

The Perception of a Local University Students on Playing Video Games and How This Motivates English Grammar, Vocabulary and Communication Enhancement

Persepsi Pelajar Universiti Tempatan Terhadap Permainan Video Games dan Bagaimana Ia Mendorong Peningkatan Tatabahasa, Perbendaharaan Kata dan Komunikasi Bahasa Inggeris

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Abstract: Since technology has become prevalent in most people's lives nowadays, playing video games is undeniably considered a favorable activity. Video games can be efficient tools and useful resources for language learning. Considering this possibility, it is vital for the issue of learning a language, particularly English via playing video games to be investigated. The topic of video games and language learning is examined from the perspective of how such games can inspire players to learn English grammar, improve their English vocabulary and practice English communication. For data collection of the present study, 100 Universiti Teknologi MARA, Cawangan Pulau Pinang (UiTM CPP) students participated in the questionnaire survey. It was discovered that 84% of the respondents agreed that they feel motivated to improve their English grammar when they do not understand the storylines of the video games, perhaps because they need to know the grammar in order to understand the storylines in the games. 88% of them feel very motivated to learn new English vocabulary that they find in video games. Clearly, playing video games can contribute to positive effects on the students' English language learning. The results of this study can support the objectives of this research pertaining to language learning through games. Most respondents apparently have positive perception towards video games as reliable sources of motivation in learning, improving and practicing English. Besides, they also seem to have positive experiences in learning and improving their English in the contexts of autonomous learning and social interactions while playing video games.

Keywords: Video games, grammar, vocabulary, communication, language learning

Abstrak: Memandangkan teknologi telah digunakan secara meluas dalam kehidupan kebanyakan orang pada masa kini, bermain permainan video tidak dapat dinafikan dianggap sebagai aktiviti yang digemari ramai. Permainan video boleh menjadi alat yang efektif dan sumber berguna untuk pembelajaran bahasa. Berdasarkan kemungkinan ini, isu pembelajaran bahasa, terutamanya Bahasa Inggeris dengan bermain permainan video adalah penting untuk diterokai. Topik permainan video dan pembelajaran bahasa dikaji dari perspektif bagaimana permainan sebegini boleh memberi inspirasi kepada pemain untuk mempelajari tatabahasa Bahasa Inggeris, meningkatkan perbendaharaan kata mereka dan mempraktikkan

komunikasi Bahasa Inggeris. Untuk pengumpulan data kajian ini, 100 pelajar Universiti Teknologi MARA, Cawangan Pulau Pinang (UiTM CPP) telah mengambil bahagian dalam tinjauan soal selidik. Didapati bahawa 84% daripada responden bersetuju bahawa mereka berasa bermotivasi untuk meningkatkan tatabahasa bahasa Inggeris mereka apabila mereka tidak memahami jalan cerita permainan video, memandangkan mereka perlu mengetahui tatabahasa untuk memahami jalan cerita dalam permainan tersebut. 88% daripada mereka berasa sangat bermotivasi untuk mempelajari perbendaharaan kata bahasa Inggeris baharu yang mereka temui dalam permainan video yang dimain. Jelas sekali, bermain permainan video boleh menyumbang kepada kesan positif terhadap pembelajaran Bahasa Inggeris pelajar. Hasil kajian ini dapat menyokong objektif kajian yang berkaitan dengan pembelajaran bahasa melalui permainan. Kebanyakan responden nampaknya mempunyai persepsi positif terhadap permainan video sebagai sumber motivasi yang boleh dipercayai dalam pembelajaran, penambahbaikan dan latihan Bahasa Inggeris. Selain itu, mereka juga dilihat mempunyai pengalaman positif dalam pembelajaran dan meningkatkan bahasa Inggeris mereka dalam konteks pembelajaran autonomi dan interaksi sosial semasa bermain permainan video.

