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# La práctica de los eSports en estudiantes universitarios. Patrocinios y Streaming

# A prática de desportos electrónicos nos estudantes universitários. Patrocínios e Streaming

# The practice of eSports in university students. Sponsorships and Streaming

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# RESUMEN

Se presenta un estudio con el propósito de analizar la práctica de los eSports en estudiantes universitarios, así como la percepción que tienen de las marcas, patrocinios y streaming dentro de los video juegos. Se realizó un estudio transversal con un diseño mixto descriptivo, cuantitativo y cualitativo. Participó una muestra de 266 estudiantes de bachillerato y universidad, con una edad promedio de  $18.39 \pm 3.10$  años, 245 hombres (92.1%) y 21 mujeres (7.9%), de los cuales 120 estudian bachillerato (45.1%), 135 licenciatura (50.8%) y 11 en posgrado (4.1%). Se elaboró una encuesta *ad hoc* y contiene cinco apartados: introducción de la encuesta, datos generales, consumo de eSports, streaming, marcas y patrocinios. Los resultados muestran que la mayoría de los estudiantes les agrada ver streamers trasmitiendo en vivo a través de las distintas plataformas (82.1%): Twitch, youtube, Facebook, entre otros; además la presencia de las marcas patrocinadoras (52.3%) y los contenidos audiovisuales (16.9%). Se puede concluir que los eSports son una nueva área en la cultura del deporte y se ha convertido en algo esencial y popular en las comunidades universitarias como parte del uso de su tiempo libre.

Palabras clave: video juegos, streamer, marcas, deporte universitario, plataformas digitales

# ABSTRACT

A study is presented with the purpose of analyzing the practice of eSports in university students, as well as their perception of brands, sponsorships, and streaming within video games. A cross-sectional study was carried out with a mixed descriptive, quantitative and qualitative design. A sample of 266 high school and university students participated, with an average age of  $18.39 \pm 3.10$  years, 245 men (92.1%) and 21 women (7.9%), of whom 120 are studying high school (45.1%), 135 bachelor's degree (50.8%) and 11 postgraduate degree (4.1%). An ad hoc survey was created, and it contains five sections: survey introduction, general data, eSports consumption, streaming, brands, and sponsorships. The results show that most students like to watch streamers broadcasting live through different platforms (82.1%): Twitch, YouTube, and Facebook, among others; in addition, the presence of the sponsoring brand (52.3%) and the audiovisual content (16.9%). It can be concluded that eSports is a new area in

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sports culture. It has become one of the most essential and popular parts of university communities in the way they use their free time.

Keywords: video games, streamer, brands, university sports, digital platforms

### RESUMO

Apresenta-se um estudo com o objetivo de analisar a prática dos eSports nos estudantes universitários, bem como a perceção que estes têm das marcas, dos patrocínios e do streaming nos videojogos. Foi efectuado um estudo transversal com uma conceção mista descritiva, quantitativa e qualitativa. Participaram 266 estudantes de escolas secundárias e universitários, com uma idade média de  $18,39 \pm 3,10$  anos, 245 homens (92,1%) e 21 mulheres (7,9%), dos quais 120 estão a estudar no ensino secundário (45,1%), 135 na graduação (50,8%) e 11 na pós-graduação (4,1%). Foi desenvolvido um inquérito ad hoc que contém cinco secções: introdução ao inquérito, dados gerais, consumo de eSports, streaming, marcas e patrocínios. Os resultados mostram que a maioria dos estudantes gosta de ver streamers a transmitir em direto através de diferentes plataformas (82,1%): Twitch, YouTube, Facebook, entre outras; também a presença da marca patrocinadora (52,3%) e de conteúdos audiovisuais (16,9%). Conclui-se que os eSports são uma nova área na cultura desportiva e que se tornaram uma das partes mais essenciais e populares das comunidades universitárias como parte da utilização do seu tempo livre.

