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VIDEO GAMES EFFECTS ON COLLEGE STUDENTS IN DUBAI DURING COVID-19 PANDEMIC

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ABSTRACT

Student's lifestyle has been changed drastically due to covid pandemic. Whether because colleges switched to online education or the social distancing restrictions that doesn't let students to be outside as much as they usually do. This study aims to investigate and assess the potential impact of video games on college students in Dubai during the pandemic, as well as to gain a better understanding of how college students feel about video games in general. A self-administered online questionnaire was used as an instrument for data collection among 100 respondents in Dubai through stratified random sampling technique. SPSS program was used to evaluate the results from collected data. Based on findings, researcher concludes that student's lifestyle has been changed during the covid 19 pandemic as well as there is a relation between students mind and video games, but there is no risk of video game addiction which can cause negative effect on students' academic performance in Dubai.

INTRODUCTION

In the year 2020, the Coronavirus COVID-19 outbreak impacted people around the world, and the disease is extremely contagious in nature (World Health Organization, 2020). Due to the ongoing COVID-19 pandemic, many of us have been on lockdown or have actively followed the social distancing guidelines to limit our time spent outside in recent months. This is a serious matter to combat the disease (Zhu, 2021). As a result, classes have moved from a normal classroom environment to an online or virtual environment using appropriate technologies. Although in-person classes in some countries have been postponed until further notice from March/April 2020. The Ministry of Education (MOE) in the UAE designed universities to minimize students' visits to campus and to phase out in-class instruction in favor of distance learning (Saif Almuraqab, 2020). Because of COVID-19, the majority of students decided to cut down on their outgoing and gathering activities during the pandemic.

This resulted in an increase anxiety and depression among college students (George Shakarishvili, 2019). Most of the students play video games, and it is known that video games are common form of entertainment (Rüth & Kaspar, 2021). Games are often seen as an important part of new technologies, and they have become an integral part of many people's lives (Almalki & Aldajani, 2020). This research is a quantitative study that focuses on college students in Dubai and possible effects of video games during the COVID-19 pandemic.

Background Study: COVID-19 (coronavirus disease 2019) is an infectious caused by a virus known as SARS-CoV-2 which mostly influences the respiratory system, causing interstitial pneumonia and acute respiratory distress syndrome (Landi et al., 2020). Since this disease is extremely infectious and contagious, it can be spread between individuals by respiratory droplets and other means of contacts, such as palms, noses, and mouths (Liu et al., 2020). This pandemic had an influence on education, as it had on other fields. As a result, government choices have focused on the common objective of slowing the spread of COVID-19 by preserving social distance and avoiding face-to-face interactions, as well as teaching (Saif Almuraqab, 2020).Multiple countries have effectively reduced

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the spreading of the COVID-19 by introducing drastic measures such as restricting public meetings and shutting down universities until further notice. While university closures are an effective way of limiting virus spread, they have their own set of challenges, especially in high developed countries such as the UAE (Saif Almuraqab, 2020). Video games is known to be a common form of entertainment as well as the part of majority of students lifestyle (Rüth & Kaspar, 2021). Electronic devices such as a console, tablet, or a computer is used to play video games and they have become a popular type of entertainment, well-being, and leisure activity for people of all ages around the globe, especially children and teenagers (Alqurashi et al., 2016). They were invented just over a thirty years ago, but have rapidly become one of the most common, successful, and influential types of entertainment (Squire, n.d.). There are multiple reasons, that video games have become a common and influential medium. Main reason is that, video games evoke strong emotional responses in their players, such as fear, strength, anger, wonder, and joy (Squire, n.d.). Fighting, adventures, puzzles, strategy games, and sports are the most common types of video games, with many motivators such as exploration, filling leisure, excitement, intellect and skill growth, winning, and challenge and those attracts youth's attention (Alqurashi et al., 2016). Historically, computer games have been at the cutting edge of what is theoretically feasible, whether it is constructing online communities on the Internet, developing rich environments with 3D graphics cards, or making dynamic synchronous interaction play through broadcasting information over the Internet (Squire, n.d.). Additionally, majority play video games for relaxation, social interaction, stress relief, mentally escaping from the real work, and entertainment (Sherry et al., n.d.). Video games have generally had a negative reputation among the general population. However, in this crisis, their players benefited in certain ways (Zhu, 2021). People can quickly find calm and peace in the game and withdraw from reality's pain to relieve anxiety and depression (Zhu, 2021).

