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Article

Beyond the Baseline: Cognitive Dissonance in the Journey to Professional Tennis

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Abstract: This study investigates the role of cognitive dissonance in the journey of professional tennis players as they strive for success in the sport. Utilizing Green's (2005) sport development tasks and Festinger's (1957) cognitive dissonance theory, in-depth interviews were conducted with eleven male players to explore their commitments from initial engagement to professional status. Findings reveal that athletes often escalate their commitment by withdrawing from conventional educational paths to prioritize athletic progression, heavily influenced by family support. Despite financial insecurities and limited career prospects outside tennis, players sustain their dedication, driven by a strong identification with the sport's subculture and a unidimensional athletic identity. This escalation of commitment, while at times irrational, is rationalized through cognitive reframing and externalizing beliefs to maintain consistency with their identity. The study highlights the intricate interplay between identity, subcultural values, and cognitive dissonance in elite athlete development. It suggests that professional success is not solely dependent on skill and performance but also involves complex negotiations of identity and commitment, often at the expense of broader life experiences. The research calls for further exploration of diverse athlete narratives and the impact of cognitive dissonance on long-term development, aiming to identify more sustainable pathways in professional sports.

Keywords: athlete development; cognitive dissonance; escalation of commitment; professional athletes; tennis

The growing interest in professional athletic careers (Eather et al., 2020) has contributed to a professionalized youth sport environment worth roughly US$15billion in the United States alone (Gregory, 2015). The professionalized environment is evidenced by youth athletes specializing in their sport at increasingly young ages (Jayanthi et al., 2015). Unsurprisingly then, youth athletes today are spending more time in the sport environment. However, this is considered a cause for concern as greater time spent in the sport environment reduces individuals' social engagement and participation in alternative extra-curricular activities, and likelihood of participating in physical activity later in life (Cosh & Tully, 2014; Ryder et al., 2022).

Although athletes and their families invest significant resources in athletic development (Horne et al., 2022), advancement to sports' elite levels is not guaranteed (Campbell & Parcels, 2013). In fact, approximately 98% of youth athletes fail to 'make it' to the top level of their sport (Malina, 2010). And for those that do, 'making-it' rarely mirrors media and social-media's glamorous portrayals. Most professional sport occurs in leagues and tours garnering minimal attention, and therefore, when accounting for total hours worked (e.g., training, traveling, competing), many professional athletes earn less than minimum wage (Hayhurst, 2014).

The competitive and demanding environment of youth sport, combined with the low odds of advancing and negligible financial rewards raise salient concerns for youth athletes with professional ambitions. From a cost-benefit perspective, the pursuit of a professional sport career seems unwise at best and foolhardy at worst. Then why do so many families invest so much in their children's sport future? And why are athletes so willing to give up other experiences in their commitment to "make it to the next level"? Why do athletes continue to believe they will make it when there is evidence that it is unlikely they will?

The answers may lie in our beliefs, understandings, and expectations of the pathways to athlete advancement and consequent systems of sport and athlete development. Therefore, the purpose of this study is to examine the commitments professional athletes believe necessary for successful advancement through their sport and athlete development system from their earliest sport experience to 'making it', to understand the post-hoc attributions of the reasons behind their commitment choices, and to identify the ways in which athletes sought to justify those choices to maintain consistency between their beliefs and behaviors.

Research illuminating professional athletes' successful navigation of the competitive sport system is critical for advancing our understanding of elite athlete development and of 'making it.' Unfortunately, as professional athletes are difficult to access, their voice in the extant elite athlete development literature is negligible. Consequentially, our knowledge of elite athlete development is overwhelmingly derived from coaches and policymakers (e.g., Brouwers et al., 2015; Sotiriadou et al., 2017). While important, these perspectives alone are insufficient. Not only do coaches and policymakers not share comparable lived experiences or preferences to elite athletes (Cowden et al., 2014), but they may also benefit from athletes' misunderstanding of their own potential for advancement, and therefore encourage athletes to escalate their sport commitment. In addition to giving athletes' voice, and eliciting the most important stakeholders' perspective of the elite athlete development experience, the study can potentially unearth further complexities in the athlete journey, thus extending current understanding of the athlete development process.

Conceptual Framework and Literature Review

The pyramid analogy has been used to provide a simplistic illustration of sport and athlete development (e.g., Green, 2005). Formed by a wide base representing a large number of participants at the lowest tier of a sport, the model narrows at each level

demonstrating the winnowing of participants successfully transitioning to more elite competitions. In her elaboration on the pyramid model, Green (2005) highlighted three essential tasks for effective sport and athlete development: athlete entrance, athlete retention, and athlete advancement. These three tasks underpin professional athletes' beliefs in the requirements to successfully navigate each level of the sport and athlete development model.

According to Green (2005), athlete entrance explains athletes' first participation in sport, a process typically driven by significant others (Côté, 1999), chiefly family members, teachers/coaches, and peers. Retention before and during elite level participation demands that athletes remain motivated, committed, and connected to their sport's subculture (Green, 2005). Athletes' motives may derive from extrinsic rewards associated with elite sport, such as college scholarships, lucrative salaries and trophies, as well as intrinsic factors including social interaction, mastery and/or fitness (Bartholomew et al., 2009).

