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GAME PLAN FOR LIFE: CAREER PREPARATION STRATEGIES OF UNIVERSITY STUDENT ATHLETES

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ABSTRACT

The issue of to what extent university student-athletes are prepared to enter the workforce upon graduation is an important concern in today's era. As career shifts follow the evolution of technology, the careers of student-athletes are also at stake. This case study investigates the career readiness of seven final-year student-athletes from Universiti Putra Malaysia (UPM), representing diverse sports disciplines and academic programs. It is guided by three research questions related to (1) career planning strategies, (2) the impact of dual academic-athletic demands, and (3) the role of support systems in shaping career preparation. Data were collected via semi-structured interviews and participants' observations. Using Interpretive Phenomenological Analysis (IPA), seven major themes and 21 categories were derived from the three main research questions associate with strategy, impact of dual demands, and role of social support in their career preparation. Findings suggest that student-athletes often lack structured career planning, experience role conflict, and rely heavily on informal networks for guidance. The study highlights the need for integrated support frameworks, including career counselling, flexible academic programming, and targeted interventions. A longitudinal research design is recommended further to explore the impact of career preparation strategies post-graduation.

Keywords: career preparation strategies, dual career, university student-athletes, tertiary education

1. Introduction

The career preparation and readiness of student-athletes is a multifaceted issue that encompasses various psychological, social, and institutional factors. Research indicates that student-athletes often experience lower levels of career maturity compared to their non-athlete peers, which can hinder their ability to make informed career decisions (Hong et al., 2022). For instance, Smith and Hardin (2019) found that early engagement with academic and career resources significantly aids student-athletes in developing coping mechanisms for their transitions. This proactive approach is vital, as many student-athletes report feeling unprepared for the workforce due to the intense focus on their sports commitments (Coffin et al., 2021). This is particularly crucial as many student-athletes face unique challenges, such as the pressure to select a degree path early due to eligibility requirements, which can truncate their career exploration process (Haslerig & Navarro, 2015). Many articles discussing career preparation among student-athletes were published some time ago, highlighting the need for more recent research on this important topic (Hong et al., 2022; Fernandez, 2022). Nevertheless, this issue has become increasingly critical with the rapid evolution of technology (Saarinen et al., 2022), exposure to mental health (Coffin et al., 2021), and the significant societal shifts due to COVID-19 that impact everyone, including student-athletes (Graupensperger et al., 2020).

Moreover, the transition from athletics to post-collegiate careers is often inadequately addressed, with many student-athletes receiving career management support only after their athletic careers have ended (Kim, 2014). This lack of proactive career development can lead to decreased confidence and a passive approach to career planning (Fernandez, 2022). Indirectly, this can negatively impact student-athletes by limiting their career options to the narrow scope of 'sports careers' or roles related to their athletic background. In the worst-case scenario, as highlighted by Quinaud et al. (2023), statistics reveal that many student-athletes end up unemployed or forced to accept jobs unrelated to their passion for sports. Study by Huang et al. (2016) highlight the importance of psycho-biosocial readiness for transitioning to post-sport careers, suggesting that student-athletes should actively engage in vocational development outside of their sport to facilitate a smoother transition.

Condello et al. (2019) emphasise the mentoring influence of coaches, which can significantly impact a student-athlete's dual career trajectory. Similarly, Hong et al. (2022) emphasised the role of support systems, including coaches and mentors, critical in shaping the career readiness of student-athletes. Furthermore, the development of career decision-making self-efficacy is essential, as parental support and coach influence have been shown to enhance athletes' confidence in navigating their career paths (Retnam et al., 2018). Career readiness encompasses a range of competencies, including the ability to visualise future career paths and actively pursue opportunities such as internships and networking (August, 2018). However, many student-athletes struggle with balancing their academic and athletic commitments, which can detract from their career preparation efforts (Davis et al., 2022). The systems-theory framework of career development suggests that both internal and external factors significantly affect student-athletes' career trajectories, necessitating a comprehensive approach to career services that addresses these unique challenges (Davis et al., 2022).

Understanding the career preparation strategies will help the transition from university athletics to professional careers become more structured, with institutions implementing programs that prepare student-athletes for life after sports. It is found that early engagement with academic and career resources significantly aids student-athletes in developing coping

mechanisms for their transitions (Smith & Hardin, 2019). This proactive approach is vital, as many student-athletes report feeling unprepared for the workforce due to the intense focus on their sports commitments (Coffin et al., 2021). Indirectly leading to increased stress and anxiety levels among this population (Graupensperger et al., 2020). This study aims to explore the career preparation strategies of student-athletes to support their transition after graduation. However, due to time constraints and approval concerns, the study was conducted within a single institution. Nevertheless, to ensure reliability and validity, specific criteria will guide participant selection, and data will be collected until saturation is achieved, as further explained in the methodology section. Accordingly, this study was designed to address the following three research questions:

- RQ1: What strategies do university student-athletes employ to navigate career planning as the transition from higher education and sport to the workforce?
- RQ2: How do the dual demands of academics and athletics impact the career preparation of student-athletes?
- RQ3: What role do support systems (e.g., counsellors, departments, coaches) play in the career preparation of student-athletes?

2. Literature Review

2.1. Dual Career Trend for Student-Athletes

University student-athletes often face unique challenges in preparing for careers beyond their athletic endeavors. Unlike typical university students, they must balance rigorous training schedules, frequent tournaments, and external expectations while maintaining strong academic performance. The demanding nature of managing both academics and athletics can limit their engagement in career development activities, leading to underdeveloped decision-making skills and delayed career planning compared to their non-athlete peers (Espina, 2020). This dual commitment may result in identity foreclosure, where individuals become overly identified with their athletic role, potentially hindering their exploration of alternative career paths (Espina, 2020). Consequently, many student-athletes struggle with the transition from sports to the professional workforce, experiencing anxiety and uncertainty about their future careers (Graupensperger et al., 2020).

