

AN ECOLOGICAL UNDERSTANDING OF THE JUNIOR-TO-SENIOR TRANSITION IN  
PROFESSIONAL TENNIS

By

SAUL JARED SHROM

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## **Abstract**

The junior-to-senior transition (JST) in professional tennis has been found to be increasingly difficult in recent years (International Tennis Federation (ITF), 2017). Players face considerable financial imbalance on tour, with the top 1% of players (i.e., top 50 males and top 26 females) having earned 60% and 51% of the prize money distributed on the men's and women's tours in 2013, respectively, leaving only 1.8% of male and 3.1% of female players able to earn a profit in the professional structure (ITF, 2017). Further, research has shown that the time taken from players earning their first world ranking to reaching the world's top 100 has increased from 3.7 to 5 years (men) and 3.4 to 4.9 years (women) from 2000 to 2017 (ITF, 2017; ITF Global Tennis Report, 2019), suggesting that there are additional challenges at play than financial imbalance making the professional tour an increasingly difficult environment to thrive in. This thesis aimed to gain a contextualized understanding of the lived JST experiences of tennis players to provide added depth to the limited academic literature base to date and offer valuable applied practice insight and implications for players, their support networks, and other stakeholders. To achieve these aims, three studies were conducted. First, Study 1 adopted an exploratory, single, holistic case design to examine the lifestyle challenges professional players experience in their lives on tour. Behind the Racquet (BTR), a social media platform aimed at raising awareness of professional players' lifestyle challenges through providing authentic, vulnerable, self-reported experiences from players served as a unique and valuable data source. From the experiences of 65 professional players (33 male, 32 female) from 28 different countries, findings illustrated physical and mental fatigue, financial imbalance of the professional system, the social and psychological impact of living a nomadic existence, the weight of expectation, structural-caused instability, and mental ill-health as six key lifestyle challenges on the professional tour.

Collectively, these challenges represented barriers to the satisfaction of many of players' basic needs (Maslow, 1943; 1954) posing a risk to their tour progression and mental health. With context of the lifestyle challenges professional players experience, there was rationale to then investigate the lived experiences of players' JST processes. In the first study of a larger, longitudinal, exploratory, collective case study into the lived experiences of seven professional tennis players, Study 2 adopted a narrative enquiry approach and identified three narrative types of the JST process: *Supportive Structure and Steady Progression; Lack of Support, Demotivation and Career Termination; and Successive Setbacks and a Search for Solutions*. Key findings from this study included: a) the facilitative impact of supportive structures in assisting players to meet many of their basic needs (Maslow, 1943; 1954) and sustain motivation amidst the concurrent and multifaceted challenges they face in their JST experiences; and b) the JST is a complex process constructed of several individual and environmental factors that interact to shape players' developmental processes. This led to the adoption of the PPCT model (Bronfenbrenner, 2005) in Study 3 to understand the interaction of individual, environmental, and time-based influences in players' JST experiences. Five themes were generated to illustrate this interaction: *A Race Against Time, Riding the 'Mental Grind', 'You Can't Do It Alone', A Chance to Pause, and Cultural-Based Opportunities*. Collectively, these findings highlighted the varying macrosystem and time-based influences that interact with players' micro- and mesosystems to explain the complexity of the JST process. Taken together, this thesis expanded the knowledge base of the JST process in tennis and offers not just empirical, theoretical, and methodological significance, but valuable applied practice insight and implications to assist tennis players and other stakeholders with their preparations for professional careers.

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## **Contents Listing**

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- List of abbreviations

## **Publications and conference presentations produced during this thesis**

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## **List of Abbreviations**

JST – Junior-to-Senior Transition

ITF – International Tennis Federation

ATP – Association of Tennis Professionals (men's professional tour governing body)

WTA – Women's Tennis Association (women's professional tour governing body)

PPCT – Process-Person-Context-Time model

# **Chapter 1**

## Introduction to the Thesis

## 1.1 Introduction

Centre Court, Wimbledon. A place of striking simplicity, awe-inspiring aesthetics, and unparalleled history. On this specific patch of land in southwest London, at the All England Lawn Tennis & Croquet Club, SW19, many of tennis' most historic moments have unfolded. The sports' greats have been crowned Wimbledon champion and the next generation, whether in the seats of Centre Court or watching on television around the world, have been inspired to one day become a professional tennis player. The subsequent journey is a long and challenging process requiring substantial physical, mental, and financial sacrifice from players and their support networks (Kovacs et al., 2015a). Research has illustrated that players in the world's top ten spend nearly ten years from starting in the sport to reaching an international junior level, before dedicating a further ten years to reaching their peak professional ranking (Li et al., 2018). However, the likelihood of achieving professional tennis success is slim, as while tennis is one of the most popular sports worldwide with over 87 million participants (ITF Global Tennis Report, 2021), only slightly over 300 players (160 males and 150 females) earn enough prize money from the sport to cover the costs of playing professionally (Bane & Gescheit, 2015). These statistics suggest that a tennis players' likelihood of earning money from a professional career are at approximately one out of every 281,000. Of the many developmental challenges within tennis, one of the greatest forms the main topic of this PhD thesis: the junior-to-senior transition (JST).

Within the sport psychology discipline, a transition has been defined in line with the clinical psychology literature as “an event or non-event, which results in a change in assumptions about oneself and the world and thus requires a corresponding change in one's behavior and relationships” (Schlossberg, 1981, p. 5). However, over time, sport psychology researchers



began to understand transitions as a process (rather than an event) with potentially positive or negative outcomes (Taylor & Ogilvie, 1994; Stambulova, 1994; 2003). This resulted in a sport specific definition of transitions as turning points in athletes' career development where they cope with a set of specific demands in order to continue successfully in sport (Stambulova, 1994). Transitions can be described as normative, which refer to sequential and predictable movements from one stage to another, like the JST, and non-normative, which are caused by anticipated movements which fail to occur or unexpected situations like injury or deselection from a team (Stambulova et al., 2009). More recently, quasi-normative transitions were introduced to refer to predictable transitions for a particular group of athletes (e.g., cultural transitions) (Stambulova, 2016; 2020). The JST has been argued to be the most challenging transition within athletes' careers (Stambulova, 2009). Research highlights the low rates of successful progression from the junior to senior level varying between 17% and 33% across studies (Drew, 2020; Franck et al., 2016a; 2016b; Vanden Auweele et al., 2004). Naturally, with high demand to reach professional status and a limited number of places within professional structures, progression rates will be low. However, the difficulty of the JST is not simply due to a lack of places in professional structures but also the demands placed on transitioning athletes' physical, psychological, psychosocial, academic/vocational, and financial development (Wylleman et al., 2013).

The JST into professional tennis has been identified as an increasingly difficult process in recent years. Players' journeys to the top of the sport are becoming longer and more challenging with the mean age of the world's top 100 tennis players consistently increasing over the last decades in both the men's (1990: 24.4 years; 2000: 25.7 years; 2010: 26.8 years; 2014: 27.9 years) and women's games (1998: 23.5 years; 2009: 24.4 years; 2014: 25.2 years) (Gallo-Salazar

et al., 2015; Kovacs et al., 2015a; 2015b; McCraw, 2009; Reid et al., 2014; Reid & Morris, 2013). Further, the time taken from earning one's first professional ranking to reaching the world's top 100 increased from 3.7 to 4.8 years (men) and 3.4 to 4.1 years (women) from 2000 to 2013 (ITF, 2017), with the most recently available figures showing a further increase to 5 years (men) and 4.9 years (women) (ITF Global Tennis Report, 2019). Although it was previously argued that success on the junior tour was a predictor of professional success (Reid et al., 2007; 2009), Brouwers et al. (2012) contested this notion by highlighting that only 16.8% of male and 11.4% of female junior top 20 players later reached a top 20 professional ranking—evidence that underpinned their conclusion that “for the great majority of tennis players performance at young ages are not associated with later success” (p. 470). Adding to these conclusions, the ITF Global Tennis Report (2019) found that only 12.8% of boys and 21% of girls who achieved top 100 junior rankings later reached top 100 professional rankings.

Despite a growing evidence base on the professional player pathway, there is limited research investigating players' lived experiences of the JST process in professional tennis (Franck & Stambulova, 2019; Jensen, 2012; Pummell, 2008). Accordingly, with a dearth of research exploring players' introspective perceptions of the JST process in professional tennis, our understanding of this difficult transitional period, and therefore our capacity to support players effectively, remains limited. The present thesis aims to build upon the limited investigations to date and address the challenging transition by providing a detailed, holistic understanding of the lived experiences of players throughout their JST processes. In doing so, this thesis hopes to provide valuable insight for aspiring professional players, their support networks, talent development centres, governing bodies, and other stakeholders within tennis. To introduce this PhD thesis, this chapter will highlight the motivation for the research before

providing further context on professional tennis by outlining a brief history of the professional tour, the tour structure, recent changes to the structure, and the traditional pathways into professional tennis. Consequently, an argument is made for the rationale of investigating the lived experiences of tennis players' JST experiences.

## **1.2 Introducing Myself**

This thesis was completed within the interpretivist paradigm. While the implications of this standpoint will be discussed in detail in Chapter 3, the alignment highlights the importance of acknowledging my role in the research and the factors which influenced my motivation behind conducting this research project. Put simply, this thesis would not have materialized if not for my own experience with the JST in professional tennis. Following a junior tennis career in Canada and a four-year NCAA collegiate tennis career in the United States, I embarked on a professional tennis career in 2014 at the age of 22. In my one year on tour, I quickly became aware of how much of my transitioning experience revolved around factors outside of hitting a tennis ball. Playing on the professional tour was much like running one's own business: the product being the players' tennis-playing ability. However, in order to deliver the product, a wide range of factors had to be managed. There were the factors that most tennis players are familiar with and might expect such as the on-court tennis training, strength and conditioning, recovery, mental training, nutrition, and sleep, but also tasks that may be new like booking flights, accommodation, transportation, developing a competition schedule, organizing coaching/training, and managing the finances of the entire enterprise. My time on tour was arguably the most important time of my life. It led to significant personal growth and inspired myself to pursue a career in sport psychology and particularly to focus my PhD research on

investigating the JST in professional tennis. More information on my personal experiences and how it impacted the research process is provided in Chapter 3.

### **1.3 The Context of Professional Tennis**

The professional tennis tour is a unique sporting context. To understand its complexity and the potential challenges it creates that impact players' JST experiences, this section will outline a brief history of professional tennis, tour structure, recent tour structure changes, and the pathways into the professional structure.

#### **1.3.1 A Brief History of Professional Tennis**

While tennis can be traced back to the late nineteenth century, the first organized professional tennis tour was not formed until 1926. At the time, the major championships (i.e., Australian Open, French Open, Wimbledon and United States Open) were only open to amateurs, who were unable to accept prize money from tournaments and exhibitions (Collins & Hollander, 1993). This created a dilemma, as the expenses required to play professionally made it difficult for players to fund their careers without earning any form of income. Over time, it was speculated that the top players in the world were secretly receiving money and indirect incentives to pay for the range of expenses associated with playing professionally, prompting them to be branded 'shamateurs' (Collins & Hollander, 1993). However, this controversy was eventually put to rest in 1968, when the 'Open Era' was developed, which allowed amateurs and professionals to compete together and legally accept prize money.

Although the 'Amateur Era' was over, problems still existed in the game. Most notably, women had fewer opportunities to compete in professional events and received unequal prize money compared to men (WTA, 2019). Billie Jean King, who won the first Open Era Wimbledon Championships and received £750 compared to Rod Laver's (the male winner)

£2,000, was inspired to take a stand and with the help of Rosie Casals, Nancy Richey, and Gladys Heldman (the publisher of World Tennis Magazine) boycotted a professional event in late 1970. Instead, they organized their own tournament, which due to the United States Tennis Association's threat of suspension to any player who took part, only attracted nine women. These women, who later became known as 'The Original Nine', paid one dollar to join the breakaway tournament part of the Virginia Slims Circuit. The success of this tournament led the Virginia Slims Circuit to become the Women's Tennis Association (WTA) in 1973, an organization which to this day represents all professional women tennis players' rights (WTA, 2019), joining the already formed Association of Tennis Professionals (ATP) which represented professional male players' rights from 1972 (Maquirriain, 2014).

At this point, tennis began to expand at a rapid pace. By 1976, the International Tennis Federation (ITF) and a range of national governing bodies established European and North American men's satellite circuits to provide aspiring male professional players with the opportunity to gain professional ranking points and prize money. By 1990, the ITF assumed sole responsibility for these circuits, which became known as the 'Satellite Tour' and increased their offerings from 31 to 109 by the end of 1997 (ITF, 2019). A 'circuit' on the Satellite Tour included a group of four to five consecutive tournaments in a set location that players were required to commit to playing where varying amounts of ranking points and prize money were distributed based on players' performances throughout. Meanwhile, the women's professional tour expanded in 1986 when a £100,000 contribution from the Championships at Wimbledon kickstarted what became known as the 'Grand Slam Trust Fund', which served as a cash incentive that assisted tournament organisers in running women professional events (ITF, 2019). The French Open, United States Open, and Australian Open quickly followed with their own

contributions to the fund and by the end of 1986 there were twelve weeks of professional events introduced in South America and fourteen weeks in Asia, alongside the already growing presence of professional events in Europe and the United States (ITF, 2019).

### **1.3.2 Tour Structure**

By 1998, the ITF restructured entry level tournaments to one-week ‘Futures’ tournaments, which provided scheduling flexibility to players by no longer requiring them to commit to certain locations for several weeks at a time. At this point, Futures tournaments made up the ITF Men’s and Women’s Circuits (known as the Futures Tour) and represented the lowest level of the professional structure, offering players their first opportunities of earning ATP and WTA Ranking Points to build their world rankings. On the men’s side, events were run as either \$10,000 or \$15,000 events. If players succeeded at these events and earned substantial ATP Ranking Points, they would progress to the ATP Challenger Tour, where events ranged from \$40,000 to \$220,000 and offered more than double the ATP Ranking Points of Futures events (ITF, 2019). On the women’s side, events on the ITF Pro Circuit ranged from \$10,000 to \$100,000. Players began in the smaller events (i.e., \$10,000 and \$15,000), and progressed to the higher-level events (\$60,000, \$80,000 and \$100,000 tournaments) if they accumulated sufficient WTA Ranking Points, where more than double the amount of WTA Ranking Points were offered (ITF, 2019). From the ATP Challenger Tour and the upper echelon of the ITF Women’s Circuit, players progress to the highest level of the sport: The ATP and WTA World Tours. It is on these tours where a majority of the prize money and ranking points are distributed. The ATP World Tour consists of Grand Slam events (Australian Open, French Open, Wimbledon, United States Open), the Masters 1000 series, ATP 500, and ATP 250 events (1000, 500 and 250 referring to the number of ATP Ranking Points distributed to the tournament winner) (ATP, 2021). The

WTA Tour is broken down into Grand Slam events (same events as on the men's tour), WTA Premier Mandatory, WTA Premier 5, WTA Premier, WTA International, and \$125,000 events (WTA, 2021).

Entry into professional events is granted through priority lists based first on world rankings and then national rankings. After registering for tournaments, players appear on an acceptance list either in the main draw, the qualifying draw, or the alternate list. Based on how many players register for an event, what their rankings are, and how many players withdraw, the ranking cut off for entry into events is different week to week. Accordingly, while the ITF Pro Circuit and ATP Challenger Tour are different tours, a player who holds a singles world ranking of 350 may be one of the highest ranked players in an ITF Pro Circuit event, but also be able to gain entry into the qualifying draw of an ATP Challenger event. Similarly, a player with a singles world ranking of 750 may gain direct entry into the main draw at some ITF Pro Circuit tournaments but have to play the qualifying draw in others.

### **1.3.3 Recent Tour Changes**

The professional tour structure changed in recent years after the ITF published the most substantial review of professional tennis to date in 2017. The review identified pressing issues in the sport like the considerable number of players on the professional tour, the lack of players breaking even financially, and the difficulty that elite juniors were having transitioning into the professional game. Specifically, in 2013, 14,000 players competed on the professional men's and women's circuits with almost half of them earning no prize money at all, while the top 1% of players (men in the top 50 and women in the top 26) earned 60% and 51% of total prize money distributed across professional tennis, with only 1.8% of males and 3.1% of female players earning a profit (ITF, 2017). In addition to the financial breakdown of prize money on tour, as

detailed in the previous section, the time it was taking players to reach the top 100 from earning their first professional ranking had increased in both the men's (3.7 to 4.8 years) and women's (3.4 to 4.1 years) game from 2000 to 2013 (ITF, 2017). The review's findings led the ITF Board of Directors to approve changes to the professional structure with aims of improving player pathway into the professional game. The first reform increased prize money at ITF tournaments, with \$15,000 events becoming \$25,000 events in 2016 and \$10,000 events becoming \$15,000 events in 2017. Next, the ITF World Tennis Tour was introduced on the 1<sup>st</sup> of January 2019, replacing the men's and women's ITF Pro Circuit (i.e., The Futures Tour). The new tour still offered one-week tournaments much like Futures events, but provided ITF World Tennis Ranking Points, which granted players an ITF ranking instead of an ATP or WTA World Ranking. This ranking is placed second on the priority level of entry into professional tournaments behind ATP or WTA world rankings, but ahead of national rankings. The ITF World Tennis Tour was brought in to reduce the number of 'true' professional players with ATP and WTA world rankings (ITF, 2017). Finally, to address the increased difficulty of top junior players transitioning into the upper echelon of the sport, the ITF began to reserve five spots in each ITF World Tennis Tour event for top-performing juniors straight into the main draw of events (instead of playing qualifying), as well as wild cards (i.e., direct entry at the discretion of tournament directors) into ATP Challenger and ITF Women's Circuit qualifying events (ITF, 2017).

The changes made to the professional tour in 2019 caused significant backlash from the tennis world (Addicott, 2019; Patrascu, 2019; Tandon, 2019). Collectively, the changes meant that roughly 2,000 players with ATP or WTA world rankings lost their world rankings and were no longer considered 'true' professional players because of an inability to earn ATP and WTA



Ranking Points from the lower-level events on tour (Patrascu, 2019; Tandon, 2019). Further, with a significant reduction in the size of qualifying draws down to 24 players from the previous 32, 64 or 128 sized draws, there were substantially fewer opportunities for players to even compete in ITF tournaments (Tandon, 2019). The changes sparked a petition developed by an impacted player which brought attention to the issue when it quickly received over 15,000 signatures from people directly affected in the tennis world (Patrascu, 2019). Six months after the launch of the ITF World Tennis Tour and its associated changes, the ITF reversed many of the changes and announced that ATP and WTA Ranking Points would once again be distributed at \$15,000 events, as well as increased amounts at \$25,000 events. In addition, qualifying draw sizes increased and ATP and WTA Ranking Points that were not allocated to players in ITF-level events played in the previous months under the new rules were distributed (Herman, 2019). However, the ITF World Tennis Tour remained and continues to serve as the lowest tier of the professional tennis structure.

#### **1.3.4 The Pathways into Professional Tennis**

As players conclude their junior careers at age 18, there are two traditional pathways into the professional game: a) beginning a professional career; and b) playing collegiate tennis in the United States while completing a university education before later turning professional. Players who begin professional careers move from amateur to professional status, while those who choose the collegiate tennis route maintain their amateur status. Although it may seem like the obvious choice for successful junior tennis players to continue building their momentum and begin competing against senior players to build a professional ranking, the United States Tennis Association (USTA) recommends that 99% of players choose the collegiate route explaining that unless junior players are amongst the very best juniors in the world and have achieved

substantial professional results while still a junior player, then the collegiate route will benefit them more (USTA, 2010). The main reason for this recommendation is the financial implications of a professional career—some of which were outlined in the previous section in discussing the ITF Pro Circuit Review (2017) findings. While it can cost approximately \$143,000 USD per year to compete on the professional tour (USTA, 2010), there are over 2,000 universities and colleges in the United States that offer tennis scholarships to players from around the globe that can cover the costs of education, coaches, sport medicine personnel, on and off-court training, competitions, and equipment (USTA, 2021). In a notoriously expensive sport like tennis, an opportunity to develop one's game at no cost to themselves while earning an education as a back-up plan in case tennis does not work as a long-term career is an appealing option (Chi, 2020). Taking the ITF Global Tennis Report's (2019) findings into account that the transition from a top 100 junior to a top 100 professional player takes 5.8 years (men) and 4.3 years (women), players could save more than half a million dollars by choosing collegiate tennis and developing their games instead of playing professionally and potentially running out of funds before reaching their prime. In addition to the financial argument, collegiate tennis can help players develop their on-court game through extensive competition and adaptation to game styles from around the world (Jones, 2018), as well as off-court through personal growth from moving away from home, meeting new people, and balancing athletic, academic, and social demands (USTA, 2010).

For players who are unsure of which pathway to choose, there is a possibility to compete in both. In this situation, collegiate players compete in professional events throughout their collegiate careers as long as they maintain their amateur status (i.e., do not accept sponsorship deals or more prize money than stated by the collegiate system, see Lawn Tennis Association,

2022 for more). Many players with professional aspirations choose to play some professional events alongside their collegiate seasons during semester breaks to provide them with a taste of the professional level and associated environment (Chi, 2020; USTA, 2010). In closing, aspiring professional players have different options of routes to a professional career, which offer a range of benefits and financial implications.

#### **1.4 Rationale for this Thesis**

Earlier in this chapter, extensive tennis talent development research was referenced to highlight the increasingly difficult and time-consuming nature of the JST into professional tennis (e.g., Gallo-Salazar et al., 2015; Kovacs et al., 2015a; 2015b; Reid et al., 2014; Reid & Morris, 2013; ITF, 2017; 2019). Then, through unpacking the history of tennis, the tour structure, and recent tour changes due to the concerning findings of the ITF Pro Circuit Review (2017), a key challenge of the JST into professional tennis was uncovered: the financial demands and unequal distribution of prize money. Without the contracts that athletes possess in sports like football, which not only pay them a salary but cover the costs of coaching, sport science support, training, competition and materials, professional tennis players are left to construct and fund the costs of their own teams and pay for airfare, transportation, accommodation, food, string, and other materials at a cost estimated to be between \$121,000 and \$197,000 USD per year (Quinlan, 2012; USTA, 2010). In 2011, only the top 120 players on the ATP Tour earned more than \$197,000 in prize money (Reid et al., 2014). The dire financial situation that over 96% of professional tennis players experience accumulating losses of thousands of dollars per year (ITF, 2017) forms a key factor in players' navigation of the JST process. This is illustrated in the USTA's (2010) stance that a large majority of aspiring professional players should wait to pursue professional careers until they have developed their games and matured on and off the court in

collegiate tennis before making the major financial investment. However, these findings related to the difficult player pathway (e.g., Gallo-Salazar et al., 2017; Kovacs et al., 2015a; 2015b; Reid et al., 2014; Reid & Morris, 2013) and the financial challenges of most professional players (ITF, 2017; USTA, 2010) only form part of a very complex picture of the JST into professional tennis. There remains a gap in understanding the JST process holistically and through gaining extensive insight of players' lived experiences within this process, the present thesis aimed to help fill this gap.

### **1.5 Thesis Aims**

This thesis aimed to add to previous JST research of the lived experiences of professional tennis players (Franck & Stambulova, 2019; Jensen, 2012; Pummell, 2008) by providing a holistic, ecological understanding of players' JST experiences. In doing so, it hoped to a) provide valuable applied practice insight and implications to assist aspiring professional players, their support networks, talent development centres, governing bodies, and other stakeholders within tennis; and b) offer empirical, theoretical, and methodological value to the athletic career transition literature. A breakdown of the thesis aims and chapters they are reported on is provided in Table 1.1.

**Table 1.1**

*Thesis Aims*

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Chapter	Aims
Chapter 2	<ol style="list-style-type: none"><li>1. To review the current state of JST research in sport</li><li>2. To argue for a shift from an individualistic to ecological approach to understand the many interacting factors that influence the developmental processes of tennis players within their JST experiences.</li></ol>
Chapter 4 (Study 1)	<ol style="list-style-type: none"><li>1. To gain an understanding of the lifestyle challenges that professional tennis players experience in their lives on the professional tour and the impact it has on their progression and mental health.</li></ol>
Chapter 5 (Study 2)	<ol style="list-style-type: none"><li>1. To comprehend the lived experiences of players' JST processes over a 15-month period.</li></ol>
Chapter 6 (Study 3)	<ol style="list-style-type: none"><li>1. To investigate the interaction of individual, environmental, and time-based factors that shape the JST experiences of professional tennis players</li></ol>

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# **Chapter 2**

## Review of the Literature

## 2.1 Introduction

Chapter 1 has illustrated the importance of gaining an understanding of the lived experiences of the JST into professional tennis. Before doing so, it was necessary to examine the landscape of the athletic career transition literature from its beginning to its current state. This chapter will provide a review of this literature, specifically focusing on the JST. It will explain the development of the literature from the 1960s and 1970s until the present moment, outlining key theoretical influences, empirical findings, and methodological approaches. To conclude, it will outline gaps in the literature, the theoretical underpinnings of this thesis, and highlight the subsequent scope of the present thesis.

## 2.2 The Beginning of Athletic Career Transition Research

Although athletes have faced transitions for as long as they have pursued athletic endeavours, the academic literature on career transitions is comparatively short in existence. Athletic career transitions were introduced as a concept in the mid-to-late 1960s and 1970s by studies seeking to examine the retirement experiences of athletes (Haerle, 1975; Hallden, 1965; Mihovilovic, 1968). Without sport-specific models to explain this new area of research, researchers initially looked outwards to areas like thanatology (i.e., study of the stages of dying) and social gerontology (i.e., study of the aging process) to understand these experiences. Thanatology was applied to athletic retirement through Rosenberg (1984) and Lerch's (1984) assertion that *social death* (Kalish, 1966) was an appropriate construct to explain the social and psychological challenges that could occur when retiring from sport (e.g., social isolation, loss of identity, segregation). Lerch (1984) noted parallels between athletes' experiences of social death in their retirement and Kubler-Ross' (1969) stages of grief, suggesting that athletes may progress through a similar set of stages to terminally ill patients (i.e., denial, anger, bargaining,

depression, acceptance). That is, retiring athletes may refuse to acknowledge the inevitability of the end of their career (denial), become agitated by the changing situation (anger), attempt to negotiate a way to extend their career (bargaining), and exhibit a distressed reaction to retirement (depression) before ultimately accepting the career transition (acceptance).

Meanwhile, initial support for social gerontology perspectives explaining athletic retirement was found by researchers (Edwards & Meier, 1984; Lerch, 1981; Rosenberg, 1981) through the application of social breakdown theory (Kuypers & Bengston, 1973), which proposes that role loss (e.g., retirement) can lead to external labeling and the internalization of negative evaluation, and continuity theory (Atchley, 1976), that suggests the importance of maintaining continuity throughout the aging process. Although thanatology and social gerontology perspectives provided a starting point for athletic career transition research, the unique characteristics of athletic retirement experiences led researchers to view these frameworks as inadequate in explaining the athletic retirement process (Blinde & Greendorfer, 1985; Crook & Robertson, 1991). Specifically, Blinde and Greendorfer (1985) argued that viewing athletic retirement through a thanatological lens proposed an overly negative portrayal misrepresenting the many athletes who retired from sport without experiencing *social death* and that athletes' earlier retirement age than the traditional workforce (often by at least twenty years) made social gerontology perspectives less applicable to athletes.

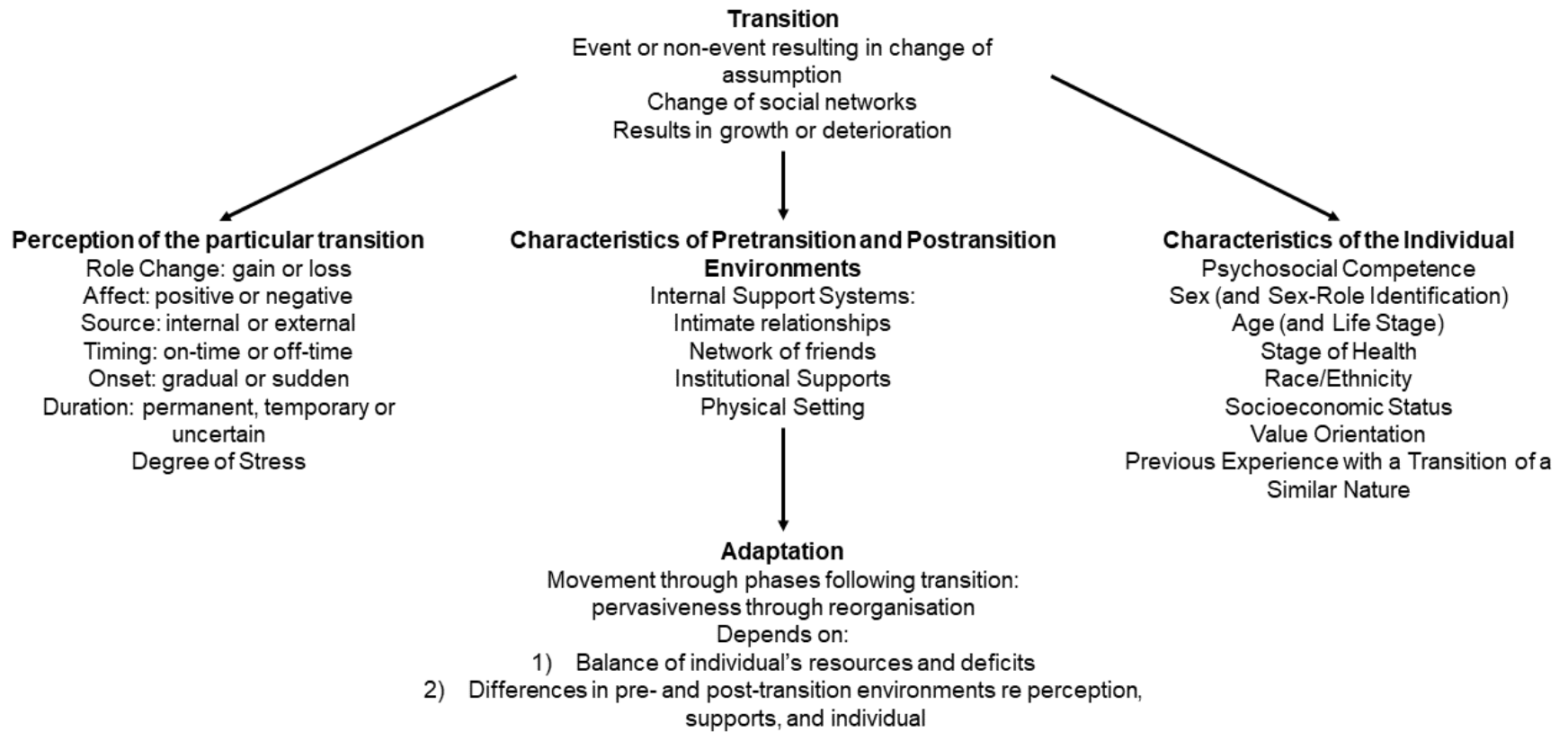
The inadequacies of thanatological and social gerontological approaches to explain athletic career transition experiences led scholars to the application of a counseling psychology model—namely Schlossberg's (1981) "Model for Analyzing Human Adaptation to Transition" as an explanatory framework for athletic retirement (Figure 2.1). The model postulates that three groups of factors influence an individuals' adaptation to a transition: perception of the particular



transition, characteristics of pre-transition and post-transition environments, and characteristics of the individual. The model explains that adaptation through the transition depends on the balance of individuals' resources and deficits and the differences in their pre- and post-transition environments across the three groups of factors. A later adaptation to the model highlighted factors which influenced a transition as 'The 4 S System' (Schlossberg et al., 1995) and included the 'situation' (e.g., feelings of personal control over the transition), 'self' (e.g., demographics like socioeconomic status and psychological characteristics such as self-efficacy), 'support' (e.g, social support available) and 'strategies' (e.g., coping strategies and resources) where factors were seen as either 'assets' or 'liabilities' to the transition, with the balance of the two determining the levels of stress or ease in which the transition was experienced.

**Figure 2.1**

*Model for Analyzing Human Adaptation to Transition (Schlossberg, 1981)*



Although Schlossberg's (1981; Schlossberg et al., 1995) model was developed as a counseling psychology model for general life transitions and not specifically for athletic transitions, it gained support from a range of studies within the athletic domain (Baillie, 1993; Parker, 1994; Pummell et al., 2008; Swain, 1991). Pummell et al. (2008) and Swain (1991) found the model to predict the importance of key factors of transitions (e.g., social support), while Swain (1991) further found the model to accurately provide context and reflect the variability of transition experiences. Despite this support and the model's greater suitability to explaining athletic transitions than thanatological and gerontological models (Wylleman et al., 2004), the model was critiqued for not being specific enough to sporting transitions to adequately explain and understand athletes' experiences with adaptation to retirement (Taylor & Ogilvie, 1994). From an applied perspective, a lack of specificity could limit the framework's ability to provide relevant guidance to practitioners supporting athletes through their transitioning experiences.

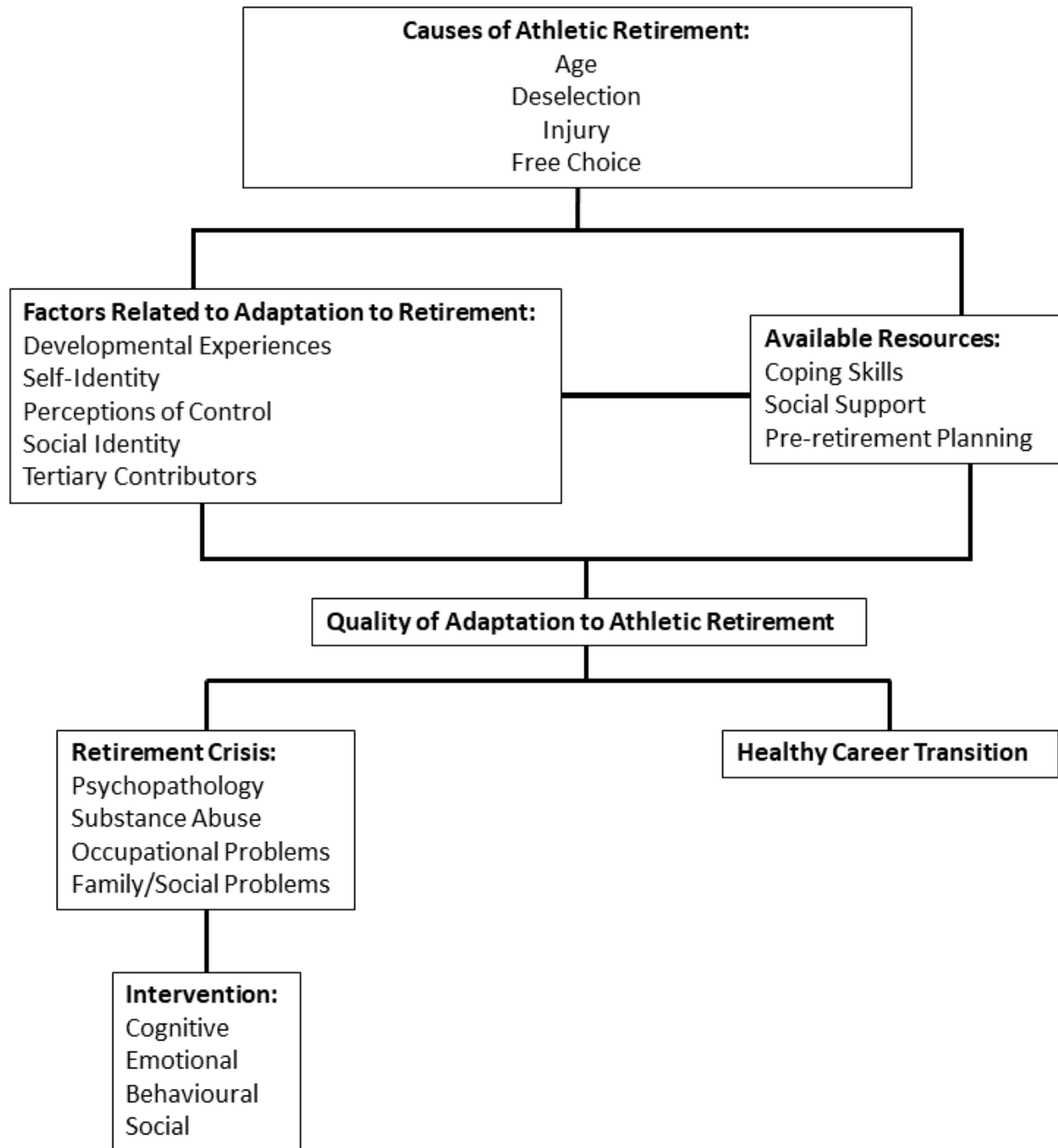
## **2.3 Sport-Specific Transition Models**

### **2.3.1 Conceptual Model of Adaptation to Retirement Among Athletes**

In response to criticism of Schlossberg's (1981; Schlossberg et al., 1995) model, Taylor and Ogilvie (1994) developed a sport-specific athletic retirement model aimed at providing a comprehensive representation of athletic retirement from inception to completion (Figure 2.2). In sum, the model asserts that the presence or absence of causes of athletic retirement, factors related to adaptation to retirement, and available resources determine whether athletic retirement is experienced as a healthy career transition or a retirement crisis. For athletes in crisis, the model suggests interventions be developed by sport psychologists to target cognitive, emotional, behavioural, and social concerns.