But even now, there are instructors that are concerned about the impact of video games on students and the wisdom of incorporating more video game technology into the classroom. Most outspoken and oft quoted of video game critics, poses four major concerns with video games. Video games: Can lead to violent, aggressive behavior, employ destructive gender stereotyping, promote unhealthy "rugged individualist" attitudes, and stifle creative play. But currently, there is no connection between video game use and social maladjustment, according to video game researchers (Squire, n.d.). Higher education students are known as tomorrow's leaders. Their main goal is academic achievement (Kolachina, 2014). Leaning is the most significant requirement for students in colleges. Engagement is one of the main elements of enhancing this importance requirement. According to some educators, one of the most challenging tasks for teachers is to keep students engaged in the classroom. According to statistics, between 25 and 60 percent of students are disengaged (Zamani, 2018). In terms of economic development and growth, Dubai is a major city in the Middle East and North Africa (MENA) region (Khan et al., 2017). In the four decades since independence, education in Dubai has advanced at a rapid rate (Soto, 2016). Higher education institutions or colleges are still seen as places of opportunity for teaching and studying classic subjects, learning for leisure, learning for skilled jobs, expanding the workforce, as well as providing developmental foundations for underachieving students. (Kolachina, 2014). In both corporate and academic environments, education is critical. Training or preparation is used to assist staff in doing something better than they did previously. The aim of education is to build a sense of curiosity in students (Raja & Nagasubramani, 2018). Colleges have a far wider mission than only granting associate degrees or having general education courses to help students transition to baccalaureate-granting institutions. Colleges meet local educational needs usually by duplicating or improving on substandard opportunities at previous levels of education and adding new subject matter that is applied or technical in its nature (Kolachina, 2014).

Significance of the Study: There are few studies on video games, COVID-19, and its impact on college students in Dubai. The aim of this study is to explore and evaluate possible effects of video games on college students in Dubai during the pandemic, as well as to understand college students feeling and overall perspective on video games, and since there is COVID-19 pandemic, most of the universities have online education, this study will also include possible changes on student's lifestyle due to pandemic.

Objectives by Questions

⌡ Do video games have positive or negative impact on college students of Dubai?
⌡ Can video games and COVID-19 change college students' lifestyle?

Literature review

In order to find the possible effects of video games on college students of Dubai, it is important to understand the impact of COVID-19 on people's lifestyle. In literature review, we will investigate previous studies to understand student's lifestyle, as well as to investigate video games and its impact on college student.

COVID-19 and How it Changed the Lifestyles: A large number of patients were affected in December 2019. According to the facts, an unusual pneumonia with human-to-human transmission and fast spread virus has been confirmed in Wuhan. The 2019 novel coronavirus (SARS-CoV-2) caused a coronavirus disease outbreak in Wuhan, Hubei Province, China, which has since spread across China and to other nations (WHO, 2020). An infectious disease known as coronavirus (or COVID-19) is caused due to recently discovered coronavirus (World Health Organization, 2020). The majority of individuals infected with the COVID-19 virus usually develop mild to moderate respiratory symptoms and will recover without the need of any special care. People above the age of 65, as well as the ones that have basic medical issues such asdiabetes, heart illness, chronic respiratory disorders, as well as cancer, have more risk to experience severe illnesses. Despite the fact that no age group is utterly higher and more severe than those that are 70 years old or over, with mortality rates is known to be above 20%(Prem et al., 2020).