To address these challenges, many student-athletes adopt a dual-career approach to cater dual demand, combining sport with education or work, which helps them balance their athletic and non-athletic commitments while preparing for life after sports (Hong et al., 2022). This dual-career trend has gained significant attention in recent years, as it allows athletes to continue their involvement in sports while pursuing academic and professional development (Cano et al., 2020; Izzicupo et al., 2021; Condello et al., 2019). For many who have grown up immersed in sports, leaving the field entirely can be difficult, making dual careers a practical and increasingly popular option for ensuring a smoother transition into the workforce.

Student-athletes face the challenge of balancing their sporting commitments with their educational and career development goals (Cano et al., 2020; Cartigny et al., 2020). Research has shown that student-athletes who are able to successfully navigate the dual career path tend to exhibit higher levels of self-esteem and career adaptability (Nikander et al., 2021). However, the implementation of effective dual career support systems at the institutional level remains a challenge (Palumbo et al., 2021; Izzicupo et al., 2022). Barriers to successful dual career development include perceived lack of time, difficulty in balancing academic and

athletic responsibilities, and limited access to relevant information and services (Vaquero-Cristóbal et al., 2023; Nikander et al., 2022). Addressing these barriers through targeted interventions and policy changes at the institutional and national levels is crucial for supporting student-athletes' career preparation (Onose et al., 2023; Puskás & Perényi, 2015). The dual career environment and organisational culture of the educational institution can also significantly impact student-athletes' ability to thrive in both the academic and athletic domains (Korhonen et al., 2020; Quinaud et al., 2023). Fostering a supportive and flexible environment that recognises the unique needs of student-athletes is essential for their holistic development (Quinaud et al., 2023). The study gathered the literature review that studied the dual career trend as a career preparation among student-athletes and can be summarised in Table 1.

Table 1: Summary of Dual Career for Career Preparation

Factor	Explanation	Article(s)
Support system	<ul style="list-style-type: none"> - Parents, coaches, academic staff, and sport personnel in navigate the demands of their dual responsibilities - Coherent coordination and integration between support providers enhance student-athletes' manage roles effectively 	<ul style="list-style-type: none"> - Gjaka et al., (2024); - Capranica et al., (2022); - Izzicupo et al., (2022)
Flexible academic arrangements	<ul style="list-style-type: none"> - Adaptable curricula, academic tutoring, and sport monitoring services allow student-athletes to better balance their time and commitments 	<ul style="list-style-type: none"> - Cano et al., (2020); - Brustio et al., (2020); - Gjaka et al., (2024)
Coping mechanism and life skills	<ul style="list-style-type: none"> - Skills (i.e., time management, goal setting, and decision-making) help student-athletes successfully handle the pressures of their dual responsibilities 	<ul style="list-style-type: none"> - Izzicupo et al., (2021); - Quinaud et al., (2022); - Saarinen, (2024)
Motivation and identity	<ul style="list-style-type: none"> - Prioritize either sports or academics, depending on their personal goals and circumstances 	<ul style="list-style-type: none"> - Lin et al., (2022); - Cartigny et al., (2020)
Challenges and barriers	<ul style="list-style-type: none"> - Difficulty reconciling academic and athletic commitments as they approach the conclusion of their sports careers - Burnout and negative career thoughts complicate dual career experiences 	<ul style="list-style-type: none"> - Huang et al., (2016); - Macia-Andreu, (2023); - Kuettel et al., (2017)
Holistic approach	<ul style="list-style-type: none"> - Addressing the needs of the individual while considering the broader educational and athletic environments - Effective strategies (i.e., comprehensive support systems, internships, mentorship programs, and policies) that integrate academic flexibility with skill-building opportunities 	<ul style="list-style-type: none"> - Capranica et al., (2022); - Stambulova et al., (2015); - Gjaka et al., (2024); - Mateo-Orcajada et al., (2022)

2.2. Schlossberg's Transition Theory in Career Preparation

Schlossberg's Transition Theory, developed by Nancy Schlossberg in the 1980s, has been employed to understand the complex phenomenon of how individuals experience and cope with change, particularly during transitions such as moving between occupations, shifting careers, or transitioning from student life to the workforce. The theory is widely used to explore how individuals adapt to various life transitions as a continuous, phased process of moving out of, moving through, and moving into new situations (Coston, 2023). It has been widely applied in various contexts, including student transitions (Coston, 2023; Gray et al., 2022), veteran transitions (Carpenter & Silberman, 2020), career transitions (Lavallee, 2006), and transitions in later life (Koltz & Koltz, 2019). When applied to career preparation, the theory provides a valuable framework for understanding how individuals prepare to enter the workforce. In this study's context, it explains how student-athlete get ready to transition into post-collegiate careers. This suggests that they are at a critical career transition, characterised by the "moving out" and "moving through" phases, as they are still in their final year of study and sports while preparing for their exit from both and entry into professional life.

Schlossberg posits that an individual's ability to cope with a transition depends on the interaction of four key factors; internal and external factors often referred to as the "4 S's": situation, self, support, and strategies (Coston, 2023). These elements guide the exploration of how student-athletes prepare for their transition into the workforce by influencing their perception, decision and strategies. Figure 1 proposes a conceptual framework that contextualises the career preparation experiences of final-year university student-athlete. The framework links the 4 S's – to the three core research questions. The "situation" factor examines the characteristics of the transition, such as whether it is expected or unexpected, positive or negative, and the individual's perception of the change. In this framework, the "situation" reflects the "moving through" transitional phase from student-athlete to working professional. This includes the pressures of navigating and adjusting dual commitments including academic deadlines, sports commitments, and uncertainties about life. The "self" factor focuses on an individual's personal and demographic characteristics, including their psychological resources, resilience, and coping abilities, which influence how they navigate the transition. The "self" captures individual attributes such as athletic identity, resilience, self-efficacy, and their perceived control over their career outcomes. These internal characteristics determine how student-athletes perceive and respond to career-related challenges. The "support" factor emphasises the role of social support systems in helping an individual through the transition process. While in this framework, the "support" component involves external sources that contribute to career preparation—such as guidance from coaches, mentors, peers, academic advisors, and family members. Finally, "strategies" refer to the practical actions and coping mechanisms adopted by student-athletes, including participation in career workshops, networking, proactive job searching, and balancing sports training with career development activities.

