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Abstract

This study explored the experiences of retired esports players, focusing particularly on their 2 3 transition out of esports. Utilizing a qualitative approach, interviews were conducted with four retired professional esports players in South Korea. A thematic analysis revealed four recurring 4 themes: Career Pressure and Uncertainty; Lack of Pre-Retirement Planning; Demand for 5 Mentorship Support; and Necessity for a Realistic Perspective on Talent. The findings 6 7 indicated that significant pressure and financial insecurity during their careers often catalyzed the players' decisions to retire. Players were unprepared for post-esports life due to inadequate 8 9 pre-retirement planning. This study highlights the crucial roles of mentorship and realistic talent assessments in facilitating smoother career transitions. The main contribution of this 10 research lies in its empirical evidence, which stresses the need for structured support systems 11 for esports players transitioning out of professional gaming. Stakeholders within the esports 12 industry can utilize these findings to formulate policies and programs aimed at providing 13 financial assistance, career planning, mentorship, and guidance to players during their careers 14 and upon retirement. The outcomes of this study can serve as a foundation for future research 15 by clarifying the necessity for broader investigations into the experiences of esports players 16 17 and the development of practical strategies to mitigate their transition challenges.

Keywords: career transitions in esports; career planning and development; esports players; lifeafter esports; support systems.

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Introduction

The popularity and growth of esports and its industry have been widely observed and 25 documented (Himmelstein et al., 2017; Smithies et al., 2020). The increasing popularity of 26 esports has led to a significant increase in the number of professional teams, which has attracted 27 many young people who aspire to become professional esports players (Smith et al., 2019). 28 Scholars from various disciplines have also shown a keen interest in esports, with an extensive 29 literature review of esports research conducted by Reitman et al. (2020). Their review identified 30 150 publications from 2002 to 2018 across various disciplines, including media studies, 31 informatics, business, sports science, sociology, law, and cognitive science. Several social 32 science studies have compared esports to traditional sports, such as sport management and sport 33 psychology (Cunningham et al., 2018; Hallmann & Giel, 2018; Heere, 2018). These studies 34 35 examine various aspects of esports, such as the nature of competition, the organizational structure of the industry, and the roles of stakeholders within the esports ecosystem. Despite 36 this wealth of knowledge, gaps remain, particularly regarding the short career spans of esports 37 players. Such brief careers can lead to post-career challenges and difficulties, posing potential 38 threats to their overall health and well-being (Smithies et al., 2020). Studies have investigated 39 various topics related to esports, such as the influence of esports on football brands (Bertschy 40 et al., 2020), esports online spectatorship (Qian et al., 2020), stressors and coping strategies of 41 42 professional esports players (Smith et al., 2019), and the roles and responsibilities of esports stakeholders in ensuring players' health and wellbeing (Hong, 2022). A gap in the literature is 43 the relative lack of research focusing on the unique experiences of esports players, the 44 challenges they encounter during and after their esports careers, and the impact of short career 45 spans on their well-being. This research gap highlights the importance of understanding the 46 experiences of esports players and developing strategies to address their challenges during and 47 after their careers. The findings of such research could provide a foundation for the 48

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development of practical and effective policies and programs aimed at supporting esports players and ensuring their well-being both during and after their esports careers. 50

This study aims to investigate the challenges, difficulties, and perceived needs 51 experienced by retired professional esports players in Korea during their transition out of 52 esports. The insights gleaned from this research offer valuable guidance for current or aspiring 53 professional players, better equipping them to navigate life after their esports careers. To 54 achieve the aim, the research questions are as follows: (a) What challenges and difficulties did 55 retired professional esports players in Korea face during their transition out of esports?; (b) 56 57 What are the perceived needs of retired professional esports players in Korea during their career transition?; (c) How do the experiences of retired professional esports players in Korea inform 58 the preparation needed for current or aspiring players regarding life after their esports careers?; 59 and (d) How do the transitional experiences of retired professional esports players in Korea 60 contribute to our understanding of career transitions in esports on a broader scale? 61

62 In the following sections, we will review relevant literature, particularly focusing on esports in the Korean context, and identify gaps in existing research. In the Methods section, 63 we describe our methodological approach to data collection and analysis. Subsequently, in the 64 Results section, we present our findings, which form the basis for the Discussion and 65 Conclusion sections. In these sections, we discuss key findings and provide their implications, 66 highlighting the contributions of our study to both theory and practice. To the best of the 67 authors' knowledge, this is the first qualitative study in the English language literature to offer 68 comprehensive insights into the career transitions of South Korean esports players. In this 69 respect, this study serves as an introductory investigation. It could provide a research design 70 for larger-scale studies and lay the foundation for future research into the experiences of retired 71 esports players worldwide. The findings significantly enrich both academic discourse and 72 practical applications, presenting empirical evidence on player transitions. This information 73

can inform the development of tailored support for the target population in practice. The study
also presents the challenges, stressors, and uncertainties that professional players confront in
their careers and sheds light on the factors that influence their decisions to retire, thereby
making a valuable contribution to the literature.

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Literature Review

79 Esports in the Korean Context

It should be emphasized that South Korea (hereafter referred to as Korea) played a 80 81 pivotal role in the early growth and development of esports both on a national and international scale. Internet cafés, colloquially known as PC bangs in Korea, created an environment 82 conducive to competition and spectatorship as early as 1998 (Jin, 2020). Another significant 83 84 milestone in Korean esports was the establishment of the 21st Century Pro-Game Association in 2000, later renamed the Korea e-Sports Association (KeSPA) in October 2003 (Korea e-85 Sports Association, 2019). Notably, this was the world's first association for esports at the 86 national level. KeSPA implemented essential regulations and principles, and organized esports 87 leagues, substantially contributing to Korea's influence on the global esports industry (Jin, 88 89 2020). Korean esports' influence has extended beyond popular culture, shaping the industry's development worldwide (Rea, 2016). Given this context, it is highly valuable to investigate the 90 experiences of retired Korean esports professionals, especially those who launched their 91 careers during the initial surge and prosperity of esports culture in the 2000s, to garner their 92 insights into the transition out of esports. 93

Whilst other countries such as the U.S. used the term of "electronic sports" in the 1990s,
Koreans used different terms including cyber athletics, digital athletics, or pro-gaming to
describe what is now globally known as esports (Jin, 2020). Since its introduction by Ji-Won
Park, Minister of the Department of Culture and Tourism in 2000 at the inaugural meeting of

the KeSPA, the term "esports" has gained official recognition. (Ministry of Culture, Sports, 98 and Tourism, 2008; Samsung Economic Research Institute, 2005). The active acceptance of 99 the Internet and the significant growth of esports in Korea can be attributed to different factors 100 including the determined mindset of the Korean people, their awareness of the potential 101 challenges caused by globalization, as well as political and historical contexts that shape the 102 Korea of today (Jin, 2010). Jin (2020) identified three significant milestones in the growth of 103 esports in Korea including "the introduction of PC communications like Hitel until 1998, the 104 introduction of StarCraft and PC bang, and the emergence of esports broadcasting and the 105 106 institutionalization of spectatorship in the Korean context until 2002" (p.3727). These key periods indeed led to the prosperity of esports in Korea and particularly the introduction of 107 StartCraft booted the esports phenomenon. Rea (2019) described such phenomenon as "a boon 108 109 for Korean digital gaming culture, arriving as it did at the height of PC bang expansion. StarCraft became a pop culture sensation in Korean seemingly overnight" (p. 120). 110

Reflecting this phenomenon, the Korean Air Force extended its involvement in esports 111 by sponsoring Air Force Challenges e-Sports (ACE), a professional esports team affiliated with 112 the military branch (Taylor, 2012). Korea still maintains a mandatory military service system 113 114 for men, requiring them to spend at least 18 months in military service, usually in their early twenties (Kim et al., 2016). This results in an educational or career break during this period. 115 116 Given this societal context, ACE could serve as a great opportunity for the professional players to further develop their career profiles while fulfilling their military services. As Cho (2008) 117 notes, "The Ace has been the only place where young professional gamers can continue their 118 career while completing the mandatory military service — an inevitable choice for most players 119 120 because their peak time as a gamer overlaps their military conscription age" (para. 7). Since its establishment in 2006, talented StarCraft players including "Lim Yo-Hwan" have served their 121 military service obligations while continuing to compete until the ACE team was disbanded in 122

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2012 (Oh, 2020). While this demonstrates the influence and power of esports culture on 123 Korean society, the disbandment of the professional team may have had a significant impact 124 on some individuals. The glory of StarCraft came to an end as major esports match-fixing 125 scandals occurred. In October 2015, several professional StarCraft 2 players in Korea have 126 been arrested on accusations of engaging in match-fixing and participating in illegal betting 127 activities; two of them have been even banned for life (Yin-Poole, 2015). In April 2016, BBC 128 (2016) also reported that two professional Starcraft 2 players have been charged with match 129 fixing, which negatively impacted the reputation of the game. 130

It is also important to consider the influence and association of the Korean culture with 131 the esports culture, in particular educational culture, and system. The outcomes of the Program 132 for International Student Assessment (PISA), a renowned global assessment initiative, revealed 133 that Korea demonstrated remarkable performance in the mathematics, reading, and science. In 134 this respect, the Korean education system is widely recognized for its strong emphasis on 135 student assessment, particularly through regular examinations. This emphasis, though, has 136 engendered dissatisfaction, stress, and a host of challenges among students, such as intense 137 competition and financial burden. The role of educational achievement in national development 138 is undeniable, yet the adverse effects of an excessive focus on exams have become increasingly 139 apparent. These negative impacts manifest in student unhappiness and a disconnect between 140 workforce requirements and the expectations of companies (Heo et al., 2018). Korea is a 141 society that values competitiveness and places a strong emphasis on academic performance 142 and achievement. Such emphasis arises from the belief that achieving high academic success 143 leads to a successful life, including entering top-tier universities, securing desirable 144 employment, and building stronger social networks (Lee, 2013). While such competitiveness 145 and drive for high performance have positively influence the growth and prosperity of esports 146 culture in Korea (Jin, 2020), the social pressure placed on academic achievement may leave 147

esports players vulnerable. Many Koreans still prioritize studying over playing games and may
perceive gaming with disdain. Thus, young people who pursue their esports careers can face
challenges in balancing their commitment to both studying gaming as they endeavor to meet
social expectations.

