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# From E-Heroin to E-Sports: The Development of Competitive **Gaming in China**

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The paper examines the development of competitive gaming in China in the past three decades. In the early years, gaming enthusiasts in China organized competitions on a voluntary basis. From the late 1990s, profit-driven gaming companies began to organize and sponsor video game competitions across the country. The past 15 years have seen the commercialization and professionalization of competitive gaming, and the development of the new concept of 'e-sports'. E-sports draw participants and audiences from China's rapidly expanding online gaming community. While gaming companies, live-streaming services, and online gaming platforms are making millions of dollars in profits, the booming e-sports culture has facilitated the growth of the online gaming market and contributed to the formation of a vast cohort of online gaming addicts in China. Parents, educationists, and doctors have expressed growing concern over the social and health costs of the e-sports industry. Academia, media, and the general public are becoming more cautious about the development of the e-sports industry, which mostly targets a vulnerable group made up of the country's children, teens, and young adults.

#### **KEYWORDS**

Video games; e-sports; China; gaming industry; addiction

In May 2015, Dictionary.com added a new term, 'e-sports', to its database. This step was reported by major video gaming websites, such as IGN and GameSpot, as a milestone that indicated that e-sports, or electronic sports, were getting mainstream attention and gaining recognition in the wider cultural spectrum. The term e-sports refers to 'competitive tournaments of video games, especially among professional gamers.22 Like traditional competitive sports, e-sports require skills, strategies, tactics, concentration, communication, coordination, teamwork, and intensive training. However, for most of the general public, who primarily see sport and athleticism as overt demonstrations of physical activity, e-sports are merely computer games and should not be considered as real sports like soccer and basketball. A 2015 research report produced by games market research company Newzoo and global sports market analytics firm Repucom challenges such a view. Using traditional sports as a point of reference, the report offers some insights into the global e-sports industry. It points out that worldwide e-sports market revenue reached US\$194 million in 2014 and would reach US\$465 million in 2017. In 2014, about 205 million people watched or played e-sports. The number of e-sports enthusiasts reached 89 million in 2014 and is expected to jump to 145 million in 2017, which means that competitive gaming has grown into a popular spectator sport with a fan base comparable to that of mid-tier traditional sports such as volleyball, ice hockey, and swimming.<sup>4</sup>

Initially, competitive gaming was most popular in North America and Western Europe. When the e-sports industry began to take off in the early 2000s, China joined the club and soon became a major player in the international competitive gaming community.<sup>5</sup> After more than 15 years of rapid development, China has now become the world's largest e-sports market. By 2015, there were more than 15 companies and organizations coordinating e-sports events in the country on a regular basis. The country has more than six streaming platforms that broadcast e-sports tournaments and professional gamers. Domestic league matches are watched on the Internet and on television by millions of gaming fans.<sup>6</sup> Top players have become national figures. In 2008, celebrity Warcraft III player Zhang Xiangling was selected as a torchbearer for the Beijing Olympic Games as a representative of e-sports.<sup>7</sup> In March 2013, a national e-sports team was established by the Sports Ministry. It is evident that competitive gaming has already gained some general acceptance.<sup>8</sup>

#### A Brief History of Competitive Gaming

E-sports grew out of the gigantic global video gaming industry, which has 'surged in four decades to become one of the largest entertainment industries in the world." The gaming industry is now worth US\$20 billion more than the music industry and is nearly two-thirds the size of the film industry. There are 1.7 billion people worldwide actively playing video games, 100 million more than those who actively participate in traditional sports.<sup>10</sup> In the past decade, the ever-expanding gaming industry has produced tens of thousands of professional gamers and league players and millions of spectators for e-sports tournaments.

Competitive player-versus-player gaming started in the late 1970s when arcade and console games took off in Japan and the USA. As early as 1974, Japanese video game developer SEGA hosted the All Japan TV Game Championships in Tokyo. The tournament was designed to promote interest in TV games and 'create an atmosphere of sports competition on TV amusement games'. In 1979, the Scores arcade in Dallas organized the Winter Pinball Olympics. Four video game tournaments were held for individual games: Atari Football, Double Play, Triple Hunt, and Space Wars. One year later, Atari's National Space Invaders Tournament of 1980 attracted more than 10,000 participants from across the USA.<sup>12</sup> In 1981, Tournament Games staged a three-day national video game championship at the Chicago Exposition Centre. The event was described as 'a major new sporting contest in which 10,000 to 15,000 of the world's best video-game players would go head-to-head on a single game - Centipede'. In 1983, Twin Galaxies, an American organization that tracks video game records, launched the US National Video Game Team and began organizing arcade tournaments on a regular basis. In the same year, Japanese video game company Nintendo released its Nintendo Entertainment System (NES). This new home video game console took the global market by storm and facilitated the early development of competitive gaming. 14 From the mid-1980s onward, Nintendo held NES gaming tournaments in Japan and the USA for marketing purposes. In 1990, the company held its first 'World Championships' in California. In the following years, more and more video



game companies used gaming competitions to promote their products. Both arcade and home console competitions - as public contests complete with title sponsors, audiences and media coverage – became increasingly common.<sup>15</sup>

#### The Rise of Video Games in China during the 1980s and 1990s

Back in the 1970s, when video games had become one of the most popular pastimes for children and teenagers in Europe, the USA, and Japan, the Chinese were still suffering poverty. Throughout the Mao Era (1949-1976), the state maintained a planned economy system and controlled resources, agriculture, industry, and the market. The economic system put little or no emphasis on profitability or competition. The system did help China maintain a relatively low level of economic and social inequality but failed to cultivate strong economic growth. Other factors, such as the fast population increases, which prevented rises in the gross domestic product per capita (GDPPC), and the social unrest caused by the Cultural Revolution (1966-1976), also contributed to a lack of growth in the Chinese economy between the 1950s and 1970s. By the early 1980s, living standards in China were substantially lower than among neighbouring Asian countries such as Singapore, Japan, and South Korea. For most Chinese people, modern home appliances such as televisions, washing machines, and refrigerators were luxuries that only appeared in posters and magazines. In 1978, China launched a nationwide campaign of reform and opening up. Policies were adopted to achieve the goal of modernization. The country began to allow private ownership. Foreign investment and trade flourished. The reform brought about unprecedented growth.<sup>16</sup> Between 1980 and 2000, the average disposable income of urban Chinese households jumped from US\$280 to US\$3,000 per capita. Consumers had more money to spend on food, clothing, furniture, electrical appliances, and leisure activities. The 1980s and 1990s saw a rapid improvement in people's living standards.<sup>17</sup> At the same time, Western cultural products such as literature, art, music, and film were reintroduced to the general public.

