


## **ELECTRONIC GAMES DURING THE COVID-19 QUARANTINE: A STUDY WITH FEF/UNICAMP STUDENTS**

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**ABSTRACT:** The Covid-19 pandemic has drastically changed people's lives, including the ways they experience leisure. Among the options in the quarantine period, virtual leisure and electronic games stood out. Therefore, this research aimed to analyze the leisure experiences of university students from the Faculty of Physical Education of the State University of Campinas regarding the use of electronic games during the period of social distancing established by the Covid-19 pandemic. A bibliographical and field research was carried out through the application of an online questionnaire, which was answered by university students from the Faculty of Physical Education at Unicamp. Data were analyzed using descriptive statistics. The results showed that most of the research participants used virtual leisure and electronic games in their “free” time during the mentioned period.

**KEYWORDS:** Leisure activities. Video games. Pandemics.

### **JOGOS ELETRÔNICOS DURANTE A QUARENTENA DA COVID-19: UM ESTUDO COM ESTUDANTES DA FEF/UNICAMP**

**RESUMO:** A pandemia de Covid-19 modificou drasticamente a vida das pessoas, inclusive as formas como vivenciaram o lazer. Entre as opções no período de quarentena se destacaram o lazer virtual e os jogos eletrônicos. Portanto, essa pesquisa teve como objetivo analisar as vivências de lazer dos universitários da Faculdade de Educação Física da Universidade Estadual de Campinas no que se refere ao uso dos jogos eletrônicos durante o período de distanciamento social estabelecido pela pandemia de Covid-19. Foi realizada uma pesquisa bibliográfica e de campo por meio da aplicação de um questionário *online*, que foi respondido por universitários da Faculdade de Educação Física da Unicamp. Os dados foram analisados pela estatística descritiva.

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Os resultados mostraram que a maioria dos/as participantes da pesquisa utilizaram o lazer virtual e os jogos eletrônicos nos tempos “livres” durante o período citado.

**PALAVRAS-CHAVE:** Atividades de lazer. Jogos de vídeo. Pandemias.

## **Introduction**

Leisure is a constitutional right and a relevant dimension to the life of every human being, as well as work, education, politics, among others. Cultural practices experienced during leisure time include physical/sporting, artistic, intellectual, social and tourist events (DUMAZEDIER, 1980; CAMARGO, 1986). Schwartz (2003) also adds virtual leisure experiences. Such practices are recent and have been present in society since the 1970s, when digital games were created, defined as representations of games – not exclusively – at a more abstract level, through computational resources (LUCCHESI; RIBEIRO, 2009). When it comes to digital games, there are different categories and styles. They include party games, games that require three or more people in contact through video games, their themes vary according to the players' choice (WILLIAMS, 1981).

At the beginning of 2020, Covid-19 (disease caused by the Coronavirus SARS-COV-2) caused a global pandemic, which forced the population to remain in quarantine and stay at home for an indefinite period to prevent the spread of the virus, since, “diseases transmitted by respiratory droplets require a certain physical proximity for contagion to occur and social distancing allows transmission to be reduced” (AQUINO *et al.*, 2020. p. 245). This measure profoundly interfered with people's living, including group leisure practices. Electronic games were one of the options of leisure available, which according to Araújo *et al.* (2011, p.607) “are an important mechanism for socialization, fun and learning”.

According to the recommendations of Oswaldo Cruz Foundation (FIOCRUZ) in 2020 (p. 120), with regard to quarantine, “establishing telephone or online contacts [...] can reduce the negative impacts of social distancing measures and protect mental health.” According to this document Silva, Santos e Oliveira (2020, p. 7) recommended: “[...] to practice some activity related to work, relaxation and leisure and always seek to strengthen bonds — even if at a distance — with people who can enable greater collective well-being.”

Some research has demonstrated how the use of time and leisure changed during the quarantine imposed by the Covid-19 pandemic. A study carried out by Montenegro, Queiroz and Dias (2020) with university students in the city of Macapá showed that social distancing impacted the free time and leisure of the individuals, and this fact resulted in an increase in “residentialization” and “virtualization” of this dimension of life. Leisure experiences that previously took place in contact with nature and others in which sociability was exercised were replaced by others in the domestic environment. There was an increase in practices linked to the use of the internet, such as online games; watch live shows and films; access to social networks; use of cell phones and computers, according to the authors.