152 Career Transitions in Esports

Esports players tend to have a short career span, with one in five professional esports 153 players competing for only about two years (Ward & Harmon, 2019). This is due to the fact 154 that esports players rely heavily on their ability to respond quickly and accurately to complex 155 visual stimuli, which may begin to decline after the age of 24 (Thompson et al., 2014). As a 156 result, players may find it challenging to remain at the top of their game as they age (Smithies 157 158 et al., 2020). Many individuals begin playing esports at a young age, and some even leave 159 school prematurely to pursue careers as professional esports players (Hattenstone, 2017; Martin, 2019), limiting their opportunities to explore other career options after retiring from esports 160 161 (Smithies et al., 2020). Similarly, in traditional sports, adolescent high-performance athletes often prioritize their sport over education, resulting in a lack of pre-retirement planning and 162 career qualifications, and difficulties transitioning out of sport (Park et al., 2013). Dual careers 163 have been proposed as a solution to this issue, with high-performance athletes maintaining 164 careers in both sport and other areas, such as education or work (Stambulova & Wylleman, 165 166 2014). Likewise, Johnson and Woodcock (2021) have highlighted the precariousness of being a professional esports player, as players may need to sacrifice other aspects of their lives to 167 commit to training and competitions. As reported by Hattenstone (2017), many esports players 168 begin their professional careers at a young age, typically between 16 and 20 years old, as there 169 are no age restrictions to play professionally. An early onset of a professional esports career 170 may consequently lead some players to relinquish their education to chase their esports 171 aspirations. This phenomenon is not unique to esports, as it has also been reported among 172

adolescent athletes with dual careers in traditional sports who prioritize sport over education 173 (Cosh & Tully, 2014). Given that many esports players are of an age where they are attending 174 secondary schools or universities, there is a need for guidelines on the dual careers of esports 175 players. Such guidelines would raise awareness of the challenges faced by players and the need 176 for support from stakeholders, including teams, federations, sponsors, educational institutions, 177 and parents, to enhance their well-being during and after their esports careers. Managing dual 178 careers and developing the necessary skills to balance various obligations is critical for overall 179 health and well-being (Hong & Connelly, 2022). This makes it crucial for esports players to 180 181 synchronize their professional obligations with education, providing thorough readiness for life post-retirement (Hong, 2022). Researchers have investigated diverse aspects of esports, such 182 as the stressors professional esports players face, coping strategies they employ, and the role 183 of stakeholders in securing player health and well-being. Even so, there remains a dearth of 184 studies focusing on the unique experiences of esports players during their careers and in their 185 retirement (Smithies et al., 2020). 186

Esports players' short career spans may be due to a lack of financial and job security. 187 McCutcheon and Hitchens (2020) define esports professionals as individuals who primarily 188 earn their income through the provision of esports services, including professional players, 189 coaches, and team managers. Every esports player in all levels in the world may be 190 191 economically exploited by game publishers/developers as they heavily consume esports games and must commit to training and competitions to reach higher levels and become professional 192 players who generate significant income through their esports career (Witkowski & Manning, 193 2019). This financial insecurity is particularly evident in lower level esports players who do 194 195 not enjoy stable incomes or sponsorship. Esports players may be at significant risk of experiencing both financial and career insecurity (Witkowski & Manning, 2019). While some 196 top-level professional players may generate considerable income and enjoy financial security 197

during their careers (Todorov, 2022), most players at lower levels do not. Tournament income, 198 serving as a major financial source for professional players, amplifies career pressure and the 199 motivation to perform. Yet, the achievement of financial security remains a difficult endeavor 200 for many, with only a handful of top players maintaining the necessary high-level performance 201 amid the intensely competitive setting of esports (Johnson & Woodcock, 2021). The prevailing 202 notion that players are highly replaceable further compounds this precarious situation. Even 203 those with successful track records may find themselves deselected from their professional 204 teams (Van Allen, 2018). This insecurity can lead to a lack of pre-retirement planning, which 205 206 may cause players to struggle during and after their esports careers (Smithies et al., 2020). Esports players' financial and career insecurity may be addressed through pre-retirement 207 planning, as it is critical for both high-performance athletes and professional esports players to 208 209 mitigate financial and transitional issues and ensure healthy and smooth transitions (Hong, 2022; Park et al., 2013; Smithies et al., 2020). Some high-performance athletes, like some 210 esports players, enjoy early financial success but may struggle with financial issues in post-211 athletic life due to a lack of financial literacy and self-management skills (Hong & Fraser, 212 2021). Esports players' limited opportunities for career development due to their financially 213 punitive contracts violate their rights and cause struggles (Witkowski & Manning, 2019). In 214 this respect, the esports industry should establish structured systems to support esports players' 215 transitions out of esports, including career planning assistance, mentoring, and guidance during 216 217 their careers and post-retirement, to address the financial and career insecurity of esports players (Smithies et al., 2020). 218

Existing research on the transitions of esports players, albeit sparse, stresses the importance of this topic. It highlights the unique skill sets these players possess, which could be transferred to other domains, and the absence of structured support systems within the esports industry (Smithies et al., 2020; Hong, 2022). In contrast, the transition of high-

performance athletes out of traditional sports has received considerable attention, giving rise 223 to supportive measures like career assistance programs (Hong & Coffee, 2018; Torregrossa et 224 al., 2020). With these considerations in mind, the focus of this study is to explore the 225 experiences of esports players who have retired or are about to retire. This is to provide insights 226 that could prepare younger players for their own transitions. This study, by exploring both the 227 challenges and opportunities faced by retired esports players, seeks to establish the basis for 228 229 the creation of structured support systems that can assist esports players during and after their 230 careers.

231 Theoretical Framework

The process of athletes' transitions has been studied by sport psychology researchers 232 using theoretical models such as the Athletic Career Termination Model (Taylor & Ogilvie, 233 1994), the Analytical Career Model (Stambulova, 1994), and the Holistic Athletic Career 234 Model (Wylleman, 2019; for additional frameworks, see Stambulova et al., 2021). Among 235 those well-establish theoretical framework examining career transitions in sport, the 236 Conceptual Model of Adaptation to Career Transition (Lavallee et al., 2014) was chosen as the 237 theoretical framework for this study, as shown in Figure 1. This is because the framework 238 provides a comprehensive overview of the process of transition out of sport including causes 239 of career termination, factors influencing athletes' adaptation to career transition, the resources 240 available for coping with transitions, the potential challenges associated with career transitions, 241 and intervention that can support athletes during such period. Whilst there have not been any 242 established frameworks particularly focused on transition out of esports, adopting such well-243 established framework from the similar context can help provide valuable insights into the 244 esports context and potentially contribute to the development of a theoretical framework 245 specific to esports. 246

[Figure 1 near here]