Palavras chave: videojogos, streamer, marcas, desporto universitário, plataformas digitais

# INTRODUCTION

The present study addresses the issue of the factors associated with the practice of video games in university students, which have increased considerably in recent years, some authors point out that eSports are one of the most attractive formulas of leisure time occupation and currently, it is one of the preferred activities for young people, both for the interest they provoke and for the time they dedicate to them (Chiu et al., 2021; Chóliz & Marco, 2011).

eSports, or electronic sports, are video game competitions in which several recreational, amateur, and even professional players compete or combat among themselves, usually in multiplayer teams and often in matches that are broadcast live, to a multitude of fans from the comfort of their homes to massive stadiums in different parts of the world (Adglow, 2022; García-Naveira et al., 2023).

Authors such as García-Naveira et al. (2018) point out that the regular use of video games and eSports improves people's cognitive abilities, psychological skills, and the development of values; they can also be a useful tool for training and mental evaluation, in which it remains to define the optimal daily hours of use for their benefit and the need to combine with other activities (studies, physical activity, rest habits ...). In higher education, the benefits of the use of games mediated by technologies include the following: it promotes education for sustainability, and it encourages educational inclusion and the function of different social skills, such as collaborative and cooperative work (Pineda Martínez et al., 2023).

On the other hand, different studies indicate that a significant dedication to eSports and video games is associated with a worse lifestyle and less healthy habits, with less physical activity or sedentariness, increased body mass, poorer nutrition (schedules, variety and quantity of food, as well as beverage consume), sleep quality (sleepiness and variety of rest schedules), thus causing general health problems (e.g., obesity and diabetes), physical health (e.g., wrist, back and eye injuries, etc.), and psychological health (e.g. anxiety, stress, depression and burnout); in addition, the possible addiction problems with video games (Bányai et al., 2019; Chan et al., 2022; Hong, 2022; López-Mora et al., 2022; Pereira et al., 2022; Shao, & Wang, 2019; Shulze et al., 2021).

People who play eSports have been the subject of analysis about cognitive benefits (Himmelstein et al. 2017). To achieve a satisfactory performance, eSport players need to have great knowledge about the video

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game, they must think strategically, and make quick and intelligent decisions, be motivated to keep moving forward (i.e., not think about past performances), be able to separate everyday life from performance, avoid getting distracted and stay focused, deal with bullying adaptively, maintain a growth mindset (i.e., a positive attitude), and warm up before the performance, both physically and mentally (Pérez Rubio et al., 2017). Other authors (Miaoting et al., 2023) point out that proper time management and rational usage of eSports are crucial to promote a healthy lifestyle and psychological wellbeing among university students. This study is highly relevant, since during the pandemic the use of video games increased, causing brands to increase their participation in advertising, sponsorships, image rights, ticket sales for live events and merchandising (Adglow, 2022). Merchandising in eSports is a new growth opportunity through a new business model called streaming, where it is broadcasted live on different platforms such as Twitch and Facebook (META). The interest of brands in eSports is reflected in the growing revenue generated by advertising in recent years. In 2021, the global income of eSports exceeded one billion dollars, according to estimates by Newzoo (2021), a consulting firm specializing in video games, and the forecast is that the market will continue to grow, with Asia and the United States as leaders in this sector, while in Europe, countries such as Spain are among those with the highest penetration of this industry. Mexico leads video game consumption in Latin America and invoices more than US\$500 million annually (Lagos, 2022).

The purpose of this study is to analyze the practice of eSports in university students, as well as the perception of sponsoring brands and streaming.

# METHODS

# Research design

A cross-sectional study was conducted in a mixed descriptive, quantitative, and qualitative design (Ato et al., 2013). eSports practice was analyzed, as well as the sponsorships and streaming that have increased its consumption, especially among young people. Mixed methods combine quantitative and qualitative perspectives in the same study, to give depth to the analysis when the research questions are complex (Creswell, & Plano Clark, 2007).

### Participants

A non-random sample of 266 high school and major students from the Universidad Autónoma de Nuevo León, Mexico, with an average age of  $18.39 \pm 3.10$  years, of which 245 were male (92.1%) and 21 female (7.9%); 120 studying high school (45.1%), 135 university students (50.8%), and 11 university graduates (4.1%).

