Ciencia y Deporte

History of Electronic Sports in Cuba

[*Deportes electrónicos y su historiografía en Cuba*]

[*Deportes eletrónicos e sua historiografia em Cuba*]

Rafael Font Rojas[1] , *Haydee María Reyes Joa[1]*

[1] The University of Holguin, Faculty of Physical Culture, Holguin, Cuba.

*Correspondence: rfontr@uho.edu.cu

ABSTRACT

Introduction: Electronic sports constitute a novel branch of sports, in which athletes and computer systems are closely linked.

Aim: To demonstrate the relevance of historical contents and conceptual elements that favor the scientific study of electronic sports in Cuba, due to the lack of sufficient information about the scientific history of electronic sports.

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Materials and methods: The descriptive qualitative approach was used along with the bibliographic method, and meta-synthesis. Information was collected from scientific papers referring to electronic sports and the historic-logical analysis method.

Results: This report derives from the search for historical elements about the emergence and progression of electronic sports in Cuba, their players, and main results in national and international meetings, as well as characteristics and necessary concepts in this sports area.

Conclusions: This study offers a bibliographic review of this sport discipline, and includes a timeline of the main players in the country in recent years, their introductory characteristics, and definitions in the world of electronic sports.

Keywords: Electronic sport, history, video games, technology.

RESUMEN

Introducción: los deportes electrónicos son una rama novedosa incluida en los deportes, en los que los atletas y los sistemas informáticos están estrechamente relacionados.

Objetivo: demostrar la importancia de los contenidos históricos y elementos conceptuales que facilitan la incursión científica de futuras investigaciones a los deportes electrónicos en Cuba; dado a la insuficiente información referente a los deportes electrónicos en la esfera histórica de esta modalidad.

Materiales y métodos: se utilizaron el enfoque cualitativo, de nivel descriptivo y con método bibliográfico, los métodos meta-síntesis; se hizo una recolección de información de artículos científicos referentes a los deportes electrónicos y el método de análisis histórico-lógico.

Resultados: el artículo es el resultado de la búsqueda de los elementos históricos, sobre el surgimiento y desarrollo de los deportes electrónicos en Cuba, sus figuras y principales resultados en eventos nacionales e internacionales, así como características y conceptos de uso necesario en este campo deportivo.

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Conclusiones: se aporta una reseña historiográfica de la disciplina deportiva, y a la vez, la trayectoria de los principales representantes del país en los últimos años, así como características y definiciones introductorias al mundo de los deportes electrónicos.

Palabras clave: deporte electrónico, historia, videojuegos, tecnología.

RESUMO

Introdução: os esportes eletrônicos são uma lista nova incluída nos esportes, em que os atletas e os sistemas informáticos estão estreitamente relacionados.

Objetivo: a investigação propõe demonstrar a importância dos conteúdos históricos e elementos conceituais que facilitam a incursão científica de futuras investigações sobre os esportes eletrônicos em Cuba; dada a informação insuficiente referente aos esportes eletrônicos na esfera histórica desta modalidade.

Materiais e métodos: utiliza-se a abordagem qualitativa, de nível descritivo e com método bibliográfico, os métodos de meta-síntese; se trata de uma coleção de informações de artigos científicos referentes aos esportes eletrônicos e ao método de análise histórica lógica.

Resultados: o artigo é o resultado da busca dos elementos históricos, sobre o surgimento e desenvolvimento dos esportes eletrônicos em Cuba, suas figuras e principais resultados em eventos nacionais e internacionais; assim como características e conceitos de uso necessários neste campo esportivo.

Conclusões: se apresenta uma pesquisa historiográfica da disciplina esportiva e, ao mesmo tempo, a bandeja dos principais representantes do país nos últimos anos, assim como características e definições introdutórias ao mundo dos esportes eletrônicos.

Palavras-chave: esporte eletrônico, história, videojuegos, tecnologia.

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INTRODUCTION

E-sports has been defined by the Cambridge Dictionary as "The activity of playing computer games against other players on the Internet, often for a prize, or in special meetings organized on the Internet." (Cambridge). E-sports are a novel sports activity in which the main traits of the sport are given by technological systems (a computer, video game console, or cell phone). In practice, e-sports frequently refer to competitive video games (professionally or amateurishly), often ruled by leagues and tournaments, and where players usually play for teams or sports organizations.

Electronic sports appeared around 1972 when a group of students from Standford University gathered to compete in the video game Space War (Pérez-Rodríguez, 2019). A few years later (1980), it became an official event sponsored by Atari, one of the most successful console developers of the time. The game was Space Invader, and the winner scored the highest in the meeting (Telephone Foundation, 2017, cited by Muños & Pedrero, 2019). It was the beginning of a small industry that expanded all over the world through the years at a very fast speed.

