casos	Ocorrências	Sub-Grupo			
1	Tens computador/ consola no quarto	Sim	8				
		Não	12				
2	Com que frequência jogas (semana)	Não joga	5	Tempo de jogo			
		Ocasionalmente	2	Tempo de jogo		< 1 H	1
		1 ou 2 x semana	6			1 H	1
		3 ou 4 x semana	2			2 H	1
		Diáriamente	5			> 2 H	1
4	Pais definem regras	Não	15	Tipo regras		Cumprimento	
		Sim	5	Tempo de jogo	4	Cumpre	4
				Tipo jogos	1	Não cumpre	1
5	Pais exercem controlo?	Não	13	Tipo Controlo			
		Ocasionalmente	3	Tempo de jogo	5		
		Sim	4	Tipo jogos	1		
6	A maioria dos jogos contém violência	Sim	16				
		Não	4				
7	Jogas jogos violentos	Não	8	Porquê		Jogos Favoritos	
		Mto violentos não	1	Matar os outros	1	Counter Strike	5
		Sim	9	On line	2	Mortal Kombat	1
		Ás vezes	2	Tiros	4	Warcraft	1
				Luta	1	WWE	1
				Excitante	1	Races	1
						Medal of Honor	2
						Sports	1
						GTA	2
						Missão Impossivel	1
8	É fácil comprar jogos para 18 anos?	Não sabe	6				
		Não	1				
		Sim	13				
9	Concordas com classificação etária atribuida aos jogos	Sim	6	Discordas porquê?			
		Não	7	Jogos crianças violentos		11	
		Algumas	6	Jogos para 18 não têm nada de mal		1	
		Não sabe	1				
10	É fácil ter acesso a jogos violentos na Internet?	Não	0				
		Não Sabe	5	Motivos			
		Sim	15	Identificação da idade pode ser falseada			

11	As crianças deviam jogá-los?	Não	17	Efeitos		E os adolescentes	
		Não sabe	1	Vão imitar	2	Não	8
		Sim	2	Ficam malucos	1	Ás vezes	2
				Aprendem a reagir à violência	1	Sim	10
12	Os jogos podem tornar crianças mais agressivas	Não	0				
		Às vezes	1				
		Sim	19				
13	Reconheces atitudes, comportamentos e/ou linguagens dos jogos nos teus colegas	Sim	18	Sinais que reconheces		Quais	
		Não	2	Em quase tudo	2		
				Linguagem	7	Wannafight/head shot	
				Lutas	2	wrestling: amigo do 2º ciclo foi para hospital	
				Brincadeiras Violentas	1		
14	Costumas entrar em conflito com colegas/ pais/ professores	Sim	5				
		Não	15				
		Gosta de ver	1				
15	Já te envolveste em situações de bullying?	Sim	8				
		Não	12				
16	Se alguém te der um encontrão acidental como reages?	Faço o mesmo		1			
		Dou soco a brincar		1			
		Nada		14			
		Aviso oralmente de forma violenta		4			
17	Já estiveste viciado em videojogos.	Sim	10				
		Não	10				
18	Os videojogos afectam o teu resultado escolar?	Sim	8				
		Não	12				

Do you have a computer/ games console in the bedroom

■ Sim   ■ Não

40%

60%
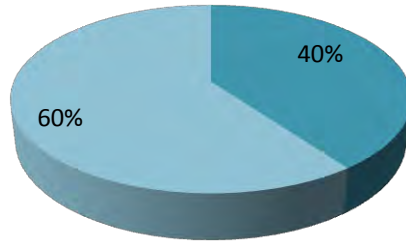
How frequently do you play?

■ Não joga   ■ Ocasionalmente   ■ 1 ou 2 x semana
■ 3 ou 4 x semana   ■ Diáriamente

25%   25%

10%   10%

30%
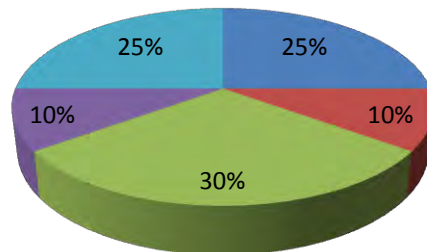
How long do you play without interruption?

■ < 1 H   ■ 1 H   ■ 2 H   ■ > 2 H

25%   25%

25%   25%
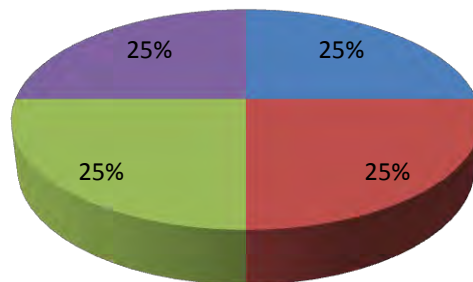
Do your parents set any rules?