# Instruments and Variables

A survey was developed based on the studies review of Chóliz & Marco (2011), Corrales Corral (2014) and Sanahuja Peris et al. (2021). The survey contains five sections: The first describes the purpose of the research and voluntary participation. The second section shows the general data such as age, gender, level of studies, the semester you are studying, and the area in which your profession is located. The third one describes the consumption of eSports with eight questions about whether they consider themselves an eSports player if they have participated in intra-university tournaments, on which platform they play, the video game they preferably use (in this question they are given the opportunity to choose two options), if they play competitive level and/or player against player and hours a week that they dedicate to it. In section four with seven questions, streaming consumption (where video games are broadcast) is described, it asks if they watch streaming video games, the platform and device they use, how many times a week and hours they watch them, if they consider themselves fans of any streamer and if electronic sports will be part of your future entertainment.

The last section (five) on sponsoring brands with five questions: if they consider that brands or sponsors have an important role in the eSports environments as investors, the most interesting brand advertising for the eSports audience, if there are interruptions of sponsorships during streaming, mention any brand of a sponsor during streaming, and finally if they would like to add any comments about eSports and sponsorships.



# Procedure

The study was conducted according to the Declaration of Helsinki (WMA 2017), which provides the fundamental ethical principles for researching human subjects. Participants voluntarily agreed to get involved in the study, and an electronic informed consent form was filled in any case. In addition, the following was conducted by the Ethical Standards in Sport and Exercise Science Research (Harriss et al., 2019). The project was reviewed and approved by the Research Coordination of the Organización Deportiva Facultad de of the Universidad Autónoma de Nuevo León under the registration number REPRIN-FOD-117.

A non-invasive study is presented that considers the ethical aspects of quantitative and qualitative research with social or scientific value in which an intervention is proposed that leads to the improvement of living conditions, the well-being of the population, or the production of knowledge that provides opportunities for improvement or, problemsolving. Likewise, informed consent ensures that individuals participate in the proposed research only when it is compatible with their values, interests, and preferences. They do so voluntarily with the necessary and sufficient knowledge to make responsible decisions about themselves (Miranda-Novales & Villasís-Keever, 2019).

The questionnaire was reviewed by a group of experts Communication, in Sports Physical Education, and Sports and eSports players regarding the wording of each item and its relationship with the objective of the research, terms of the Spanish language spoken in Mexico. The questionnaire was created on the Google Forms platform and was initially applied to a sample of 50 individuals to identify possible errors in answering and understanding questions with the possible results to be obtained. Once the questionnaire was set up, its final application was proceeded with; for this purpose, the Sports Director of the Universidad Autónoma de Nuevo León to explain the purpose of the research and the support for its administration. Through this address, the sports coordinators of each high school and faculty, as well as students who have participated in intra-university tournaments were contacted, and to those who have not participated in these events but who practice it on a regular basis.

The survey was sent to them by email and WhatsApp so that the distribution could be made to the students. Once the survey was applied, which had the informed consent, the students' participation was closed.

# Statistical analysis

The database was downloaded into Excel and then imported into the SPSS v25 program for analysis. To maintain the study's objective, frequency and percentage were obtained on the characteristics of university students who play eSports, video game platforms, video game classification, streamer consumption, and the importance given to brands and sponsorships.

The questionnaire includes two open-ended questions into the following categories: the first recall of eSports sponsoring brands and the second on any recommendations or comments on eSports and sponsorships. So, they were subdivided into eSports in college as a sport, eSports as a business model, Streamer as a lifestyle, Sponsorships in college as investors, and More video game options.

# RESULTS

# Characteristics of university students

The characteristics of university students who play eSports are mostly men (92.1%), who study mainly in the areas of health (34.7%), exact and engineering (22.9%), and social and humanities (19.4%). A little more than half of the students (52.6%) say they have participated in university tournaments. 83% consider themselves Gamers. In addition, 89.1% say they compete online periodically (player vs. player). The hours they devote most to eSports are 5 to 10 hours per week (51.9%). Finally, 85.7% would like to be a professional eSports player. The platform they use the most to play video games is the Xbox (27.1%) and PC (39.6%). However, 29.3% indicate that they like to use more than 2 game consoles (Table 1).