The leading country was South Korea, where electronic sports were born and fostered.

Snavely, (2014) said,

> South Korea invested in the future of the nation, through the communications industry, during the Asian crisis of 1977, modernizing all the network structures in the country, and optimizing Internet access of its citizens. In South Korea, players used to spend significant time improving their skills to compete against others. The activity generated an industry capable of supporting professional players, producing conventional sports events that attracted sponsors p. (3)

Today, the list of significant professional South American players participating in top events is extensive. Countries like Argentina, Peru, and Brazil, have the highest numbers of active professional players, with Brazil in the sixth position worldwide by late 2021 (Orús, 2022).

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In Cuba, very few scientific papers have dealt with this practice. Besides, the basic terminology and characteristics of electronic sports are unknown, including the main players in the national and international arena. This conditioned a study that focused on this novel sport and informed the public.

Considering the previous, an exploratory analysis was made to know about the researchers who presented their studies in this area and their findings. The literature review found substantial information in the following bibliography: Snavely (2014), Thegrefg *et al.* (2019), Muños & Pedrero (2019), Collis (2021), Bascón-Seda (2022). Additionally, several foreign statistics pages of the sport, such as Liquipedia and NewZoo, were consulted in English. These sites deal with conceptual elements of electronic sports, required athlete profiles, and other aspects, including the history of the sport's origin and evolution. Accordingly, this paper aims to demonstrate the relevance of historical content and conceptual elements that favor the scientific study of electronic sports in Cuba.

MATERIALS AND METHODS

This study relied on a qualitative-descriptive approach and the bibliographic method, whose main purpose was to inquire, analyze, collect, organize, and interpret information or data about a topic.

The sources for the search were available in Scopus, and the Scirus search engine, between 2015 and 2022. The keywords used were *electronic sports*, associated with other eSports terms, limiting the search terms to the title, abstract, and keyword.

The references totaled 14900 documents in Scopus (October 2022), from which 15 representative samples were chosen. The target consisted of papers with the following conditions: a) from reliable sources, professional scientific conferences, and journals; b) the topic would deal with the main concepts and characteristics of electronic sports; c)

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papers published within the last five years, maximum. These references were used only to collect data about electronic sports.

The methods used were meta-synthesis, along with the collection of information from scientific articles referring to electronic sports as a discipline that needs study. Besides, the historic-logical analysis method was included, because electronic sports in Cuba need further elucidation. Therefore, the different perspectives offered by the various platforms consulted were linked. Additionally, the digital interview method was used as a qualitative technique, to learn information from the president of the Association of Electronic Sports in Cuba (ADEC), who provided data for the development of electronic sports between 2015 and 2022.

RESULTS AND DISCUSSION

Characteristics of electronic sports and the opinion of the International Olympic Committee (IOC)

Firstly, it is important to know about the features of sports, depending on the authors that dealt with them. Some associated them more with mere playing, while others linked them to general competition. Even Parlebas (1981, cited by Hernández, 1994, p. 15) considered that the lack of physical activity observed in a game is an indicator to rule out a game as a sport.

Cagigal (1959) said that sports are a distraction and disinterested joy, and may be considered as a liberal and spontaneous activity, or assumed as a simple modest competition or a big show, where the players try to rival or be better among themselves. Hernández (1994) referred to these elements as the ludic character.

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The European Charter of Sports (1992, cited by MEYER, F. C., & Starepravo, F. A. (2020) defines it as:

> Every type of physical activity with an organized or other kind of participation aims to express or improve the physical and psychic conditions, the development of social relations, or competitive achievements at every level p (8-9).

C. Tiedemann (2020, cited by Agrawal & Upadhyay, 2022) referred to sports as a cultural field where humans deal with their counterparts, having the conscious intention of enhancing their skills and deeds, then compare them with other people according to the rules imposed or adopted, without hurting them or themselves deliberately.

These definitions vary depending on the relationships, according to Cagigal (1959) and the European Sports Chart (1992). However, Tiedemann's proposal (2004) is closely related to competitions and the improvement of motor skills. Cagigal (1959) said that "if chess and other similar games are considered sports, then the difference between the game and the sport is confrontation, physical exercise then is not entirely essential."

One of the definitions of sport which might include E-sports is the one suggested by Wagner (2006, cited by Bascón-Seda, 2022), because of its adaptability to video games.