The Conceptual Model of Adaptation to Career Transition (Lavallee et al., 2014) was 248 initially developed based on research on athletes' transitions in traditional sports but can also 249 be applied to professional esports players due to the unique characteristics of esports, such as 250 high-performance in competitive settings and short career spans (Hong, 2018; Smithies et al., 251 2020; Taylor, 2012). According to the model, there are four reasons for career termination: age, 252 deselection, injury, and free choice. While the reasons for esports players' career termination 253 may vary, there is limited empirical evidence available. The model identifies five key factors 254 that may impact athletes' adaptation to career transition. Research has shown that high-255 performance athletes may experience identity issues during their transition due to limited 256 opportunities to develop well-rounded identities during their athletic careers (Lally, 2007; Park 257 et al., 2013). It is important for athletes to identify available resources, such as coping strategies, 258 social support, and pre-retirement planning, to handle the demands of career transition. When 259 the demands of transition outweigh the available resources, athletes may experience various 260 difficulties, such as occupational or financial problems, family or social problems, and 261 psychopathology. In such cases, athletes may require cognitive, emotional, behavioral, social, 262 and organizational interventions. Research has highlighted the role of sports governing bodies 263 and organizations in providing organizational interventions (Hong & Coffee, 2018; Surujlal, 264 2016). There have been some studies that have found the existence of career assistance 265 programs for athletes, as shown by Hong and Coffee (2018) and Torregrosa et al. (2020). Hong 266 and Coffee (2018) identified such programs in 19 different countries, indicating that sport 267 governing bodies and organizations are making efforts to establish support systems for athletes 268 during their transitions. While these steps are promising, the research exploring athletes' 269 interactions with organizational interventions during their transition remains scarce. They also 270 claimed that the effectiveness of such programs has not been examined, and more research is 271

needed to assess their efficacy. Although there is currently no research on career assistance 272 programs specifically for esports players, Hong (2022) emphasizes the importance of 273 structured support systems for their career development, transitions, and overall health and 274 wellbeing. To develop such support systems, it is critical to understand esports players' unique 275 career path across different stages of their esports careers. This requires further investigation 276 to establish a solid framework that conceptualizes these stages and considers the associated 277 demands, challenges, and available resources (Salo, 2017). In this regard, it is also crucial to 278 gather more empirical evidence on professional esports players' transitions to inform the 279 280 industry and key stakeholders in establishing appropriate career development and transition support services/programs. 281

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Methods

283 The present study is an exploratory study, which can contribute to theory-building within the subject area (Mollick, 2014). By applying a qualitative approach, we sought to 284 provide in-depth narrative of Korean retired professional esports players' experiences of 285 transitioning out of esports. As we adopted a relativist ontology and subjectivist epistemology, 286 we recognize that individuals construct their own perceptions of the social world based upon 287 their "subjectivities, interests, emotions, and values" (Sparkes, 1992, p. 5). To achieve a more 288 comprehensive understanding of participants' subjective experiences, we employed semi-289 structured interviews as a meaning-oriented methodology (McArdle et al., 2012). By utilizing 290 this approach, we were able to explore participants' perspectives and gain valuable insights 291 into how they interpreted and made sense of their experiences. 292

293 **Participants**

To select participants for this study, the researchers interviewed four retired South Korean professional esports players who met the following criteria: 1) were over the age of 18;

296 2) had a professional esports career of three years or more; and 3) were retired or retiring from 297 esports. The researchers utilized purposive sampling to recruit participants, as this method 298 allows for the selection of individuals who can provide information based on their lived 299 experiences (Bernard, 2002). The researchers faced challenges in recruitment due to the limited 200 number of potential participants but overcame this by utilizing their network that had been 201 developed during previous esports research, which includes the national esports association 202 and professional teams in South Korea.

All participants were male, between 26 and 31 years old (M = 28.25, SD = 1.79), had 303 esports careers of 3 to 8 years (M = 5.75, SD = 1.92), and had retired between 0 and 9 years 304 prior to data collection (M = 4.75, SD = 3.27). One participant was retiring at the time of data 305 collection. Participants 1, 2, and 3 played StarCarft I and II, while Participant 4 played League 306 of Legends. They were all high-profile retired athletes who were part of the top-tier 307 professional teams in their respective game. At the time of data collection, the participants held 308 various professional positions, including government officer (Participant 1), employee of 309 games publisher (Participant 2), commentator (Participant 3), and undergoing military services 310 (Participant 4). 311

The decision to include a small sample size of four high-profile participants in this study 312 was based on several factors. While the authors initially aimed to recruit between six and eight 313 high-profile participants considering the potential challenges related to accessing such specific 314 population, they could not reach the targeted number. A small sample size was regarded as 315 appropriate for the study since the authors and officers from the national esports association 316 and professional teams made every possible effort to maximize the sample size within the given 317 timeframe. Given resource limitations including restricted contact points, transcription costs, 318 and researcher time constraints (Lakens, 2022), the decision to include these four participants 319 was shaped. Despite these restrictions, the national esports association and professional teams 320

specifically recommended these individuals owing to their unparalleled and expert perspectives 321 on the experiences of esports players. The insights and perspectives provided by these 322 participants were deemed of high value in the context of the study's objective, offering 323 empirical evidence on the subject matter. As such, the researchers decided to maximize the 324 data's worth by centering their attention on a compact yet expert group of participants. The 325 study's findings should be interpreted not as universally applicable, but as a significant input 326 to the literature documenting the experiences of esports players. Despite this, it is critical to 327 emphasize that the present study stands as a pioneering examination, setting the groundwork 328 329 for forthcoming research by outlining initial findings.

330 **Procedure**

331 To gain insight into the experiences of retired or retiring esports players, the authors conducted semi-structured interviews with four South Korean professional esports players who 332 met the selection criteria (Pezalla et al., 2012). The interviews were conducted between 333 November and December 2019, either via phone calls or face-to-face meetings, based on 334 participants' preferences. Three interviews were conducted by the lead author and the 335 remaining one interview was conducted by both authors, who are Korean. Prior to the interview, 336 participants received an information sheet and were asked to sign a consent form in compliance 337 with ethical procedures. All participants provided their consent before the commencement of 338 their interviews. The interviews lasted between 36 and 82 minutes (M = 55.76, SD = 17.64). 339 The interview guide was developed through a literature review and discussions between the 340 authors, drawing on works such as Lavallee et al. (2014), Park et al. (2013), and Stambulova 341 et al. (2009). 342

The interview guide was developed to explore participants' experiences with esportscareer transitions. The guide included four main sections. Section A focused on the background

of participants' esports careers, including the game(s) they played, the length of their 345 professional career, and their motivation to become a professional player. Sample questions for 346 this section include: What game(s) did you play professionally? How long was your 347 professional esports career? What motivated you to become a professional esports player? 348 Section B aimed to understand participants' experiences as professional players, including their 349 training and competition routines and any challenges or stressors they encountered. Sample 350 questions for this section include: What was your training regimen like as a professional player? 351 How did you manage the stress of competition? What were some of the biggest challenges you 352 353 faced as a professional player? Section C focused on participants' career transitions out of esports, including their reasons for retirement, how they prepared for retirement, and any issues 354 or difficulties they faced during the transition. Sample questions for this section include: What 355 led to your decision to retire from esports? How did you prepare for retirement? What were 356 some of the biggest issues or difficulties you faced during your transition out of esports? Lastly, 357 Section D aimed to understand participants' perceptions of the need for better transitions in 358 esports, including any support they felt they needed and any recommendations they had for 359 improving the transition process. Sample questions for this section include: What type of 360 support did you receive during your transition out of esports? What type of support did you 361 feel you needed but did not receive? What recommendations do you have for improving the 362 transition process for esports players? By exploring these four areas, the interview guide aimed 363 to provide a comprehensive understanding of the experiences and needs of retired or retiring 364 esports players during the transition process. 365

The authors of this study possess a wealth of relevant experience in esports and sport coaching. The lead author has conducted interviews with players and stakeholders across all levels of the esports industry, as well as with active and retired athletes, on the topics of career transitions and mental health and wellbeing. Meanwhile, the co-author is a former elite athlete and sport coaching expert who has also played StarCraft I as an amateur and followed
professional players as a fan. This collective experience and interest in the topic have helped
to establish a rapport with the participants and enriched the study's insights.

373 Data analysis and rigor

The authors employed Braun and Clarke's (2006) six-step thematic analysis to detect 374 significant patterns in the data set. This method was utilized to conduct a systematic and 375 comprehensive analysis of the data, in accordance with Braun et al.'s (2016) recommendations. 376 377 The data was transcribed verbatim to ensure a thorough understanding of the data. Since all interviews were conducted in Korean, the lead author translated the quotes used in this paper 378 while developing the Results section. To preserve confidentiality, each participant was 379 380 assigned a code name (e.g., Player 1, 2, 3, and 4). During the coding process, the authors took 381 initial notes on the participants' experiences of transitioning out of esports while reading and re-reading each manuscript. Based on the initial notes from both authors, the notes were 382 383 thoroughly reviewed and refined by the lead author resulting in 90 codes identified. These codes were then used for the next step to identify themes. To ensure the trustworthiness of the 384 findings, the authors had three different meetings to discuss the initial codes and common 385 themes identified from the data, with discussions held via video or phone call. These meetings 386 were used to finalize the themes and achieve consensus on the identified themes. Out of 90 387 codes, 18 potential themes were identified, and they were eventually categorized into four 388 themes as final themes. To guarantee the accuracy and transparency of the findings, each theme 389 was explicitly named and defined. The authors also reviewed Braun and Clarke's (2006) 15-390 point checklist for a good thematic analysis to ensure the quality of the analytic process 391 throughout the six steps. By following this rigorous approach to data analysis, the authors 392 aimed to ensure the credibility and reliability of their findings, and to provide a trustworthy 393 and dependable account of the participants' experiences. 394