# The practice of eSports

| Platform    | Frequency | Percentage |
|-------------|-----------|------------|
| Nintendo    | 15        | 5.6        |
| PC          | 62        | 23.3       |
| PlayStation | 23        | 8.6        |
| Cell Phone  | 16        | 6.0        |
| Xbox        | 72        | 27.1       |
| More than 2 | 78        | 29.3       |
| Total       | 266       | 100.0      |

Frequency and percentage of platform to play

Regarding the video game that they most like to play as the first option is FIFA (15.4%) and Call of Duty (13.2%), and as the second option is Clash Royale (11.7%) and Fortnite (11.7%). It is important to note that in both options they prefer to use more than two types of video games (Table 2).

# Table 2

Table 1

Frequency and percentage of video games

|               | Option 1    |            | Option 2    |            |
|---------------|-------------|------------|-------------|------------|
| Video games   | Frequencies | Percentage | Frequencies | Percentage |
| League of     | 30          | 11.3       | 9           | 3.4        |
| legends       |             |            |             |            |
| FIFA          | 41          | 15.4       | 18          | 6.8        |
| Counter       | 0           | 0          | 7           | 2.6        |
| Strike        |             |            |             |            |
| Valorant      | 14          | 5.3        | 16          | 6.0        |
| Fortnite      | 21          | 7.9        | 31          | 11.7       |
| Call of Duty  | 35          | 13.2       | 24          | 9.0        |
| Rocket        | 15          | 5.6        | 14          | 5.3        |
| League        |             |            |             |            |
| F1            | 2           | .8         | 5           | 1.9        |
| Clash Royale  | 12          | 4.5        | 31          | 11.7       |
| Smite         | 1           | .4         | 3           | 1.1        |
| Apex          | 7           | 2.6        | 9           | 3.4        |
| Legends       |             |            |             |            |
| GTA           | 3           | 1.1        | 18          | 6.8        |
| Overwatch     | 0           | 0          | 3           | 1.1        |
| PUBG          | 0           | 0          | 2<br>2      | .8         |
| Resident Evil | 1           | .4         | 2           | .8         |
| 2             |             |            |             |            |
| Starcraft     | 1           | .4         | 0           | 0          |
| SuperSmash    | 17          | 6.4        | 6           | 2.3        |
| Bros          | 2           | .8         | 2           | .8         |
| More than 2   | 64          | 24.1       | 66          | 24.8       |
| Total         | 266         | 100.0      | 266         | 100.0      |

#### Streaming Consumption

Regarding the consumption of Streaming, students comment that they do like to watch the games/ live games (48.1%), 46.2% do it occasionally and 5.6% do not do it. A variety of the days of the week dedicated to watching streaming is appreciated, from those who do it daily (19.9%), 2 or 3 times a week, and even those who watch it a few times a month (25.2%). Most university students spend 1 to 5 hours a week (50.8%) watching streaming, others less than an hour (27.4%). Twitch (57.9%) and YouTube (25.9%) are the platforms that are most used to watch streaming video games; while the cell phone (45.5%) and the computer (35.3%) are the main devices that are used. Finally, 65.8% consider themselves fans of a Streamer.

#### Brands and sponsorships

On the other hand, the presence of sponsoring brands (52.3%) and audiovisual content (16.9%) are the aspects that students who practice eSports consider most important (Table 3).

#### Table 3

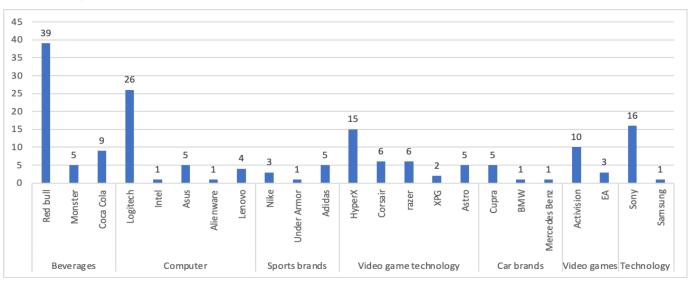
Frequency and percentage of brand advertising for the eSports audience

| Brand advertising                 | Frequency | Percentage |
|-----------------------------------|-----------|------------|
| Presence of sponsoring brand      | 139       | 52.3       |
| Audiovisual content               | 45        | 16.9       |
| Merchandising material            | 26        | 9.8        |
| Contest, challenges or promotions | 20        | 7.5        |
| Brand name in competitions        | 15        | 5.6        |
| Brand presence in the video game  | 12        | 4.5        |
| Sponsored amateur competitions    | 9         | 3.4        |
| Total                             | 266       | 100.0      |

# Qualitative studies

At the end of the survey, they were asked two openended questions, the first one where they could point out the sponsoring brands they remember: the most relevant were beverage, computer, and video game technology brands (Figure 1).