> Sport is a cultural field of activities in which humans participate voluntarily with other people, to develop and train culturally-important skills, and compare to others, according to sets of rules adopted deliberately not to harm themselves or others. p. 438

Barrera and Albares (2019) define electronic sports as "an expression of the psycho-motor skills through information and communication technologies in a competitive environment, with rules and gameplay. In them, all the participants compare their abilities in equal conditions with the strong intention of becoming better."

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It shows that electronic sports could be considered as sports in professional and scientific spaces. However, the criteria of the International Olympic Committee about it were reviewed. In October 2017, at the Sixth Olympic Summit, competitive electronic sports could be considered a sports activity, since the participants get ready and train with such an intensity that it can be compared to that of athletes in traditional sports (International Olympic Committee (IOC), 2017).

Then, in 2018, at the Seventh Olympic Summit, the participants recognized that the Olympic Committee had to spread the relationships with the electronic sports community, due to their popularity among the youth globally. Though there are uncertainties about some of the games that do not share the Olympic values, and logically, there is strong competition among commercial developers who create and sponsor these games. At the Summit, they added that it is still too early to discuss any inclusion of electronic games as part of the Olympic program (IOC, 2018).

Later, at the Eighth Olympic Summit, on December 7th, 2019, the participants suggested a two-step approach, encouraging electronic games that simulate traditional sports (FIFA, NBA2k, eFootball PES, iRacing, NASCAR), and secondly, in relation to other games, promoting a healthy lifestyle at every level, particularly the professional electronic games (IOC, 2019).

The Ninth Olympic Summit, on December 20th, 2020 discussed the importance of contrasting the two forms of virtual sports and games, since there are physical forms, such as cycling, and non-physical forms of virtual sports, like soccer. Meanwhile, games include both competitive (League of Legends) and casual games. The Summit agreed that the International Federations had to adopt physical and non-physical virtual forms in their respective sports, focusing on the regulation of fair competitions, respecting the values of virtual sports, and attracting the new public.

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On the last Summit, December 9th, 2022, the participants received the current plan for the opening of E-Sports Olympic Week in Singapore, between 22 and 25 of June 2023. then, the next step will be given in support of new developments in virtual sports within the Olympic movement. The E-sport Olympic Week was considered by the Olympic Summit as a significant committed platform for the IOC and the international federations involved, looking to connect to a new audience (IOC, 2022).

The benefits of electronic sports practice are linked directly to the cognitive field, being used by athletes initially for insertion due to the heavy ludic character they have. Among the main benefits provided by electronic sports practice are,

- Improvements in the cognitive capacities, such as the working memory, cognitive flexibility, and visual search (Vaamonde *et al.,* 2018)
- Improvements in psychological skills (Mendoza, 2019), some authors have found improvements in the control of impulsiveness (Puerta-Cortés *et al.,* 2017)
- Development of values (Barbosa-Granados & Urrea-Cuélla, 2018), such as self-training, discipline, communication, and teamwork. (ONTIER, 2018)

At present, electronic athletes can be divided into two groups: professional player or athlete, who has a contract with a professional team, and recreational player or plain player, a person with no contract who has skills and status in the game. Besides, they are organized into specific classes, depending on the characteristics of the video game and the user (athlete or player), as shown in Table 1.

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Table 1. - Class organization in electronic sports

Class of electronic sport	Acronyms	Video games
Multiplayer of Battle Arena online	MOBA	League of Legends and Dota 2
First-person shoots	FPS	Overwatch, Fortnite, CS: GO
Real-time strategy	RTS	StarCraft (1 and 2)
Collectible card games	CCG	Hearthstone
Simulation games		
Sports video games		FIFA, NBA2K, eFootball PES
Racing video games		iRacing, NASCAR, Grand Tourism
Fighting video games		Super Smash Bros, Street Fighter

Note: the previous table does not show all the electronic sports games or all the classes, only the most popular and widely reported in consulted papers and literature.

Every electronic game is a video game, but not the other way around. Most video games are not considered electronic sports. A video game must have the following features to be an electronic sport:

- Competitiveness between two or several players.
- Equal conditions for every participant, where the results are uniquely determined by their skills.
- Be defined in leagues or ruled competitions.
- A defined public, since these competitions are often broadcast on YouTube and Twitch.
- Easiness of understanding and visualizing.

A method for the study of electronic sports in Cuba

Every historical research about electronic sports in Cuba should refer to the *Group of Electronic Sports in Cuba* (ADEC). It has been the main drive for the development and spreading of this practice. Hence this research study is closely related to this association, which provided historical data that demonstrate the solid evolution in the practice of electronic sports and ADEC.