Video games were among the foreign cultural products that flooded into China. From the mid-1980s, arcade machines and game consoles were imported or smuggled from Hong Kong and Taiwan into the country. Gaming centres began to appear in the major coastal cities, including Guangzhou, Xiamen, and Fuzhou. Gaming soon became one of the most popular recreational activities for children and teenagers. In late 1980s, home video game consoles like Atari and Nintendo's NES became extremely popular in Asia. However, this new technology was not affordable for ordinary Chinese people. At the time, an imported Atari or NES console would cost up to 1,500-2,000 RMB, and one game would cost hundreds of RMB.<sup>18</sup> In 1990, the average annual income of urban dwellers in China was only 1,387 RMB. 19 This meant that expensive game consoles could only be found in gaming centres in major cities. Players would be charged 0.5–1 RMB per game or pay hourly rates of 3–5 RMB.

Arcade and console gaming centres pioneered the introduction of video games to the Chinese, hinting at the great potential of the video game market. Attracted by the high margins, a number of Chinese companies joined this new market. Taking advantage of the fact that Atari and Nintendo did not have an official presence in China, Taiwan's TXC Corporation and Shengtian Electronics Co., Ltd began manufacturing NES clones for the Chinese market. TXC's 'Micro Genius' and Shengtian's '9000' were sold for 600-700 RMB, more than 60% cheaper than Nintendo's official NES.<sup>20</sup> Consequently, video game retailers

in China abandoned NES and Atari in favour of the pirated consoles and games that were being imported or smuggled onto the mainland. Taking their lead from these Taiwanese and Hong Kong companies, businessmen and tech gurus on the mainland also joined the business. Private IT firms, including Yanshan Software (1985), SUBOR Electronics Technology Co., Ltd (1987), and Fuzhou Waixing Computer Science & Technology Co., Ltd (1993), were set up to produce NES and Atari clones and pirated games and accessories. By the early 1990s, more than 10 different brands of NES clones were being produced by these companies.<sup>21</sup> The mass production of pirated hardware and software in China brought down the price of these products significantly.<sup>22</sup> When SUBOR released its Little Tyrant Game Console in 1991, the price of NES clones was further reduced to 200-300 RMB, and the cost of gaming software was reduced from 200-300 RMB to 30-60 RMB. In 1993, SUBOR invited movie star Jackie Chan to be the advertising endorser for its newly released Little Tyrant Learning Console, another re-branded NES clone which featured a PC keyboard and several educational software packages for primary and secondary school students (see Figure 1). Due to a lack of awareness around intellectual property rights and copyright licensing, the Little Tyrant Learning Console was regarded as a legitimate product. It was recommended by the National Research Centre for School Computer Education and was sold across the country. Ironically, the Little Tyrant Learning Console was soon cloned by other Chinese companies and the price of such pirated consoles became even lower at just 100–150 RMB. As the Chinese economy developed, video games finally became affordable for ordinary Chinese families and a new era in the gaming industry began.<sup>23</sup>

Pirated NES and Atari consoles and games made in Taiwan and China had successfully introduced video games to the general public. Although the Chinese Government had



Figure 1. Poster for the Little Tyrant Learning Console (1993). Source: https://www.yxdown.com/ news/201402/114022.html.

implemented strict censorship of television, print media, radio, film, music, and literature, video games were not affected. Throughout the 1980s and 1990s, no policies or decrees were issued by the government to regulate the market or to tackle copyright and licensing issues. In this period, none of the world's leading video game companies officially released their products in China. However, their arcades and home video consoles, including Capcom and NEO-GEO's arcades, Sony's PlayStation (1994), Nintendo's N64 (1996), and Sega's Genesis (1988) and Saturn (1994), were sold in China in large numbers. As most of the hardware and software was smuggled into the country, there were no official figures to show the scale of this market. Nevertheless, the second half of the 1990s became a golden age for China's video game industry. Arcade and console gaming centres expanded from coastal cities to smaller towns in remote regions. According to Ministry of Culture statistics, by 2000, there were more than 10,000 gaming centres in China. The industry's total revenue had reached 30 billion RMB.<sup>24</sup> Game consoles became one of the 'essentials' for the young generation. Video game books and magazines, such as Guide to Video Games (1990), Game Software (1994–2012), and *Ultra Console Games* (1998–present), were published to meet increasing demand among the country's first generation of gaming fans.

#### **Public Criticism of Video Game Addiction and its Consequences**

The rapidly developing gaming industry led to controversy. As more and more school children were exposed to the gaming world, gaming addiction became a widespread problem. Parents and teachers began to voice their concerns. The term 'electronic heroin' was invented to condemn the ever-expanding gaming industry, which was believed to have made students lose interest in study and end up in addiction. Some students skipped classes to play in gaming centres beside their schools.<sup>25</sup> Some would steal money from home to play or buy gaming hardware/software. Gaming centres, usually small, smoky, dirty, and dim, developed a very bad public image and became a target of criticism.<sup>26</sup> Many people shied away from them and parents discouraged their children from frequenting them. The situation became more worrying when gambling machines began to spread in this unregulated market.