**Figure 2.2**

*Conceptual Model of Adaptation to Retirement Among Athletes (Taylor & Ogilvie, 1994)*



Taylor and Ogilvie's (1994) model was well-received by athletic career transition researchers, evidenced in reviews of the literature (Park et al., 2013; Stambulova et al., 2009; Wylleman et al., 2004) and in empirical work (Coakley, 2006; Stoltenburg et al., 2011). After decades of applying models from outside of sport psychology to explain athletic retirement, researchers and practitioners now had a sport-specific transition model that could be used to advance both academic and applied inquiry. For example, in a study exploring the athletic retirement of National Football League players with aims of developing a football-specific athletic retirement transition program, Coakley (2006) found the model to provide a holistic representation of the athletic retirement process and offered practical insight to better prepare athletes to function effectively.

However, while athletic retirement received much of the research attention from the 1960s through the early 1990s, a shift occurred in the late 1990s and early 2000s which brought within-career transitions into the spotlight as researchers began to recognise the wider range of transitions athletes experienced and the need for further models to describe and explain these transitioning experiences (Stambulova, 2003; Wylleman & Lavallee, 2004). This shift was inspired in part by both Bloom (1985), who introduced three transitional stages (i.e., early years, middle years and later years) in the progression from beginner to expert in sport, music, art, and science and Côté (1999; and later adapted by Côté et al., 2007) who provided a sport-specific model which similarly led to the identification of three stages of development: the sampling years (ages 6-13), specializing years (ages 13-15), and the investment years (16+). Although Bloom and Côté's (1999; Côté et al., 2007) research focused more broadly on talent development instead of within-career transitions of professional athletes, it identified key stages within an individuals' developmental course and highlighted the need to widen the athletic career transition

research scope beyond athletic retirement to include the varying transitioning experiences throughout athletes' careers.

### **2.3.2 Athletic Career Transition Model**

The first model designed to investigate transitions throughout athletes' career span, including within-career transitions like the JST, was Stambulova's (2003) athletic career transition model (Figure 2.3). The model proposes that during transitions, athletes use their resources and coping mechanisms to face the demands and barriers of their situations. Resources used to face demands of the JST can include internal factors like knowledge of the JST process (Morris et al., 2016; Pummell & Lavalley, 2019) and external factors like social support (Bruner et al., 2008; Pummell et al., 2008). Barriers, on the other hand, can include decreased confidence due to the substantial increase in standards in senior competition (Bennie & O'Connor, 2006) and external factors like a lack of social or financial support (Bennie & O'Connor, 2006; Morris et al., 2015). Demands associated with the JST include financial challenges (Bennie & O'Connor, 2006; Franck & Stambulova, 2019). Stambulova (2003) suggests that coping with a transition is a dynamic process which requires a balance between the resources and coping mechanisms the athlete possess and the demands and barriers they aim to counteract. If individuals possess the necessary resources, avoid or overcome potential barriers and exhibit effective coping, the model hypothesizes a successful transition will occur. However, if individuals lack necessary resources, face excessive barriers, and exhibit ineffective coping strategies, a crisis-transition would occur requiring professional psychological assistance.



The athletic career transition model (Stambulova, 2003) has received extensive support as a framework that can help to explain athletes' JST experiences across sports (e.g., Alge, 2008; Čačija, 2007; Morris, 2013; Morris et al., 2015; 2016; 2017; Olsson & Pehrson, 2014; Stambulova et al., 2017). Across four studies within their PhD thesis, Morris (2013) found support for the athletic career transition model (Stambulova, 2003) in understanding the complexity of the youth to senior transition in professional football by identifying internal and external resources like determination, motivation to be successful, and social support as key facilitative factors to be used against barriers of the process, such as a lack of personal knowledge or preparation for the transition, and limited social support. One of these studies, that was later published (Morris et al., 2015), offered preliminary evidence that the model could provide explanatory power regarding outcomes of transition. This study compared two youth football clubs' developmental systems. Organization A assessed demands athletes may face during the transition and planned how to overcome these demands, suggested resources that could be used to assist players, held 'parents nights' to educate parents on how to help in the process, and adopted a staggered entry into the system to ease the transition. Organization A therefore aligned with the demands, resources, and barriers of the athletic career transition model (Stambulova, 2003) and was proactive and committed to taking action around these factors. In contrast, Organization B lacked an understanding of transition demands, had limited sport science support, and did not educate parents on how they could assist in the process. In support of the model, Organization A had more successful transition outcomes, evidenced by a higher percentage of players being offered first team contracts, more first team appearances, and greater



value received on the sale of former youth players, despite spending less money on their youth development system.

### **2.3.3 Holistic Athletic Career Model**

A second key model applied to within-career transitions is the holistic athletic career model (Wylleman & Lavallee, 2004; Wylleman et al., 2013; Wylleman, 2019) (Figure 2.4). The model recognizes the effect that developmental challenges in spheres outside of athletic performance in individuals' lives have on their holistic development by outlining various normative transitions that individuals experience in their athletic, psychological, psychosocial, academic/vocational, financial, and legal development throughout their athletic lifespan. Normative transitions refer to sequential and predictable movements from one stage to another, like the JST or athletic retirement (Stambulova et al., 2009). In relating to factors outside of athletic development, this model adopts a *whole person* perspective that acknowledges the individual as more than simply an athletic performer. Additionally, the model illustrates the concurrent and interactive nature of transitions that athletes experience throughout their development. For example, while at an athletic level, first-year senior athletes face more experienced athletes and an increased level of training and competition (Bruner et al., 2008; Lorenzo et al., 2009; Pummell et al., 2008) and adopt a professional lifestyle (e.g., healthy food intake, strong sleeping habits, time management, rest and recovery) (Stambulova et al., 2009), they are simultaneously transitioning from adolescence into young adulthood at the psychological level and developing their identity, which requires greater independence, discipline and responsibility (Rosier et al., 2015). Concurrently, at a psychological level, the relationships athletes experience with their coaches, family and friends are evolving, with athletes often moving away from home and spending increasing amounts of time on their sport

potentially impacting friendships and negatively leading to loneliness and isolation (Pummell et al., 2008; Rosier et al., 2015).

**Figure 2.4**

*Holistic Athletic Career Model (Wylleman et al., 2013; Wylleman, 2019)*

Age	10	15	20	25	30	35
<b>Athletic Level</b>	Initiation		Development	Mastery		Discontinuation
<b>Psychological Level</b>	Childhood	Puberty/ Adolescence		(Young) Adulthood		
<b>Psychosocial Level</b>	Parents, Siblings, Peers	Peers, Coach, Parents	Partner, Family, Coach, Support Staff, Teammates, Student-Athletes		Family, (Coach), Peers	
<b>Academic Vocational Level</b>	Primary Education	Secondary Education		(Semi) Professional Athlete		Post-sport Career
				Higher Education	(Semi) Professional Athlete	
<b>Financial Level</b>	Family	Family Sport Governing Body	Sport Governing Body/ NOC/ Sponsor, Family		Family, Employer	
<b>Legal Level</b>	Minor		Adult (of age)			

Although the model was initially referred to as the “developmental model on transitions faced by athletes” (Wylleman & Lavallee, 2004) and described normative transitions that athletes experienced across the four levels of athletic, psychological, social, and academic/vocational development, financial and legal development were later added to the original model alongside other small adaptations and the model was renamed the “holistic athletic career model” (Wylleman et al., 2013; Wylleman, 2019). Figure 2.4 provides further details of the normative transitions athletes experience at each level. Briefly, these levels highlight the progression of individuals through the various athletic stages (initiation, development, mastery, discontinuation), developmental stages (childhood, adolescence, adulthood), changing importance of psychosocial networks (shift from parents, siblings and peers in initiation stage to partners and coaches in mastery stage), academic/vocational stages (primary education, secondary education, higher education, vocational training/professional occupation), changing sources of financial support (shift from family to governing bodies and sponsors) and legal development (minor, adult).

The holistic athletic career model (Wylleman & Lavallee, 2004; Wylleman et al., 2013; Wylleman, 2019) has received widespread adoption and support by researchers in varying empirical studies (e.g., Bruner et al., 2008; Debois et al., 2015; Pummell et al., 2008; Wylleman et al., 2012), as well as practitioners who have developed athlete career support provision for countries like France, the Netherlands, Belgium, and Scotland using the model (Bouchetal Pellegri et al., 2006; Wylleman et al., 2013). In an investigation into first-year experiences of elite ice hockey players, Bruner et al. (2008) found the model to be a valuable framework for understanding players’ transitional experiences by exploring their athletic development through key on-ice themes, such as readiness for elite competition and demonstrating competence, and

psychosocial development through off-ice factors like the role of teammates and billets. Wylleman et al. (2012) furthered support for the usefulness of the model in identifying athletes' perceptions of changes experienced in their Olympic Games experiences. The study found athletes experience changes at the athletic level (e.g., frequency and load of training routines), psychological level (e.g., increased self-confidence), psychosocial level (e.g., decreased contact with family, partner, and peers before and during the Olympics) and academic/vocational level (e.g., decreased academic efforts before and during the Olympics). Collectively, these findings provided valuable insight to develop applied sport psychology support programmes to assist future Olympians.

#### **2.4 Existing JST Research in Sport**

The athletic career transition model (Stambulova, 2003) and holistic athletic career model (Wylleman & Lavallee, 2004; Wylleman et al., 2013; Wylleman, 2019) are different in their aims. Stambulova's (2003) model focuses on the dynamic balance of demands, resources, barriers, and coping strategies that an individual brings to a transitioning experience and attempts to explain the process of a single transition. In doing so, the athletic career transition model is comparable to Schlossberg's (1981) model which also focuses on the influence of several factors on the transition outcomes and related consequences. In contrast, the holistic athletic career model (Wylleman & Lavallee, 2004; Wylleman et al., 2013; Wylleman, 2019) is a descriptive model that places emphasis on the concurrent and interactive nature of a range of transitions that athletes experience across several layers of their development over the athletic life course. Despite these differences, both Stambulova's and Wylleman and colleagues' models are more complimentary than competing models in the JST literature, as evidenced by empirical work adopting both models simultaneously (e.g., Alge, 2008; Čačija, 2007; Franck, 2018). The

emergence of these two athletic career transition models has led to a substantial increase in empirical studies focusing on the JST. Studies now exist across sports such as football (e.g., McGreary et al., 2021; Mills et al., 2012; Morris, 2013; Morris et al., 2015; 2016; 2017; Røynesdal, 2015; Swainston et al., 2020), ice hockey (e.g., Bruner et al., 2008; Olsson & Pehrson, 2014; Pehrson et al., 2017; Stambulova et al., 2017), track and field (e.g., Bennie & O'Connor, 2006; Drew, 2020; Hollings, 2014), equestrian (e.g., Alge, 2008; Pummell et al., 2008), basketball (e.g., Čačija, 2007; Lorenzo et al., 2009), rugby (e.g., Jones et al., 2014), swimming (e.g., Franck & Stambulova, 2019; Vujic, 2004), and tennis (e.g., Franck & Stambulova, 2019; Jensen, 2012; Pummell, 2008). With the challenges that athletes face in the JST varied according to sport (Bruner et al., 2008; Drew et al., 2019), there is an importance to having broad representation of sports in JST research. The increased presence of studies on the JST process has led to extensive findings highlighting key factors that both facilitate and debilitate athletes' transitioning experiences into senior sport. Before reviewing the JST literature across sports, a brief summary of the limited tennis JST literature is provided.

#### **2.4.1 Tennis JST Research**

As part of their PhD thesis, Pummell (2008) conducted an unpublished longitudinal case study of a single professional tennis player over a 20-month period, with data being collected from the player, their coach, and sport psychologist. No theoretical underpinning for the research was explicitly stated. Throughout the study, the player progressed from the ITF Men's Pro Circuit to the ATP Challenger Tour with an ATP singles ranking improvement from 386 to 224. As part of a series of studies throughout the thesis contributing to a grounded theory on the JST process, the longitudinal case study reported detailed findings around the following constructs: identity development, performance related adjustments, lifestyle adjustments, the role of coaches

and the role of other players in the transitioning experience. Key insights gleaned from the study included the significant role that the players' coach and sport psychologist played in the JST process through providing valuable emotional support and spending extended periods of time with the athlete and becoming like familial figures, as well as the ongoing revision of identity, self-concept, and self-efficacy development throughout the JST process. This study was the first investigation into the JST process in tennis and filled a gap in the general JST literature through its longitudinal design but was limited in its use of only one players' experience of the JST. Additionally, through possessing a full-time traveling coach and sport psychologist, this players' JST experience is not representative of many tennis players who would not possess the luxuries of a full-time traveling coach and sport psychologist.

Jensen (2012) provided a second study on the JST process in tennis. This study was also from an unpublished PhD thesis and did not have an explicit theoretical underpinning. A sport ethnography into the experiences of former male NCAA college tennis players transitioning onto the ITF Men's Pro Circuit was the design. Jensen (2012) competed on the tour himself while collecting data and identified three transitional periods within the overall JST: going from college to pro tennis, competing full-time on the futures tour, and moving up or moving on. These transition periods were reflected in five overarching themes: impact of life, uncertainty, mental discipline, support, urgency. The sub-themes of these overarching themes varied based on the transition phase the players were experiencing. For example, the impact the transition had on players' lives changed from the first through the third transitional phases by initially being 'life-defining', then 'life-consuming' and finally 'life-changing'. Additionally, Jensen's (2012) findings aligned with what Pummell (2008) proposed regarding the importance of social support for transitioning players' navigation of the JST process. This study also highlighted the financial

struggles of transitioning players and their desperate bids to find funding to continue their professional pursuits. Although the study provided great detail into the transitioning experiences of tennis players, it was limited in its design of investigating the experiences of only male players who were based in the United States, failing to account for female representation or the majority of professional players based anywhere outside of the United States.

Finally, Franck and Stambulova (2019) conducted a narrative study that explored a tennis player's JST experience. Two narratives were identified in this study for the tennis player: the 'performance narrative' outlined as "having ambitious athletic goals at the beginning of the transition with their focus on development primarily in sport and prioritizing sport over studies and other life activities" (Franck & Stambulova, 2019, p. 289), and the 'injury and reorientation narrative' where repeated injuries ultimately led to a restructuring in the athlete's life and focus on a university education away from tennis. Findings from the study provided additional evidence for the importance of social support in the JST, corroborating the findings presented by Pummell (2008) and Jensen (2012). More specifically, Franck & Stambulova (2019) focused on the role of the family in providing support and the financial pressures of the JST which requires substantial financial assistance, as was found by Jensen (2012). Although the study provided insight into the narrative experience of a professional tennis players' JST, it was limited in its retrospective design collecting data several years after the players' transitioning experience.

#### **2.4.2 JST Findings Across Sports**

Most of the JST research to date has been conducted outside of tennis. Collectively, the findings have illustrated a range of both facilitative and debilitating factors of the transitioning process. The most salient finding across sports to date is the importance of social support as a facilitative factor in players' JST experiences (e.g., Bennie & O'Connor, 2006; Bruner et al.,



2008; Drew et al., 2019; Drew, 2020; McGreary et al., 2021; Mills et al., 2012; Morris et al., 2016; 2017; Pummell et al., 2008). Specifically, eight providers of social support have been identified: a) family, b) coaches, c) teammates, d) peers, e) sport science staff, f) organizational support, g) partners, and h) managers (Bruner et al., 2008; Mills et al., 2012; Morris et al., 2016; 2017). The support athletes receive can be characterized as emotional (e.g., showing concern for the athlete), esteemed (e.g. boosting a person’s feelings of self-esteem), informational (e.g., tactical or technical advice), and tangible support (e.g., assistance with finances) (Morris et al., 2016; Pummell et al., 2008). Although the types of support provided to athletes can vary based on contextual circumstances, Morris et al. (2016) suggested that coaches often provide informational and esteemed support; parents and family usually provide emotional, esteemed, and tangible support; and sport science staff provide technical, informational, and emotional support. Morris et al. (2016) also reported that friends and family were identified as the most frequent and important providers of emotional support such as by “giving players a chance to vent their frustrations away from the cocooned sporting environment” (p. 384). The significance of parents and friends/teammates’ provision of emotional support has also been supported in other JST research (Bruner et al., 2008; Mills et al., 2012; Pummell et al., 2008). Additionally, a range of studies have highlighted the importance of tangible support being provided to athletes by parents in the form of financial assistance to allow for the continuation of their careers, the preparation of food to ease the lifestyle, and driving to practice and competitions (Franck & Stambulova, 2019; Pummell et al., 2008; Stambulova et al., 2017). Collectively, social support has been found to serve as an important protective factor against the demands and stressors of the JST through acting as a coping mechanism (Bruner et al., 2008; McGreary et al., 2021; Morris et al., 2016).

The JST has also been found to be a dynamic, complex, and non-linear process (Debois et al., 2015; Drew, 2020; Franck & Stambulova, 2019; Morris, 2013). In their PhD thesis investigating the youth to senior transition in professional football, Morris (2013) found that resources and barriers of the transitioning process changed over time. Drew (2020) also used a longitudinal study in their PhD thesis to investigate the JST process in track and field. They argued “athletes in the current study were not affected by one factor consistently throughout their transition; instead, it was a dynamic interaction between many different challenges and resources at different moments of the transition” (Drew, 2020; p. 251). Drawing on the example of one athlete in the study, Drew (2020) explained that their biggest challenge was finding an ideal environment and coach to motivate and inspire them, but that alongside this challenge, they coped with numerous other factors like moving to a different city, developing new relationships with their coach and training partners, earning a sustainable income, increasing motivation, and maintaining social connections with their family—all of which were constantly changing with different factors becoming more or less prominent during different interview periods.

In addition to the dynamic, complex nature of the JST process illustrated in the findings of Morris (2013) and Drew (2020), Franck and Stambulova’s (2019) research highlighted the non-linear nature of the JST process including their identification of imbedded transitions within the overall JST process of athletes. In their narrative study of two athletes (a swimmer and a tennis player), Franck and Stambulova acknowledged a range of *crossroads* that occurred at key points of the athletes’ transitioning experiences. For example, the swimmer experienced crossroads when they moved from one sport club to another when they had outgrown their initial sport club (crossroad 1), adapted to the new environment and the differing standards and expectations (crossroad 2), before experiencing a change in coaches and structure of the group

(crossroad 3) that limited their progression and led to a rethink of their priorities before the ultimate decision to end their athletic career (crossroad 4). The findings across these three studies highlight the dynamic, complex, and non-linear nature of the JST process, helping to explain why the JST process is exceedingly difficult (Stambulova, 2009) and implies that athletes require a range of resources and coping mechanisms to assist in their processes over time.

Research has identified facilitative factors of the JST process as exhibiting adaptability to the changing environment and demands (Røynesdal, 2015; Vujic, 2004), optimism and professionalism (Mills et al., 2012), and resilience to cope with the transition's demands (Mills et al., 2012; Olsson & Pehrson, 2014; Røynesdal, 2015). In investigating the transition from academy to first-team football, Røynesdal (2015) highlighted the importance of adapting to the new environment and its associated demands, outlining factors such as understanding what the manager expects of the players and the technical and tactical differences in the higher level of play. Further, Røynesdal (2015) emphasized the importance of *psychological stamina*, a term defined as the ability “to stay long enough on the train for the scenery to change” (p. 18), and is related to dealing with criticism, setbacks, and disappointment from situations like being dropped from the squad and being able to withstand these types of hardships over an extended period of time. Mills et al. (2012) also investigated the youth academy to professional football transition, and similarly found that a footballer's ability to cope with adversity over time and exhibit *bouncebackability* in the face of injuries and difficult refereeing decisions as a crucial facilitative factor in the JST process. Mills et al. (2012) further argued for the importance of professionalism and players taking personal responsibility for their careers by displaying a readiness to make sacrifices and being self-disciplined. For example, a coach in the study explained that:

[Players] have got to decide what they want and how they are going to get it. Do you want to still go out with your mates every night? Well you can't do that if you want to be a top class footballer. You've got to forsake certain things in your life if you want to achieve." (p. 1598).

Athletes' ability to balance the varying life components of sport, work, education, and relationships, as well as having outlets outside of sport have also been identified as facilitative factors of the JST process (Drew, 2020; Jones et al., 2014; Pummell, 2008). Drew (2020) found that athletes who were able to balance their various commitments outside of sport alongside their JST experiences (e.g., work, education, social life) felt more able to manage the demands of the transition, while athletes who struggled to do so perceived their inability to balance competing roles as a key demand in the JST process. In an examination into the transition from sub-elite to elite-level rugby, Jones et al. (2014) discussed the importance of a balanced identity with players working towards self-exploration and a strong sense of self throughout the development process. One coach explained "It becomes clear that if you engage in something else, if you're a good family person, if you're a church person, or whatever it be...you've got to have a bit of an outlet that takes you away from that single focused desire because it actually helps that desire" (p. 17). A similar sentiment was echoed in findings of Pummell's (2008) case study of a professional tennis players' JST experience where the player realized that to unwind, they needed to find a new balance and reflected:

After a certain amount of time I need some kind of a release before I then start again.

Some sort of a just a complete lose yourself couple of hours, almost like okay, I'm going on holiday but like your mind just steps out of my body for however long...the way I am with how intense I am it's unsustainable (p. 177).

Although several facilitative factors have been identified in JST research, barriers in the JST process have also been found and include the higher standard between junior and senior, the increased pressure to perform, and the greater physical and training demands (e.g., Bennie & O'Connor, 2006; Čačija, 2007; Morris, 2013; Pummell et al., 2008). When describing their JST experience, a football player remarked “I have really struggled to keep up with the boys, ‘cause the sessions are much longer and more physical which has really hindered how well I play. We also train more often, sometimes twice a day, which we never done in the youths” (p. Morris, 2013, p. 143). Similarly, a track and field coach interviewed by Bennie and O'Connor (2006) explained “All the qualifying standards are a bit of a joke, they’re pretty hard...and they’re not retaining athletes as a result” (p. 63). In addition to the increased standard, expectations, and pressure to achieve at the next level, time pressures to manage sporting and non-sporting commitments effectively, as well as financial demands and burden have also been identified as barriers to athletes’ JST processes (Alge, 2008; Čačija, 2007; Drew, 2020; Franck & Stambulova, 2019; Jensen, 2012; Pummell et al., 2008). Specifically, a former track and field athlete (Bennie & O'Connor, 2006) pointed to the associated costs of receiving coaching during the transition to the higher level and the difficulty they experienced affording this as a student as a key barrier to the JST. Additionally, Jensen (2012) and Franck and Stambulova (2019) detailed the significant costs associated with funding a professional tennis career and the pressure that players felt around gaining and maintaining sponsorships to sustain their careers. Finally, Morris (2013) identified a lack of personal knowledge or preparation for the transition and insufficient social support as barriers to the JST process, with a coach and sport psychologist explaining that athletes can underestimate the significance of the increase in level and the importance of

surrounding themselves with support and, subsequently, embark on the process underprepared physically, mentally, and socially.

Shifting from reviewing the facilitative and debilitating factors of the JST process, the theoretical and methodological approaches used in JST studies have been limited. For instance, the majority of JST research to date has been underpinned by either the athletic career transition model (Stambulova, 2003) and /or the holistic athletic career model (Wylleman & Lavallee, 2004; Wylleman et al., 2013; Wylleman, 2019). In their systematic review of qualitative research on the JST process in sport, Drew et al. (2019) found that these two models accounted for the theoretical underpinnings of 19 of the 27 studies identified. Methodologically, JST research has been conducted primarily through singular, retrospective, qualitative semi-structured interviews (Drew et al., 2019). The implications of these theoretical and methodological tendencies within this area of research will be discussed further in the following section.

## **2.5 Gaps in the Literature**

Although the JST literature has grown steadily over the last decades, this review of the literature has identified gaps and limitations worthy of attention. First, while the athletic career transition model (Stambulova, 2003) and the holistic athletic career model (Wylleman & Lavallee, 2004; Wylleman et al., 2013; Wylleman, 2019) have provided strength in their explanatory and descriptive potential of transitioning experiences and furthered the athletic career transition knowledge base, their substantial use in the area may limit our understanding of transitioning experiences. As exemplified in a systematic review of the literature, the predominant use of two theories to underpin much of the JST research landscape poses a risk of questions being too narrowly focused and highlighting idiosyncrasies of the models (Drew et al., 2019). In line with the logic of Drew et al. (2019), in this thesis I argue that the substantial use of

these models in the JST literature has led to a largely individualistic approach to the empirical work conducted to date. Studies have largely investigated transitions from an individualistic perspective (e.g., Bruner et al., 2008; Pummell et al., 2008), with a limited focus on the role that key environmental, structural, and cultural influences play on the individual's developmental process. In today's world, athletes are pursuing professional careers in sport within complex social, environmental, structural, and cultural spheres. Investigating the JST process by focusing only on individual-related factors without understanding the larger environmental-based influences of the process or the interactions between the two is research out of context. Accordingly, in this thesis, I adopted ecologically informed theoretical underpinnings that emphasized the many interacting factors which influence human developmental processes and provide a more contextualized illustration of athletes' JST processes. The theoretical underpinnings of this research project are detailed in the next section.

A second gap identified in the empirical work within the JST literature to date is that most studies adopted singular, retrospective accounts (e.g., Finn & McKenna, 2010; Jones et al., 2014; Pummell et al., 2008). The JST has been identified as a dynamic, non-linear, continually changing process (Drew, 2020; Franck & Stambulova, 2019; Morris, 2013); therefore, collecting data at a single time point “only provides data pertaining to a snapshot of the transition” and “does not acknowledge the transition process in its entirety and fails to recognize any potential changes athletes and key stakeholders might perceive during various points throughout the transition” (Drew et al., 2019, p. 7). Despite the longstanding calls for longitudinal research in the JST literature (e.g., Bruner et al., 2008; Jones et al., 2014; Pummell et al., 2008; Drew et al., 2019), limited numbers of longitudinal studies exist in the area (e.g., Drew, 2020; Morris, 2013; Pummell, 2008; Swainston et al., 2020). Longitudinal approaches allow researchers to track

changes athletes experience throughout their JST processes providing a more detailed understanding of the dynamic process. To this end, the present thesis followed the lead of these previous researchers and adopted a longitudinal design to study the JST process in tennis.

A final gap identified in this review of the literature is the need for further investigations into the JST process in different sports. Although football (e.g., McGreary et al., 2021; Mills et al., 2012; Morris, 2013; Morris et al., 2015; 2016; 2017; Røynesdal, 2015; Swainston et al., 2020) and ice hockey (e.g., Bruner et al., 2008; Olsson & Pehrson, 2014; Pehrson et al., 2017; Stambulova et al., 2017) have received a considerable amount of attention, other sports have received limited or no attention at all. With contextual differences and challenges of the JST varying from sport to sport (Bruner et al., 2008; Drew et al., 2019), there is applied and academic value in broadening our understanding across sports to provide a rich, contextualized understanding of the JST to aspiring professionals, their support networks, talent development centres, national governing bodies, and other sport-specific stakeholders who inform policy and practice. This thesis will investigate the JST process in tennis, a sport that has received limitation attention in the academic literature to date (Franck & Stambulova, 2019; Jensen, 2012; Pummell, 2008).

## **2.6 Theoretical Underpinnings of this Thesis**

Informed by the gaps identified in this review of the literature, the research conducted in this thesis was underpinned by a theoretical framework made up of two individual theories. Each will be detailed below, alongside an argument for the rationale of adopting the theory and exploration of relevant research underpinned by the theories.

### **2.6.1 Process-Person-Context-Time (PPCT) Model**



The Process-Person-Context-Time (PPCT) model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) is the bedrock of the “Bioecological Theory of Human Development” (Bronfenbrenner, 2005), an evolving theoretical framework that was developed over decades to understand human development. To better understand the PPCT model, a brief history of Bronfenbrenner’s work is provided below, followed by the rationale behind the use of the model in this thesis.

Bronfenbrenner’s work spans several decades and stems from his belief that a lack of context in human development research casted doubt on the suitability of applying findings from controlled settings like laboratories to complex real-life settings. Specifically, Bronfenbrenner (1977) argued that “much of contemporary developmental psychology is the science of the strange behavior of children in strange situations with strange adults for the briefest period of time” (p. 513). Out of this concern, Bronfenbrenner developed ecological systems theory (1979) (Figure 2.5, see page 45) which detailed four interrelated systems (i.e., microsystem, mesosystem, exosystem, macrosystem) that individuals interact within throughout their developmental process. A fifth system, the chronosystem, was later added to the theory (Bronfenbrenner, 1988). The five systems are defined as follows:

- **Microsystem:** The microsystem refers to any environment the developing individual is an active member of and spends a significant amount of time engaging within. Examples include home, school, or within a peer group, and in a sport setting could include an athlete’s training environment. The interactions the developing individual has within their microsystems tend to be personal and significant for supporting their development. They can be stable and relatively predictable, such as eating dinner with family, or a post-practice debrief with a coach, and nurture development, or unstable and chaotic such as

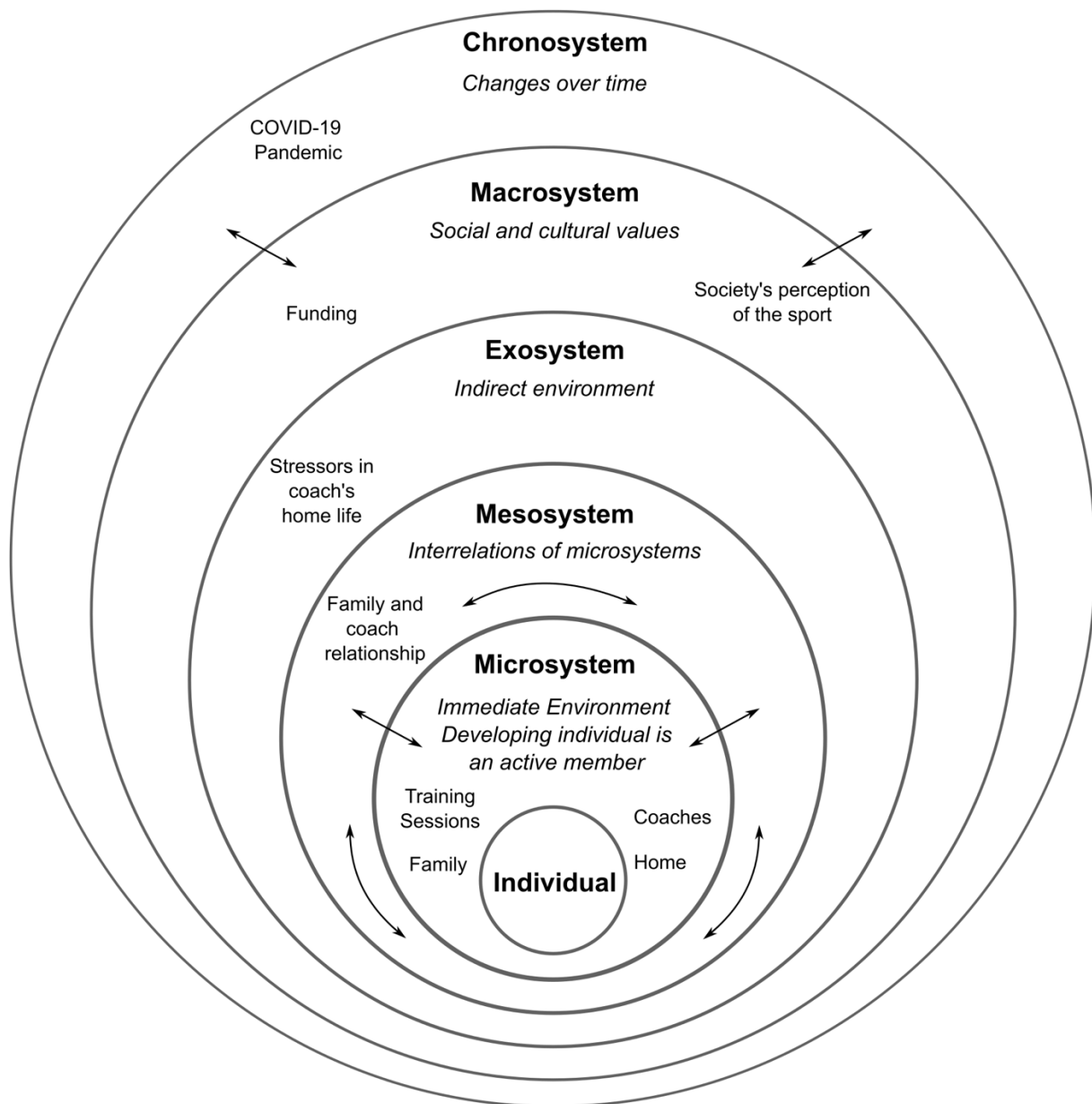
irregular communication or engagement with family or coach, and undermine development (Bronfenbrenner & Evans, 2000).

- **Mesosystem:** The interrelations of microsystems, like a child's parent and teachers or sport coach is referred to as a mesosystem. Within mesosystems, the individuals' microsystems are interconnected and influence one another. For example, a child's parent having a strong relationship with a sport coach can aid development, while a poor relationship can inhibit development.
- **Exosystem:** The exosystem signifies settings that the individual is not a direct part of, but which can impact an individuals' development. With regards to sport, the stressors that a coach may be experiencing in their home life can impact how they coach the athlete, and thus, impact the athletes' development.
- **Macrosystem:** The macrosystem encompasses the overarching cultural norms, societal beliefs, economic, social, legal, and political systems which impact all of the influencing systems. In a sporting context, this could include the way a society values a specific sport, and the funding that is provided to that sport, which will have an impact on the opportunities and support provided to the developing athlete within that sport, and in their micro-, meso- and exosystems.
- **Chronosystem:** The chronosystem refers to time-based environmental changes that take place throughout the lifetime and influence an individual's development. These chronosystem influences can shape the individual's developmental process through the impact the event has on their micro-, meso-, exo- and macrosystems. Examples include historical events like a world war or the COVID-19 pandemic, or a major life transition

like divorce. Related to sport, this could include the impact that a historical event has on limiting an athlete's ability to train and compete.

**Figure 2.5**

*Ecological Systems Theory (Bronfenbrenner, 1979; 1988) as applied to sport*



While ecological systems theory (Bronfenbrenner, 1979) stressed the importance of person-context interrelation, it became known as a ‘context-model’ and was being applied as one (Bronfenbrenner, 1986; Tudge et al., 2009). Bronfenbrenner (1986) grew disappointed with its application, stating “(I)n place of too much research on development ‘out of context’, we now have a surfeit of studies on ‘context without development’” (p. 288). Throughout the 1980s and 1990s, the model was adapted by Bronfenbrenner and colleagues (e.g., Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Crouter, 1983; Bronfenbrenner & Morris, 1998) and by the late 1990s, proximal processes became the key factor within the theory posited as the primary engines of human development (Bronfenbrenner & Morris, 1998). Proximal processes are best described through the following proposition:

Especially in its early phases, but also throughout the life course, human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment. To be effective, the interaction must occur on a fairly regular basis over extended periods of time. Such enduring forms of interaction in the immediate environment are referred to as proximal processes. (Bronfenbrenner & Morris, 1998, p. 996)

With the focus on proximal processes, the initial theory evolved into the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) (Figure 2.6, see page 50). In addition to an emphasis on proximal processes, the PPCT model also focuses on the biopsychological characteristics of the developing individual, the ecological contexts, and the dimension of time. Bronfenbrenner and Morris (1998) outlined this in a second proposition:

The form, power, content, and direction of the proximal processes effecting development vary systematically as a joint function of the characteristics of the developing person; of the environment—both immediate and more remote—in which processes are taking place; the nature of the developmental outcomes under consideration; and the social continuities and changes occurring overtime through the life course and the historical period during which the person has lived. (p. 996)

#### **2.6.1.1 Process.**

The *process* component of the PPCT model refers to proximal processes, which are described in the first proposition above as frequent, ongoing, complex, and reciprocal interactions between an individual and their surroundings over an extended period of time. Examples of proximal processes in general development include a child learning to speak or read, while in sport they can be learning new technique to hit a tennis serve or moving from one sporting level to another, like the junior to senior transition. Proximal processes are influenced by the remaining three elements of the model: person, context, and time. These three elements are detailed below:

#### **2.6.1.2 Person.**

The *person* component of the PPCT model relates to three types of relevant characteristics to human development. First, demand characteristics are those traits that are immediately apparent, and thus, may invite or discourage reactions from the social environment that can influence interaction and the proximal process. Examples include age, gender, and physical appearance. Related to the JST process in sport, a demand characteristic may be a tennis player's height, which can help with their on-court performance. Second, resource characteristics influence an individual's ability to effectively engage in proximal processes and include mental,

emotional, social, and material resources, such as past experiences, perceived social support, skills, intelligence, and access to housing, quality food, caring parents, and educational opportunities, as well as functional integrity assets like the influence of genetics and mental health (Bronfenbrenner, 2005). These examples refer to developmental assets, although resource characteristics can also include biopsychosocial liabilities like genetic defects, physical handicaps, severe and persistent illness, brain damage, and impact individuals' abilities to engage in proximal processes in different ways. In the JST process in sport, a tennis player's past experiences playing tournaments, the support networks they have access to, and access to funding for their tennis career can serve as resource characteristics. Third, force characteristics signify individuals' traits that influence their response to the systems around them, such as temperament, motivation, and persistence. These factors can influence the likelihood of others engaging with the individual and the quality of these interactions, which subsequently influence development. For example, in the JST process in sport, two athletes may have equal resource characteristics, but can experience different developmental trajectories if one has more curiosity, stronger motivation, and an ability to persist amidst setbacks than the other.