To ensure the validity and reliability of our qualitative study, we employed several 395 measures. Firstly, we conducted a thorough review of the data analysis process and findings 396 for each theme through a series of meetings. Secondly, we maintained an "audit trail" of our 397 analytical procedures, which ensured transparency and coherence of the process and described 398 the methods we applied and the decisions we made. Thirdly, to ensure credibility and 399 dependability, each author conducted the primary analysis individually, and we acted as critical 400 friends for each other by sharing and reviewing our work. 'Critical friends' is one of the ways 401 to achieve rigor and quality of qualitative studies and it helps researchers enhance the rigor of 402 403 their studies (Smith & McGannon, 2018). It is "to encourage reflexivity by challenging each other's construction of knowledge" (Cowan & Taylor, 2016, p. 508). In this respect, both 404 authors critically reviewed each other's analysis and reflected the process of the data analysis 405 process. These measures align with the standards for ensuring rigor and trustworthiness in 406 qualitative research and establish the credibility and validity of our findings (Brown et al., 2018; 407 Finfgeld-Connett, 2014; Marshall & Rossman, 2006). 408

409

Results

The present study identified four prominent themes from the data: (a) Career Pressure 410 and Uncertainty, (b) Lack of Pre-Retirement Planning, (c) Demand for Mentorship Support, 411 and (d) Necessity for a Realistic Perspective on Talent. The initial theme addresses the 412 experiences of professional esports players prior to retirement, which constitutes a crucial 413 aspect of their careers, encompassing the 'Causes of Career Termination'. The subsequent 414 theme pertains to players' experiences upon retirement or upon deciding to retire from esports. 415 This theme correlates with 'Factors Related to Adaptation to Career Transition' and 'Available 416 Resources for Adaptation to Career Transition'. Lastly, the third and fourth themes underscore 417 the perceived necessity for improved preparation within the profession. These themes are 418 linked to 'Available Resources for Adaptation to Career Transition', 'Quality of Transition', 419

and 'Quality of Transition' within the Conceptual Model of Adaptation to Career Transition
(Lavallee et al., 2014). The comprehensive thematic map illustrating the experiences of
professional esports players in South Korea can be found in Figure 2.

423

[Figure 2 near here]

424 Career Pressure and Uncertainty

All participants in this study began their professional esports careers either during 425 secondary school or upon graduation, as their talents were recognized by fellow professional 426 427 players, teams, and coaches. Participants reported being aware of their exceptional performance even before joining professional teams, as their official rankings were verifiable. 428 Beginning their engagement in esports with games like StarCraft or League of Legends, these 429 430 players were initially drawn to the field for pure enjoyment. As recognition from other players and fans started to grow, so did their passion, leading them to see a career opportunity in 431 something they genuinely enjoyed. That being said, the professional esports environment 432 presented its own challenges, with significant performance pressure and a demand for 433 consistent victories, leading to an environment filled with stress. This stress stemmed from the 434 435 critical evaluation of their performance by teams, peer players, and fans, as well as the obligation to excel since they received compensation for their participation: 436

I did not receive a salary at the beginning of my career as a trainee, but I greatly enjoyed
the experience, as the team provided me with accommodations, gaming facilities, and
equipment in a gaming house. But, once I started earning a salary, I felt immense
pressure to maintain high performance levels at all times. The pressure during
competitions was especially overwhelming (Player 3).

Player 4 expressed an ability to cope with competitive pressure, as the drive to winoften superseded any concurrent stress. Yet, like the other players, he found the professional

environment particularly taxing in the face of losses. Reflecting on this, Player 4 remarked,
"Competing brought me joy. The sense of accomplishment when I won was extraordinary.
Dealing with a loss, on the other hand, was a true test [...]. Coping with fan criticism can also
be quite distressing." He drew attention to criticism from fans on social media platforms like
Facebook and Twitter. His career spanned a period of significant growth in social networking
sites, and he was involved in the most popular game, League of Legends.

As players aged, they felt the pressure of competing with emerging younger talents. 450 Player 1 noted, "We often remark, 'It's difficult to compete with teenagers." He observed a 451 decline in his physical ability to respond swiftly and accurately with age. This decline was also 452 attributed to excessive training while remaining physically inactive for extended periods. The 453 other three players shared similar experiences, although all participants made an effort to 454 exercise during their careers. Player 2 commented, "I made an effort to allocate time for 455 exercise amidst my training and competition schedules. While the team offered fitness club 456 memberships, the level of interest among players varied. But I was quite engaged in it." All 457 participants highlighted the significance of regular exercise and physical activity in optimizing 458 performance. Player 4 stated, "Some players participate in exercise and physical activities, but 459 many, due to their youth, don't recognize the importance and don't see it as a necessity." 460

Participants in the study also grappled with uncertainty throughout their careers. When 461 462 performing well and winning competitions, they tended to focus on their present success rather than considering their future prospects. Conversely, when experiencing losses, they became 463 acutely aware of the myriad young, talented players who could potentially replace them. This 464 lack of job security induced feelings of anxiety and concern about their long-term prospects in 465 the industry. Player 1 explained, "The absence of job security caused me immense anxiety." 466 This sentiment highlights the precarious nature of esports careers, where a player's success is 467 often judged on a game-by-game basis. The constant influx of emerging talent adds to the 468

uncertainty, as players must constantly strive to maintain their competitive edge or risk beingreplaced.

471 For all participants in this study, the mandatory military service for South Korean men, typically occurring in their early 20s, generated uncertainty. They were unsure whether this 472 obligation would interfere with their esports careers. A special military service arrangement 473 for esports players, called 'Air Force Challenges e-Sports (ACE),' was available for a limited 474 period. Certain professional players, particularly those engaging in StarCraft during that period, 475 managed to balance esports involvement alongside their military service. Player 3 exemplifies 476 such a case. Unluckily, his service arrangement was abruptly discontinued due to a scandal 477 involving match-fixing and a decline in the game's popularity, largely tied to the transition 478 from StarCraft I to StarCraft II. This change sparked significant uncertainty for three players 479 (Players 1, 2, and 3). The exceptional popularity of StarCraft I in Korea and its instrumental 480 role in nurturing the esports culture is noteworthy. The game publisher's introduction of 481 StarCraft II, however, caused a domino effect that led to many professional teams' disbandment 482 and numerous players' retirement, as they were encouraged or in some cases forced to 483 transition from StarCraft I to II. The three players' enthusiasm and passion for StarCraft II 484 could not match that for StarCraft I. They also noticed that StarCraft II could not reach the 485 popularity heights of its predecessor, leading to a decrease in opportunities for career 486 progression. 487

In summary, the reasons for players' retirement decisions encompass job insecurity due to factors such as short contracts, a decline in competitive advantage as they age, significant changes in the games played, and the obligation to fulfill military service.

491 Lack of Pre-Retirement Planning

The responses from all participants concerning the initial stage of their post-retirement 492 careers revealed a common theme: they lacked clear ideas about their next steps due to 493 insufficient pre-retirement planning. Player 1 admitted, "To be honest, I was at a loss. I had no 494 experience beyond the realm of gaming." Similarly, Player 2 mentioned, "After retirement, I 495 took on a few part-time jobs because I was uncertain about my next career move. But I first 496 had to complete my mandatory military service." Player 3 initially believed he could return to 497 his team upon completing his military service, but that option was not available. He recounted, 498 "Following my military service, I was at a loss regarding my next steps. That period was likely 499 500 the most difficult for me, as I navigated various career options outside of being a professional player." Player 1 devoted considerable effort to networking, which eventually led him to a new 501 career as an esports commentator. Yet, achieving stability took time due to the unpredictability 502 503 of his initial freelance income. In contrast, Player 2 found a seamless transition in his career when a game publisher offered him a job, enabling him to stay within the esports industry that 504 was already familiar to him. Despite this, he experienced a "very hard time" dealing with 505 506 identity loss (e.g., "I am not a professional player anymore") and regret (e.g., "Why didn't I prepare anything for the future?")—feelings shared by other players. He expressed greater 507 satisfaction with his current profession than with being a professional player, considering 508 improved job security. 509

Player 1 expressed a desire to enter a profession unrelated to esports, despite feeling unprepared for any particular career path. He had read a news article about a retired professional esports player who had successfully transitioned from esports to a government officer role, a position renowned for its job security in Korea. This player's story served as both inspiration and motivation for him. At the time of data collection, Player 1 had recently secured a government officer post and was highly satisfied with the job security it provided. As Player 4 decided to retire, he was presented with an opportunity to become a professional

team coach following his military service. This offer was a direct result of his reputation as one of Korea's leading players. Despite this, he found himself wavering between accepting the coaching role and investigating alternative career options. As he navigated through these considerations, the immediate necessity to complete his military service became his primary focus.