In May and June 2000, several news investigations were published by major news agencies to question the widespread video game culture. These reports pointed out that gaming addiction had become a new problem for society. Statistics showed that more than 50% of parents believed that their children's studies were negatively affected by gaming.<sup>27</sup> Reports from the Public Security Bureau were used to highlight the fact that video games, especially gambling games, caused a variety of social problems, including crime, violence, abusive language, and bullying. The authors also cited doctors who argued that young children were vulnerable to video game addiction, which could cause mental health problems including depression, anxiety, violent behaviour, and learning disabilities. These reports triggered a nationwide debate on video games. In the following months, similar news reports and investigations were published in newspapers. TV broadcasters made documentaries to unmask gaming addiction and its associated problems. Although game enthusiasts published articles in their magazines to defend the hobby, their voices were overwhelmed by the mainstream media. Anti-video game activists and educationists urged the government to regulate the gaming industry and close down gaming centres besides schools. The call was

supported by millions of parents who feared that their children's lives and education would be ruined by e-heroin.<sup>28</sup>

In response to the parental outcry, the State Council issued a notice entitled 'Feedback regarding the launch of a special operation on video game arcades (decree no. 44)' on 15 June 2000 to regulate the gaming industry, to reduce the number of gaming centres, and to ban gambling machines.<sup>29</sup> All gaming centres were now required to display a notice which stated 'No Entry for Under 18s Except on Public Holidays'. One month after the issuing of the ban, thousands of game centres had been closed down and 17,000 gambling machines had been destroyed.<sup>30</sup> Decree no. 44 also banned the sale of video game equipment and accessories in the Chinese market. However, the ban was never strictly enforced. Gaming companies continued to manufacture hardware and software for the Chinese market. Game retailers' business went on as usual. Game consoles and software were smuggled into China in large numbers and could be easily bought from game shops around the country.<sup>31</sup> From the early 2000s, attracted by the low labour costs, Nintendo, Sony, and Microsoft moved their production lines to China. The new generations of consoles like the Xbox and Xbox 360, PlayStation 2 and 3, and the Nintendo DS and Wii were made in China but had to be smuggled back into the country to be sold to Chinese gaming fans. Modded consoles and pirated games continued to feed the growing domestic market.

Decree no. 44 did not ban the importation of game consoles. It used the term 'strictly limited' instead, which left some room to manoeuvre for foreign game companies. Therefore, on 17 November 2003, Nintendo officially launched its iQUE '3D Interactive System' - a rebranded N64 game console - in China, making Nintendo the first foreign game company to legally sell game hardware and software to the Chinese market. A few months later, Sony launched its PlayStation 2 as a 'computer entertainment system' in Shanghai and Guangzhou. Due to the widespread piracy, Nintendo and Sony's official consoles and games did not survive in the market for very long. In 2004, the per capita annual net income of urban households was 9,421 RMB. An official PlayStation 2 game cost between 168 and 500 RMB, while a pirated game only cost 5 RMB.<sup>32</sup> Players even download pirated games for free and use them on modded consoles. Therefore, the majority of Chinese gaming fans continued to buy consoles and games on the black market.<sup>33</sup>

Unlike the video game market in Japan, Western Europe, and North America, where regional, national, and international arcade and console game competitions were held regularly by game companies and fan organizations, competitive gaming was almost nonexistent in China in the 1980s and 1990s. There are three major reasons for this. First, due to a lack of purchasing power and a lack of awareness around intellectual property rights and licensing, the Chinese market was dominated by cloned arcade machines/consoles and pirated software. None of the leading video game companies, such as Atari, Nintendo, and Neo-Geo, officially launched their products in China. Therefore, they had no reason to organize gaming competitions to promote their products in that market. Second, video game playing was not welcomed or encouraged by parents. As a result, Chinese game console manufacturers had to keep a low profile. They rebranded NES clones as affordable learning consoles with keyboards and educational software. Video game competitions were thus something that they needed to avoid. Third, game retailers and gaming centres operated in a grey area of the law so they always tried to avoid public exposure. Running game competitions would not have been regarded as a great way to operate or promote their businesses.



#### Online PC Gaming and the Rise of E-Sports

From the mid-1990s onwards, when Personal Computers (PCs) became affordable consumer goods for the general public, and with the rapid development of the Internet, PC games began to replace arcade and console games as the ideal platform for competitive gaming. First-person shooter (FPS) games like id Software's Quake (1996) took the market by storm and gave birth to online competitive gaming via Local Area Network (LAN) and/ or modem connection. Led by Blizzard Entertainment's Warcraft: Orcs & Humans (1994) and Westwood Studio's Command & Conquer (1995), real-time strategy (RTS) games also joined the online competitive gaming family. These games created millions of online gaming fans around the globe and kicked off a new era in competitive gaming. By the late 1990s, the size of and participation in competitive gaming had reached a new level. In 1997, the first modern e-sports event - The Red Annihilation Quake Tournament - was held during the Third Electronic Entertainment Expo (E3), which took place in the Georgia Dome in Atlanta, USA. In the same year, the Cyberathlete Professional League (CPL), a pioneer in the e-sports industry, was founded in Dallas, USA.34 In the years since, the CPL has 'organised competitions across five continents and distributed more than \$3 million in prize money. 35 At the same time, similar e-sports organizations were launched around the world. For example, the World Cyber Games (WCG) was formed in South Korea in 2000 and launched an annual tournament, 'The World Cyber Game Challenge', in the same year. The initiative was supported by Korea's Ministry of Culture and Tourism, Ministry of Information and Communications, and Samsung. The First WCG Challenge attracted 174 competitors from 17 countries.<sup>36</sup>