■ Não ■ Sim

25%

75%
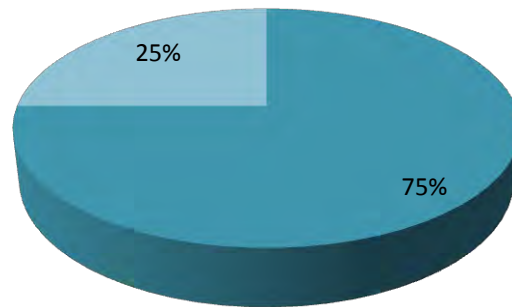
What are the rules about?

Tipo jogos
20%
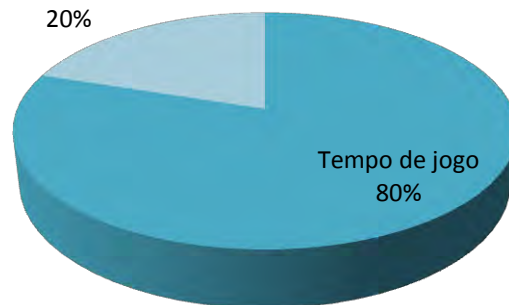
Tempo de jogo
80%

Do you usually comply with the rating system?

■ Cumpre ■ Não cumpre

20%

80%
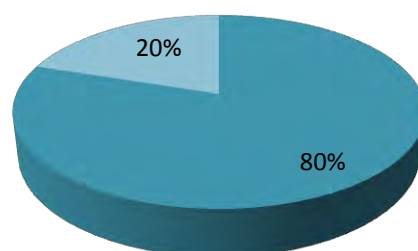
Do your parents exert any control of your playing?

■ Não ■ Ocasionalmente ■ Sim

20%
15%
65%
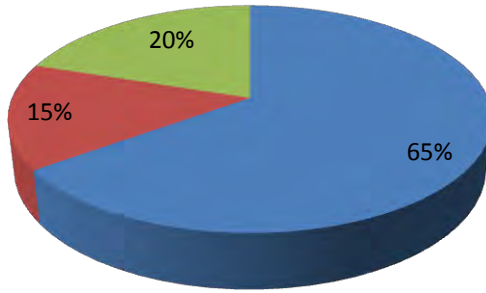
What do they control?

■ Tempo de jogo ■ Tipo jogos

17%
83%
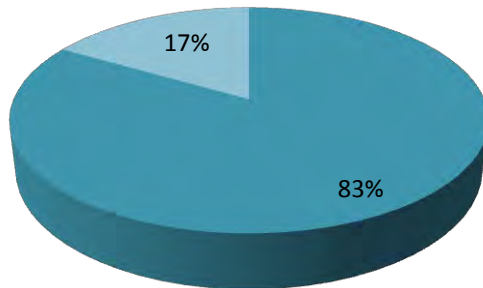
Do you think that most video games are violent?

■ Sim ■ Não

20%
80%
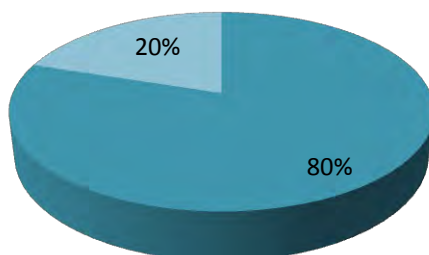
Do you play violent games?

■ Não ■ Mto violentos não ■ Sim ■ Ás vezes

40%

10%

45%

5%
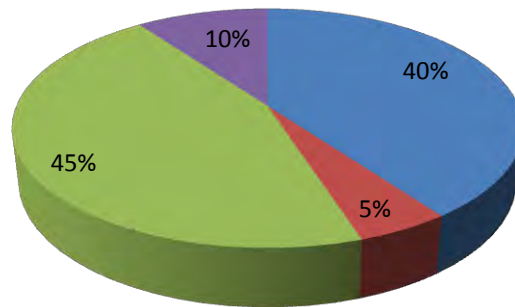
Why do you like violent games?

■ Matar os outros ■ On line ■ Tiros ■ Luta ■ Excitante

11% 11%

11%

22%

45%
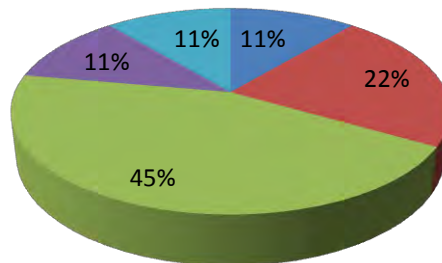
What are your favourite violent games?

