

Contents lists available at ScienceDirect

Computers in Human Behavior Reports



journal homepage: www.sciencedirect.com/journal/computers-in-human-behavior-reports

Exploring stakeholders' perspectives on esports players' wellbeing and career prospects

Check for updates

Hee Jung Hong *

Faculty of Health Sciences and Sport, University of Stirling, Stirling, Scotland, UK

| ARTICLE INFO | A B S T R A C T | |
|---|--|--|
| Keywords: Career development in esports Duty of care in esports Esports industry Physical and mental wellbeing Support systems | This study aims to explore the perceptions of key stakeholders in the esports industry regarding how players can ensure their wellbeing while practicing and competing, as well as their perspectives on the career prospects of esports players. While there has been a growing body of research on esports, including the topic of players' wellbeing, there is a lack of studies that explore stakeholders' perspectives on players' wellbeing and career prospects in the esports industry. This study employs a qualitative case study approach using semi-structured interviews to explore key stakeholders' perceptions including event organisers ($n = 2$), an international esports association ($n = 1$), a national esports federation ($n = 1$), a professional team ($n = 1$), and a sponsor ($n = 1$). The key stakeholders interviewed for the study are prominent and influential leaders in the esports industry. Through thematic analysis, three themes were identified: (a) Importance of Maintaining Physical Health, (b) Developing Life and Transferrable Skills, and (c) Understanding Esports Careers and Developing Future Plans. The findings highlight the significance of physical health, psychological resilience, communication skills, financial management, and career planning. These factors positively impact on players' wellbeing and career prospects, not only during their active esports career but also in their post-esports career. This exploratory study, thus, offers in-depth insights from key industry leaders, emphasising the need for focused support mechanisms for esports players. This encourages further investigation into players' wellbeing and career prospects, providing and career prospects, providing additional empirical evidence to establish effective support systems. | |

Recent showcases of esports at the Olympic Esports Week in Singapore in June 2023 and at the 19th Asian Games 2023 in Hangzhou are good examples of how esports have grown and expanded as a major global event, attracting remarkable attentions in particular from younger generations (Seo, 2023; Shankar, 2023; Wan, 2023). Esports is indeed a rapidly evolving field driven by digital technology, blending elements of culture, sport, business, and media (Jenny et al., 2017; Meng-Lewis et al., 2022). The rapid rise of esports has led to a significant increase in the number of esports players, with the industry becoming an appealing career path, particularly for youth (Kocadağ, 2019; Salo, 2017). In this respect, it is not surprising that esports have positioned as critical part of video gaming communities, which mainly comprised of teenagers and young adults (Bányai et al., 2019). Participation in esports enables young people to develop key life skills such as communication and teamwork (Tang, 2018). Youth can also acquire transferable skills including technological literacy, critical thinking (Hsu & Wang, 2010), and the ability to think systematically (e.g., Gee, 2008; Zimmerman, 2008). Researchers further pointed out that esports provide a unique space where individual abilities are clearly demonstrated, offering valuable insights into how natural talents interact with personal development (Kechagias, 2011; Pluss et al., 2019). Such skills that young people develop through esports can be classified as "21st century literacy skills" (Schrader et al., 2009, p. 794), which are critical for equipping the young generation to address future challenges and are highly valued by employers (Bellanca & Brandt, 2010).

Despite the positive aspects of engaging in esports, young players, particularly those who recognise their talent and potential for becoming professional players, may face challenges and issues related to their long-term career development and wellbeing. For instance, they may drop out of education to pursue professional esports careers; however, this choice could limit long-term development due to short careers and early career termination (Hong, 2023). Researchers have also raised concerns about young players, including online abuse, lack of coping skills, sedentary lifestyles, and poor mental health impacting overall wellbeing (Himmelstein et al., 2017; de Rezende et al., 2014; Monteiro Pereira, 2022). Due to the demanding nature of playing esports, which

https://doi.org/10.1016/j.chbr.2025.100589

Received 7 August 2024; Received in revised form 6 January 2025; Accepted 6 January 2025 Available online 7 January 2025 2451-9588/© 2025 The Author. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

^{*} Faculty of Health Sciences and Sport, University of Stirling, Stirling, FK9 4LA, Scotland, UK. *E-mail address:* heejung.hong@stir.ac.uk.

requires commitments such as long hours of practice, young people may experience stress, mental illness, and poor decision-making (Wattanapisit et al., 2020). This highlights the need for significant social and emotional support for players (DiFrancisco-Donoghue et al., 2019; Freeman & Wohn, 2017). As such, there remains a need to explore perspectives of esports players and supporting staff members on esports players' needs and experiences to enhance the provision of appropriate health and wellbeing support (Monteiro Pereira et al., 2023).

While researchers have consistently highlighted these issues and interest in the field continues to grow, there is still a need for a deeper understanding of players' coping strategies, their specific needs, and the support required for their health and wellbeing (Hong & Connelly, 2022; Poulus et al., 2022). Although the stressors esports players face and the coping strategies they use have been increasingly identified (e.g., Leis et al., 2024), which can inform the industry about the needs of esports players, there is also a knowledge gap concerning stakeholder perceptions within the esports industry about player wellbeing and approaches to addressing such issues. It should be highlighted that stakeholders play a significant role in influencing the conditions where esports players perform as they are often decision-makers in the industry (Hong, 2023). As such, their perspectives can guide the development of policies, allocation of resource, and support systems designed to address player wellbeing and welfare efficiently. In this respect, researchers and practitioners may need to work collectively on developing support systems for esports players, who significantly contribute to the growth and sustainability of the industry (Hong, 2023; Scholz, 2020; Shulze et al., 2023). This study, thus, aims to explore the perceptions of key stakeholders in the esports industry regarding how players can ensure their wellbeing while practicing and competing, as well as their perspectives on the career prospects of esports players.

1. Literature review

1.1. Theoretical background

1.1.1. Stakeholders in the esports ecosystem

Scholz (2020) contextualised stakeholders in the esports industry, as illustrated in Fig. 1, serving as the basis for identifying key stakeholders for the present study. The esports ecosystem is centralised around the players, with game developers, who play a significant role in the design and creation of specific esports games, being key stakeholders. Every aspect of value network expands upon theses specific esports games, with the aim of providing an equal and intriguing competition. As another primary stakeholder, tournament organisers play a significant role in fostering the growth of competitive esports. Esports titles and tournaments serve not only as competitions but also culture and social gatherings for players. Professional esports teams, another group of primary stakeholders, scout for top talent and offer comprehensive support, including training and coaching. The players, as another group of primary stakeholders, are the foundation of the ecosystem, significant for developing the sports infrastructure and supporting the growth of amateur and grassroots levels. Secondary stakeholders also play a significant role. For instance, sponsors and other secondary stakeholder contribute to the financial stability of esports players and shape the development of esports ecosystem. Thus, they were also considered participants in this study for their influential role.

1.1.2. Interorganizational relationships

To better understand the stakeholders of the esports industry and their potential collaborations aimed at promoting and enhancing players' physical health and mental wellbeing, interorganizational

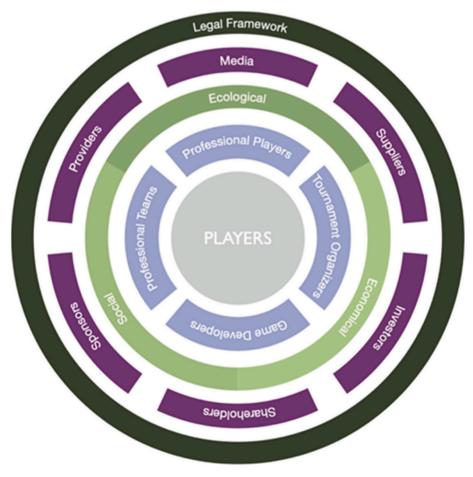


Fig. 1. Categorization of the esports ecosystem (Scholz, 2020).

relationships (IORs) were examined. In the traditional sport context, the significance of IORs has become a crucial aspect of how different sport organisations operate (Babiak et al., 2018; Bingham & Walters, 2013; Franco & Pessoa, 2013). This is because there have been growing numbers of partnerships and collaborations in the sport industry, highlighting the importance of IORs (Babiak et al., 2018). Robinson et al. (2000) proposed three ideal types as conceptual tools for understanding interorganizational relationships (IORs): competition, co-ordination, and cooperation. These three types, originating from sociologist Max Weber, outline characteristics of social phenomena that may not always be observed in reality (Robinson et al., 2000). Robinson and colleagues define competition as applying to both resource scarcity and the competition for new ideas, values, and needs, impacting interorganizational relationships. Co-ordination involves organising activities through authority, hierarchy, and rules to align stakeholders' interests for operational efficiency. Finally, co-operation focuses on building consensus and shared actions among stakeholders to achieve collective outcomes through collaboration rather than competition.