Entering the 2000s, e-sports showed great potential and began to mirror the achievements of 'real sports'. An increasing number of international tournaments, such as the WCG, the Electronic Sports World Cup, and the World e-Sports Games, were held around the world. "Top players ... formed teams owned by limited companies, and often receive[d] salaries to train and compete'. 37 Big brands like Coca-Cola, Red Bull, Intel, Samsung, and Microsoft began to sponsor e-sports tournaments and media networks started bringing e-sports to TV platforms. In May 2015, the Entertainment and Sports Programming Network (ESPN) aired Blizzard's 'Heroes of the Dorm' event on primetime.<sup>38</sup> In the meantime, an increasing number of e-sports events began to take place in traditional sports venues, for example, The League of Legends 2013 World Championship, which was held at the Staples Centre in Los Angeles and attracted an audience of 11,000.39 One year later, a Defense of the Ancients 2 (DotA 2) tournament was held at a former World Cup soccer stadium – the Commerzbank Arena – in Frankfurt, Germany. 40 Like in traditional sports, the prize money on offer in e-sports soon became sky-high: 'Top players earn six-or seven-figure incomes and attract big and passionate followings, luring a generation of younger players to seek fame and fortune as gamers'. 41 For instance, the total prize pool for the International DotA 2 Championship in 2015 was US\$18.43 million, with the champion team Evil Geniuses claiming US\$6.63 million,<sup>42</sup> a prize which is higher than that on offer in most traditional sports, including cycling, golf, marathon running, and tennis.

The growing e-sports industry has changed the face of video games. It is also transforming the global sports landscape. As Matt Wolf, Coca-Cola's global head of gaming, commented in 2013: 'There are several signs that show that this is real, it's sustainable, and the growth is astronomical ... It's not far afoot to say that e-sports, as it stands, is the biggest sport

that people have never heard of. 43 From the mid-2000s, efforts have been made by various organizations to have e-sports accredited as a full sport. Traditional governing bodies for sport, including the Olympic Council of Asia (OCA), Sport Accord, and The Association for International Sport for All, began to take e-sports seriously. In 2007, the Olympic Council of Asia (OCA) selected e-sports as a demonstration discipline within the Second Asian Indoor Games. 44 In 2013, the OCA included e-sports as an official discipline at the Fourth Asian Indoor and Martial Arts Games. 45 National Olympic Committees from Asian countries began to show an increasing interest in e-sports. E-sports associations and federations were launched in a host of countries.<sup>46</sup> In 2013, in response to the growing popularity of e-sports tournaments, the US Government began to issue visas to professional gamers from other countries, designating them as 'individual athletes'. 47

#### The Development of PC Games and the Rise of Competitive Gaming in China

The 1990s and 2000s saw a marked rise in the popularity of arcade and console games in China. It also witnessed the rapid adoption of PC games. China's PC market began to take off in the mid-1990s. In 1997, Chinese consumers bought three million PCs. 48 By 2005, the total shipment of PCs to China had reached 19.3 million. <sup>49</sup> The figure climbed to 66 million in 2012, making China the world's biggest PC market; it also became the world's biggest Internet market, with more than 500 million users. 50 Thanks to the dramatic increase in the sale and use of PCs and the nationwide boom in Internet use, PC games were introduced to a wider audience. Unlike arcade and console games, which primarily targeted a youth audience, PC games were enjoyed by both teens and adults in China. In the mid-1990s, a PC was still a luxury which was not affordable for most Chinese households. The majority of gaming fans learned to use a PC in unlicensed gaming centres in backstreets. When the Internet began to emerge in China in the late 1990s, Internet cafes sprouted up on streets and in alleys throughout the country and soon became the main place people went to play both online and offline PC games. Although most of these Internet cafes focused solely on serving PC game fans, they were regarded as the fruit of modernization and industrialization and therefore were welcomed by the government. The PC market was also much healthier than the arcade and console games industry, which had largely relied on smuggled game systems and pirated games. PC hardware and software were imported, manufactured, and distributed legally around the country. Many popular PC games – for example 3DO's Heroes of Might and Magic series, Blizzard's StarCraft (1998) and Diablo II (2000), and Sierra's Half Life (1998) and Counter Strike (1999) - were officially released in China and were legally distributed by domestic computer software retailers. Led by software giant Kingsoft, many Chinese companies also joined the PC game industry and developed popular games, such as The Legend of Swordsman (剑侠情缘, 1997). Despite this, software piracy was still a considerable problem for the PC market, primarily due to the high price of genuine software and Chinese consumers' relatively low levels of disposable income.

In the early years, the PC game market was dominated by single player games. When multiplayer RTS and FPS games landed in China in the late 1990s, the concept of competitive gaming began to take root and grow. Command & Conquer: Red Alert (1996) was one of the most popular RTS games at the time and one of the most important in introducing competitive gaming to Chinese gamers. Produced by Westwood Studios and released in 1996, the game was hailed as one of the first RTS games to feature decent competitive online

play. The plot was set around a hypothetical war between the Allied Forces and the Soviet Union. Internet gameplay was officially supported by Westwood and also by private servers run by gaming communities. Players acquired credits by mining for ore and minerals in order to build war factories, train soldiers, and build up their own armies. Various tactics and strategies were needed to battle one's opponents. The game supported Internet headto-head play over modem and two to eight player multiplay via LAN. It soon became one of the most popular games in Internet cafes across China because players could now take part in multiplay battles and play against real people instead of against the computer. This new feature made the gameplay more intense and interesting.

Following Red Alert, Blizzard's StarCraft was the next milestone in China's competitive gaming history. The game was set in a science fiction environment in the twenty-fifth century. It featured a well-developed multiplayer system operated over a LAN or the Internet via Blizzard's free Battle.net network service. It allowed two to eight players to compete in a variety of game modes. In terms of gameplay, StarCraft made speed, creativity, and tactics essential for play. In comparison with previous RTS titles, the player had to make more decisions based on strategy and tactics and be able to input commands quickly. This made the skill ceiling higher and the competition more intense. StarCraft not only raised the bar for developing RTS games, it also gave rise to organized PC game competitions in China. Soon after its release, it replaced *Red Alert* as the most popular RTS game in Internet cafes across China. Although the genuine StarCraft was available in the Chinese market, Internet cafes typically used pirated versions of the software to cut down on cost. Therefore, most Chinese players could not use the official Battle.net Internet service to play online. Instead, they played multiplayer games over LAN. Fan communities formed around the game and Internet cases became their community centres. Internet cases started to organize StarCrast matches. In the following years, unofficial domestic servers were set up by StarCraft fans and video game websites and companies, allowing more players and teams to participate in competitions over the Internet. Online StarCraft communities began to grow, teams were formed, and online leagues were organized to accommodate players from around the country.