With current pandemic caused by COVID-19, many of us have been on lockdown or have actively followed the social distancing rules and reduce our time spent outdoors in recent months. It is a critical matter to combat the disease (Zhu, 2021).

The coronavirus epidemic put a heavy burden on everyone's shoulders, and everybody is attempting to cope in their own unique way. It has brought so many traumatic memories as a global epidemic. And now people pay greater attention to mental health issues because of the pressure and distress created by the fear of viruses in everyday life (Zhu, 2021). Education systems are experiencing huge challenges due to COVID-19 pandemic (Daniel, 2020). Many countries have effectively reduced the spreading of the coronavirus by implementing aggressive actions such as prohibiting public meetings and putting universities under lockout until further notice (Saif Almuraqab, 2020). Many schools that have the resources to support electronic learning have decided to go for distance or online learning. Teleteaching has been adopted by schools that lack the resources or facilities to accommodate online education, such as televised lessons during the COVID-19 pandemic (Edward Davis, 2020). While closing universities is an effective way to stop the virus from spreading, it comes with its own set of problems, mainly in developing countries like the UAE. The Ministry of Education (MOE), in collaboration with other universities, issued multiple rules and regulations to adapt the mandate of the country's leaders in order to ensure the country's education process' stability, and the country's excellent technology has played an important role in facilitating the online/distance process of learning(Saif Almuraqab, 2020).

With coronavirus disease outbreaks on the rise across the world, all of us are facing yet another round of limitations and shutdowns. Currently, there is risk of spending a lot more time at home compared to lifestyle before the pandemic. So, many people have all this free time, what they are going to do? Playing video games become the solution for many people, at least in some way (Wiederhold, 2021).

Education in Dubai: Within the Middles East and North Africa region (or MENA), it is known that Dubai is a large city regarding the development and economic growth. Its development throughout last 2 decades, mainly regarding the infrastructure, has established it as a global benchmark for both emerging and developed economies (Khan et al., 2017). Higher educational institutions or colleges are now seen as areas of opportunities for teaching and studying classic subjects, learning for recreation, learning for advanced careers, expanding the workforce, and creating a developmental base for underachieving students. Community colleges have a far wider mandate than only offering associate degrees or offering general education courses to help students transition to baccalaureate-granting institutions (Kolachina, 2014). Colleges draw the most multicultural student bodies in terms of age, race and ethnicity, and career ambitions due to their diverse educational priorities, broad enrollment, low cost, and convenience (Hurtado et al., 2002). They strive to provide learning and student support facilities and activities to a mobile and diverse student population. However, teaching those students is a difficult challenge. Age, appearance, culture, and socioeconomic status have bestowed distinct strengths and limitations on each student, making some students more prepared for the rigors of the collegiate community than others. Dubai is a popular destination for expats, as well as educational institutions cate to a diverse group of students, including students from Pakistan, India, Filipins, Iran, Egypt, Sudan, Russiaand many more nationalities. Educational institutions are responsible for integrating students from both of these backgrounds, overcoming language barriers, and addressing the emotional needs of students, including those who are transferring from a safe home/school community to college in a foreign land away from home. As expatriate students, they are supposed to do a lot more in terms of adaptation to foreign cultures and people. And to balance academics and adaptation/adjustment to a new culture, a high degree of emotional maturity is required (Kolachina, 2014).

Evolution of Video Games: A video games can be described as "a game played by electronically manipulating images displayed on a television screen" (Alqurashi et al., 2016). Throughout the 1970s, video games were first introduced. By the end of that decade, computer games had surpassed tv as the most common childhood pastime. Adults were worried about the negative impact of video games, so the arcade games were also prohibited in some nations (Soto, 2016). But now, computer and video games are being developed three times faster than ever since 1996. The games are not only for teenagers, but also for many adults (Alqurashi et al., 2016).