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To facilitate a historical understanding of electronic sports, history was broken down into five main stages, represented in a timeline showing the evolution and characteristics they have had through the years (Figure 1).
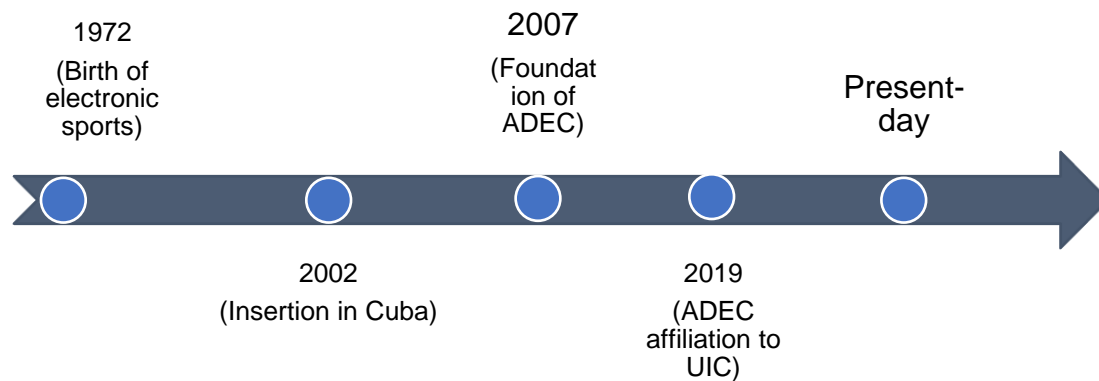

Fig. 1 - Timeline for the scientific study of electronic sports

Note: The starting point is the birth of electronic sports in Cuba, though they did not originate in Cuba, to understand the initial evolution and development of the games.

In the first period, electronic sports were created (1972), with a tournament at Stanford University, but then video games were not recognized as sports. They were mounted on arcade machines considered as the first consoles. The industry saw the economic potential of this new form of recreation, producing several video games. Quite a few experts in video game history marked this stage between 1970 and 1980, as the "Golden Age of Arcade Video Games" (Vicente & Pérez, 2020), a time of creation, exploitation, and popularity of this type.

The prices for Arcade manufacturing forced the industry to change their minds. People wanted to have video games at home, which was impossible because the existing games were too big and cost about 20,000 (including the purchase of the arcade). Additionally, players had to use coins to play, and the machines only contained a single game. In late 1972, the first video console (Magnavox Odyssey) could be used in homes.

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Years later, the arrival of computers, the Windows operating system, and the creation of TCP/IP networking (which enabled a possibility for information exchanges between computers) led to the Warcraft games. Orcs and Humans (1994), and StarCraft (1998), the main electronic sports initially spread in Cuba.

The arrival of electronic sports in Cuba

On March 31st, 1998, American company Blizzard Entertainment launched the first PC game StarCraft Saga, which was incredibly accepted worldwide. StarCraft is a real-time strategy game staged in a futuristic environment, a platform in which the mechanics are the production of resources and armies to destroy the bases of the enemy, another player.

StarCraft also saw the light in Cuba, with interchanges in local networks. Around 2002, players from the Cuban capital began to pool together and play through LAN parties, leading to the creation of a large community. Some of these players created partial tournaments. The community created new plays, strategies, and methods empirically. At that time exchanges were only national, so the new skills and concepts resulted from joint efforts,

Gradually, wireless systems were set up illegally, to promote exchanges and gaming from home. It encouraged more young people to use video games, stimulated by competition and easy understanding of the games. The increasingly growing community enabled more planning among players and teams, with tournaments that showed the immediate need for an official organization that could provide support.

Beginnings of the Group of Electronic Sports in Cuba, and current e-sports status

The Group of Electronic Games in Cuba (ADEC) defines itself as "a project that gathers players and lovers of electronic sports in Cuba, to develop a culture for electronic sports nationally, through new spaces that promote the sport, culture, and healthy recreation.

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The absence of a general organization and the need to join young people in an organization that could identify this new sports movement inspired some to take the first steps to set up a new organization (ADEC). The main promoter of this movement was Iván "Twin", a Law student who claimed the creation of an association that could eradicate these problems.

Electronic sports could be defined as the "group of video games practiced, not only as a hobby but also for competition, which requires theoretical-strategic knowledge and physical and mental skills. "Electronic sports comprise calculating systems, such as computers, consoles, smartphones, etc., which make human-machine interactions possible, in order to develop cognitive elements associated with this sports practice.

