

# From Arcade "Challengers" to Digital Athletes: A Narrative Review of the Evolving Esports Experience in Hong Kong

Wong Ying-Kit\*

Hong Kong Shue Yan University, Hong Kong

**Abstract:** Introduction: Esports has evolved from a niche subculture into a global digital industry. Hong Kong presents a unique case study where the "esports experience" is deeply rooted in the physical arcade culture of the 1980s before transitioning to online arenas. This narrative review explores the evolution of the player and spectator experience in Hong Kong, analyzing how historical arcade practices influenced modern digital athleticism. Methods: A narrative review was conducted by synthesizing historical archives, academic studies, government policy documents, and qualitative data on player perceptions in Hong Kong. The review traces the trajectory of esports development through three distinct eras: the Golden Era of Arcades (1980s–2000s), the Digital Transition and Legitimacy Turning Point (2012–2017), and the Modern Professional Era (2018–Present). Results: The "game centre" (locally known as Gei Pou) culture fostered a unique tangible user experience characterized by "queueing" (locally known as Gan Gei) and face-to-face "challenging" (locally known as Tiu Gei). This physical competitiveness laid the groundwork for the region's fighting game expertise. The 2012 world championship victory by a Hong Kong player and the government's 2017 policy recognition shifted the experience from rebellious leisure to professional pursuit. However, recent studies using the Theory of Planned Behavior indicate that while infrastructure (e.g., Cyberport) has improved, the user experience for aspiring "digital athletes" remains conflicted by social stigma and academic pressures. Conclusion: The evolution of esports in Hong Kong represents a shift from immersive physical spaces to digitally mediated professional environments. While the hardware and status of players have upgraded, the core spirit of "challenging" remains. Future developments in immersive media should address the psychological well-being of players to sustain this ecosystem.

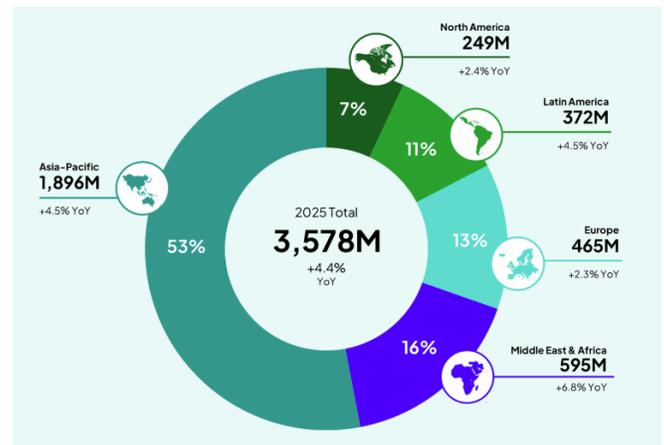
**Keywords:** Hong Kong Esports, Arcade Culture, User Experience, Narrative Review, Digital Athletes.

## 1. INTRODUCTION

Electronic sports (esports) has evolved rapidly from a niche recreational activity into a global phenomenon and a billion-dollar industry (Ahn *et al.*, 2020). Globally, the esports audience was estimated to reach 385 million people and total revenue US\$696 million dollars by 2017 (Warman, 2017), and grow up to 3.6B players (see Fig. 1) and \$188.8B in 2025 revenues (see Fig. 2) (Newzoo, 2025). However, while the global narrative often focuses on the technological infrastructure and massive tournaments of North America and South Korea (Cybersport, 2018), the development of esports in Hong Kong offers a unique case study in the evolution of immersive user experience (Lam & Wong, 2025). In Hong Kong, the journey of the "digital athlete" did not begin in modern stadiums, but rather in the highly regulated and culturally distinct ecosystem of the "Amusement Arcade" (locally known as Gei Pou) (Sing Tao, 2023a).