There are many different types of computer as well as the video games, some examples are: puzzles, fighting, sports, adventures, strategy, and many more. Based on the number of players, games are categorized to individual or group games. Individual and party games are classified based on the number of players. Puzzle games and adventure game theories models, for example, can be played by a single player. Sports and battle games, on the other hand, can be played by several players(García Reyes, 2013).

Physical and Mental Effect Caused by Video Games: It is widely believed that the majority of consumer video game content is abusive. Commercial games, interestingly, have been found to boost a player's problem-solving abilities (Gee, 2003). While video games can cause students to become socially isolated, which has a negative impact on their emotional, personal, and social development, some educators and researchers encourage students to play games and see them as an effective treatment. Many scholars believe that video games can help students develop their thinking skills and abilities (Alqurashi et al., 2016). Most people believe that computer games are mainly designed for fun, but increasingly, many features have been included, such as interesting plots, complex gaming mechanics, simulations of social interactivity, and immersive imagery, all of that plays an essential role in encouraging the individuality of learning and gaining various types of knowledge (Almalki & Aldajani, 2020). People play video games for a number of reasons, but the most common reason is that they elicit powerful emotional reactions in their players, such as fear, strength, rage, wonder, or excitement. In order to generate these feelings, video game creators must weigh a variety of considerations, including character characteristics, prizes, challenges, game plot, competition with other players, and capacity for teamwork with other players (Squire, n.d.).

Video games have often had a negative reputation among the general population. However, their players have benefited in several aspects during this crisis (Zhu, 2021).Although there is no conclusive proof that playing violent video games leads to increased offensive activity in real life, there could be a subset of video game players in the child or teen age group whose gaming patterns reflect potential behavior (Funk, 1993).Video games provides special mood-boosting and stress-relieving benefits, especially during the pandemic. First, they direct the

players to focus away from whatever is bothering him or her, into the game's external, physical stimuli.This change helps relax the nervous system in the same way as typical grounding and relaxation exercises do, because unlike most escapist practices such as to watch a movie or tv programs or to read a book, playing computer games is mesmerizing. They completely consume and divert the mind's attention away from problems and tension (Wiederhold, 2021).Since then, multiple articles been published about a use of video games to aid in the recovery of both physical as well as mental health problems, whether or not they are meant to be therapeutic. There is proof that when physical therapy is "gamified," for example, patients are far less mindful of fatigue and discomfort and are more encouraged to improve physical health and adopt recommended care plans to control their health. Furthermore, computer games and the immersive digital/virtual worlds are usually used to combat anxiety(Wiederhold, 2021).

Video Games and its Effect on Students Academic Performance: Games can possibly enhance logical thinking, analytical skills, social skills, visual abilities, collaboration, movement, and computing (Christopher Thomas Miller, 2008). Psychomotor processes are influenced by computer and video games, and tension levels are reduced. In addition, playing games improves critical reasoning, analytical capabilities, movement, cognitive skills, perceptual ability, teamwork, and programming (Clark & Ernst, 2009). The study of (Alqurashi et al., 2016) shows that there is a positive relation between the amount of hours students play video games and their GPA, which means that students that take time playing video games, can possibly have better academic performance. Also, (Christopher Thomas Miller, 2008) states that students awareness and consciousness can be improved by playing video games. It is clear that games play an important role in increasing students' intelligence quotients (IQ). When students play games in the classroom, they form teams and devise their own tactics for winning. They pay attention to and analyze the key points, and they aim to minimize challenges in the future by looking more seriously (Sawyer et al., 2011). The study of (Clark & Ernst, 2009) found that 72% of participants believed that outside of the classroom homework tasks involving computer or video games could be beneficial to student education. In addition, about 77% accepted that video games should be used to incorporate and teach science, technology, and mathematics principles. Another study by (Almalki & Aldajani, 2020) showed that 69.66% of participants had a negative effect on their academic success due to video game addiction. Furthermore, 49.44% agreed that video games are educational, while 50.56% did not believe and said that it is preferable to read books rather than play video games. Moreover, 66.29% of participants used smartphones to play video games and spent a significant amount of time doing so.