#### **2.6.1.3 Context.**

The *context* element of the PPCT model is made up of the initial four interrelated systems of ecological systems theory (i.e., microsystem, mesosystem, exosystem, macrosystem; Bronfenbrenner, 1979) defined above.

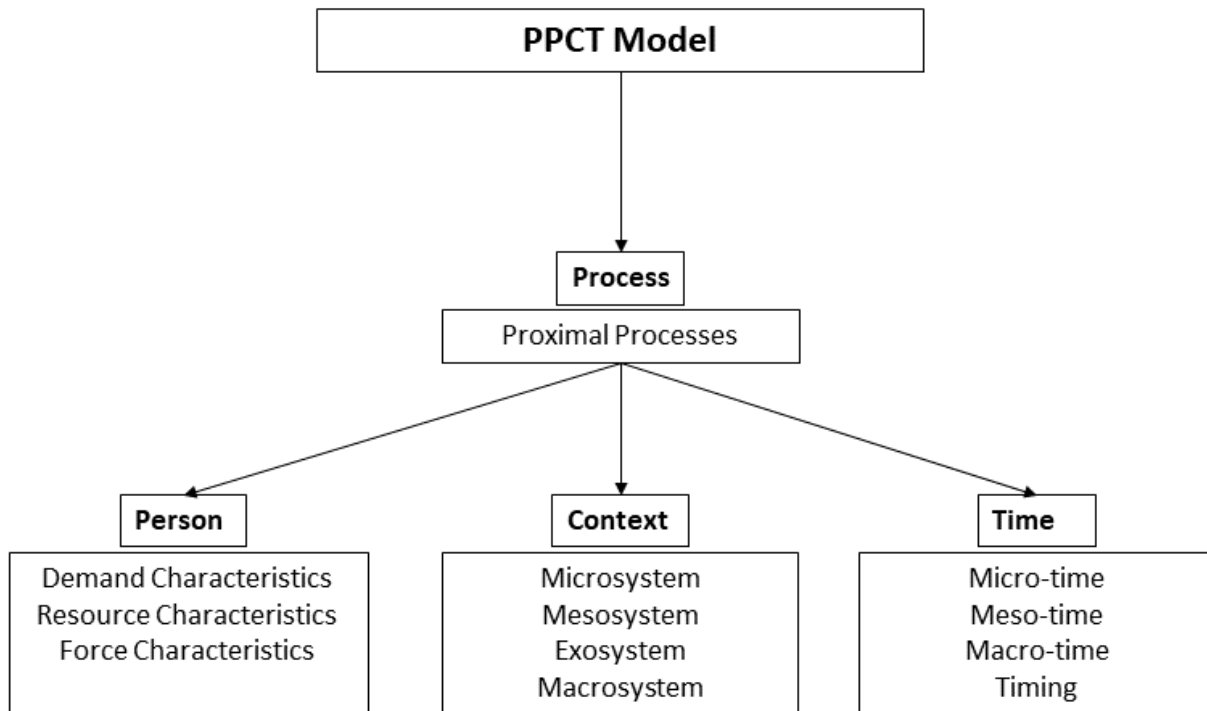
#### **2.6.1.4 Time.**

The *time* component of the model is broken down into micro-time, meso-time, macro-time, and timing. Micro-time refers to the time that is spent in a specific activity or interaction. In the JST process in sport, this can refer to an individual training session or match.

Meso-time refers to activities and interactions that occur with some frequency, like the accumulation of training sessions or matches over time, as well as the distribution of time between different contexts, like on-court versus off-court time for an athlete. Macro-time, which relates to the chronosystem term from ecological systems theory, refers to “the time-based developmental influences that are not directly related to individuals’ interactions or activities but occur at a certain point in the individual’s life.” (DiSanti & Erickson, 2020, p. 32). Living through the COVID-19 pandemic and the impact that has on an athletes’ developmental process is an example. Finally, the sub-factor of timing refers to the idea that the duration and order of events and interactions within the various systems that the individual is located within plays a role in understanding development. For a tennis player, when the age at which they earn their first ranking point can then influence their development by providing them increased opportunities.

**Figure 2.6**

*Flow Chart of PPCT Model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005)*



#### **2.6.1.5 Rationale for PPCT Model.**

Although the PPCT model was developed within the human development literature and not specifically for sport, researchers have argued for the suitability of the model's application in the sport psychology literature in recent decades (e.g., DiSanti & Erickson, 2020; Garcia Bengoechea, 2002; Henriksen, 2010; Krebs, 2009). Garcia Bengoechea (2002) suggested that despite PPCT's rare application to the study of developmental issues in sport at the time, it held "considerable promise for increasing our understanding of the interplay of factors influencing developmental processes and outcomes in sport...and for opening new pathways as we strive to expand what we already know" (p. 2). Krebs (2009) later proposed the "bioecological model of sports talent development" based on the PPCT model to generate avenues for research in talent



development in sport. Within the model, talent development was proposed as the proximal process, and was broken down into four increasingly complex stages: sport stimulation, sport skills learning, sport practice, and sport specialization. Krebs (2009) related sport examples to the personal characteristics (e.g., physical fitness, self-control), environmental contexts (e.g., athlete's home, gymnasium, neighbourhood) and dimensions of time (e.g., occurrences during one day of training, occurrences during a sequence of days) constructs of the PPCT model. Although Krebs' (2009) model has not been applied extensively in the sport psychology literature, it inspired the further use of ecological approaches in talent development research (e.g., Henriksen, 2010).

Henriksen (2010) developed the holistic ecological approach (HEA) which proposed a shift from the individualistic nature of talent development to the role of the environment in which the athlete develops. This approach consists of the athletic talent development environment (ATDE) model and the environment success factors (ESF) working model. The influence of HEA in the talent development literature has increased in the last decade (e.g., Haukli et al., 2021; Larsen et al., 2013; 2020; Ryom et al., 2020; Seanor et al., 2017) having recently been recognized as a key trend in athlete career research in the International Society of Sport Psychology (ISSP) Career Development and Transitions of Athletes Position Stand (Stambulova et al., 2021), highlighting the potential of ecologically-informed approaches in influencing athlete career research by appreciating the critical role of the environment in athletes' developmental processes. Henriksen's (2010) approach influenced the theoretical thinking behind this thesis. One of the key gaps identified by this review of the literature was the need for expansion of theoretical underpinnings to investigate the JST in sport—and the increasing adoption of HEA and its recognition by Stambulova et al. (2021) as an emerging trend

in athlete career research provided rationale for this approach to underpin the present thesis. However, because the focus of this thesis was on players' processes within the JST and not on the effectiveness of talent development environments (e.g., tennis academies) in producing well-equipped athletes for the JST, HEA was not deemed a suitable framework for the thesis. Instead, an approach which helped to understand players' individual processes of development by examining the interaction of individual and environmental factors was more appropriate. By looking into the ecological rooting of Henriksen's (2010) approach—the work of Bronfenbrenner—a fitting ecological underpinning for the research questions and aims of this thesis was discovered.

As detailed above, Bronfenbrenner's work spans several decades and forms an evolving theoretical framework to understand human development. Its earliest conceptualization—ecological systems theory (1979)—was expanded upon over time to understand human developmental processes through the interaction of individual, environmental, and time-based factors, as formulated in the most mature version of Bronfenbrenner's work—the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005). However, researchers have found worrying patterns of research misattributing their theoretical underpinnings as Bronfenbrenner's most recent work, when it was instead informed by the earlier ecological systems theory (Feddersen et al., 2021; Tudge et al., 2009). For example, within the talent development literature, Feddersen et al. (2021) concluded in a systematic review of HEA-informed research that a majority of studies used the earlier conceptualization of Bronfenbrenner's work (1979) interchangeably with the latter (Bronfenbrenner, 2005) without fully embracing the latter's focus on proximal processes, individual characteristics, and the dimension of time. This confusion may stem from Henriksen's ATDE model (2010) being rooted in 'ecological psychology'

(Bronfenbrenner, 1979; 2005) despite only focusing around concepts from ecological systems theory (Bronfenbrenner, 1979) like the micro-environment and macro-environment, and no mention of proximal processes, individual characteristics, and time-based influences. The present thesis has instead adopted the PPCT model (Bronfenbrenner & Morris, 1998; 2005) as a suitable theoretical framework because it focuses on the interaction of individual, environmental, and time-based influences in shaping complex developmental processes like the JST process in tennis—a main aim of this research project. With the argument made in this review of the literature for the use of an ecological approach to expand the JST research area by offering a broader, more contextualized illustration of athletes' JST processes than individualistic approaches, the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) provides a strong theoretical underpinning for the project.

In recent years, increasing arguments have been made for the use of the PPCT model in sport (e.g., Cupples, 2020; DiSanti & Erickson, 2020; Moulds et al., 2022). In a paper reviewing the youth sport specialization literature, DiSanti and Erickson (2020) advocated for a broader ecological focus and posited that using the PPCT model would “more accurately reflect the current landscape and practical processes of contemporary youth sport” (p. 29). Moreover, DiSanti and Erickson (2020) concluded that:

the most glaring weakness of the research when held up to an ecological magnifying glass is the lack of empirical work detailing interaction among various roles of the youth sport equation [and that] it is grossly out of touch to attribute the individual athlete's perspective (i.e., the 'person' component of PPCT) as the exclusive marker of this experience. (p. 44)

Moulds et al. (2022) similarly argued for the benefits that applying the PPCT model to the youth sport dropout literature would have in providing “a more comprehensive meta-framework, highlighting broader range of possible explanations for behaviour at an individual-cohort level across and within sports” (p. 3) and that previous literature “has predominantly been examined from arguably conceptually narrow, psychological (i.e. within person) theoretical explanations, providing valuable but potentially only partial explanatory understanding of youth sport dropout” (p. 2). Within empirical research, Moulds et al. (2020) adopted the PPCT model as a theoretical framework to understand youth swimmer dropout in Australia and found support for the model in understanding the complexity of the process by concluding that factors like age-group, competition level, and proximity to a major city were independent factors associated with dropout. Additionally, Cupples (2020) implemented PPCT as a theoretical underpinning to investigate the development pathways of rugby league athletes, and across four studies in their PhD thesis, found support for the model in understanding the complexities of talent development through a range of processes (e.g., training, coach-athlete relations, peer interactions), person characteristics (e.g., motivation, discipline, self-regulation), context (e.g., school-based talent development environments, national rugby league clubs) and time (coach-athlete interactions, duration of talent development environment involvement). Finally, in a series of studies into parents’ involvement in youth sport, Dorsch et al. (2015; 2016) adopted the PPCT model and concluded the model supported understandings of the complex socialization process of parents in youth sport during a child’s initial involvement and the parent-athlete relationship.

Although research has supported the application of the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) in empirical evaluations (e.g., Cupples, 2020; Dorsch et al., 2015; 2016; Moulds, 2020), there remains no PPCT-informed research on the lived experiences

of athletes' JST processes. The present thesis aimed to fill this gap by applying the model to better understand the complexity of the JST process through better understanding the interaction of individual, environmental, and time-based factors on influencing tennis players' developmental processes within the JST. This review of the literature identified the largely individualistic approach to empirical work within the JST literature to date and through adopting the PPCT model as a theoretical underpinning in this thesis, steps have been taken to expand the theoretical perspectives used to understand the JST process.

### **2.6.2 Maslow's Hierarchy of Needs**

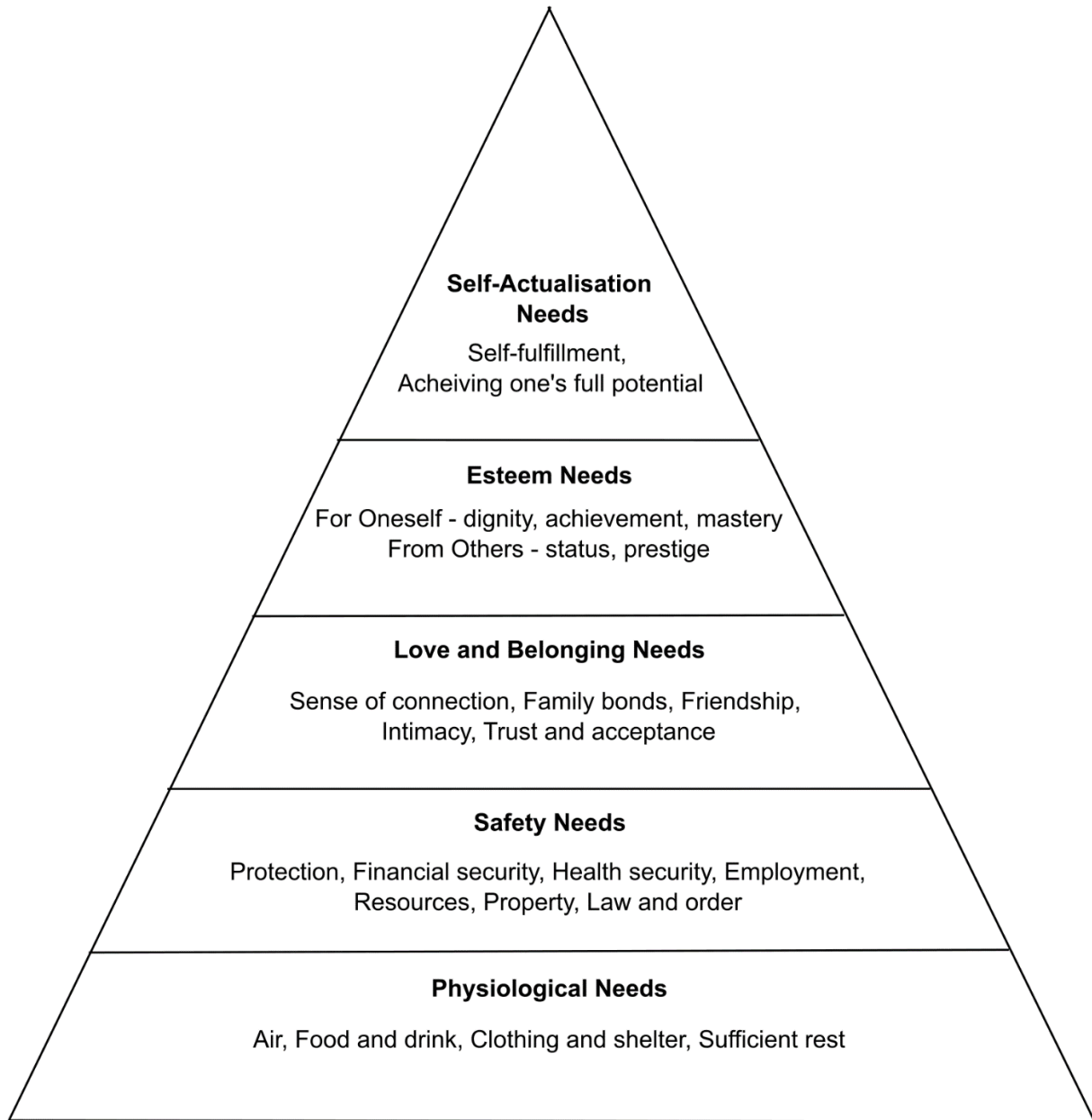
Complementing the PPCT model in this thesis, Maslow's hierarchy of needs (1943; 1954) was adopted as an additional theoretical underpinning. The JST process has been argued to be the most difficult within-career transition of athletes' careers (Stambulova, 2009) with research highlighting the low rates of successful progression from the junior to senior level varying between 17% and 33% across studies (Drew, 2020; Franck et al., 2016a; 2016b; Vanden Auweele et al., 2004). In a difficult transitional period like this, athletes' motivation forms a key component. Although the PPCT model adopts a holistic, ecological perspective investigating varying influential contexts within an individuals' development, it does not encompass a motivational aspect. To provide such a motivational lens for this thesis, Maslow's hierarchy of needs (1943; 1954) was adopted and will be described below, alongside an explanation of the rationale behind this choice.

The hierarchy of needs (1943; 1954) was proposed as a motivational theory that included five levels of needs, upon which being satisfied allowed humans to reach their maximum potential. At the foundational level were physiological needs that make up the most basic biological requirements of humans to survive, including air, food and drink, clothing and shelter,

and sufficient rest. Once physiological needs were met, an individuals' focus could turn to safety needs, which included protection from violence and theft, financial security, health security, employment, resources, property, and law and order. The third level of needs was represented by love and belonging needs, including sense of connection, family bonds, friendship, intimacy, and trust and acceptance. Next, the fourth level of needs was represented by esteem needs, which related to both esteem for oneself (e.g., dignity, achievement, mastery) and desire for reputation or respect from others (e.g., status, prestige). Finally, self-actualization needs referred to self-fulfilment or achieving one's full potential. Maslow (1943; 1954) did not represent this model in the form of a pyramid in his initial writings, but this shape has been commonly used to visualise the model (Figure 2.7).

**Figure 2.7**

*Hierarchy of Needs Pyramid (Maslow, 1943; 1954)*



Maslow's (1943) initial work suggested a hierarchy in that it was only after one set of needs was satisfied that the next level of needs emerged. However, Maslow (1987) later clarified that the satisfaction of needs was not an "all-or-none" phenomenon and that his earlier work may

have provided “the false impression that a need must be satisfied 100 per cent before the next need emerges” (p. 69). Instead, the average individual is most likely to have each level of needs partially satisfied and partially unsatisfied. Further, Maslow (1987) explained that while most individuals in his research met their needs in the order described in the original model, that the order of needs can vary depending on contextual circumstances or individual differences. For example, some individuals may perceive esteem needs as more integral than love and belonging, or safety needs as more important than physiological needs. This modern understanding of the model views the need levels as flexible and dynamic and counteracts the popularly represented visual of the model as a pyramid. The model is now better understood as a group of coexisting needs to be satisfied instead of as a hierarchy, with individuals moving between levels over time based on their own contextual circumstances and individual differences. There have been additions to the model over time (Maslow, 1970) with cognitive needs (e.g., knowledge and understanding, curiosity, exploration, need for meaning and predictability), aesthetic needs (e.g., appreciation and search for beauty, balance, and form), and transcendence needs (e.g., values which transcend the personal self like mystical experiences, experiences with nature, service to others, the pursuit of science, and religious faith). However, this thesis adopted Maslow’s (1943; 1954) original theory with the five basic level of needs (i.e., physiological, safety, love and belonging, esteem, and self-actualization) and viewed the needs as a group of coexisting needs to be satisfied instead of as a hierarchy. Figure 2.8 illustrates an adaptation of Maslow’s (1943; 1954) model that was applied to the present thesis.



**Figure 2.8**

*A Modern Conceptualisation of Maslow's Needs*

<b>Physiological Needs</b> Air, Food and drink, Clothing and shelter, Sufficient rest	<b>Safety Needs</b> Protection, Financial security, Health security, Employment, Resources, Property, Law and order	<b>Love and Belonging Needs</b> Sense of connection, Family bonds, Friendship, Intimacy, Trust and acceptance
	<b>Esteem Needs</b> For Oneself - dignity, achievement, mastery From Others - status, prestige	<b>Self-Actualisation Needs</b> Self-fulfillment, Acheiving one's full potential

### **2.6.2.1 Rationale for Hierarchy of Needs.**

Although the hierarchy of needs has continued relevancy decades after its inception and has informed research and applied practice across diverse fields such as medicine, psychology, business, and education (e.g., Abbas, 2020; Benson & Dundis, 2003; Crandall et al., 2020; Hale et al., 2019; Jerome, 2013; Milheim, 2012; Tay & Diener, 2011; Zalenski & Raspa, 2006), it has largely been overlooked in sport with only a limited selection of studies applying the model as a theoretical underpinning (e.g., Andrew et al., 2016; Bede, 2021; Homan, 2021; Nikitina, 2021). Within sport and exercise psychology, self-determination theory (SDT) (Deci & Ryan, 1985; 2008; Ryan & Deci, 2000) has been applied much more frequently as a motivational framework (e.g., Standage & Ryan, 2020; Teixeira et al., 2012). SDT focuses mainly on types of motivation (i.e., autonomous motivation, controlled motivation, amotivation) over the amount of motivation as predictors of individuals' performance; emphasizes social circumstances that improve these types of motivation suggesting that the degrees to which an individual's autonomy, competence, and relatedness are supported rather than thwarted impact the type and strength of motivation;

and differentiates between intrinsic and extrinsic life goal and aspirations in leading to differing levels of performance and psychological health (Deci & Ryan, 2008). Although SDT has had an undeniable impact on developing the sport psychology literature (Deci & Ryan, 2008), and was considered as a potential motivational framework to underpin this thesis, Maslow's hierarchy of needs (1943; 1954) was instead adopted as a more appropriate motivational framework for this thesis for the following reasons detailed below.

First, while SDT focuses on psychological needs like autonomy, competence, and relatedness, Maslow's hierarchy of needs (1943; 1954) encompasses both psychological needs and more basic needs like physiological and safety needs. In doing so, the hierarchy of needs provides a broader set of needs which brings an additional lens of understanding and a more holistic approach to comprehend the complexity of the JST process in sport. Further, with the thesis' aim of understanding the JST process from an ecological lens, it was important that any motivational perspective adopted was rooted in an ecological approach that focused on the role of individual-environment interaction. Although SDT (Deci & Ryan, 1985; 2008; Ryan & Deci, 2000) acknowledges the role that social factors play in motivation specifically through the need for relatedness, the model collectively possesses less of an environmental-focused approach than the hierarchy of needs which emphasizes numerous individual and environmental needs and the interaction of these needs in influencing motivation from an ecological perspective.

Second, adopting a model that has been widely used across academic disciplines, but not extensively within the sport psychology literature, therefore provides an opportunity for this thesis to showcase the relevancy of Maslow's model to sport as exemplified via the JST process in tennis. Within the healthcare setting, Maslow's model has been applied to the hospice and palliative care environment to ensure patients' needs are met in end-of-life care (Zalenski &

Raspa, 2006) and to promote increased mental wellness amongst resident doctors to target increasing rates of depression and hopelessness (Hale et al., 2019). In the psychology/mental health literature, Tay and Diener (2011) found universal needs aligned with Maslow's model to increase subjective wellbeing regardless of cultural differences in a study analysing over 60,000 participants across 123 countries, with Crandall et al. (2020) finding support for Maslow's model to predict and explain rates and changes in adolescent depressive symptoms. In the business world, the model has been applied to understand organizational culture, human resource management, and motivating employee performance (e.g., Benson & Dundis, 2003; Jerome, 2013), while the education sector has used the model to comprehend factors influencing student satisfaction in online learning (Milheim, 2012) and service quality in higher education (Abbas, 2020). Collectively, the cross-domain application of this model supports the wide-reaching implications of Maslow's hierarchy of needs when understanding the complexities of real-world challenges. Accordingly, its application to the sport psychology discipline, and specifically the JST process in tennis in this thesis, presents an opportunity to take a novel approach to understand the challenges that impact players' motivation and livelihood on the professional tour, the impact this has on players' mental health, how met and unmet needs impact players' longevity in their careers, and offers a guiding framework for developing interventions to support motivation and wellbeing of professional players through a holistic consideration of their needs (Hale et al., 2019). This thesis provides crucial and original research to examine the hierarchy of needs' effectiveness in explaining the complexities associated with the JST in sport.

## **2.7 Scope of this Thesis**

The scope of this thesis is based on the gaps identified in this review of the literature and the theoretical framework discussed. In sum, this thesis investigated the JST process in tennis,

using a longitudinal design (in Chapters 5 and 6), theoretically underpinned by an ecological approach that examines the individual-environment-time interaction of contributing factors to athletes' holistic development. Although both theoretical underpinnings that make up the overall theoretical framework relate across the research programme of this thesis, Study 1 is particularly underpinned by Maslow's hierarchy of needs (1943; 1954) to understand the lifestyle challenges of professional players and its impact on players' progression and mental wellbeing on tour. Next, Study 2 connected the JST experiences of professional tennis players to Maslow's hierarchy of needs by highlighting the importance of key factors that allow for meeting basic needs on tour, while additionally arguing for the need of adopting an ecological approach to investigate the JST process in tennis. Finally, Study 3 adopted the PPCT model as a framework to illuminate the individual-environment-time interaction of factors on the developmental processes of professional tennis players. Preceding these empirical chapters, the next chapter discusses the methodological approaches used in this thesis to study the JST process in tennis, before Chapters 4, 5 and 6 share the empirical studies of the thesis.

# **Chapter 3**

## Methodology and Methods

### **3.1 Introduction**

This chapter outlines the philosophical assumptions and paradigm in which this thesis was conducted within, as well as the subsequent methodological approaches and decisions made to investigate the JST process in professional tennis. It provides an overview of the research design and methodologies employed, as well as measures of quality and rigour and ethical considerations before beginning an important conversation around the significance of positionality and expertise by experience in sport and exercise psychology research.

### **3.2 Research Design**

The research design of the work conducted in this thesis is informed by philosophical assumptions on the nature of reality (i.e., ontology) (Denzin & Lincoln, 2011) and how knowledge is generated / the relationship between the inquirer and the researched (i.e., epistemology) (Denzin & Lincoln, 2011; Hesse-Biber & Leavy, 2004). These assumptions are commonly housed under the term paradigm, which has been defined as an “organizing structure” where researchers ground their “philosophical position relating to the nature of social phenomena and social structures” (Yvonne Feilzer, 2010, p. 7). Paradigms provide insight into the researcher’s standpoint, specifically regarding “what the researcher thinks *counts as knowledge*, and *who can deliver the most valuable slice of this knowledge*” (Lincoln, 2010, p. 5). Further, as Mackenzie and Knipe (2006) outline, the paradigm “...sets down the intent, motivation and expectations for the research. Without nominating a paradigm as the first step, there is no basis for subsequent choices regarding methodology, methods, literature or research design” (p. 2). The research presented in this thesis was conducted in alignment with the interpretivist paradigm consisting of a relativist ontology, which views reality as humanly constructed with multiple

subjective realities; and a subjectivist epistemology, that sees researchers as part of the research process who co-construct findings through their interactions with the researched (Sparkes & Smith, 2014).

Aligned with these assumptions, qualitative research methods were used to make sense of the personal experiences of professional tennis players to “provide an insider’s view...by walking in their shoes to better understand what and how they feel in making sense of the world around them” (Sparkes & Smith, 2014, p. 15). A key aim of qualitative inquiry is to gain an understanding of individuals’ multifaceted, constructed realities and to acknowledge and report these realities through their voices and interpretations (Sparkes & Smith, 2014). In addition to being aligned with this thesis’ philosophical assumptions, conducting qualitative research in this thesis allowed for a detailed, contextualized understanding of tennis players’ lived experiences in an understudied research area in need of research attention. Specifically, in Studies 2 and 3, a longitudinal, qualitative approach allowed for extensive interaction with professional players over a 15-month period of their JST experiences. Although quantitative research favours larger samples with the potential for increased generalizability, the qualitative approach of the present thesis allowed for richer, more detailed data into the complexity of players’ lived experiences on tour (Study 1) and their JST processes (Studies 2 and 3). It also reduced the likelihood for potential misunderstandings that can occur in quantitative data collection tools like questionnaires, where participants may misinterpret questions and not have the opportunity to gain clarity from the researcher as they would in qualitative settings.

The philosophical assumptions underpinning this research did not just influence the type of research conducted (i.e., qualitative research), but guided decision making on the methodologies and methods used to answer this thesis’ research questions. Specifically, the

relativist ontological and subjectivist epistemological stances for this thesis inspired the adoption of case studies and narrative enquiry—two methodologies suited to gain extensive, in-depth understandings of complex social phenomena (Sparkes & Smith, 2014). Wahyuni (2012) argued that methodology can be considered a bridge between one’s philosophical assumptions and methods in that it provides the guiding framework for deciding how data is gathered in the research process. In the present thesis, aligned with the theoretical foundations of the chosen methodologies, interviews were adopted as a suitable method to gain detailed understandings of players’ lived experiences (Sparkes & Smith, 2014). Descriptive details of the three specific studies that comprise this thesis and their methodologies, methods, data collection processes, sampling procedures and data analysis are presented within each individual study in Chapters 4, 5, and 6, respectively. However, each study’s research questions and methodologies are introduced in Table 3.1 to illustrate the overall research design of this thesis.



**Table 3.1***Research Design of the Three Empirical Chapters*

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<b>Study</b>	<b>Research Question(s)</b>	<b>Methodology</b>
Study 1	What challenges do professional tennis players experience in their lives on the professional tour?  What type of impact do these challenges have on players' mental health?	Exploratory, single, holistic case study of the 'Behind the Racquet' platform
Study 2	What are the experiences of professional tennis players in their JST process?	Longitudinal, exploratory, collective case study of seven professional players' JST experiences  Conducted and presented as a narrative enquiry
Study 3	How do individual, environmental, and time-based factors interact to shape the JST experiences of professional tennis players?	Longitudinal, exploratory, collective case study of seven professional players' JST experiences.

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### **3.3 Establishing Rigour and Trustworthiness**

In conducting the research part of this thesis, I became ingrained within the modern discussion of rigour in qualitative research (e.g., Burke, 2016; Morse, 2015; Smith & McGannon, 2018). With the subjective nature of qualitative research, it is important for measures of quality to ensure the trustworthiness of research findings. Through my investigations into the literature and conversations with other academic researchers, I found myself in agreeance with key arguments made by Smith and McGannon (2018). Specifically, although member checking and inter-rater reliability have been identified as the most frequent techniques used to establish

rigour in qualitative research within sport and exercise psychology (McGannon et al., 2021), these measures contradict ontological and epistemological assumptions of qualitative research in that it is impossible for researchers and participants to separate themselves from their experiences and produce theory-free knowledge. Beyond this, it has been argued that member checking even lacks effectiveness in enhancing trustworthiness of research (Morse, 2015; Smith & McGannon, 2018; Thomas, 2017). Accordingly, the present thesis steered clear of using these popular measures to establish rigour and trustworthiness, instead using a collection of measures recommended by Tracy (2010): credibility, sincerity, meaningful coherence, and worthy topic.

Tracy's (2010) quality measures for qualitative research have been used extensively in sport psychology research in the last decade (Burke, 2016; Smith & McGannon, 2018). By advocating eight criteria as universal measures of quality for qualitative research, Tracy aligns with a criteriological approach believing that measures of quality in research can be predetermined and applied to any research regardless of its aims (Burke, 2016; Sparkes & Smith, 2014). Smith and McGannon (2018) argued that a criteriological approach contradicts philosophical assumptions associated with the interpretivist paradigm explaining that "given a world of multiple, created, mind-dependent realities, and the impossibility of theory-free knowledge, criteria is not 'out there' awaiting discovery but socially constructed" and that "the usefulness of criteria can change and the number of criteria used in each project be modified" (p. 114). Additionally, Burke (2016) suggested that research can become stagnant and reduced to a technical exercise when a predetermined quality checklist is adopted. Although Smith and McGannon (2018) oppose a criteriological approach on a philosophical basis, they conceded that researchers who perceive no problem with a criteriological approach can adopt Tracy's (2010) universal criteria—but must use all eight measures. Alternatively, for researchers who align with

Smith and McGannon's (2018) perspective and reject universal criteria instead possessing a relativist approach that perceives criteria as socially constructed and free from a fixed, pre-determined list (Burke, 2016), individual measures can be chosen that align with their philosophical assumptions and aims of their research. In this thesis, I have embraced relativist ontological and subjectivist epistemological stances and reject universal criteria and criteriological approaches. Although I have adopted several measures discussed by Tracy (2010), I perceive these measures as socially constructed and in alignment with the aims of this research project, instead of as universal criteria. The three empirical chapters in this thesis (Chapters 4, 5 and 6) should be judged on the above-stated four criteria (i.e., credibility, sincerity, meaningful coherence, worthy topic). Each of these four criteria are expanded upon below.

### **3.3.1 Measures of Quality for this Thesis**

First, this research can be judged by credibility which refers to the trustworthiness and plausibility of the research findings (Tracy, 2010). One way that credibility is exhibited in this thesis is through the thick description provided of tennis players' experiences. Across all three empirical chapters, a detailed description of players' experience is offered through the extensive use of player quotations to allow for their voices to be heard, highlighted particularly in Study 2 (Chapter 5) through a narrative approach. This thick description was offered to convey sufficient detail to allow readers to form their own conclusions based on the data provided (Tracy, 2010). Further, because the use of multiple "researcher viewpoints, theoretical frames, and methods of analysis allow different facets of problems to be explored, increases scope, deepens understanding, and encourages consistent (re) interpretation" (Tracy, 2010, p. 843), critical friends were used throughout the research project to "provide a theoretical sounding board to encourage reflection upon, and exploration of, multiple and alternative explanations as these

emerged in relation to the data and writing” (Smith & McGannon, 2018, p. 113). Using critical friends allowed for critical feedback and encouraged reflexivity by challenging my viewpoints and beliefs throughout the research process.

Second, this thesis can be judged for quality by its sincerity, a measure described as “marked by honesty and transparency about the researcher’s biases, goals, and foibles as well as about how these played a role in the methods, joys, and mistakes of the research” (Tracy, 2010, p. 841). To exhibit sincerity, a reflexive statement is provided later in this chapter to detail my positionality in the research and the role it had on influencing the research process. Further, methodological decisions are described in great detail throughout the thesis to allow the reader to best understand the research process.

Third, this research can be judged on its meaningful coherence (Tracy, 2010). This measure relates to what Mayan (2009) describes as methodological coherence: “congruence between your epistemological and ontological viewpoint, your theoretical position/perspective, the methods you choose, and so on” (p. 13). The work in this thesis was meticulously designed and conducted in alignment with the interpretivist paradigm, with a relativist ontology and subjectivist epistemology, and adopted methodologies, methods, data analysis techniques and language aligned with the research’s philosophical assumptions.

Finally, this research possesses a worthy topic (Tracy, 2010). In recent years, there have been increasing findings in tennis talent development literature highlighting difficulties in player pathways and transitions, and inequalities within the professional structure (e.g., Bane & Gescheit, 2015; ITF Pro Circuit Review, 2017; ITF Global Tennis Report, 2019; 2021). Additionally, there is increased pressure on the ATP and WTA Player Councils with male world number 2 Novak Djokovic and fellow male professional player Vasek Pospisil launching an

alternative Professional Tennis Players' Association (PTPA) in 2021 to better protect and advocate for the rights of male and female professional players by inspiring collective reform to ensure more players are able to earn sustainable livings from tennis, that players are fairly represented, and are offered counsel to help advance their careers (PTPA, 2021). Simultaneously, mental health in professional tennis has gained an increasingly central role most notably through the voice of Naomi Osaka in the summer of 2021 (Osaka, 2021), but also through Stefanos Tsitsipas (Spector & Raf, 2021) and retired player Mardy Fish in the Netflix series 'Untold' (Way & Way, 2021). Despite all of this, academic research into the lived experiences of professional tennis players was limited before this thesis (Franck & Stambulova, 2019; Jensen, 2012; Pummell, 2008). Conducting this research, specifically at this point in time in the tennis world, aligns with what Tracy (2010) outlines as keys to worthiness of a topic: relevant, timely, significant, and interesting.

### **3.4 Ethical Considerations**

This research project received ethical approval from the University of Birmingham Science, Technology, Engineering and Mathematics Ethical Review Committee (reference No. ERN\_18-1966). Study 1, with its analysis of a public platform and lack of recruited participants, did not specifically require ethical approval. The ethical approval gained for the project was instead for Studies 2 and 3. In these studies, once players expressed interest in participating in the research, they received an information sheet and later signed an informed consent form. Players were made aware that they were able to withdraw from the study at any point until 10 months after the start of data collection.

#### **3.4.1 Data Protection**

Due to the participants' public profiles as professional tennis players, participant confidentiality was taken very seriously in Studies 2 and 3. All identifying characteristics were intentionally removed from the empirical work and participants were given pseudonyms. The removal of identifying characteristics included details like player' nationalities, time-based rankings (e.g., ranking at the time of COVID-19 tour pause), specific details of tournaments played, and results achieved at specific events to ensure that readers of the research were unable to deduce the identity of the participants. Audio recordings and typed transcripts of the interviews were uploaded onto university software where data analysis was completed, all on a password protected computer.