522 **Demand for Mentorship Support**

A lack of pre-retirement planning was identified as a significant issue for players when 523 they decided to retire and explore alternative career options. They also recognized a limitation 524 in mentorship for preparing for life after esports. Due to the absence of widely known 525 successful transitions, players felt as though they had to start 'from scratch.' While they 526 acknowledged that many retired players shifted to occupations such as running streaming 527 services and YouTube channels, they perceived these options as limiting. Player 3 commented, 528 "No one seems to be remembered post-retirement. While some manage to sustain themselves 529 via YouTube, Afreeca TV, and other platforms, a truly bright future for esports players has yet 530 to emerge. It's a disheartening reality." This sentiment was echoed by other players. Player 3 531 also acknowledged several retired esports players who smoothly transitioned into poker 532 playing careers. Despite this, he voiced an inclination towards a career path that offered more 533 safety and security. 534

As mentioned earlier, Player 1 was inspired by a retired esports player to become a government officer. He emphasized the importance of mentorship in facilitating the exploration of career options, as there was limited information available on the paths taken by other retired players. Player 1 stated, "We require diverse success stories from retired senior players who have discovered new career paths, in order to inspire younger players. We can gain valuable insights from their first-hand experiences." This viewpoint was shared by the other three

participants as well. The players stressed that mentorship should be provided by professional teams, national associations, or other relevant authorities, rather than solely relying on individual efforts. Young players may not recognize the significance of pre-retirement planning while actively competing. Player 4 noted, "Players may not heed advice during their active careers; so, it is vital for teams, coaches, KeSPA [national esports association in South Korea], and other governing bodies to offer educational and mentorship support."

547 Necessity for a Realistic Perspective on Talent

548 Drawing from their experiences as professional players and transitioning out of esports, all participants emphasized the apparent difference between playing esports for fun and playing 549 professionally. The latter demands extensive commitment, continuous coping with pressure 550 and stressors, and maintaining a competitive edge over other players. The participants 551 552 expressed concern about young people aspiring to become professional players without understanding the commitments and responsibilities involved. They also highlighted the need 553 for young people to critically assess and be realistic about their talent as players. Since most 554 esports games offer rankings, individuals can easily determine their potential to become 555 professional players: "If you lack sufficient talent, refrain from pursuing it. [...] Avoid 556 overestimating your abilities and remain grounded in reality." (Player 4); "You must engage in 557 thorough self-assessment. Determine if you genuinely possess the required talent and if you 558 are prepared to fully dedicate yourself to training and competition. Clarity is essential." (Player 559 1). 560

Although all participants started their professional careers based on their recognized talent at a young age, sustaining a successful career proved challenging due to extreme competition. Participants suggested that young people should be more aware of alternative career paths within the esports industry if they possess a strong passion for esports but may not succeed as professional players. This awareness can enable aspiring players to make informed
decisions and pursue viable career options within the esports ecosystem.

567

Discussion

This study investigates the experiences of retired or retiring esports players as they 568 transition out of their professional careers. The findings demonstrate that they have experienced 569 significant career pressure and coped with uncertainty related to their future career path. Since 570 they exclusively committed to training and competition from an early age, they had limited 571 opportunity and time to establish pre-retirement plans, which resulted in challenges during the 572 transition period. It should be noted that they also lacked sufficient guidance, highlighting their 573 need for external resources such as social and organizational support. In this respect, the 574 findings highlight the significance of external support from key stakeholders, such as 575 576 professional teams, national associations, and other relevant authorities. This support aligns with the Organizational Intervention for Career Transition aspect of the Conceptual Model of 577 Adaptation to Career Transition (Lavallee et al., 2014), which is critical for facilitating high-578 quality and healthy career transitions for players. Hong and Coffee (2018) also argue in 579 traditional sport context that organizational support from sports governing bodies and 580 organizations, as well as practitioners, plays a critical role in the successful transition of high-581 performance athletes out of their sports careers. 582

583 While the Conceptual Model of Adaptation to Career Transition (Lavallee et al., 2014) 584 proposes four distinct causes of career termination (age, deselection, injury, and free choice), 585 this study reveals a variety of reasons for transitioning out of esports, including job insecurity 586 arising from short contracts, diminishing competitive advantage as players age, significant 587 changes in games played, and the obligation to fulfill military service, which is an unique 588 reason in the Korean context (Kim et al., 2016). Job insecurity due to short contracts or non-

renewal of contracts may resemble deselection, and a decline in players' competitive advantage 589 with age aligns with the age factor in the framework. Significant changes in the games played 590 represent a unique factor in esports, setting it apart from traditional sports. Another specific 591 issue, mandatory military service, is pertinent only to players in countries with such requisites, 592 like South Korea. Even so, as professional players now increasingly have opportunities to join 593 international teams, these factors become critical not only for Korean players but also for 594 595 international professional teams seeking to recruit them. Whilst the release of StarCraft I played a critical role in the growth of esports culture in Korea (Jin, 2020), the transition from StarCraft 596 597 I to StarCraft II can be seen as unique challenges and difficulties for Korean professional players who participated in these games. It is likely that players will continue to face retirement 598 as games evolve or become outdated. This issue warrants attention from industry stakeholders, 599 particularly those responsible for player welfare. While this study's findings on the causes of 600 transition contribute to the literature, additional research should be conducted to identify other 601 significant causes to help reduce the prevalence of premature retirement. 602

It is important to highlight that Player 3 discussed the impact of a 'match-fixing scandal,' which led to the termination of a unique military service arrangement for esports players known as 'Air Force Challenges e-Sports (ACE).' This development had long-term consequences on his career. As mentioned earlier, while such special military service arrangement for talented esports players was considered a great opportunity (Cho, 2008), it should be noted that the short duration of the arrangement could negatively affected someone's career path. This aspect should be taken into consideration when establishing any future initiatives.

Match-fixing was also discussed as one of the factors influencing their career decisions. Two significant match-fixing scandals in relation to StarCarft in 2015 and 2016 (BBC, 2016; Yin-Poole, 2015) even resulted in a negative impact on those players who were not involved in match-fixing cases as one of the participants demonstrated. This was due to the diminished

reputation of the game, which led to a loss of popularity. Abarbanel and Johnson (2019) explore 614 esports consumers' awareness and attitudes towards gambling-related match-fixing. They find 615 that viewers are not highly concerned about match-fixing, often perceiving gambling as a 616 corruption source among competitors but also accepting some aspects. Spectators typically 617 judge wrongdoing based on rules rather than ethics and frequently excuse infractions. Schöber 618 and Stadtmann (2022) examined prohibited behaviours within esports teams, including 619 cheating, doping, and match fixing. They claimed that certain players and teams might 620 participate in self-betting, manipulating match results, in order to secure higher profits 621 622 compared to what they could gain from prize money. This claim can be supported by the significant difference in the volume of esports, which approximately 107 times higher than the 623 volume of prize money in 2020 (Schöber & Stadtmann, 2022). Holden et al. (2017) also pointed 624 out that esports has faced issues related to sexism, banned competitors, doping, and prize pool 625 splitting scandals besides match fixing controversies. Such findings from such previous studies 626 (Abarbanel & Johnson, 2019; Holden et al., 2017) and highlight the need for increased 627 awareness and vigilance against match-fixing and other issues. To foster a culture of integrity 628 and fair play, it is crucial to strengthen ethics education among esports players and expand 629 existing anti-cheating programs to cover the wider esports community. Collaboration among 630 various esports stakeholders, including players, teams, tournament organizers, and regulatory 631 bodies, is key (Hong, 2022) to creating a more transparent and ethical competitive environment. 632 633 More importantly, the aforementioned factors, such as match-fixing, sexism, doping, and prize pool splitting scandals, can have serious implications for professional esports players' careers. 634 Engaging in these unethical activities can damage a player's reputation, leading to 635 636 disqualification from competitions, loss of sponsorships, and even a potential ban from the industry. The prevalence of such issues can also create an unstable and untrustworthy 637 environment, making it difficult for players to build a sustainable and successful career. By 638

critically examining these factors and their impact on players' careers, stakeholders can
develop more effective strategies to combat these issues and create a healthier and more
supportive ecosystem for professional esports players.

It is important to acknowledge that job insecurity was the one of the factors contributing 642 to career pressure and uncertainty regarding their future career path. Professional players, who 643 typically begin playing esports "for fun," face pressure due to the intensely competitive 644 professional environment, leading to financial and job insecurity. Despite having contracts with 645 renowned and well-established professional teams and receiving high salaries during their 646 careers, financial and job insecurity were frequently cited by participants. As esports careers 647 can be short, akin to elite sports, such pressures and concerns are inevitable for both esports 648 professionals and high-performance athletes in traditional sports (Hong, 2022; Park et al., 649 2013). While a select few players enjoy financial security from annual contracts (Todorov, 650 2022; Smithies et al., 2020), many, if not most, professional players grapple with insecurity. 651 For top-level professionals with annual contracts, the pressure to improve performance may 652 actually intensify in order to remain competitive against younger, talented players who could 653 replace them. It is also worth noting that professional players might have limited opportunities 654 for career advancement due to harsh contractual demands, potentially resulting in players' 655 rights violations (Witkowski & Manning, 2019). The issues of financial and job insecurity, 656 657 along with the pressure to stay competitive to address these concerns, are linked to the brief careers of professional players. This is reflected in participants' advice for young players to be 658 realistic about their talent, given the need to manage the pressure of maintaining high 659 performance and a competitive edge, as well as devoting themselves to training. Players also 660 need to cope with the uncertainty of relatively short professional careers, which could be 661 effectively ended by the emergence of younger, talented players. In addressing uncertainty, it 662 is critical for players to establish strategies to cope with these unpredictable elements, such as 663

broadening their skill sets, pursuing mentorship, and concentrating on long-term career 664 planning. In doing so, esports players might enhance their readiness and resilience to navigate 665 through changes in the esports environment, which in turn could help to mitigate the 666 psychological burden associated with uncertainty. Despite this, it remains crucial to 667 acknowledge that esports players, in order to cultivate additional skill sets, secure mentors and 668 initiate career planning, necessitate social and organisational backing (Hong, 2022). They 669 could confront hurdles in allocating time for such activities and might lack guidance in 670 kickstarting those endeavors. 671