StarCraft soon gave rise to a unique competitive gaming culture, including the players, e-sports organizations, leagues, sponsors, and enthusiastic spectators. On 9 May 1998, the China StarCraft Association (CSA) was established by a young player, Yinxiaong Wang, on Battle.net. In less than one year, membership of the CSA exceeded 1,000 and more than 10 local branches were formed in Jiangsu, Guangzhou, Beijing, Jiangxi, and other major cities. In the following years, more than 50 Chinese StarCraft teams joined the association and membership grew to six thousand.<sup>51</sup>

From 1999, video game websites, PC newspapers, and computer hardware/software companies began to organize online and offline StarCraft competitions. On 24 August 1999, Beijing 263 battlenet, an unofficial server provider for StarCraft players, organized an online StarCraft championship. In January 2000, a StarCraft tournament organized by Aomei Soft, which officially published StarCraft in China, and sponsored by Gaoxingda Computer School took place in Beijing. The tournament offered 1,000 RMB in prize money for the champion. It marked the first official StarCraft competition in China. At the same time, StarCraft fans began to discuss the professionalization of competitive gaming in China. They made appeals to the Sports Ministry in Beijing, hoping that e-sports would gain official recognition. Attempts were also made to find sponsorship for regional and national e-sports competitions. In 2000, led by Hu Binguo, several top StarCraft players in Beijing launched the China E-Sports Association (CESA). The association secured funding of one million RMB from Beijing Tengtu Press and immediately organized a national StarCraft competition. However, the budget was drained by the regional qualifiers, causing the sponsor to withdraw and the finals in Beijing to be cancelled. StarCraft fans were not discouraged by this. On 11 June 2000, organized by the newly formed Chinese Professional Gamers' League, the first ever international friendship StarCraft match took place between Chinese and German players on Battle.net.<sup>52</sup> Also in June 2000, Computer Business Information (CBI), one of China's leading newspapers for computer technology, organized the Second National Computer Games Championship.<sup>53</sup> The preliminaries took place in 18 cities and the finals were staged in Beijing. The Championship marked the first national StarCraft competition. It attracted more than 1,000 StarCraft fans, most of whom were students aged between 13 and 26.54

Following the trail blazed by id Software's Quake II (1997), multiplayer FPS games formed the other pillar supporting China's competitive gaming market. Quake II was set in a science fiction environment. Players used various weapons to shoot their enemies from the perspective of the main character. The most remarkable feature of the game was its well-developed online multiplay system, which allowed up to 32 players to compete against each other over the Internet or LAN. The game was extremely popular in China's Internet cafes. In December 1998, an online Quake II tournament was organized by the Shenzhen Telecommunications Bureau with 1,500 RMB in prize money. It was probably the first official online competitive gaming event in China.<sup>55</sup> Encouraged by the success of Quake II, id Software released its sequel, Quake III Arena, in 1999. This time, the title was turned into a pure online multiplayer competition platform. In the same year, organized by Computer Business Information and sponsored by PC hardware manufacturer Shenzhen Mediatech, the First CBI National Computer Games Championship took place in 23 cities across China. Quake III Arena was selected as the exclusive software for the competition. It was the first national-level e-sports competition in China. In August 2000, jointly organized by cgol.net, pconline.com, and Q3ACN.com, the Impact Extreme China Quake Championship and Q3A Chinese National Team Trials took place in Beijing. A total of 128 Chinese players and 2 New Zealand players took part in the competition. The total prize money was 86,000 RMB. The top four players were sent to the USA to participate in Babbage's CPL Tournament, which took place in December 2000 in Dallas, Texas.<sup>56</sup>

In addition to Quake III, the year 1999 saw the release of Counter-Strike, another important FPS game that brought a revolutionary change to competitive gaming. Counter-Strike focused solely on team matches in which players joined either the terrorist team or the counter-terrorist team in battle. Tactics and cooperation were important elements in winning matches. The game soon became the mainstream platform for e-sports competitions in China and around the globe.<sup>57</sup>

Most Chinese game fans learnt to play FPS games in Internet cafes. In the early years, Internet cases were the pioneers in organizing local and regional FPS game competitions. The objective was to facilitate their business and attract more players. Counter-Strike was the most popular platform for competition because of its cooperative nature. Organized by Beijing Great Wall Broadband Network Service Co., Ltd, and sponsored by Pepsi, the First Mirinda China E-sports Tournament was held in China between April and May 2002. The event used genuine Counter-Strike software provided by Aomei Software. A total of 202 teams, including female teams and team comprised of disabled people, competed in the event. The winning team took home 10,000 RMB in prize money and six Philips PC monitors. It was reported that Aomei Software and the organizer hoped to use the event to fight software piracy and cultivate e-sports culture.<sup>58</sup>

Starcraft, Quake, and Counter-Strike facilitated the emergence of the first generation of professional and semi-professional gamers in the early 2000s. In the beginning, most of the professional teams were funded by Internet cafes. In the following years, in response to the fast-growing e-sports market, computer software, hardware, and accessory companies began sponsoring professional e-sports teams. The famed Quake III player Meng Yang provides a good example of how this worked. Meng quit school at the age of 15 and became a professional PC game player. After winning several regional Quake II tournaments in Sichuan, Meng received sponsorship from Beijing Huacai Software in 2001 and became a full-time player. He then moved to Shanghai and joined the Shanghai 5E Club, which was established by a venture investment company in 2003, earning a monthly salary of 3,600 RMB.<sup>59</sup> In June 2004, Meng became a member of the Hunter Club, which had been founded by the Beijing Hunter Internet Bar. In October 2004, he won one million RMB by defeating the American professional player Jonathan Wendel in a Doom 3 invitational competition sponsored by computer hardware manufacturer Abit at the Great Wall of China.<sup>60</sup>