### **3.5 Statement of Positionality**

Qualitative research celebrates the subjectivity of both the participants' experiences and the researcher. Sparkes and Smith (2014) explain "the connections between the self and study are often powerful forces in shaping many aspects of the research process, from the topic selection to the way data are reported and how these are interpreted" (p. 19). Accordingly, reflexivity has gained increasing importance in qualitative research (Sparkes & Smith, 2014). Reflexivity has been described by Finlay and Gough (2003) as "thoughtful, self-aware analysis of the intersubjective dynamics between researcher and researched" and "requires crucial self-reflection of the ways in which researchers' social background, assumptions, positioning and behaviour impact on the research process" (p. 9). With my background as a collegiate and professional tennis player, there is no denying the impact that my involvement in the sport had on the research process. Put simply, this research would not have materialized if not for my time on the professional circuit gaining first-hand experience of the complexities that aspiring players

face in their professional careers. This section will provide a statement on my positionality and the role it had on influencing the research process.

Pike (1954) presented two standpoints from which a researcher can describe human behaviour: the emic and etic perspectives. The emic, or 'insider perspective' refers to when the researcher "conducts studies with populations, communities, and identity groups of which they are also members" (Kanuha, 2000, p. 439), while the etic, or 'outsider perspective' signifies that the researcher "does not have any intimate knowledge of the group being researched, prior to entry into this group" (Griffith, 1998, p. 361). While an insider may possess the benefits of having an easier time gaining access to participants, a better initial understanding of the context, and stronger rapport and acceptance from participants (Dwyer & Buckle, 2009; Griffiths, 1985; Mercer, 2007; O'Connor, 2004), their familiarity might mean they do not possess the necessary distance and detachment from the study which could lead to assumptions of similarity and a lack of seeking clarification (Dwyer & Buckle, 2009; Fay, 1996; Mercer, 2007; O'Connor, 2004). Over time, researchers have rejected the insider/outsider dichotomy and instead favoured a continuum as a better measure of one's position within research, understanding the unrealistic nature of being an absolute insider or outsider (Dwyer & Buckle, 2009; Hayano, 1979; Mercer, 2007).

With regards to my positioning within the research conducted in this thesis, in line with Witcher (2010), I classify myself as a relative insider. My involvement in the sport at both a collegiate and professional level and the associated familiarity with the professional structure and the JST process meant that I had shared experiences with the participants of the research. This provided a deeper understanding, not only of the process of progression through the sport and the necessary levels of training, competition and sacrifice required, but also 'tennis lingo' and the

sport structure. As Mercer (2007) explains “insiders will undoubtedly have a better initial understanding of the social setting because they know the context; they understand the subtle and diffuse links between situations and events” (p. 6). For Studies 2 and 3, where I personally recruited professional tennis players, this ‘insider status’ granted easier access to participant recruitment through having contacts within the sport (i.e. players, coaches, administrators) who could share my research project idea with potential participants. This likely would have been a more difficult process without my involvement in the sport. Additionally, in the interviewing process for Studies 2 and 3, I believe my background and similar age to the participants provided further elements of ‘insider status’ that made the rapport-building feel more natural and less formal than if I was not from a tennis background or significantly older than the participants.

However, although I possessed insider status in some ways, I felt like an outsider in others. First, at the start of the research process, I had been out of the professional game for almost four years. My role as a full-time PhD researcher led to a shift in ‘worlds’, where instead of structuring my days around my tennis training and performance, and being surrounded by tennis players, I was now enrolled at a university and spent much of my time reading, writing, and interacting with other academic researchers. In this way, I felt removed from my life as a professional player and from tennis altogether. Further, while participants in Studies 2 and 3 were initially made aware of my previous involvement in the sport, I introduced myself as a PhD researcher, and as such, it could be argued that they saw me coming from a much different world to theirs. In fact, in some discussions I had with participants before their first interview, although they were intrigued with the idea of my PhD research, it appeared they were relatively unfamiliar with what the PhD process entailed (as might be expected outside of academia).



The extent to which my positionality played a role in the research in this thesis varied based on each study's data collection approaches. Due to the publicly available nature of the data in Study 1 and the lack of interaction between myself and the participants, the impact of my positionality did not play a role in the data collection process (like it did in Studies 2 and 3), but instead on the data analysis process. Although I had experienced a range of lifestyle challenges during my playing career, the intention of Study 1 was to learn about other players' experiences on tour and represent their words in the analysis and presentation of findings. Throughout the process, I ensured that I engaged with critical friends (i.e., a group of academic researchers) of whom none had any background in tennis. This was crucial in providing outsider perspectives and alternative explanations to challenge my assumptions and biases. Similarly, in relation to Studies 2 and 3, I had my own experience with the JST process, but I was focused on the experiences of the seven recruited professional players. The use of a narrative approach for Study 2 allowed for the extensive use of the players' own words and their stories to be highlighted, limiting the potential bias that could influence the data analysis and presentation of the research. For Studies 2 and 3, in the same way as Study 1, critical friends were used to challenge my assumptions and perceptions throughout the research process.

As a practicing sport psychology consultant, I was acutely aware of the importance of rapport building with participants in Studies 2 and 3 to make them feel comfortable within the process and as a way of collecting rich data around their experiences. To initiate this rapport-building process, I adopted a flexible approach to scheduling interviews. I was aware of the unpredictability of professional tour life and the inevitability of travel plans, training sessions, and match times changing on short notice. As a result, I was in touch with players around the time period that I wanted to conduct interviews with them but gave them the flexibility to let me

know when worked for them specifically (oftentimes, this was on very short notice). I believe that catering to the participants, even though it was sometimes inconvenient for myself, played a key role in the smooth interviewing process and the lack of any missed interviews or participant dropout throughout the study. Additionally, throughout the interviewing process, I was sure to engage in small talk with players before the interviews to ‘break the ice’ and answer any questions they had around the process. It was my intention to keep the interview process conversational and informal to allow players to feel more comfortable and starting with casual conversation helped facilitate this. I was happy with the rapport built with the seven participants throughout the process. Several participants outlined their enjoyment of the times that we spoke suggesting that it helped them reflect on their time on tour and move forward with a clearer mind and more perspective which they expressed finding cathartic. While the interviews provided this benefit to the participants, the rapport that was developed between myself and the participants built trust which allowed for very detailed insight into their JST experiences—a key benefit to the research process. Specifically, over time, it became apparent that a narrative approach would be possible as a component of the longitudinal case study due to the quality and nature of the interviews. While it was always my intention to share the stories of professional players’ transitioning experiences, until the interviewing process began, it was impossible to predict whether the necessary trust would be developed between myself and the participants to allow for the type of data required for narrative research. It is my belief that the combination of my relative insider status that I possessed through my background in the sport and my similar age to the participants, alongside the trust and rapport that was developed, allowed for breadth of data and a detailed examination of players’ JST experiences.

In sum, I believe that my relative insider status helped the research process through providing necessary context of the area under investigation, easing player recruitment, rapport-building, and the development of trust between myself and the participants (for Studies 2 and 3). This has implications for other sport psychology research where the researcher, through their background, may have shared experiences which can ease the research process. However, at the same time it can be argued that as a relative insider, a researcher may not possess the necessary distance and detachment from the context which can lead to assumptions of similarity and a lack of seeking clarification (Dywer & Buckle, 2009; Fay, 1996; Mercer, 2007). This is the very reason why the use of critical friends throughout the research process in this thesis to challenge my assumptions was crucial and helped to challenge this potential limitation of insider status.

### **3.6 Conclusion**

This chapter outlined the philosophical assumptions and paradigm in which this thesis was conducted within and the influence this had on methodological approaches and decisions made to investigate the JST process in professional tennis. The overall research design, methodologies, methods, measures of quality and rigour, ethical considerations and positionality in the research were detailed to provide context to the overall research project. Next, Chapter 4 presents the first empirical chapter of this thesis: a single, holistic, exploratory case study that illuminates the lifestyle challenges that professional tennis players experience in their lives on tour and the impact it has on their progression and mental health.

## **Chapter 4**

# **Lifestyle Challenges and Mental Health of Professional Tennis Players: An Exploratory Case Study**

## 4.1 Introduction

Each year, thousands of tennis players from around the world compete against each other on the professional tennis circuit (ITF, 2022). However, as the most recent ITF Pro Circuit Review has highlighted (ITF, 2017), their pursuit of success is not without obstacles. Most notably, there is a considerable financial imbalance on tour, with the top 1% of players having earned 60% and 51% of the prize money distributed on the men's and women's tours in 2013, respectively, and only 1.8% of male and 3.1% of female players earning a profit (ITF, 2017). This leaves a majority of professional players in varying degrees of financial debt and in danger of ending their professional pursuit due to an inability to fund the extensive costs. Further, the time taken from earning one's first professional ranking to reaching the world's Top 100 has increased from 3.7 to 4.8 years (men) and 3.4 to 4.1 years (women) from 2000 to 2013 (ITF, 2017), and even further to 5 years (men) and 4.9 years (women) by 2017 (ITF Global Tennis Report, 2019), suggesting that additional challenges are at play making the professional tennis tour an increasingly difficult environment to thrive in. While research has identified lifestyle challenges of professional athletes in other sports (Battochio et al., 2009; 2016; Gordin, 2016; Moore, 2016; Noblet & Gifford, 2002; Ryba et al., 2016; Schinke et al., 2012), we do not yet sufficiently understand the specific challenges (in addition to the identified financial ones) faced by tennis players in their lifestyle on the professional tour, nor how these potentially impact upon their mental health and wellbeing. Although there is existing literature into players' transitions into professional tennis (e.g., Jensen, 2012; Pummell, 2008), the knowledge base around lifestyle challenges from these studies is limited and would benefit from more diverse samples, involving players of both sexes and from a range of nationalities. With regards to mental health and wellbeing, there is limited research to date exploring this area in professional tennis (e.g.,

Carrasco et al., 2013). In addition to adding depth to the academic literature, investigating players' lifestyle challenges and their impact on mental health and wellbeing can help to inform aspiring players' preparations for the transition into professional tennis from both a performance and mental health standpoint.

Understanding the challenges that professional tennis players face on tour is important not just for performance reasons, but for mental health and wellbeing reasons because the period in which tennis players, and athletes in most disciplines, generally reach their peak performance overlaps with the peak onset of mental health disorders in the general population (Jones, 2013). It is estimated that 75% of mental health disorders are established by the age of 24 (Kessler et al., 2005). When this sensitive developmental period is combined with the unique stressors (i.e., competitive, organisational, and personal) that athletes experience in high-performance environments (Sarkar & Fletcher, 2014), elite athletes may be at an increased vulnerability to mental ill-health compared to the general population (Gucciardi et al., 2017). To date, research on mental illness within elite sport has reported prevalence rates between 17% and 47% (Foskett & Longstaff, 2018; Gouttebauge et al., 2017; Gulliver et al., 2015; Schaal et al., 2011), which are comparable, and in some cases, higher than the general population rates of young adults estimated to range between 19% and 26% (Australian Bureau of Statistics, 2007; Education Policy Institute, 2018; Mental Health Foundation, 2016). Although it has not been substantiated that elite athletes experience higher prevalence of mental illness than the general population, the environmental challenges and age-related risk factors they experience during their sporting careers make mental ill-health within the elite sporting world a cause for concern.

The increased focus on mental health within elite sport in recent years is also reflected in position and consensus statements published by major sporting organisations including the

International Society of Sport Psychology (Henriksen et al., 2020a; Henriksen et al., 2020b; Schinke et al., 2018) and the International Olympic Committee (Reardon et al., 2019). With considerable research having been undertaken to attempt to quantify and classify the nature and prevalence of mental illness within sport (Gorczynski et al., 2017; Rice et al., 2016), Henriksen et al. (2020a) recently argued for the importance of focusing on mental health in addition to mental illness and conceptualizing mental health as more than simply the absence of mental illness. This argument aligns with Keyes' (2005) definition of mental health as "a complete state in which individuals are free of psychopathology and flourishing with high levels of emotional, psychological, and social well-being." (p. 539), as well as Keyes' (2002; 2005) dual continuum model which views mental health and mental illness as two distinct but related dimensions existing on two separate continua. The model provides a holistic understanding of mental health (Iasiello et al., 2020; Uphill et al., 2016) by conceptualising flourishing (i.e., high levels of mental health) as being made up of three distinct types of wellbeing (i.e., emotional, psychological, and social), as well as demonstrating how athletes can experience high or low levels of mental health, while simultaneously experiencing either high or low levels of mental illness.

#### **4.1.1 Theoretical Underpinning**

To explore challenges experienced by professional tennis players, the present study adapted an established theory – Maslow's (1943; 1954) hierarchy of needs – and used it as an innovative theoretical framework and approach within the sport psychology discipline. The theory continues to be relevant decades after its inception, informing research and applied practice in diverse fields such as medicine, psychology, business, and education (e.g., Abbas, 2020; Benson & Dundis, 2003; Crandall et al., 2020; Hale et al., 2019; Jerome, 2013; Milheim,

2012; Tay & Diener, 2011; Zalenski & Raspa, 2006). As a classic theory of motivation, Maslow (1943; 1954) posited that four basic sets of needs (i.e., physiological, safety, love and belonging, and esteem) must be satisfied for individuals to be motivated to reach maximum human potential (i.e., self-actualization). While most often visually represented as a pyramid with higher-order needs dependent on lower-order needs, the importance of each level of needs varies from person to person and is not a rigid hierarchy as originally conceptualised (Maslow, 1987). Instead, these need levels are more flexible and dynamic, based on contextual factors and individual differences. Thus, this theory is more recently understood as a group of coexisting needs to be satisfied instead of as a hierarchy, with people able to experience higher needs even if the more basic ones are not met.

Only limited sport research has adopted Maslow's hierarchy of needs (1943; 1954) as a motivational framework (e.g., Andrew et al., 2016; Homan, 2021; Nikitina, 2021). But, I propose that Maslow's framework would enable a holistic view of the challenges faced on tour by professional players and be well-suited for exploring their mental health and wellbeing. In support, in their study analysing over 60,000 participants across 123 countries, Tay and Diener (2011) found universal needs aligned with Maslow's theory to increase subjective wellbeing regardless of cultural differences. Further, Crandall et al. (2020) found Maslow's theory to partially predict and explain baseline rates and changes in adolescent depressive symptoms. Despite this, Maslow's theory has not yet specifically been applied to understanding athlete mental health. Adopting this theory would provide an insightful look at how the satisfaction or lack thereof of basic human needs can impact both players' progression on tour and their mental health and wellbeing. The hierarchy of needs also offers a guiding framework for developing



interventions to support the wellbeing of professional players through a holistic consideration of their needs and by acknowledging multiple concurrent threats to them (Hale et al., 2019).

#### **4.1.2 Study Aims**

The present study aimed to provide a detailed, contextualized understanding of the lifestyle challenges that professional tennis players face on the professional tour and the potential impact these challenges have on their mental health. This was the first study to investigate the lifestyle challenges of the professional tennis tour within a diverse, international sample. The study's findings provide implications for aspiring professional tennis players in preparing them for their transitioning experiences into professional tennis. Additionally, it makes a unique theoretical contribution by providing a novel application of Maslow's (1943; 1954) hierarchy of needs to the sport psychology discipline.

### **4.2 Methods**

#### **4.2.1 Design**

This study was underpinned by an interpretivist approach consisting of a relativist ontology and a subjectivist epistemology (Sparkes & Smith, 2014). It adopted an exploratory case study methodology (Yin, 2017), an approach selected to gain rich insight (Cooper et al., 2019) into a previously understudied area. The case study consisted of a single holistic case: Behind the Racquet (BTR), a social media platform aimed at raising awareness of the challenges that tennis players face on the professional tour. BTR as a case study offered unique opportunities for research into the voice of players, being an authentic, self-reported platform of players' professional experiences (Paulhus & Vazire, 2007). The case study was bounded to understand the challenges that professional players face in their lifestyle on tour. The units of analysis were individual players who contributed to the BTR platform. Theoretically

underpinned by Maslow's (1943; 1954) hierarchy of needs, the study looked to understand the extent to which players' basic needs were met amidst the challenges they face on the professional tour. With the first researchers' background in tennis, a reflexive approach to the data analysis process was used (Braun & Clarke, 2019).

#### **4.2.2 Data Collection**

Self-reported narrative data was collected via blog posts from professional tennis players who contributed to BTR. Given the competitive nature of professional tennis, these types of vulnerable narratives are rarely shared, making them an invaluable data source, as well as the case study unique. The initial intention for this study was to recruit professional players to interview to gain insight into the types of challenges they experienced in their lifestyle on tour; however, the development and growth of the BTR platform provided an excellent opportunity to gain a self-reported understanding of professional tennis players' lifestyles. Not only was BTR sharing authentic, vulnerable insights into the experiences of professional players, but it was doing so in large quantities and with players varying widely in their sex, age, nationality, and level of success within the sport. Accordingly, it provided a valuable platform to answer the study's research questions of 'What challenges do professional tennis players experience in their lives on the professional tour?' and 'What type of impact do these challenges have on players' mental health?'.

Blogs provide access to hard-to-reach populations from which the researcher is either geographically or socially removed from (Mann & Stewart, 2000; Wilson et al., 2015), while offering an authentic, publicly available, low-cost, and instantaneous way of collecting a considerable amount of data with the transparency of a built-in audit trail (Hookway, 2008; Moravcsik, 2014). The use of blogs in academic research is becoming increasingly common

(Kurtz et al., 2017; Wilkinson & Thelwall, 2011) with growing support for its use for data collection purposes in qualitative research in health (Wilson et al., 2015) and sport (Brown & Billings, 2013; Kavanagh et al., 2016). Ethical considerations of blog use, such as informed consent and the public or private nature of information, are increasingly important as they become a more common data source for academic research (Kurtz et al., 2017; Wilkinson & Thelwall, 2011). In the present study, the Association of Internet Researchers' (AoIR) recommendations (Ess et al., 2002; Markham et al., 2012) were followed, which considers blogs as public webpages that can be viewed by anyone (as compared to a private chatroom) and explained that "the greater the acknowledged publicity of the venue, the less obligation there may be to protect individual privacy, confidentiality, right to informed consent, etc." (Ess et al., 2002, p. 5). As informed consent does not apply to published material (e.g., newspapers) and sending participation requests to players who had already consented to sharing their narratives to a popular platform like BTR seen as potentially intrusive (Snee, 2013), it was not deemed necessary to obtain additional consent to use these blogs for research purposes. Nonetheless, consent to use the platform (whilst publicly available) was still sought from the founder of BTR (N. Rubin, personal communication, July 16, 2019). Additionally, to ensure trustworthiness of the posts, the first researcher liaised with the platform's creator to gain an understanding of the story development process and presentation of stories. Specifically, the platform's creator speaks with professional players about their lived experiences on tour and converts these conversations into a short story format. The story is then reviewed by the player who must give permission that it accurately represents their feelings and experiences on tour before it is then posted to the BTR platform.

### **4.2.3 Sample**

Of the 115 posts uploaded between January 19, 2019 and March 31, 2020, 66 were selected for analysis according to the following inclusion criteria: a) the post shared players' experiences unique to their professional career (instead of pre- or post-professional career); and b) the post illustrated experiences which had a psychological impact on the player. The dataset included experiences of 65 professional players (one player had two separate posts), of which 33 were male, and 32 were female. Further details of the sample are provided in Table 4.1. A wide range of achievement levels existed across the sample, ranging from Grand Slam and Olympic champions to players within the ATP and WTA Top 10, and those within and outside of the ATP and WTA Top 100.

**Table 4.1***Sample Breakdown*

<b>Age and Sex Breakdown</b>	<b>Age Descriptive Statistics</b>	<b>Nationalities</b>	<b>Playing Status</b>
<b>&lt; 21: N=5</b> M: 1; F: 4	Mean: 27.34 Range: 29 SD: 5.23	United States (20), Canada (4), France (4), Russia (4), Australia (3), Germany (3), Great Britain (3), Croatia (2), Czech Republic (2), South Africa (2), Argentina, Barbados, Belgium, Brasil, Colombia, Egypt, Hungary, Israel, Italy, Japan, Netherlands, New Zealand,	Active: 56 Retired: 9
<b>21-25: N=20</b> M: 10; F: 10			
<b>26-30: N=23</b> M: 11; F: 12			
<b>31-35: N=14</b> M: 8; F: 6			
<b>36+: N=3</b> M: 3; F: 0			

Note. N = number of players; M = male; F = female. Numbers in bracket refer to the number of players from that country in the sample.

**4.2.4 Data Analysis**

Data was analysed inductively using reflexive thematic analysis, a flexible process where researchers generate patterns of meaning within their dataset through reflexive and thoughtful consideration of their data (Braun & Clarke, 2019). This approach was adopted due to the exploratory nature of the case study, which aimed to gain a contextual understanding of the beliefs, thoughts, and experiences of professional players. In line with the phases of thematic

analysis (Braun et al., 2016), I began the analysis process by reading and familiarizing myself with the data before embarking on the initial coding process. NVivo 12 was used to organize and code the data. The entire dataset was coded before the codes were subsequently grouped into initial themes. The initial themes were then taken to a meeting with a group of academic researchers independent from the project where useful discussion on the analysis led to further adaptations to themes. After this meeting, a separate meeting was organized with the thesis' supervisors to discuss the development of the themes, which led to a further round of adaptations leading to six themes that more clearly represented how players' challenges on tour impact their ability to meet their basic needs (Maslow, 1943; 1954). Involving outside researchers was a collaborative process to help "develop a richer more nuanced reading of the data, rather than seeking a consensus of meaning" (Braun & Clarke, 2019, p. 594). The steps taken throughout this reflexive thematic analysis led to prolonged engagement with the data and continual reflection and questioning of assumptions that were made in interpreting the data (Braun & Clarke, 2019).

#### **4.2.4.1 Establishing Rigour and Trustworthiness.**

The rigour and trustworthiness of this study is enhanced in two ways. Credibility is exhibited through the use of critical friends who had no background in tennis, but expertise in reflexive thematic analysis, to provide a sounding board for ideas and encourage potential alternative explanations of the data throughout the analysis process. This proved particularly vital at the stage where initial themes were developed and a discussion with the critical friends led to an alternative understanding of an important concept, which led to a restructure of a key theme. Additionally, the thick description provided of tennis players' experiences in extensive player quotations allows for their voices to be heard and conveys sufficient detail to allow

readers to form their own conclusions based on the data provided (Tracy, 2010). Second, this study can be judged on its meaningful coherence (Tracy, 2010) through the congruence between epistemological and ontological assumptions, methodology, methods, and data analysis.

### **4.3 Results**

In line with the study's aims, data analysis led to a deeper and contextualised understanding of the challenges that players face in their lifestyle as professional tennis players. Six themes were developed in the analysis (i.e., Physical and Mental Fatigue, Financial Imbalance of the Professional System, The Social and Psychological Impact of Living a Nomadic Existence, The Weight of Expectation, Structural-Caused Instability, and Mental Ill-Health), and these themes and their connection to the levels of Maslow's hierarchy (1943; 1954) are outlined below.

#### **4.3.1 Physical and Mental Fatigue (Physiological Needs)**

The weekly travel from one country to another, where players are confronted by different time zones, cultures, foods, languages, and playing conditions, is a major challenge, which leads to physical and mental fatigue and impedes players' physiological need for rest (Maslow, 1943; 1954). As Player 1 (male, French), a veteran of the professional tour, explained:

On one side I feel lucky to be able to travel around the world and see different cultures, and on the other side it was just tiring. From New York to Tokyo and then Moscow, in one month, it's three different worlds that you have to get used to.

The fatigue which Player 1 explains is exacerbated by the professional tennis calendar, which due to its short offseason, means players compete for eleven months of the year. The relentless nature of this lifestyle is illustrated by Player 2 (female, Russian), who explained:

The long year of tennis is exhausting. Other sports have two-three months off to use as a break. I understand that other sports may push their players harder during the short seasons but there is no way they are put in the same amount of stressful situations as tennis players are.

#### **4.3.2 Financial Imbalance of the Professional System (Safety Needs)**

A financial imbalance exists in the professional system and this represents a major barrier to its players. With players at the lower levels of the tour earning far less money than those at the top, yet still personally responsible for the substantial costs of a professional career, navigating a professional career becomes a monumental financial challenge. This impacts players' safety needs (Maslow, 1943; 1954) by challenging both their financial and job security. Indeed, the financial stress professional players experience on tour hangs like a dark cloud over their professional existence, leading to doubt over the feasibility of their continued involvement on tour. With the endless expenses of travel, accommodation, equipment and other playing essentials, players must earn as much prize money as possible to offset these costs. As illustrated by Player 3 (male, South African), the precarious nature of this funding is a significant source of stress and leads players to questioning: a) can they afford to continue; and b) is it worthwhile for them to do so:

The question always came up, 'What am I doing?' I was going week to week, making two or three hundred dollars. Then after taxes it was basically nothing. What am I doing with my life? I am twenty nine now. I don't have a degree...Other people around my age, who I went to school with, have cars, house, etc...living the less stressful life. They see me and think that I am living this glamorous lifestyle, playing at Wimbledon, but in actuality I was barely surviving paycheck to paycheck.



Despite considerable success at the entry level of the professional tour and amassing a world singles ranking of 350, Player 3 was barely making ends meet and lacked the financial stability that his friends outside of tennis enjoyed in their chosen careers. His experiences exemplify the poor financial security that many professional players face (safety needs; Maslow, 1943; 1954). As a result, they may need to rely on family for financial support. It is not uncommon that the considerable financial resources needed to support a professional tennis career leads to stress and financial difficulties for the players' families. As Player 4 (male, American) explained "It took a major toll, forcing my family to take out multiple mortgages on the house...They sacrificed everything for us to play tennis." While the depths to which Player 4's family went to fund their son's professional tennis career may seem extraordinary, it is not unusual for professional players' families to make major financial and lifestyle sacrifices for their children's tennis careers. Player 5 (male, French) noted:

My dad stopped working to travel with me full time. There was already pressure from not being too wealthy and now my father wasn't making money...There was a lot of pressure on the whole family to also keep up with the expenses of travel...My mom switched jobs and started to work at home so she had time to look after my brother by herself.

This example further magnifies the substantial sacrifices families make to help their children reach their professional tennis dreams, in addition to highlighting questions over the feasibility of such sacrifices. Although Player 5 has reached the highest tier of the professional game and is financially stable, most players are not as fortunate, and like Player 4, leave the professional tour having spent much of their own and their family's financial resources.

#### **4.3.3 The Social and Psychological Impact of Living a Nomadic Existence (Love and Belonging Needs)**

The opportunities to play tournaments in all but one week of the calendar year and the fierce competition to earn ranking points and prize money to move up the ranking system and fund the costs of the professional tour are strong incentives for players to compete in different parts of the world throughout the year. The resulting nomadic existence challenges players' love and belonging needs (Maslow, 1943; 1954) by inhibiting their need for sense of connection and friendship. Humans are a social species which require social contact and support to survive and thrive (Seppala et al., 2013), and not meeting these needs in young adulthood while embarking on a professional career can be particularly disorienting for players. As Player 6 (female, German) explains, the constant travelling and inability to settle in a geographical location for an extended period makes it difficult to maintain relationships and feel connected with others:

It's hard to maintain relationships with a boy/girlfriend, with friends...it's hard not to see your family for long periods because you are rarely home. You miss out on important things that happen in your friends' lives. It's your job to be on the road and play.

These relationship challenges affect players' ability to nurture those key relationships that they would otherwise rely on for valuable emotional support to counteract the challenges they face on tour. It also leads to loneliness. While players at the highest level of the sport like Rafael Nadal and Iga Swiatek are able to cover the traveling costs of numerous members of their support networks to be on hand during tournament weeks, most professional players cannot afford this luxury. As a result, these players embark on a year's worth of travel, often without members of their support network. Feelings of loneliness were reported by a range of players, with some examples including: "traveling alone was exhausting" (Player 7; male, American), "(I) spent almost a year alone on the tour after that. I was so miserable." (Player 8; female, French), and "Most people can understand how alone you can feel on a tennis court, but as a

tennis player there are moments when you feel just as isolated off court.” (Player 9; male, American).

#### **4.3.4 The Weight of Expectation (Esteem Needs)**

The journey of becoming a professional tennis player is time-consuming, challenging and includes numerous sacrifices from the player and their families. It is unsurprising that when a player reaches the professional level, the weight of expectation to succeed can negatively impact upon their esteem needs of feelings of achievement, recognition, and status (Maslow, 1943; 1954). To remain on the professional tour, players must consistently achieve results and earn the necessary ranking points to maintain or increase their world ranking. This results-focused environment puts thousands of highly motivated and capable players head-to-head and under immense pressure to achieve. This is seen through the experiences of Player 10 (female, American), who broke into the Top 100 at the age of 20, and Player 11 (male, Canadian), who began a professional career after being the number 1 ranked junior player in the world:

I broke into the top 100 for the first time and had some of my best results to date.

Unfortunately, that season changed my expectations. I began to put a lot more pressure on myself...my focus was on all the wrong things. I was so worried about defending/recreating the previous year I had, that I barely had a single productive practice. (Player 10)

Nobody truly expected me to be a contender for junior slams, so everyone was pretty surprised that I made four finals, winning two of them in just a year. That obviously changed peoples’ perspectives. It was definitely a lot of pressure, having everyone expecting me to be top 100 right out of juniors. (Player 11)

Because of the extensive sacrifices made by players and their families, players internalise this pressure as a sense of responsibility to succeed, and it can be accompanied by a fear of failure. Player 12 (male, American) explained:

To let down the people closest to me, my friends and family, is my most daunting fear.

From an early age I was pretty aware about how many lives I affected. How many people had to sacrifice time, energy and money. The idea that it may not be worth it, or there might not be a way to repay them, haunts me at times.

This quote highlights the depth of the responsibility Player 12 felt to succeed for those who had already sacrificed so much for him. Player 13 (female, American) shared similar thoughts when explaining the fear associated with not meeting her professional career expectations:

If I wasn't going to use my college degree to work towards financial independence, I needed to make this endeavor worth it. My family helped me financially and my coach agreed to be compensated with lunches after practice. There was constant fear on whether I would ever be good enough to make it all worthwhile.

Another negative feeling that comes with carrying this weight of expectation is a loss of enjoyment. This was seen with Player 14 (female, American), who explained "I felt absolutely no thrill being on the court. I didn't want to compete and didn't care if I practiced or not...I had no motivation, no real desire to play, and I hated anything tennis related." This is a powerful example of how the wear and tear of sustained expectation throughout Player 14's career took its toll and led to a shift in their views about tennis.

A similar experience was shared by Player 10 (female, American), who after struggling with the expectations she felt after reaching the Top 100, shared, "I wasn't enjoying any of the

travel, training or competition. Tennis was becoming more stressful than enjoyable, and it was affecting my whole life. I was disappointed...for letting my results on the tennis court dictate my overall happiness.”

#### **4.3.5 Structural-Caused Instability (Esteem Needs)**

The structure of the professional tour creates an environment of instability that also impacts on esteem needs. The lack of regular salaries or contracts on tour leaves players dependent on achieving results to earn money. Further, the 52-week rolling ranking system, where ranking points from more than 52 weeks prior are removed from players’ point total, places a time-sensitive pressure on players to continually earn results and maintain their spot within the professional system. The uncertainty caused by the tour’s structure is the catalyst for two major challenges that players face on tour and inhibits their esteem needs (Maslow, 1943; 1954) of status and recognition. It also leads them to making choices that are not always in the best interest of their health and wellbeing.

Although injuries are an unfortunate reality of professional sport as a whole, the unique structure of tennis makes time away from the sport a serious threat to one’s ability to maintain a foothold within the system. Specifically, with no form of income, and the risk of ranking points disappearing, players feel pressure to avoid missing time from injury and an urgency to return to play as soon as possible. The experience of Player 15 exemplifies the difficult choices made to minimise the time away from the tour:

I broke into the top 10 for the first time at St. Petersburg in 2016. Then soon came Miami where I got my first injury, which led to many others. A severe wrist problem came and I tried to avoid surgery while playing for nine months. April 2017, I finally decided to get

it done. I was out for about six months and my ranking dropped to 350. Tennis is super difficult because you never stay where you are. (Player 15; female, Swiss).

Player 15's decision to play through injury for nine months in an attempt to maintain their hard-earned top 10 ranking illustrates the stress surrounding taking time away from the sport. In the Top 10, Player 15 has entry to the top tournaments in the world, earns substantial prize money and endorsement deals. However, lowering to 350 means significantly decreased prize money and ranking points, as well as a threat to their status (Maslow, 1943; 1954), which would require several weeks-worth of strong results to regain.

The instability caused by the professional structure also leads to players feeling underappreciated. With a tournament system where only one player is victorious each week, the regularity of losing becomes commonplace and recent success gains prominence, with past successes losing significance. These feelings were experienced by Player 12 (male, American), a former Wimbledon junior singles champion, who stated "the sport has a way of making you feel irrelevant...with the likelihood of losing every week and the forever expanding field of players, chances are if you were once talk of the town, that will quickly diminish over time." These feelings of irrelevance and change in status relate to Player 16's (female, American) frustration regarding the status that is given to "winners", and lack of appreciation of "losers". Specifically, she explained: "Tennis puts this stigma on losing to the point that only winners receive the platform to speak. It's truly sad that losers are barely acknowledged in a sport where defeat is an every week occurrence."

Player 16's views point to further inequalities that exist on the tour; a small number of players at the top of the sport's structure are appreciated and given the ability to shape the narrative of professional tennis through on-court interviews and increased media opportunities,

compared to the many lower ranked players who are not given this opportunity. This leads to concern that a skewed image of the professional system is being portrayed to the public, one in which the experiences of the highest ranked players with their financial security and other benefits are shared, and the realities of most players are not represented.

#### **4.3.6 Mental Ill-Health (Self-Actualization)**

Symptoms of mental ill-health associated with tour lifestyle challenges were a consistent finding across the data. While there were many subclinical symptoms of mental ill-health, there were additionally over 15% of players who explicitly reported experiencing mental illness on the professional tour (e.g., anxiety, panic attacks, depression, and eating disorders). An example of this is seen in a quotation from Player 17 (female, Puerto Rican):

There is trauma after winning something that major that pushes you flat on your butt...As I became more upset I saw that depression was inevitable when it was tough to get out of bed. At one point you're just on top of the world and all of a sudden it ends and you just don't know what just happened. It's like whiplash. I couldn't find ways to motivate myself to play. I just didn't know what to do with myself. There are many times when all I wanted to do was cry every day, in bed, in a dark room.

Another example is seen in Player 18 (male, American), who experienced panic attacks on tour, one of which came after experiencing expectation-related stress of reaching the world's Top 100 and feeling antsy to return to play after managing nagging injuries. They detailed their experience by describing:

It is now two weeks before my first French Open main draw. It felt as if I had no control of my mind. I had a panic attack on my flight from Dallas to Paris. It was nine hours of some of the most agony and pain I have ever felt. I thought that every breath I took could

be my last. After getting to Paris, I could barely practice. I would walk off the court immediately and hop into a car to get back to my hotel. I just couldn't function at all, not wanting to leave the hotel room.

Reflecting on the experience, Player 18 went on to say "I held it all in, not thinking much of it. Everyone has adversities...As athletes you are always told to push through it, not knowing what to deal with, until it's too late." Similar feelings were shared by Player 19 (female, American) who had experienced depression on tour for years and explained "it can be difficult to show vulnerability in such a competitive, high stakes profession."

These examples, as well as others from the dataset, highlight the impact that mental ill-health has on professional players' lives both inside and outside of tennis and how it may inhibit players' need to self-actualize (Maslow, 1943; 1954) on the professional tour.