Hypothesis

COVID-19 pandemic changed lives of peoples around the globe, and students are not exceptions. Due to lockdown, social distancing, and distance learning (online learning) students lifestyle changed drastically, from an outside life with friends, to an isolated life at home. Which can mean:

- **H1** – There is significant effect on student's lifestyle due to COVID-19 pandemic
- **HO1** – There no significant effect on student's lifestyle due to COVID-19 pandemic

It is believed that video games cause violence, especially at young age. But recent studies shows that there can be a positive effect on students mind and behavior caused by video games. There are multiple studies that shows the use of video games to treat physical and mental problems (Wiederhold, 2021). Therefore:

- **H2** - There is a significant impact on college students mind and behavior caused by video games
- **HO2** - There is no significant impact on college students mind and behavior caused by video games

As stated by (Christopher Thomas Miller, 2008), video games can possibly enhance logical thinking, analytical skills, social skills, visual abilities, collaboration, movement, and computing. There can be positive impact on student's GPA/academic achievements caused by video games. But some studies such as (Almalki & Aldajani, 2020) states that video games causes negatively on students' academic performance, due to addiction and distraction. There is mixed information about the relation of video games and student's academic performance. Thus:

- **H3** - There is a significant relation between video games and students' academic performance
- **HO3** - There is no significant relation between video games and students' academic performance

Problem Statement: Due to current world situation with dangerous virus which caused pandemic, student's lifestyle has changed. Most of the students are forced to be isolated from society and just being at home most of the time. Thus, playing video games became a normal habit for many college students. But there is lack of studies in Dubai related to video games and its impact on students. The purpose of this study is to evaluate the possible physical and/or mental impact on college students caused by video games during the COVID pandemic in Dubai. As well as to investigate possible impact of video games on students' academic performance.

METHODOLOGY

A questionnaire-based study was carried out among male and female students in Dubai, United Arab Emirates, in order to find out about the impact of video games on students in Dubai during COVID-19 pandemic, this includes any impact on social behavior, lifestyle as well as academic performance. The study's participants were chosen using a systematic random sampling method. It was decided to create a self-administered questionnaire. In addition, each participant received and completed an online self-administered questionnaire. Gender, age, employment status, preferred game type, and lifestyle questions such as preferred activity and number of hours spent playing video games were all included in the survey. In addition, the questionnaire contained questions about students' perceptions of video games, with responses ranging from Strongly Agree (SA), Agree (A), Not Sure (NS), Disagree (D), and Strongly Disagree (SD). A total of 100 people replied, and the completed questionnaires were checked for accuracy and completeness before being inserted into the database. SPSS program version 22 was used to examine the results. Tables is used to display qualitative data in terms of frequency and percentages.

All the participants were made aware that their attendance was fully voluntary. Furthermore, no one's name was written on the questionnaires, and all of the participants' private details was kept private and safe.

RESULTS

Table 1 represents the demographic data of the peoples who participated. There were 67 (67%) male and 33 (33 %) female participants. Most of the participants (36%) were in age range of 19-21, while there been some people (27%) above the age of 30. While more than half of the participants were employed (56%) but only some participants were self-employed (8%) and others were unemployed (36%).

Table 1. Demographic data of the participants

		Frequency	Percent
Gender	Female	33	33.0%
	Male	67	67.0%
Age	16 - 18	6	6.0%
	19 - 21	36	36.0%
	22 - 24	10	10.0%
	25 - 27	16	16.0%
	28 - 30	5	5.0%
	30+	27	27.0%
Status of employment	Employed	56	56.0%
	Self-employed	8	8.0%
	Unemployed	36	36.0%

Table 2 shows data of preferred type of video game and activity. Most popular video game genre taken from participants are sport games (25%), while the least popular one is story games (4%). And for their preferred activity, it seems like majority of participants prefer to be outside with their friends/family (25%), following by playing video games (22%) and watching TV or videos (21%). While the least preferred activity is to Create art (6%) and some other activities (3%).