Kata kunci: Permainan video, tatabahasa, perbendaharaan kata, komunikasi, pembelajaran bahasa

Introduction

Background of the Study

According to Demirbilek, Yilmaz and Tamer (2010), since game-based language learning is fundamentally different from conventional book-based learning, a range of research avenues can be explored further. As for the present study, the type of game-based language learning is referred to using video games in learning English and it is discussed from the perspective of the influence of video games in motivating the players to learn English grammar, improve their English vocabulary and practice their English communication. Communicating with and through video games has become a regular, language-mediated occurrence and has become a source of informal language learning for millions of players around the globe (Chik, 2014). deHaan, Reed and Kuwada (2010) conducted a study on a video game entitled, "Parappa the Rapper" and they discovered that the players' attention was split between game rules and the words of the game narrative. Clearly, video games are able to catch language learners' attention in learning a language. Besides, Hitosugi, Schmidt and Hayashi (2014) conducted a study on retention of vocabulary after playing the video game, "Food Force" and it was found that their study's participants retained the vocabulary from the game better as compared to their text book. Also, the results

of the study of Chen and Yang (2013) indicate that adventure video games like "BONE" may supply valuable insights to help university students improve their learning motivation and English vocabulary as it was found that the students deemed the game useful in enhancing their language skills and motivation. Based on these discoveries, it is evident that playing video games has the potential to generate motivation in individuals learning a language and therefore, the issue of how they can be motivated to learn some components of language such as grammar and vocabulary is fundamental to be unraveled.

Problem Statement

According to Reinhardt (2017), it was once suggested that games only were attractive to sub-sets of learners who are not part of the mainstream community. However, since video games are common in people's lives nowadays, it is therefore crucial to investigate what benefits the games can offer to their players. Numerous claims are made about the impact of games on affective factors such as anxiety and motivation, but few studies have specifically explored the effects of digital games on second-language acquisition (Shahriarpoura & Kafi, 2014). Realizing such lack of studies on the impact of video games on second language learning, the execution of the present study is then important to fill the gap in the literature. According to Rankin, Gold and Gooch (2006), even though video games have received many criticisms for

being mindless entertainment without any educational value or content, it is argued that video games model successful learning practices (Gee 2004). Chen and Yang (2013) claim that some research indicated that computer simulation games could offer context-rich, cognitively challenging virtual language learning settings. However, it is uncertain if all these claims are also supported by UiTM CPP students that play video games and if they also experience similar effects of playing video games, and thus, their opinions are vital to be collected through the present study. Reinhardt (2017) claims that many observations of the early computer - assisted language Learning (CALL) researchers are still valid today and he gives the example of Baltra (1990) who discovered that, for some reasons, adventure and simulation games particularly could encourage language learning: 1) they combined all four language skills, 2) their objective was not to teach vocabulary or grammar but instead to foster goal-oriented activities involving effective use of language, and, 3) they introduced discovery-based pedagogical methods that could stimulate collaboration and interaction between students. As grammar is regarded as the fundamental area of language and that it is closely related to vocabulary (Cook, 2011), based on Baltra's (1990) findings, it is important to examine how playing video games can specifically motivate language learning in terms of grammar, vocabulary and communicative practices, and to discover if the findings are still true today as claimed by Reinhardt (2017) by conducting the present study.

Research Objectives

The study was conducted to achieve these objectives:

- 1) to investigate how playing video games motivates UiTM CPP students to learn English grammar.
- 2) to investigate how playing video games motivates UiTM CPP students to improve English vocabulary.
- 3) to investigate how playing video games motivates UiTM CPP students to practice their English communication.

Research Questions

The research questions of the present study are as follows:

- 1) How does playing video games motivate

UiTM CPP students to learn English grammar?

- 2) How does playing video games motivate UiTM CPP students to improve English vocabulary?

- 3) How does playing video games motivate UiTM CPP students to practice their English communication?