The four factors can significantly shape how student-athletes or individuals in similar dual-career paths prepare for, and ultimately navigate, career changes and transitions. By emphasising the interplay of personal characteristics, support systems, and effective strategies, the theory highlights the multifaceted nature of career preparation, offering insights into how individuals can adapt and thrive as they shift from one phase of life to another (Coston, 2023). It also helps explains why some individuals are better prepared than others during transition process – based on their situation, self-perception, support systems, and strategies employed. In this study, the conceptual framework grounded in Schlossberg's

theory informed the thematic structure of the data analysis, with findings categorised into three major themes—career planning strategies (RQ1), impact of dual demands (RQ2), and role of support systems (RQ3)—each corresponding with specific elements of the 4 S's. By aligning the lived experiences of student-athletes with this theoretical lens, the framework enables a nuanced understanding of the career readiness process and highlights where targeted institutional interventions could improve outcomes. It also supports recommendations for future longitudinal studies to examine how these transitions evolve over time, especially post-graduation (Lavalée, 2006; Koltz & Koltz, 2019).

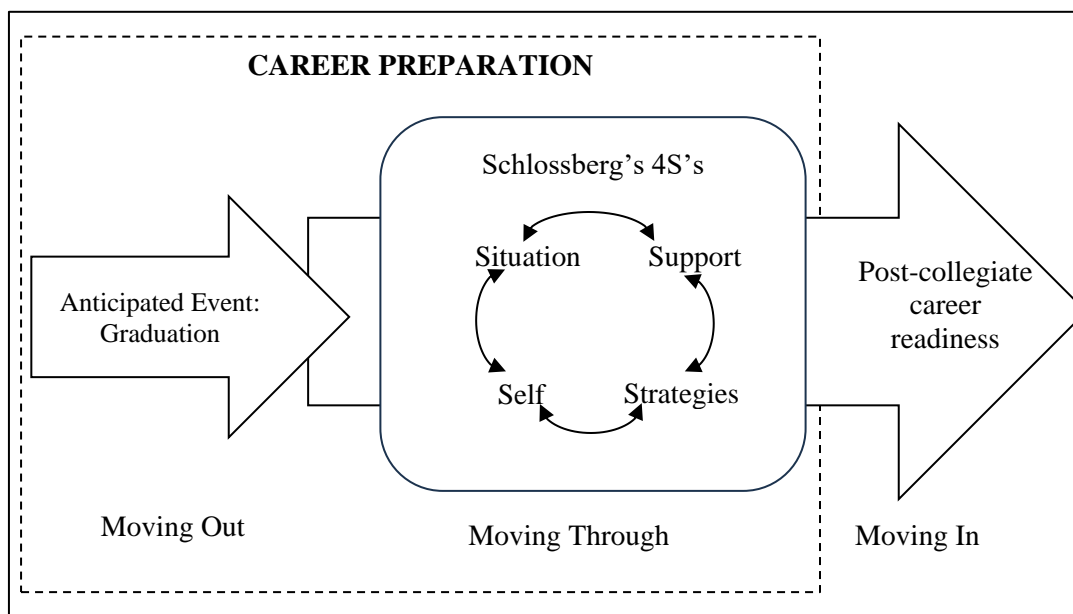


Figure 1: Research Framework

3. Methodology

Based on the study's research questions, the researchers selected a single case study focusing on student-athletes from a single institution, UPM. A single case study does have its limitations—it may not be easily generalized to larger populations, has a smaller sample size, and could be influenced by bias, affecting objectivity. However, it also offers significant advantages. It allows for a deep, holistic understanding of the case and can uncover unique or unexpected insights that broader studies might overlook (Gustafsson, 2017). Since the goal of qualitative research is not necessarily to generalize findings, a single case study is a suitable approach for this study.

UPM was selected for several reasons. It is recognised as one of the institutions with the highest number of student-athletes under the Memorandum of Understanding (MoU) with the National Sports Council (MSN). UPM offers flexible academic provisions such as reduced credit enrolment per semester and remote access to lecture materials, particularly beneficial for overseas-based athletes (Zakaria, n.d.). Moreover, institutional access and approval to collect data from UPM student-athletes further justified its selection as the single-case focus.

To ensure trustworthiness and credibility, the study employed methodological triangulation, combining data from semi-structured in-depth interviews, non-verbal observations (i.e., intonations, body language, eye contacts during the interview and trainings sessions), and

document analysis (i.e., performance reports, sport portfolios and newspaper articles). Each method contributed complementary perspectives, allowing for cross-validation of emerging themes. To ensure analytic transparency and reduce bias, the researchers employed reflexivity by maintaining field journals, reflective memos, and an audit trail documenting the entire data collection and interpretation process.

Data were collected using purposive and criterion sampling strategies. Participants were first selected based on characteristics that align with the study's objectives and research questions. Three inclusion criteria were applied:

- (i) First, the study involved interviews with final-year university student-athletes from various courses or programs. The rationale was to gain detailed insights into their career preparation strategies as they approached graduation and entry into the workforce.
- (ii) Second, participants were required to be actively involved in sports, representing various levels of achievement, such as national or international competitions.
- (iii) Lastly, student-athletes were chosen from diverse cultural, socioeconomic, geographical, and sporting backgrounds to explore how these factors shaped their career strategies.

In total, seven participants were recruited. Each interview lasted between 45 to 60 minutes, was conducted face-to-face, digitally recorded with consent, and transcribed verbatim. Observational data were documented during interviews and training sessions, focusing on behaviour, tone, and interactional cues. Supplementary data included athletes' performance documents and publicly available profiles.

The analysis process followed the CoCaT framework (Codes, Categories, and Themes), supported by Atlas.ti qualitative analysis software. After transcription, data were imported into Atlas.ti and subjected to open coding, where initial codes were inductively derived from the participants' narratives. Codes were iteratively grouped into categories, which were then abstracted into broader themes. Thematic development was guided by IPA allowing for a detailed exploration of lived experiences and meaning-making processes. Data collection ceased when thematic saturation was reached, and no new themes or insights emerged after the seventh interview.