Another study carried out by Ribeiro *et al.* (2020) with adults and elderly people sought to compare leisure experiences before March 2020 and during the first months of the Covid-19 pandemic. The authors found that those surveyed significantly changed their leisure habits, especially with regard to experiences in which sociability was present, that is, social activities, physical-sporting activities and tourist activities. An increase in leisure activities mediated through technology and the internet was also noted, such as music lives, watching series, browsing the internet and social networks,

meetings and online games. According to the authors, such leisure activities made it possible to alleviate the stress brought on by social distancing.

Thus, online contacts and party games would be leisure possibilities that, while providing pleasure to players, could help maintain mental health through socialization, since party games are also a form of online social contact.

From this context, and also considering the few studies on this topic, this paper sought to answer the following questions: during the first part of the quarantine imposed by the Covid-19 pandemic (March to September 2020): Did the undergraduate students from FEF/Unicamp experience virtual leisure activities? If so, were online games and party games included in the choices for virtual leisure? Did students stay in these games because of this online social contact? Did party games contribute to a better quarantine experience in terms of the tension caused by the pandemic?

Therefore, the general purpose of this paper was to analyze the leisure experiences of university students of FEF/Unicamp regarding the use of electronic games during the period of social distancing established by the Covid-19 pandemic. With regard to specific purpose, it aimed to: a) Verify whether during the quarantine imposed by the Covid-19 pandemic there was a prevalence of virtual leisure by students of FEF/Unicamp; b) investigate whether this virtual leisure activity has seen an increase in the participation of electronic games and party games by this public; c) Understand the relevance of party games as a leisure possibility for students of FEF/Unicamp.

### **Methodological Approach**

For this study, a bibliographical research was carried out, such as the analysis of the results of research experiences and the theories developed by different authors who

are close to the chosen topic. The materials consulted were books, theses, dissertations, articles, among other materials.

And, field research was also used, which, according to Marconi and Lakatos (2017), is that with the purpose of obtaining information and/or knowledge about a problem, to which an answer is sought, or a hypothesis, which needs to be proved, or even discover new phenomena or the relationships between them. For this field research, a questionnaire was used using Google Forms with closed questions. The questionnaire was disseminated online, through social networks such as *Facebook*, *Whatsapp* and *Instagram*, and institutional email, which was completed by a group of 58 students from FEF/Unicamp.

The questionnaire was applied with the aim of analyzing how online games were used in students' leisure during the quarantine and how much they were used, given that, in a pandemic context, it was not possible to leave the house for many forms of leisure.

The data collected in relation to the socioeconomic profile were: age, biological sex, marital status, whether they have children, income, type of work and which items (referring to virtual leisure) the research participants had at home. Such data helped to identify the group participating in the study. Considering the context of social distancing following the class suspension of Unicamp (March 13, 2020), the questions in the questionnaire focused on the types of leisure experienced during this period, and what types of virtual leisure activities were experienced. Regarding online games, questions were asked about which ones were accessed and how communication with other players took place. Furthermore, a comparison was made of the first months of 2021 with the same period in 2020, regarding the type of leisure that was practiced.

All the methods and procedures adhered to the Helsinki declaration and were approved by the local University Research Ethics Committee (CAAE 4544.5621.4.0000.5404).

### **About Leisure**

We consider leisure as “a human need and as a dimension of culture characterized by the playful experience of cultural manifestations in social time/space” (GOMES, 2011, p. 19). The author includes as experiences the various bodily practices, parties, cinema, theater, painting, literature, drawing, games, playful action, crafts, entertainment via the internet, music and other possibilities (GOMES, 2011).

These experiences occur in ‘free’ time from individuals’ obligations, although we agree with Marcellino (2013), when he emphasizes that no time is free from rules and social coercion. We still consider leisure as a possibility, since ‘doing nothing’ can also be an individual's choice in their free time. ‘dolce far niente’ (‘sweetness of doing nothing’), an expression created by the Italians, takes us to contemplation, or to a person lying in a hammock, or by the sea, or even enjoying other landscapes. However, meditation, relaxation techniques and sunbathing are also possibilities for leisure (RIBEIRO, 2014).