#### **4.4 Discussion**

The present study aimed to gain a detailed, contextual understanding of the challenges that professional tennis players experience in their professional tour lifestyles and examine the impact these challenges have on their mental health. Analysis of a social media platform provided access to an extensive range of self-reported experiences of professional players and a deeper understanding of the professional tennis environment. The study's findings are in line with Sarkar and Fletcher's (2014) assertion that elite sporting environments consist of a range of competitive, organizational, and personal stressors. Specifically, on the professional tennis tour, these include the weight of expectation (competitive), financial imbalance of the professional system, the social and psychological impact of living a nomadic existence, and structural-caused instability (organizational) and physical and mental fatigue (personal). Collectively, these

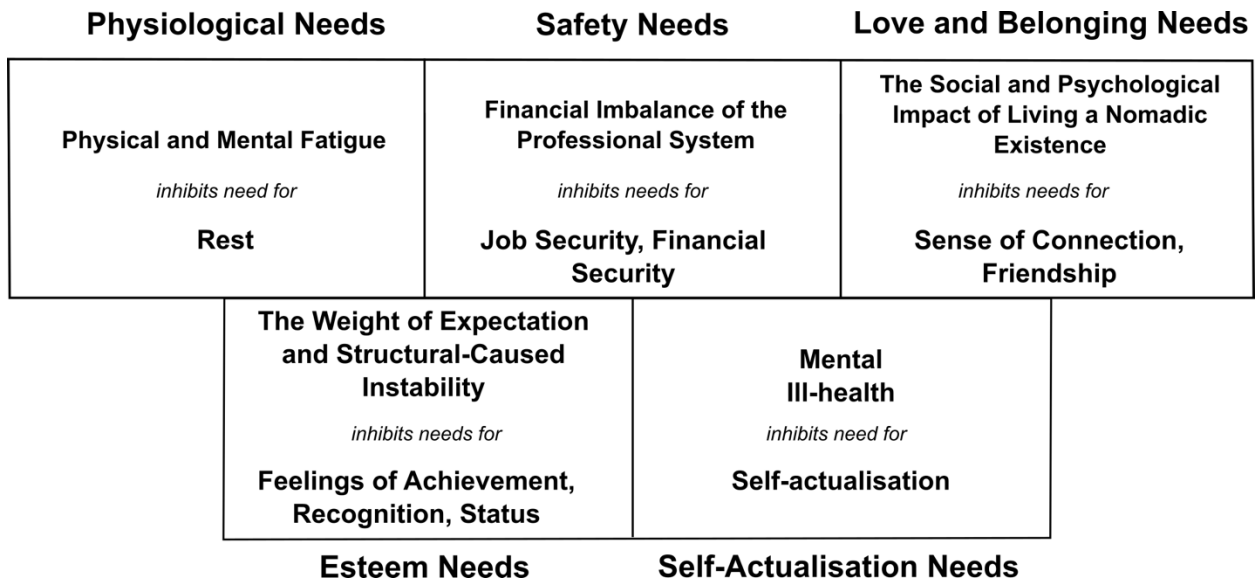


challenges represent barriers to the satisfaction of key human needs (Maslow, 1943; 1954) and pose a potential risk to players' mental health. (softening language)

Challenges on the professional tour inhibit players' ability to satisfy their needs on each level of Maslow's (1943; 1954) hierarchy. At the physiological level, physical and mental fatigue hindered players' ability to meet their need for rest. At the safety needs level, the financial imbalance of the professional system led to employment uncertainty and financial stress impacting players' job and financial security. Players' love and belonging needs are impeded through their nomadic existence which threaten their need for sense of connection and friendship. At the esteem level, players' needs are impacted by both the weight of expectation and structural-caused instability of the tour challenging their needs for feelings of achievement, recognition, and status. Finally, players' self-actualization may be inhibited due to existing mental ill-health issues on tour and an accumulation of other unmet needs across levels. The impact of tour challenges on players' needs is illustrated in Figure 4.1

**Figure 4.1**

*Impact of Lifestyle Challenges on Players' Needs*



Beyond impacting players' ability to progress on tour, inhibited needs have implications for mental health. Not only did 15% of players within the sample explicitly refer to experiencing mental illness, but the very challenges which players face on the professional tour have known links to decreased mental health. For example, fear of failure that players exhibited as a result of the weight of their expectation is associated with anxiety, depression, and eating disorders (Conroy, 2001; Lavalley et al., 2009; Sagar et al., 2007). Additionally, there are known links between financial stress and poorer mental health outcomes (O'Neill et al., 2005; Wadsworth, 2013), and research illustrating the impact of social support and connectedness on managing sporting and non-sporting challenges and enhancing wellbeing (Bernat & Resnick, 2009; DeFreese & Smith, 2014; Sheridan et al., 2014). The present study's findings illustrate a concerning picture. This is one of the first studies to examine the mental health challenges on the professional tour, and it is clear that further research is needed. A holistic approach to mental

health like Keyes' (2002; 2005) dual continuum model can provide a more contextualized understanding of mental health and mental illness on tour by recognizing the importance of acknowledging players' levels of both mental health and ill-health. In an environment where the identified challenges of this study exist, simply focusing on preventing mental illness prevalence may not do enough to promote players' emotional, psychological, and social wellbeing.

The study's findings also pose questions around the structural issues in professional tennis. Most notably, the financial challenges players experience, which was partially understood prior to this research (ITF, 2017), became increasingly apparent. Players' daily existence on tour were directly affected by the financial challenges in professional tennis. These findings beg the question: what steps can be taken by the ITF, ATP, and WTA to improve the financial situation on tour? After uncovering financial issues within the sport in the ITF Pro Circuit Review (2017), the ITF restructured entry level tournaments so that \$10,000 and \$15,000 events became \$15,000 and \$25,000 events, respectively. However, adding \$5,000 or \$10,000 to be spread across an entire lower-level tournament may not be enough of a step in a sport where the top 1% of players on the men's and women's tours were earning 60% and 51% of all prize money in 2013, and where 1.8% and 3.1% of male and female players were earning a profit, respectively (ITF, 2017). With prize money increasing at the highest level of the sport (i.e., Grand Slam events) each year (Clarey, 2019), and the range of financial-related challenges identified throughout the professional structure, there are important questions to be asked about the distribution of prize money in the sport and the implications this has on the livelihood of players throughout the entire professional system.

While structural-related challenges are not directly within the control of professional players, other challenges are within players' control and provide an opportunity to better manage

on the professional tour. One of these challenges is managing the weight of expectation that players experience. In line with achievement goal theory (Nicholls, 1989), working on shifting players' focus from a performance orientation emphasising outperforming others and results to a mastery orientation emphasising what is within players' control like continual improvement, decision-making and effort can lead to decreased anxiety, increased intrinsic motivation, positive affect, and basic need satisfaction (Alvarez et al., 2012; Kipp & Weiss, 2013, Smith et al., 2007). Further, players can work to increase their ability to maintain relationships and connectedness amidst their nomadic existence, as well as increase their financial literacy and discover ways to generate alternative forms of income, develop budgets and find sponsorships or fundraising opportunities to increase their opportunity on tour. The ATP and WTA offer player development programs (i.e., ATP University, WTA Player Development Program) which cover a range of topics, like media training, finances, tour lifestyle and health and wellness to assist players adjust to the professional game. While these programs provide important opportunities for players to better prepare themselves for the challenges of the tour lifestyle, they are only offered to players who have ATP or WTA player membership and meet certain ranking requirements (i.e., ATP Top 200 singles or Top 100 doubles, WTA Top 750 singles or Top 200 doubles) (ATP, 2021; WTA, 2021). Courses like these could be extended to all full-time professional players across the ATP, WTA, and ITF, as adjusting to tour challenges is not something that only players ranked toward the top of the professional structure require. Regardless, whether players enroll in official training courses or not, educating oneself on the challenges of professional tennis and ways to manage these challenges is crucial to players' development from performance and mental health standpoints.

#### **4.4.1 Implications**

The findings of the present study have implications for players aspiring to play professional tennis. Prospective professional players and their coaches, families, and other support networks can gain insightful information about the professional tour which can assist the familiarization and preparation processes for their transition into professional tennis. These findings also strengthen the tennis literature by providing a contextualized understanding of the professional tennis lifestyle and challenges within the sport, which can be used to inform future tennis research. This study provided rationale to investigate how players manage these lifestyle challenges in their experiences on tour, especially early in their careers during their JST when the professional environment is new to them (Study 2).

#### **4.4.2 Limitations**

While the present study offers important contributions to the literature, it is not without limitations. First, the data was collected at a single time point rather than at various points throughout the players' careers. A longitudinal design would allow for an understanding of whether identified challenges endured throughout players' careers or changed over time. Second, while the sample was evenly distributed amongst North America (n=26) and Europe (n=26), a disproportionate amount of the sample (i.e., 30.8%) was from the United States.

#### **4.4.3 Conclusion**

This study provided evidence of the range of challenges that professional players face in their lifestyles on the professional tour, while highlighting the concern these challenges pose to players' mental health. Access to a hard-to-reach population for data collection was gained through a social media platform and data was analysed using a novel application of Maslow's hierarchy of needs (1943; 1954) to the sport psychology discipline. The findings demonstrated the model's relevance for understanding athletes' performance challenges and their implications

on athletes' mental health. In doing so, the study adds empirical, theoretical, and methodological significance to the literature, in addition to its applied potential of informing aspiring professional players and their support networks with vital information to assist in their professional endeavours.

## **Chapter 5**

### **The Junior-to-Senior Transition in Professional Tennis: Three Narrative Types of Players' Experiences**

## 5.1 Introduction

The findings of the previous chapter provided a contextual understanding of the lifestyle challenges players experience on the professional tour. Specifically, these challenges are multifaceted and wide-ranging with a mixture of both individual-based challenges (e.g., physical and mental fatigue, the weight of expectation) and environment-based challenges (e.g., financial imbalance of the professional system, structural-caused instability) that inhibit players' ability to meet many of their basic needs (Maslow, 1943; 1954) on the professional tour. With this knowledge, there is now rationale to investigate how players navigate their experiences on tour, especially early in their professional careers when they are first exposed to this new environment. The transitioning period into professional sport is known in the academic literature as the junior-to-senior transition (JST). The JST has been argued to be the most challenging within-career transition that athletes face throughout their careers (Stambulova, 2009), influenced by the demands they experience in their physical, psychological, psychosocial, academic/vocational, and financial development (Wylleman et al., 2013). Research highlights the low rates of progression from the junior to senior level varying between 17% and 33% across studies (Drew, 2020; Franck et al., 2016a; 2016b; Vanden Auweele et al., 2004). Although none of these studies investigated the JST in tennis, the lifestyle challenges identified in Chapter 4 together with findings from the most recent Player Pathway Review (ITF, 2017) that only 1.8% of male and 3.1% of female professional players earned a profit in 2013, suggest the JST experience is similarly difficult in tennis.

Despite this suggestion, there has been limited research attention on players' lived experiences of the JST in tennis to date (e.g., Franck & Stambulova, 2019; Jensen, 2012; Pummell, 2008), leaving a gap in our understanding of how players navigate the transition, what factors influence the process, and how to support players most effectively. The present study aimed to add further depth to this area of research by gaining a detailed understanding



of players' JST experiences through adopting a longitudinal, holistic, narrative approach. A strong argument has been made for the use of narrative research in sport and exercise psychology to illuminate the subjective and complex lived experiences of individuals and highlight the messiness of being human (Smith, 2010; Smith & Sparkes, 2009a; Smith & Sparkes, 2009b). McLeod (1997) suggested that while personal stories prioritize the experience of the individual, they also occur within a cultural and social environment. Therefore, adopting a narrative approach enables researchers to focus on the person and their sociocultural environment (Crossley, 2000).

These arguments have led to the increased use of narrative research within elite sport (e.g., Carless & Douglas, 2009; 2012; 2013a; 2013b; Cavallerio et al., 2017; Douglas & Carless, 2006; 2009; Drew, 2020; Franck & Stambulova, 2019; 2020) and the identification of varying narrative types (e.g., 'performance' and 'effort and relationship'). Narrative types have been defined as "the most general storyline that can be recognised underlying the plot and tensions of particular stories" (Frank, 2013, p. 75) and are representative of the cultures within which individuals exist. The performance narrative (Douglas & Carless, 2006; 2009) has been found to be particularly dominant in elite sport and is described as "a story of single-minded dedication to sport performance to the exclusion of other areas of life and self" (Douglas & Carless, 2009, p. 215). While this narrative can help athletes achieve great results in sport, longitudinal research has illustrated a reliance on this narrative type can result in trauma and distress during periods of poor athletic performance, identity crisis, narrative wreckage, and mental health difficulties following career termination (Carless & Douglas, 2009; Douglas & Carless, 2009). For example, in a study on athletic retirement experiences from professional golf (Carless & Douglas, 2009), an athletes' inability to adopt an alternative narrative to provide resources to construct a new self-identity when their ability to

achieve golf success was taken away through retirement, led to significant deterioration of the athletes' mental health requiring professional intervention.

The effort and relationship narrative (Franck & Stambulova, 2019) offers an alternative narrative type to the performance narrative in elite sport and “emphasises an agency in the athletic development process but also connectedness to, and support from, the key people involved” (p. 290). Specifically, the athlete prioritizes self-improvement and the process of being effortful over outcomes of athletic performance, while maintaining and valuing key relationships that help facilitate the process (Franck & Stambulova, 2019). Carless and Douglas (2012) proposed the ‘I did the best that I could’ and ‘People I made the journey with’ stories of success within elite sport—stories that have strong links to the effort and relationship narrative (Franck & Stambulova, 2019) and argued that the long-term sustainability of these narratives offer benefits to athlete mental wellbeing because of their focus on factors that are controllable, unlike performance outcomes. Within the performance narrative, when athletes are no longer able to achieve at their previous level, they can become prone to mental ill-health consequences without adopting an alternative narrative type—evidenced by the above example from Carless and Douglas (2009). In this way, alternative narrative types like the effort and relationship narrative offer opportunities within the sporting world to improve athlete well-being and sport psychologists’ ability to support athletes. Interestingly, altering narratives is used as a therapeutic approach within psychotherapy (e.g., Batista et al., 2021) meaning that reframing athletes’ narrative types can provide intervention opportunities.

While there has been considerable narrative research conducted on the transition out of sport (e.g., Carless & Douglas, 2009; Cavallerio et al., 2017; Douglas & Carless, 2009), less focus has been placed on the JST (Drew, 2020; Franck & Stambulova, 2019; 2020). Drew (2020) explored six track and field athletes’ personal narratives of the JST experience

and identified social support, focusing on personal progression, and developing a sport-specific knowledge as facilitative factors of the transition, with pressure to perform, lack of support, and a lack of motivation as debilitating factors of the transition. Drew (2020) also found factors associated with the JST process to be continuously changing throughout the process. In narrative analyses of two individual athletes (Franck & Stambulova, 2019) and two team athletes (Franck & Stambulova, 2020), Franck and Stambulova (2019; 2020) collectively highlighted the importance of psychological factors like the support of family, coaches, and the sport club environment. Additionally, 'crossroads' were identified as embedded transitions within the larger transition suggesting the non-linear nature of the JST process, corresponding with Drew's (2020) argument for the JST as a dynamic process. Taken together, it can be argued that key findings of the narrative JST literature to date include the importance of social support and the non-linear, dynamic nature of the JST process. Building on the work of Drew (2020) and Franck and Stambulova (2019; 2020), the present study adopted a narrative approach to gain a contextualized understanding of the JST experiences of professional tennis players. This methodology is suitable for the study because the in-depth subjective data that narratives provide allow for contextualized understandings of complex experiences which unfold over time (Sparkes & Smith, 2009a), like the JST process in tennis.

Additionally, this study investigated players' experiences longitudinally as their JST processes unfolded in real time. While there have been extensive calls for longitudinal JST studies (e.g., Bruner et al., 2008; Drew et al., 2019; Jones et al., 2014; Pummell et al., 2008), outside of two studies (Morris, 2013; Pummell, 2008), it was not until very recently that a growth in the number of longitudinal studies has been seen (Drew, 2020; Franck & Stambulova, 2018; Swainston et al., 2020). It has been argued that longitudinal approaches can offer a more detailed understanding of the JST process than retrospective designs, as

retrospective designs not only depend “on participants’ ability to recall relevant information, but only provides data pertaining to a snapshot of the transition...and fails to recognise any potential changes athletes and stakeholders might perceive during various points throughout the transition” (Drew et al., 2019, p. 7). The present study also used a holistic approach by adopting a ‘whole-person’ perspective (Wylleman & Lavallee, 2004) recognizing the individual as more than just an athlete and acknowledging the role of factors outside of athletic performance as relevant to their development. Through adopting a longitudinal, holistic, narrative approach, the present study extended previous research exploring tennis players’ lived experiences of their JST process. The resulting understanding may help to inform policies and provide guidelines for improving this transition point for aspiring professional players.

## **5.2 Methods**

### **5.2.1 Philosophical Assumptions and Methodology**

This study was conducted aligned with the interpretivist paradigm consisting of a relativist ontology and a subjectivist epistemology (Sparkes & Smith, 2014). Accordingly, viewing reality as humanly constructed with multiple subjective realities, the present study investigated a group of professional players’ JST experiences to “interpret and make sense of their experiences...by walking in their shoes to better understand what and how they feel in making sense of the world around them” (Sparkes & Smith, 2014, p. 14-15). The study adopted a longitudinal, narrative approach which allowed for the examination of players’ experiences of the JST as they negotiated the process. Narrative enquiry is a methodology that “takes the story itself as its object of enquiry” and “seeks to describe and interpret the ways in which people perceive reality, make sense of their worlds and perform social actions” (Smith & Sparkes, 2009a, p. 281). Narrative enquiries are case-centered and “can help researchers understand lives in very complex ways” by revealing “a great deal about the

sociocultural fabric of lives, subjectivity, feelings, agency, and the multi-layered nature of human experience over time and in different sets of circumstances” (Sparkes & Smith, 2014, p. 131). In this way, they share similarities with case studies (Flyvbjerg, 2006) and can be used in unison to offer promise in documenting complex experiences in great detail (Sunday et al., 2020).

### **5.2.2 Participants**

The study’s sample consisted of seven professional tennis players (five males, two females) originating from five different countries. All participants chose the collegiate route to the professional tour, outlined in Chapter 1, and completed collegiate tennis careers before beginning their professional careers. Their mean age at the start of the study was 24.7 years. Inclusion criteria for the study were that players: a) held ATP or WTA world rankings; b) were competing predominantly on the ITF World Tennis Tour (instead of at higher levels of professional tennis); and c) were within the first four years of their professional career. These criteria were in place to ensure that players had shown some degree of ability on tour (i.e., quality control measure) but were still competing on the entry level of the professional tour with aims of progressing to the higher levels. Using four years as a cut-off for inclusion was aligned with tennis research findings that illustrated the time taken from earning one’s first professional ranking to reaching the world’s top 100 (widely considered as a key marker of success; Kovalchik et al., 2017) was over four years for both men (4.8 years) and women (4.1 years) (ITF, 2017), as well as general JST research estimating the process to take between one and four years (Stambulova, 2009).

### **5.2.3 Procedure**

After gaining ethical clearance from the University of Birmingham’s ethics committee (ERN\_18-1966), player recruitment began in February 2019. Sampling for the study included criterion-based, convenience, and snowball sampling (Patton, 2014). As detailed above,

participants were required to meet criteria for inclusion in the research. Convenience sampling was used in that I reached out to personal contacts (i.e., coaches, players, and administrators) within the tennis world and asked them to check with players they knew or had access to if they were interested in taking part in the study. Four players were recruited in this way. There were no conflicts of interest or prior relationship identified between myself and of these research participants. Finally, due to the difficulty of recruiting transitioning professional tennis players (i.e., there are only a limited number of potential participants), snowball sampling was used to recruit three additional participants. There were no conflicts of interest or prior relationship identified between myself and any of these three additional participants either. Participants were provided with an information sheet (see Appendix A) outlining the study's background and aims, proposed procedure, anonymity, and confidentiality details and researcher contact information. If interest was expressed, an informed consent form (see Appendix B) was provided to be completed before any data collection began. After consent was gained, players were contacted to arrange a date for their first interview. Due to the narrative nature of the research, interviews were deemed a suitable method for data collection (Sparkes & Smith, 2014). Telephone interviews were adopted due to the logistical challenges associated with participants' worldwide locations and their year-round traveling for tournaments. While potential limitations of telephone interviews have been identified (e.g., absence of visual cues; Sparkes & Smith, 2014), there is increasing evidence of their ability to produce rich data (Holt, 2010; Irvine et al., 2012). Further, adopting telephone interviews provided access to a hard-to-reach population (Hanna, 2012). Before data collection began, a professional tennis player not part of the study was recruited for a pilot interview to test the interview guide to ensure it elicited rich information, possessed flow, and to check if the participant believed anything was missing. This process allowed for reflection with the supervisory team and for specific modifications to be made.

Data collection took place over a 15-month period. Interviews were spaced roughly six months from each other. A longitudinal approach was adopted to avoid the use of ‘drive-by interviews’ (Chamberlain, 2012), which fail to gain as complex an understanding as ongoing conversations with participants throughout the process. The third wave of interviews occurred between June and August 2020, overlapping with the COVID-19 tour pause. Length of interviews ranged between 38 and 60 minutes (average length of 47.1 minutes) and were recorded to allow for transcription and analysis of the data. In addition to interviews, archival records were used for data collection including the ITF Pro Circuit, ATP and WTA player databases which provided valuable information regarding players’ playing timelines, tournament schedules, prize money, rankings, and ranking history.

#### **5.2.4 Data Analysis**

Within narrative enquiry, data analysis can be grouped into one of two different standpoints: the story analyst and the storyteller (Smith, 2016). A story analyst places the stories of individuals under analysis (Smith, 2016) by using approaches like thematic, structural, or performative narrative analysis (Sparkes & Smith, 2014), while for the storyteller, the narrative itself is the analysis presented through forms like autoethnography, poetry and fiction (Smith, 2016). In this study, a story analyst approach was adopted with the authors collecting stories of professional tennis players’ JST experiences and conducting an analysis of them. The results are based on a structural analysis (Leiblich et al., 1998; Sparkes & Smith, 2014), which focused on a combination of the ‘whats’ (i.e., the content of the interviews) and ‘hows’ (i.e., how their stories are constructed) of the tennis players’ lives (Phoenix et al., 2010; Riessman, 2008). Specifically, four steps were taken in the analysis: a) immersion, b) identify the plot and create a storyline, c) naming narratives, and d) writing the report (Sparkes & Smith, 2014). First, interview transcripts were read several times through to gain an initial impression of the story’s themes and structure. Notes were made on the

transcripts around common themes within the players' stories to decipher key plots and how events in players' lives were connected. This process allowed for an understanding of which aspect of the stories "acted as the 'glue' that held the stories together and gave them their unique shape" (Busanich et al., 2014, p. 707). Through a cyclical and iterative process of analysing the 'whats' and 'hows' of tennis players' stories, storylines were eventually identified, clustered together into narrative types, and named before the results were written to present players' experiences of the JST.

#### **5.2.4.1 Establishing Rigour and Trustworthiness.**

In their recent review, Smith and McGannon (2018) critiqued some of the most frequent methods of ensuring rigour in qualitative research: member checking, inter-rater reliability, and the notion of universal criteria. In agreement with their arguments, the present study steered clear of using these measures and instead adopted a collection of measures recommended by Tracy (2010): credibility, sincerity, and meaningful coherence. However, due to the relativist ontological and subjectivist epistemological stances of this study, the measures outlined by Tracy (2010) were seen as a socially constructed list of characteristics (Burke, 2016) and were selected due to their alignment with the philosophical assumptions and aims of the research instead of from a criteriological approach. Credibility was exhibited in this study in two ways. First, the rich description of the narratives provided extensive use of participants' own words, conveying sufficient details to allow readers to form their own conclusions based on the data provided (Tracy, 2010). Second, the use of critical friends in the analysis offered "a theoretical sounding board to encourage reflection upon, and exploration of, multiple and alternative explanations" (Smith & McGannon, 2018, p. 113) allowing for critical feedback and the encouragement of reflexivity by challenging viewpoints and beliefs throughout the research process. Sincerity, described by Tracy (2010) as "marked by honesty and transparency about the researcher's biases, goals and foibles as



well as about how these played a role in the methods, joys, and mistakes of the research” (p. 841), was displayed through the detailed reflexive statement provided in Chapter 3, which outlined this study’s research process. Finally, meaningful coherence which overlaps with Mayan’s (2009) definition of methodological coherence as “congruence between your epistemological and ontological viewpoint, your theoretical position/perspective, the methods you choose, and so on” (p. 13), was displayed in this study through the alignment of the choices made for the study design, methodology and methods with the interpretivist paradigm and the relativist and subjectivist epistemological stances.

### **5.3 Results and Discussion**

Results and discussion have been combined to highlight the connection between the participants’ experiences and existing knowledge. The analysis found three types of JST narratives on the professional tennis tour across the sample: *Supportive Structure and Steady Progression*; *Lack of Support, Demotivation and Career Termination*; and *Successive Setbacks and a Search for Solutions*. Developing typologies allowed for the identification of types of narratives surrounding the JST process in tennis and the consequences these narratives had on the athletes and their careers. This section is structured around these three typologies with each type described below. In line with previous narrative studies (e.g., Cavallerio et al., 2017; Douglas & Carless, 2006), one exemplar case for each narrative type is presented to elucidate the experience types of the professional players across the sample. Specifically, the narratives of James, Sophia, and Jack have been chosen. All names are pseudonyms and care has been taken to protect the identity of players through the removal of specific details.

#### **5.3.1 Supportive Structure and Steady Progression Narrative – James’ Story**

James was based in his home country at a professional academy, where he trained alongside six other professional players and worked with two tennis coaches and a group of sport science support. He had developed a strong training environment with genuine relationships with his coaches over a two-year period. When asked in Interview 1 about how his coaches have helped him in his transitioning experience, James explained:

I talk to both of them pretty much daily when I'm out at a tournament, just sort of shooting different ideas or different feelings and thoughts, cuz a lot of the time when you're out here, you may have a bad day's practice right before a match and you've maybe had three weeks of great practice, but that day can shake you up a little bit if you're going into a match, so they're there, in that sense, they just calm me down.

While James' coaches provided important emotional (i.e., listening to his concerns and being there for him) and informational support (i.e., guidance on how to solve a problem) (Pummell et al., 2008), his supportive structure extended beyond his coaches to his relationships with his parents, an Olympian triathlete friend of his, and girlfriend, all of whom were supportive of his tennis, but with whom he was able to talk about other things as a release from his tennis. Specifically, when detailing the impact his friendship with his Olympian friend had in Interview 1, James explained "it's almost being able to have those guys to talk to that can understand what you're doing but can also help you, sort of, switch off from just playing on tour all the time." Sport-life balance was an important tool James identified in his transition with the significant amount of time he spent training, competing, and preparing for tennis (Jones et al., 2014). In Interview 1, James also highlighted the role that his girlfriend played in allowing this distance from tennis:

When I speak to her, pretty much every day, I can switch off from my tennis...she's a student, like she's gonna be a doctor...so it's nice for me having someone who is also

working hard, but in a different, like a completely different setting...so it's a switch off from tennis in that sense.

The supportive structure James had in place allowed him to compete on tour regularly and return to the academy to train and make adjustments between events, allowing for continued momentum and steady progression in his JST. Between Interview 1 and 2, James was one of the most active players in the study by competing in 12 singles and 13 doubles events on the professional tour, with highlights including reaching two singles semi-finals, a second-round result at an ATP Challenger Tour event and a doubles title. A key moment within this period was James' debut at a Grand Slam event, where he played doubles. He explained:

I've played (tournament name), it's a big thing, like I played really well, we lost first round, but yeah...I think going through that and actually playing well there and performing how I wanted to perform was a big learning curve mentally, just knowing that even if you do get nervous, you can still go out on the court and actually play well.

Weeks later, these lessons assisted James in his continued progression:

There's a few moments in matches where I was able to really be mentally very, very tough and then you sort of build on those moments...I've had a few of them happen in quick succession in a few tournaments after (Grand Slam event), and then now I've been able to build on it.

James' improved performance between Interview 1 and 2 led to an improvement in both of his rankings at the time of Interview 2 (i.e., 703 singles, 340 doubles). During Interview 2, James was happy with how his transition was unfolding and remained focused on the 'process', explaining:

I'm doing the right things off the court and knowing that they are making me a better player on court...I've accepted the fact that everything could go to plan and I can still not be Top 50 in the world. It's such a high level, you need a bit of luck to get up there, so I've accepted that there might not be the 'ultimate success', but I still know that even without the success, I'll be happy putting the work in and happy being on this journey.

In addition to his satisfaction with his progress, due to the financial boost James received from playing a Grand Slam event the previous year, he was able to add further support by hiring a traveling coach to attend tournaments, a luxury he previously lacked but hoped for. When asked about the impact having a coach on tour had on his transitioning experience, James detailed many benefits:

Just being able to talk through things and not having to just think through things by myself, having another pair of eyes that can see things...I lost first round the first week and I actually felt like...it was a productive week cuz the stuff I was able to work on and the sessions I was able to do with the coach meant that I felt like I was going into the second week playing better than I was the first week.

James' steady progression continued between Interview 2 and 3 as he competed in 8 singles and 8 doubles events on tour, reaching another semi-final in singles and winning two doubles events. While James' momentum was interrupted in March 2020 by the COVID-19 tour freeze, he held a career high ranking in singles (for confidentiality reasons, rankings at time of COVID freeze will not be disclosed).

#### **5.3.1.1 Discussion on Supportive Structure and Steady Progression Narrative.**

This narrative typology represented by James' story is characterized by players being widely supported by coaches, family, and friends and the development of a strong training environment which facilitates regular training with high-quality training partners, consistent

feedback from coaches, and steady progression on tour. It is largely aligned with the effort and relationship narrative (Franck & Stambulova, 2019), which “emphasises an agency in the athletic development process but also connectedness to, and support from, the key people involved” (p. 290). James’ relationships with key members of his support network within his micro- and mesosystems shone through his JST experience and allowed for valuable support throughout, assistance in his navigation of challenges, and facilitation of his satisfaction with his progression on tour. Additionally, James was process-focused placing emphasis on ‘putting the work in’, learning lessons from his tournaments, and self-improvement. Although Chapter 4 highlighted the pressure to achieve results and the associated expectation that players experience on the professional tour, James was committed to his own ‘process’ and task-oriented goals (Nicholls, 1989) based on his own development, judging himself in a self-referenced way instead of in comparison to others. Carless and Douglas (2012) proposed the ‘I did the best that I could’ and ‘People I made the journey with’ stories of success within elite sport—stories that have strong links to the effort and relationship narrative. They argued that the long-term sustainability of these stories offer benefits to athlete mental well-being because of their focus on factors that are controllable, unlike performance outcomes. In this study, it can be argued that in as challenging an environment as was illustrated in Chapter 4 where mental ill-health is present, the *Supportive Structure and Steady Progression* narrative type, through its alignment with factors that are controllable and sustainable (i.e., effort, relationships), may serve as a protective mechanism against potential ill-health consequences in the JST process.

The *Supportive Structure and Steady Progression* narrative type supports the findings of previous narrative JST research in highlighting the importance of social support and relationships within athletes’ micro- and mesosystems in the JST experience (Drew, 2020; Franck & Stambulova, 2019; 2020). It also joins an extensive list of studies within the larger

JST literature that points to the vitality of social support as an external facilitative factor in athletes' JST experiences (Bruner et al., 2008; Drew et al., 2019; Jensen, 2012; McGreary et al., 2021; Mills et al., 2012; Morris et al., 2016; 2017; Pummell et al., 2008). Social support has been found to be a protective factor against the demands and stressors of the JST through acting as a coping mechanism (Bruner et al., 2008; McGreary et al., 2021; Morris et al., 2016). Although the importance of social support in the JST process is well-established, the focus has largely been on the structural and functional aspects of social support by emphasising the types of support being offered to athletes and from whom, with less attention on why it is important. Within this narrative type, although I have also found support for the previously identified forms of emotional (e.g., showing concern for the athlete), esteemed support (e.g., bolstering a person's feeling of competence and self-esteem), informational (e.g., tactical or technical advice), and tangible support (e.g., financial assistance) (Morris et al., 2016; Sheridan et al., 2014) being offered from coaches, family, peers, sport science support, and partners, I also propose why social support is helpful to the transitioning athletes. From a motivational lens, James' supportive structure allowed for many of his basic needs (Maslow, 1943; 1954) to be met which led to sustained motivation and steady progression throughout his JST. As proposed in Chapter 4, Maslow's hierarchy of needs enables a holistic view of the challenges faced on tour by professional players and is well-suited to explore both individual and environmental factors within the process. At a foundational level, James' physiological needs were met through the sport science support he received at the academy which allowed for recovery between tournaments. At the safety needs level, while inhabiting a particularly challenging environment as identified in Chapter 4, James possessed resources and a form of security in his supportive structure knowing that he had a place to return to where he could improve his game and take the necessary steps in progression to a long-term career. At the love and belonging needs level, James was able to

meet his needs for sense of connection, friendship, and family through the strong relationships he had developed and maintained with coaches, sport science support, family, friends, and his partner. This supportive structure which led to the satisfaction of key needs at the physiological, safety, and love and belonging needs levels jointly influenced James' esteem needs (e.g., feelings of achievement, recognition) evidenced by his acknowledgement of his improvement throughout the JST process and external recognition of reaching career high rankings, winning professional events, and being granted a wild card entry into a Grand Slam event. Collectively, the satisfaction of many of James' needs (Maslow, 1943; 1954) through his supportive structure allowed for sustained motivation in his career and an ability to strive for self-actualization moving forward in his professional career.

### **5.3.2 Lack of Support, Demotivation and Career Termination Narrative – Sophia's Story**

Sophia was based in her hometown and did not have a formal coach. Instead, she organized her own training with players in the area and received some assistance from her father who she explained "feeds me balls occasionally...it's more so reps...it's not as extensive as a coach that I would pay." In Interview 1, when reflecting on the limitations of her training structure, Sophia explained:

A big part of that (not having a team) is money, like if I could choose to have like a bigger team, I definitely would...I see a lot of girls who are traveling with their coaches or their academy and...it's a huge advantage to have a coach traveling with you and being in one spot, like one tennis academy, you have everything there, the gym, you have courts, coaches, people to practice with.

As her JST experience progressed, Sophia's financial limitations and the accumulating costs of tour life impacted her mindset around remaining on tour:

It's super expensive to travel, like accommodation, equipment, all that, and it leads to my mental thought, my thought process towards it all. And I think having a bad week at a tournament, the financial burden of it sort of makes the loss a little tougher compared to someone who doesn't have to worry about the money...I definitely have this, like, back and forth of should I keep playing, should I not? And it comes from money and not having enough of it to keep traveling.

Despite Sophia's financial limitations and questions over her long-term career plans, between Interview 1 and 2, she managed to compete in 9 singles and 7 doubles events on tour and won one singles and two doubles titles. This led to an improvement in Sophia's rankings at the time of Interview 2 to 714 in singles (a career high at the time) and 621 in doubles. However, Sophia's on-court achievements during this period did not lead to the motivation she envisioned it would:

I think after having a decent singles result I would have felt a little different or like more motivated to play, but it actually had the opposite effect. Just almost every time I stepped onto a singles court, I just had no motivation, like I just really didn't want to be there.

Sophia struggled with motivation for months to come. On one hand, she felt that the tour was lonely, explaining:

You go to these tournaments and you see pretty much the same people...there are people around all the time, but they are going through the same thing as you are and at the end of the day, you're just trying to win. You're trying to win the tournament, so it makes it competitive. I wouldn't say that I would trust everyone on tour, like there are a few people who I would consider my friends, but they are definitely going to think about themselves, so it's hard to make authentic connections.



In addition to the lack of connection Sophia felt on tour during her JST experience, her motivation struggles were also driven largely by her continued financial instability. Sophia worked for months at a time as a tennis coach to generate financial means to continue her career, but began to realize the counteracting effects this had on her performance:

That (previous coaching job) wasn't great for my tennis in hindsight. I didn't have much time to practice, spent a lot of time on court coaching...and didn't really have anyone to hit with out there for three solid months and I didn't play any tournaments for three months...that first month getting back on tour was super brutal...all the confidence you might have gained before the break is gone.

Sophia's demotivation lingered for months and although she played five singles and four doubles events between Interview 2 and 3, she concluded shortly before Interview 3 that she would stop playing singles on tour and attempt a doubles-only career, believing it would be more fun to travel with a friend and work together towards a goal. However, as Sophia and her doubles partner were traveling to their first group of tournaments, their plan was interrupted by the COVID-19 tour freeze. It was during this period, when Sophia returned home to live with her parents that she had time to further consider her demotivation and thoughts around her professional career. She explained:

I needed a huge break, so I didn't touch a racquet for like a month and a half, two months...it gave me a lot of time to think, and I think the space from tennis and competing really, it was really eye-opening for me, in terms of just like being ready to move on from it...the going back and forth (between working and competing), that's something that I learned that it doesn't work and I learned that the hard way...corona was just kinda the nail in the coffin, especially like financially as well, like I was definitely not making money when I was on tour, but...there's no way I can wait

around for a year, not make any money...like the idea of that, um, was pretty daunting to me.

During the COVID-19 pandemic, Sophia officially ended her professional career and began taking the necessary steps to pursue a new career path outside of the sport.