Wong and Meng-Lewis (2023) applied Weber's three ideal types to the esports context, highlighting the critical role of competition in driving innovation and interconnection among stakeholders (Scholz, 2019; Wong & Meng-Lewis, 2023). For instance, competition between streaming platforms and broadcasters, as well as the short, high-turnover careers of professional players, fosters industry growth (Meng-Lewis et al., 2022; Scholz, 2020). Co-ordination in esports, which was traditionally associated with state/government regulated rules and hierarchy (Robinson et al., 2000), has evolved into a self-regulated ecosystem reliant on mutual dependence among stakeholders (Lin & Zhao, 2020; Wong & Meng-Lewis, 2023). While competition is critical, cooperative strategies such as franchising and community collaboration ensure industry stability and expansion (Peng et al., 2020; Scholz, 2019; Wong & Meng-Lewis, 2023). As such, collaboration between stakeholders appears to be significant for the industry's ongoing growth and sustainability. In this context, establishing a support system and putting collaborative and collective effort on ensuring players' physical health and mental wellbeing is considered critical (Hong, 2023). Hardy et al., (2003) highlighted the effect of collaboration, which they defined it as "a cooperative, interorganizational relationship that is negotiated in an ongoing communicative process, and which relies on either market or hierarchical mechanisms of control (p. 323)". The conception of collaboration spans different forms of partnerships, such as consortium, networks, associations, identifying unique characteristics that separate it from other interorganizational efforts. Hardy et al. (2003) pointed out that a significant impact of collaboration is its ability to enhance organisational capabilities by sharing and combining resources. Collaboration also contributes to organisations being able "to better utilise strategic alliances as vehicles for learning new technologies and skills from their alliance partners" (Lei & Slocum, 1992, p. 81). Thus, it is crucial to highlight and promote collaboration among stakeholders in the esports industry to optimise their collective capacity and resources. Such support will be crucial for individuals engaged in esports, particularly for professional esports players, who are the primary stakeholders and central figures in the industry.

This study is part of a larger project focused on developing and implementing a customised scale to assess the health and wellbeing of esports players. The broader project aims to explore the insights and perceptions of both esports players and key stakeholders concerning players' wellbeing and career prospects. The present study focuses on the second part of the project, which examines stakeholders' perspectives on esports players' wellbeing and career prospects. By integrating IORs with Scholz's (2020) categorization of the esports ecosystem, the study, thus, aims to explore the perceptions of key stakeholders in the esports industry regarding how players can ensure their wellbeing while practicing and competing, as well as their perspectives on the career prospects of esports players.

1.2. Concerns about players' health and wellbeing raised in esports

Recently, the field of esports research has experienced significant expansion, leading to an increase in studies focused on players' physical health and mental wellbeing (Hong, 2023; Monteiro Pereira et al., 2022; Rudolf et al., 2022; Shulze et al., 2023; Yin et al., 2020). World Health Organization (WHO) defines mental health as "a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community. It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships and shape the world we live in" (World Health Organization, 2022, para 1). Considering the definition, this study applies the term *mental wellbeing* instead of *mental health* to highlight positive mental health, which not only enhances quality of life but also social cohesion, productivity, and long-term development.

In Palanichamy et al.'s (2020) systematic review, they identified three key areas to understand esports from a health perspective: (a) esports and physical issues, (b) esports and psychological distress, and (c) esports and addiction. The findings from their study indicate that excessive engagement in playing esports and its competitive aspect can lead to significant physical health concerns, including visual strain, lumbar discomfort, headache, as well as psychological problems, including depression, anxiety, mental/social life distress, and sleep/e-motional disruption. Professional esports performance requires extensive game knowledge, strategic development, motivation, and motor control skills (Pedraza-Ramirez et al., 2020), subjecting players to physical and psychological stressors similar to traditional sport athletes (Hallmann & Giel, 2018; Himmelstein et al., 2017; Smith et al., 2019).

Players may also face sleep and mood disorders, negatively impacting performance (Eickhoff et al., 2015; Palanichamy et al., 2020). It was also found that prolonged hours of playing esports online significantly impact psychological distress and mental health concerns such as social phobia, obsession-compulsion, paranoid ideation, and gaming addiction (Palanichamy et al., 2020). The competitive nature of esports presents players with challenges such as pressure from competitive environment, bullying, and unsatisfactory and miscommunication with team members. These factors, particularly related to team communication, adversely affect team dynamics, eventually impacting team success (Himmelstein et al., 2017). The intense demands of training and competitions in esports also lead to stress, mental illness, and poor decision-making, highlighting the need for social and emotional support within the esports ecosystem (DiFrancisco-Donoghue et al., 2019; Wattanapisit et al., 2020). Thus, player welfare, which includes both the physical health and mental wellbeing of young participants, emerges a critical concern in the esports industry (Kelly et al., 2022).

A scoping review conducted by Monteiro Pereira et al. (2022) highlighted key research areas in esports players' health and wellbeing including lifestyle habits, sleep, exercise and physical health, physiological demands, and mental health. Interestingly, their findings demonstrate that esports have transcended its recreational origins, showing parallels with traditional sport in relation to player experiences and challenges (Monteiro Pereira et al., 2022). As a result, esports players train and compete, adopting lifestyle and behaviours that are comparable with those of high-performance athletes in traditional sport. In this respect, professional esports players also face challenges such as injuries, being cut from the team, public and press exposure, and mental and physical fatigue, paralleling the experiences of traditional high-performance athletes. These challenges do require proactive and protective measures and interventions for their mental and physical health and wellbeing (Rice et al., 2016).

High-performance athletes experience psychological challenges, including depression, anxiety, and poor self-esteem (Taylor & Ogilvie, 2001; Webb et al., 1998), which can result in mental health issues and risk-taking behaviours (Hughes & Leavey, 2012). Thus, interventions from sport governing bodies can enhance athletes' wellbeing and

support their successful transitions out of sport (Hong & Coffee, 2018). Wylleman (2019) also suggested that these bodies and stakeholders play a critical role in positively influencing athletes' career development, health, and wellbeing. In this respect, Hong (2023) explored the roles of esports stakeholders in safeguarding player health and wellbeing, highlighting the need for a structured support system. Such a system would aim to promote holistic health and wellbeing by addressing barriers such as sedentary habits, physical inactivity, excessive gaming behaviours, psychological distress, and mental ill-health. However, there remains an unexplored area in the literature about key stakeholders' perspectives on how players can ensure their wellbeing while practicing and competing, as well as on the career prospects of esports players. Despite esports' rising popularity, there is scarce research addressing health issues associated with heavy involvement in playing and watching esports, and mental health challenges such as excessive gaming, gaming addiction/disorder, burnout, discrimination, and cyberbullying (Hong & Hong, 2023; Yin et al., 2020). Thus, more research is needed on both physical health and mental wellbeing, employing more diverse methodologies and approaches to expand our understanding and knowledge in the field (Monteiro Pereira et al., 2022).

1.2.1. Players' physical health

There has been a growing interest among researchers in examining the physical health implications for individuals engaged in esports. Esports players, due to the long hours spent practicing and competing, are prone to musculoskeletal issues in their neck, spinal area, and upper limbs (McGee et al., 2021). Such risk is attributed to the sedentary nature of the esports, which involves maintaining the same seated position or poor posture (McGee et al., 2021; Zwibel et al., 2019). It was found by Kari and Karhulahti (2016) that esports players train for approximately 5.28 h each day, with 1.08 h of that time spent on physical exercise. Such routine is associated with adverse effects on their physical, psychological, and cognitive health (de Rezende et al., 2014). Rechichi et al. (2017) indicates that professional players may suffer from occupational overuse syndrome due to repetitive movements and excessive muscle overuse. It is also worth noting that esports players commonly report physical health issues including eye fatigue and pain in the neck, back, wrist, and hands (DiFrancisco-Donoghue et al., 2019). Despite some progress, there is still a lack of comprehensive understanding about the cardiovascular, respiratory, consumption, and metabolic health risks in esports (Pereira et al., 2019). Monteiro Pereira et al. (2022) also highlighted the need for more research on cardiovascular health and the impact of performance-enhancing drugs in this field. In their recent study of identifying perspectives of eFootball players and staff members regarding the effects of esports on health, by interviewing five elite electronic football players, one world-class electronic football player, two national team coaches, and two members of the esports department, Monteiro Pereira et al. (2023) reported that all their participants identified a close connection between esports and physical health challenges, with the main causes being gaming equipment, facilities, and extended periods of sitting. In this regard, they also suggested that the use of ergonomically designed chairs, controllers, and monitors equipped with advanced features to reduce posture and vision-related risks was recommended by the participants in order to prevent physical health issues, which may require external support from key stakeholders such as sponsors and professional teams. Although research pointed out the significance of ensuring esports' physical health and addressing its associated challenges, there remains an empirical gap in understanding key stakeholders' perceptions on this topic. Understanding their perceptions and insights is crucial, as it can guide esports players in establishing healthy behaviours and lifestyles. Moreover, gaining insight into stakeholder perceptions can help players more effectively manage potential challenges and barriers related to physical health issues.