With regard to games, we have considered the vision of Huizinga (1990, p. 16) as: “free activity, consciously taken as ‘not serious’ and outside normal life [...] an activity disconnected from any and all material interests, from which no profit can be obtained”.

Regarding cultural manifestations, several authors classify the ways of practicing leisure. The French sociologist Dumazedier (1980, p.25) created a classification, called leisure interests, namely: “artistic, intellectual, manual, physical-

sporting and social interests”. The author states that all leisure fits into one of these interests, but emphasizes that a leisure practice can fit into more than one category.

The main aspect of artistic interest is the search for aesthetics and enchantment, whether through images, emotions or feelings, creating works of art at any level. Examples are the visual arts, music, theater, cinema, dance, among others. In intellectual interest, objective, rational information is sought. Examples include board games, Rubik’s Cube and courses/lectures to acquire knowledge. Manual interests involve the constructive manipulation of materials and objects or nature. The focus is on the creation process, not necessarily the product. Examples include gardening, carpentry, cooking and crafts. Physical-sporting interests are based on body movement and physical exercise. The pleasure in this interest lies not only in moving one's own body, but also in watching other people move and this second practice is widespread in the mainstream media. Social interest manifests itself when the search for contact with other people, above other interests. In this type of leisure, pleasure comes with social interaction, such as, for example, a party or meeting with friends.

Although criticized by several authors, this classification helps us to provide answers to some aspects of leisure, such as, for example, to act in leisure planning (MELO; ALVES JÚNIOR, 2012). In the case of this research, it helped us reflect on the leisure experiences of university students during quarantine. This set of interests is called leisure cultural content.

Aiming to expand these categories of leisure, Camargo (1986), a Brazilian author, added the tourist interest that focuses on displacement and a qualitative level such as cultural experience, involving tours, excursions, reconnaissance trips, contemplation of places or learning.

Furthermore, with the increasing development of technology, Schwartz (2003), a Brazilian author, proposed the inclusion of virtual interests, “since these means facilitate the temporal-spatial relationship and modify the way people act in their own, social and receptive dimension” (p. 26). Virtual leisure is one that requires interaction with an electronic device to experience it, it can be a sophisticated device or a computer. Regarding the internet network, the author reports:

When the focus is on the relationship between the use of the internet and leisure, Schwartz and Silva (2000) showed in their studies that the search for fun and improvement of interpersonal relationships were the main goals for accessing the internet. (SCHWARTZ, 2003, p.29).

This statement by Schwartz is important to understand how the internet relates to leisure and how this relationship influences contact, even virtually.

### **Virtual Leisure and Electronic Games**

From this perspective, we will reflect on the emergence of virtual leisure, since the author presents virtuality as “a new historical stage”. Studies regarding virtual leisure are recent, but if we observe, “the first forms of leisure through electronic devices have existed since the 60s, considering that the first digital games appeared a few years earlier (BATISTA *et al.*, 2007, p.2)”. For a better understanding, it will be used the concept of digital games by Reis and Cavichioli (2014, p.312), which state that they “are contemporary cultural products used mainly as a driver of playful experiences lived in so-called leisure time”. We will use the concept of digital games as a synonym for electronic games.

In the historical context, the first electronic game was created in 1958, as a test carried out by engineer Willy Higginbotham, who noticed the ability of an oscilloscope to simulate air resistance in a projectile. So, the game *Tennis for Two* was created (DEMARIA, 2018, p.50), which requires two people to be played, as there was no artificial intelligence to be the opponent. In 1961, a game called “*Spacewar!*” was



created to demonstrate the capabilities of computers at the Massachusetts Institute of Technology (PINHEIRO, 2008, p.72).

These games, however, did not progress as an electronic game, as it was just programming on a specific device and was not accessed by other people. Therefore, we can consider that virtual leisure only appeared in 1967 with Ralph Baer, who created the Brown Box, a device that could be connected to a television for the first time and was aimed exclusively at virtual leisure and no longer adaptations of other systems and languages. of programming. (PINHEIRO, 2008, p. 74)

Later, the game *Spacewar!* from 1961 was adapted for arcades, which began to be commercialized, starting an increase in the use of electronic games for leisure throughout the world (BATISTA *et al.*, 2007).