Literature Review

Video Games and their Features

According to Tavinor (2008) video games are distinctively referred to as “computer games”, “electronic games”, and even “digital entertainments” and that terms cannot be considered synonymous. Espocito (2005) claims that a video game is a game that is played by audio-visual equipment and which is established from a story. Hardware, graphical complexity, human-computer interface, target audience, concept, and player interaction can make each video game different from each other (deHaan, Reed & Kuwada, 2010). Wood et al. (2004) define the features of video games that make them attractive to players. Among the features proposed by Wood et al. (2004) are; 1) sound (i.e., sound effects, talking characters and background music), 2) graphics (i.e., high-quality realistic or cartoon-style illustrations and full motion video (FMV), 3) background and setting (i.e., whether the game is based on a narrative, film, or television program, and the use of realistic or fictional settings), 4) Game dynamics (i.e., exploration of new areas, elements of surprise, fulfilling a quest, skill development, AI interactions, gathering things, avoiding things, surviving against the odds, shooting, different ending alternatives, different types of transport, deciphering puzzles, beating times, cheats/Easter eggs, resolving time constraint problems, constructing environments, mapping, and linear/non-linear game format, and 5) winning and losing features (i.e., the potential to earn or lose points, obtaining bonuses, needing to start level again, and capability to save regularly. It is argued by Enayat and Haghghatpasand (2017), in terms of learning a language through video games, the utilization of various modalities of presentation, such as movies, music, meaningful conversations, and native pronunciation of words that are commonly used in various settings, may all help with vocabulary development. In a study conducted by Enayat and Haghghatpasand (2017) on a video game, “The Secret of Monkey Island– Special Edition”, it was concluded that one of the features of gaming is the frequency of the appearance of new words, which aids learners’

comprehension of the uses of words in various situations and meaningful phrases. Such a repeated exposure may ensure the occurrence of vocabulary learning and maximize the probability that a word's meaning will be transferred from the short-term to long-term memory. Besides, Enayat and Haghghatpasand (2017) believe that subtitles are an important element of "The Secret of Monkey Island-Special Edition", since they assist learners in visualizing the words they hear.

Benefits of Language Learning through Video Games

The distinctions between games and other multimedia should be the emphasis of second language study, education, and design (deHaan, Reed & Kuwada, 2010). To provide both entertainment and training to the player, video games include a variety of technological and educational features (deHaan, Reed & Kuwada, 2010). Rankin, Gold and Gooch (2006) claim that computer games mimic the experiential approach to second-language learning by offering an immersive learning experience. Ang and Zaphiris (2006) found that video games contributed to language learning through the use repetition (behavioral nature) as well as thought organization and adaptation processes (constructivist nature). Enayat and Haghghatpasand (2017) argue that the possible impact of commercial adventure video games on learning a second language prompted a few scholars to investigate it. For example, Miller and Hegelheimer (2006) explored the impact of playing "The Sims" on L2 learners' grammar and vocabulary skills. The Sims is a computer adventure video game that allows players to experience the hardships of daily life via the characters of a family known as the Sims. The researchers discovered that the language learner's knowledge of vocabulary had improved substantially. The replication of the same study by Ranalli (2008) also revealed similar results. The study of Vahdat and Behbahani (2013) reported that learning vocabulary is more beneficial through video games and that males are more inclined than females towards video game learning. It was found that the use of vocabulary games and activities improves students' ability to learn words, promotes student interaction and enhances student motivation (Shahriarpour & Kafi, 2014). In a study conducted by Rankin, Gold and Gooch (2006), it is posited that a video game, "Ever Quest 2" offers a rich environment that is suitable for developing the vocabulary of ESL students and "Ever Quest 2" also enhances the students' conversation skills. Turgut and Irgin (2009) reported that video games are effective in in terms of

learning sub-skills, especially vocabulary and pronunciation. Baltra (1990) claims that adventure games are valuable tools for improving communicative proficiency. Besides, computer simulation games may offer rich context and cognitively engaging virtual language learning settings (Chen & Yang, 2013).

Motivation in Language Learning through Video Games

It was discovered in the study of Chik (2011), that there were two categories of motivation that could stimulate one's language learning through gaming; 1) the need to advance in a game level influenced gamers to be more aware of the English text in the game, and 2) games offered authentic platforms for communication with other gamers in English. With respect to motivation generation from playing video games, the study of Shahriarpour and Kafi (2014) on digital games to develop learning English vocabulary particularly via video games discovered that digital games do improve the incentive of learners to learn, and thereby change the direction from rote learning to substantive learning and that the use of digital games is one of the factors that makes learners excited and inspired to learn language. Osma-Ruiz et. Al (2015) discovered in their study that the integration of "serious games" or, more accurately, "serious video games" into the teaching-learning process led significantly to improving the enthusiasm of the students and thus to promoting their further participation in their own learning. In short, the respondents in the study of Osma-Ruiz et. Al (2015) believe primarily that playing video games significantly enhances their desire to learn English. Bado and Franklin (2014) investigated the impact of playing Trace Effects, an instructional adventure video game. This adventure video game was created by a group of EFL experts with the goal of teaching American English. The results of the investigation revealed that playing the game benefited the English as Foreign Language (EFL) students in terms of improving their knowledge and understanding of vocabulary and motivation in learning English. The study of Chen and Yang (2013) on the influence of adventure video game, "Bone" on English vocabulary learning uncovered positive outcome after the players, EFL learners played the game extensively for six weeks where they admitted that the game improved the range of their vocabulary as well as listening and reading skills. In addition, it was also discovered that the game increased the learners' motivation by providing them with a sense of accomplishment in learning.