■ Counter Strike ■ Mortal Kombat ■ Warcraft
■ WWE ■ Races ■ Medal of Honor
■ Sports ■ GTA ■ Missão Impossivel

7%

7%

13%

33%

13%

7% 7% 7%

6%
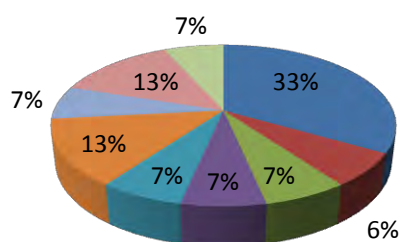
Is it easy to buy violent games?

Não sabe ■ Não ■ Sim

30%

65%

5%
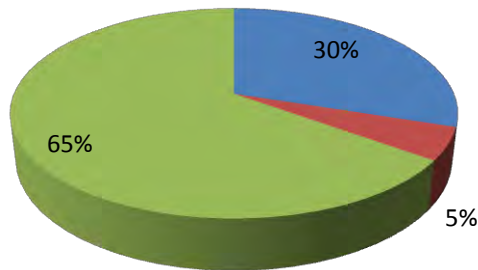
Do you agree with the games rating system?

Sim ■ Não ■ Algumas ■ Não sabe

5%

30%

30%

35%
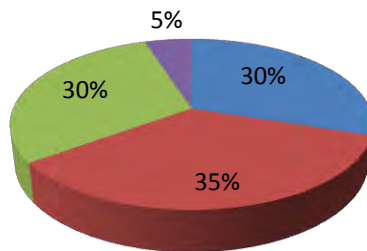
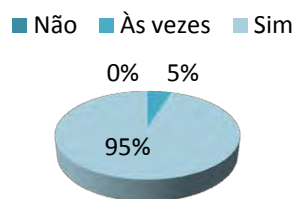## Is it easy to access violent games through the Internet?
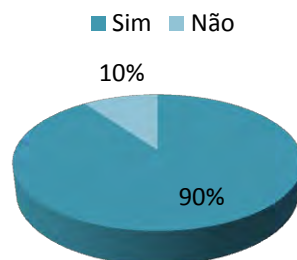
Não ■ Não Sabe ■ Sim

0%

25%

75%
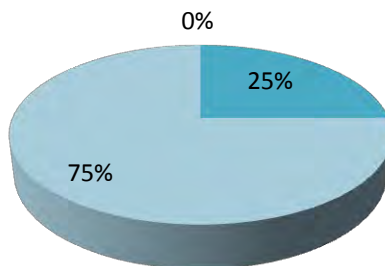
Should children play violent games?

■ Não ■ Não sabe ■ Sim

5% 10%

85%
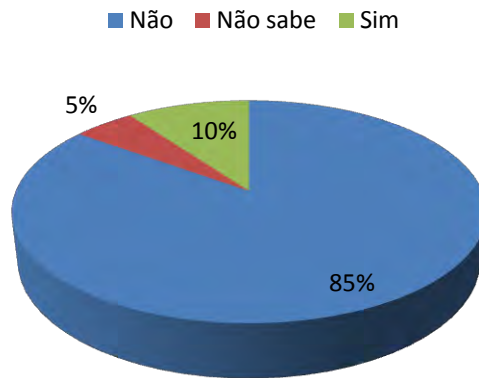
Do you believe children may become more aggressive for playing violent games?

■ Não ■ Às vezes ■ Sim

0% 5%

95%

Do you recognize the influence of video games in other students' language, behaviour or attitudes?
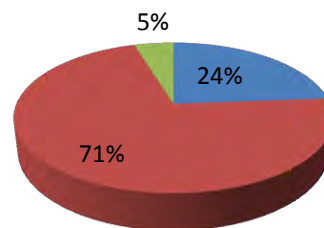
■ Sim ■ Não

10%

90%

In what aspects?

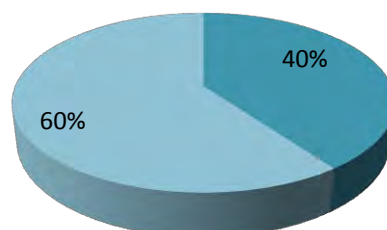Em quase tudo | Linguagem | Lutas | Brincadeiras Violentas
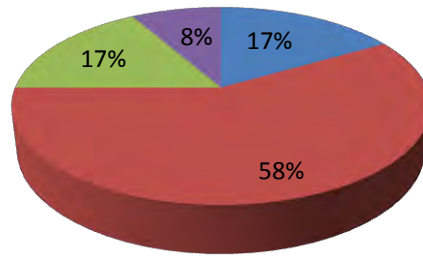
Do you usually have conflicts with other students, teachers or parents?