Arcade games began to appear all over the world. The first arcades were opened, providing specific places to play coin-operated video games, and to socialize with friends (EDDY, 2012, *apud*, 2012, PERANI; REGIS, 2015, p.2).

Over the years, console technology has developed. The practicality they provided made their success and evolution even greater, as the games no longer required travel to a specific game location and began to be enjoyed in their own homes.

Electronic games expanded their reach, previously only to a fixed place with computers and consoles and, from 1979 onwards, with the emergence of portables, consoles that could be easily taken elsewhere with the player (MACIEL; VENTURELLI, 2004, p.171). However, portable video games only began to be relevant in 1989 after the launch of the *Game Boy* by Nintendo, generating worldwide success: Tetris (BEZERRA; LOPES, 2011).

And, when thinking about the practicality of carrying this type of leisure with you, on cell phones, one of the first known electronic games was Snake in 1997 (PASE; TIETZMANN, 2017). The game did not have any innovations in relation to the

gameplay or graphics of other electronic games, but the mobility of having a game on your own cell phone was what led it to become popular. Later, this game came to be called a mobile game (PITTOL, 2019), which means mobile in Portuguese. And, just like consoles, cell phones also developed, giving way to smartphones that made it possible for many people to access mobile games. (PITTOL, 2019).

At the beginning of the creation of electronic games, multiplayer games, games for more than one player, were more common, but with the development of consoles, gaming started to happen individually (single players), each player in their own home without face-to-face or virtual contact. Computers, in turn, began to be used more frequently for leisure and, with the development of the internet, the practice of playing multiplayer games became popular again, since “with network connections and multiplayer games, it became possible the simultaneous and remote participation of several players in the same game” (REIS; CAVICHIOLLI, 2014, p. 343).

As the number of people who consume and have fun with electronic games increases every year, the different genres covered by them also grow and reach the most diverse audiences (NASCIMENTO; ORIOL, 2021). In this research, the classification of two authors was used to reach the main focus of this paper.

In general, the classification of digital games is carried out by grouping the types of games that present or comply, respectively, with similar characteristics and criteria (LUCCHESI; RIBEIRO 2009, p.10).

Thus, they categorized electronic games into eight groups according to Battaiola (2000), they are: strategy, simulators, adventure, children’s, pastime, RPG, sports and educational. García (2022) carried out a new grouping by genre, in addition to those mentioned above, the following were included: action, shooting, careers, musicals, dance and group games. The last three categories were grouped by the author into a genre called party games (GARCÍA, 2022, p.14). Party games were used in this work as a synonym for group games.

In addition to the possibility for players to connect while playing, regardless of distances, communication with other people has become possible through conversation chats (real-time communication, through internet messages) within the game itself and, in some cases, voice communication. Matos, Pinheiro and Bahia (2020, p.266) state that “the practice of group leisure influences the persistence in the activity”. Therefore, this communication tool made it possible to virtually approach people with a common interest.

Communication is not understood unanimously by all researchers, but in general, we will use the conception of João Queiroz (2006, p.1) who states: “if two or more organisms (or parts of them) enter into a form interaction, then they appear to do so because they are capable of communication.”

The evolution of communication media increased the speed at which information was transmitted, so human beings went from face-to-face sounds and gestures to video calls with people far away from each other. (SANTOS, 2008). In games, it has become possible to chat, via text or voice, with people who are playing or even access a chat room to talk simultaneously with a group of different people while they watch someone play. What was just a convenience became a necessity in the midst of a pandemic, in which social isolation prevented people from getting closer physically, taking them to digital media to communicate. Meetings, classes, everyday conversations and virtual games had an emphasis in 2020 and this is what the next topic will be about.

## **Covid-19**

In 2020, a pandemic was recognized by WHO (World Health Organization) due to the disease caused by the Sars-Cov 2 coronavirus, Covid-19. This disease spreads quickly and is transmitted mainly by saliva particles from an infected individual. There

were more than 600 million cases of contamination and more than 6.5 million deaths registered by WHO worldwide, while in Brazil there were more than 700 thousand deaths from the virus (WORLD HEALTH ORGANIZATION, 2022).