The portal EcuRed refers to the initial evolution of tournaments and leagues, whose first editions were organized by Ian Pedro "Kaster" Carbonell Karell, who added new concepts to the competition system, and the new ranking system. Although the tournament's finals were arranged via modem, it showed the organizers the need for facilities for the public to watch the games.

Then, the tournaments were bigger and more respected, which eventually merged into the Havana StarCraft Leagues (HSL), where the first national competition took place, in January 2007. It was the only available tournament, and the players began to take StarCraft seriously, though users had to play on their phones, from home. The first competition was more similar to an online competition, but the finals were always held in place with spectators watching the games live. The facility was one of the players' homes for the most part, with about ten spectators, until 2009, when the HSL finals were held at the Maxim Rock theater, with over 200 fans.

In early 2009, a young player organized the first HTL (Havana Team League) with the participation of the available teams. In the first edition, five teams took part. The first finals were held in the homes of the players, and the third final was again held at the Maxim Rock, with an amazing number of fans attending the event.

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In 2010, ADEC had many followers and showed a great reputation in Havana and part of Cuba. However, some people thought of ADEC as a modality, since there were only StarCraft tournaments and leagues. At the beginning of September, a new discipline was created: Warcraft. It showed the strong desire of ADEC's administrative group to explore new modalities, fulfilling the initial purposes of the group, and increasing the scope of competitiveness. Then other modalities were added, such as Clash Royale, Dota 2, and Hearthstone.

On October 25th, 2016, the first national competition with international access was held. The video game used was Dota 2, in a competition held in Havana with the participation of teams from eight provinces. The meeting promoted electronic games practice, and the possible participation of Cuba in international competitions was a fact. Besides, new people were interested in this topic. Documentary *Project Gamer* shows the challenges taken by non-professional players of electronic sports, as well as the evolution of the sport in Cuba.

At present, there are few consulting materials nationally with details of the main actors of this type of sport, as well as the results in all the national and international competitions in which Cuban athletes participate.

Today, ADEC is part of the IT Association of Cuba (UIC), so the insertion of ADEC into the Global Electronic Sports Federation (GEF), and the Alliance of E-sports Federations of the Caribbean (CEFA), the main position reached so far.

Since its foundation in 2007, the concept of electronic sport has been shaped; when ADEC was founded there was no knowledge of this sports modality. Its main goal is to diffuse electronic sports as a concept, which has been widely acknowledged. Recently, a few tournaments have been organized at the University of Physical Culture and Sports Sciences (UCCFD), in Havana, with INDER support, along with other types of institutions, despite the limited knowledge about this area.

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Accordingly, the main players should be mentioned. Among the most outstanding figures are,

- Alberto "SlayersMvP" Suárez. Male athlete of StarCraft 2. Participation in national and international competitions. Winner of several LCSC Tournaments sponsored by ADEC (No. 3, 4, 12, 13, 15). Participation in several international competitions, such as SSL Pro. (ranking 11th). the SSL Cup (ranking 3rd); the CSO Cup (4th).

- Javier "InMoLaTioNs" Estévez Sotolongo. Male athlete of StarCraft. Captain of the Cuban selection of StarCraft 2 during participation several times in Nation Wars, with the highest victory average on the team. Participation in national and international competitions. Winner of Cuban StarCraft 2 editions 6, 7, 8, 9, 14, 15, 16; winner of the eighth edition of LCSC Tournament, and WCS20 ADEC StarCraft, all of them sponsored by ADEC. Participation in international competitions such as the Hyperion Cup (3rd-4th positions); one of the first three positions in the Battle of America, three times (No, 42, 44, 45).

- Christian "SoraPro" Pons. Male athlete of Clash Royale. Top 1.6 of the world in Clash Royale. Participation in the Clash Royale League, the most important international Clash Royale tournament in the world, qualifying in the top 32.

- Karla "Karura" González Sánchez. Female athlete of video game Hearthstone. Top 4 and second best in the Cuban leagues of Hearthstone 5 and 7, respectively. Top 8 in the Lich King League organized by Tierras de Fuego (TDF). Top 64 among more than 512 competitors in the WSOE Tournament. Top 8 in several tournaments of the Online Sports Championship (OSC) and OSC Elite. Top 12 in the Badass Women of Hearthstone.

CONCLUSIONS

This research study offers information encompassing part of the history of electronic games in Cuba, as well as their main figures and results in national and international

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competitions. The study found several definitions and concepts of E-sports and the importance of the Group of Electronic Sports in Cuba (ADEC) in the insertion of this sports discipline in the country. The study determined that the present knowledge about this topic is limited, in light of the scarce national scientific bibliography.

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