Table 2. Data collected from survey about the preferred type of video games and activity

		Gender		
		Female	Male	Total
What type of video games you like?	Action	5.0%	9.0%	14.0%
	Fighting	4.0%	8.0%	12.0%
	Other	4.0%	7.0%	11.0%
	Puzzle	11.0%	9.0%	20.0%
	Sport	1.0%	24.0%	25.0%
	Story	2.0%	2.0%	4.0%
	Strategy	6.0%	8.0%	14.0%
Total		33.0%	67.0%	100.0%
What activity you prefer to do?	Be outside with friends/family	6.0%	19.0%	25.0%
	Create art (example: Drawing)	4.0%	2.0%	6.0%
	Other		3.0%	3.0%
	Play video games	5.0%	17.0%	22.0%
	Read books	6.0%	5.0%	11.0%
	Use social media (example: Instagram)	5.0%	7.0%	12.0%
	Watch TV or videos	7.0%	14.0%	21.0%
Total		33.0%	67.0%	100.0%

Table 3 represents the reasons that students play video games. Majority of students are playing video games in order to have fun (52%) followed by playing with friends (24%).

Table 3. Reasons to play video games

	Frequency	Percent
To compete with other players	5	5.0%
To explore virtual worlds	3	3.0%
To get distracted from outside world	12	12.0%
To have fun	52	52.0%
To learn something new	1	1.0%
To play with friends	24	24.0%
To spend/waste time	3	3.0%
Total	100	100.0%

And only 1% play video games to learn something new. Table 4 shows the amount of time participant spends playing video games according to their status of employment. We can see that majority of female participants are Unemployed (54%) and 33% of them play about 1-2 hours of video games per week. And regardless of their status of employment, more than half of female participant play 1-2 hours of video games per week (51.5%). There is also no female participant that play video games more than 10 hours a week. While the majority of male participants are Employed (68%) and most of them does not play video games (0 hours) (25.4%). But unlike female participants, there are some male participants that play 11-14 hours (6%) and 15+ hours (6%). But overall, regardless of their status of employment and gender, most of the participant play 1-2 hours of video games (33%), followed by 0 hours, which manes 25% doesn't play video games.

Table 5 Represents the opinions collected regarding the video games effect on students and how the covid impacted student's lifestyle. It follows the scaling format that goes from Strongly Agree (SA), Agree (A), Not Sure (NS), Disagree (D), to Strongly Disagree (SD). From this table, 32% of participant agree that video games have negative impact on students' academic performance While only 25% disagreed to that statement. Majority agreed (39%) and Strongly Agreed (38%) that students play video games more than before, because of Covid.

And most of the participants are not sure (37%) about the impact of video games on student's mind, following by 29% that agree and 18% that disagree. Similar to video games reduces motivation to be productive, 33% are not sure while 26% agree and 24% disagree with that statement. Regarding the improvement of strategic thinking by playing video games, most of the participants agreed (41%) and strongly agreed (28%).

Also, majority agreed (33%) and strongly agreed (46%) that due to COVID, students spend more time at home than outside. And regarding students that play games are not socially active, 30% not sure/neutral about that, 25% agree and 26 disagree with that statement. Furthermore, 39% agree that student's physical health can be harmed because of video games. While most of the participants were not sure (36%) that video games are important on student's lifestyle, and 33% agreed to that statement. 45% agreed that students prefer to play video games rather than to read book or tv.

And lastly, 39% agreed that video games help students to develop thinking skills. And for the Table 6, it is overall opinion regarding the video games effect on students of Dubai during COVID-19 Pandemic, 45% think that video games have positive effect on students of Dubai, 32% think that video games have negative effect, 20% not sure about it and 3% has other opinion about effect of video games.