### 1.1. The Era of Physical Immersion: The Arcade Roo

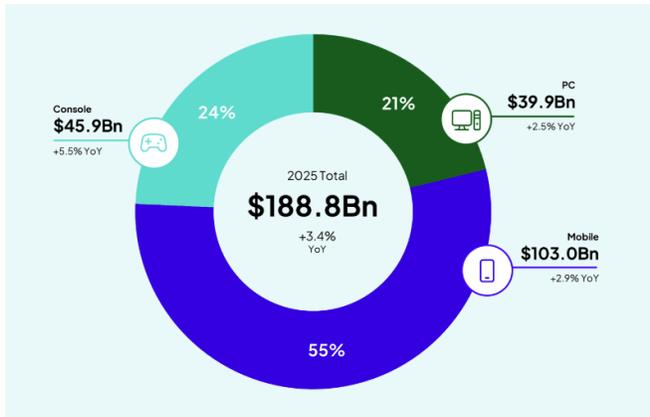
To understand the current user experience of Hong Kong esports, one must examine its origins in the 1980s and 1990s. During this "Golden Era," there were



**Figure 1:** Game Players Globally in 2025 (Source: Newzoo Games Market Reports and Forecasts, August 2025).

over 2,000 licensed game centres across the city (Lorraine, 2016) (see Table 1). Unlike the home-console focus of Western markets (Consalvo, 2006), Hong Kong's gaming culture was forged in shared physical spaces regulated by strict colonial laws, specifically the 1993 Amusement Game Centres Ordinance (Cap. 435) (Amusement Game Centres Ordinance, 1993). This ordinance created a bifurcated user experience: "Adult Centres" (strictly for those aged 16 and above) and "Children Centres", often creating a sense of rebellion and exclusivity for young gamers (Home Affairs Department, 2023).

\*Address correspondence to this author at Hong Kong Shue Yan University, Hong Kong; E-mail: ykwong@hksyu.edu



**Figure 2:** Global Games Market Revenues in 2025 (Source: Newzoo Games Market Reports and Forecasts. August 2025).

**Table 1:** Total number of Game Centers in Hong Kong. (Lorraine, 2016)

The Total Number of Game Centers in Hong Kong	
1980's	>2000
1993	876
2003	420
2012	267
2016	209

The user experience in these spaces was defined by tangible, face-to-face interactions that are rare in modern online gaming (Bernhaupt, 2010). The local lexicon developed unique terms to describe these interactions, such as "Queueing" (Gan Gei), where players placed a coin (Hong Kong one-dollar coin) on the machine to reserve the next turn (Sing Tao, 2023a) (Music Game Info, 2019), and "Challenging" (Tiu Gei), where a player would interrupt another's session to initiate a competitive duel (Wen Wei Po, 2021). This culture of "Challenging" fostered a hyper-competitive environment that prioritized skill and dominance, laying the psychological groundwork for future professional competitors (The Sun, 2012). However, this period was also marked by social stigma; game centres were frequently associated with vice, leading to strict operational restrictions such as midnight closures (later relaxed to 2:00 AM) and bans on school uniforms (Amusement Game Centres Ordinance (1993).

### 1.2. The Digital Transition and Legitimacy Turning Point

The transition from "arcade gamer" to "esports athlete" in Hong Kong was catalyzed by specific

watershed moments that reshaped public perception. The most significant turning point occurred in 2012, when Hong Kong player Kurtis Lau (known as "Toyz") won the League of Legends Season 2 World Championship (League of Legends, 2025) (see Table 2) as part of the Taipei Assassins (TPA) team (NBC News, 2012) (ET today, 2012) (Business Today, 2019). This victory brought global visibility to Hong Kong talent and challenged the traditional narrative that gaming was merely a pastime (Jones & Wirman, 2024) (Lam & Wong, 2025).

**Table 2:** League of Legends Season 2 World Championship Results and Prize Pool (Source: [https://liquipedia.net/leagueoflegends/World\\_Championship/2012](https://liquipedia.net/leagueoflegends/World_Championship/2012)).

Place	\$ USD	Participant
1st	\$1,000,000	Taipei Assassins
2nd	\$250,000	Azubu Frost
3rd-4th	\$150,000	Moscow Five
		CLG Europe
5th-8th	\$75,000	Invictus Gaming
		Najin Sword
		Team SoloMid
		Team WE

Following this, the local industry began to professionalize. In 2013, the first professional team, Hong Kong Esports (HKE), was established (Hong Kong Esports, 2025), followed by the founding of Cyber Games Arena (CGA) and the hosting of tournaments with prize pools exceeding HK\$100,000 (Fandom, 2014) (CGA, 2013). Recognizing this economic potential, the Hong Kong SAR Government formally intervened in the 2017-18 Budget, where the Financial Secretary allocated HK\$ 100 million to promote esports as a new sector with economic potential (ITIB, 2018). This policy shift aimed to transform the user experience from one of underground subculture to mainstream acceptance, culminating in the development of dedicated venues like the Cyberport Esports Arena (Cyberport, 2019).