The final analysis revealed three major themes and nine subcategories, which were mapped onto the conceptual framework based on Schlossberg's Transition Theory. A comparative thematic analysis approach was used to identify similarities and variations across different participants, sports disciplines, and academic programs, thereby enhancing the depth and breadth of insights. Figure 2 illustrates the study's data collection and analytical process.

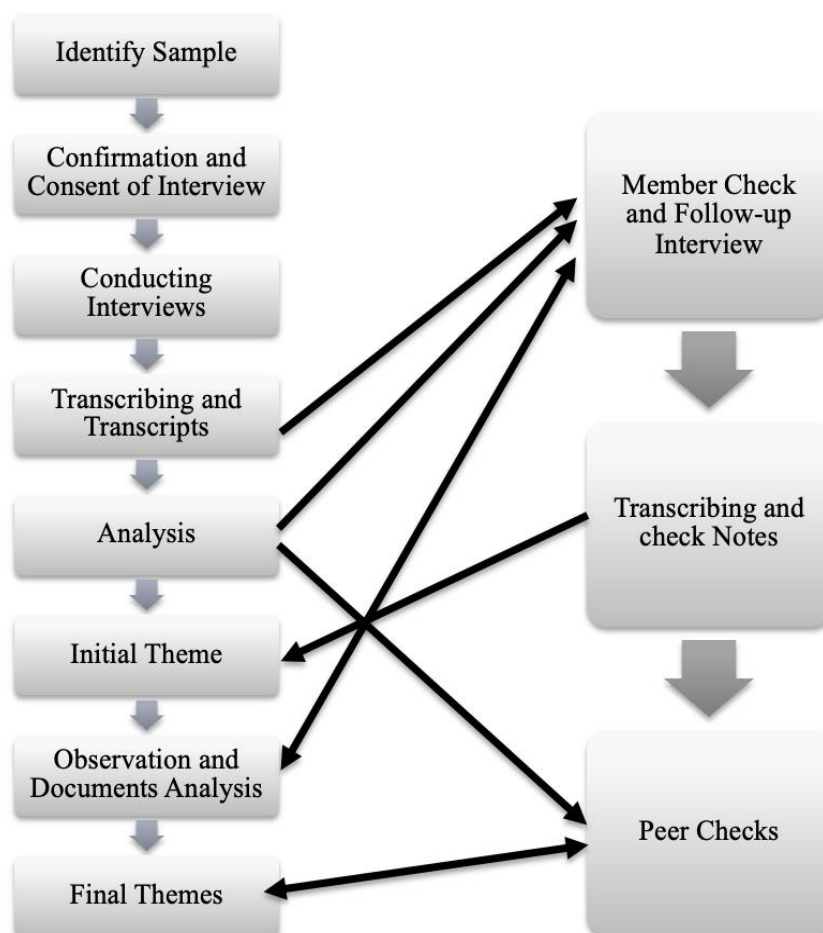


Figure 2: Data collection and data analysis flow

3.1. Participant Information

The profile of the seven participants reflects a diverse range of experiences in sports and years of involvement, as summarised in Table 2. To ensure confidentiality, pseudonyms have been used to replace participants' real names. The sample includes three males and four females, aged between 22 and 24 years, all of whom have extensive athletic backgrounds, with involvement in sports ranging from 8 to 18 years. They have competed at different levels, including both national and international tournaments, bringing a rich array of perspectives to the study.

Although previous studies such as Lupo et al. (2017) and Comeaux and Harrison (2011) reported gender-based differences in career planning among student-athletes, the findings of this study are more consistent with Ryan (2015) and Martens and Cox (2020), who found no significant differences based on gender or type of sport. In the present study, all participants reported receiving comparable support from both Universiti Putra Malaysia (UPM) and the Malaysian National Sports Council (MSN), including financial incentives, structured training, and access to career development programmes. Given the uniformity in institutional support and the similarity in participants' reflections across genders, the analysis did not separate findings based on gender, as it was not a distinguishing factor in their career preparation experiences.

Table 2: Participant Information

	Gender	Age (years)	Sport	Years involve in sport	Level of highest tournament
P1	Male	24	Tenpin Bowling	18	International
P2	Male	23	Track & Field	8	International
P3	Male	24	Softball	13	International
P4	Female	23	Archery	10	International
P5	Female	24	Archery	8	International
P6	Female	22	Archery	10	International
P7	Female	22	Badminton	14	National

4. Findings and Discussion

The findings and discussions are summarised in Table 3. Seven overarching themes emerged from the research questions, encompassing a total of 21 categories identified through the interviews. Detailed explanations of these themes, categories and sample of excerpts or codebook are provided and will be discussed in the subsequent section.

Table 3: Themes and Categories

Research question	Theme	Categories	Sample of Excerpts or Codebook
RQ1	Dependence on sports as a career	Long-term athletic career goals Interest in coaching/sports education Dependence on sport for income/security Institutional support shaping career decisions (e.g., MSN) Identity strongly tied to sport	<p>P1: “Yeah, we (refer to his friends as well) know it's risky and not very sustainable in the long run, especially here in Malaysia. But still, I really hope I can stay in the sports industry somehow. It's what I'm passionate about.”</p> <p>P2: “Most of my friends already set their minds on pursuing a sport-related career because our program is also related to sports.”</p> <p>P3: “If possible, I'd really like to stay in sports...it's what I've been doing for years and what I enjoy the most.”</p> <p>P5: “I'm still thinking of playing sports as my second career for my additional sources of income.”</p> <p>P6: “Still, many of my friends have chosen to settle into a career in sports—most of them have been receiving financial support from MSN for years, which makes them feel that this is the right path for us”</p>
	Strategy to pursue non-sport-related careers	Focus on education as a career foundation Career backup strategies Awareness of instability in sport careers Use of digital tools and networks (e.g., LinkedIn, JobStreet) Self-initiated skill development	<p>P4: “Besides training, I've been looking into professional courses and internships—something that can help me if I need to switch careers later on.”</p> <p>P5: “I focused more on education... I believed to succeed in a career transition, it's by further studies as a backup.”</p> <p>P6: “I'm trying to build a backup plan outside of sports, just in case things don't work out. That's why I'm focusing more on my studies now.”</p> <p>P6: “But at the same time, I know the sports industry isn't very stable, so I have to be careful and think about other options too.”</p> <p>P7: “I started exploring job platforms like LinkedIn... I equipped myself with technical and soft skills, computer skills, time management...”</p>
	Time constraints and limited career	Balancing academic and athletic responsibilities Prioritisation challenges	<p>P7: “The third factor is time management—being disciplined with our time between sports and study... particularly for those of us in our third or final year of study.”</p>