Professional players' careers are inherently short, as high performance relies on the 672 ability to rapidly and accurately respond to complex visual stimuli; such skills are likely to 673 decline after the age of 24 (Thompson et al., 2014). Participants emphasized their engagement 674 in regular exercise and physical activity to maintain fitness for competition and daily intensive 675 training. This factor may contribute to their longer-than-average careers (approximately 2 years; 676 Ward & Harmon, 2019) and warrants consideration by active professionals, young aspiring 677 players, and key industry stakeholders. Researchers have raised concerns about excessive 678 sedentary behavior among esports players (Tremblay et al., 2017), as they typically spend 679 around 15 hours per day training. This behavior can be linked to poor physical, psychological, 680 and cognitive health outcomes (de Rezende et al., 2014). As a result, some professional players 681 might need to terminate their careers prematurely or take unplanned breaks due to injuries, 682 such as carpal tunnel syndrome, tennis elbow, and back pain (Jolly, 2019). The demands of 683 training and competition can lead to stress, mental illness, and poor decision-making 684 (Wattanapisit et al., 2020). Thus, players and key stakeholders should place greater emphasis 685 on players' engagement in exercise and physical activity, not only to support their careers but 686 also to promote overall health and well-being. 687

Professional players in this study faced difficulties exploring other career options upon 688 retirement due to a lack of pre-retirement planning while coping with identity loss and seeking 689 job security, aspects reflected in the framework (e.g., self-identity, perceptions of control, and 690 social identity). This finding aligns with Johnson and Woodcock's (2021) observation that 691 professional players often sacrifice other life domains, limiting their opportunities to engage in 692 activities that develop broader interests and skills (Hong, 2022). In this respect, the study 693 highlights the need for players to better prepare for life after esports (i.e., emphasizing pre-694 retirement planning and mentorship) and provides guidance for young, aspiring players (i.e., 695 696 maintaining a realistic perspective on their talent). As proposed in the framework, players can benefit from developing coping skills to manage the pressures and uncertainties associated with 697 a professional esports career, securing social support from mentors and other key stakeholders, 698 699 and establishing pre-retirement plans. These findings provide significant practical implications 700 for the industry and its key stakeholders, who may take these factors into account when designing career support systems tailored to esports players. In traditional sports contexts, 701 702 researchers have emphasized the importance of pre-retirement planning for smooth and successful transitions (Park et al., 2013). As highlighted in the Conceptual Model of Adaptation 703 to Career Transition (Lavallee et al., 2014), pre-retirement planning is crucial for coping with 704 the demands of transition. The absence of such planning led the professional players in this 705 study to experience career transition distress, particularly in terms of occupational and financial 706 707 challenges, as indicated in the model. This evidence should be taken into account when establishing support systems for transitioning professional esports players. Expanding on these 708 findings, it is evident that there is a need for better pre-retirement planning and support for 709 esports professionals. This may involve providing career guidance, networking opportunities, 710 and access to resources that help players explore alternative career paths. 711

Pursuing dual careers, particularly by combining sports and higher education, has been 712 recommended to better prepare for life after sports (Rvan, 2015). Since all participants started 713 their professional careers while in secondary school or shortly thereafter, feelings of "being 714 715 lost" might be intensified due to being "institutionalized" by esports and having developed strong identities as professional players from a young age. In the esports context, balancing 716 esports commitments with education has been deemed critical for preparing for post-retirement 717 life (Hong, 2022). As a result, professional teams, national/international associations, and other 718 relevant authorities may need to consider fostering an environment that encourages young 719 720 players to pursue dual careers. Participants also experienced identity loss upon retirement, stemming from their status as well-known players and their heavy commitment to esports. This 721 issue is similarly significant in the traditional sports context (Lally, 2007). Addressing 722 723 psychological challenges related to retirement, such as identity loss and regret, is critical for helping players manage the transition more effectively and attain long-term satisfaction in their 724 post-retirement pursuits. Thus, fostering a healthy culture that encourages young players to 725 726 develop well-rounded identities while competing is crucial. This can be achieved by promoting dual careers and engaging in comprehensive pre-retirement planning. 727

728 Mentorship emerged as a critical factor in managing post-retirement transitions, as evidenced by the participants' experiences. Player 1, influenced by an article about a former 729 730 player transitioning into a government officer role, chose the same trajectory. This decision 731 turned out to be beneficial, yet it arose by chance. In response to this reality, participants advocated for the implementation of mentorship initiatives led by professional teams, national 732 associations, or other relevant authorities. The aim would be to provide players with an 733 734 understanding of life beyond esports and guide them in effective preparation strategies. The emphasis on job security for post-retirement careers is not surprising, considering the 735 participants' experiences with job insecurity during their esports careers—a challenge that 736

many other players likely face (Smithies et al., 2020). Addressing this issue requires collective 737 efforts from all stakeholders to promote both players' overall well-being and the sustainability 738 of the esports industry (Hong, 2022). Potential solutions may encompass mentorship programs, 739 career planning initiatives, and extensive industry-wide efforts focused on promoting stability 740 and generating long-term prospects for professional players. Additionally, offering access to 741 successful role models, mentors, and tailored resources and training programs could facilitate 742 743 smoother transitions into post-retirement careers and enhance overall satisfaction and stability for former professional players. 744

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Limitation and Future Study

The present findings aim to raise awareness among young players about transitioning 746 747 out of esports and encourage key stakeholders to establish career support systems for players. 748 The Conceptual Model of Adaptation to Career Transition (Lavallee et al., 2014) serves as a valuable theoretical framework for understanding professional players' transitions out of 749 esports. Future researchers could benefit from building on this work by developing a 750 customized theoretical model specifically for esports players, grounded in empirical and 751 theoretical evidence. For instance, the findings of the present study can contribute to the further 752 development of Salo's (2017) proposed theoretical framework. While Lavallee et al.'s (2014) 753 was considered as suitable for the present study, it may not fully capture the unique context of 754 esports since it was developed based on studies of high-performance athletes in traditional 755 sports. In this respect, future study can examine esports players' transitions employing different 756 theories and theoretical framework so that it can eventually contribute to the establishment of 757 a tailored theoretical framework specific to esports context. Focusing on the in-depth 758 experiences of four Korean professional players, the findings' applicability to other populations 759 may be limited. Future research should explore professional players from different countries to 760 draw more generalizable conclusions. 761

While some researchers argue that there are no general rules for sample size in 762 qualitative research (Patton, 1990), the researchers should aim to meet theoretical saturation, 763 meaning that they continue data collection until no new themes or insights were emerging from 764 the data (van Rijnsoever, 2017). Although the small sample size was previously justified due 765 to the unique population characteristics and resource constraints, future studies should aim for 766 larger sample sizes to achieve theoretical saturation. Future research could expand upon this 767 study by examining the transitional experiences of a larger, more diverse sample of Korean 768 professional esports players. For instance, it could include the experiences of retired players 769 770 from less mainstream esports genres (e.g., fighting games) or underrepresented groups in esports, such as female players. In addition, future studies can adopt this study design to 771 investigate the experiences of retired esports players worldwide, thus providing broader 772 773 perspectives on transitioning out of esports. Future research could also focus on exploring the post-esports lives of retired players. Such studies would provide empirical evidence on life 774 after esports, offering valuable insights to young and aspiring players on how to prepare for 775 776 their post-esports life. This will allow researchers to examine the changes in the esports industry including different factors such as contract conditions, support from professional 777 teams, and the increasing number and scale of competitions and tournaments. This would also 778 help researchers provide broader insights into the topic, given the fact that Korea has a 779 relatively longer history of esports culture and is still one of the leading countries with regard 780 781 to esports culture and industry. All participants in this study are male; however, with the increasing number of female players in recent times, future research should also investigate 782 female players' experiences transitioning out of esports. The present study employed a cross-783 784 sectional design, conducting only one interview per participant. While this approach provides valuable insights, future researchers might consider implementing longitudinal studies to 785 examine professional players' adaptation to retirement over time. While qualitative studies 786

provide valuable insights into topic by presenting participants' narratives and researchers' 787 interpretations of their transitional experiences, future research can complement the findings 788 from quantitative studies by developing a scale to examine esports players' overall wellbeing 789 during and after their esports career. Through such quantitative approach, future studies can 790 identify common challenges and barriers, copings skills and strategies, and esports athletes' 791 unique needs for esports players in transitions. Such quantitative perspective can provide a 792 broader understanding of the topic, conveying a more comprehensive perspective of esports 793 players' experiences and requirements. Lastly, as highlighted in the present study, the future 794 795 study can examine esports players' experiences of pursuing dual careers to identify the specific challenges and barriers and support needs when they manage two different commitments. Such 796 findings can enable the esports industry and key stakeholders to establish a supportive 797 environment for young players pursuing dual careers. 798