### 1.3. The Conflict of Experience: Digital Athletes vs. Social Stigma

Despite these advancements, the "user experience" for Hong Kong's youth remains complicated by

conflicting social pressures. Recent studies utilizing the Theory of Planned Behavior (TPB) (see Fig. 3) have highlighted a dichotomy in how esports is perceived (Ajzen, 1991). While players identify beneficial outcomes such as goal achievement, socialization, and stress reduction, they simultaneously face significant barriers (Wong *et al.*, 2021). These include the physical strain of intensive training (e.g., eye fatigue, wrist injuries) and a pervasive negative social image labeled by parents and educators as "waste of time" or academic distraction (Alzahrani, 2017).

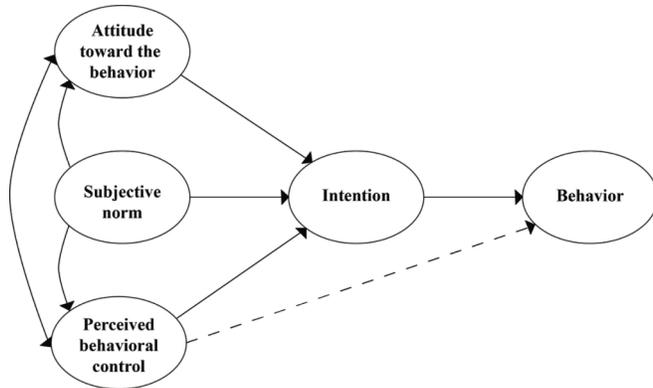


Figure 3: Theory of Planned Behavior (TPB) (Ajzen, 1991).

Furthermore, the public health discourse often conflates esports participation with "Gaming Disorder" (WHO, 2018d) or "Hazardous Gaming" (Chung *et al.*, 2019), concepts recently formalized by the World Health Organization (WHO) in the ICD-11 (WHO, 2018b, 2018c). This medicalization of gaming creates a tension in the user experience: Hong Kong Esports players are celebrated as "athletes" when they win medals—such as the silver medal in Dream Three Kingdoms 2 at the 2022 Hangzhou Asian Games (SFOC, 2022) (see Table 3)—yet are cautioned against "addiction" in their daily lives, addiction of gaming is another issue in Hong Kong (Wong & Lam, 2016).

Table 3: 2022 Hangzhou Asian Games Result of E-sports. (SFOC, 2022)

Sport Event - Hangzhou Asian Games 2022	Name of Athlete	Medal
E-sports	CHAN Cheuk Kit / LAW Hing Lung / YIP Ho Lam / YIP Wai Lam / YUEN Pak Lam	Silver

1.4. Theoretical Framework: Dimensions of Presence

To move beyond a purely descriptive historical account, this review analyzes the evolution of esports

through the lens of "Presence" (Witmer & Singer, 1998) in immersive media, specifically drawing on the distinction between "Physical Co-presence" (Croes *et al.*, 2016) and "Telepresence" (Held, 1992) (Sheridan, 1992). In the arcade era, the user experience was defined by Physical Co-presence—the sensory immediacy of shared space and tactile hardware interaction (Gajadhar *et al.*, 2009). As the industry shifted to digital platforms, the experiential paradigm transitioned toward Telepresence and Social Presence, where immersion is mediated through screens and networks rather than physical proximity (Nowak & Biocca, 2003). This theoretical distinction provides an analytical framework for understanding how the "Challenging" (locally known as Tiu Gei) culture evolved from a bodily confrontation to a digital gaming competition.

1.5. Review Objectives

This narrative review aims to document the evolution of esports in Hong Kong by analyzing the shift in user experience from physical arcades to digital arenas. By synthesizing "grey literature" on arcade history, government policy documents, and academic studies on player perception, this article will: (1) Map the historical trajectory of Hong Kong's gaming culture; (2) Analyze the impact of government legitimacy on the industry ecosystem; and (3) Discuss the current psychosocial landscape for players navigating the boundary between sport and stigma.