Due to the lack of preventive measures, such as vaccines and medicines, to combat Covid-19, WHO recommended non-pharmacological interventions (NPIs), in order to mitigate the transmission of the virus. Measures include: washing hands, wearing masks and social distancing. Social distancing, in turn, “encompasses the isolation of cases, the quarantine applied to contacts and the voluntary practice of not frequenting places with crowds of people (GARCIA; DUARTE, 2020, p.2)”.

Since the start of the Covid-19 pandemic, officially declared by WHO on March 11, 2020, the world has suffered considerable impacts in relation to interpersonal communication, as they have become primarily virtual. The Dean of Universidade Estadual de Campinas [State University of Campinas] (Unicamp), Marcelo Knobel, announced the suspension of academic activities and events within the campus, from March 13, 2020 to April 14, 2020, which was later extended. This measure was taken due to the Covid-19 pandemic and the social distancing decree adopted by WHO, as many students and employees circulate around the university daily, which caused many students to limit their social lives to virtual communication or other uncrowded environments.

With the increase in contamination and deaths due to Covid-19 (WHO, 2022), the period of social distancing and remote activities was extended indefinitely during 2020 and 2021. In 2022, the dean’s office of Unicamp defined the return to in-person activities for March 14, with the use of masks and distancing measures in crowded places such as the university restaurant, for example. When considering the university decree period, students and professors carried out activities remotely for two years

(from March 13, 2020 to March 14, 2022), consequently, without face-to-face contact, and virtual media were used to socialize, work and leisure.

Work and study, when they became remote, interfered in the daily lives of university students, as there was no longer an explicit delimitation of the hours allocated to each activity: studies, home care, family life and leisure (LOSEKANN ; MOURÃO, 2020, p.73). However, even though leisure alternatives were reduced, there was an increase in the experience of virtual leisure, such as watching pay TV, series, lives, online games, among others (MATOS; PINHEIRO; BAHIA, 2020, p.275; MONTENEGRO; QUEIROZ; DIAS, 2020) Therefore, with these theoretical contributions, the research demonstrated in this work focuses on the pandemic period and virtual leisure.

## **Results and Discussion**

The questionnaire used to collect data in this research was divided into three axes: 1) Socioeconomic Profile, 2) Questions related to leisure experiences in 2020 and 3) Questions related to leisure in 2021.

As previously mentioned in the methodology, the research sample was made up of 57 people, all students regularly enrolled in Physical Education at FEF/Unicamp in 2020. In relation to the sex of the students, 65% were male (37 students) and 35% were female (20 students), which differed from the research carried out by Castilho, Ribeiro and Ungueri (2020) in which the majority of students who responded to the questionnaire were women.

Regarding marital status, 86% were single, 7% declared themselves in a stable union, 5% were civilly married and only 2% were divorced. The majority (96%) said they did not have children. Still regarding the socioeconomic profile, students were

asked about their individual monthly income and the type of work performed (in this case they could select more than one option).

The monthly income of 70% of the research participants did not reach two thousand reais, and, among this majority: 30% responded that they received up to one thousand reais and 40%, from one thousand to two thousand reais. The remainder, which received over two thousand reais, is divided as follows: 5% had income between two and three thousand reais, 4% three to five thousand reais, 7% five to seven thousand reais and only 2% received ten thousand reais or more; another 12% preferred not to respond. As in the research carried out by Ribeiro and Rosa (2023), the monthly income of most students does not exceed two thousand reais, which for the authors, can be a barrier to leisure. These data also corroborate the results of the study by Castilho, Ribeiro and Ungueri (2020), in which 67.2% of students who responded to the questionnaire had an income lower than the minimum wage.

In relation to positions and functions, the most selected was student, which was expected since the research was carried out with undergraduate students; working without a formal contract was the answer for 21 (36.84%) of the participants; formal employment contract, public servant, unemployed and businessperson had, respectively, six (6), four (4), three (3) and one (1) responses.

In the second part of the questionnaire, participants were informed that they should answer the questions in accordance with the context of suspension of Unicamp activities and consider social distancing due to the decree announcing the Covid 19 pandemic (March 13, 2020) until September 2020, when São Paulo entered the yellow alert. This phase, pursuant to the Plan of São Paulo to combat Covid-19, was the beginning of the flexibility of some non-essential activities.