Table 4. Number of hours spent on video games according to gender and status of employment

Gender			Please state your status of employment			
			Employed	Self-employed	Unemployed	Total
Female	How many hours per week you spend playing video games?	0	9.1%	6.1%	6.1%	21.2%
		1 - 2 hours	9.1%	9.1%	33.3%	51.5%
		3 - 6 hours	3.0%		9.1%	12.1%
		7 - 10 hours	9.1%		6.1%	15.2%
	Total		30.3%	15.2%	54.5%	100.0%
Male	How many hours per week you spend playing video games?	0	25.4%	1.5%		26.9%
		1 - 2 hours	14.9%		9.0%	23.9%
		3 - 6 hours	16.4%		7.5%	23.9%
		7 - 10 hours	7.5%	3.0%	3.0%	13.4%
		11 - 14 hours	4.5%		1.5%	6.0%
		15+ hours			6.0%	6.0%
	Total		68.7%	4.5%	26.9%	100.0%
Total	How many hours per week you spend playing video games?	0	20.0%	3.0%	2.0%	25.0%
		1 - 2 hours	13.0%	3.0%	17.0%	33.0%
		3 - 6 hours	12.0%		8.0%	20.0%
		7 - 10 hours	8.0%	2.0%	4.0%	14.0%
		11 - 14 hours	3.0%		1.0%	4.0%
		15+ hours			4.0%	4.0%
	Total		56.0%	8.0%	36.0%	100.0%

Table 5. Opinions about Video Games and COVID

	SD	D	NS	A	SA
Video games have negative impact on students' academic performance (GPA)	9%	25%	27%	32%	7%
Students play more video games than before, due to COVID pandemic	9%	4%	10%	39%	38%
Video games have positive impact on students' mind	9%	18%	37%	29%	7%
Video games can make a student less motivated to be productive	10%	24%	33%	26%	7%
Video games can improve strategic thinking	3%	13%	15%	41%	28%
Because of COVID, students spend more time at home than outside	9%	3%	9%	33%	46%
Students that play video games are not socially active	7%	26%	30%	25%	12%
Video games can harm the physical health of students' due to lack of movement and unhealthy lifestyle	8%	12%	21%	39%	20%
Students have more time because of distance learning	8%	16%	16%	37%	23%
Video games play important role in students' lifestyle	9%	13%	36%	33%	9%
Students prefer to play video games than to read a book, watch Television or other activities	9%	8%	22%	45%	16%
Video games help students to develop thinking skills	5%	12%	23%	39%	21%

Table 6. Overall opinion about video games effect on students during COVID-19 Pandemic in Dubai

	Frequency	Percent	Valid Percent	Cumulative Percent
I Don't Know	20	20.0	20.0	20.0
Negative	32	32.0	32.0	52.0
Other	3	3.0	3.0	55.0
Positive	45	45.0	45.0	100.0
Total	100	100.0	100.0	

DISCUSSION

The study results showed that most of the participants prefer sport (25%) and puzzle (20%) games rather than story or fighting games, and their preferred activity is to be outside with friends or family (25%) rather than to play video games (22%), this agrees with (Alqurashi et al., 2016) that majority of males (24%) prefer sport games, while most of the females (11%) prefer puzzle games. Which can mean that most of the male students of Dubai enjoy the outside life with their friends and family, and they play sport games in order to virtualize the outside activity while being at home because of covid pandemic. (Christopher Thomas Miller, 2008) said that females are more realistic and prefer to solve problems without any risks, that can be reason why most of females prefer puzzle games. Also, present study showed that majority of participants agreed that most of the students play video games in order to have fun (52%) rather than to learn something new (1%), this is against the research of (Sherry et al., n.d.) and

(Alqurashi et al., 2016) which showed that majority of people play video games for competition and challenge. And, according to(Kolachina, 2014), students who have positive feelings are more likely to have improved academic results, while students who have negative emotions are more likely to struggle to attain academic success. This can lead to assumption of positive impact of video games on student's academic performance, since majority of students play video games for fun, they will have positive emotions, and it can possibly lead to improvement of their academic performance. As for the number of hours played, the results of this study shows that majority of female students (54.2%) are unemployed and 33.3% of them play video games for 1-2 hours per week. For male students, most of them (68.7%) are employed and 25.4% of them don't have time to play video games. Perhaps, this can be because students prefer to be outside rather than to be at home, as the results show that regardless of the employment status only 12% of male participants have a risk of addiction since they play more than 11 hours per week.