Sim | Não | Gosta de ver

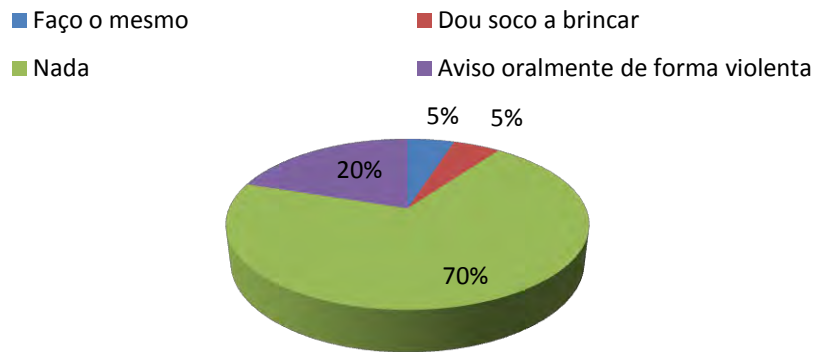**Have you already been involved in bullying situations where you were the perpetrator?**

Sim | Não

If someone bumped into you accidently, how would you react ?

- Faço o mesmo
- Dou soco a brincar
- Nada
- Aviso oralmente de forma violenta

5% 5%
20%
70%

Have you already been addicted to video games?

Sim Não

50% 50%
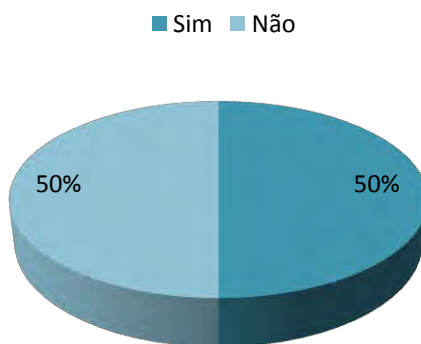
Does playing video games affect your school performance?

Sim Não

40%
60%
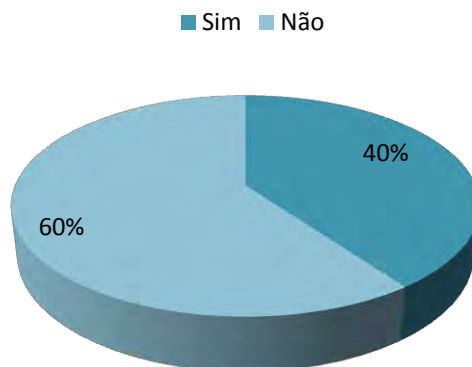
APPENDIX 5 – STUDENTS' FAVOURITE VIDEO GAMES (TABLES)

			1ºCiclo
	GTA	11	25,6%
	FIFA/ PES	8	18,6%
	WWE	6	14,0%
Jogos favoritos	POKEMON	5	11,6%
	BUZZ	5	11,6%
	THE SIMS	4	9,3%

			2ºCiclo
	FIFA/ PES	17	32,7%
	GTA	10	19,2%
	WWE	10	19,2%
Jogos favoritos	THE SIMS	7	13,5%
	RACING	6	11,5%
	HABBO	6	11,5%

			3ºCiclo
	FIFA/ PES	15	40,5%
	BURNOUT / NEED FOR SPEED	10	27,0%
	GTA	8	21,6%
Jogos favoritos	THE SIMS	8	21,6%
	COUNTERSTRIKE	7	18,9%
	WWE	5	13,5%

Students' favourite games

Jogos favoritos

	GTA	FIFA/ PES	WWE	POKEMON	BUZZ	THE SIMS
1ºCiclo	11	8	6	5	5	4
1ºCiclo	25,6%	18,6%	14,0%	11,6%	11,6%	9,3%

Students' favourite games

Jogos favoritos

	FIFA/ PES	GTA	WWE	THE SIMS	RACING	HABBO
2ºCiclo	17	10	10	7	6	6
2ºCiclo	32,7%	19,2%	19,2%	13,5%	11,5%	11,5%

Students' favourite games

Jogos favoritos

	FIFA/ PES	BURNOUT / NEED FOR SPEED	GTA	THE SIMS	COUNTER STRIKE	WWE
3ºCiclo	15	10	8	8	7	5
3ºCiclo	40,5%	27,0%	21,6%	21,6%	18,9%	13,5%