RQ2	preparation opportunities		<p>P5: “Sometimes I feel like I’m just rushing through assignments after training. There’s not enough time to really focus on studies or look into internships.”</p> <p>P3: “When tournaments get close, I just can’t think about anything else—not even class or career stuff. It’s hard to plan ahead when you’re always focusing on the next game.”</p> <p>P2: “I wanted to join a campus career programme last semester, but training camps clashed with the dates. So I had to skip it.”</p>
	Psychological and emotional impacts	Mental health and emotional strain Resilience and coping mechanism	<p>P5: “Emotional and mental strength play a significant role in making sure that both sports and careers stay on the right track, especially during big events or tournaments.”</p> <p>P6: “There are times I feel really overwhelmed. Like during the SEA Games, I had to skip some assignments and couldn’t focus. It all builds up.”</p> <p>P3: “It’s not easy, but I try to stay positive and break things into small goals, one thing at a time. That helps me manage the stress.”</p> <p>P1: “I once failed to compete in one of the world tournaments due to an injury and my slower recovery process caused by age. There was no mental support, and I was left behind. It made me realise that once you are unwell in the sports world, you are no longer considered relevant.”</p>
RQ3	Perceived quality and accessibility of institutional support	Career centre accessibility Administrative rigidity	<p>P4: “Lecturers and coaches are helpful in guiding us to shape our careers because they are experts who understand which career paths suit us best. Their knowledge, expertise, and experience play a crucial role in helping us decide what is best for our future.”</p> <p>P7: “They held career workshops, but most of the sessions were during training hours. It’s hard to attend unless you skip practice, and that’s not really an option for us.”</p> <p>P3: “I tried to explain to the department that I was away for an international game, but they still penalised me for missing the assignment. There’s no special arrangement for athletes sometimes—it’s frustrating.”</p> <p>P5: “I requested to delay my internship because of a training camp, but they said it had to be done according to the academic calendar. No exceptions.”</p>
	Role of coaches and sport administrators in career guide	Negative and positive coach influence Lack of personalised career support	<p>P4: “My coach always reminds us that sport won’t last forever. He encourages us to think about what we’re good at outside of training. He even shared a contact from the sports science field for me to talk to.”</p> <p>P5: “When I brought up applying for an internship, my coach didn’t really support it. He said it might interfere with my competition schedule and told me to ‘focus on the present.’”</p> <p>P7: “The career guidance (sport instructors) felt very general. They don’t understand our situation as student. We need someone who knows how to guide us while taking into account our, class, training and competition commitments. I just hope they were more understanding and consider all these things before providing us guide in our career”</p> <p>P2: “They just tell us to apply on JobStreet or LinkedIn, but we don’t get help in figuring out how to use those platforms effectively as athletes with irregular schedules.”</p>
	Peer and social support networks	Supportive peer network Resources sharing Shared experience and mutual understanding	<p>P6: “Some of my teammates already finished internships, so they helped me prepare my resume and gave tips. We kind of support each other because we know how different our schedule is from other students.”</p> <p>P1: “I once failed to compete in one of the world tournaments due to an injury and my slower recovery process caused by age. There was no mental support, and I was left behind. It made me</p>

			<p>realise that once you are unwell in the sports world, you are no longer considered relevant...during that time, my friends who were in the same situation or gone through similar issues help me in giving the advices and literally be 'there' for me – which makes me so grateful”</p> <p>P4: “Although lecturers and coaches were so helpful in helping us (athletes), but there were time it’s really hard to talk to them because they don’t fully understand our schedule or what we go through as athletes. But with my teammates, it’s different. We’re in the same situation, so we help each other. We share links to online courses and job openings in our group chat. Even emotionally, when one of us feels overwhelmed or unsure about the future, we talk it out. It’s like we’ve built our own support system. Without them, I don’t think I would’ve been as motivated to think seriously about my career after sport.”</p>
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4.1. RQ1: What strategies do university student-athletes employ to navigate career planning as the transition from higher education and sport to the workforce?

The analysis of the codes derived from the seven participants suggests that university student-athletes are aware of the importance of career planning. The findings are discussed across two major themes: (1) dependence on sports as a career, and (2) intention to pursue non-sport-related careers. These strategies were shaped by individual ambitions, educational backgrounds, the realities of the sports industry, and institutional support. These reflect diverging post-graduation pathways and demonstrate the complexity of career decision-making during the transition from university life to the workforce.

4.1.1. Dependence on Sports as a Career

Several participants expressed strong aspirations to pursue long-term careers in the sports industry. Their reliance on sport was often motivated by passion, identity, and the familiarity developed through years of involvement in athletics. Some also saw sports as a means to secure income or future career opportunities, particularly in coaching or sport education. P2, a track and field athlete enrolled in a sport-focused academic programme, noted that his peers similarly envisioned future careers within the sporting ecosystem, often in coaching or sport education:

“Most of my friends already set their minds on pursuing a sport-related career because our program is also related to sports.”

This inclination aligns with Henriksen et al. (2020), who argued that student-athletes immersed in dual-career environments are likely to foster aspirations in both educational and sporting domains.