2. METHODS

2.1. Research Design

This study employs a narrative review methodology to synthesize diverse forms of evidence regarding the evolution of esports in Hong Kong (Ng, 2006). Unlike systematic reviews that strictly aggregate quantitative data, a narrative review approach was selected to provide a comprehensive, contextualized account of the "user experience" (UX) across different historical eras (Bernhaupt, 2010). This approach is particularly appropriate for this topic due to the fragmented nature of the available literature, which spans cultural history, public policy, and behavioral psychology. By integrating historical narrative with theoretical analysis, this review constructs a holistic timeline of how the phenomenon of "gaming" has transformed from a regulated subculture into a recognized professional industry (Wong *et al.*, 2021). To reduce bias and ensure accuracy, this review cross-references cultural anecdotes with official legal records and industry data.

## 2.2. Data Sources and Search Strategy

Given the hyper-localized nature of the subject matter and the scarcity of formal academic literature on the specific history of Hong Kong arcade culture, a multi-source data acquisition strategy was implemented. Data was triangulated from three distinct categories:

- 1) Academic Literature: Bibliographic databases including Google Scholar were searched to identify peer-reviewed studies relevant to player psychology and public health in Hong Kong. Key search terms included "Hong Kong Esports," "Gaming Disorder," "Theory of Planned Behavior," and "Problematic Gaming". To ensure the inclusion of indigenous cultural contexts often overlooked in English-language literature, specific Cantonese keywords were incorporated into the search strategy. These include "機舖" (locally pronounced Gei Pou, meaning "Game Centre"), "跟機" (locally pronounced Gan Gei, meaning "Queueing"), and "挑機" (locally pronounced Tiu Gei, meaning "Challenging"). This search yielded critical qualitative studies utilizing the Theory of Planned Behavior (TPB) (Ajzen, 1991) to map the beliefs, barriers, and facilitators perceived by local youth, as well as reviews on the public health implications of excessive gaming (Griffiths, 2010).
- 2) Government Policy and Legal Documents: Official publications from the Hong Kong Special Administrative Region (HKSAR) Government were retrieved to analyze the regulatory and economic landscape.
  - o For the historical era, the Amusement Game Centres Ordinance (Cap. 435) (Amusement Game Centres Ordinance, 1993) was analyzed to understand the legal constraints on early gaming venues.
  - o For the modern era, the 2017-18 Budget Address by the Financial Secretary was reviewed to document the government's strategic shift toward recognizing esports as a sector with economic potential, including the HK\$100 million allocation for industry development (ITIB, 2018).
  - o Reports from the Cyberport management regarding the establishment of the dedicated Esports Arena were also included (Cyberport, 2018a).

- 3) Grey Literature and Historical Archives: To reconstruct the "Arcade Era" (1980s–2000s) and specific cultural phenomena where academic records are absent, this review rigorously incorporated "grey literature." This included local blog (Old Hong Kong, 2025)(Austinroad, 2022), news archives (SCMP, 2017)(HK01, 2025), industry chronicles from the E-Sports Association Hong Kong (ESAHK, 2025), and cultural documentation of arcade terminologies (HKSJU, 2013). To reduce potential selection bias, grey literature sources were selected based on their documentation of verifiable historical milestones (e.g., tournament results, documented legislative changes) rather than purely subjective opinion pieces. These sources were essential for defining unique local cultural practices such as "Queueing" (Gan Gei) (Kantorates, 2014) and "Challenging" (Tiu Gei) (Wen Wei Po, 2021), as well as tracking the competitive achievements of Hong Kong athletes in international events like the League of Legends World Championship and the Asian Games.

## 2.3. Inclusion Criteria and Timeframe

The review encompasses a timeframe from the 1980s to August 2024 (Fung, 2018). The starting point marks the proliferation of licensed game centres in Hong Kong (Amusement Game Centres Ordinance, 1993), while the endpoint captures recent developments, including Hong Kong athletes winning the Pokémon GO World Championship in 2024 (SCMP, 2024). Inclusion was restricted to materials that specifically address the Hong Kong context or international events with direct Hong Kong participation.

## 2.4. Data Synthesis and Thematic Analysis

Data extracted from these sources were synthesized thematically to trace the evolution of the user experience. Information from 'grey' literature was integrated with official records to construct a comprehensive historical timeline. The analysis was structured into three chronological and thematic phases:

1. The Era of Physical Immersion (1980s–2000s): Focusing on the tactile and face-to-face experience of arcade culture.
2. The Legitimacy Turn (2012–2017): Analyzing the impact of international competitive success and subsequent government policy intervention.

3. The Modern Ecosystem (2018–Present): Examining the current dichotomy between professional infrastructure and social stigma/public health concerns.