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Conclusion

This study offers empirical evidence regarding professional esports players' 800 transitions out of their careers, presenting valuable lessons and implications for both theory 801 and practice. In summary, this qualitative study offers a comprehensive understanding of 802 esports players' career transitions, particularly identifying their unique challenges and reasons 803 for retirement in comparison to elite athletes from traditional sports. This may inspire esports 804 researchers to develop a theoretical framework tailored to professional esports players' 805 retirement experiences and characteristics. Identity loss emerged as a significant challenge, 806 much like in traditional sports. This critical experience warrants further investigation to better 807 understand its impact on retiring players. Financial and job insecurity should also be explored 808 more thoroughly, as it is not directly linked to pre-retirement planning, such as pursuing dual 809 careers. Nevertheless, the study's findings emphasize the need for key stakeholders to establish 810 effective approaches that encourage young individuals to develop life and transferable skills 811

applicable beyond their esports careers. This can address concerns related to the unavoidably 812 short career span in esports. In this study, we also highlighted concerns regarding scandals. 813 such as match-fixing, which can significantly impact professional esports players' careers. 814 Further research on negative factors, including match-fixing, sexism, doping, and prize pool 815 splitting, is essential to increase awareness among esports players and fans regarding ethical 816 behaviors. This heightened awareness will contribute to the sustainable growth and 817 development of the esports industry. The exclusive reason for retirement in the Korean context, 818 military service, suggests that professional players from other cultures may have their own 819 820 unique reasons for retirement and barriers preventing them from continuing their esports careers. These factors should be further investigated. Lastly, the importance of mentorship and 821 adopting a realistic perspective on one's talent offers valuable insights and implications for how 822 professional players can begin and thrive in their esports careers. This needs to be addressed 823 by the entire industry and key stakeholders through structured support services and systems. 824

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835	References
836	Abarbanel, B., & Johnson, M. R. (2019). Esports consumer perspectives on match-fixing:
837	implications for gambling awareness and game integrity. International Gambling
838	Studies, 19(2), 296-311.
839	BBC (2016, April 25). Starcraft 2: E-sport stars charged with match fixing.
840	https://www.bbc.co.uk/news/technology-36131238
841	Bernard, H. R. (2002). Research methods in anthropology: Qualitative and quantitative
842	approaches (3rd ed.). Walnut Creek, CA: Alta Mira Press.
843	Bertschy, M., Mühlbacher, H., & Desbordes, M. (2020). Esports extension of a football brand:
844	stakeholder co-creation in action? European Sport Management Quarterly, 20(1), 47-
845	68, DOI: 10.1080/16184742.2019.1689281
846	Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research
847	in Psychology, 3, 77-101.
848	Braun, V., Clarke, V. & Weate, P. (2016). Using thematic analysis in sport and exercise
849	research. In B. Smith & A. C. Sparkes (Eds.), Routledge handbook of qualitative
850	research in sport and exercise (pp. 191-205). London: Routledge.
851	Brown, C. J., Webb, T. L., Robinson, M. A., & Cotgreave, R. (2018). Athletes' experiences of
852	social support during their transition out of elite sport: An interpretive
853	phenomenological analysis. Psychology of Sport and Exercise, 36, 71-80.
854	https://doi.org/10.1016/j.psychsport.2018.01.003.
855	Cho, J. S. (2008, May 19). StarCraft Losing in Gaming League. Korea Times.

https://www.koreatimes.co.kr/www/news/tech/2008/05/133_24407.html

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858

- encountered in combining elite sport and tertiary education. *Psychology of Sport and Exercise*, 15(2), 180–189.
- Cowan, D., & Taylor, I. M. (2016). 'I'm proud of what I achieved; I'm also ashamed of what
 I done': A soccer coach's tale of sport, status, and criminal behaviour. *Qualitative Research in Sport, Exercise and Health, 8*, 505–518.
- Cunningham, G. B., Fairley, S., Ferkins, L., Kerwin, S., Lock, D., Shaw, S., et al. (2018).
 eSport: Construct specifications and implications for sport management. *Sport Management Review*, 21(1), 1-6.
- 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 reviews. *PLoSOne*, 9(8), e105620. https://doi.org/10.1371/journal.pone.0105620
- 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
- 872 Hattenstone, S. (2017, June 16). *The rise of eSports: are addiction and corruption the price of*
- *its success?* The Guardian. https:// www.theguardian.com/sport/2017/jun/16/topaddictionyoung-people-gaming-esports.
- Heere, B. (2018). Embracing the sportification of society: Defining e-sports through a
 polymorphic view on sport. *Sport Management Review*, 21, 21-24. doi:
 doi.org/10.1016/j.smr.2017.07.002
- Heo, H., Leppisaari, I., & Lee, O. (2018). Exploring learning culture in Finnish and South
 Korean classrooms. *The Journal of Educational Research*, *111*(4), 459-472.

- Himmelstein, D., Liu, Y., & Shapiro, J. L. (2017). An exploration of mental skills among
 competitive league of legend players. *International Journal of Gaming and Computer- Mediated Simulations*, 9(2), 1–21. doi:10.4018/IJGCMS.2017040101
- Holden, J. T., Rodenberg, R. M., & Kaburakis, A. (2017). Esports corruption: Gambling,
 doping, and global governance. *Maryland Journal of International Law*, *32*, 236.
- Hong, H. J. (2018, May 1). Top athletes struggle to adjust away from limelight more should
- *be done for them*. The Conversation. https://theconversation.com/top-athletes-struggleto-adjust-away-from-limelight-more-should-be-done-for-them-95796
- Hong H. J. (2022) 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., & 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), Art. No.: 324. https://doi.org/10.3390/jrfm14070324
- Jin, D. Y. (2010). *Korea's online gaming empire*. Cambridge, MA: MIT Press.
- Jin, D. Y., (2020). Historiography of Korean Esports: perspectives on spectatorship.
 International Journal of Communication, *14*, 3727-3745.
- Johnson, M. R., & Woodcock, J. (2021). Work, play, and precariousness: An overview of the
 labour ecosystem of esports. *Media, Culture & Society, 43*(8), 1449–1465.
- 901 Jolly, J. (2019, July 29). *Esports injuries real for pros and at-home gamer, from finger sprains*
- 902 to collapsed lungs. USA Today.

- 903 <u>https://eu.usatoday.com/story/tech/columnist/2019/07/29/videogames-esport-pros-</u>
 904 face-serious-injuries-so-can-home-players/1832131001/
- Kim, S., Lim, E. J., Kim, T. H., & Park, J. H. (2017). Long-term effect of noise exposure during
 military service in South Korea. *International Journal of Audiology*, *56*(2), 130-136.
- Lakens, D. (2022). Sample size justification. *Collabra: Psychology*, 8(1), 33267.
- Lally, P. (2007). Identity and athletic retirement: A prospective study. *Psychology of Sport and Exercise*, 8(1), 85–99. https://doi.org/10.1016/j.psychsport.2006.03.003
- 910 Lavallee, D., Park, S., & Taylor, J. (2014). Career transition among athletes: Is there life after
- 911 sports? In J. Williams & V. Krane (Eds.), *Applied sport psychology: Personal growth*912 *to peak performance* (pp. 490–509). McGraw-Hill.
- Lee, G. L. (2013). Re-emphasizing character education in early childhood programs: Korean
 children's experiences. *Childhood Education*, 89(5), 315–322.
- 915 Martin H. (2019, May 22). Boy, 15, quits school to become full-time professional gamer and
- 916 *has already earned £25,000 in just three months as he now chases £23m Fortnite World*
- 917 *Cup cash*. The Daily Mail. <u>https://www.dailymail.co.uk/news/article7057239/Boy-15-</u>
 918 <u>quit-school-time-professional-gamer.html</u>.
- 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
- McCutcheon, C., & Hitchens, M. (2020). eSport and the exploitation of digital labour. *The Journal of Fandom Studies*, 8(1), 65–81.
- 924 Ministry of Culture, Sports, and Tourism. (2008). 2008 Korean Game White Paper. Seoul,
 925 Korea: Author.