#### Figure 1 Presence of sponsoring brands

Regarding the second open-ended question where they are asked to write any recommendation or comment related to eSports and sponsorships as a business model, there are some who see it positively that video games are considered as a sport because they are new opportunities for participation and growth within this industry. Some of the responses are grouped in 5 sections focused on:

eSports at the University as a discipline: A1) It is a very interesting new sport, and the good thing is that now they are giving more attention to it. A2) They are a good help if you are starting in any field of video games (in professional mode). A3) They are important as any sport; they provide more money and opportunities for bigger and more entertaining tournaments. A4) I really consider that they could become an important part of society's entertainment in the future. A5) I propose that each university create its own representative eSports team.

eSports as a business model: A1) I wish they could get sponsorships for the university. A2) I really consider that they could become an important part of society's entertainment in the future. A3) It was a support for the Sports Department in the pandemic as a new sport. A4) Scholarships for those who obtain the first ranks.

Streamer as a lifestyle: A1) Not all faculties participate, I would like it not to be a taboo and for

everyone to have proper recognition. A2) I really enjoy playing video games.

Sponsorships in the university as investors: A1) For an organization to have sponsorships is good because, it makes brand renown, and the brand will sponsor accessories to the eSports teams. A2) eSports are quite important nowadays and competitive players should be taken more into account and look for sponsorships from schools. A3) All of us players who are in this business know that sports sponsorships are the most important thing to be able to have a career in the world of eSports.

*More video game options: A1)* He liked answering the survey and realizing that it is being given importance; also, that new games on eSports are being included in the university tournaments; for example: Mario Kart 8 Deluxe on Nintendo Switch. *R2)* More PC video game options in intra-university tournaments.

# DISCUSSION

The aim of this study was to analyze the practice of eSports in university students, as well as the perception of sponsors and streaming; for this purpose, a survey was designed and applied on the practice of eSports in university students, showing a mostly male player (92%) and with an average age of 18 years, most of them consider themselves gamers



(84%) and a little more than half of them have participated in intra-university eSports tournaments.

From the first Atari or Magnavox Odyssey to the current Wii, XBox and PlayStation3, several generations of video game consoles have evolved progressively, both in the types of games and in their aesthetics and operation (Robarge, 2022). The most used platform to play video games is the Xbox (47%) and PC (39.6%), while the video game they most like to play as first choice is Call of Duty (23.9%) and FIFA (22.4%), and as second choice is Clash Royale (20.9%) and Fortnite (20.5%). This may be because eSports are played competitively in controlled environments, with structure and regulations like traditional sports such as leagues and tournaments (Cerqueira et al., 2020; Hallmann & Giel, 2017). The most popular video games in history are Super Mario Bros and Tetris. However, the best-selling games are Call of Duty, FIFA, and Minecraft (San Martín, 2023). As discussed, eSports generated over \$1.1 billion in income during 2018, with a forecast of \$1.8 billion in income by 2022 (Newzoo, 2019).

Most college gamers watch streaming on Twitch (82.1%). This data supports where eSports broadcasts are mainly consumed through online video streaming platforms, such as Twitch.tv, where access to content is free and streamers earn income from their subscriptions community, through e.g., and donations, advertising and sponsorship, or other commercial activities (Gutiérrez Lozano & Cuartero, 2020; Macey et al., 2020; Törhönen et al., 2019). We have seen university graduates transition into becoming streamers and content creators on platforms like Twitch, TikTok, Instagram, and others. As a result, communities have formed and interact on various digital platforms such as Twitch or YouTube (Pérez, 2022).