### 3. RESULTS

The evolution of the esports user experience in Hong Kong can be categorized into three distinct phases: the era of physical arcade immersion, the democratization via the "shadow market," the transitional period of legitimization, and the modern era of professionalization and psychosocial conflict.

#### 3.1. The Era of Physical Immersion: Arcade Culture (1980s–2000s)

##### 3.1.1. The Regulated Space: The Rise of "Gei Pou"

During the 1980s and 1990s, the primary locus of the gaming experience was the "Amusement Game Centre," locally known as Gei Pou (Sing Tao, 2023a). At its economic peak in the 1980s, Hong Kong hosted over 2,000 licensed game centres (Lorraine, 2016). Unlike the private, home-console experience common in the West (Consalvo, 2006), Hong Kong's gaming culture was fundamentally public and communal, yet strictly regulated. From an experiential design perspective, this environment was defined by strict "Spatial Constraints" (Borrmann *et al.*, 2009). The colonial government implemented the Amusement Game Centres Ordinance (Cap. 435) in 1993 to control these spaces (Amusement Game Centres Ordinance, 1993). This legislation created a bifurcated user experience by strictly dividing venues into "Adult Centres" (16+ only) and "Children Centres" (under 16) (Home Affairs Department, 2023).

The user experience was heavily defined by these regulatory constraints (Barbara, 2017) (Bernhaupt, 2010). Students in school uniforms were prohibited from entering "Adult" centres", and operations were curbed between midnight and 8:00 AM (later relaxed to 2:00 AM in 2002) (Amusement Game Centres Ordinance, 1993). These restrictions framed the act of gaming as a rebellious, "underground" activity, often associated by the public with vice, smoke-filled environments, and truancy.

##### 3.1.2. The Rituals of Interaction: "Gan Gei" and "Tiu Gei"

The immersive nature of this era was characterized by unique, unwritten social protocols that governed player interaction. The most iconic ritual was

"Queueing", known as Gan Gei (Kantorates, 2014) (Kwok, 2024), where a waiting player would place a one-dollar coin on the machine's control panel to physically reserve the next round. Functioning as a "tangible affordance" (Norman, 1999), this token served as a binding reservation system. This tangible token served as a binding reservation system, creating an orderly yet high-pressure social environment (Sing Tao, 2023a).

Furthermore, the concept of "Challenging", known as Tiu Gei (Wen Wei Po, 2021) (Old Hong Kong, 2025), emerged as the dominant form of competitive interaction. Unlike modern online matchmaking which is anonymous and automated, Tiu Gei involved a player physically stepping up to a machine occupied by another to initiate a duel. This face-to-face proximity heightened the psychological intensity of the experience "Physical Co-presence" and psychological intensity of the experience (Barbara, 2017; Emmerich & Masuch, 2017). The community developed its own code of ethics, such as the "Let Round" (locally known as Yeung Round), where a player leading 2-0 in a best-of-three match might intentionally lose a round to prolong the gameplay experience for the opponent (New Monday, 2016). Conversely, exploiting software bugs to win was termed Wat Gei, a derogatory slang for unfair play that remains in the local lexicon (Executor, 2018).

##### 3.1.3. Cultural Permeation and Decline

This subculture permeated mainstream media, solidifying the arcade as a cultural icon (Wong, 2010). During the 1990s, there were many Hong Kong movies that featured actors who were specifically cast to portray characters from popular video games. This trend highlighted the growing influence of video game culture on the film industry, as filmmakers sought to bring these iconic characters to life through live-action adaptations (Leona, 2021) (Cheuk, 2008). However, by the 2000s, with the rise of home consoles and mobile gaming, the necessity of the physical centre declined (Wei Po, 2025a). By 2023, the number of licensed centres had plummeted to fewer than 100, marking the end of the era of mass physical immersion.

##### 3.1.4. The Shadow Ecosystem: "Game Doctors" and the Democratization of Play

While arcades provided a public competitive arena (Gao *et al.*, 2022), the domestic user experience was shaped by a unique economic phenomenon: the "Shadow Market" of software piracy (Dan, 2018). In the

late 1980s and early 1990s, for example, Nintendo Entertainment System launched in 1985 (Wired, 2010). The cost of a Nintendo Entertainment System (NES) Disk System was prohibitively expensive (Nintendo, 1985), representing nearly a third or quarter of the average Hong Kong worker's monthly salary (CSD, 1985) (Fandom, 2025). This economic barrier threatened to restrict gaming to the elite.