1.2.2. Players' mental wellbeing

As the esports industry grows, the mental wellbeing of its players is receiving increasing attention. In particular, the extensive hours spent gaming and rigorous training schedules are associated with a range of mental health issues. A study focusing on professional esports players found that Korean players, training more hours daily compared to their U.S. and Australian opponents, exhibited significantly higher depression scores, attribute d to disrupted sleep patterns (Lee et al., 2021). These findings are in line with those of Dworak et al. (2007), who reported that excessive gaming leads to sleep disturbances and a decline in verbal memory performance. Such excessive gaming may also create potential barriers to esports players' performance, such as confidence issues, insufficient coping strategies/skills for anxiety, dwelling on past mistakes, experiencing harassment, and struggling to balance esports with life (Himmelstein et al., 2017). Monteiro Pereira et al. (2021) reported that esports players showed prevalent issues, such as distress, depressive and anxiety symptoms, sleep difficulties and poor nutrition habits. They pointed out that understanding such issues in esports players is critical for reducing its effects, as their approaches to managing anxiety and depression may influence their everyday lives. Shulze et al. (2023) also identified psychological risks associated with excessive esports playing such as stress, coping, cognitive fatigue, gaming addiction, and mental ill health. Smith et al. (2022), in their study of examining the predictors of mental ill health in esports players, demonstrated that significant relationships were observed between stressors and sleep quality, burnout, and social anxiety, and all these factors collectively served as key predictors of mental ill health. Thus, they pointed out that improving mental health in esports players could be achieved through tailored interventions addressing stress, sleep disturbances, burnout, and social anxiety, which may depend on the active involvement and support of key stakeholders in the sports industry. Similarly, Birch et al. (2024) explored the rates of mental health issues and levels of wellbeing in 51 professional Counter-Strike players and their findings indicated high levels of depression, anxiety, psychological distress, and low wellbeing among the players, emphasising significant mental health challenges among them. Thus, the authors pointed out that supporting mental health in esports demands increased focus on screening and tailored interventions by both performance and clinical professionals.

In Monteiro Pereira et al.'s (2023) study, mental health challenges and personal stressors, such as pressure of professional gaming, can impair cognitive function and focus, creating a reinforcing cycle of poor performance and mental health decline. In light of the insufficient mental health support within esports teams, their findings highlighted the need of regular access to mental health professionals to help players prevent, identify, and cope with mental health issues. The risk of mental health concerns also highlights the need for developing evidence-based support systems in esports and organisations should play a significant role in ensuring and the responsibility of promoting and maintaining employee mental health rests significantly with organisations in the esports industry (Kegelaers et al., 2024). These findings emphasise the significance of key stakeholders offering resources to help players address these such psychological risks (Hong, 2023). Given the findings from the previous studies, it is evident that ensuring mental wellbeing is critical for esports players, affecting both their performance and overall wellbeing. While many studies focus on the players' perspectives of wellbeing, the significant role of other stakeholders in supporting players' health and wellbeing is often overlooked. Thus, their perspectives on this topic have received limited attention in research. To bridge this gap, the present study is to gather insights from key stakeholders in the esports industry.

1.3. Coping skills and strategies

To effectively address health and wellbeing challenges and issues faced by esports players, it is critical for them to develop strong, wellestablished coping skills and strategies. To ensure the maintenance of cognitive skills, such as strategic decision-making, and motor skills and mental and physical wellbeing, esports place significant emphasis on the need to cope with the stressors inherent in competitive contexts (Leis et al., 2021, 2022). In this regard, several studies have examined the coping skills and strategies of esports players. For instance, in their investigation of identifying stressors, stress responses, and coping strategies among professional esports players, Leis et al. (2022) found that players mainly relied on communication with teammates or coaches and used problem-focused coping strategies to address performance related stressors. While the study highlights the importance of players learning to identify and control stress responses to enhance performance, it does not fully address the broader implications for health and wellbeing. However, these coping strategies may still help prevent potential health and wellbeing issue. In their recent systematic review of stressors and coping strategies in esports, Leis et al. (2024) provided a comprehensive overview of the multidimensional challenges of stressors and coping strategies in esports. By reviewing 19 articles, they identified five different stressor categories including performance (e.g., performance pressure, injuries, substance use), team (e.g., communication, antisocial behaviour, lack of team support), social (e.g., social media and public perception, online harassment and toxicity), organisational (e.g., schedule and time conflicts, limited training hours, jetlag), and personal (e.g., balance life commitments, job insecurities, limited prise money) stressors. The authors found that the comparison of esports and traditional sport highlights the influence of social factors, such as social media and audience perception, in esports. They also identified three coping categories: internal regulation (e.g. communication, team interaction, meditation, team support, talking breaks), mastery coping (e.g., self-focus in gaming, goal setting, lifestyle balance), and goal withdrawal (e.g., venting negative emotions, substance use, leaving the team). While their review (for further details, see Leis et al., 2024) highlighted correlations between stressors and psychological outcomes (e.g., anger, sleep quality, burnout) and between coping strategies and psychological characteristics (e.g., mental toughness, personal traits), there is still a lack of in-depth understanding of mediating and moderating influences, which requires further investigation.

Another study of examining stressors, stress, coping and coping effectiveness among professional esports players, Poulus et al. (2022) identified that professional esports players primarily used problem-focused coping strategies, consistent with the findings of Leis et al.'s (2022). They also found that emotion-focused coping strategies were reported to be more effective in addressing stress compared to avoidance strategies. They suggest that a tailored training programme to enhance coping skills could significantly improve both player wellbeing and in-game performance. In this regard, Poulus et al. (2020) highlighted that mental toughness in esports players is strongly associated with a greater use of problem-focused and emotion-focused coping strategies. Their findings show an overlap between the stress-coping processes of esports players and those seen in traditional sport. Thus, they suggest that esports players could benefit from sport psychology interventions commonly used in traditional sport to enhance their coping skills and mental resilience. These finding indicates that coping skills and strategies have potential to contribute to ensuring players' health and wellbeing. In the meantime, as previously highlighted, gaining deeper insight into esports players' coping skills and strategies, their unique needs, and the necessary support for maintaining their health and wellbeing remains critical (Hong & Connelly, 2022; Poulus et al., 2022).

Overall, the literature highlights the significance of establishing a well-rounded view of the factors impacting player health and wellbeing and career development in esports. While prior studies have examined different elements of player health and performance, the perspectives of key industry stakeholders have been largely overlooked. Investigating these perspectives is critical for identifying the support systems and strategies required to ensure player wellbeing and enhance their longterm career prospects in the fast-developing esports industry.

2. Methods

2.1. Philosophical position

To investigate the perceptions of stakeholders in the esports industry, this study utilised a qualitative method. It follows the interpretivist paradigm, aiming to understand and identify the processes through which key stakeholders experience and make sense of their experiences concerning esports players' wellbeing and career prospects (Mallett & Tinning, 2014, pp. 9–17). In this context, the study was grounded in relativist ontology alongside subjectivist epistemology, highlighting the idea that the collective structure of society built upon individual values, emotions, interests, and subjective experiences (Sparkes, 1992). The philosophical position was regarded as appropriate for examining and understanding detailed perspectives of key stakeholders regarding wellbeing and career prospects of esports players. Thus, the author applied semi-structured interviews to gain insights into individuals' lived experiences (McArdle et al., 2012). The author, who carried out all the interviews, brings prior experience from interviewing different stakeholders and both active and retired players. This background not only enriched the author's understanding of the esports industry but also facilitated quick rapport building with participants.

2.2. Design

The study employed a collective case study design to gain a holistic understanding from a collection of cases (i.e., different key stakeholders within the esports ecosystem). Among three categories of case study that Stake (1995) suggested, an instruct case study is conducted when the researcher's key interest is in comprehending the unique aspects of a specific case itself, rather than aiming to generalise findings beyond that case. On the other hand, an instrumental case is applied when the researcher studies a specific case to gain insights into a broader issue or phenomenon, with the goals of generalising findings to similar cases. The third category, a collective case study, involves investigating several cases to achieve a broader understanding or representation of a phenomenon, with the aim of generalising findings across those cases (1995). Since the present study intended to explore the key stakeholders' perceptions of esports players' wellbeing and career prospects, given that the esports industry is considered a new phenomenon and player' wellbeing and career prospects have not been broadly researched (Hong, 2023), a collective case study was identified as the most suitable approach. Given the exploratory nature of the present study and the goal of understanding the detailed perspectives of key stakeholders in the esports industry, this approach can help establish a broader understanding of the diverse perspectives and insights from different stakeholders within the esports ecosystem. While quantitative approaches might enhance generality, they do not facilitate a detailed understanding of the particular circumstances and perceptions of these stakeholders, which does not support the aim of the study. Thus, by examining seven cases (i.e. key stakeholders) with a qualitative approach, the study can provide a comprehensive view of the factors influencing players' wellbeing and career prospects.

2.3. Participants

Seven participants were invited to the study, utilising purposive sampling (Etikan et al., 2016). The participants consisted of a game publisher (n = 1), event/tournament organisers (n = 2), a sponsor (n = 1), a national esports association (n = 1), an international esports federation (n = 1), and a professional team (n = 1). All participants were male, and their respective organisations/companies hold leading positions within the esports industry. It is noteworthy that these participants represent key stakeholders (see Table 1) as identified by Scholz (2020).