In addition to individual professional players like Meng Yang, who focused on head-tohead death match games in Quake, Doom, and Unreal Tournament, professional Counter-Strike teams were set up around the country. These teams normally consisted of eight to 10 players. Internet cafes would be their title sponsors and would provide the venue for training and pay them a small salary. Once they captured regional or national titles, the prize money would be shared by the Internet cafe and the team members. For example, Ezero, the champion Counter-Strike team at the WCG China 2002, was sponsored by Shanghai's 26Space Internet Bar. 61 The wNv, another top Counter-Strike team, was founded by Beijing Zhiyong Team Digital Entertainment Technology Co., Ltd. The team was sponsored by a company named Beijing Yide; its annual sponsorship was worth approximately one million RMB. In 2006, the wNv captured first place at the World e-Sports Games Masters in Hangzhou and took home US\$70,000.62

### The Further Development of E-Sports in China

While the government was trying to regulate the rapidly expanding arcade and console game market, the PC game market was left untouched. In fact, based on the example of South Korea, where the competitive gaming industry was officially backed by the government to facilitate the development of the IT industry and boost the economy, the Chinese Government showed a supportive stance towards e-sports. In October 2003, China Central Television (CCTV), the country's predominant state television broadcaster, aired a documentary about the 2003 WCG, which had taken place in Seoul, South Korea. The documentary focused on the Chinese players at the competition, who had won three gold, one silver, and one bronze medal. It provided an introduction to e-sports to the general public and changed many people's views on video games. One month later, the Sports Ministry listed e-sports as one of the 99 officially recognized sports. Also in 2003, China's first dedicated video gaming TV channel, GTV, was launched in Beijing by state-owned television broadcaster Liaoning TV. It specialized in broadcasting video game-related information and e-sports matches.

On 19 June 2004, the First China E-sports Games (CEG) were launched by the Sports Ministry and the All China Sports Federation (ACSF) - the official governing body for sport in China. The CEG were hosted by China Interactive Sports Technology Invention, a company jointly established by China Sports Publications Corporation, the ACSF, and the Chinese Olympic Committee (COC) in 2003. The preliminaries took place in Beijing, Changsha, Wuhan, and Xian, and the finals were held in Beijing. The CEG were then held annually in different cities around China and were sponsored by big brands like Intel and Tencent.<sup>63</sup> At the same time, the Sports Ministry's local commissions began to provide financial support to e-sports players, as well as to e-sports competitions(see Table 1). For example, Wang Ruodu, a famous StarCraft player from Peking University, signed a contract with the Liaoning Sports Commission and received a monthly salary of 2,000 RMB. His job was to participate in various e-sports competitions on behalf of Liaoning Province.<sup>64</sup>

In April 2005, representatives of e-sports clubs/teams from more than 10 provinces and municipalities attended a meeting held by the Sports Ministry to discuss the standardization of rules and regulations and the future development of e-sports in China.<sup>65</sup> That October, e-sports featured in the Tenth National Games as a demonstration discipline.<sup>66</sup>

From the mid-2000s onward, StarCraft, Counter-Strike, Quake III, and other popular e-sports competition platforms were replaced by a new generation of games, including CrossFire (2007), League of Legends (2009), StarCraft II (2010), and the Defense of the Ancients (DotA) series (2003 onward). With the development of high-speed broadband networks and services throughout the world, the new generation of games offers a new and better online multiplay experience, attracting more and more young players.<sup>67</sup>

Live streaming video platforms that primarily focus on video games and e-sports were set up by private media companies to provide services for video game fans and e-sports enthusiasts. NEOTV.com (2006), Huya.com (2011), DOUYUTV.com (2014), and Zhanqi TV (2014) are the major players in the market. They focus on video games and e-sports, including the playthrough of video games by players, broadcasts of domestic and international e-sports competitions, e-sports news, interviews, and other gaming-related information. In recent years, these media companies have replaced Internet cafes and small IT companies to become the major sponsors of professional e-sports teams. For example, NewBee, the Chinese team that was crowned the DotA 2 International 2014 champion and won the US\$5 million prize money, was sponsored by Zhanqi TV.<sup>68</sup>

With this support from the government, the media, and the market, the past decade has seen an increase in both the scale and quality of e-sports events. The CEG has been replaced

Table 1. Funding for the e-sports industry provided by the Sports Ministry (2007–2010).

Year	City	Project	Amount (in RMB) (million)
2007	Beijing	Special Funding for the Sports Industry	60
2007	Wuhan	Guanggu Electronic Sports Arena	60
2008	Changzhou	Electronic Entertainment Theme Park – E-Sports Hall	150
2008	Wuhan	Special Funding for the Sports Industry	6
2009	Wuhan	Special Funding for the Sports Industry	6
2009	Wuxi	E-Sports Centre	20
2010	Wuhan	Special Funding for the Sports Industry	6

Source: China E-Sports Games Analysis Report (2010–2011), 14.

by more professionalized and commercialized events like the National Electronic Sports Open (NESO)<sup>69</sup> and the National Electronic Sports Tournament (NEST),<sup>70</sup> and attempts have been made to host international e-sports competitions in China. In 2014, the World Cyber Arena (WCA) was staged in Yinchuan City. Co-hosted by the Yinchuan municipal government and Yinchuan International Game Investment Co., Ltd, the event featured a 20 million RMB prize pool and attracted over 3,000 gamers from 29 countries and regions.<sup>71</sup>