Research participants were asked which mandatory activities were maintained during the aforementioned period. Regarding college obligations: 91.23% of students maintained college classes, 63.16% continued studying and reading at home, 29.82% carried out research and 13 (22.81%) maintained the PAD program (Didactic Support Program, which is monitoring that the student carries out in some discipline).

In relation to work or internships, 66.67% continued and 40.35% trained in some sport during this period. Among the participants, 14.04% continued with their religious commitments and 7.02% with political and social commitments.

With regard to caring for children or other family members, 28.07% of students remained with this obligation and the majority of university students carried out household chores during the months surveyed. Of the participants who did not answer about household chores, two are women and nine are men, which means we can relate this to Oliveira's research; Queiroz and Diniz (2020, p. 5), “women, during the pandemic, [...] are more burdened with the several activities carried out in their homes, including caregiving tasks.” The authors deal with both home care and family member care, which, in the case of this research, proved to be balanced between both genders.

With regard to the leisure activities experienced by research participants in 2020, the majority of university students (89.47%) experienced virtual leisure, and this reinforces the research already presented by Matos, Pinheiro and Bahia (2020) and Montenegro, Queiroz and Dias (2020) e Falcão *et al.* (2023), in which research participants revealed that this was the leisure interest most experienced during the period of isolation.

With more than 70% of the choices, physical-sporting (78.95%), artistic (75.44%) and intellectual (73.68%) experiences also stood out. There was, therefore, no differentiation between these activities in which those surveyed participated during this

period. These results differed from the research by Ribeiro and Rosa (2023) regarding physical-sporting and intellectual interests, in which the experiences of this type of leisure were considerably smaller. These data also contrast with the research by Ribeiro *et al.* (2020), at the beginning of the pandemic, in which many people surveyed responded that they missed physical-sports activities. When dealing with artistic interests, however, as in Ribeiro and Rosa (2023), the number of responses was remarkable considering the pandemic context. Other forms of leisure experienced were idleness and manual activities with 64.91% and 43.96%, respectively.

Taking into account social distancing and the temporary closure of some places<sup>3</sup> where it was possible to carry out these practices in the state of São Paulo, social leisure (28.07%) and tourist leisure (14.04%) were the least experienced during the quarantine, as pointed out by Ribeiro and Rosa (2023).

By deepening the focus of this research on virtual leisure, the following data seeks to specifically understand this aspect of leisure. The following question sought to guide which activity of this leisure interest was most exercised and, as in the study by Ribeiro and Rosa (2023), Castilho, Ribeiro and Ungueri (2020) and Falcão *et al.* (2023) watching series/movies was the most recurrent activity among students, along with the use of social networks, both with 94.74% of responses. Next, the most mentioned virtual activities were: playing online games (78.95%), participating in meeting calls with friends virtually (75.44%), participating in offline games (66.67%), watching music streams and watching TV by subscription (both with 59.65%) and also participating in game streams (50.88%). Some of the activities listed here may be part of more than one leisure interest, as there may be several interests that require the use of the virtual as a means of accessing such activities, for example: watching films and

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<sup>3</sup> According to decree No. 64881, of March 03, 2020, services considered non-essential should be temporarily closed to avoid crowds. Available at: <https://www.saopaulo.sp.gov.br/coronavirus/quarentena/>. Accessed on: November 15, 2022.



series, in which the artistic character is present and there is the use of virtual streaming platforms to access them.

Regarding the time dedicated to virtual leisure, 68.42% of participants said they used up to four hours per day; 24.56% spent five to eight hours a day and only 7% spent twelve to fifteen (12h to 15h) hours a day. These data contrast with the research by Malta *et al.* (2020) in which young people aged 18 to 29 spent an average of 7.2 hours on computers and tablets and there was an increase of 3 hours compared to the pre-pandemic period. The authors also highlight the hours of TV use, which were 2.8 hours with an increase of one and a half hours during the pandemic. Then, it is possible to compare with the data collected in another question in the questionnaire, in which watching series and films was the activity most practiced by university students, as it is possible to watch them from computers, tablets and televisions.