Table 1

Participant information.

| Participants | Years since establishment | Positions held by the participants | Positions in Esports Ecosystem | Continents |
|--|------------------------------|--|--------------------------------------|------------------|
| Game Developer | 2006 | Global Head | Primary | North America |
| Tournament Organiser 1 | 2017 | Co-founder and General manager | Primary | North America |
| Tournament Organiser 2 | 2016 | Producer | Primary | Asia |
| National Esports Association | 1999 | General Manager | Secondary | Asia |
| International Esports Federation | 2005 | COO | Secondary | Asia |
| Professional Team | 2004 | COO | Primary | Asia |
| Sponsor | 2005 | General Manager | Secondary | Asia |

2.4. Procedure

The author conducted semi-structured interviews were conducted to gather in-depth insights provided by key stakeholders about esports players' wellbeing and career prospects. The development of the interview guide was informed by a review of key literature (e.g., Hong, 2023; Scholz, 2020; Smith et al., 2019). The interview guide is as follows: (a) their roles/positions in the esports industry (e.g., what role/position are you in?); (b) any challenges and barriers that players may face, which can affect their wellbeing (e.g., what challenges and barriers have you seen/observed that esports players faced and how they affected players' wellbeing?; (c) coping resources (e.g., how can players cope with such challenges and barriers? What kinds of support are available for them); and (d) insights into esports players' career prospects (e.g., What advice would you offer young people pursuing careers in the esports industry? How can esports players sustainably progress in their careers over the long term?). An institutional ethical approval has been granted for this study, and prior to the interviews, participants provided their signed consent forms. The author conducted all interviews through video calls due to geographical constraints, with the author being in the U.K. and participants located in North America or Asia, which made in-person interviews impractical. Interviews ranged from 51 to 66 min in duration, with a total interview time of 417 min (M = 59.57, SD = 5.53).

2.5. Data analysis

Thematic analysis was used to analyse the data collected, recognised for its flexibility and usefulness in qualitative research (Braun & Clarke, 2006). Considering the interpretivist paradigm and relativist ontology underpinning this study, thematic analysis was highly appropriate as it enables the researcher to explore the subjective meanings and experiences shared by participants. This approach is in line with the study's philosophical foundation through its emphasis on how stakeholders perceive and interpret their experiences related to esports players' wellbeing and career prospects. The author audio-recorded and subsequently transcribed all interviews word-for-word, providing the author with the ability to thoroughly understand the participants' responses and the coherence of their answers. To initiate the thematic analysis, the author repeatedly reviewed each interview transcript to familiarise with the participants' narratives. Upon thorough review of the transcripts, initial codes were identified, which were then organised into themes. A thematic map was developed from these reviewed themes in order to visually outline the analysis. Subsequently, all themes underwent careful retirement, given a clear definition, and titled. When presenting the findings, specific counts such as 'seven participants noted', 'five participants claimed', were avoided. Alternatively, 'most' or 'some' were sued to give an overview of data, adhering to Braun and Clarke's (2006) suggestion. They maintained that this approach subtly indicates the presence of themes in the data and helps assure readers of the truthfulness of the conclusions.

To maintain trustworthiness in the qualitative study, including its methodological rigor, credibility, plausibility, and applicability (Rose & Johnson, 2020), member checking and triangulation were utilised. Trustworthiness ensures the present study's reliability (its ability to be replicated) and validity (accurate reflection of reality). Member checking (Creswell, 2013) involved sharing the transcripts with participants for feedback; two suggested minor revisions, while the others agreed with the content. Following Patton's (1999) guidelines, triangulation was conducted with multiple analysts independently identifying key codes and relevant quotes, then sharing and discussing their findings to consolidate the Result section. This bias approach aimed to minimise selective perception and bias in interpretation (Patton, 1999).

3. Results

The data analysis resulted in the identification of three themes, as presented in Table 2.

3.1. Importance of Maintaining Physical Health

The importance of engagement in physical activity for esports players was emphasised by all participants in order to maintain physical health, which is critical for esports players' overall wellbeing as well as their performance. With regard to this, two primary concerns were raised by most participants: injuries and lack of/poor sleep. Participants observed that professional esports players, due to their intensive training and competition schedules, are at risk of injuries, similar to high-performance athletes in traditional sport. Given the long hours of practice and irregular schedules, such intensive training and

| Table | 2 | |
|-------|---|--|
| | | |

_ . . .

| Themes identified fro | m the interviews. |
|-----------------------|-------------------|
|-----------------------|-------------------|

| Superordinate themes | Subordinate theme | Theme |
|--|--|---|
| Importance of Maintaining Physical Health | Injuries Lack of/poor sleep Limited resources to engage in physical activity Support needed from stakeholders (e.g., teams, parents) Issue of nutrition intake and diet | Physical issues caused by intensive practice Consequences of intensive practice – poor sleep and nutrition intake and diet Available resources for players Key stakeholders to provide support |
| Developing Life and Transferrable Skills | Psychological Skills Communication Skills Financial Management Skills | Managing potential psychological distress/ mental health issues Developing psychological skills Managing issues caused by use of social media Overcoming language barriers Developing Financial Management Skills Limited professional support services |
| Understanding Esports Careers and Developing Future Plans | Managing uncertainty and anxiety Importance of developing future plans Need for education on different career paths in esports | Uncertainty about esports career Being anxious about esports career Single minded perception on esports career – only 'professional players' Limited understanding over esports career paths |

competitive pressures may lead to sleep deprivation, which can negatively impact performance and overall health and wellbeing. A senior management officer from one of the world's leading professional teams remarked,

They feel like they have a lack of sleep. It really depends on when they finish their practice at night; they are encouraged to finish it not too late, before 2:00 a.m., but they'll probably go home and sleep at 3:00 a. m. or 4:00 a.m.

All participants acknowledged that many foremost professional teams offer assistance to ensure physical health of their professional players, including one-to-one fitness coaching, memberships of gyms, and exercise facilities within gaming training centres:

So we have a lot of our pro players at least pre Covid would all go climbing together at [the name of the gyms] gyms because not only is it good physical exercise but it's like very good for your hands, your wrists and those are the places that they tend to focus, when you're doing a repetitive activity for 14 h a day six days a week you want to make sure that your body is resistant there (*Game Developer*).

However, some participants mentioned that esports players might require greater support to minimise the risk of injuries and learn how to manage sleep. While recognising the importance of stakeholder support, participants highlighted that individual players should be more aware of maintaining their physical health:

The biggest thing I felt in esports was that the physical activity of players needs to increase significantly. Honestly, I don't know if physical activity causes stress for the players, because when I talk with team officials, they say that the players don't feel a need for physical activity. There aren't many players who enjoy exercising. However, there are many cases where a lack of physical activity leads to health problems. I think efforts to promote physical activity among players should come first. Increasing physical activity can not only reduce the risk of injury but also serve as a good indicator for managing stress. That's why I believe promoting physical activity should be a priority (*National Esports Association*).

In this regard, some participants suggested that parents play a critical role in encouraging players to participate in sports or physical activity. For instance, *Sponsor* noted, "You know diet is another part of it too [...] I think that's where parents really need to be involved." In relation to this, some other participants also discussed the issue of nutrition intake and diet. They observed that several professional teams facilitate nutritional support through the hiring of dietary specialists, provision of in-house chefs, and distribution of dietary advice. Nonetheless, this support is usually exclusive to top-level players. This suggests that players at lower levels may lack similar resources, requiring a greater emphasis on self-care and independent management.

3.2. Developing Life and Transferrable Skills

3.2.1. Psychological skills

The participants emphasised that esports are mental games, making it crucial for players to possess strong mindsets and build capabilities in mental and emotional wellbeing to tackle possible mental strains/conditions or psychological discomfort/disorders: "We need to tell them this is not only about physical movement, but also like the mind games, [...] and also maybe teamwork. I think these kinds of things also need to be emphasised in comparison to other sports" (*International Federation*). Many participants discussed that some professional teams provide psychological support to their players by brining on board sport psychologists, counselling professionals, and mental skills/strategies coaches. These professional teams have also implemented support systems designed to protect their young players from negative mental health impacts, recognising the importance of safeguarding their wellbeing at this significant sage in their youth:

[...] so, we try our best we have great managers and have great coaches and staff that are always trying to support the players, and you know encourage them, so we try to protect them. In [the country the professional team is from], there's very strict laws regarding cyber bullying, so we have we have utilised those avenues to protect our players, you know for example they attacked [one of their professional players] there were some people, they were attacking [the player's family member], attacking him and his [family member] as well, so we would we took legal action against that. Absolutely there's a lot of pressure on them and stress upon them so there's a need to really prepare them mentally for that especially for the those at such a young age, because they are so young as well (*Professional Team*).

Although top-level esports players contracted by professional teams have access to such support resources, other players in lower tiers might lack access to such support, a situation similar to the disparities in physical health support highlighted in the previous section. In this context, the significance of parents' roles was highlighted once again.

3.2.2. Communication skills

Esports players can be exposed to critical issues associated with social media, such as online bullying and verbal mistreatment. For instance, professional players tend to have a number of fans and supporters who offer encouragement and criticism. Given that many professional esports players are at such a young age, either in teenage year or early twenties, they might not possess the necessary skills or resilience to handle such negativity and critique. This may adversely affect their psychological wellbeing as well as their performance. As *Game Developer* noted:

Many of our athletes share the same social spheres as fans, such as n Twitter or Reddit. They may encounter fans discussing their shortcomings, suggesting they shouldn't be on a team anymore, and other negative comments. These mental issues can be especially challenging, considering that many of our players are between 17 and 22.