However, Hong Kong's user experience was transformed by local technological ingenuity—specifically, the widespread adoption of unauthorized backup devices known colloquially as "copiers" or "doctors", e.g., Game Doctor, Super UFO, etc...(Famicom Disk System, 2025)(Cheung, 2023). These devices allowed players to play games from inexpensive floppy disks instead of expensive cartridges. This created a hyper-localized distribution network where even neighborhood stationery stores and convenience stores offered "disk copying services" for as little as HKD 5–10 (Fandom, 2025).

This phenomenon had two profound effects on the esports user experience. First, it democratized access, allowing the working-class youth to access a vast library of games (Dan 2018)(HK01, 2024). Second, these devices inadvertently functioned as early training tools, allowing players to dissect game mechanics and practice difficult segments repeatedly. While Japan labeled Hong Kong a "Copy Heaven" of the video game during this period (Fuji TV, 1990), this era was instrumental in building the critical mass of gamers required for a future esports ecosystem. The era eventually faded in the late 1990s due to the shift to optical discs and stricter customs enforcement (Wong & Yeung, 1998).

### **3.2. The Digital Shift and the Legitimacy Turn (2012–2017)**

#### **3.2.1. The "Sputnik Moment": TPA's Victory**

The transition from "arcade gamer" to "esports athlete" in Hong Kong was catalyzed by a singular event in 2012. Hong Kong player Kurtis Lau Wai-kin (known as "Toyz") won the League of Legends Season 2 World Championship (Krdzic, 2025) as part of the Taipei Assassins (TPA) team (NBC News, 2012) (ET today, 2012) (Business Today, 2019). This victory brought global visibility to Hong Kong talent and fundamentally challenged the narrative that gaming was merely a pastime. It served as a proof of concept that Hong Kong players could compete on the world stage, sparking widespread social discussion on the

potential of esports as a career (Wen Wei Po, 2025b) (Toyz, 2019).

#### **3.2.2. Industrialization and Government Intervention**

Following this victory, the local ecosystem began to professionalize rapidly. In 2013, the first professional team, Hong Kong Esports (HKE), was founded (Hong Kong Esports, 2025), followed by the establishment of Cyber Games Arena (CGA 2025). These organizations began hosting tournaments with prize pools exceeding HK\$100,000, shifting the user experience from casual arcade play to organized, high-stakes competition (Fandom, 2014).

The turning point for legitimacy occurred in 2017. In the 2017-18 Budget, the Financial Secretary officially identified esports as a "new sector with economic development potential" (ITIB, 2018). This was the first explicit government endorsement of the industry. In 2017, Hong Kong General Chamber of Commerce mentioned that the Esports industry has experienced rapid growth both in Hong Kong and globally (HKGCC, 2018). It globally generated an estimated revenue of US\$696 million, which was projected to rise to US\$1.49 billion by 2020, establishing itself as one of the fastest-growing economic activities worldwide (Newzoo, 2017).

The Cyberport management submitted a report later that year outlining strategies to promote eSports development in Hong Kong, nurture talent and build dedicated esports venues, signaling a permanent shift in the infrastructure of the user experience (Cyberport, 2018b).

### **3.3. The Modern Ecosystem: Infrastructure, Achievement, and Experience (2018–Present)**

#### **3.3.1. Professional Infrastructure and Competitive Glory**

The post-2017 era has been defined by the development of professional-grade infrastructure. In 2019, the Cyberport Esports Arena was officially opened (Legislative Council, 2021). Funded by HK\$50 million, this 4,000-square-foot venue with a capacity for 500 spectators represented a tangible upgrade in the user experience, moving players from the cramped corners of Gei Pou to stadium-style arenas (SCMP, 2019).

This era also witnessed significant competitive achievements. Hong Kong athletes have continued to excel in individual and team events. Notably, in 2023,

the Hong Kong team won a historic silver medal in Dream Three Kingdoms 2 at the Hangzhou Asian Games (Sing Tao, 2023b). Hong Kong Attitude wins the 2023 Summer Arena of Valor Hong Kong-Taiwan-Macau League Championship. Once again claiming the summer championship in an odd-numbered year, they become a three-time champion in the GCS region (PS Esports, 2023).