The next question focused on participants who used online games in their leisure time and sought to identify those who already participated in this virtual leisure activity before the pandemic, which reached 57.89%. And, the students who started playing during the pandemic were 24.56%. These data can be better understood if we return to the concept of “virtualization” of leisure, already discussed, in which the need to remain in the domestic environment caused leisure activities to undergo “residentialization” and the availability of activities was limited to the virtual environment during the pandemic (MONTENEGRO; QUEIROZ; DIAS, 2020).

Regarding the most played online games during the pandemic period, the *Gartic* game was the most popular with 64.91%, followed by: *Among Us* (54.39%), Card games (40.35%), *Gartic Phone* (36.84%) and *Stopots* (35.09%). When looking at the first five games on this list, two important factors are notable: they are all online and free for mobile phones and are played with two or more people. It is worth mentioning

that all university students participating in this research had a cell phone, which is an important factor for games and online connection, since “mobile phones brought with them one of the most, if not the biggest, attractions, the accessibility, making connectivity with other people easy and quick” (SILVA; SANTOS; OLIVEIRA, 2020, p.5).

When looking at the characteristics of these five games, it is notable that they all fit into the party games category. *Gartic* (game with collective rooms designed to guess drawings), *Among Us* (game where you have to find the impostor among ten people while carrying out tasks), Card Games (*uno*, *truco*, *buraco* etc., with several players), the *Gartic Phone* (wireless phone using drawings, in a virtual room with several people) and *Stopots* (stop/trick game in a room with several people) all feature message chat. Returning to the genres mentioned in the introduction to this work, party games are understood as party games or group games that generally include more people and that must compete for the greatest number of points (BELLI; RAVENTÓS, 2008).

Some other items also obtained impressive numbers: Board Games (28.07%), *League of Legends* (26.32%), *Clash Royale* (22.81%), *Brawl Stars* (15.79%), *Counter Strike* (14.04%), *Valorant* (14.04%), *Freefire* (12.28%), did not participate of game (12.28%) and *Pummel Party* (1.75%). Unlike the first games on the list, these are not party games (with the exception of *Pummel Party*, a paid and lesser-known game) however, they all have message chat or message and voice chat (*Valorant* and *Freefire*). Furthermore, 19.3% of participants declared having played another game, some also online and others individually.

The online games mentioned above allow virtual contact with other players and, in most of them, there is a need for communication between everyone so that the game can take place pleasantly. Therefore, research participants were asked how they

communicated when playing and the answers were: 61.4% university students used voice chat outside the game, 52.63% used message chat and 28.07% used voice chat inside the game. Furthermore, 11 participants responded that there was no communication within the games (19.3%) and nine responded that they did not participate in these types of online games (15.79%).

Voice communication outside the game was the most used and we can relate this data to the fact that the games most played in groups by students do not have voice chat (SCHMIDT; GUSSO; CARELLI, 2021). And also, as most contacts in games were made with people who already knew each other, it is possible that they chose to chat by voice, to feel more present. The use of message chat is due to the fact that some games do not have voice contact and, as 61.4% played with random people, it was the tool available at the time to maintain communication.

Regarding game participants, university students who played online had virtual contact with some people and the majority of socialization (71.93%) was done with people they already had contact with outside the game (virtual or in person); playing with random people they met in the game was what 61.4% of university students chose to do and 24.56% played with people they met in the game. Only one student had contact with people who were just watching the matches. More than 70% of those surveyed played with people who already had contact prior to the game itself and we can cite as possible reasons for this result: “always seek to strengthen bonds – even if at a distance – with people who can promote well-being larger collective” (SILVA; SANTOS; OLIVEIRA, 2020, p.7) and the fact that enjoying the company of family and friends in free time has been the most missed experience (RIBEIRO *et al.*, 2020). People who experienced leisure with random people felt the need for social contact, but sought in the online game (which has tools for this) some way to socialize and reduce

the feeling of lack of company that would make them give up on staying in the game (MATOS; PINHEIRO; BAHIA, 2020).