- Mollick, E. (2014). The dynamics of crowdfunding: An Exploratory study. *Journal of Business Venturing*, 29(1), 1–16. https://doi.org/10.1016/j.jbusvent.2013.06.005
- 928 Oh, D. Y. (2020). 20s, Military Service, and Esports. Korea e-Sports Association.
 929 https://post.naver.com/viewer/postView.nhn?volumeNo=27981646&memberNo=679
 930 9533&vType=VERTICAL
- Patton, M. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA:
 Sage.
- Park, S., Lavallee, D., & Tod, D. (2013). Athletes' career transition out of sport: A systematic
 review. *International Review of Sport and Exercise Psychology*, 6(1), 22–53.
- Pezalla, A. E., Pettigrew, J., & Millar-Day, M. (2012). Researching the researcher as instrument:
 an exercise in interviewer self-reflexivity. *Qualitative Research*, 12(2), 165–185.
 http://dx.doi.org/10.1177/1468794111422107.
- Reitman, J. G., Anderson-Coto, M. J., Wu, M., Lee, S. J., & Steinkuehler, C. (2020). Esports
 research: A literature review. *Games and Culture*, 15(1), 32-50.
- Ryan, D. C. (2015). Factors impacting carded athlete's readiness for dual careers. *Psychology of Sport and Exercise*, *21*, 91–97. http://dx.doi.org/10.1016/j.psychsport.2015.04.008.
- Qian, T. Y., Wang, J. J., Zhang, J. J., & Lu, L. Z. (2020). It is in the game: dimensions of
 esports online spectator motivation and development of a scale. *European Sport Management Quarterly*, 20(4), 458–479, DOI: 10.1080/16184742.2019.1630464
- 945 Samsung Economic Research Institute. (2005). *Issue paper: The current status of esport and*946 *its development strategy*. Seoul, Korea: Author.

- Salo, M. (2017). Career Transitions of eSports Athletes: A Proposal for a Research Framework. *International Journal of Gaming and Computer-Mediated Simulations (IJGCMS)*, 9(2),
 22-32.
- Schöber, T., & Stadtmann, G. (2022). The dark side of e-sports–An analysis of cheating, doping
 & match-fixing activities and their countermeasures. *International Journal of Esports*,
 2(2).
- 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, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and
 opportunities within sport and exercise psychology. *International review of sport and exercise psychology*, 11(1), 101-121.
- Smithies, T. D., Toth, A. J., Conroy, E., Ramsbottom, N., Kowal, M., & Campbell, M. J. (2020).
 Life After Esports: A Grand Field Challenge. *Frontiers in Psychology*, *11*, 883.doi:
 10.3389/fpsyg.2020.00883
- 962 Sparkes, A. C. (1992). The Paradigms Debate. In A.C. Sparkes (Ed.), *Research in Physical* 963 *Education and Sport: Exploring Alternative Visions* (pp. 9-60). London: Falmer Press.
- 964 Stambulova, N. B. (1994). Developmental sport career investigations in Russia: A
 965 postperestroika analysis. *The Sport Psychologist*, 8(3), 221-237.
- Stambulova, N., Alfermann, D., Statler, T., & Côte, J. (2009). ISSP Position stand: Career 1056
 development and transitions of athletes. *International Journal of Sport and Exercise Psychology*, 7, 395-412. doi: 10.1080/1612197X.2009.9671916

- Stambulova, N. B., Ryba, T. V., & Henriksen, K. (2021). Career development and transitions
 of athletes: The international society of sport psychology position stand revisited. *International Journal of Sport and Exercise Psychology*, 19(4), 524-550. DOI:
 10.1080/1612197X.2020.1737836
- 973 Stambulova, N., & Wylleman, P. (2014). Athletes' career development and transitions. In A.
 974 Papaioannou, & D. Hackfort (Eds.), *Routledge companion to sport and exercise*975 *psychology* (pp. 605–621). London: Routledge.
- 976 Surujlal, J. (2016). Influence of organizational support on retirement planning and financial
 977 management of professional soccer players. *Polish Journal of Management Studies*, *13*,
 978 164–74.
- 979 Taylor, T. L. (2012). *Raising the stakes: E-sports and the professionalization of computer*980 *gaming*. Cambridge, MA: Massachusetts Institute of Technology.
- Taylor, J., & Ogilvie, B. C. (1994). A conceptual model of adaptation to retirement among
 athletes. *Journal of Applied Sport Psychology*, *6*, 1-20.
- Thompson, J. J., Blair, M. R., & Henrey, A. J. (2014). Over the hill at 24: persistent age-related
 cognitive-motor decline in reaction times in an ecologically valid video game task
 begins in early adulthood. *PLoS ONE*, *9*, e94215. doi: 10.1371/journal.pone.0094215
- 986 Todorov, S. (2022, May 18). *How Much Do Esports Players Make. Esports Grizzly*.
 987 https://www.esportsgrizzly.com/blog/how-much-do-esports-players-make/
- Torregrossa, M., Reguela, S., & Mateos, M. (2020). Career assistance programs. In D. Hackfort,
 & R. Schinke (Eds.), *The Routledge International Encyclopedia of Sport and Exercise Psychology* (pp. 73–88). London, UK: Routledge.

997

- Tremblay, M. S., Aubert, S., Barnes, J. D., Saunders, T. J., Carson, V., Latimer-Cheung, A. E.,
 Sebastien, F. M. C., Altenburg, T. M., & Chinapaw, M. J. M. on behalf of SBRN
 Terminology Consensus Project Participants. (2017). SBRN Terminology Consensus
 Project participants. Sedentary Behavior Research Network (SBRN)—Terminology
 Consensus Project process and outcome. *International Journal of Behavioral Nutrition and Physical Activity, 14*, 75. https://doi.org/10.1186/s12966-017-0525-8
- 998 *Party*. Kotaku. https://compete.kotaku.com/reportdota-team-told-player-he-was-cut999 during-pizza-p-1822249299.

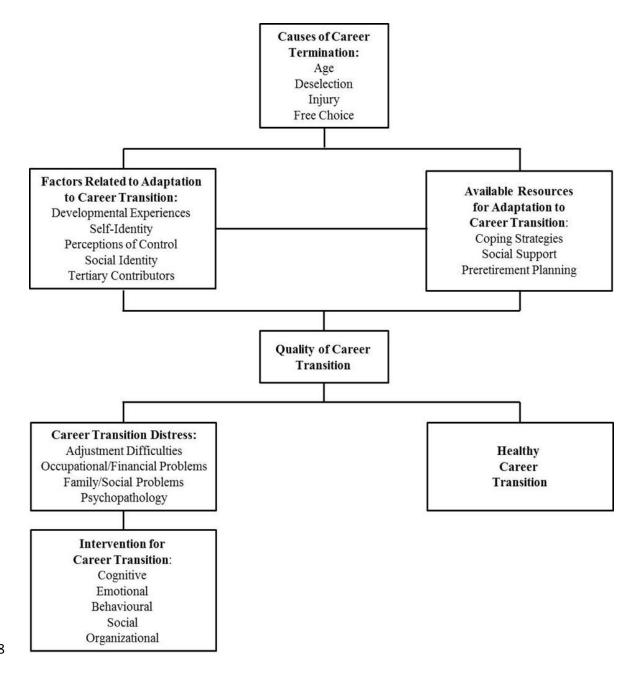
Van Allen, E. (2018, January 19). Report: Dota Team Told Player He Was Cut During Pizza

- van Rijnsoever, F. J. (2017). (I Can't Get No) Saturation: A simulation and guidelines for
 sample sizes in qualitative research. *PLoS ONE*, *12*(7), e0181689.
- Ward, M. R., & Harmon, A. D. (2019). ESport superstars. *Journal of Sports Economics*, 20,
 987–1013. doi: 10.1177/15270025198 59417
- Wattanapisit, A., Wattanapisit, S., & Wongsiri, S. (2020). Public Health perspectives on
 eSports. Public Health Reports, 135(2), 003335492091271.
 https://doi.org/10.1177/0033354920912718
- Witkowski, E., & Manning, J. (2019). Player power: networked careers in esports and highperformance game livestreaming practices. Convergence, 25(5–6), 953–969.

1009 Wylleman, P. (2019). A developmental and holistic perspective on transitioning out of elite

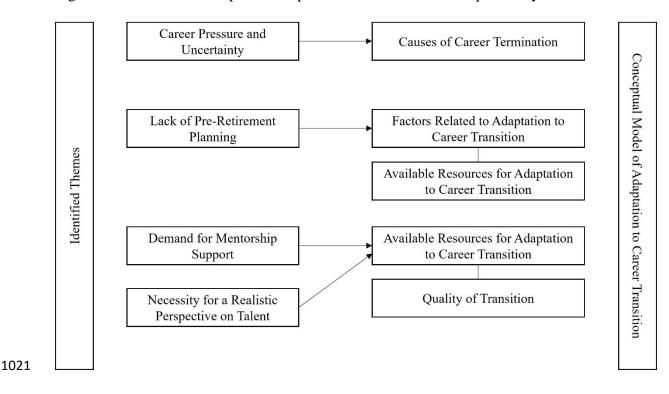
- 1010 sport. In M. H. Anshel (Ed.), APA handbook of sport and exercise psychology: Vol. 1.
- Sport psychology (pp. 201 216). Washington, DC: American Psychological
 Association.

- 1013 Yin-Poole, W. (2015, October 19). Korean StarCraft rocked by another match-fixing scandal
- 1014 Two banned for life with more expected to follow. EUROGAMER.
- 1015 <u>https://www.eurogamer.net/korean-starcraft-rocked-by-another-match-fixing-scandal</u>
- 1016
- 1017 Figure 1. Conceptual Model of Adaptation to Career Transition (Lavallee et al., 2014)





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1020 Figure 2. Final thematic map of the Experiences of Professional Esports Players in South Korea