On the other hand, it has been shown that college students prefer watching streaming. We recall that video game streaming is а modality of commercialization of the video game industry that over time has gained strength on the Internet as a means for the transmission of eSports and other events that are related and which from advertising and online sales is how they get most of their income (Afonso Noda & Aguilera Ávila, 2021; Cerón Hernández, 2018). Brand presence (52.3%) and audiovisual content (16.9%) are the aspects given most importance by students who practice eSports;

almost 60% say they noticed that there are interruptions of sponsorships during streaming. In addition, the brands, and sponsorships they remember seeing as streamers are mainly beverages, followed by computer and video game technologies (Pallavicini et al., 2018).

Sponsorship is the fact of explicitly paying a professional player or an eSports event organizer to represent the brand, through the incorporation of the logo or any other action (Chacón, 2021). The eSports industry is in full expansion, reaching the figure of millions in sponsorships (Newzoo, 2019). According to a study by the company Newzoo: eSports could overcome in viewers and final income as the Super Bowl or the Champions League in less than ten years. The possibility of broadcasting the streaming games of other players around the world is already possible thanks to Twitch. This platform, owned by Amazon, receives millions of users per month who want to enjoy the best strategies of professional gamers, as if it were a television program.

We could close this work of analysis by mentioning that eSports are a worldwide trend that has had a rapid growth in recent decades; however, academic development in this field has been limited, possibly due to lack of interest in different areas of knowledge. However, eSports are gaining more and more followers, managing to overcome in visualizations some conventional sports (Pizoo et al., 2018), so they have managed to attract the attention of organizations and multinationals that see in them a business opportunity, to the point that some international and national sports organizations have also wanted to join this movement, which wants to consolidate as a sport and has managed to capture the attention of the International Olympic Committee (Barrera-Gómez & Álvarez-Restrepo, 2019).

As for the limitations of this study, it is considered that the type of application using technology or social networks could lead to confusion in some questions and could not provide a solution at the time of answering; however, online surveys are being increasingly used. Another limitation could be the lack of representativeness of the sample, as it consists of students from the university where the data were collected, and they are only from one university.



# CONCLUSION

As we have seen, eSports is a new area in gaming culture and has become one of the most essential and popular aspects of university communities in the way they use their free time. A survey on the practice of eSports among university students is available and provides valuable information for the players themselves, tournament organizers, brands, and sponsorships.

Most students like to watch live streaming through different platforms: Twitch, Youtube, Facebook, among others. The sponsoring brands that students report that they can witness through streaming are Energy drinks (Redbull, Monster), sports brands (Nike, Adidas), electronic and technology brands (Samsung, Sony, Logitech, ASUS), phone companies (Telcel, Totalplay), online betting companies (Caliente), Apps (Ubereats, Rappi).

The study has identified the interest that university students have in playing eSports, so it is proposed to create a facility (Arena) with the necessary characteristics to play, train and compete within the university campus itself, and thus promote their practice and create educational programs related to video games.

# PRACTICAL APPLICATIONS

The data obtained show the interest, tastes, and preferences that university students have about the practice of eSports, in addition the benefits that this involves over the risks are highlighted. Therefore, it is proposed to create an "Arena for eSports at the university" which can be used by the students themselves who practice these activities.

Place

Next to the statue of the Tiger, between the Gaspar Mass stadium and the softball field located in Ciudad Universitaria.

Who

The UANL Sports Department, Faculty of Sports Organization, Faculty of Communication Sciences, Faculty of Physical and Mathematical Sciences and Construction and Maintenance may participate.

Characteristics of the Arena

- 200 square meters of extension.

- Highest quality computer equipment. It will include software, processors, and specialized graphics.
- Ergonomic accessories and furniture designed for this activity.
- Screen, sound, and seats for spectators.
- Air-conditioned spaces
- Access for people with disabilities

# Partners

- Sponsors who have an agreement with the university
- Agreements with companies that create videogame consoles.
- Agreements with physical and online stores for the distribution of video games.
- Agreements with internet connectivity providers to have their own server.

#### Activities

- Competitive eSports tournaments on-site and online.
- Scheduling of training sessions for representative teams.
- Updating and maintenance of the technological platform.
- Production and development of video games.

# Educational program

It is proposed to create a master's degree program in Design and integral development of eSports jointly between the Faculty of Sports Organization, the Faculty of Physical and Mathematical Sciences and the Faculty of Communication Sciences.

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