Methodology

Research Design

A quantitative, descriptive research design was chosen for the present study. This study did not employ experimental or lab research approach to investigate or observe how the respondents play video games in a controlled environment but rather examining their experiences playing video games and learning English through administering a pre-designed questionnaire.

Respondents

This research was implemented at UiTM CPP and the subjects of this research were 100 undergraduates who were in part five completing their Degree in Electrical Engineering at the university.

Sampling Method

The method of purposive sampling was used to obtain a sample of the research. This method which belongs to the category of non-probability sampling technique, sampled some UiTM CPP students on the basis of their experience in playing video games. A few filter questions needed to be answered by the respondents first in order to sample them as qualified respondents and only those who played video games were selected. However, for additional data collection, the names of video games they played were asked to confirm that they knew about video games and they did play them.

Instrument

A questionnaire was chosen to be the instrument for collecting data from the respondents. The items in the questionnaire were developed by partially adopting the studies of Vahdat and Behbahani (2013), and Chik (2011). Vahdat and Behbahani (2013) devised a questionnaire to determine their participants' experience of learning a language via video games. The study of Chik (2011), employed a qualitative design by applying narrative approach and content analysis. The transcribed responses from the participants of this study such as "I use the dictionary when I find new vocabulary in the games" (p. 35) and "Although the English I used was not good, but it was an opportunity to chat with foreigners in English" (p. 36) were referred to for designing the questionnaire. The questionnaire consisted of 20 questions (excluding demographic and filter questions) which were self-reporting statements related to the objectives of this study. Each item in the questionnaire was measured in terms of the respondents' levels of agreement or disagreement with the statements by using Likert scale; Strongly disagree= 1, Disagree= 2,

Undecided= 3, Agree= 4, Strongly agree= 5.

Data Collection Method

An online survey was conducted where the respondents had to answer questions by clicking the Google form link given to them. This online survey method was chosen due to its low cost and flexibility. By using this option, the researchers could quickly access the e sample without time or location constraints. There was no pre-test or post-test conducted and the data was collected in one phase only.

Data Analysis Method

The main advantage of data analysis is that it helps to ensure that the data collected is simplified and reduced, while at the same time producing results that may then be measured using quantitative techniques. As for the present study, the data obtained was input on SPSS for numerical data generation and analysis.

Findings and Analyses

Demographic Video Game Playing Profiles of the Respondents

Figure 1. Gender of Respondents

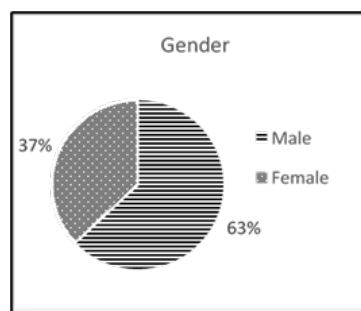


Figure 2. Ages of Respondent

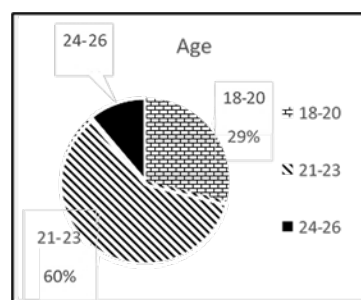
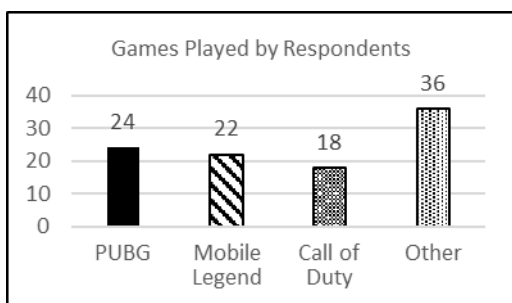


Figure 3. Games Played by Respondents



There were 100 respondents who participated in the survey and 63% of them were male and the remaining percentage, 37% were female. 29% of the respondents were between 18-20 years old, while 60% of them were between 21-23 years old, while 11% were between 24-26 years old. 24% of the respondents admitted they play “PUBG” followed by 22% of them who play “Mobile Legends” and 18% of them play “Call of Duty” while the rest chose the response option, “other” for the games that they play. In terms of how often they play video games, the majority of the respondents, 66% of them revealed that they play video games at least twice a week.