### **5.3.2.1 Discussion of the Lack of Support, Demotivation and Career Termination Narrative.**

This narrative typology, represented by Sophia's JST experience, is made up of a lack of support, which ultimately leads to demotivation and subsequent career termination. While the *Supportive Structure and Steady Progression* narrative type highlights the influence that a supportive structure has on facilitating the JST experience in tennis, the *Lack of Support, Demotivation and Career Termination* narrative type illustrates a starkly different picture where the lack of support has a major inhibitory effect on continued progression on tour. The supportive structure that James possessed allowed for the satisfaction of many of his key basic needs (Maslow, 1943; 1954), but in the case of Sophia, her lack of support in her JST experience led to many of her key needs remaining unmet and ultimately contributing to demotivation and career termination. Most notably, Sophia's safety needs remained unmet through the substantial financial limitations she experienced on tour which led to a lack of resources and financial and employment insecurity. Additionally, Sophia's love and belonging needs for a sense of connection and friendship were largely unmet in her JST experience through a lack of a team (i.e., coach, sport science support) and difficulty in developing relationships on the professional tour. These factors resulted in loneliness, one of the key influences in Sophia's demotivation, and a lifestyle challenge of the professional tour identified in Chapter 4. Sophia's decision to pursue a doubles-only career towards the end of her career because working towards a goal within a team seemed more enjoyable further highlighted Sophia's desire for more support and a sense of connectedness (Maslow, 1943;

1954) on tour. Interestingly, throughout the study, Sophia achieved strong results on tour having won several professional events, reached a career high ranking, and consistently moved up both the singles and doubles rankings list. However, her unmet safety and love and belonging needs ultimately led to her demotivation and career termination. This points to a powerful proposition that it is not necessarily the best tennis players who can be successful at navigating the JST process and progress to the top of the sport, but very good tennis players who possess the resources that allow them to meet more of their basic needs (Maslow, 1943; 1954) throughout the process.

### **5.3.3 Successive Setbacks and a Search for Solutions Narrative – Jack’s Story**

After achieving considerable success results-wise in the first several months of his professional career, shortly after Interview 1, a nagging injury led Jack to the tough decision of taking six months away from competition to fully recover. Despite the significant interruption to his progress, Jack was determined to find a way to make this period of his career as useful to his development as possible:

Along with my coach, I decided that seeing a psychologist would be a huge benefit to me, not only obviously, there’s a tennis side, but then to help me with getting back to 100% and match fitness and how I was gonna be mentally with my (injured body part) going back into matches.

The work Jack subsequently did with his sport psychologist had a big impact on his progression:

I definitely feel like I’ve progressed off the court, you know, there’s loads of stuff I’ve been doing with him. He’s got me doing yoga, which has been great...I’ve been doing very like relaxed, like restorative yoga...I’ve been doing some visualization and meditation as well, which has been guided by him...it has helped me progress while I

haven't necessarily been on court progressing tennis wise, but there has been plenty of stuff that I can do and I feel like I've made the most of that time away from the court.

Jack's work with his sport psychologist played a major role in the positivity he was able to sustain through his tough circumstances. However, Jack also received valuable support from his coaches, family, and a close friend of his. When discussing the impact of his family on his JST experience, Jack explained "my family is always there...they have helped me massively. They've always been a voice of reason, I guess, to keep me doing the right stuff". With relation to Jack's close friend, who was a semi-pro sprinter, Jack explained the value he provided during his injury lay-off:

He helps me a lot just again from the fact that we are kind of going through the same thing, that helps me a lot. I mean, with all of it, you know, when it comes to injuries, just all that stuff, like a good guy to talk to...I know he understands...like when you play at a high level, it's good to have someone who has been through the same kind of stuff.

After Jack's six-month break from the tour, he was pleased with his first trip back where he won a doubles event. However, this return was short-lived because during a training session at the following tournament, Jack suffered a different injury and was forced to take a further two and a half months away from competing. Then, after he had completed rehab and was match fit, one week before his return to tour in March 2020, in another setback to his JST, the professional tour was paused due to the COVID-19 pandemic.

In a similar way to his initial injury after Interview 1, Jack diligently searched for a way to make the most of his time away from tournaments and find a solution to the challenges he faced. He decided to have surgery on an unrelated injury for which he had previously pursued the non-surgical route. Jack explained "obviously surgery sucks, but it

was good that I was at least able to make the most of this break, cuz I wouldn't have been able to do much anyway.”

Throughout the tour pause, Jack recovered and maintained his morale by continuing to work with his sport psychologist:

I've been speaking to him online at least once a week and I've been continuing all of that work, so while maybe a lot of people are off court thinking that they're feeling a bit lost and they're not doing anything to help their tennis, I still feel like I'm progressing...and I feel like when I get back on court that maybe I'm gonna have more of an edge than I would have just doing the work back then, because...I've still been able to have a chance to improve.

#### **5.3.3.1 Discussion of Successive Setbacks and a Search for Solutions Narrative.**

This narrative typology, represented by Jack's story, is characterized by players' experiences of successive setbacks and a drive to search for solutions in a bid to continue progressing in their JST experiences. There is alignment between this narrative type and the performance (Douglas & Carless, 2006) and resilience narratives (Everard et al., 2021). Specifically, related to the performance narrative, despite repeated injuries and an inability to compete in more than a handful of tournaments throughout the entire longitudinal period of the study, Jack possessed a desire to find solutions to progress his development and ability to perform at a high level upon his return no matter how challenging the circumstances. This differs from previous narrative research (Franck & Stambulova, 2019) where a tennis players' successive injuries led to a reorientation into education and sport career termination. In a similar light, Jack's experiences relate to the resilience narrative (Everard et al., 2021) where maintenance in wellbeing and athletic trajectory are experienced despite injury setbacks with a storyline of 'Yesterday I was healthy, today I am injured, but through working hard will be healthy and perform again'. Everard et al. (2021) argued that within the

resilience narrative athletes are focused on the steps they can take in the present moment to accumulate gains and improve their future. In this way, Jack's story very strongly relates to this narrative through his determination to make progress during his injury layoffs and his confidence that he was progressing and maintaining an edge on other competitors. Everard et al. (2021) suggested that the resilience narrative's sole focus on restoration could prove threatening to athletes' wellbeing and motivation if the outcome the athlete experiences is not one that returns them to full-health and performance. In this study, Jack's successive injuries meant that his desired outcome (i.e., being fully healthy) was not met. However, Jack maintained positivity and experienced no known mental ill-health consequences. Consequently, it can be argued that Jack's strong relationships with his support networks within his micro- and mesosystems throughout his repeated struggles with injuries, in a similar way to the *Supportive Structure and Steady Progression* narrative type, may have served as a protective mechanism against potential ill-health consequences.

Although resilience is a key theme within this narrative type, it was also a sub-plot across the dataset. With the lifestyle challenges identified on the professional tour in Chapter 4, it is unsurprising that resilience is an influencing factor of the JST process. In the sport psychology literature, Bryan et al. (2019) defined resilience as "a dynamic process encompassing the capacity to maintain regular functioning through diverse challenges or to rebound through the use of facilitative resources" (p. 88). In the social work academic literature, Ungar (2012) proposed a social-ecological interpretation of the resilience literature by arguing that "resilience is as, or more, dependent on the capacity of the individual's physical and social ecology to potentiate development under stress than the capacity of individuals to exercise personal agency during their recovery from risk exposure" (p. 15). Aligned with this perspective, additional researchers critiqued the resilience literature for "being too actor-centred, ignoring any structural forces" (Mohaupt, 2009, p. 67) suggesting

that “such foci are sustained at the expense of broader structural and collective considerations that make a crucial difference to the human experiences of adversity” (Boyden & Cooper, 2007, p. 5). Related to this study, although the importance of individual agency in exhibiting resilience in the JST process in tennis was displayed by Jack, as Sophia’s story and the findings of Chapter 4 illustrated, there are key environmental and structural challenges associated with professional careers in tennis, like the ongoing financial difficulties, that require external resources (e.g., sponsors, structural improvements to the professional tour) to facilitate improved resilience. I argue that although resilience is a crucial individual factor in the JST process, a player can only display so much ‘individual resilience’ before requiring assistance from their environment to allow for more positive developmental outcomes. In other words, an individual’s resilience is only one piece of a larger ecological puzzle. In discussing an example of a child with ADHD at school, Ungar (2012) argued that to investigate their resilience we should not only ask ‘how has the child adapted to their school environment given their disorder?’, but also ‘how has the child’s school and home adapted their structures to meet the needs of this child?’. In professional tennis, it may be time to similarly focus our attention to the role that the larger environment can play in players’ resilience and overall development.

#### **5.4 Conclusion**

The aim of this study was to explore tennis players’ lived experiences of their JST processes. By tracking seven players’ JST experiences longitudinally, this study has identified three narrative typologies: *Supportive Structure and Steady Progression*; *Lack of Support, Demotivation and Career Termination*; and *Successive Setbacks and a Search for Solutions*. These narratives are not necessarily the only possible narratives that professional tennis players may experience in their JST process. However, they provide insight into three types of experiences players may expect to have during their JST and highlight key

influential individual and environmental factors associated with the process. In doing so, this study has provided a deeper understanding of the complexity of the JST process in professional tennis and offers valuable academic and applied implications for sport psychology researchers and aspiring professional tennis players, their support networks, and other stakeholders within tennis.

There are two major messages from this study with accompanying implications. First, the JST process in tennis is a complex experience made up of key individual and environmental factors that together influence a players' development. While individual factors like a players' ability to display resilience may be crucial, it is simply one piece of a larger ecological puzzle with numerous other individual and environmental pieces, like the importance of supportive structures and financial resources to professional players in the transition. Previous JST narrative research (Drew, 2020; Franck & Stambulova, 2019; 2020) highlighted the non-linear, dynamic nature of the JST process. This study supports this finding and proposes that the interaction of varying individual and environmental factors of the JST process may account for this complexity. Following on from this study, investigations into the JST process could adopt an ecological approach like the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) that focuses on the interaction of individual, environmental, and time-based influences to better understand how proximal and distal relationships and factors support, motivate, change, and influence individual development within players' JST experiences.

A second main message from this study is that supportive structures are a key facilitative resource in the JST process in tennis that can assist players in meeting basic needs (Maslow, 1943) allowing for sustained motivation on the professional tour and potentially serve as a protective mechanism against mental ill-health because of their long-term sustainability in being based around controllable factors. While James possessed strong



proximal relationships in his micro- and mesosystems allowing for the satisfaction of many of his basic needs, Sophia lacked these proximal relationships in her micro- and mesosystems leaving key safety (e.g., financial security) and love and belonging needs (i.e., sense of connection) unsatisfied, ultimately leading to her demotivation and career termination. Additionally, although Chapter 4 highlighted the mental ill-health present on the professional tour and the extensive lifestyle challenges leading to players' unmet needs (Maslow, 1943; 1954), the experiences of James and Jack in this study illuminate the potential promise of social support and strong relationships within micro- and mesosystems in the JST as a protective mechanism against mental ill-health consequences on tour. Specifically, James' supportive environment facilitated his relatively smooth process and progression on tour, while Jack was able to rely on his strong supportive structure to stay positive and motivated amidst a series of successive injuries that took him away from competing for much of the study. This adds to the findings of Franck and Stambulova (2019) where an athlete's career termination in the JST in their 'effort and relationship narrative' was experienced amidst high levels of mental functioning and a positive perspective on the process as 'meaningful' and providing 'transferable skills for post-career life' despite not reaching the highest level of the sport. While this is a promising series of findings, and social support has been found in other domains to be a protective factor for mental ill-health consequences (Harandi et al., 2017; Stewart & Suldo, 2011), future research is needed to specifically investigate the impact of social support structures as a protective mechanism against mental ill-health consequences in the JST experience.

The implications of supportive structures as a key facilitative resource in the JST process in tennis that can lead to meeting key basic needs (Maslow, 1943) offer academic and applied practice implications. First, from an academic perspective, it provides insight into the 'why' of the benefits of social support in the JST process. Although the importance of social

support as a facilitative factor in the JST process is well-established (Drew et al., 2019), research findings to date have largely emphasized the types of support being offered to athletes and from whom but placed less attention on why it was beneficial. Second, from an applied practice perspective, this offers aspiring professional players, their support networks, and other key stakeholders within tennis with valuable insight into a highly beneficial factor (i.e., supportive structures) for players to develop before their professional pursuits to meet many of their basic needs and increase their likelihood of sustained motivation throughout the JST process. Finally, implications of narrative types based around supportive structures and other factors within players' control as potential protective mechanisms against mental ill-health consequences offer opportunities to improve athlete well-being, as approaches that focus on altering narratives have been adopted in areas like psychotherapy and led to improved individual mental health outcomes (e.g., Batista et al., 2021).

Although this study offers notable strengths, there are also limitations worth noting. First, while there was logic for sampling players within the first four years of their professional careers (ITF, 2017; Stambulova, 2009), future research may benefit from identifying more specified periods based on time (i.e., first six months, first year on tour) or ranking-based transitions (i.e., from 1000 to 500, from 500 to 100) to provide a more nuanced focus on potential sub-transitions within players' overall JST experiences. Second, all players sampled for this study pursued collegiate tennis careers before their professional careers, meaning they began their careers in their early to mid-20s instead of directly after junior tennis at age 18. The JST experiences of younger players who have not pursued collegiate tennis careers may differ and is worthy of future research attention. Finally, with five males and two females in the sample, there was an imbalance in sex distribution that could have influenced the data towards more of a male perspective of the JST process.

In closing, this study provided valuable insight into players' lived experiences of the JST process in professional tennis by identifying three narrative types of players' experiences. It added to the limited previous literature on the lived experiences of the JST in tennis (Franck & Stambulova, 2019; Jensen, 2012; Pummell, 2008) and highlighted key individual and environmental factors associated with the process. The next chapter will use the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) to better understand the interaction of individual, environmental, and time-based factors in shaping players' JST developmental processes.

## **Chapter 6**

### **Understanding the Interaction of Individual, Environmental, and Time-Based Influences on Professional Tennis Players' Junior-to-Senior Transitioning Processes**

## 6.1 Introduction

The previous chapter provided detailed insight into tennis players' JST experiences through a longitudinal, narrative approach. Specifically, it found the JST process to be a complex experience with varying individual and environmental factors, like players' resilience, supportive structures, financial struggles, and lack of resources, interacting to influence their development on tour. This builds on the findings of Chapter 4 where in addition to individual-based challenges on the professional tour (e.g., physical and mental fatigue, the weight of expectation), players experienced environmental challenges (e.g., financial imbalance of the professional tour, structural-caused instability) that impacted their daily experiences on tour and inhibited their ability to meet their basic needs (Maslow, 1943; 1954). Collectively, the findings of the previous two empirical chapters demonstrate the need for a closer investigation of the interaction of individual and environmental factors within the JST process in tennis. Through adopting an ecological approach, like the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005), the impact of these coexisting and interacting factors on tennis players' developmental processes can be better understood.

The PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) emphasizes the role that individual, environmental, and time-based factors have in shaping developmental processes. The model is the bedrock of Bronfenbrenner's 'Bioecological Theory of Human Development' (Bronfenbrenner, 2005), which is the mature version of a theory Bronfenbrenner developed over decades. Originally, Bronfenbrenner proposed ecological systems theory (1979; 1988) which detailed five interrelated systems that individuals interact within throughout their developmental process (i.e., microsystem, mesosystem, exosystem, macrosystem, chronosystem; see Chapter 2 for more). However, throughout the 1980s and 1990s, the model was adapted by Bronfenbrenner and colleagues (e.g., Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Crouter, 1983; Bronfenbrenner &

Morris, 1998) to focus more on the individual and their developmental processes over time, in addition to the earlier identified multiple environmental contexts. Specifically, by the 1990s, proximal processes became the key factor within Bronfenbrenner's theory (Bronfenbrenner & Morris, 1998). Proximal processes are best described through the following proposition:

Especially in its early phases, but also throughout the life course, human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment. To be effective, the interaction must occur on a fairly regular basis over extended periods of time. Such enduring forms of interaction in the immediate environment are referred to as proximal processes. (Bronfenbrenner & Morris, 1998, p. 996).

With the updated focus on proximal processes, Bronfenbrenner's initial theory evolved into the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005). In this model, the effective development of the individual within their proximal process varies depending on the interaction of their biopsychological characteristics, multiple ecological contexts, and time-based influences. The PPCT model represents significant development in Bronfenbrenner's thinking by providing a more holistic perspective of human development. Relating this model to the complexity of the JST process in tennis, it offered a suitable approach because it emphasizes and encompasses the individual factors that players bring to the transitioning process, the environmental contexts that the players' development takes place within, and the time-based influences of the overall process to understand how these factors coexist and interact to influence tennis players' transitioning experiences. In this way, the scope of the model allows for a holistic understanding of the JST process and strengthens the understanding developed in Chapter 4 and 5 around the lifestyle challenges of

professional players and the narrative experiences of players in their JST processes, respectively. In short, this model brings together the previously individualised nature of transition research with an ecological approach in a new way that allows interaction effects within the context of an influential and powerful broader system. The four constructs of the PPCT model and examples of how they relate to the JST in tennis are detailed in Table 6.1

**Table 6.1**

*PPCT Constructs Related to JST in Tennis*

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<b>Construct</b>	<b>Definition and Examples related to JST in Tennis</b>
<b>Process</b>	Refers to proximal processes, which are frequent, ongoing, complex, and reciprocal interactions between an individual and their surroundings over an extended period of time. (Example: JST process in tennis)
<b>Person</b>	Refers to three types of relevant characteristics the individual possesses which influence development.  Demand: traits that are immediately apparent and invite or discourage reactions from the social environment (Examples: height, strength)  Resource: refer to mental, emotional, social, and material resources (Examples: past experiences, perceived social support, access to opportunities)  Force: individuals' traits that influence an individual's response to the systems around them (Examples: persistence, motivation)
<b>Context</b>	Represented by the four interrelated systems of initial representation of ecological systems theory (Bronfenbrenner, 1979)  Microsystem: refers to any environment in which the developing individual is an active member and spends a significant amount of time (Examples: training environment, home)  Mesosystem: the interrelations of microsystem influences (Example: a parent and coach's relationship; a group of training partners)  Exosystem: settings that the individual is not situated within, but can influence the individuals' development (Example: a



coach's stressors in their home life can influence how they coach the athlete, and the athlete's subsequent development)

Macrosystem: encompasses the overarching cultural norms, societal beliefs, economic, social, legal, and political systems which impacts all of the influencing systems. (Example: the way a society values a specific sport and the funding that is provided to the sport, which then impacts the opportunities provided)

## **Time**

Refers to different types of time-influences, including:

Micro-time: time spent in a specific activity or interaction (Examples: individual training session, match)

Meso-time: activities that occur with some frequency, as well as the distribution of time across varying contexts (Examples: training sessions and matches more generally; as well as on-court versus off-court distribution)

Macro-time: time-based influences outside of individual's interaction that interact with and influence the individual's development (Examples: COVID-19 pandemic; tour structure changes)

Timing: the idea that duration and order of events plays role in the development process (Example: getting an ATP or WTA ranking point before ending junior career, time off from injury)

Although the PPCT model was developed in the human development literature, and not specifically for sport, researchers have argued for the suitability of the model's application to the sport psychology literature in recent decades (e.g., Cupples, 2020; DiSanti & Erickson, 2020; Garcia Bengoechea, 2002; Krebs, 2009; Moulds et al., 2022). These arguments were expanded upon in Chapter 2. Empirical studies have answered these calls and adopted the PPCT model to better understand complex sporting processes. One example is Moulds et al. (2020) who found support for the model in understanding the multifaceted nature of youth swimmer dropout in Australia concluding that factors like age-group, competition level, and proximity to a major city were independent factors associated with dropout. Further, Cupples (2020) adopted PPCT as a theoretical underpinning to investigate the development pathway of rugby league athletes, and across four studies in their PhD thesis, found support for the model in understanding the complexities of talent development through a range of processes (e.g., training, coach-athlete relations, peer interactions) that were influenced by person characteristics (e.g., motivation, discipline, self-regulation), context (e.g., school-based talent development environments, national rugby league clubs) and time (coach-athlete interactions, duration of talent development environment involvement).

Despite the arguments made for the use of the PPCT model in sport psychology (e.g., DiSanti & Erickson, 2020; Moulds et al., 2022) and support for the model being found in empirical work (e.g., Cupples, 2020; Moulds, 2020), there is no PPCT-underpinned research on the lived experiences of athletes' JST processes. Research adopting this model within the JST literature can provide a novel approach in shifting from an individualistic mindset to showing interaction effects of individual, environmental, and time-based factors within the context of an influential and powerful broader system. By applying the PPCT model to better understand the lived experiences of the JST process in tennis, this study was the first to

qualitatively explore the interactions of individual, environmental, and time-based factors of athletes transitioning into elite sport. It also adopted a longitudinal approach that allowed for a real-time investigation of the dynamic JST process, accounting for changes that athletes may experience throughout the complex process. Finally, from an applied practice standpoint, this holistic, ecological perspective provided valuable insight into the JST process in tennis for aspiring professional players, their support networks, and other stakeholders within tennis that can assist in player development and inform guidelines, policy, and educational programmes.

## **6.2 Methods**

### **6.2.1 Philosophical Assumptions and Methodology**

This study was conducted aligned with the interpretivist paradigm consisting of a relativist ontology and a subjectivist epistemology (Sparkes & Smith, 2014). Accordingly, viewing reality as humanly constructed with multiple subjective realities and the researcher as part of the research process, the researcher engaged in rich conversations with professional tennis players longitudinally over a 15-month period of their JST experiences to understand the process as they negotiated the transition. An exploratory, collective case study was adopted due to the methodology's ability to seek extensive, in-depth descriptions of complex social phenomena, like the JST into professional tennis (Yin, 2017). The multiple cases in this study were seven professional tennis players and the study was bounded to understand the interaction of individual, environmental, and time-based factors associated with the JST process in tennis.

### **6.2.2 Participants and Data Collection**

The present chapter is part of a larger case study that was partly presented through a longitudinal, narrative enquiry in Chapter 5. The rich longitudinal data collected in this thesis allowed for two separate studies/empirical chapters to be completed. Accordingly, the

sampling and data collection processes in this study are the same as Study 2 (Chapter 5). Please refer back to sections 5.2.2 or 5.2.3 for further details. The sample for this study consists of the same seven professional tennis players as Chapter 5. In addition to James, Sophia, and Jack (who were exemplar cases in Chapter 5), the sample also consisted of Scott, Paulo, Lukas, and Isabella (all names are pseudonyms). Further details of the players that make up the sample are included in Table 6.2.

**Table 6.2**

*Sample Details*

<b>Name</b>	<b>Age*</b>	<b>Time on Tour*</b>	<b>Region</b>
James	25	2.5 years	Western Europe
Scott	27	1.5 years	Western Europe
Sophia	25	1.5 years	North America
Paulo	23	1.25 years	Central Europe
Jack	22	5 months	Western Europe
Lukas	24	1 year	Eastern Europe
Isabella	27	4 years	North America

*Note.* \* = refers to the start of the study

### **6.2.3 Data Analysis**

Data was analysed using reflexive thematic analysis, a flexible process where researchers generate patterns of meaning within their dataset through reflexive and thoughtful

consideration of their data (Braun & Clarke, 2019). An inductive, latent approach to analysis was used. Using the phases of thematic analysis outlined by Braun et al. (2016) as a guide, data immersion began with transcription of interviews. The longitudinal nature of the research meant that interviews were transcribed during different waves of data collection. Between waves, transcribed interviews were read and initial notes of patterns in the data were made. Then, after transcribing the third and final wave of interviews, the entire dataset was reviewed before coding was completed. Codes were shared with a group of academic researchers independent of the project where useful feedback was provided which led to further rounds of coding. Initial themes were later developed and shared with an academic researcher independent of the project and the thesis' primary supervisor where conversations led to further analysis that better represented the interaction of individual, environmental, and time-based factors within the JST process of tennis players. This next round of analysis led to the naming and presentation of themes as they are presented in this study. Involving outside researchers and supervisors in the analytic process was a collaborative process to help “develop a richer more nuanced reading of the data, rather than seeking a consensus of meaning” (Braun & Clarke, 2019, p. 594). The steps taken throughout this reflexive thematic analysis led to prolonged engagement with the data and continual reflection and questioning of assumptions that were made in interpreting the data (Braun & Clarke, 2019).

#### **6.2.3.1 Establishing Rigour and Trustworthiness.**

Aligned with Smith and McGannon's (2018) arguments against the suitability of member checking, inter-rater reliability, and the notion of universal criteria for research conducted within the interpretivist paradigm with a relativist ontology and subjective epistemology, the present study adopted a collection of measures outlined by Tracy (2010): credibility, sincerity, and meaningful coherence. These measures were selected due to their alignment with the philosophical assumptions and aims of the research instead of from a

criteriological approach. First, credibility was displayed in this study through the extensive use of participants' own words, which conveyed sufficient details to allow readers to form their own conclusions based on the data provided (Tracy, 2010) and the use of critical friends in the analysis process which allowed for critical feedback and encouragement of reflexivity by challenging viewpoints and beliefs throughout the research process. Sincerity was demonstrated through the detailed reflexive statement provided in Chapter 3, which outlined the research process associated with this study. Finally, meaningful coherence was exhibited through the alignment of choices made for the study, in its design, methodology, and methods with the study's philosophical assumptions and stances. For a further description of rigour and trustworthiness in this thesis, please refer to Chapter 3.

### **6.3 Results**

The results of this study illustrate a story of the interaction of individual, environmental, and time-based influences on the developmental processes of professional players in their JST experiences. Although each individual theme is distinct, collectively, the themes highlight the complexity of the JST process in tennis. Five themes were generated: A Race Against Time, Riding the 'Mental Grind', 'You Can't Do It Alone', A Chance to Pause, and Cultural-Based Opportunities, and each are detailed below.

#### **6.3.1 A Race Against Time**

Players' professional pursuits rest on their ability to gather hundreds of thousands of pounds to spend on tour-related costs, while earning far less in return from prize money, to survive financially until reaching the coveted top tier of the sport—the Top 100, where it is possible to earn financial profits. This financial discrepancy differs from many other sports where sport-related costs are covered by organizations and salaries are provided instead of payment being largely dependent on prize money. The structurally imposed financial challenges of the professional system leads players to experience a race against time to

progress in the sport before their financial resources run out. This pressure continually builds and threatens their long-term feasibility in the tennis structure. Lukas explained:

Sometimes after a tournament, if I lose first round, or I play a bad match, I'm thinking, why am I playing? What am I doing? I'm not making any money, like should I be doing something else...I'm the third best player in my country, but I can't make money on this sport...How long can I play?

Lukas' doubts around his future in the sport exemplify a key macrosystem influence of the JST process that interacts with the individual experience through the time-pressure that players experience in their professional pursuits to reach the top of the sport before losing their ability to fund their careers. This time pressure also impacts players' decision-making processes on tour—with players feeling an urgency to make adjustments and improvements in their game before it is too late. Scott explained that players' financial struggles in the JST lead to a desperate need for solutions that would allow for rapid progression to the top of the sport:

It's very tough to stick to your guns when your resources are not always (there)...a lot of times people in the Futures, even probably the Challengers, are listening to various different voices and the longer they stay there, the more voices they've probably listened to because they're searching harder...I would hit with (players) they'd be two, three, four hundred in the world, I'd be like what are you working on your game and every single time, it'd be a different thing. 'Oh I'm doing this these days and it's really starting to help me'. And then three months later, 'I'm doing this'...I ultimately feel that people aren't sticking at the same core thing for a sustained period of time.

Sophia shared Scott's belief around the pressure players feel to find solutions and progress in the sport in a timely manner, explaining "when you're on tour and you're doing it, you're like scavenging for solutions, you're trying to find a way to help you as much as you

can.” This desperate race against time left Paulo frustrated when towards the end of the study, he stated “only the top 100 make a living...and the rest, they don’t...they make a little bit, but the travel expenses will always exceed the income...you don’t get anything in return...it’s honestly just a matter of time, that’s what I’ve noticed.” Paulo soon after ended his professional career and explained, “it’s important for me to focus on my future and to not just be running around playing tournaments and not making a dollar.” Paulo’s experiences illustrate the reality that running out of time in this ‘race’ leads players to transitioning out of the professional system.

### **6.3.2 Riding the ‘Mental Grind’**

Players on the professional tour experience several simultaneous challenges, including the continuous travel taking them away from friends and family throughout the year, the associated different time zones, foods, languages and cultures, the physicality of competing week after week, the financial pressure, and the tournament system that leads to most players ending their weeks with losses. These challenges contribute to what players described as a ‘mental grind’. The defining characteristic of this theme is that amidst the concurrent challenges that players experience in the JST process, they display a strong conviction to ride the wave of the ‘mental grind’ and persist.

Part of the difficulty that players experience on tour is described in an excerpt from Scott:

Sometimes you play a phenomenal match and you win and you try to relax, but it’s tough because you know you have a match the next day, and it’s day on day on day provided you keep winning...and then you have maybe two, three days to work to train to get better, to go and play the next tournament and you’ve gotta get up for it, because there’s gonna be 31 other guys that’re gonna be pumped for the next week,



you know? And you have to do this, on average, three out of the four weeks of the month.

Alongside the physical and psychological challenges that players' tournament schedules can provide, Paulo emphasized the taxing influence of the loneliness associated with the professional tour lifestyle explaining "you find yourself being alone a lot of the time, which can be depressing...you have to live a very lonely lifestyle...traveling alone...alone on the court...just feeling alone all the time." In addition to loneliness, the amount of responsibility on players' shoulders in the JST process in terms of what they need to take ownership of also factors into the 'mental grind'. Players outlined the necessity of taking personal responsibility for off-court performance related factors like strength and conditioning, recovery, nutrition, mental training, and film study, alongside logistical factors like organizing travel and accommodation, finding training and doubles partners, and navigating the associated costs of the entire enterprise, oftentimes needing to work other jobs to raise necessary funds to continue their careers. However, despite the concurrent challenges players face, players continuously emphasized that defining characteristic of a conviction to persist and ride the wave of the 'mental grind' saying things like "that's something that you need to come to terms with" (Jack), "you have to learn to deal with that" (Paulo) and "(as a tennis player) you just have to dust yourself off and get back up" (Sophia). Players accepted the difficulty that awaited them in their JST experiences but were steadfast in their commitment to find a way to persevere and continue forward. James' outlook nicely captures 'riding the mental grind':

You could have 29 bad weeks and win a tournament, or 28 bad weeks and win 2 tournaments in the year and that will be the best year of your career, but it could be the first 28 weeks are terrible, so you have to just keep pushing...say you're on a four week trip, the first three weeks, you can bomb out first round, but you can't have that

judgement of those three weeks affect the fourth week...you just got to be able to keep going, keep your morale high.

### **6.3.3 ‘You Can’t Do It Alone’**

Players emphasized the significance of possessing a team to support them amidst their challenging endeavours on tour, including figures like coaches, sport science support, family, friends, and partners. This support is offered in their immediate environment (i.e., microsystem) in person, but also virtually due to the nomadic lifestyle of professional players. Although players often experience loneliness on tour because of an inability to fund the costs of traveling with team members, they valued the importance of speaking with their ‘teams’ when traveling to stay connected. In person support was also identified as crucial when returning to their home set-ups in between tournaments and gaining necessary support. Jack believed that developing a team of trusted individuals was the most influential thing he did in his JST process—and outlined the importance of this throughout the entire tennis system:

Having that base I think is hugely important. I would argue impossible to do it without them...getting a team behind me has been probably the most important thing...having people around you that you trust to give you clarity, you know, when you’re in the situation yourself, it’s easy to get quite lost and bogged down with it, but having someone else there to give you perspectives...and you even see it at the top, like, these guys who supposedly have everything still travel with, you know, six to twelve people which I think shows the importance of it, because even at that level there, you know, they’ve arguably ticked all the boxes of, like, financial security, job security, like all that stuff, but they still see that as quite an important thing.

Paulo similarly believed in the importance of support networks, extending their significance to the role they can play in sustaining wellbeing:

It's important to have people around you who you can talk to, who support you, who understand what you're going through...you can't do it alone...the environment is the most important thing to sustain a good, healthy lifestyle while playing tennis and not burning out.

The types of support that players viewed as important in the JST process included emotional, esteemed, informational, and tangible support (Morris et al., 2016). Emotional support refers to people showing concern for the athlete and was found to be offered by all support networks (i.e., coaches, sport science support, family, friends, and partners). An example of this is the support Sophia received from her three close friends: "when I'm having a hard time, they just have, like, the right words to say. They know me so well, so it's nice to be able to talk to them." Esteemed support relates to boosting one's self-esteem and similarly is offered across support networks. An example includes the support James received from his girlfriend: "if I just need like a confidence boost or something...if I say that practice didn't go well or whatever, and she'll like just give me a little pick me up or whatever". Informational support refers to tactical or technical advice related to tennis and is mainly provided by coaches and sport science support. An example comes from Scott's daily communication with his coach and his explanation that "with any match or a player that I was playing, I'd describe him the style, and he would maybe lay out a few different options of how to go about it...looking at the game through my lens". Finally, tangible support refers to financial assistance and was mainly offered by parents. Lukas explained that the financial assistance his parents provided was "the only reason I'm still playing." Although players detailed the significance of taking personal responsibility for their development within the JST process, simultaneously, possessing a team of support is similarly crucial. In essence, in the JST process, players can't do it alone.

#### **6.3.4 A Chance to Pause**

In March 2020, as much of the world began to feel the impact of COVID-19, transitioning tennis players' experiences were affected by the macro-time influence of the pandemic. Amidst the concurrent challenges and 'mental grind' that players were used to experiencing in their microsystem, policy decisions were made (i.e., exosystem influence) by tennis' governing bodies resulting in a complete freeze of the professional tour, providing players with a rare change of pace—and a chance to pause. Without the typical week-to-week challenges of the professional tour, players were in a unique position. James welcomed the pause, appreciating some stability noting, “that was the first time I had been at home for more than four weeks in a row or been anywhere for more than four weeks since I left university”. Scott similarly appreciated the pause for giving players a unique opportunity to distance themselves from their normal routines and reflect on the process more broadly:

Before you're just doing it because you're in a little bit of a rat race. There's a tournament and you feel like you want to get points...and you just keep wanna go and go and go and then you lose track of the big objective or the ultimate, like, what is the overall picture here? And I think in this period you kinda get a sense of the overall picture.

The COVID-19 pandemic and associated tour freeze was a macro-time influence that interacted within players microsystems through the impact it had on their individual experiences of the JST. It provided players with an opportunity to take a break and gain perspective—leading to different decisions. Some players worked towards improving their financial situation so that they could return to tour with more financial backing. Scott worked as a tennis coach during the pandemic to save money for his post-COVID career, while Isabella launched her own start-up company to help with her finances on tour. She explained:

I've always wanted to start something, but I never had the time to do it...and so, it just was a good opportunity...these three, four, five months, whatever it is, this is a

time to form it so then you take the kinks out at the beginning...and then when I'm out there (on tour), everything should be ok.

For others, the chance to pause led to differing thoughts with players like Paulo and Sophia ending their careers. Sophia outlined that the COVID-19 tour freeze "gave me a lot of time to think, the space from tennis and competing, it was really eye-opening for me in terms of just being ready to move on from it." Whichever way tennis players decided to move forward during the COVID-19 tour freeze, the sudden stop to the relentless pace of tour life provided players with an unprecedented chance to pause and represented a contrast to their usual experiences of the 'mental grind' of the tour.

### **6.3.5 Cultural-Based Opportunities**

Alongside the many other influences of the JST process of tennis players, a key macrosystem influence exists in the opportunities that are either afforded or not to players based on their nationalities and places of residence. More developed tennis countries have increased opportunities for higher-level training, coaches, and access to tournaments. Lukas, upon returning to his small, less-developed tennis country after a temporary relocation to a more developed country, compared his opportunity to other players he knew from bigger countries:

I heard there are some local tournaments in other countries, in France, in Spain, in the UK that people play and the money is decent, you know? We don't have anything like that in (his country)...We just have one (nationality) championships. That's it. There is nothing else. I feel like if I want to continue playing tennis (professionally), I have to move to another country.

Players like James, Scott, Jack, Sophia, and Isabella were located in more developed tennis countries that hosted numerous professional tournaments and were home to a large number of other professional players. This differed from Lukas and Paulo, who were limited

in their opportunities to compete and train with other professional players in their home countries. Although it is a substantial life change to relocate for one's tennis development, this is at least a possible solution and one that both Lukas and Paulo did for parts of their JST experiences in this study. However, another significant factor of cultural-based opportunities relates to benefits players receive based on their nationality—something that is more difficult, and often impossible, to change. In a sport like tennis where players' nationalities are more present and relevant throughout regular season competition than many other sports (e.g., football, basketball), opportunities like being granted direct entry into local tournaments at the discretion of the tournament organizer (i.e., wild card) due to a player's nationality exist—and are a potentially significant form of cultural-related support in the JST process. In this study, James received a wild card into the main draw of a Grand Slam event because of his nationality, despite his ranking not otherwise being high enough to allow him entry. He explained:

There's always that carrot being dangled there being able to play a Grand Slam when your ranking is not quite at that point...that's one of the big things with (the event) this year, that I'm on the borderline, like, contention for a wild card...so it's something that I'm pushing for, you know? It's something that you wouldn't—say I was Spanish, there's nothing like that that they have to push for.

James' involvement in this Grand Slam event led to increased confidence and a substantial financial boost from the prize money that players receive at the biggest tournaments the sport has to offer, which aided him in funding a private traveling coach for tournaments—a rare luxury that most transitioning tennis players cannot afford. Although many cultural-based opportunities are not within the control of players in their JST experiences, these opportunities or the lack thereof can play an important contributing role in players' developmental processes within their transitions.