Participants such as P1, P3 and P6, both with over a decade of experience in their respective sports, demonstrated a desire to stay involved in athletics. However, they were also cautious about the uncertainty of sustaining a sport-based career in Malaysia which do not last as they do on Western countries. P1 (24, male, tenpin bowling), who had been competing for 18 years, expressed an enduring commitment to sports, viewing it as both a passion and a viable career path. P1 commented:

“Yeah, we (refer to his friends as well) know it's risky and not very sustainable in the long run, especially here in Malaysia. But still, I really hope I can stay in the sports industry somehow. It's what I'm passionate about.”

The data also revealed that some participants considered sport as a secondary rather than a primary career option. For instance, P5 noted, *“I'm still thinking of playing sports as my second career for my additional sources of income.”* This reflects a pragmatic orientation toward dual-career development, wherein participants sought to maintain their involvement in sport while simultaneously preparing for more stable non-sport career paths. Such responses highlight an awareness of the financial uncertainties and limited long-term viability of sport careers in Malaysia, prompting the need for alternative or parallel trajectories to ensure future economic security.

At the same time, institutional support—particularly from the Malaysian National Sports Council (MSN)—was found to reinforce the athletes' sport-oriented identities and career aspirations. Several participants reported receiving consistent financial and educational support from MSN since the age of 17 or 18, which contributed to a sense of stability and comfort within the sporting domain. This long-term support appeared to foster greater reliance on sport as a viable career pathway. As P6 (22, female, archery) explained, many of her peers chose to remain in competitive sport due to the recognition and sustained assistance they received:

“Still, many of my friends have chosen to settle into a career in sports—most of them have been receiving financial support from MSN for years, which makes them feel that this is the right path for us.”

From Schlossberg's Transition Theory perspective, these responses reflect the role of “self” (personal identity and values), “situation” (contextual factors like long-term sport involvement), and “support” (from institutions like MSN) in shaping students' decision-making and coping mechanisms during transitions.

4.1.2. Strategy to Pursue Non-Sport-Related Careers

In contrast, several participants demonstrated clear intentions to transition into careers beyond the sports domain. Their strategies were marked by a proactive mindset, a stronger emphasis on education, and deliberate efforts to acquire transferable skills through self-initiated learning. The skills they reported developing included leadership, communication, IT literacy, and public speaking. As Bae (2023) suggests, such competencies are instrumental in fostering personal and professional development beyond the realm of sport. Acknowledging the limitations and instability associated with sport-based careers in Malaysia, these individuals took early steps to enhance their employability in alternative sectors.

P4 described her approach as one rooted in preparedness, emphasising her efforts to gain professional exposure through non-sport-related opportunities.

“Besides training, I've been looking into professional courses and internships—something that can help me if I need to switch careers later on.”

Despite her success in sport, including winning a gold medal in an international tournament, P5 described a turning point in her second year of university when she began to shift her focus.

“I focused more on education, and I want to succeed. So, I believed for me to succeed in making a career transition strategy, it’s by further studies as a backup for a future career other than sports.”

P6 echoed this sentiment, reflecting a growing awareness of external career realities:

“I’m trying to build a backup plan outside of sports, just in case things don’t work out. That’s why I’m focusing more on my studies now.”

P7, a national-level badminton player, never considered settling into a long-term career in sport, as she perceived it to be unsustainable. Consequently, she actively prepared herself by developing in-demand skills relevant to future non-athletic careers. She represented the most explicit case of self-initiated career planning, incorporating digital platforms into both her job search and skill-building efforts:

“I started exploring and using job application platforms like LinkedIn, Indeed, and JobStreet as part of my career preparation... I equipped myself with technical and soft skills—computer skills, communication skills, time management, and skills to make connections or network with people from various backgrounds.”

These strategies reflect the “strategy” and “support” dimensions of Schlossberg’s model, highlighting how individuals prepare for transition by acquiring new skills and engaging with external networks.

4.2. RQ2: How do the dual demands of academics and athletics impact the career preparation of student-athletes?

The dual demands of academics and athletics significantly impact the career preparation of student-athletes, presenting both challenges and opportunities. Two themes emerged from the study: (i) time constraints and limited career preparation opportunities, and (ii) psychological and emotional impacts.

4.2.1. Time Constraints and Limited Career Preparation Opportunities

The dual responsibilities of academic study and competitive sport imposed significant time-related constraints on student-athletes, directly limiting their capacity to engage in traditional forms of career preparation. The participants in this study—who had spent between 8 to 18 years in their respective sports—juggled heavy academic commitments alongside intensive training schedules and frequent competitions. For many, the routine demands of sport consumed the majority of their daily lives, leaving little space for activities such as internships, campus career fairs, or part-time employment—experiences commonly associated with gaining professional exposure and career clarity in non-sport sectors.

P7, a 22-year-old female national-level badminton player with 14 years of competitive experience, described how the overlapping demands of final-year academic work and sport commitments challenged her ability to prepare for life after university. Having never competed at the international level, she felt increased pressure to establish herself beyond sport and emphasised the importance of being strategic with time. The demands of training and competing often leave little room for internships, part-time jobs, or other traditional career preparation activities. As noted in the experiences of the participants, the time devoted to

training and competitions often replaces opportunities to gain practical work experience. P7, for instance, has been pointing out more than four times how important time management is for them as athletes and students at the same time. She went to say:

“The third factor is time management—being disciplined with our time between sports and study... particularly for those of us in our third or final year of study.”

Her statement reflects the pressing need to manage competing priorities, especially as graduation approaches and career decisions become more urgent. Similar sentiments were expressed by P5, an international-level archery athlete, who described the daily struggle of managing physical exhaustion from training alongside academic responsibilities. This often resulted in academic challenges, including difficulties in securing internship placements aligned with their field of study.

“Sometimes I feel like I’m just rushing through assignments after training. There’s not enough time to really focus on studies or look into internship”

This pattern of compressed academic engagement was frequently reported, particularly during competitive seasons, when physical fatigue and scheduling demands made it difficult to engage meaningfully with coursework, let alone extracurricular career preparation. For some, like P2—the time demands not only limited academic engagement but also excluded them from structured career development opportunities provided by the university. He recounted a missed opportunity:

“I wanted to join a campus career programme last semester, but training camps clashed with the dates. So, I had to skip it.”