While female participants don't even play video games for more than 10 hours per week. This agrees with (Almalki & Aldajani, 2020) that video game addiction is decreased by the increasing age and status of employment. Furthermore, 32% of participants agree that video games have negative impact on students' academic performance, and it agrees with research of (Almalki & Aldajani, 2020) and (Alqurashi et al., 2016) which showed that there can be a negative impact on students' academic performance caused by video games. Other studies such as the study of (Anderson Nicholas L Carnagey Mindy Flanagan Arlin J Benjamin & Janie Eubanks Jeffery Valentine, 2004) also agreed that video games have negative effect on students' academic performance. But in contrast, most of the participants agreed that video games have positive effect on students' mind, as well as it helps students to develop strategic thinking and thinking skills. And this can agree with the research of (Alqurashi et al., 2016) and (Wright, 2011) which found out that video games can possible increase students intelligence quotients (IQ) and improve mental abilities, logical thinking, collaboration, and decrease stress which can possibly lead to good of academic performance. Finally, for the overall opinion regarding the effect of video games on students of Dubai during the COVID pandemic, majority (45%) agreed that video games have positive effect on students. The reason can that students have much more free time than before because of COVID pandemic. Students are currently studying online instead of going to campus, while the restrictions of social distancing do not allow students to go out as a group. Which leads to much more time spend at home rather than outside. This can lead to anxiety and depression, but video games help students to get distracted and to communicate with other players. As for the hypothesis given previously on this article, this result can be concluded with the given results of the research. Most participants agreed that covid pandemic changed lifestyle of students, thus:

) **H1** – There is significant effect on student's lifestyle due to COVID-19 pandemic

Result of this research shows that most of the students agreed regarding the possible impact on students mind and behavior caused by video games, which means:

) **H2** - There is a significant impact on college students mind and behavior caused by video games

And finally, majority of participants had mixed information regarding the effect on academic performance, while most agree that video games cause negative effect on academic performance, in contrast most agreed that video games improve students mind which can lead to positive effect on academic performance, therefore:

) **HO3** - There is no significant relation between video games and students' academic performance

Research Limitation

One of the main limitations of this study is the number of participants. There were only 100 participants that answered the survey of this research. This is very low number of participants for this type of research. Especially considering that there are over 500,000 students currently in Dubai. This does not accurately reflect students' perspectives and preferences regarding video games during the coronavirus pandemic, so future researchers may need to look at more institutions in the UAE to learn more about the impact of video games on students during the coronavirus outbreak. Furthermore, aspects of student achievement such as GPA/CGPA were not covered; however, these could be revealed in the future to compare student performance before and after the covid pandemic.

Conclusion

In this study, the prevalence of negative effect on students of Dubai caused by video games are low. Covid pandemic changed lifestyles of many students, while video games thought to have negative impact on students, it is believed that videogames have been a way for students and people in general, to escape the challenging and nerve wrecking reality that is our life right now. And it will only continue to grow from here on out, further enhancing and challenging the minds and capabilities of the users, to complete interesting an engaging tasks and scenarios. One of the possible way students' academic performance can be affected negatively, is if the student is addicted to video games. By this results we can see that majority of students are employed while only playing around 1-2 hours a week and students prefer to be with their friends and family, and only a small number of students play more than 10 hours a week, which can mean that the risk of video game addiction is very low for students in Dubai. Also, it is believed that video games can have a positive effect on students' mind, and most participants agree that video games can in fact improve strategic and thinking skills.

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