Reliability Data

Table 1. Reliability Data

Cronbach’s Apha	Cronbach’s Alpha Based on Standardized Items	N of items
0.940	0.942	20

The Cronbach’s alpha obtained was 0.940, which indicates a high level of internal consistency for the questionnaire and the questionnaire is then considered reliable for the study (see table 1).

Research Question 1: Feeling Motivated to Learn English Grammar with Video Games

Table 2: Results of Learning Grammar through Playing Video Games

Item	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Mean (M)	Standard Deviation (SD)	Skewness	Standard error
	%	%	%	%	%				
1. I think I usually feel motivated to learn English grammar because I can see how the words are used in sentences with interesting visuals in the video games.	0	3	8	60	29	4.14	0.682	-0.767	0.241
2. I usually feel motivated to learn English grammar when communicating with other players.	1	6	15	52	26	3.95	0.857	-0.885	0.241
3. I think playing video games gives me the motivation to improve my English grammar because interesting animations in video games make it easy for me to remember the grammar used in the sentences mentioned in the games.	0	4	10	60	26	4.09	0.726	-0.785	0.241
4. I think the correct grammar used by other players while playing video games motivates me to build correct sentences when I chat with the players.	0	9	16	53	22	3.87	0.872	-0.674	0.241
5. I feel motivated to learn English grammar when I talk with other players that are better English speakers than me.	0	4	7	60	28	4.10	0.772	-0.981	0.241
6. I feel motivated to improve my English grammar when I don’t understand the storylines of the video games I play so that I can understand them.	1	3	12	56	28	4.05	0.809	-1.027	0.241

For the research question about learning grammar through video games, the data from items, 1-6 was analysed. Based on the results obtained, the mean and standard deviation for item 1 are 4.14 and 0.682 respectively where 60% of the respondents agreed that they feel motivated to learn English grammar by observing how the words are used in sentences with attractive graphics in video games. For item 2, 52% of the respondents agreed that they feel motivated to learn English grammar when communicating with

other players (M= 3.95, SD= 0.857). Most of the respondents chose the response option, “agree” for item 3, 4, 5 and 6 where the percentages for these items are 60%, 53%, 60% and 56% respectively.

Research Question 2: Feeling Motivated to Learn English Vocabulary with Video Games

Table 3. Results of improving vocabulary through playing video games

Item	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Mean (M)	Standard Deviation (SD)	Skewness	Standard error of
	%	%	%	%	%				
7. I think playing video games gives me the motivation to expand my English vocabulary because I need to communicate with other players in English and thus, I need to know many words.	0	4	7	60	28	4.10	0.718	-0.652	0.241
8. I usually feel very motivated to learn new English vocabulary that I find in video games because I need to know the words in order to understand the storylines in the games.	1	3	12	56	28	4.12	0.715	-0.858	0.241
9. I think video games gives me the motivation to expand my English vocabulary because the instructions and storylines that have colourful and interesting visuals in the games attract me to focus on the words in the instructions and storylines.	0	3	10	62	25	4.11	0.665	-0.756	0.241
10. I feel motivated to learn English vocabulary when I play video games because some video games have interesting theme songs with interesting words in their lyrics.	1	6	12	55	26	4.00	0.853	-0.997	0.241

11. When I see a word that I don't understand in a video game, I will feel motivated to know more about the word by referring to information about the word on the internet.	0	5	15	51	29	4.07	0.782	-0.642	0.241
12. I always feel motivated to learn new words that I find in video games because I need to understand the words in order to understand the games.	0	2	12	59	27	4.11	0.680	-0.532	0.241
13. If I do not know the meaning of certain words in video games, I feel motivated to look up the words in the dictionary for the meanings of the words.	3	0	19	47	22	3.75	1.019	-0.764	0.241
14. If I do not know the meanings of certain words in video games, I feel motivated to learn the words by translating the words into my mother tongue (e.g: by using Google Translate etc).	0	6	10	53	31	4.09	0.805	-0.877	0.241