The findings illustrate how the relentless demands of dual participation in academics and sport often marginalise student-athletes from critical career development experiences, placing them at a relative disadvantage in preparing for life beyond university.

4.2.2. Psychological and Emotional Impacts

The dual responsibilities of academic achievement and elite-level athletic performance place considerable psychological and emotional demands on student-athletes. For many, this pressure intensifies during periods of high-stakes competition, where the overlap of tournament schedules and academic deadlines creates a compounded sense of stress and mental fatigue. Majority participants described moments of emotional exhaustion, reduced concentration, and a general sense of being overwhelmed—particularly during major sporting events. These intense periods often led to academic disruptions, such as missing classes or struggling to complete assignments on time, which in turn generated additional anxiety about falling behind in their studies.

One recurring sentiment was the mental toll exacted by the need to constantly switch between roles—that of a student in the classroom and an athlete on the field. The participants reported that maintaining this dual identity required not only physical endurance but also a significant amount of emotional regulation. As one participant, P5, put it:

“Emotional and mental strength play a significant role in making sure that both sports and careers stay on the right track, especially during big events or tournaments.”

This recognition highlights how emotional resilience becomes a crucial factor in managing the stress associated with balancing multiple high-performance roles. Yet, despite these challenges, participants also described a range of coping mechanisms that helped them maintain psychological stability. Some adopted proactive, task-oriented strategies, such as breaking their responsibilities into manageable goals and prioritising daily tasks. Others leaned on social support, especially from teammates who were experiencing similar struggles. These informal networks provided both emotional relief and a sense of solidarity, reinforcing the idea that they were not facing these pressures in isolation. P3, a 24-year-old male softball player explained:

“It’s not easy, but I try to stay positive and break things into small goals—one thing at a time. That helps me manage the stress.”

This methodical approach to stress management reflects a level of emotional maturity and self-awareness developed through years of balancing multiple responsibilities. These experiences resonate with Schlossberg’s Transition Theory, particularly the “self” and “situation” dimensions. The “self” is reflected in athletes’ internal coping resources—such as emotional regulation, resilience, and motivation—while the “situation” refers to contextual pressures like tournament timing, institutional demands, and performance expectations. In sum, the psychological and emotional impacts faced by student-athletes are substantial. While many develop effective coping mechanisms, the findings underscore the need for structured psychological support and athlete-sensitive policies within universities, aimed at easing the emotional burden of dual-career pathways and supporting long-term well-being.

4.3. RQ3: What role do support system (e.g., counsellor, department, coaches) play in the career preparation of student-athletes?

Support systems play a multifaceted and critical role in shaping student-athletes' career trajectories. Prior research has highlighted the importance of these systems in facilitating smooth transitions into post-athletic careers. Condello et al. (2019) and Nikander et al. (2022) emphasise that support structures—ranging from academic departments and counsellors to coaches and peers—address both the personal and professional development needs of student-athletes. A systematic review by López-Flores et al. (2021), which analysed 26 peer-reviewed articles, reinforced this by demonstrating that integrated support is key to guiding student-athletes through the complex process of career planning. The findings from this study expand on this literature by identifying three interrelated themes: (1) perceived quality and accessibility of institutional support, (2) the role of coaches and sport administrators in career guidance, and (3) the significance of peer and social support networks.

4.3.1. Perceived Quality and Accessibility of Institutional Support

Participants expressed mixed experiences with institutional support structures, such as academic departments and career centres. While some described lecturers and university personnel as knowledgeable and helpful, many noted that institutional services were not fully accessible or tailored to their unique needs as dual-career athletes. A recurring issue was the inflexibility of academic systems, which often failed to accommodate athletes’ training and competition schedules. For instance, while lecturers occasionally offered guidance and connected athletes with industry professionals, university-wide career programmes often excluded them—either by timing or by failing to consider their non-traditional schedules.

P4 shared how valuable expert guidance from lecturers was in shaping her career decisions:

“Lecturers and coaches are helpful in guiding us to shape our careers because they are experts who understand which career paths suit us best. Their knowledge, expertise, and experience play a crucial role in helping us decide what is best for our future.”

However, this support was often limited to individual initiative rather than systemic design. For example, P7 described missing out on career development opportunities simply because they were scheduled during training hours. She acknowledged the structural limitations and expressed understanding of the broader academic context.

“They held career workshops, but most of the sessions were during training hours. It’s hard to attend unless you skip practice, and that’s not really an option for us... But I do understand that lecturers have a lot of work to do to cater to everyone, not just me and my friends who are athletes.”

Her response reflects the recurring tension between institutional programming and the unique scheduling demands faced by student-athletes. Institutional rigidity was also evident in the lack of flexibility around academic assessments and internships. P3, a male softball player who had represented Malaysia internationally, shared his frustration at being penalised despite competing at the highest level.

“I tried to explain to the department that I was away for an international game, but they still penalised me for missing the assignment. There’s no special arrangement for athletes sometimes—it’s frustrating.”

These findings underscore a need for institutional mechanisms that recognise and respond to the demands of dual-career athletes. Support, when it is present, tends to be inconsistent and dependent on individual staff members rather than integrated into formal policies. This resonates with Schlossberg’s “support” factor, where inadequate institutional support complicates transitions by exacerbating existing time and emotional pressures.

4.3.2. Role of Coaches and Sport Administrators in Career Guidance

Coaches and sport administrators often serve as primary mentors for student-athletes, given their close proximity and frequent interactions. In several cases, they played a constructive and proactive role in promoting career awareness beyond competitive sport. Some coaches encouraged athletes to think realistically about life after sport, shared their professional networks, or acknowledged the importance of balancing academic and athletic goals. For example, P4 described how her coach provided specific advice and industry exposure:

“My coach always reminds us that sport won’t last forever. He encourages us to think about what we’re good at outside of training. He even shared a contact from the sports science field for me to talk to.”

Yet, not all experiences were positive. Several participants shared how coaches prioritised short-term athletic success at the expense of long-term career planning. In some cases, coaches dismissed or discouraged athletes from pursuing internships or further study, citing potential conflicts with training schedules. This lack of support not only restricted their career development but also instilled a fear of deviating from sport-related pathways. P5 expressed frustration after raising the topic of internships with her coach:

“When I brought up applying for an internship, my coach didn’t really support it. He said it might interfere with my competition schedule and told me to ‘focus on the present.’”