Tempted by the prize money and inspired by legendary e-sports celebrities like Li 'Sky' Xiaofeng and Meng 'Rocket Boy' Yang, an increasing number of young gamers are deciding to go professional. E-sports teams are formed with the goal of winning big prize money at e-sports competitions. These young players train for up to 10 hours per day, seven days per week, in order to prepare for competitions. Most of the professional e-sports clubs offer a monthly salary of 3,000–5,000 RMB to freshmen members.<sup>72</sup> Skilled players can easily earn up to 8,000 RMB per month.<sup>73</sup> Contract rates for star players, who are in high demand, have skyrocketed. By 2015, amounts of one to two million RMB had become the norm.<sup>74</sup>

Some e-sports teams are invested in by wealthy individuals and organizations. The most famous example is Invictus Gaming (IG), which was founded by Wang Sicong, son of real estate tycoon Wang Jianlin, who has a net worth of US\$28.7 billion. 75 The club, established in March 2010, was formerly known as Catastrophic Cruel Memory. It won several DotA competitions in China and Malaysia before being acquired by Wang Sicong in August 2011 at a cost of US\$6 million. In addition to the investment from Wang, IG receives corporate sponsorship from PC accessories giant Lifitech and famous PC vendor ASUS. The club has signed more than 20 professional players and 'pays the gamers a base salary of about 4,000-5,000 yuan per month (around US\$650-\$800) and covers their room and board. On top of that, the gamers can rake in lavish prizes from live matches in China or abroad.<sup>76</sup> Some of the team's star members earn six-figure annual incomes.<sup>77</sup>

The average career life cycle of professional e-sports players is three to five years, which is significantly shorter than in traditional sports. Most of the pro players are between 16 and 23 years old. 78 After retiring from professional gaming, some star players continue their careers as consultants for video game companies. Some are hired by video game streaming companies at high salaries. Former professional LoL player Wei Handong is a good example. Wei started to play LoL in secondary school. After only a few months of playing at a local Internet cafe, he became one of the best LoL players in China and was invited to join China's leading e-sports club, World Elite (WE). With a starting monthly salary of 3,000 RMB, Wei became a trainee in WE in November 2011. He became an official member of the team in March 2012 and his salary increased to 4,000 RMB. After winning the LoL IPL 5 tournament in November 2012, his monthly salary moved up to 7,000 RMB. By June 2014, as the club's star player, he was earning 20,000 RMB per month. Surprisingly, he retired as a professional player in September 2014 at the age of 23 and joined live streaming video platform Zhanqi. com with an annual salary of five million RMB. His job is to play and commentate on live games, help sell products to viewing fans, and provide endorsements. His show normally pulls in over 100,000 online viewers.<sup>79</sup>

#### The Ongoing Debate on E-Sports

Not everyone is optimistic about China's booming e-sports industry. Decades after the public criticism and parental outcry against arcade/console games, parents are again voicing their concerns regarding popular e-sports culture. They have been joined by an increasing number of educationists, doctors, and social critics. 80 Many question the sustainability of the e-sports industry and its social cost.<sup>81</sup> Yes, professional gaming offers new opportunities for young players who dream of becoming superstars, earning millions in prize money at international competitions. However, aiming to become a professional player seems to be a pricy gamble. The professional e-sports world operates in a pyramid structure, with its base formed by countless gamers who are willing to devote their time and money to pursuing the dream of e-sports success.<sup>82</sup> Let us take the professional *LoL* community in China as an example. There are more than 50 professional LoL clubs/teams in the country, many of which are based in Internet cafes in major cities like Shanghai and Beijing. Each of these teams has about five full-time players. The reality is that, after months and even years of training, only two or three clubs succeed in capturing the national title and qualifying for international tournaments. More than 90% of the so-called professional players remain at the bottom of the pyramid, earning small monthly salaries of 2,000-3,000 RMB, which is barely enough for them to survive on.<sup>83</sup> After bidding farewell to their e-sports dreams at a young age, they soon find out that the knowledge and skills they have learned during their e-sports careers are of little help in securing a new job. At the same time, the e-sports world has also closed its door behind them because streaming service companies and game software developers only want star players. There is no place for retired average pro players. Former professional *StarCraft* player Zheng 'Alex' Wei recalled:

We used to spend more than 10 hours per day on training. Four to five team members stayed in a small rented apartment. Sometimes the investor refuse to pay our salaries on time. There was one time that I only had 2 RMB left in my pocket. I had to borrow money from my friends to buy food. The lifespan of a pro player is five to six years. If you fail to make it to the top, you will be in big trouble after retirement. Nobody in the e-sports industry would offer good jobs to average players.84

China's e-sports industry is based on the rapidly expanding online gaming community. In 2014, the sales figures for China's gaming industry totalled 114.48 billion RMB. By 2015, the population of multiplayer online games fans had reached 429 million.<sup>85</sup> The professional e-sports world draws its audiences and players from this vast gamer pool. As Isaacson observed: 'For every well-paid Kid, there are tens of thousands of young gaming enthusiasts who play for fun. Many of them are compulsive gamers, logging countless hours in virtual worlds of adventure, fantasy and violence. 86 Over the past 10 years, alongside the commercialization and professionalization of competitive gaming, e-sports has become a new concept that gaming companies, video game publishers, and online streaming platforms are eager to sell to the general public. The objective is to attract more young people into the ever-expanding online gaming world and generate more profits. While leading gaming companies are making millions of dollars of profits from young e-sports audiences and participants, the booming e-sports culture has facilitated the growth of the gaming industry and contributed to the formation of a vast cohort of online gaming addicts in China, which, in the eyes of many parents, teachers, and doctors, has become a public health and social issue.87