Individual excellence remains a hallmark of the region, exemplified by "Mr. Chung" winning the Summoners War World Championship in 2020 (PS Esports, 2020), Chris Wong placing second at the Capcom Cup X (Street Fighter 6) in 2024 (Capcom, 2025) (PS Esports, 2024), and Cheng Yip-kai winning the Pokémon GO World Championship in August 2024 (Pokemon, 2024).

### 3.3.2. The Psychosocial User Experience: Insights from TPB

Despite infrastructural and competitive gains, the subjective user experience for Hong Kong youth remains conflicted. Qualitative studies utilizing the Theory of Planned Behavior (TPB) reveal a complex psychological landscape for players (Ajzen, 1991).

**Barriers and Stigma:** Conversely, the experience is hindered by "Normative Beliefs"—specifically, the disapproval of parents who view esports as a "waste of time" (Uuskoski, 2011) or a threat to academic performance (Burgess *et al.*, 2012). Players also report physical strain as a significant negative outcome, including eye fatigue and chronic wrist injuries, which differs from the physical fatigue of traditional sports (Alzahrani, 2017).

The modern user experience is thus characterized by a paradox: players are celebrated as national heroes when they win medals (SFOC, 2022), yet face significant social stigma and academic pressure in their daily lives, navigating an identity that fluctuates between "digital athlete" and "distracted student" (Wong & Lam, 2016).

## 4. DISCUSSION

This narrative review has traced the trajectory of Hong Kong esports from the regulated confines of the 1980s "Game Centres" to the global stage of the 2023 Asian Games (Asian Games, 2023). By synthesizing historical "grey literature" with modern behavioral studies, we identify three critical dimensions that define the evolution of the Hong Kong esports user

experience: the transformation of immersive spaces, the democratization of access through informal markets, and the persistent psychosocial paradox of the digital athlete.

### 4.1. From Tactile to Cognitive Immersion: The Legacy of "Tiu Gei"

The first major finding of this review is that the core "user experience" of Hong Kong esports was established long before the advent of high-speed internet. Applying the Presence framework, the arcade culture of the 1980s fostered a specific type of physical immersion: Physical Co-presence (Croes *et al.*, 2016) (Gajadhar *et al.*, 2009). The concept of Tiu Gei (Challenging) was not merely a gameplay mechanic but a social ritual requiring physical courage—interrupting a stranger's game face-to-face. This created a high-stakes environment where skill was the only currency.

While the medium has shifted from the tactile feedback of arcade joysticks to the cognitive immersion of Telepresence (Held, 1992) (Sheridan, 1992) of cloud-based arenas, this cultural DNA persists. Modern Hong Kong players, particularly in the Fighting Game Community (FGC), continue to excel in 1-on-1 disciplines (e.g., Street Fighter, Pokémon GO), arguably a legacy of the "Challenging" culture. However, the loss of the physical "Gei Pou" (Game Centre) as a community hub has altered the socialization aspect: nature of Social Presence. As noted in the TPB studies, modern socialization occurs via headsets and discord servers, which broadens global connectivity but removes the tangible, hyper-local community bonding: the sensory immediacy that defined the arcade era.

A systematic comparison of these experiential dimensions reveals a fundamental shift. In terms of sensory immersion (Nilsson *et al.*, 2016), the user experience has moved from the noisy, tactile environment of the arcade cabinet to a primarily visual focus mediated by screens and headsets. Social interaction (Turner, 1988) has similarly transformed from face-to-face "Challenging" (Tiu Gei) to online competition, removing physical contact while enabling global connection. Finally, regarding user agency (Snow *et al.*, 2015), players in the arcade era were restricted by opening hours and physical "Queuing" (Gan Gei); conversely, the modern digital gaming offers "on-demand" access to play anytime.

## 4.2. The "Shadow Market" as an Accelerator of Expertise

A unique insight from this review is the pivotal, albeit controversial, role of the "Shadow Market" in shaping the user experience. The proliferation of "Game Doctors" and cheap copied disks in the 1990s essentially democratized the user experience. In an era where legal software cost 25% to 33% of a monthly salary, piracy lowered the economic barrier to entry, allowing working-class youth to access a vast library of content.