Others, like P7 and P2, noted that even when career guidance was provided, it was often overly generalised and lacked contextual relevance. As P7 explained:

“The career guidance (sport instructors) felt very general. They don’t understand our situation as student. We need someone who knows how to guide us while taking into account our, class, training and competition commitments. I just hope they were more understanding and consider all these things before providing us guide in our career”

These findings reveal a disconnect between the potential and actual role of coaches in facilitating career development. While some coaches embraced their dual role as mentors, others maintained a sport-centric view that inadvertently hindered athletes' broader professional aspirations. This inconsistency suggests the need for structured training for coaches on dual-career support, as proposed by Ryba et al. (2021) and Bae (2023). Within Schlossberg's framework, the “support” dimension here also intersects with the “situation” variable—where institutional culture, expectations, and interpersonal dynamics collectively shape the athlete's transition experience.

4.3.3. Peer and Social Support Networks

Among the most consistent and valuable forms of support described by participants were peer networks—informal systems formed among fellow student-athletes. These networks provided emotional reinforcement, practical advice, and affirmation, helping athletes navigate both the challenges of dual-career life and the uncertainties of future planning. Peers were often more attuned to the unique pressures of juggling academics and sport, and thus offered advice that was realistic, empathetic, and timely. P6, for instance, described how her teammates offered guidance based on their own experience:

“Some of my teammates already finished internships, so they helped me prepare my resume and gave tips. We kind of support each other because we know how different our schedule is from other students.”

These networks extended beyond practical help to emotional well-being. P4 explained the value of shared understanding and collective coping:

“Although lecturers and coaches were so helpful in helping us (athletes), but there were times it’s really hard to talk to them because they don’t fully understand our schedule or what we go through as athletes. But with my teammates, it’s different. We’re in the same situation, so we help each other. We share links to online courses and job openings in our group chat. Even emotionally, when one of us feels overwhelmed or unsure about the future, we talk it out. It’s like we’ve built our own support system.”

This sense of belonging and shared experience fostered a protective space, where athletes could express vulnerability without judgment. However, some participants also noted that reliance on peers was sometimes necessitated by the absence of adequate institutional or coaching support. P1 recounted how the lack of support during an injury led to feelings of abandonment:

“I once failed to compete in one of the world tournaments due to an injury and my slower recovery process caused by age. There was no mental support, and I was left behind. It made me realise that once you are unwell in the sports world, you are no longer considered relevant...during that time, my friends who were in the same situation or gone through similar issues help me in giving the advices and literally be ‘there’ for me – which makes me so grateful”

The value of peer networks, therefore, lies not only in what they provide, but in how they compensate for gaps in formal support structures. Their role in fostering resilience and affirmational support aligns strongly with Schlossberg’s theory, particularly in addressing emotional and relational aspects of transition.

5. Conclusion

This study looks at the strategies, challenges, and role of support systems in helping university student-athletes manage their responsibilities in both academics and sports while preparing for their future careers. The findings show how important support systems such as lecturers, coaches, and university staff are in shaping the career paths of student-athletes. In Malaysia, sports do not provide the same level of security and less sustainable career as in Western or developed countries, where athletes are often offered pensions or stable jobs after their careers. Because of this, many student-athletes choose to focus on other career options outside of sports, treating sports as a secondary career for extra income or as a personal hobby. One key takeaway from the study is the need for emotional and mental support. Many participants said they rely on their coaches, lecturers and peers to help them handle the pressures of both sports and academics. This type of support is especially important during major competitions or when dealing with setbacks, such as injuries or the limitations of ageing, which can affect their athletic performance. Despite the benefits of these support systems, inconsistencies in the level of care and guidance, particularly from coaches, were evident, leaving some athletes feeling undervalued and unsupported. For most participants, balancing both academics and athletics required a strong and reliable support system. However, many ultimately chose career paths outside of sports, as they felt the existing system was not sustainable for their long-term growth and success. Additionally, the importance of skill development, career planning, and networking opportunities was underscored, with many participants recognising the need to prepare for dual-career paths that extend beyond the sports industry.

6. Implications and Recommendations

Several implications can be drawn for universities, sports organisations, and policymakers that are customised for the student-athletes (Hong et al., 2022). First, sports organisations should prioritise mental health support and provide consistent care through coaches, specifically for student-athletes. Addressing their mental and emotional well-being will help them manage the challenges of balancing sports and academics. Second, universities and institutions should support student-athletes by offering academic flexibility alongside skill-based learning to prepare them for life beyond sports. This could include flexible learning options, career workshops, internships, and mentorship programs across various industries. While UPM offers flexibility for students, especially those training overseas, through online support learning (refer to Zakaria, n.d.), the arrangements differ between lecturers and courses and often change over time. This inconsistency highlights the need for clear, standardized guidelines to help student-athletes better plan and manage their academic

responsibilities. Lastly, these findings can guide policymakers in developing better strategies at institutional and national levels to safeguard student-athletes' well-being and career prospects. Clear pathways for academic accommodations during tournaments and structured programs for career transitions after sports are essential. As representatives of Malaysia's future in sports, student-athletes deserve robust policies that support both their athletic and professional journeys. As of today, most existing incentives and policies apply to active athletes, providing financial rewards and lifetime monthly pensions for Olympic medalists (refer thestar.com, 2024). However, support should go beyond monetary incentives to include career development opportunities, ensuring athletes have sustainable prospects beyond their sporting careers.

Three suggestions for future research can be proposed. Firstly, this study was limited to a single university. Future research could expand the scope of data collection to include multiple universities, providing richer and more diverse data. Secondly, future studies might consider a longitudinal approach, tracking student-athletes during their university years and following up a few years after graduation to examine their career development over time. Lastly, it is recommended to conduct quantitative research to allow for broader generalisation to a larger population of student-athletes, complementing the findings of this study.

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