A study conducted by the Chinese Academy of Social Sciences in 2010 revealed the increasing number of problems associated with Internet gaming. It pointed out that nearly 50% of young Chinese people use the Internet just to play games. Nearly 70% of young Internet addicts are hooked on multiplayer online role-playing games.<sup>88</sup> Internet gaming addiction started attracting the attention of the general public when an increasing number of deaths began to occur in Internet cafes. In 2012, a 23-year-old man was found dead in an Internet cafe in Xinbei City after a marathon 23-hour gaming binge. The game he played was League of Legends, one of the most popular games used in e-sports tournaments in China and around the world. 89 In 2015, 24-year-old gamer Wu Tai collapsed and died in an Internet cafe in Shanghai after playing World of Warcraft for 19 consecutive hours without a break. His death was caused by blood clots that occurred as a result of prolonged sitting in front of the computer. 90 On New Year's Eve 2015, a 21-year-old college student in Qingdao collapsed and died while playing games online. 91 The staggering fact is that similar tragedies happen nearly every month in China.<sup>92</sup>

In addition to the frequent deaths of gamers in Internet cafes, Internet gaming addiction-related violence and crimes are on the rise. A 2010 survey conducted by the China Youth Association for Network Development showed that as the number of young Internet addicts skyrocketed to 24 million by 2010, almost double the figure for 2005, gaming addiction has become a significant factor in juvenile crimes such as theft, burglary, and robbery.93 In December 2013, a 15-year-old secondary school student was stabbed to death by a 14-year-old boy in an Internet cafe in Dandong. The 14-year-old confessed that he could not control his anger when the victim had laughed at his poor gaming skills. 94 In February 2015, a 60-year-old taxi driver in Danyang was robbed and killed by two 14-year-old teenagers. The police were shocked when they discovered that the money was used by the two teens to feed their Internet gaming habit.95 In September 2015, two secondary school students broke into an apartment and brutally murdered an elderly couple. Several hours later, they were arrested by the police in an Internet cafe playing games online. They confessed that the only reason they had killed the couple was to earn experience points and increase their bravery scores, just as people do in the virtual gaming world.<sup>96</sup>

The widespread problems associated with Internet gaming addiction have also destroyed many families. In June 2011, 30-year-old Warcraft player Wen Zhang tried to commit suicide 10 days after quitting the game. He stabbed himself and injured his mother. 97 On 27 May 2012, a mother took her own life in front of her 14-year-old son, who refused to go to school and spent most of his time on online gaming. 98 In June 2013, a 14-year-old secondary school student died after jumping off an apartment building because his mother had stopped him from playing Internet games. 99 In February 2015, a 19-year-old gamer in Nantong chopped off his hand in a desperate attempt to cure his addiction to Internet gaming. 100 In April 2015, a 17-year-old gaming addict set his family home on fire because his father had forced him to give up his gaming habit. After setting the house on fire, he went straight to a local Internet cafe to play. The house was burnt down and his four-year-old brother was killed in the fire. 101

In response to the worrying situation of the ever-growing number of young Internet gaming addicts, an increasing number of clinics and military-style boot camps have been set up across China to tackle the issue. This initiative has been supported by many desperate parents. 102 As early as 2007, the country's psychologists had also launched initiatives to classify Internet gaming addiction as a mental disorder which leads to problems and symptoms including irritability, anxiety, depression, and anger disorders. 103 Although Internet gaming addiction has not been officially recognized by the Ministry of Health as a medical disease, regulations were passed by the Chinese Government to limit the time



teens can spend playing online games and bar under-18s from Internet cafes except on public holidays. 104

China is not the only country facing an Internet gaming addiction epidemic. In 2013, the American Psychiatric Association added Internet gaming addiction to Section III of the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) as a condition warranting further study. 105 'This marked the first occasion of Internet gaming being formally recognised as a mental health disorder, albeit tentatively, in psychiatric nomenclature'. <sup>106</sup> In South Korea, Internet gaming addiction is viewed as a public health concern. 107 In Japan, the government has recognized the problem following a study by the Ministry of Education. Rehabilitation centres were set up to treat gaming addicts. <sup>108</sup> In recent years, an increasing number of specialized treatment centres and programmes have also been set up in Europe and the USA to provide treatment and support for Internet gaming addicts. 109

#### **Conclusion**

Although video games were brought into China in the 1980s, competitive gaming was almost non-existent in the country until the late 1990s, when PC and multiplayer online gaming began to take off. In the early years, competitive gaming was regarded by most Chinese gamers as a hobby, a leisure activity, a social media platform, and a new lifestyle choice in the era of information technology. Gaming enthusiasts organized competitions on a voluntary basis. From the early 2000s, driven by profit, an increasing number of gaming companies began to organize and sponsor video game competitions across the country in order to build up their brands, increase sales, and attract new customers. The past decade has seen the commercialization and professionalization of competitive gaming. 'E-sports' has become a new concept that gaming companies, PC hardware vendors, video game publishers, and online streaming platforms are eager to sell to gaming fans. The objective is to attract more young people in the ever-expanding gaming industry and generate more profits. The Chinese Government adopted a supportive stance towards the e-sports industry, hoping to facilitate the development of the IT industry and boost the economy. By 2016, with a total annual revenue of US\$22.23 billion, China had overtaken the USA as the world's largest e-sports market.<sup>110</sup> Both domestic and foreign gaming companies like NTES, Perfect World, Blizzard, Valve Corporation, and Riot Games are investing heavily in China to recruit new players and viewers. While leading gaming companies, live streaming services, and online gaming platforms are making millions of dollars of profits from young e-sports audiences and participants, who put countless time, money, and effort into online gaming, the booming e-sports culture has contributed to the formation of a vast cohort of gaming addicts in China. Parents, educationists, and doctors have expressed growing concern over the social and health costs of the e-sports industry. China, like South Korea, Japan, and the USA, is now recognizing gaming addiction as a public health matter. The academia, media, and the general public are becoming more cautious about the development of the e-sports industry, which mostly targets the vulnerable group made up of the country's children, teens, and young adults.



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#### **Disclosure Statement**

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#### **Notes on Contributor**

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