This phenomenon challenges the Western-centric narrative that esports development requires affluent infrastructure. In Hong Kong, the early "training" of future professionals was facilitated by unauthorized technology. This inadvertently created a user experience focused on mastery through repetition. This historical context explains why Hong Kong produced world-class talent like Toyz (Lau Wai-kin), who won the League of Legends 2012 Season World Championship and the Finals MVP (League of Legends, 2025), despite lacking the government support seen in South Korea during the same period. The user experience was one of resourcefulness and adaptation, traits that remain vital in the competitive landscape.

## 4.3. The Modern Paradox: "Athletic Glory" vs. "Hazardous Play"

The most significant finding regarding the contemporary user experience is the widening gap between industry legitimacy and social perception. While the government's 2017 funding (ITIB, 2018) allocation and the 2019 opening of the Cyberport Arena (Cyberport, 2025) provided the hardware for a professional experience, the "software"—the social and familial support systems—has not kept pace.

As highlighted by the Theory of Planned Behavior (TPB) studies, the user experience for young players is characterized by cognitive dissonance. Applying this theory to user experience design reveals a key conflict that players now have high "Perceived Behavioral Control" (Ajzen, 2002) because access to hardware is easy, but they face negative "Subjective Norms" (La Barbera *et al.*, 2020) from disapproving parents. This creates a mental barrier that prevents players from fully immersing themselves in the game. On one hand, they are aspiring "digital athletes" capable of winning Asian Games medals; on the other, they operate within a domestic environment where gaming is often framed as

"addiction" or a "waste of time" by parents. This is exacerbated by the WHO's classification of Gaming Disorder (WHO, 2018d). The result is a user experience fraught with anxiety, where the joy of "Flow" (Csikszentmihályi, 1975) is constantly interrupted by the guilt of "non-productivity.". Unlike traditional athletes who receive universal praise, Hong Kong esports players must constantly negotiate their identity, leading to a psychological burden that is distinct from other sports.

## 4.4. Implications for Future User Experience

For the Hong Kong esports ecosystem to mature, the focus must shift from "Hardware" (venues and speed) to "Humanware" (player well-being and career sustainability).

- Health-Conscious Design: Given the reports of physical strain (e.g., chronic wrist problems), the industry must integrate sports science into the user experience, similar to traditional athletics.
- Career Pathways: To alleviate the "waste of time" stigma (Uuskoski, 2011)(Alzahrani, 2017), the user experience must be reframed as a viable career path. Recent initiatives like the "Esports Technology and Management" course in secondary schools are positive steps (HKU Space, 2025). By formalizing the education pipeline, the narrative changes from "playing games" to "developing digital skills," thereby improving the normative beliefs of parents and teachers.

## 5. CONCLUSION

This narrative review has chronicled the unique evolutionary path of Hong Kong esports, revealing a transition from the tactile intensity of 1980s arcade culture to the government-sanctioned digital arenas of the present day. Unlike other regions where esports grew primarily from home consoles, Hong Kong's user experience was forged in the regulatory and physical confines of the "Gei Pou," creating a legacy of face-to-face competitiveness ("Challenging") that persists in the region's DNA. Furthermore, the often-overlooked "Shadow Market" of the 1990s played a critical role in democratizing access to gaming, inadvertently training a generation of talent by lowering economic barriers.

While the 2012 world championship victory and the 2018 government policy shift successfully upgraded the "hardware" of the user experience—providing professional venues and funding—the "software" of

social acceptance lags behind. The modern Hong Kong digital athlete operates within a paradox: celebrated as a hero on the podiums of the Asian Games, yet stigmatized as a "gamer" within the domestic sphere due to prevailing academic pressures and public health concerns regarding addiction.

Future developments in the Hong Kong esports ecosystem must therefore look beyond infrastructure. To enhance the user experience for the next generation, stakeholders must bridge the gap between "sport" and "stigma." This requires a holistic approach that integrates sports science to manage physical strain, formalizes educational pathways to legitimize the career, and preserves the unique cultural heritage of the city's gaming roots. Only by resolving this psychosocial conflict can Hong Kong transform from a city of arcade challengers into a sustainable hub for digital athletes.

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## CONFLICTS OF INTEREST

The author is a member of the editorial board of Immersive Media and User Experience. The author declares no other conflict of interest relevant to this article. The peer review process was guided by the journal's standard procedures to ensure impartiality.

## ETHICAL APPROVAL

Not applicable. This article is a narrative review of existing literature and did not involve new data collection from human or animal subjects.

## DATA AVAILABILITY

Data sharing is not applicable to this article.

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