## 6.4 Discussion

The present study aimed to provide a broad, contextualized understanding of the interaction of varying individual, environmental, and time-based influences of the JST process in tennis. Through investigating seven professional tennis players' JST experiences longitudinally over a 15-month period, this study has generated five key themes that together illustrate the interaction of several factors which shape players' JST experiences over time (i.e., the proximal process under investigation). Specifically, 'a race against time' showcased the interaction between the macrosystem influence of financial inequality and instability on the professional tour and the individual experience (within the microsystem) through the urgency financial pressure elicits to find solutions to continue playing on tour. Further, 'you can't do it alone' represented the significance of the development of players' micro- and mesosystems in supporting an individual's experience of the JST process, while 'a chance to pause' illustrated the influence that a macro-time factor like the COVID-19 pandemic had on players' developmental processes by pausing the typical 'mental grind' of professional tour life, providing perspective to players, and shaping key decisions within their individual experience of the JST. Cultural-based opportunities highlighted the impact that macrosystem influences like a player's nationality, their country's development with regards to tennis, and access to tournaments and funding has on an individual's experience within the JST process in their microsystem through either receiving or not receiving key opportunities that can ease the process or make process more difficult. Finally, 'riding the mental grind' represented a key force characteristic within the proximal process of the JST in tennis, through exemplifying players' response to the environmental challenges they face in the transition. Collectively, this study's findings highlight the importance of adopting an ecological approach (e.g., PPCT; Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) to understand the complexity of the JST process in tennis and provides key practical implications for

aspiring professional players, their support networks, and other stakeholders within tennis by providing evidence of key individual, environmental, and time-based factors that shape players' developmental experiences.

A key finding from this study is the suitability of using an ecological approach to understand the complexity of the JST process in tennis. JST research has historically investigated the transitioning process from a largely individualistic approach (Drew et al., 2019). However, this study's ecological underpinning allowed for the identification of the interaction of individual, environmental, and time-based influences that coexist to impact the overall JST process in tennis. In doing so, it provided a less individualized focus that over-responsibilises players for wider contextual factors that impact their experiences and led to the identification of key structural issues that differentially impact players therefore providing targets to focus on to redress inequality. If the present study only focused on individual factors of the JST process in tennis, key environmental and time-based factors like the financial inequality of the professional system and cultural-based opportunities would be missing. In this way, research into the JST process that fails to adopt an ecological approach risks omitting key environmental and time-based influences that provide a more holistic illustration of the transitioning process of athletes—with the result being an incomplete picture, a puzzle with missing pieces, or more simply, research out of context. Although researchers have argued for the suitability of applying the PPCT model to the talent development and the athlete career research literature more broadly in recent decades (e.g., Cupples, 2020; DiSanti & Erickson, 2020; Garcia Bengoechea, 2002; Krebs, 2009; Moulds et al., 2022), this was the first study to apply the PPCT model specifically to understand the lived experiences of athletes' JST processes. In doing so, and in providing support for the use of the model to better understand the complexity of the JST process, this study creates an opportunity for future research to similarly adopt the PPCT model (Bronfenbrenner &



Morris, 1998; Bronfenbrenner, 2005) to comprehend the interaction of individual, environmental, and time-based influences on the complex developmental process of athletes within this transitional period, as well as other proximal processes.

A second core finding from the present study is that through alignment of many of its findings with previous JST research, this study further evidences key influential factors within the JST process, providing insight and practical implications for aspiring professional players, their support networks, and other stakeholders within tennis that can be used to develop guidelines, policy, and educational programmes to assist in player development in the sport. First, the ‘you can’t do it alone’ theme corresponds with the extensive research around the facilitative impact of social support in the JST process in both tennis (Franck & Stambulova, 2019; Jensen, 2012; Pummell, 2008) and across sports (Bruner et al., 2008; Drew, 2020; Drew et al., 2019; McGreary et al., 2021; Mills et al., 2012; Morris et al., 2016; 2017; Pummell et al., 2008). This study highlighted the value of tennis players receiving emotional (e.g., showing concern for the athlete), esteemed (e.g., boosting a person’s feeling of self-esteem), informational (e.g., tactical or technical advice), and tangible support (e.g., assistance with finances) from a wide variety of support networks (e.g., coaches, sport science support, family, friends, and partners) (Morris et al., 2016; 2017; Sheridan et al., 2014). These findings reinforce the importance of supportive structures in the JST process found in Chapter 5’s narrative exemplar case of James who was able to meet many of his basic needs on tour (Maslow, 1943; 1954), compared to other players with a less developed support structure (e.g., Sophia), from the training environment he possessed and the strong relationships he had developed with his coaches, sport science support, family, friends, and partner, which facilitated his sustained motivation and steady progression on tour. Additionally, these findings correspond with previous tennis JST research emphasizing the importance of support structures in the transitioning process, with Pummell (2008)

highlighting the facilitative impact a supportive team network has on players' development through the emotional attachment and familial role that coaches and sport psychologists can develop with transitioning tennis players' from the extensive periods of time spent together, and Jensen (2012) arguing for the significance of supportive structures throughout the whole transition, but particularly emotional support at the start of a career for college players who have lost their college team support network. Aligned with the previous findings of this thesis and previous JST research both inside and outside of tennis, this study further evidences the value of possessing a strong network of support in the JST process in tennis.

The 'riding the mental grind' theme in this study additionally supports previous JST findings in tennis (Jensen, 2012; Pummell, 2008) and outside of tennis (Mills et al., 2012; Stambulova et al., 2017) that emphasized the importance of transitioning athletes' ability to deal with setbacks (Jensen, 2012; Stambulova et al., 2017) and cope by exhibiting 'bouncebackability' (Mills et al., 2012), as well as taking ownership of their development within their transitioning experiences (Jensen, 2012; Mills et al., 2012; Pummell, 2008; Stambulova et al., 2017). Specific to tennis, Jensen (2012) described that despite the harsh reality of the professional tour where in a tournament with 128 players in the qualifying draw and 32 in the main draw that only 1 of 150 player ends the week with a win, that players had to be able to handle the adversity of consistent losing and use it as a learning process to move forward in their development. Further, Jensen (2012) and Pummell (2008) argued for the facilitative factor of transitioning tennis players' ability to take ownership of their development and career by designing their training sessions, searching for coaching, organizing the logistical elements of their career, and navigating the financial elements of the whole endeavour, often by working as tennis coaches alongside to generate funds to continue playing. In this way, the 'riding the mental grind' theme from this study strongly relates to

previous JST research and provides further evidence for these key facilitators of the JST process.

A final key finding from the present study that corresponds to previous JST research within tennis is the ‘a race against time’ theme. This theme highlights a key macrosystem influence of the JST process in tennis—the financial inequality and instability of the professional system, and the impact it has on the individual experience of the JST through the urgency that it leads players to experiencing in finding a way to continue playing on tour. This relates to findings from Chapter 4, where the financial stress of professional players’ lives on tour was described as hanging like ‘a dark cloud over their professional existence’ that casted doubt over the long-term feasibility of a professional career. Then, in Chapter 5, Sophia’s lived experiences of the JST process illustrated the findings of Chapter 4 by illuminating the impact that financial instability had on her transition through inhibiting the development of an ideal training structure, the ability to travel to tournaments, and meet her safety and love belonging needs (Maslow, 1943; 1954) ultimately leading to demotivation and career termination. Jensen’s (2012) research into the JST process in tennis additionally found the financial instability of professional players to be a key macrosystem influence, detailing the urgency that players felt to find solutions to prolong their career, with one example including players staying eight to ten people in one hotel room to limit costs. One player in Jensen’s (2012) study explained that the financial conditions of the professional tour make it “a system designed for you to quit” (p. 129). Although financial demands have been identified as barriers to athletes’ JST experiences in other sports (e.g., Bennie & O’Connor, 2006; Drew, 2020; Pummell et al., 2008), the depth of findings now present in the tennis literature from the three empirical studies in this thesis, alongside previous JST research (Franck & Stambulova, 2019; Jensen, 2012) illuminate a key debilitating macrosystem influence of the JST process in tennis that has a serious impact on

players' individual experiences (within the microsystem). The collective alignment of the above described three themes (i.e., 'you can't do it alone', riding the 'mental grind', a race against time) with previous tennis JST literature (Franck & Stambulova, 2019; Jensen, 2012; Pummell, 2008) further evidences the importance of these factors in the JST process in tennis—offering value to aspiring professional players and associated stakeholders as relevant factors in the JST process for players to consider, prepare for, and/or develop ahead of professional pursuits.

In addition to findings that support previous research, this study identified novel findings within the JST process in tennis that expands our understanding of the transitioning experience. No previous tennis JST research has recognized the macrosystem influence of cultural-based opportunities and their implications for player development within the transition. By overlooking this, past studies have missed a potentially influential piece of the larger puzzle. This study highlighted how opportunities players received or were not able to access because of their nationalities impacted their individual experience of the JST process. For example, James received direct entry into a Grand Slam event despite not holding a ranking that would otherwise grant him entry because of his nationality and subsequently gained increased confidence and a large sum of prize money that was then invested back into his professional career through hiring a private traveling coach for tournaments. This experience differs starkly from Paulo and Lukas, whose nationalities meant they received far fewer opportunities for access to tournaments, training partners, and resources from their national governing bodies. Cultural factors in transitioning processes have begun to receive increased attention in recent years (e.g., Richardson et al., 2012; Ryba et al., 2012; 2016); however much of the work relates to migratory transitions of athletes (e.g., Richardson et al., 2012; Ryba et al., 2016) which differs from the cultural influences highlighted in the present study. Extant talent development literature investigating birthplace effects on reaching

professional status across sports relates more closely to this study. Early research findings in this area supported smaller cities as being more effective in developing talent than larger cities (Côté et al., 2006; MacDonald et al., 2009a; 2009b). However, later research has found variance in the optimal city sizes for producing Olympic athletes across countries (Baker et al., 2009) and within the same country across different sports (Lidor et al., 2014) suggesting that birthplace effects are buffered by broader sport-specific, sociocultural, and geographical factors and that findings should be contextualized by the sport being examined. Although it would be interesting to understand the context of birthplace effects in tennis, aligned with the focus of this research on the JST process and the proposition in this study that cultural opportunities or lack thereof impact players' developmental experiences in the JST, future research is needed to gain a more detailed understanding of the role that cultural-based opportunities play in players' JST experiences.

An additional novel finding from the present study is the macro-time influence of the COVID-19 pandemic on players' JST experiences. While research exists on the professional tennis world's response to COVID-19 (King, 2020; Slater & Watkins, 2021), there is no research to date on the impact of the COVID-19 tour freeze on the JST process in tennis. In this way, this study's findings which outlined the tour freeze as a chance to pause amidst the fast-moving, relentless pace of the JST process adds to the academic literature. A key question players faced with no tournaments to compete in and no prize money to receive during the pause related to their futures in the sport and the financial implications that the COVID-19 tour freeze had on their ability to continue. In the early months of the pandemic in 2020, the seven governing bodies of professional tennis (i.e., the ITF, ATP, WTA, Tennis Australia, Federation Francaise de Tennis, All England Club, and United States Tennis Association) raised in excess of \$6 million USD to create a 'Player Relief Programme' aimed at helping a total of approximately 800 ATP/WTA singles and doubles players (ITF, 2020a),

with the ITF later distributing an additional \$350,000 to players between 501-700 ATP/WTA singles and 176-300 ATP/WTA doubles (ITF, 2020b). Although these funds were designed to soften the financial blow of the tour pause, the financial implications of the pandemic during this pause still played a key role in players' decision-making around their future, with two players in this study, Sophia and Paulo, terminating their careers largely as a result of financial reasons, with other players using the tour freeze as an opportunity to increase financial backing before returning to the professional tour. Additionally, the impact of the lost time on tour due to the pandemic moving forward may lead to players experiencing even further pressure related to their 'race against time' in their professional careers. Despite some players' individual efforts to improve their financial situations during the pandemic and the governing bodies' efforts to limit the impact of financial disruption, there remains serious questions around the financial situation on tour and what can be done in the coming years to ensure that there is not a drop off of players as a result of the financial implications of the pandemic.

#### **6.4.1 Implications**

There are two key implications from this study. First, through being the first known study to adopt and provide support for the use of the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) in understanding the complexity of interacting individual, environmental, and time-based factors that shape athletes' lived JST experiences, this study offers a novel theoretical avenue for researchers to further expand our understanding of the JST process, as well as other proximal processes, both inside and outside of tennis. Second, through implementing an ecological approach, this study provided rich findings into complex factors in the JST process such as the impact of financial instability and cultural-based opportunities on the individual experience, the significance of sustained persistence to overcome concurrent environmental-based challenges and adversity, and the facilitative role

of developing a strong supportive structure of coaches, sport science support, family, friends, and partners to provide informational (e.g., tactical or technical advice), emotional (e.g., showing concern for the athlete), esteemed (e.g., boosting a person's feeling of self-esteem) and tangible support (e.g., assistance with finances) in the transitioning process. These findings provide valuable insight for aspiring professional players, their support networks, and other stakeholders within tennis into crucial factors that assist in the development of professional players and can be used to inform guidelines, policy, and educational programmes for aspiring professional tennis players. Additionally, these findings allow for comparisons of JST processes across sports to be completed to better understand how the JST process in other sports is similar or different from tennis.

#### **6.4.2 Limitations**

Due to the study's shared sample and dataset with Chapter 5, many of the limitations of this study overlap with the limitations stated in the previous chapter. Please refer to Chapter 5 to review those limitations. However, with the different methodological approaches used across the two chapters, there are additional limitations to this study. Despite having plans to interview nominated individuals within the support networks of professional players such as coaches, family, and other stakeholders, like has been done in previous research (e.g., Morris et al., 2016), these were disrupted by the COVID-19 pandemic. Data collection with players began in May 2019 and two full waves of interviews were completed before the pandemic paused the professional tour in March 2020. However, data collection with support networks was set to begin in the spring of 2020. As this time approached, many of the individuals who were set to contribute to the data collection were experiencing personal challenges within their families due to the pandemic. The decision was ultimately made to respect the challenging times the players' support networks were experiencing and not pursue this data. Gaining insight from key individuals closely linked to the players could

have provided broader insight into the JST experience. A second limitation of this study is that although the research questions and aims for Chapters 5 and 6 were different, an argument can be made that due to their shared sample and dataset that their findings may overlap. Accordingly, claims around the importance of certain factors because of their findings across two separate studies need to be taken with caution and consideration that this may be the case due to the shared dataset. Finally, although this study is underpinned and finds support for the suitability of the PPCT model in understanding the complexity of the JST process in tennis, it should be noted that it did not specifically test elements of the model. Instead, this study found support for the many interacting factors of the JST process that fit within the PPCT model and the importance of examining the JST process from an ecological perspective which acknowledges the interaction of individual, environmental, and time-based factors. However, future research can look to test specific elements of the model.

### **6.4.3 Conclusion**

This study provided evidence of the complex interaction of individual, environmental, and time-based influences in shaping the JST experiences of tennis players over a 15-month longitudinal period. It is the first known study to apply the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) to understand athletes' lived experiences of the JST process and through providing support for the model, offers theoretical significance to the literature by creating an opportunity for future research to use the model to further expand our understanding of the JST process both inside and outside of tennis. Additionally, it added empirical significance to the literature through its detailed, holistic, ecological approach to understanding an understudied area of the literature—the JST process in tennis. Finally, through providing further evidence for many key previous findings within the limited tennis JST literature like the impact of financial instability on the individual experience, the significance of sustained persistence to overcome concurrent environmental-based challenges



and adversity, and the facilitative role of developing a strong supportive structure of coaches, sport science support, family, friends, and partners, the study increasingly solidifies support for key influential factors within the JST process and offers practical insight and implications for aspiring professional players, their support networks, and other stakeholders within tennis that can be used to assist in player development.

# **Chapter 7**

## **General Discussion**

## 7.1 Introduction

The purpose of this thesis was to investigate the JST process in professional tennis. Within this purpose, there were three specific aims. The first was to understand the lifestyle challenges professional players experience on the professional tour. Despite research highlighting the financial implications of professional tennis careers (e.g., ITF, 2017) and it taking increasingly longer for players to reach the top 100 after gaining their first world ranking (e.g., Gallo-Salazar et al., 2015), there was limited research on the lifestyle challenges of professional tennis players (Jensen, 2012; Pummell, 2008). Moreover, this small literature base involved small samples or samples limited in nationalities and gender. Second, the thesis aimed to explore the lived experiences of players' JST processes as they occurred in real time to identify different narrative typologies. Aside from this thesis, only one narrative study exists within professional tennis (Franck & Stambulova, 2019) and while it showed the value of narrative research and informed the thesis, it only investigated the experiences of a single tennis player. The third and final aim of this thesis was to adopt an ecological approach to investigate the interaction of individual, environmental, and time-based influences of tennis players' JST experiences. Although ecological approaches have been applied to athlete career research in recent years (e.g., Cupples, 2020; Henriksen, 2010), no research had applied the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) to understand the interaction of individual, environmental and time-based factors on athletes' lived JST experiences.

To achieve these aims, Study 1 investigated the lifestyle challenges of professional tennis players on the professional tour across a large and varied sample, Study 2 examined seven professional players' JST experiences longitudinally and provided three narrative typologies of the JST in tennis, and Study 3 applied the PPCT model to understand the interaction of individual, environmental, and time-based influences on tennis players' JST

experiences. This chapter will first provide a synthesis of the key findings from the three empirical studies of this thesis, before it discusses the implications of these findings, identifies strengths and limitations of the thesis, offers recommendations for future research, and provides a conclusion to the thesis.

## **7.2 Summary of Key Findings**

Across the three empirical chapters of this thesis, a wide range of findings were generated. While the findings from each study were self-contained, they sequentially provided evidence which built upon each other to provide a holistic, ecological understanding of the JST process into professional tennis. This section will highlight this understanding through a synthesis of the findings of this thesis.

A main finding across this research project is the presence of coexisting and interacting individual and environmental-based factors which influence players' lived experiences and development on the professional tennis tour. This was a common theme across each study and provided evidence for the value of adopting ecological approaches to better comprehend the complexity of professional tennis players' lived experiences in the professional game. First, Chapter 4 illustrated the ranging and interacting individual-based (e.g., physical and mental fatigue, the weight of expectation) and environmental-based lifestyle challenges (e.g., financial imbalance of the professional tour, structural-caused instability), which together inhibited many of players' basic needs, motivation, and progression on the professional tour. Next, through investigating players' lived JST experiences in Chapter 5, findings highlighted that despite the importance of individual characteristics (e.g., resilience), no individual characteristic on their own can counteract the very real and influential impact of environmental-based challenges (e.g., financial instability)—leading to the conclusion that individual characteristics are only a piece of a larger ecological puzzle in navigating the JST process in professional tennis. In essence, the

focus of JST investigations should not solely be on the players and their ability to develop individual characteristics to navigate the transition, but additionally on wider environmental factors, like the development of supportive structures and asking tough questions of governing bodies around how the JST process pathway can be improved. Finally, informed by the findings of Chapters 4 and 5, and underpinned by the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005), Chapter 6's findings illustrated the interaction of ranging individual, environmental, and time-based factors in influencing players' lived JST experiences. Specifically, findings highlighted the importance of players' ability to overcome the concurrent challenges of the 'mental grind' on the professional tour (individual factor), while facing the financially induced 'race against time' to succeed on tour before running out of funds (environmental factor) amidst the COVID-19 tour pause (time-based factor). Collectively, this thesis highlighted the complexity of the JST process in tennis and the coexisting and interacting individual, environmental, and time-based factors that shape developmental processes. By adopting an ecological theoretical framework, this thesis offered a less individualised focus that over-responsibilises players for wider contextual factors that impact their experiences and widened the scope of JST research in tennis by providing evidence for the suitability of the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) in understanding the complexity of the JST process. This creates an opportunity for future research to similarly adopt the model to comprehend the interaction of individual, environmental, and time-based influences on the complex developmental process of athletes within this transitional period, as well as other proximal processes.

A second key finding from this thesis was the significance of players possessing supportive team structures to assist in their navigation of the JST process. With the ranging lifestyle challenges identified in Chapter 4 (e.g., the social and psychological impact of living a nomadic lifestyle—which led to players' difficulty maintaining relationships and

loneliness), it is unsurprising that players in Chapters 5 and 6 detailed the value of possessing supportive team structures consisting of coaches, sport science personnel, family, and friends to provide emotional, esteemed, informational, and tangible support as a key resource in the JST process. This type of network can provide players with a sense of connection in their nomadic lifestyle—a love and belonging need that was found to be inhibited on the professional tour in Chapter 4. Within Chapter 5, the strikingly contrasting experiences of James and Sophia provided evidence for the significance of supportive structures in players’ transitioning experiences. For James, his supportive structure was a key contributor to his steady progression on tour providing him with an established training environment with well-equipped coaches and sport science personnel, high-quality training partners, and social support from both the coaches and sport science personnel in the training environment and family and friends outside of it. In this way, James’ structure allowed for many of his psychological, safety, love and belonging, and esteem needs to be met on the professional tour, leading to sustained motivation and a drive to continue striving for self-actualization moving forward in his professional career. In contrast, Sophia lacked a supportive structure mainly due to financial limitations—leaving her without coaches and sport science personnel, or a developed training environment, to assist in the development of her game. This led to many of Sophia’s needs remaining unmet, including financial and employment security (safety needs) and sense of connection and friendship (love and belonging needs), and to an inhibitory effect on her progression, resulting in a deterioration of her motivation and ultimate career termination. The importance of supportive team structures was further highlighted by the Chapter 6 theme—‘you can’t do it alone’—with players emphasizing the near impossible nature of navigating the JST process without a support team.

Interestingly, the scope of the significance of supportive team structures in the JST process goes beyond performance-related factors. Chapter 5 findings proposed that narrative

experiences of tennis players defined by social support and strong relationships may serve as a protective mechanism against mental ill-health consequences because of their long-term sustainability in being underpinned by factors within players' control. This differs from narrative experiences governed by uncontrollable factors like performance outcomes, which are unsustainable long-term as players' age increases and performance gradually decreases. Although further research is needed to evidence this proposition, Chapter 5 corroborates previous arguments from Carless and Douglas (2012) and provides early indications that supportive team structures can offer mental health benefits to professional players in their JST experiences.

A third major finding from this thesis relates to the financial instability of the professional tour and the resulting financial pressures players experience in their JST experiences. This was initially found in Chapter 4 where financial stress hung like a dark cloud over players' professional existence, leading to doubt over the feasibility of their continued involvement on tour and challenging their needs for employment and financial security. Chapter 5 further evidenced players' doubt over the feasibility of professional careers due to the financial strain Sophia experienced leading to her unmet needs for employment and financial security, which ultimately played a key contributing factor in her demotivation and subsequent career termination. Finally, Chapter 6 highlighted the key macrosystem influence of financial inequality on the professional tour and the impact it has on players' individual experiences within their microsystems through the urgency it elicits to find solutions to keep their professional pursuits alive. Collectively, the studies in this thesis illustrated the significant role that financial instability plays on the professional tour and the importance of players developing an understanding of this key barrier, as well as financial literacy to assist with career planning. Additionally, these findings pose serious questions around structural factors in tennis, particularly related to prize money distribution and the

implications that financial inequality on the professional tour has on the livelihood of players throughout the entire professional system.

A final central finding of this thesis is the relevance of each study's findings in providing practical implications for aspiring professional players, their support networks, and other stakeholders within tennis to assist in the preparation of professional pursuits, as well as the findings' suitability to inform guidelines, policy, and educational programmes to assist in player development in tennis. Chapter 4 provided a detailed understanding of the ranging lifestyle challenges players experience on the professional tennis tour (e.g., physical and mental fatigue, financial imbalance of the professional system, the social and psychological impact of living a nomadic existence, the weight of expectation). Although this study did not exclusively sample players within their JST processes, through gaining valuable insight from a large, varied sample of professional players, it provided context on the type of lifestyle challenges a tennis player may experience in their JST, offering aspiring players a valuable opportunity to better understand the complexity of the challenging environment they will enter when beginning their professional pursuits. Next, through investigating the lived JST experiences of seven professional players, Chapters 5 and 6 offered ranging practical insights into the JST process in professional tennis that provide aspiring players, their support networks, and other stakeholders with valuable knowledge of factors to focus on, prepare for, and develop before professional pursuits, like the impact of financial instability on the individual experience, the significance of sustained persistence to overcome concurrent environmental-based challenges and adversity, and the facilitative role of developing a strong supportive structure of coaches, sport science personnel, family, friends, and partners to provide emotional, esteemed, informational, and tangible support in the transitioning process. Collectively, the findings of this thesis offer applied significance that can be used to inform



player development in tennis both through the education of players, coaches, and other support networks, as well as by informing player development guidelines and policy.

### **7.3 Implications of Key Findings**

#### **7.3.1 Theoretical Implications**

This thesis provides key theoretical implications that can influence future investigations into the JST process and similarly complex issues within the sport psychology literature. The theoretical framework used to underpin the present thesis included the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) and Maslow's hierarchy of needs (1943; 1954). Although evidence of the use of the PPCT model exists in the sport psychology literature (e.g., Cupples, 2020; Dorsch et al., 2015; 2016; Krebs, 2009; Moulds et al., 2022), this thesis provided the first use of the model to understand the complexity of the lived experiences of the JST process. Similarly, while Maslow's hierarchy of needs (1943; 1954) had been used sparingly in the sport literature (e.g., Andrew et al., 2016; Bede, 2021; Homan, 2021; Nikitina, 2021), no previous research had adopted the theory as a motivational lens to better understand the JST process. The suitability of both models evidenced throughout this thesis provides support for their use as a novel theoretical avenue for researchers to adopt in the future to continue expanding this area of the literature.

A key strength of the theoretical framework of this thesis is that it provided a less individualized focus that over-responsibilises players for wider contextual factors that impact their experiences and allowed for the identification and examination of key structural issues that differentially impact players in the JST process. In Chapter 4, it was argued that the lifestyle challenges that players experience are multifaceted in that there are both individual-based challenges (e.g., physical and mental fatigue, the weight of expectation) and environmental challenges (e.g., financial imbalance of the professional system, structural-caused instability), and that not all challenges players face can be solved through individual

agency. Then, in Chapter 5, aligned with Ungar's (2012) social-ecological interpretation of the resilience literature, I argued that although resilience is a crucial individual factor in the JST process that a player can only display so much 'individual resilience' before requiring assistance from their environment to allow for more positive developmental outcomes. In other words, an individual's resilience is only one piece of a larger ecological puzzle. Finally, in Chapter 6, the PPCT model allowed for the interaction of these factors to be investigated and found that, as an example, the macrosystem influence of financial inequality and instability in the professional system interacts with the individual experience within the microsystem by putting pressure on players to reach the highest tier of the tour to meet key needs like financial security and employment security. It was argued that research into the JST process that fails to adopt ecological approaches risk omitting key environmental and time-based influences and being an incomplete picture, or more simply, research out of context. Through emphasizing the interaction of key environmental challenges with the individual's experience of the JST process, this framework possesses a valuable ability to holistically understand the complexity of the JST experience of tennis players.

In Chapter 2, I proposed that Maslow's hierarchy of needs (1943; 1954) could complement the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) in providing a thorough theoretical framework. The main logic for this argument was that although the PPCT model adopts a holistic, ecological perspective that investigates varying influential contexts within an individual's development, it does not encompass a motivational aspect. With the JST process having been argued as the most difficult within-career transition of athletes' careers (Stambulova, 2009), a framework without a motivational lens would be lacking. Throughout this thesis, Maslow's hierarchy of needs (1943; 1954) allowed for a unique understanding of the impact that unmet needs had on players' motivation on the professional tour. In Chapter 4, the model allowed for a contextualized understanding of why

players' lives on the professional tour were so difficult. As Table 4.1 outlined, many of players' key needs were inhibited on each level of Maslow's hierarchy (1943; 1954). Specifically, players' needs for financial security, job security, sense of connection, friendship, feelings of achievement, recognition, status, and rest were unsatisfied, leading to implications for players' progression on tour and mental health. Then, in Chapter 5, the financial limitations that plagued Sophia's career and the loneliness and lack of connection she experienced on tour led to key safety (i.e., financial security, employment security) and love and belonging needs (i.e., sense of connection, friendship) remaining unmet on tour. Interestingly, throughout the data collection process for Chapter 5, Sophia achieved strong results on tour and won several professional events, reached a career high ranking, and moved up both the singles and doubles rankings list throughout. However, her unmet safety and love and belonging needs ultimately led to her demotivation and career termination. This was a clear example of how Maslow's hierarchy of needs (1943; 1954) helped to understand players' motivation within their JST experience in tennis. Additionally, the importance of key needs on tour (e.g., financial security, employment security, sense of connection, feelings of achievement) were reflected in the findings of Chapter 6. Collectively, Maslow's hierarchy of needs provided a useful motivational lens alongside the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) throughout this thesis.

Despite the usefulness of the hierarchy of needs in this thesis, I would argue that it is best applied alongside the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) instead of as a standalone theoretical underpinning. With the scope of the PPCT model through its four constructs, it better illustrates the complexity of a process like the JST in tennis than the hierarchy of needs. Motivation is a key component of any elite sporting endeavour, but it is not the whole thing. In this way, the grouping of the two models together provides a powerful, holistic, ecological perspective that encompasses the many factors (i.e.,

individual, environmental, and time-based) that influence complex processes, while also housing a practical motivational lens that reflects this ecological approach of the PPCT model through its range of individual and environmental related needs. Answering the calls of Drew et al. (2019) for an expansion of theoretical perspectives in the JST literature, this ecological framework adopted in the present thesis can help to expand our understanding by placing much needed emphasis on key environmental and time-based factors, alongside individual factors in developmental processes.

### **7.3.2 Applied Practice Implications**

The research conducted for this thesis was motivated by the need to better understand the complexities of the JST process in tennis to influence applied practice. By gaining insight into the lifestyle challenges of professional tennis players (Study 1), identifying three narrative types of players' JST experiences (Study 2), and providing an understanding of various individual, environmental, and time-based factors that coexist and interact to shape the JST experiences of tennis players (Study 3), this thesis offers valuable insight into the JST process in tennis that can assist aspiring professional tennis players, their support networks, talent development centres, governing bodies, and other stakeholders within tennis to prepare players for professional pursuits. Specifically, this information provides sport psychologists with an opportunity to develop educational programmes to support the development of aspiring professional tennis players. Although it was beyond the scope of this thesis to develop, implement, and measure the impact of an educational programme intervention, the findings from the three empirical studies in this thesis provide a wealth of knowledge that could help to inform the development of an intervention. Additionally, through the structural factors it identified as influencing the individual experience of the JST process, this thesis can offer guidelines to influence policy for stakeholders in the sport. With my post-PhD plans to work as an applied sport psychology consultant and within the sport of tennis, I intend to

inform future work with the findings of this thesis. One way I envision doing this is through the development of an educational programme intervention for aspiring professional tennis players to prepare them ahead of their JST experiences. Previous research has argued that knowledge around the transition process improves athletes' readiness for the transition (Drew, 2020; Morris et al., 2016; Pummell & Lavallee, 2019). The words of Jack from Study 2 and 3 in this thesis also strikes a chord around the significance of educational programmes ahead of JST experiences:

There's so many basic things—or bits of information—they could give that would help, like, if you just talk about the recovery, the psychology, sleep, nutrition, managing your finances, managing a schedule, training loads, stuff like that. I mean, there's zero reason to not be given that information because once you know it, it's fairly basic...but if it takes you a year or three years to figure that all out, well that's just kinda wasted time. So yeah, I mean 100% there should be an easy way to access that information.

Despite the increasing work detailing the JST experience across sports, there remains very limited literature on interventions that aim to address these challenges (e.g., Drew, 2020; Pummell & Lavallee, 2019). In developing an educational programme intervention from the findings of this study in the future, it will be important to learn from these two existing intervention studies. Pummell and Lavallee's (2019) intervention was in tennis, and naturally provides more context than Drew's (2020) intervention on the JST process in track and field. However, before examining the tennis specific intervention, it is worth outlining valuable lessons from Drew's (2020) intervention. By developing a contextualized understanding of facilitative and debilitating factors of the JST process in track and field through a series of studies in their thesis, Drew (2020) incorporated key JST factors into their intervention—for example, social support was regularly referenced as a facilitative factor, so the intervention

included not just information around social support and how to develop supportive structures, but also a mentoring program which could help connect athletes to role models in their sport. Further, based on participants' wish for informational support on topics like general education on the transition, nutrition, psychology, physiology, time management, financial management, and recovery/injury prevention, Drew (2020) included a wide variety of topics in the programme—with a focus beyond psychology and performance factors. In this way, Drew (2020) adopted a *whole-person* approach (Wylleman et al., 2013) that developed skills and coping strategies that could assist athletes in the JST process both on and off the track. Finally, due to the importance of athletes' relationships with their parents and coaches in professional sporting pursuits (Cranmer & Sollitto, 2015; Knight et al., 2017), parents and coaches were encouraged to take part in the intervention and were provided with information on how they could best support athletes and how their role to the athletes could change throughout the JST process. Results showed that the intervention was successful in both preparing and motivating athletes for the transition, had a positive influence on athletes' perceptions of the transition, and developed coping strategies that could facilitate the transition. There are definite strengths of Drew's (2020) intervention that could support the development of future interventions—however, due to the follow up interviews taking place only one to two weeks after the intervention ended, measuring the long-term effect of the intervention and whether it impacted athletes' ability to make the transition into senior track and field was not possible.

With a specific focus on the JST process in tennis, Pummell and Lavalley (2019) developed, implemented, and measured the effects of an educational intervention consisting of seven (four males, three females) national and international junior level tennis players in the United Kingdom. The intervention focused on developing resources, knowledge, and readiness to cope with the JST and included ten sessions on topics like: introduction to the

JST, performance and lifestyle adjustments, mental skills, professional behaviours, independence/responsibility, scheduling of tournaments, transition preparation, setbacks, commitment and lifestyle balancing, and stages of the transition. Based on previous suggestions of the benefits of junior athletes being provided regular opportunities to observe and interact with senior athletes (Morris et al., 2015; Stambulova et al., 2017), pre-recorded videos of role models (i.e., current professional tennis players) discussing the programme's range of topics were made. Videos were chosen because of the demanding travel schedule of professional tennis players making it difficult to arrange in-person interaction. In a similar approach to Drew (2020), Pummell and Lavalley (2019) also adopted a holistic approach (Wylleman et al., 2013) that focused on both on and off-court factors across athletes' varying developmental levels (i.e., athletic, psychological, psychosocial, academic/vocational, financial) within their JST experiences. Results of the intervention illustrated that players found the programme highly useful through its ability to increase knowledge around the transition and develop coping skills that could be used in the transitioning process in the future. However, as was the case with Drew's (2020) intervention, there was no long-term follow-up measure taken throughout the athletes' JST processes, and therefore no way to understand the impact of the intervention on transitioning experiences and outcomes.

The JST educational programme interventions that exist to date provide key learnings for future interventions. First, through adopting holistic, *whole person* approaches (Wylleman et al., 2013) that focus on factors across varying developmental levels in athletes' lives (e.g., athletic, psychological, psychosocial, academic/vocational, financial), the interventions both found athletes to be better prepared for their transitioning experiences after taking part in the programme. Second, both interventions adopted and found support for the use of role models in delivering JST interventions. With aims of developing an educational programme based on the findings of this thesis in the future, the next paragraph will outline thoughts around the

content and design of an intervention based on the findings of this thesis and previous JST intervention work (Drew, 2020; Pummell & Lavallee, 2019).

Many of the key discussion points in the Pummell and Lavallee (2019) intervention overlap with findings from the present thesis. For example, this thesis similarly found the importance of the following factors in the JST process: the development of support structures, players coping with setbacks, taking increased responsibility, displaying independence, planning logistical elements of a professional career, managing travel and lifestyle sacrifices, off-court performance factors like nutrition, and financial challenges and considerations. In this way, an educational programme intervention based on the findings of the present thesis would cover a wide range of factors that Pummell and Lavallee (2019) included in their intervention. However, due to the significance of certain factors of the JST process identified in the present thesis, the weight in which certain topics were discussed might be adjusted. For example, the macrosystem influence of financial inequality and instability within the professional tour and the way this interacts and shapes the individual experience of the JST process is a major finding of the present thesis. Additionally, the significance of developing supportive team structures around the player in the JST process is a similarly crucial factor. Accordingly, it is believed that these factors should carry more weight in a tennis JST intervention than they were perhaps given in the Pummell and Lavallee (2019) intervention, where each week discussed a different topic. Although this allowed for several topics to be covered throughout the programme, it may dilute the importance of certain key factors, like the financial reality of professional tennis and the development of support structures, due to a commitment to fit more topics in. An additional difference from the Pummell and Lavallee (2019) intervention to one that could be developed from the findings of this thesis, but aligned with Drew (2020), is the involvement of parents and coaches in the intervention. Due to the importance of support structures found in this thesis and literature which evidences the



significance of athletes' relationships with coaches and parents during pursuits in elite sport (e.g., Cranmer & Sollitto, 2015; Knight et al., 2017), there is reason to believe that including parents and coaches in an intervention alongside the athlete could be beneficial. By completing the programme together, tennis players and coaches and parents can develop a shared understanding of the JST process, as well as information on how to best support each other in the process, that could then facilitate the athletes' JST process. Finally, without follow-up measures to the interventions throughout athletes' JST experiences, it is hard to understand how helpful previous interventions are in facilitating the JST process (Drew, 2020; Pummell & Lavalley, 2019). In this way, a gap for future research exists in conducting a longitudinal study that includes the implementation of a JST educational intervention with follow-up measures during athletes' JST process over time.