Tournament Organiser 2 also remarked, "Yeah, it's kind of a growing issue in the industry right now. For example, if players perform better in a game, social media or the public can attack them quite a lot. So, it's kind of a big issue at the moment". Regarding this, participants emphasised the importance of making young esports players aware of potential issues (e.g., criticism, hate speech, online verbal abuse) related to social media via education such as learning how to manage their emotions and feelings and where/who to report such issues. Some participants mentioned that some professional teams have staff members (e. g., marketing department) assisting their esports players in managing social media. However, such support may be unavailable for young individuals without a professional team, which requires self-management.

Many participants also discussed language barriers to communication with other players, which may negatively affect team dynamic and the importance of different culture to develop team cohesion. They acknowledged that significant issues arise from language barriers and misunderstandings of each other's cultures within professional teams comprising multinational team members. Several professional teams make available language assistance, such as translators, and relevant resources to assist players in appreciating other members' cultural and background diversity: "I think these types of issues were a lot bigger than they were before. But now it's kind of like it's well known, right? Like, people have been importing, like foreign athletes in esports, for probably a decade now. Right? So, people, the teams have already learned how to deal with it. They have translators, they have, like teambuilding exercises, right? (Tournament Organiser 1). Yet, such issues may not only be limited to certain professional teams with players from diverse cultural backgrounds since players at all levels have an opportunity to play with other players from different countries due to the nature of esports games being global. In regard to this, some participants emphasised the benefits of English proficiency for career development and success:

Having global fans and the ability to speak other languages, especially English, can open up opportunities for young players to play overseas. Language communication is a significant aspect of the sport, so it helps tremendously if players can speak English (*Professional Team*). While the language skills may be more beneficial for professional players to boost their career to the global teams and markets, such skills are helpful for players at other levels to communicate with other players in different countries to develop a sense of community within esports games they play; the language skills are also transferable skills that can utilise for other domains and career options for their benefits. However, it is also important to note that some stakeholders highlighted that the issue also lies in the players' awareness of the importance of learning a foreign language, as well as their motivation and willingness to do so: "I don't think the players have that kind of awareness yet. Rather than thinking they need to learn a foreign language to prepare for something, they prioritise concerns about their competition performance" (National Esports Association).

3.2.3. Financial management skills

The participants raised their concerns and made some suggestions in relation to professional players' ability to manage their finance. In this regard, the importance of developing financial management skills was emphasised. This is because professional esports players have the opportunity to generate substantial incomes at a young age compared to their peers, including considerable prize money, high payments from professional teams, and financial support from sponsors. As a result, young players need to manage their finances effectively, as their professional career is inevitably short-lived.

You hear about players, like basketball players, making tens of millions of dollars and then squandering their finances, ending up with nothing left, even going bankrupt. The same can be said of esports pros [...] because you can't be a pro gamer making hundreds of thousands of dollars forever (*Sponsor*).

While young players may receive financial support from their parents, the participants also recognised the need for support from their organisations, governing bodies, teams or other officials to build their knowledge in financial management and planning skills for ensuring career and life objectives. While this is especially relevant for professional players engaged with professional teams under contracts, enabling them to earn their livelihood through esports, it is not only limited to them because players at lower levels can have an opportunity to win a prize money and have potential to move to a professional level where they can generate income out of esports career. Given this context, the development of financial management skills and literacy was regarded as key and beneficial for players as they also apply such skills to life in general.

Yeah, the idea around financial literacy is starting to grow for players but it's very much a personal or a team directed activity. [...] it's one of their top priorities in the coming year to provide resources, but the issue run into is that the people dispensing the advice or trying to find someone to dispense the advice don't have a background in it themselves. So it's hard if you're not particularly financially literate you don't know what to look for in someone to help deliver financial advice to others, so you know I think to a large extent you know we don't have a lot of flashy players who are out spending money the way like a you know a professional baseball or basketball player would in the US those guys tend to, you know no one's buying Lamborghini's most of them are really content to play video games all day and stick their money in a savings account and like worry about it later (*Game Developer*).

Although no significant issues were raised in the esports industry during the data collection period, as noted by *Game Developer*, it is encouraging that the industry recognised the significance of the potential issue and was planning to provide resources. However, given the lack of a formal support system or initiative, it is critical to proactively address this issue to safeguard young players.

3.3. Understanding esports careers and developing future plans

Interestingly all participants discussed that players in particular professional players can be negatively affected by uncertainty over their future careers, which requires their own psychological skills to cope with as well as psychological support to manage such uncertainty and even anxiety caused by the uncertainty especially when they poorly perform, and their contracts are due to be expired. Players often begin playing at the professional level at an early age and the career longevity for them is typically short. Thus, professional players, paralleling highperformance athletes in conventional sport, may see their careers end earlier than in other professions. Factors beyond their control, such as career ending injuries, mental health problems, and the termination of contacts, can lead to prematurely ending their careers. Therefore, it was highlighted by the participants that there is the critical needs for young players to explore and respect the multitude of career options within the esports industry, beyond the singular path of professional gaming: "But right now, it's just so few people that could actually make a living out of it, like this way less than 1% of gamers" (Tournament Organiser 1). This highlighted the significance of attracting talented and ambitious young people to various professions within the esports industry for its sustainable development, rather than solely encouraging them to pursue careers as professional players: "this is actually our most important agenda. To achieve such goal of helping players access to sustainable career development. By providing such a platform, esports players can compete at a high level while pursuing academic goals and developing their career path" (International Esports Federation). In this regard, some participants mentioned that there are 'esports academies' established to guide young aspirants aiming for a professional career path in the esports fields. These academies provide opportunities to acquire a range of skills and enrich their knowledge of the esports ecosystem, including the particular nature and features of the esports industry:

Yes, other teams are also showing interest in the academy side of things. In the past, the focus was solely on developing players, but as the esports market has grown, many new job opportunities have emerged as well. For example, there are more jobs in game operations, more opportunities for creators, and in fields like technology and broadcasting. So, we, too, are preparing a lot for this trend (*National Esports Association*).

Apart from the main themes that were mainly discussed by the participants, some participants also discussed some macro-level of factors that may influence esports players' overall wellbeing. Although participants perceived that criticism and stigma towards esports are no longer significant issues due to the positive shift in public perception, they acknowledged that resolving the issues of gender inequality is critical for all stakeholders involved. This approach would contribute to developing a supportive and motivational space for female participants, thereby increasing their engagement in esports:

By going through this kind of process, we expect to grow and expand the opportunity and platform for female esports athletes to compete at international level esports competition. Also, in future we would expect to see more female coaches, officials and esports experts at international stage (*International Esports Federation*).

While several positive steps have been observed among stakeholders, issues related to players' health and wellbeing as well as their career prospects remains challenges that both the industry and individuals need to address. It is also critical for key stakeholders in the esports industry to address these challenges collectively and proactively.

4. Discussion

The purpose of the study is to explore the perspectives of key stakeholders in the sports industry on how players can ensure their wellbeing during practice and competition, as well as their views on the career prospects of esports players. The findings highlight the multidimensional nature of esports players' wellbeing, highlighting its significance for their performance, mental health, and future planning. from the insights gained from this study have both theoretical and practical implications, enriching our knowledge of the perspectives of key stakeholders on these issues. The study addresses existing gaps in the literature by offering insights into key areas where esports players require support. These insights could help in developing a structured support system for the esports ecosystem, achieved through the collective and collaborative efforts of all key stakeholders (Hong, 2023). The implications and insights have broader impacts, influencing the entire network and relationships of stakeholders within the esports ecosystem. Taking into account Hardy et al.'s (2003) insights on the positive impact of collaboration within IORs, a joint effort by both primary and secondary stakeholders, including the players themselves (Scholz, 2020), is critical. This collaborative approach to establish a supportive environment will not only ensure players' wellbeing and career prospects but also promote the sustained progress of its industry, which will benefit all stakeholders involved.

In this study, findings highlighted that physical health plays a critical role in both the performance and overall wellbeing of esports players. They reported an urgent requirement for teams and other stakeholders to focus more on players' physical health, especially in preventing injuries and managing sleep. Concerns related to injuries (Zwibel et al., 2019) and sleep issues (Eickhoff et al., 2015; King et al., 2013; Lee et al., 2021) have been raised in previous studies from athletes' perspectives, and these issues were similarly highlighted by the key stakeholders in the present study. A significant finding from this study is the disparity in access to support between top-tier players and those at lower competitive levels. Acknowledging evidence of a positive link between physical activity and competitive esports outcomes (de Las Heras et al., 2020; Toth et al., 2020), it is not surprising that professional players who can access support for their physical health can effectively manage any potential physical issues and make a progress on their professional careers. It is positive that top-tier professional players, who often face intense stress and pressure, receive support for their physical health. Given the nature of competitive environment where players must compete and face short career span (Meng-Lewis et al., 2022), and the vital role of competition in the esports industry from the standpoint of IORs perspective (Scholz, 2019), the practice of offering exclusive support to the top-tier professional payers is likely to continue. Despite this, there is a greater need to focus on supporting players at lower levels by establishing a broader support system. This approach is critical for the long-term sustainability and growth of the esports industry, as nurturing talent across all levels via co-ordination and co-operation among stakeholders can contribute significantly (Hong, 2023; Robinson et al., 2000; Wong & Meng-Lewis, 2023). Such strategies ensure a continuous pool of skilled players while promoting the wellbeing and career development of participants at all levels. Interestingly, some participants mentioned the crucial role of parents in motivating players to participate in sport or physical activities. This indicates the need for tailored support to better equip parents in supporting their children effectively, which has been established in traditional sport (Burke et al., 2021).