For the research question concerning improving vocabulary via video games, the data from items, 7-14 was analyzed. For item 7, 60% (M= 4.10, SD= 0.718) of the respondents agreed that playing video games gives them the motivation to expand their English vocabulary because they need to interact with other players in English and therefore, they need to know many words for this purpose. For item 8, 56% (M= 4.12, SD= 0.715) of the respondents believe that they are very motivated to learn new English vocabulary that they encounter in video games because they need to know the words in order to comprehend the storylines in the games. For items, 9-14, the majority of the respondents selected the response option, “agree” with 62%, 55%, 51%, 59%, 47% and 53% respectively.

Research Question 3: Feeling Motivated to Practice English Communication with Video Games

Table 4. Results of practicing English communication through playing video games

Item	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Mean (M)	Standard deviation (SD)
	%	%	%	%	%		
15. I think I can make my English more fluent when communicating with other players while playing video games.	0	2	8	62	28	4.17	0.652
16. I think after playing video games, I usually feel motivated to communicate in English.	0	5	12	61	22	4.00	0.739
17. I feel motivated to improve my English because other players usually help me by correcting my English if there is any language mistake while communicating with them.	2	9	19	44	26	3.83	1.006
18. I usually feel motivated to practice my English while playing video games because video games help to develop my listening skills and speaking skills when communicating with other players.	0	5	10	52	33	4.12	0.820
19. I think playing video games gives me the motivation to improve my confidence level in English communication	0	9	14	55	28	4.05	0.757

when I see other players can speak better English than me.							
20. Playing video games makes me motivated to improve my English skills so that I can communicate fluently with other players.	0	1	11	58	30	4.17	0.652

For the research question pertaining to practicing English communication through video games, the data from items, 15-20 was analyzed. Based on the data obtained, the mean and standard deviation for item 15 are 4.17 and 0.652 respectively where 62% of the respondents believe that they can make their English more fluent when communicating with other players while playing video games. For item 16, 61% (M= 4.00, SD= 0.739) of the respondents agreed that after playing video games, they usually feel motivated to communicate in English. For items 17-20, the majority of the respondents selected the response option, “agree” with the percentages of 44% (M= 3.83, SD= 1.006), 52% (M= 4.12, SD= 0.820), 55% (M= 4.05, SD= 0.757), and 58% (M= 4.17, SD= 0.652) respectively.

Discussion

Firstly, it can be deduced from the results that interesting animations in video games make remembering the grammar used in the sentences mentioned in video games easier. In terms of vocabulary, most of the respondents have the idea that they feel motivated to expand their English vocabulary because they need to communicate with other players in English and thus, they need to know many words. Based on the results, obviously, being able to interact well with other players and to comprehend the storyline in the games are the motivational drivers in their vocabulary expansion. As for practicing communicative English, being corrected when using English while interacting with other players can motivate the respondents to learn English. It is probable that positive corrective feedback from other players can contribute to positive feelings in the respondents. As indicated by most of the respondents, oral and auditory skills of English communication can be improved by playing video games. Also, the

respondents in majority believe that they feel motivated to improve their confidence level in English communication when they see other players speak better English than them. This apparently shows that external motivation in the form of other players' proficiency can stimulate one to improve their English. Most respondents claim that they feel motivated to improve their English when playing video games so that they can communicate fluently with other players. Thus, communicative fluency is clearly a motivational driver in improving their English.

Conclusion

In summary, playing video games is viewed positively by the respondents with respect to the players' learning, improving and practicing their English. Also, obviously, video games can be considered as useful tools in facilitating English learning in terms of their visual and audio features such as graphics or animations, storylines, theme songs and so on. Besides, individual learning of English by referring to some sources such as translation devices, collaborative learning of English can also occur when video game players communicate with other players. In conclusion, video games apart from being tools for entertainment can also be learning aids particularly in generating incidental learning and therefore, video games should not be perceived as merely a non-beneficial activity.

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