### **7.3.3 Policy Implications**

With the ecological focus of this thesis, it is only fitting to additionally include thoughts on policy implications from the findings. In Chapter 5, drawing from Ungar's (2012) social-ecological interpretation of the resilience literature that emphasized the role of an individual's physical and social ecology in addition to individual agency in exhibiting resilience, I argued that although resilience is a crucial individual factor in the JST process, tennis players can only display so much 'individual resilience' before requiring assistance from their environment to allow for more positive developmental outcomes. It is within this stance, and through the key structural issues of the professional tennis tour identified throughout this thesis, that I propose questions need to be asked to tennis bodies about the JST process in the sport.

The strongest and most impactful macrosystem influence of the JST process identified in this thesis was the financial inequality and instability of the professional tennis tour. Questions over players' long-term feasibility of playing on tour arose from the financial

challenges that were evident in players' experiences across all three empirical studies, potentially most clearly through the 'a race against time' theme in Chapter 6. This theme highlighted the significance of professional tennis bodies' (i.e., macrosystem) influence on the individual experience of the JST with players displaying an urgency and desperation to make decisions with hopes of reaching the top of the sport to financially save their careers. These findings around financial inequality and instability in the professional game are not unique to this thesis. Previously, JST research by Jensen (2012) and Franck and Stambulova (2019) highlighted the extensive costs of a professional tennis career and the most recent ITF Pro Circuit Review (2017) highlighted that the top 1% of players earned 60% and 51% of the prize money distributed on the men's and women's tour in 2013, respectively, with only 1.8% of male and 3.1% of female players earning a profit. Collectively, these findings beg the question: what steps can be taken by the ITF, ATP, and WTA to improve the financial structure of professional tennis?

After uncovering the dire financial situation within the sport in the ITF Pro Circuit Review (2017), the ITF restructured the lowest level of tournaments in the professional structure so that \$10,000 and \$15,000 events became \$15,000 and \$25,000 events, respectively. However, in a sport with as dramatic a distribution gap between the highest level and lowest level professional players, adding \$5,000 or \$10,000 to be spread across an entire tournament may not be enough of a step to tackle the very real implications that financial inequality and instability has on the livelihood of the majority of players in the professional system. It should be noted that the ITF World Tennis Tour Player Panel was created in 2020 to provide a forum for professional players to present feedback, engage in discussion, and provide input on how the ITF tour is run (ITF, 2020c). There is a men's and women's panel, each consisting of seven players with a variety of world rankings and nationalities to ensure broad representation. Presumably, this medium of communication

between players and the ITF provides opportunities to discuss the financial reality that players face on tour—however, it is hard to know how much progress is being made on this front. At the time of writing this chapter in 2022, the prize money at events on the ITF World Tennis Tour where transitioning tennis players begin their professional pursuits remains the same as it did after the changes in 2017. With regards to needed policy change within the professional tennis structure, the financial inequality and instability that players experience in their transitioning experience forms one of the most pressing issues and is worthy of considerable attention.

A second policy issue identified in this thesis relates to findings around cultural-based opportunities in Chapter 6. In a process like the JST in tennis where players are typically struggling financially and trying to reach the top of the sport before they run out of resources, cultural-based opportunities can play a key role in the process. In Chapter 6, the experiences of James who received a wild-card into a Grand Slam event because of their nationality led to a large sum of prize money that was then reinvested into his career through hiring a traveling coach for tournaments highlighted the fortune that some players receive due to their nationalities. Players like Lukas and Paulo, who were from smaller, less developed tennis countries struggled to even find access to tournaments and other professional players to train with in their home countries. The most recent ITF Global Tennis Report (2021) has shed light on several key culture-based findings. First, while over 87 million people were estimated to play tennis worldwide, 48% of players came from two countries, while 73% from 6 countries. Further, over 50% of players in the men's top 100 in 2019 came from 7 countries, with over 50% of the women's top 100 coming from 8 countries. Finally, comparing one of the more developed tennis countries to one of the less developed tennis countries of players in Study 2 and 3 in this thesis, the ITF Global Tennis Report (2021) found that there were more than 56 times as many tennis clubs and 40 times as many tennis players in the more developed

country. Despite these wide-ranging statistics around tennis development across countries, we still have a limited understanding of how cultural-based opportunities impact players transitioning experience into the professional structure. In Chapter 5, I proposed that it was not necessarily the best tennis players who can be successful at navigating the JST process and progress to the top of the sport, but very good tennis players who possess the resources that allow them to meet key basic needs (e.g., financial security) throughout the process. In their sport ethnography of the JST process in tennis, Jensen (2012) similarly stated that:

From my time on the Futures Tour, I realized that those players who were better connected with tennis organizations, coaches, clubs, and management had a much better chance of success. Players without such connections often face an uphill battle in terms of finding the necessary support and resources to make the reality of staying on Tour even a possibility, despite having equal talent, ability, and desire as other players.” (p. 188).

It is a shame that connections to organizations and other resources play as big a role as they do on the professional tour, inhibiting many capable players’ ability to reach the highest levels of the sport. Moving forward, questions need to be asked around how in an expensive sport like tennis we can create more opportunities within more countries around the world to improve access and representability.

One final point on policy implications from the findings of this thesis relates to ATP and WTA player development programmes (i.e., ATP University, WTA Player Development Program). These programmes provide important opportunities for players to better prepare themselves for the challenges of the tour lifestyle through covering a range of topics like tour lifestyle, finances, and health and wellness. As evidenced by my stance in the applied practice implications section, I believe there is great value in educational programmes like these for aspiring professional players. However, ATP University and the WTA Player

Development Program are only offered to players who have ATP or WTA player membership and meet certain ranking requirements (i.e., ATP Top 200 singles or Top 100 doubles, WTA Top 750 singles or Top 200 doubles) (ATP, 2021; WTA, 2021). Courses like these could be extended to all full-time professional players across the ATP, WTA, and ITF to help players adjust to tour life, as this is not something that only highly ranked professional players require. If anything, players are more likely to require this type of information and training earlier on in their development, within their JST experiences, when they have not yet gained the results needed to reach the rankings that are required to enroll in these courses.

#### **7.4 Strengths**

This thesis had several strengths in addition to those already discussed in each of the empirical chapters. First, it provided a novel theoretical framework for research within the JST literature and fulfills Drew et al.'s (2019) call for the expansion of theoretical approaches in the area by using the PPCT model and Maslow's hierarchy of needs. By finding support for this theoretical framework in understanding the complexity of the JST process, the thesis offers researchers alternative theories to use to expand their understandings of the JST process in the future. Additionally, the rigour and systematic approach through adopting a theory driven methodology has enhanced the generalizability of the findings to potentially apply this method to other sports and in similarly complex processes. Second, this thesis offered a rich, qualitative understanding into the understudied area of the JST process in professional tennis. Prior to the thesis, this area had been sparsely studied and required qualitative research to provide baseline knowledge to inform future research in the area and applied practice. Through its use of two qualitative, exploratory case studies, this thesis provided valuable depth to this area of the literature. A final strength of this thesis was the longitudinal approach that Studies 2 and 3 adopted. Despite the JST having been identified as a dynamic, non-linear, continually changing process (e.g., Drew, 2020; Franck &

Stambulova, 2019; Morris, 2013) and the longstanding calls for longitudinal research in the area, only limited numbers of longitudinal studies exist. By adopting a longitudinal approach in this thesis, the studies were able to better understand the experiences of players as they unfolded over time and any changes that occurred in the process.

### **7.5 Limitations**

There are also some limitations to this thesis worth noting. First, as outlined in the COVID-19 disruption statement submitted alongside this thesis, I had planned and received ethical approval to interview nominated individuals within the support networks of the professional players in Study 2 and 3, such as coaches, family, and other stakeholders, like has been done in previous JST research (e.g., Morris et al., 2016)—but these interviews did not end up being possible. Speaking with stakeholders closely related to the players could have provided broader insight into their JST experiences and furthered the understanding gleaned from this thesis. Second, all players sampled for the longitudinal segment of the empirical work (Study 2 and 3) pursued collegiate tennis careers before their professional careers, meaning they began their careers in their early to mid-20s instead of directly after junior tennis at age 18. The JST experiences of younger players who have not played collegiate tennis prior to professional tennis may differ. Finally, although there was logic for sampling players within the first four years of their professional careers (ITF, 2017; Stambulova, 2009), future research may benefit from identifying more specified periods based on time (i.e., first six months, first year on tour) or ranking-based transitions (i.e., from 1000 to 500, from 500 to 100) to provide a more nuanced focus on potential sub-transitions within players' overall JST experiences.

## 7.6 Suggestions for Future Research

There are several directions for future research based on the findings of this thesis. First, future JST research can adopt the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) and hierarchy of needs (Maslow, 1943; 1954) to provide a similarly ecological understanding of the complex developmental process of athletes within their JST experiences outside of tennis. Similarly, future research can use this ecological perspective to understand the interaction of individual, environmental, and time-based factors in shaping developmental processes in other transitioning experiences, like from high school to collegiate sport, as well as developmental processes in athletes' lives outside of transitions. Second, although football, ice hockey and track and field have an established base of literature around the JST process, sports outside of these have received less research attention that can be expanded upon. With the challenges that athletes face in the JST varied according to sport (Drew et al., 2019), there is an importance to having broad representation of sports in JST research. Future research can aim to expand our understanding of the JST process across sports. Third, with limited JST narrative research and the detailed understanding a narrative approach provided of the JST experience in tennis in Chapter 5, future research can similarly adopt a narrative approach to better comprehend the depth and messiness of athletes' JST processes across sports. Fourth, future research can look to expand on findings into the mental health of transitioning tennis players and athletes in other sports. The time period that athletes typically make the JST overlaps with peak onset of mental health disorders in the general population (Jones, 2013). When this sensitive developmental period is combined with the unique stressors athletes experience in the JST process, this can become a very challenging period for athletes. However, limited research related to athletes' mental health during the JST process exists. In the coming years, this is an area that would benefit greatly from being expanded.

Fifth, because research into the JST process requires gaining access to a generally hard-to-reach population, future research can similarly adopt more creative means of accessing data, like in Chapter 4 of this thesis where a social media platform was used. Although it is integral to verify the quality of the data and its suitability in answering the study's research questions, this approach can expand opportunities into researching elite athletes and sport through providing more accessibility. Sixth, and focusing specifically within tennis, future JST research can look to understand any potential differences in the JST process between players who transition directly after their junior career at age 18 versus those who complete collegiate tennis careers and start on the professional tour in their early 20s. With the ongoing debate of the pros and cons of choosing either route, research comparing the transitioning experiences of those who directly turned professional and those who played collegiate tennis first could provide very interesting and useful insight. Continuing within tennis-specific future research ideas, there is scope to further investigate the impact and outcomes of players' possessing supportive team structures in their JST experiences both from a performance and mental wellbeing standpoint. This thesis provided general evidence for the importance of social support and proposed that narrative experiences defined by social support may possess protective factors against mental ill-health consequences, but future research can more specifically measure these outcomes.

The increasing presence of JST research across sports in recent years is an exciting prospect that is assisting researchers, applied practitioners, coaches, athletes, and other stakeholders with understanding this difficult experience and providing practical knowledge to help influence the development of athletes positively. Although it is exciting to see researcher's growing interest in this area of the literature, there is still much room to grow. Within the next five to ten years, my best hopes are that some of the above recommendations



for future research are implemented and we can continue to grow this important area of research even more than we have in the last few decades.

## **7.7 Conclusion**

In conclusion, the present thesis achieved its main purpose of expanding the understanding of the JST process in tennis. This was achieved through meeting the aims of each respective empirical chapter: to gain an understanding of the lifestyle challenges that professional tennis players experience in their lives on the professional tour and the impact it has on their progression and mental health (Study 1); to comprehend the lived experiences of players JST processes over a 15-month period (Study 2); to investigate the interaction of individual, environmental, and time-based factors that shape the JST experiences of professional tennis players (Study 3). In doing so, this thesis offered empirical, theoretical, methodological, and applied practice significance. Empirically, the thesis provided a detailed, qualitative understanding into an understudied area of the research. Theoretically, by adopting and finding support for a novel theoretical framework consisting of the PPCT model (Bronfenbrenner & Morris, 1998; Bronfenbrenner, 2005) and Maslow's hierarchy of needs (1943; 1954) to ecologically understand the JST process in tennis, this thesis delivered new theoretical avenues for researchers both in and outside of the JST literature to expand their understanding of similarly complex processes. Methodologically, this thesis used a social media platform to gain a rich understanding of the professional tennis tour, provided further evidence of the benefits of narrative research to understand the JST process, and added to the limited number of longitudinal studies in the JST literature. Finally, through its detailed ecological understanding of the JST process, the present thesis offered applied practice significance through the valuable insight and practical implications it includes to assist aspiring professional players, their support networks, and other stakeholders within tennis in preparing for tennis players' professional pursuits.

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## **Appendix A: Participant Information Sheet (Chapters 5 and 6)**

You are being invited to participate in the following research because you are a professional tennis player competing on the ITF World Tennis Tour. Please read through this form to familiarize yourself with why the research is being conducted and what it will entail. If you have any questions, please feel free to contact any member of the research team using the details provided at the end of this form.

### **Who is conducting this research?**

This research is being conducted by PhD student Saul Shrom, alongside Dr. Jennifer Cumming, and Dr. Brett Smith from the School of Sport, Exercise, and Rehabilitation Sciences at the University of Birmingham.

\*Note: Dr. Sarah-Jane Fenton joined the supervisory team after Dr. Brett Smith left University of Birmingham in the middle of this PhD.

### **What is the purpose of the study?**

The purpose of this study is to gain a deeper understanding of the transition into professional tennis. The study specifically aims to gather information around the importance of professional players' environments, in addition to other contributing psychological factors which lead to successful transitions. The findings of the study will be shared with the tennis world as a way to assist aspiring professional tennis players with their transition into the professional game.

### **What will happen if I choose to take part? What do I need to do and when?**

If you choose to take part, you will first complete the *Informed Consent Form*. After this, you will be asked to partake in a total of three interviews over the course of a twelve-month period. The interviews will be completed roughly 5-6 months apart from each other. They will be planned for a time that is most convenient for you, and will be done over FaceTime/Skype or the phone. Interviews will last roughly 45 minutes to 1 hour.

Additionally, it is the researchers' hope that members of your support team, such as coach(es), parent(s), physical trainer(s), sport psychologist(s), training partner(s), friend(s) etc. will be able to take part in two interviews over the course of the twelve-month period.

### **Will I receive any compensation for taking part in the study?**

Yes. As a token of our appreciation, you will receive financial compensation of £75 for taking part in the study.

Additionally, participants will be offered four months of free sport psychology services from Saul Shrom upon completion of the study (up to 8 x 1 hour sessions), as another gesture of

thanks for your involvement in the study.

### **Do I have to take part? Can I change my mind once I have started?**

Taking part in this research is entirely voluntary. If you agree to take part in the research, you will sign an informed consent form. However, after this is signed, you are still free to withdraw from the study any time before Jan 31, 2020. If you do wish to withdraw at any point, please let us know by using the contact details at the end of this information page. In this instance, any data that you may have already provided will be destroyed.

### **Will my taking part in this study be anonymous and will my data be kept confidential?**

Due to the nature of the study, which includes one-to-one interviews, it is impossible for you to be anonymous as a participant. However, your data and identity will be kept completely confidential to the research team. In the written report, your name will be replaced with a participant number (e.g. participant no. 3) or a pseudonym (i.e. a fictional name), meaning that your identity will not be identifiable to anybody.

All data will be stored in accordance with the procedures outlined by University of Birmingham Ethical Review Committee and in line with the UK Data Protection Act 1998. Taped interview recordings will be uploaded to password-protected computers belonging to the research team. Any hard copy documents will be stored in locked filing cabinets at the University of Birmingham. All data will be stored for ten years before being destroyed.

### **What will happen to the information collected throughout the research project?**

The information collected throughout the project will be used as part of the PhD students' thesis, and aims to be published in an academic journal, and presented at academic conferences, as well as to sporting/tennis organizations around the world. In any instance, names or any other identifying feature of participants will not be revealed.

### **Are there any risks in participating?**

There are no known risks to either physical or psychological health associated with taking part in this study.

### **What if I have any questions or I am not happy with how the research was conducted? What if I want to see the results?**

If you wish to discuss or file a complaint about any aspect of the research, please contact Jennifer Cumming [REDACTED]. If you would like to know the results of the research, a summary report of the findings can be made available to you on completion of the research project.

**Contact Details**

PhD Student: Saul Shrom

Email: [REDACTED]

Dr. Jennifer Cumming

Email: [REDACTED]

Professor Brett Smith

Email: [REDACTED]

**Thank you for taking the time to consider participation in this research.**



**Appendix B: Informed Consent Form (Chapters 5 and 6)**

1. I confirm that I have read and understand the participant information sheet and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time before February 28, 2020.

3. I give consent to take part in an audio recorded interview and for it to be analysed and I understand that these recordings will be kept securely.

4. I understand that my involvement will be entirely confidential.

5. I understand that all research procedures have been approved by the University of Birmingham Ethical Review Committee.

6. I give consent for the data that I provide to be used for research purposes.

7. I agree to take part in this study.

8. I would like to receive an email with a summary of the results from the study. If yes, please provide an email address. If no, then leave blank.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## **Appendix C: Interview Guide (Chapters 5 and 6)**

### **Opening Questions (Interview 1 only)**

Can you tell me a little bit about yourself? How old are you? Where are you from?

When did you start playing tennis?

Can you describe your general progression in the sport as a junior up until the beginning of your professional tennis career?

Probes: turning points, lessons learned, objectives

### **Beginning of Professional Career Questions (Interview 1 only)**

When you began your professional career, what were your training arrangements like?

Who was part of your 'team'? What were some strengths and weaknesses of your team set-up?

What challenges did you face when you first began on the professional tour?

How was this similar or different to what you expected the transition to be like?

What helped you overcome challenges you faced?

Probes: in what way, tell me more about that

### **Current Time Questions (Interview 1)**

Can you fill me in on the last couple of months? How has your transition been going?

How do you feel you are progressing?

What challenges are you facing at the moment?

What factors do you believe are key to helping you make this transition?

What are your goals for the next five to six months?

Is there anything else you feel is important to let me know about your experiences that we haven't spoken about yet?

Probes: in what way, tell me more about that

### **Interviews 2 and 3 Questions**

How have you been? Can you fill me in on the last several months?

What are some key learnings from these months?

How do you feel you are progressing with this transition?

What are any challenges you have faced?

Has your training environment set-up remained the same or changed at all?

What are your goals for the next several months? (Study 2 only)

Is there anything else you feel is important to let me know about your experiences that we haven't spoken about yet?

Probes: in what way, tell me more about that

## Appendix D: Thematic Map (Chapter 4)

Theme	Conceptual Patterns Within the Theme	Data Extracts
<b>Physical and Mental Fatigue</b>		<p>On one side I feel lucky to be able to travel around the world and see different cultures, and on the other side it was just tiring. From New York to Tokyo and then Moscow, in one month, it's three different worlds that you have to get used to...I just wanted to go home. (Player 1)</p> <p>The long year of tennis is exhausting. Other sports have two-three months off to use as a break. I understand that other sports may push their players harder during the short seasons but there is no way they are put in the same amount of stressful situations as tennis players are...After the Olympics in 2016, all other sports went on holiday, to relax and recover, some for even over a year. Some girls from home, in synchronized swimming, rested for two years and then began preparing for the next Olympics. For the tennis players, it's totally different since we had to fly to the US Open the next day. Everyone was looking at us like we were crazy. (Player 2)</p> <p>There was a good bit of time where I went out and played a match where if I won the match, great and if I lost then I got to go home. Home gave me that sense of normal. (Player 20)</p> <p>I'd been on the road maybe six or seven weeks and was just worn down. (Player 9)</p>
<b>Financial Imbalance of the Professional</b>		<p>The question always came up, 'What am I doing?' I was going week to week, making two or three hundred dollars. Then after taxes it was basically nothing.</p>

**System**

What am I doing with my life? I am twenty nine now. I don't have a degree...Other people around my age, who I went to school with, have cars, house, etc...living the less stressful life. They see me and think that I am living this glamorous lifestyle, playing at Wimbledon, but in actuality I was barely surviving paycheck to paycheck. (Player 3)

It took a major toll, forcing my family to take out multiple mortgages on the house...They sacrificed everything for us to play tennis. They sacrificed their relationship for us...When reflecting on it, I wonder if I didn't play tennis, would my parents be happier, since financials wouldn't be an issue? (Player 4)

My dad stopped working to travel with me full time. There was already pressure form not being too wealthy and now my father wasn't making money...There was a lot of pressure on the whole family to also keep up with the expenses of travel...My mom switched jobs and started to work at home so she had time to look after my brother by herself. (Player 5)

**The Social and Psychological Impact of Living a Nomadic Lifestyle**

Difficulty Maintaining Relationships

It's not easy being away from my girlfriend and son and scheduling times to see them between tournaments. Torn between giving everything to tennis and being there for family. (Player 23)

It's hard to maintain relationships with a boy/girlfriend, with friends...it's hard not to see your family for long periods because you are rarely home. You miss out on important things that happen in your friends' lives. It's your job to be on the road and play. (Player 6)

Loneliness                      spent almost a year alone on the tour after that. I was so miserable (Player 8)

Most people can understand how alone you can feel on a tennis court, but as a tennis player there are moments when you feel just as isolated off court. (Player 9)

after a lot of travel by myself where I just hit a wall in which I felt pretty unhappy. I think mainly it was just a sense of loneliness. (Player 20)

**The Weight of Expectation**

Pressure to Achieve      I broke into the top 100 for the first time and had some of my best results to date. Unfortunately, that season changed my expectations. I began to put a lot more pressure on myself...my focus was on all the wrong things. I was so worried about defending/recreating the previous year I had, that I barely had a single productive practice. (Player 10)

Results

How I feel, as other players may understand, is that there are many times where I do not enjoy the sport. I truly love the sport but it comes with too much pressure. I am always thinking about winning and losing, money, points, everything. I put this pressure on myself to be top 50, or top 100. (Player 24)

Despite the wave of emotion from breaking through the top 100, I thought there were more eyes on me now, which led to the thought of, what now? (Player 18)

Fear of Failure              To let down the people closest to me, my friends and family, is my most daunting fear. From an early age I was pretty aware about how many lives I affected. How many people had to sacrifice time, energy and money. The idea that it may not be worth it, or there might not be a way to repay them, haunts me at times. (Player 12)

If I wasn't going to use my college degree to work towards financial independence, I needed to make this endeavor worth it. My family helped me financially and my coach agreed to be compensated with lunches after practice. There was constant fear on whether I would ever be good enough to make it all worthwhile. (Player 13)

Early in my career when I first started, fear definitely held me back. I was never great, I was good, so the success I had later in juniors kind of came out of nowhere...It was something that put me in the limelight, while I wanted to be out of it...I almost felt like (winning a junior grand slam) was a little bit of a fluke. The first few years after that, I maybe wasn't in the right mind frame to handle losses. Every time I lost I thought to myself if I was doing it for the right reasons. (Player 22)

#### Loss of Enjoyment

I wasn't enjoying any of the travel, training or competition. Tennis was becoming more stressful than enjoyable, and it was affecting my whole life. I was disappointed...for letting my results on the tennis court dictate my overall happiness (Player 10)

Then everything started piling up in a negative way. I got too overwhelmed by everything. My tennis started going downhill. I was having difficulty with the relationships in my life including the one with myself. Practices began to feel worthless. I wasn't enjoying it anymore (Player 21)

I never had to deal with something not going my way in my career, and now any failure was directly in the spotlight. I didn't enjoy simply playing tennis anymore. I was never one that wanted to be in the spotlight off the court. (Player 15)

**Structural-Caused Instability**

Urgency to Return from Injury

Hip surgery was Christmas day in 2015, with a second surgery a couple months later in February on my other hip. After the first surgery I was extremely optimistic with how it went and how rehab was going. After just a couple months I was back in pain, but now in my other hip. The idea of nine-to-ten months off, when we don't know how long our careers will be, is scary. (Player 25)

I broke into the top 10 for the first time at St. Petersburg in 2016. Then soon came Miami where I got my first injury, which led to many others. A severe wrist problem came and I tried to avoid surgery while playing for nine months. April 2017, I finally decided to get it done. I was out for about six months and my ranking dropped to 350. Tennis is super difficult because you never stay where you are. (Player 15)

Underappreciated

It seems as if the top players are playing in a different league, where corruption and financial problems rarely touch them. I feel separated from them and I know other players are with me. Even at the better challengers, and even 250's, we are not treated how we should be. I am not sure if the people at the top understand this. (Player 26)

Tennis puts this stigma on losing to the point that only the winners receive the platform to speak. It's truly sad that losers are barely acknowledged in a sport where defeat is an every week occurrence. (Player 16)

**Mental Ill Health**

I'm sitting in a busy locker room, facing the nearest wall, with a towel draped over my head so no one can see the silent tears rolling down my face. An anti-doping monitor stands nearby shifting awkwardly left and right wondering when will be a good time to ask me to sign consent papers for testing. She's been standing there for thirty minutes and I haven't so much as acknowledged her presence—even in

my special state of misery, I feel guilty about this. All of the standard questions and doubts roll through my head with relentless persistence. 'Why couldn't you handle the nerves better?' 'Why didn't you play your game?' 'Would a someday champion wilt under pressure that way?' And perhaps the most haunting question, 'At a career high ranking of 71 in the world, competing at the French Open in Paris, how is it possible that you are this miserable?'...Of course an athlete is going to be in pain immediately after a three set, two-day-long loss at one of the biggest events of the year. But, in reality, I had not enjoyed a single happy moment in weeks...While meditation, a healthy lifestyle, bouts with medication, and a solid support system have helped me immensely in the past three years (battling depression), there are still days where it's tough for me to get out of bed. Feelings of guilt and shame for "not being as good at tennis as I once was", or anxiety about life after tennis still consume more of my mental energy than I care to admit. I'm working toward being more honest with myself and others about when I'm feeling down, but it can be difficult to show vulnerability in such a competitive, high stakes profession. (Player 19)

There is trauma after winning something that major that pushes you flat on your butt...As I became more upset I saw that my depression was inevitable when it was tough to get out of bed. At one point you're just on top of the world and all of a sudden it ends and you just don't know what just happened. It's like whiplash. I couldn't find ways to motivate myself to play. I just didn't know what to do with myself. There are many times when all I wanted to do was cry every day, in bed, in a dark room...All of these moments come with a tremendous amount of self-shame and self-criticism. (Player 17)

It is now two weeks before my first French Open main draw. It felt as if I had no control of my mind. I had a panic attack on my flight from Dallas to Paris. It was nine hours of some of the most agony and pain I have ever felt. I thought that every breath I took could be my last. After getting to Paris, I could barely practice. I would walk off the court immediately and hop into a car to get back to my hotel. I just couldn't function at all, not wanting to leave the hotel room. (Player 18)



## Appendix E: Thematic Map (Chapter 6)

Theme	Conceptual Patterns Within the Theme	Data Extracts
<b>A Race Against Time</b>	Feasibility Concerns	<p>Sometimes after a tournament, if I lose first round, or I play a bad match, I'm thinking, why am I playing? What am I doing? I'm not making any money, like should I be doing something else...I'm the third best player in my country, but I can't make money on this sport...How long can I play (Lukas)</p> <p>It's super expensive to travel, like accommodation, equipment, all that, and it leads to my mental thought, my thought process towards it all. And I think having a bad week at a tournament, the financial burden of it sort of makes the loss a little tougher compared to someone who doesn't have to worry about the money...I definitely have this, like, back and forth of should I keep playing, should I not? And it comes from money and not having enough of it to keep traveling. (Sophia)</p>
	Desperate for Solutions	<p>It's very tough to stick to your guns when your resources are not always (there)...a lot of times people in the Futures, even probably the Challengers, are listening to various different voices and the longer they stay there, the more voices they've probably listened to because they're searching harder...I would hit with (players), they'd be two, three, four hundred in the world, I'd be like what are you working on your game and every single time, it'd be a different thing, 'Oh I'm doing this these days and it's really starting to help me'. And then three months later, 'I'm doing this'...I ultimately feel that people aren't sticking at the same core thing for a sustained period of time. (Scott)</p> <p>When you're on tour and you're doing it, you're like scavenging for solutions, you're trying to find a way to help you as much as you can. (Sophia)</p>

## Riding the 'Mental Grind'

### Riding the Wave of Adversity

You could have 29 bad weeks and win a tournament, or 28 bad weeks and win 2 tournaments in the year and that will be the best year of your career, but it could be the first 28 weeks are terrible, so you have to just keep pushing...say you're on a four week trip, the first three weeks, you can bomb out first round, but you can't have that judgement of those three weeks affect the fourth week...you just got to be able to keep going, keep your morale high. (James)

Persistence is huge, because you're gonna lose every week and you have to learn to deal with that...you have to face the fact that you're going to lose every week. You're gonna be defeated and you have to come back from it the next week and be ready to fight again...of course it's challenging, but at the end of the day, you have to deal with it...and you try to find a solution (Paulo)

### Mental Grind

I got in late the night before, stayed in the airport that night and all my stuff got robbed...it was actually robbed by a homeless guy...I saw him on camera taking my bag, but I remember after that thinking...everyone has a certain ceiling for bullshit and I think that was my ceiling right there, you know? Playing for the best part of two years...being in a bit of a vulnerable low point anyway...and then you're thinking well wow, is this worth it? There's definitely a lot more to life than this. Having fucking 30 dollars in my account which was legitimately the case and having to ask my sister to send me four or five hundred on the spot just to keep me going through the next couple of weeks, you know? It wasn't a nice feeling. (Scott)

You go to these places where you're just like, oh I'm not stoked to come here again. Or you go to the places where you're like wow, I'm not going here at

all...the planes, the transportation, the crappy beds...it's a lot different...you have to adjust to your surroundings, sometimes I mean, if you go to Asia, they don't have like Western nutrition, like oatmeal and like I dunno, like non-greasy things (Isabella)

**'You Can't Do It Alone'**

Importance of a Supportive Team Network

Having that base I think is hugely important. I would argue impossible to do it without them...getting a team behind me has been probably the most important thing...having people around you that you trust to give you clarity, you know, when you're in the situation yourself, it's easy to get quite lost and bogged down with it, but having someone else there to give you perspectives...and you even see it at the top, like, these guys who supposedly have everything still travel with, you know, six to twelve people which I think shows the importance of it, because even at that level there, you know, they're arguably ticked all the boxes of, like, financial security, job security, like all that stuff, but they still see that as quite an important thing. (Jack)

Tennis is already such an individual, lonely sport, so you spend most of your time alone, so it's important to have people around you who you can talk to, who support you, who understand what you're going through...you can't do it alone in professional tennis. You need help...the environment is the most important thing for sure...to sustain a good, healthy lifestyle while playing tennis and not burning out. (Paulo)

without them, it's like, you get lost really quick, because tennis is one of those, like, lonely sports, and if you don't have that support group, you're kinda like, you're in a limbo, and a lot of people, that's when they quit...in a journey like this, you have to have a team. (Isabella)

Emotional Support

Just the support from my entire family. We have a WhatsApp group, and they always like message throughout a match, like, let's go, come, uh, let's get this game, you know? After a match, I come, I see, you know, they're supporting me even though they are not there. I feel like after a match, ok, like they care so much, they watch the score. So that does help me a lot. (Lukas)

When I'm having a hard time, they just have, like, the right words to say. They know me so well, so it's nice to be able to talk to them (Sophia)

Esteemed Support

If I just need like a confidence boost or something...if I say that practice didn't go well or whatever, and she'll like just give me a little pick me up or whatever. (James)

Some of the other (nationality guys), you know like, if they see you do well, they'll shoot you a message, or like...my old college coach, he'd always be in touch and always see what's going on...always really encouraging. (Scott)

Informational Support

I would talk to him every day, and he'd give me good advice...if I ever had questions with any match or a player that I was playing, I'd describe him the style, and he would maybe lay out a few different options of how to go about it...looking at the game through my lens...he's been someone whose been really, like, rock solid, like always. (Scott)

I wasn't able really to see physios and stuff for my recovery from this operation (during Covid-19 pandemic) so I've worked with him (strength and conditioning

coach) like online, uh, not that he's a physio, but obviously he understands the body and communicating with my surgeon on kinda steps I need to go through...so that's been really helpful. If I didn't have him, it would have been definitely more difficult and more stressful (Jack)

Tangible Support

My parents, they're always super supportive...it's not that I have to like play from my own money, if I need some help, they'll help me...and like that's the only way—that's the only reason I'm playing. (Lukas)

My dad really more than anyone...he's like given me a lot of like, you know, the freedom I suppose, you know like, go for it, do it...he's supported me as well, like financially, um, he's given me money to pursue it. (Scott)

**A Chance to Pause**

A Break to Gain Perspective

Before you're just doing it because you're in a little bit of a rat race. There's a tournament and you feel like you want to get points...and you just keep wanna go and go and go and then you lose track of the big objective or the ultimate, like, what is the overall picture here? And I think in this period you kinda get a sense of the overall picture. (Scott)

It was nice to actually get—that was the first time I had been at home for more than four weeks in a row, or been anywhere actually, anywhere for more than four weeks, um, since I left university...that was quite a nice change to get into like a good rhythm of things. I actually quite enjoyed that. (James)

Decision: Opportunity

I've always wanted to start something, but I never had the time to do it...and so,

to Improve Financial  
Situation

it just was a good opportunity...these three, four, five months, whatever it is, this is a time to form it so then you take the kinks out at the beginning...and then when I'm out there (on tour), everything should be ok. (Isabella)

I was like ok it would be great to have some, a good amount of financial resources behind me...so I started making a plan to work a little bit more and train at the same time, but more just really work, and just enjoy the work...my goal is basically to, um, get back playing, and just really, I think when I go back, I'll have a nice little pocket trunk of change, so to say, and then I'll be able to do it in a manner where I think I'll be...a little bit more comfortable, less concerns or less thoughts, just regarding decisions won't be made on dollar signs, they'll be more of is this best for my tennis...I'll be (working) here for at least the best part of this year at least, and then, you know, I'll look to see, to survey the field a little bit, see how it all looks out there, and then I'll probably go again. (Scott)

Decision: Career  
Termination

I needed a huge break, so I didn't touch a racquet for like a month and a half, two months...it gave me a lot of time to think, and I think the space from tennis and competing really, it was really eye opening for me in terms of just like being ready to move on from it...corona was just kinda the nail in the coffin, especially like financially as well, like, I was definitely not making money when I was on tour, but like, not having anything for three months, just really made me want to make money...there's no way I can wait around for a year, not make any money...like the idea of that, um, was pretty daunting to me. (Sophia)

I've just been playing, just trying to keep my level up a little in case that I do want to play again, but at the moment, I'm not sure because of the whole situation. Not sure it's really worth it...it's just impossible to, to make a living out of tennis, I mean, 99.9% can't...you're just spending everything, all your money, and you

don't get anything in return...it's important for me to focus on my future and to not just be running around playing tournaments and not making a dollar. (Paulo)

**Cultural-Based Opportunities**

Facilitative Opportunities

There's always that carrot being dangled there being able to play a Grand Slam when your ranking is not quite at that point...that's one of the big things with (the event) this year, that I'm on the borderline, like, contention for a wild card...so it's something that I'm pushing for, you know? It's something that you wouldn't—say I was Spanish, there's nothing like that that they have to push for. (James)

Yeah it's pretty big...here it's a little bit more affordable, because you always see like public parks, and there used to be high schools, things like that. I know like communities, like apartment communities or condos, they have tennis courts there, so you know, it's like more accessible, and that's why we have, like, a lot more culture about it (Isabella)

Limiting or Lack of Opportunities

Even though I'm like the third (best) player right now, but no one is helping me with, like anything. We have a tennis federation, but they do quite a lot for junior level tennis, they do a lot for the kids, so until you're 18, 19...after you finish your junior career, and if you're not let's say top 100, or top 200, they don't really help you as much. (Lukas)

I heard there are some local tournaments in other countries, in France, in Spain, in the UK that people play and the money is decent, you know? We don't have anything like that in (his country)...we just have one (nationality) championships. That's it. There is nothing else. I feel like if I want to continue playing tennis (professionally), I have to move to another country. (Lukas)