The outcome of the present study emphasises the crucial role of mental/psychological aspects of esports. Considering esports players' susceptibility to psychological distress and mental health challenges due to prolonged gaming sessions (Dworak et al., 2007; Lee et al., 2021), it is crucial for players across all levels and stakeholders to recognise and prioritise these findings. It should be noted that such psychological distress and mental health issues are identified as core aspects of esports related studies (Birch et al., 2024; Monteiro Pereira et al., 2022, 2023; Palanichamy et al., 2020). Participants stressed the significance of enhancing psychological resilience and mental skills to address potential psychological distress, mental health challenges. and performance-related issues. Just as physical health support is critical, there is an increasing demand for accessible professional psychological support. This is particularly crucial for the development of mental and psychological abilities in players at lower competitive levels as discussed previously related to support provision for physical health. Given the frequent exposure of players to online criticism and toxicity, it is important to foster emotional resilience in them through mental and psychological skill training. The absence of such skills may leave esports

players ill-equipped to cope with psychological challenges, potentially leading to mental health issues and risky behaviours (Hughes & Leavey, 2012). Thus, support for developing such skills should be a priority, and it should be offered not only by professional teams but also by stakeholders involved with lower-level players, as the risks of online criticism and toxicity can affect all. Despite this, participants also highlighted the need for individual players to assume greater responsibility for their physical and mental health, emphasising the significance of self-care practices (Hong & Connelly, 2022).

The findings also emphasised the significance of communication skills, particularly in overcoming language barriers that could negatively impact team dynamics. These findings on the importance of communications skills are consistent with previous studies, which highlight that communication plays a significant role in managing stress among esports players (Leis et al., 2022, 2024; Poulus et al., 2022). While this study did not explicitly examine how esports players utilise their coping skills and strategies, as it falls beyond its scope, it is important to note that well-established coping skills and strategies can be positively associated with players' health and wellbeing. As evidenced in the literature, effective coping strategies enable players to proactively manage stress and challenges, helping to prevent mental health issues (Hong & Connelly, 2022; Leis et al., 2024; Poulus et al., 2022). In this regard, it is crucial to implement support initiatives or programmes, such as sport psychology interventions (e.g., Poulus et al., 2020), aimed at developing communication skills that esports players can utilise as effective coping strategies.

With the rise of multinational teams globally, proficiency in English and cultural awareness become crucial. While professional teams can support players by offering language and cultural training to enhance team cohesion, such language barriers extend beyond professional players. Given the global nature of esports, players at all levels can benefit from language skills to communicate with international players, fostering a sense of community within the games they play (Rusk & Ståhl, 2022). These language skills as communication skills also serve as transferable assets that can be useful in other domains and career paths (Zhong et al., 2022). Participants also emphasised the importance of young esports players being educated about potential social media problems. They highlighted the need for learning how to manage emotions and understand where and who to report such issues to. Despite these needs, support for developing such communication skills is currently limited, primarily available to top-tier professional players. Beyond communication skills, participants pointed out the critical need for effective financial management skills, given the early income opportunities that esports can offer. Developing financial literacy can be beneficial not only within the esports domain, but also in general life management (Taft et al., 2013). While this aspect is beyond the scope of this study and has been scarcely examined in literature, it has been highlighted in traditional sport (Hong & Fraser, 2021) and should be considered in the development of a comprehensive support system.

Uncertainty regarding future careers emerged as a prevalent concern among participants. This uncertainty is especially relevant to professional players, given their inherently short career span, which can be even shorter than expected due to unforeseen circumstances. This uncertainty highlights the need for career support services and increased awareness of different career pathways within the esports industry (Hong, 2023). In this respect, the participants indicated that esports academies could greatly enhance young players' understanding of the industry and help them develop relevant skills, contributing to the industry's sustainable growth. Despite a shift in public perception, there is a recognised need to tackle gender inequality, with a call for all stakeholders to work towards a more inclusive space, particularly for female players – a critical factor for the industry's future (Rogstad, 2022). Thus, future research could examine strategies for promoting gender equity within esports. In addition, researchers have observed that the ideal image of a skilled esports player is often described as a young, White, cisgender male, presumed to be heterosexual (Witkowski,

2018). Individuals who differ from the perceived norm of an esports players due to their race, ethnicity, gender, sexuality, or other identity traits often face marginalisation and they may be also perceived as not belonging in esports communities (Friman et al., 2024; Gray, 2020). In this respect, LGBTQ + players frequently encounter hostility within the esports and broader gaming communities (Friman et al., 2024). From the perspective of intersectionality, online gaming environments can expose Black lesbian gamers to intersecting forms of discrimination, including racism, sexism, and homophobia (Gray, 2020), all of which pose risks to players' health and wellbeing. In light of this, further research on players' health and wellbeing is critical to address these neglected and underexplored issues. Such efforts are key to promoting a healthy environment for esports players and ensuring the long-term sustainability of the esports industry.

4.1. Implications

The findings highlight the importance of physical health, psychological resilience, communication, financial management, and career planning. The findings present theoretical and practical implications, fostering further investigation into esports players' wellbeing and career prospects and providing empirical evidence to shape support systems. It should be noted that stakeholders often influence or contribute to establishing policies and programmes (e.g., Charles & Sunday, 2014; Mukaruzima et al., 2023; Yaro et al., 2017) that can positively influence players' wellbeing as well as career progression and development. This study also highlights the importance of nurturing interorganizational relationships that include competition, co-ordination, and co-operation (Robinson et al., 2000) as well as emphasise effective collaboration (Hardy et al., 2003). These factors should be actively encouraged and taken into account when establishing a timely and suitable support system for players. Thus, it is hoped that the perspectives of key stakeholders in this study can inform the development of support systems, educational programmes, and career transition assistance for esports players.

4.2. Limitations and future research directions

While this study offers valuable insights, it has some limitations. While the participants of this study were leading key stakeholders in the esports industry, a larger sample size could provide more diverse insights into players' wellbeing and career prospects and potentially share best practices. Thus, future research should aim to broaden the sample to bring in a more diverse group of stakeholders into different continents, further enriching our understanding of their perceptions on esports players' wellbeing and career prospects. Semi-structured interviews employed in this study provided valuable in-depth insights from the participants regarding the research topic. However, for future research, alternative methodologies such as focus group interviews might be considered to facilitate collective discussion among stakeholders. This method could potentially identify shared perceptions, contrasting perspectives, or areas of agreement. Gaining such understanding could better inform our approaches to nurturing players' wellbeing and career advancement, playing a key role in sustaining the esports industry. Whilst the present study focuses on the perceptions of key stakeholders, excluding players, as part of a larger project, the future study can investigate players' perspective on their wellbeing and career prospects. This would provide a more comprehensive understanding of the factors affecting players' wellbeing and career prospects by incorporating insights directly from the players themselves. By comparing these perspectives with those of key stakeholders, researchers can identify commonalities and discrepancies, eventually leading to more targeted and effective strategies for enhancing health, wellbeing, and career prospects in the esports industry. Lastly, as previously mentioned, while these topics were not within the direct scope of the present study, issues such as inclusivity, ethnicity, sexual orientation, and

intersectionality require further exploration. Investigating these areas is critical to supporting players who face marginalisation or are exposed to related risks. Such efforts will play a significant role in promoting the ongoing growth of the industry and advancing players' career development.

5. Conclusion

This study highlights the significance of addressing esports players' health and wellbeing as well as career prospects by focusing on their physical health, enhancing psychological and emotional wellbeing, and developing key skills such as communication, financial management, and career planning. By providing empirical insights from the leading stakeholders in the esports industry, it presents important direction for developing support systems and educational programmes to enhance player wellbeing and career development. Ongoing collaborative efforts between stakeholders is critical for establishing strong systems that promote the long-term sustainability of the esports industry.

Use of AI

During the preparation of this work the author(s) used ChatGPT in order to improve language and readability with caution. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Hee Jung Hong reports financial support was provided by International Olympic Committee. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

I extend my sincere thanks to the participants for dedicating their time to this study and sharing their invaluable insights with us. Their participation enabled the author to complete the study and learn more about the topic of esports players' wellbeing and career prospects. I also wish to acknowledge my colleagues as well for their support and encouragement during the study. Lastly, my sincere gratitude goes to the International Olympic Committee (IOC) Advanced Olympic Research Grant Programme for providing the funding for this study.

Data availability

The data that has been used is confidential.