Contact in online games experienced by students brought some perceptions about the social-virtual relationship experienced during the pandemic, therefore it is worth highlighting that the three most listed were: it allowed a pleasurable/fun experience in leisure time (70.18%), allowed to alleviate the stress of social distancing (63.16%) and relax from the tensions caused by the pandemic, (fear of becoming infected, the fear of family members contracting Covid-19 and the fear of death), cited by a little more than half of the students (50.88%). With regard to the most relevant data, it is essential to consider the view of Deslandes and Coutinho (2020, p.2) “the bet is that the interactivity and mobility of the internet can mitigate the effects of this measure that suppressed the face-to-face nature of human interaction for so many.” It is possible to point out, therefore, that online games were essential for a better (sur)vival during the Covid-19 pandemic.

The last two questions referred to the period at the beginning of 2021, so this is the third stage of the questionnaire. The first question returned to cultural leisure interests and which of them was the most experienced in the chosen period (2021), and the most enjoyed leisure interest was virtual leisure (78.95%), as well as in 2020. Ranking second, with the same percentage, physical-sporting and artistic interests 63.16%, followed by leisure (52.53%), intellectuals (50.88%) and manuals (36.84%). The last two categories least experienced in 2021 continued to be social interests (19.3%) and tourist interests (8.77%), although these interests had a considerable drop from 2020 to 2021, when the comparison is made with the data from the research itself.

This drop in social and tourist interests contradicts the current situation, given that in 2021 there was a greater easing of restrictive measures (PLANO DE SÃO

PAULO, 2021), so people could meet in open, uncrowded places. This reduction due to tourist and social interests, however, “may have been caused by an increase in interest in other activities” (RIBEIRO, ROSA, 2023). Virtual leisure remained the most enjoyed, which leads us to believe, in accordance with data from other interests, that students remained confined, respecting Covid-19 security measures and, therefore, they maintained more domestic leisure activities. Another reason may have been the fact that when it comes to travel, financial conditions are necessary to do so.

To finalize the questionnaire, it was necessary to understand whether online games became present and persisted as a type of leisure in students' lives, therefore, even in relation to 2021, students: They played in 2020 and continued playing (57.89%); played in 2020, also started watching games online and continued playing and watching in 2021 (19.30%); He played in 2020, but not in 2021 (15.79%). Corroborating other data from the survey, in which we observed that virtual leisure was also widely used in 2021, it is possible to see why the number of participants who played in 2020 and continued in 2021 is much greater than the other two responses.

### **Final Considerations**

This paper aimed to analyze the leisure experiences of university students from FEF/Unicamp regarding the use of electronic games during the period of social distancing established by the Covid-19 pandemic in the period of 2020 and 2021.

It was confirmed that the majority of research participants played online games during the aforementioned period and the time spent on this activity varied up to four hours per day for this group. There was a broad search for this type of leisure, given that, with limited travel, the ways of using free time were limited to the residential environment, both in the first year of the pandemic (2020) and also in 2021.

Other leisure experiences that depended on technology and the internet stood out, such as watching series, accessing social networks, virtual meetings with friends, etc. Such students also experienced other cultural leisure interests, with less possibility in social and tourist areas, due to the quarantine. The virtual environment has thus become a great ally of leisure during the pandemic period and the internet phenomenon has maximized the possibilities due to the diverse connections it provided.

Furthermore, with regard specifically to party games, there was a search for this type of game, which promoted social interaction that was so scarce at that time. The games *Gartic* and *Among Us* and Card games stood out. Connecting with other people through the internet has become a reality, but the fact that many students who were already playing games did not change their leisure habits, but only temporarily migrated to party games.

And, an important factor in the research was to note that students considered leisure during that period as a way of, in addition to the search for pleasure, also relieving the tensions caused by confinement and news related to the coronavirus. All forms of leisure experienced were effective during the period, however, virtual leisure played a crucial role in reducing students' stress.

One of the limitations of the research was the number of university students participating in the research, which sometimes restricted some understanding, as the sample was small. However, it should be emphasized that the perception of difficulties allows, in turn, new research perspectives.

This research provided clarification on the topic. However, new research is needed, with different groups, with more qualitative approaches to deepen understanding in the context of virtual leisure. And, also, to analyze how this cultural

interest in leisure develops and can be effective in connecting people who make use of this virtual/social leisure, not only in moments of confinement.

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