References

- Babiak, K., Thibault, L., & Willem, A. (2018). Mapping research on interorganizational relationships in sport management: Current landscape and future research prospects. *Journal of Sport Management*, 32(3), 272–294.
- Bányai, F., Griffiths, M. D., Király, O., & Demetrovics, Z. (2019). The psychology of esports: A systematic literature review. *Journal of Gambling Studies*, 35(2), 351–365. https://doi.org/10.1007/s10899-018-9763-1
- Bellanca, J., & Brandt, R. (2010). 21st century skills: Rethinking how students learn. Bloomington, IN: Solution Tree.
- Bingham, T., & Walters, G. (2013). Financial sustainability within UK charities: Community sport trusts and corporate social responsibility partnerships. Voluntas: International Journal of Voluntary and Nonprofit Organizations, 24(3), 606–629. https://doi.org/10.1007/s11266-012-9275-z
- Birch, P. D., Smith, M. J., Arumuham, A., de Gortari, A. O., & Sharpe, B. T. (2024). The prevalence of mental ill health in elite Counter-Strike athletes. *Journal of Electronic Gaming and Esports*, 2(1).
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3, 77–101. https://doi.org/10.1191/1478088706qp0630a

Burke, S., Sharp, L. A., Woods, D., & Paradis, K. F. (2021). Enhancing parental support through parent-education programs in youth sport: A systematic review. *International Review of Sport and Exercise Psychology*, 1–28.

Charles, M. O., & Sunday, I. E. (2014). Partnering for education finance in Nigeria. Journal of Studies in Education, 4(1), 180–189. https://doi.org/10.5296/jse. v4i1.4977

Creswell, J. W. (2013). Qualitative inquiry and research design: Choosing among five approaches. Thousand Oaks, CA: Sage.

de Las Heras, B., Li, O., Rodrigues, L., Nepveu, J. F., & Roig, M. (2020). Exercise improves video game performance: A win-win situation. *Medicine & Science in Sports & Exercise*, 52(7), 1595–1602.

de Rezende, L. F., Rodrigues Lopes, M., Rey-Lopez, J. P., Matsudo, V. K., & Luiz, O. C. (2014). Sedentary behavior and health outcomes: An overview of systematic revies. *PLoS One*, 9, Article e105620.

DiFrancisco-Donoghue, J., Balentine, J., Schmidt, G., & Zwibel, H. (2019). Managing the health of the eSport athlete: An integrated health management model. *BMJ Open Sport & Exercise Medicine*, 5(1), Article e000467. https://doi.org/10.1136/bmjsem-2018-000467

Dworak, M., Schierl, T., Bruns, T., & Struder, H. K. (2007). Impact of singular excessive computer game and television exposure on sleep patterns and memory performance of school-aged children. *Pediatrics*, 120(5), 978–985.

Eickhoff, E., Yung, K., Davis, D. L., Bishop, F., Klam, W. P., & Doan, A. P. (2015). Excessive video game use, sleep deprivation, and poor work performance among U.S. Marines treated in a military mental health clinic: A case series. *Military Medicine*, 180(7), 839–843. https://doi.org/10.7205/MILMED-D-14-00597

Etikan, I., Abubakar Musa, S., & Sunusi Alkassim, R. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.1

Franco, M., & Pessoa, N. (2013). University sports partnerships as collaborative entrepreneurship: An exploratory case study. *Administration & Society*, 46(8), 885–907. https://doi.org/10.1177/0095399713481597

Freeman, G., & Wohn, D. Y. (2017). Social support in eSports: Building emotional and esteem support from instrumental support interactions in a highly competitive environment. In Proceedings of the annual symposium on computer-human interaction in play (pp. 435–447).

Friman, U., Ruotsalainen, M., & Ståhl, M. (2024). Diversity, equity, and inclusion in esports. In S. E. Jenny, N. Besombes, T. Brock, A. C. Cote, & T. M. Scholz (Eds.), *Routledge handbook of esports* (pp. 540–550). Routledge. https://doi.org/10.4324/ 9781003410591.

Gee, J. P. (2008). Learning and games. In K. S. Tekinbas, (Ed.), *The ecology of games: Connecting youth, games, and learning* (pp. 21–40). MIT Press.

Gray, K. L. (2020). Intersectional tech: Black users in digital gaming. Louisiana State University Press.

Hallmann, K., & Giel, T. (2018). eSports-Competitive sports or recreational activity? Sport Management Review, 21(1), 14–20. https://doi.org/10.1016/j.smr.2017.07.011

Himmelstein, D., Liu, Y., & Shapiro, J. L. (2017). An exploration of mental skills among competitive league of legend players. *Journal International Journal of Gaming and Computer-Mediated Simulations*, 9(2), 1–21. https://doi.org/10.4018/ LIGCMS.2017(04010)

Hong, H. J. (2023). eSports: the need for a structured support system for players. European Sport Management Quarterly, 1–24. https://doi.org/10.1080/ 16184742.2022.2028876

Hong, H. J., & Coffee, P. (2018). A psycho-educational curriculum for sport career transition practitioners: Development and evaluation. *European Sport Management Quarterly*, 18(3), 287–306.

- Hong, H. J., & Connelly, J. (2022). High e-performance: Esports players' coping skills and strategies. International Journal of Esports, 2(2).
- Hong, H. J., & Fraser, I. (2021). 'My sport won't pay the bills forever': High-performance athletes' need for financial literacy and self-management. *Journal of Risk and Financial Management*, 14(7), 324.
- Hong, H. J., & Hong, S. H. (2023). Transitioning out of esports: Exploring the experiences of professional esports players in South Korea. *Journal of Electronic Gaming and Esports*, 1(1).

Hughes, L., & Leavey, G. (2012). Setting the bar: Athletes and vulnerability to mental illness. *British Journal of Psychiatry*, 200(2), 95–96.

Jenny, S. E., Manning, R. D., Keiper, M. C., & Olrich, T. W. (2017). Virtual (ly) athletes: Where eSports fit within the definition of "Sport". Quest, 69, 1–18 https://doi. org/10.1080/00336297.2016.1144517.

Kari, T., & Karhulahti, V. M. (2016). Do e-athletes move?: A study on training and physical exercise in elite e-sports. *International Journal of Gaming and Computer-Mediated Simulations*, 8(4), 53–66.

Kegelaers, J., Trotter, M. G., Watson, M., Pedraza-Ramirez, I., Bonilla, I., Wylleman, P., ... Van Heel, M. (2024). Promoting mental health in esports. *Frontiers in Psychology*, 15, Article 1342220.

Kelly, S. J., Derrington, S., & Star, S. (2022). Governance challenges in esports: A best practice framework for addressing integrity and wellbeing issues. *International Journal of Sport Policy and Politics*, 14(1), 151–168.

King, D. L., Gradisar, M., Drummond, A., Lovato, N., Wessel, J., Micic, G., Douglas, P., & Delfabbro, P. (2013). The impact of prolonged violent video-gaming on adolescent sleep: An experimental study. *Journal of Sleep Research*, 22(2), 137–143. https://doi. org/10.1111/j.1365-2869.2012.01060.x

Kocadağ, M. (2019). Investigating psychological well-being levels of teenagers interested in esport career. Research on Education and Psychology, 3(1), 1–10.

Lee, S., Bonnar, D., Roane, B., Gradisar, M., Dunican, I. C., Lastella, M., ... Suh, S. (2021). Sleep characteristics and mood of professional esports athletes: A multi-national study. *International Journal of Environmental Research and Public Health*, 18(2), 664. Leis, O., Lautenbach, F., Birch, P. D., & Elbe, A. M. (2022). Stressors, associated responses, and coping strategies in professional esports players: A qualitative study. *International Journal of Esports*, 3(3).

Leis, O., Raue, C., Dreiskämper, D., & Lautenbach, F. (2021). To be or not to be (e) sports? That is not the question! Why and how sport and exercise psychology could research esports. *German Journal of Exercise and Sport Research*, 51(2), 241–247. https://doi.org/10.1007/s12662-021-00715-9

Leis, O., Sharpe, B. T., Pelikan, V., Fritsch, J., Nicholls, A. R., & Poulus, D. (2024). Stressors and coping strategies in esports: A systematic review. *International Review* of Sport and Exercise Psychology, 1–31.

Lin, Z., & Zhao, Y. (2020). Self-enterprising eSports: Meritocracy, precarity, and disposability of eSports players in China. *International Journal of Cultural Studies*, 23 (4), 582–599.

Mallett, C. J., & Tinning, R. (2014). Philosophy of knowledge. Research methods in sports coaching.

McArdle, S., McGale, N., & Gaffney, P. (2012). A qualitative exploration of men's experiences of an integrated exercise/CBT mental health promotion programme. *International Journal of Men's Health*, 11(3), 240–257. https://doi.org/10.3149/ jmh.1103.240

McGee, C., Hwu, M., Nicholson, L. L., & Ho, K. K. (2021). More than a game: Musculoskeletal injuries and a key role for the physical therapist in esports. *Journal* of Orthopaedic & Sports Physical Therapy, 51(9), 415–417.

Meng-Lewis, Y., Wong, D., Zhao, Y., & Lewis, G. (2022). Understanding complexity and dynamics in the career development of eSports athletes. *Sport Management Review*, 25(1), 106–133.

Monteiro Pereira, A., Bolling, C., Birch, P., Figueiredo, P., Verhagen, E., & Brito, J. (2023). Perspectives of eFootball players and staff members regarding the effects of esports on health: A qualitative study. Sports medicine-open, 9(1), 62.

Monteiro Pereira, A., Costa, J. A., Verhagen, E., Figueiredo, P., & Brito, J. (2022). Associations between esports participation and health: A scoping review. Sports Medicine, 52(9), 2039–2060.

Mukaruzima, L., Duhamahoro, J., & Frantz, J. M. (2023). Stakeholder perspectives on promoting health enhancing sport through the Rwanda Sports Policy. *International Journal of Sport Policy and Politics*, 15(4), 619–633.

Palanichamy, T., Sharma, M. K., Sahu, M., & Kanchana, D. M. (2020). Influence of esports on stress: A systematic review. *Industrial Psychiatry Journal*, 29(2), 191.

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, 34, 1189–1208.

Pedraza-Ramirez, I., Musculus, L., Raab, M., & Laborde, S. (2020). Setting the scientific stage for esports psychology: A systematic review. *International Review of Sport and Exercise Psychology*, 1–34. https://doi.org/10.1080/1750984x.2020.1723122

Peng, Q., Dickson, G., Scelles, N., Grix, J., & Brannagan, P. M. (2020). Esports governance: Exploring stakeholder dynamics. *Sustainability*, 12(19), 8270.

Pereira, A. M., Brito, J., Figueiredo, P., & Verhagen, E. (2019). Virtual sports deserve real sports medical attention. *BMJ open sport & exercise medicine*, 5(1), Article e000606.

Pereira, A. M., Teques, P., Verhagen, E., Gouttebarge, V., Figueiredo, P., & Brito, J. (2021). Mental health symptoms in electronic football players. *BMJ Open Sport & Exercise Medicine*, 7(4), Article e001149.

Poulus, D., Coulter, T. J., Trotter, M. G., & Polman, R. (2020). Stress and coping in esports and the influence of mental toughness. *Frontiers in Psychology*, 11, 628.

Poulus, D. R., Coulter, T. J., Trotter, M. G., & Polman, R. (2022). Longitudinal analysis of stressors, stress, coping and coping effectiveness in elite esports athletes. *Psychology* of Sport and Exercise, 60, Article 102093.

Rechichi, C., De Mojà, G., & Aragona, P. (2017). Video game vision syndrome: A new clinical picture in children? *Journal of Pediatric Ophthalmology & Strabismus*, 54(6), 346–355.

Rice, S. M., Purcell, R., De Silva, S., Mawren, D., McGorry, P. D., & Parker, A. G. (2016). The mental health of elite athletes: A narrative systematic review. *Sports Medicine*, 46, 1333–1353. https://doi.org/10.1007/s40279-016-0492-2. Advanced on-line publication.

Robinson, D., Hewitt, T., & Harriss, J. (2000). Why inter-organisational relationships matter. Managing development: Understanding inter-organizational relationships. London: Sage & The Open University.

Rogstad, E. T. (2022). Gender in eSports research: A literature review. European Journal for Sport and Society, 19(3), 195–213.

- Rose, J., & Johnson, C. W. (2020). Contextualizing reliability and validity in qualitative research: Toward more rigorous and trustworthy qualitative social science in leisure research. Journal of Leisure Research, 50(4), 432–451. https://doi.org/10.1080/ 00222216.2020.1722042
- Rudolf, K., Soffner, M., Bickmann, P., Froböse, I., Tholl, C., Wechsler, K., & Grieben, C. (2022). Media consumption, stress and wellbeing of video game and eSports players in Germany: The eSports study 2020. *Frontiers in sports and active living*, 4, Article 665604.
- Rusk, F., & Ståhl, M. (2022). Coordinating teamplay using named locations in a multilingual game environment-Playing esports in an educational context. *Classroom Discourse*, 13(2), 164–187.

Salo, M. (2017). Career transitions of eSports athletes: A proposal for a research framework. International Journal of Gaming and Computer-Mediated Simulations, 9, 22–32. https://doi.org/10.4018/IJGCMS.2017040102

Scholz, T. M. (2019). eSports is Business. London: Palgrave Macmillan.

Scholz, T. M. (2020). Deciphering the world of eSports. International Journal on Media Management, 22(1), 1–12. https://doi.org/10.1080/14241277.2020.1757808

Schrader, P. G., Lawless, K. A., & McCreery, M. (2009). Intertextuality in massively multiplayer online games. In R. E. Ferdig (Ed.), Handbook of research on effective electronic gaming in education (pp. 791–807). Hershey, PA: Information Science Reference.

H.J. Hong

Seo, Y. (2023). The asian games' golden ticket: South Korea's esports stars target medal success – and a military exemption. CNN. https://edition.cnn.com/2023/09/26/s port/esports-asian-games-military-exemption-medals-hnk-spt-intl/index.html.

Shankar, N. (2023). Asian games: First esports medal won in Hangzhou. BBC. https://www. bbc.co.uk/sport/66922626.

- Shulze, J., Marquez, M., & Ruvalcaba, O. (2023). The biopsychosocial factors that impact esports players' well-being: A systematic review. *Journal of Global Sport Management*, 8(2), 478–502.
- Smith, M. J., Birch, P. D., & Bright, D. (2019). Identifying stressors and coping strategies of elite esports competitors. *International Journal of Gaming and Computer-Mediated Simulations*, 11(2), 22–39. https://doi.org/10.4018/ijgcms.2019040102
- Smith, M., Sharpe, B., Arumuham, A., & Birch, P. (2022). Examining the predictors of mental ill health in esport competitors. *Healthcare*, 10(4), 626. MDPI.
- Sparkes, A. C. (1992). The paradigms debate. In A. C. Sparkes (Ed.), Research in physical education and sport: Exploring alternative visions (pp. 9–60). London: Falmer Press. Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage.
- Taft, M. K., Hosein, Z. Z., Mehrizi, S. M. T., & Roshan, A. (2013). The relation between financial literacy, financial wellbeing and financial concerns. *International Journal of Business and Management*, 8(11), 63.
- Tang, W. (2018). Understanding esports from the perspective of team dynamics. The Sport Journal, 21, 1–14.
- Taylor, J., & Ogilvie, B. C. (2001). Career termination among athletes. In R. N. Singer, H. E. Hausenblas, & C. M. Janelle (Eds.), *Handbook of sport psychology* (pp. 672–691). New York, NY: Wiley.
- Toth, A. J., Ramsbottom, N., Kowal, M., & Campbell, M. J. (2020). Converging evidence supporting the cognitive link between exercise and esport performance: A dual systematic review. *Brain Sciences*, 10(11), 859.
- Wan, A. (2023). Singapore kicks off the world's first Olympic Esports Week. CNBC. https ://www.cnbc.com/2023/06/23/singapore-kicks-off-the-worlds-first-olympic-es ports-week.html.

- Wattanapisit, A., Wattanapisit, S., & Wongsiri, S. (2020). Public health perspectives on eSports. Public Health Reports, 135(3), 295–298.
- Webb, W. M., Nasco, S. A., Riley, S., & Headrick, B. (1998). Athlete identity and reactions to retirement from sports. *Journal of Sport Behavior*, 21, 338–362.
- Witkowski, E. (2018). Doing/undoing gender with the girl gamer in high-performance play. In K. L. Gray, G. Voorhees, & E. Vossen (Eds.), *Feminism in play* (pp. 185–203). Springer. https://doi.org/10.1007/978-3-319-90539-6_11.
- Wong, D., & Meng-Lewis, Y. (2023). Esports: An exploration of the advancing esports landscape, actors and interorganisational relationships. *Sport in Society*, 26(6), 943–969.
- World Health Organization. (2022). Mental health. https://www.who.int/news-room/ fact-sheets/detail/mental-health-strengthening-our-response.
- Wylleman, P. (2019). A developmental and holistic perspective on transiting out of elite sport. In M. H. Anshel, T. A. Petrie, & J. A. Steinfeldt (Eds.), APA handbooks in psychology series. APA handbook of sport and exercise psychology (Vol. 1, pp. 201–216). American Psychological Association. https://doi.org/10.1037/0000123-011. Sport psychology.
- Yaro, I., Arshad, R., & Salleh, D. (2017). Relevance of stakeholders in policy implementation. Journal of Public Management Research, 3(1), 25, 2.
- Yin, K., Zi, Y., Zhuang, W., Gao, Y., Tong, Y., Song, L., & Liu, Y. (2020). Linking esports to health risks and benefits: Current knowledge and future research needs. *Journal of Sport and Health Science*, 9(6), 485–488. https://doi.org/10.1016/j.jshs.2020.04.006
- Zhong, Y., Guo, K., Su, J., & Chu, S. K. W. (2022). The impact of esports participation on the development of 21st century skills in youth: A systematic review. *Computers & Education*, Article 104640.
- Zimmerman, E. (2008). Gaming literacy: Game design as a model for literacy in the twenty-first century. In B. Perron, & M. J. Wolf (Eds.), *The video game theory reader 2* (pp. 45–54). Routledge.
- Zwibel, H., DiFrancisco-Donoghue, J., DeFeo, A., & Yao, S. (2019). An osteopathic physician's approach to the Esports athlete. *Journal of Osteopathic Medicine*, 119(11), 756–762.