A sport's subculture, whereby group members share a set of values and beliefs (Green, 2001), can influence athletes' commitment to their sport, particularly as their identity as an athlete in that sport increases its salience (cf. Donnelly & Young, 1988). Identifying with a sport's subculture by aligning with a shared set of values and beliefs is important, as a failure to connect can lessen athletes' desire to remain within a sport (Woolf et al., 2016). Identification with a sport subculture is somewhat inevitable for professional athletes, as making it requires prolonged engagement. Making it to the next level routinely requires that an athlete be selected to advance; a process that usually places a premium on fit with the subculture (Donnelly et al., 2001). Although strong subcultural identification may enhance one's probability of selection, it can have negative outcomes when the athlete identity becomes all consuming, thus limiting the healthy development of alternative identities (Brewer & Petitpas, 2017). Development of a unidimensional identity can hinder or inhibit career planning beyond sport (Barriopedro et al., 2019). Although advanced athletes report higher levels of commitment compared to recreational athletes, they can experience less enjoyment and feel obligated to remain as sport is tied to their identity and because of the commitments made to advance (Casper & Andrew, 2008). Athletes need to identify with a sport's subculture; however, identity development should be monitored so the development of a unidimensional identity is avoided.

Like athlete identification, sport commitment is necessary for retention, and ultimately advancement, in one's sport. Also, like identification, there is a down side to overcommitment at the expense of other commitments (Adent et al., 2024; Brewer & Petitpas, 2017). Escalation of commitment (Staw, 1981) is only truly beneficial when there is reasonable likelihood of success. Escalation of commitment can be dangerous when athletes continue to invest in a course of action at the expense of other opportunities, particularly when success is unlikely or unknowable as it can cause psychological distress and have financial implications (Brockner, 1992). Early specialization in a sport is a common escalation of commitment that occurs at young ages -- often before an athlete has had a chance to sample a range of activities (Côté, & Vierimaa, 2014). Early specialization is linked with a greater risk of overuse injuries (DiFiori et al., 2014), burnout (Adent et al., 2024) and the development of a unidimensional identity (Coakley, 1992).

As an athlete escalates their commitment to a single sport and/or program, they increasingly narrow their activities, first giving up other sports, and then other aspects of their life (e.g., social events, family holidays, school). As the commitment continues to escalate, they may become more goal focused. Indeed, goal setting is a critical element of performance improvement and helps athletes transition to more elite competitive contexts (Weinberg & Butt, 2014). With some sport-life balance and realistic goals, this can be healthy

and beneficial for athletes. However, escalation of commitment can become unhealthy when an athlete becomes emotionally attached to a singular goal or course of action, such as winning a championship, breaking a record, obtaining a college scholarship, or turning pro, and is unwilling to give up on that goal, despite mounting evidence that the goal is unobtainable.

Athlete development models generally assume that as athletes' physical and strategic skills and conditioning improve, athletes advance to compete in higher performance contexts (e.g., American Development Model, Developmental Model of Sport Participation, Long-term Athlete Development Model). Our broader understanding of athlete advancement is more limited, and fails to account for the myriad social psychological, and environmental factors that may interact with physical and cognitive factors to effect athletes' chances of 'making it'. Green (2005) acknowledged this gap in the sport and athlete development literature 20 years ago. And yet, a dearth of literature remains. Developing a greater understanding of athlete advancement is critical, as successful transitions between competitive contexts are essential but not assured (Green, 2005).

We know 'making it' is predicated upon years of dedication. The more time spent advancing through the athlete development system, the more athletes' identities intertwine with their athletic performance to cement one's athletic identity (Brewer & Petitpas, 2017). An athletic identity is an individual's degree of personal connection to the athlete role, and the recognition they seek for that role (Brewer & Petitpas, 2017). This singular focus on athletic performance can cause athletes to neglect alternative career paths or hinder athletes' exit from their sport (Lally & Kerr, 2005). These two concepts, low likelihood of professional success and the strong athletic identity are often antithetical. Athletes experience cognitive dissonance between the low probability of achieving professional success and the unwavering commitment to becoming a professional athlete that is reinforced by their strong athletic identity. This cognitive dissonance can be understood as a classic example of the tendency to experience discomfort when holding two or more conflicting beliefs, values, or ideas (Aronson, 1999).

Cognitive Dissonance and Escalation of Commitment

Festinger's (1957) Theory of Cognitive Dissonance explains how individuals try to maintain consistency between their beliefs, attitudes, and behaviors. According to this theory, when a person experiences two conflicting beliefs or behaviors, they experience cognitive dissonance. This discomfort motivates individuals to reduce or eliminate the inconsistency, often by changing one of the beliefs or behaviors or by reframing them to be consistent with one another. The theory of cognitive dissonance consists of three key components: (1) inconsistent beliefs, attitudes, or behaviors, (2) a feeling of discomfort or psychological tension that motivates the individual to reduce or eliminate the dissonance, and (3) an attempt to reduce or eliminate the dissonance by changing one of their beliefs, attitudes, or behaviors, seeking out new information that supports one of their beliefs, or rationalizing their behavior or belief to make it consistent with the other. Ergo sport commitment is a likely contributor to cognitive dissonance experienced by athletes.

Escalation of commitment and cognitive dissonance are two closely related concepts. Escalation of commitment refers to peoples' tendency to continue to invest in a course of action even when that investment is irrational or unlikely to lead to success (Brockner, 1992). Cognitive dissonance, on the other hand, refers to the mental discomfort that arises when a person holds two or more conflicting beliefs, values, or ideas. The link between escalation of commitment and cognitive dissonance can be explained by the fact that people are often motivated to maintain consistency between their beliefs and actions, even when

those actions are irrational or unproductive. This desire for consistency can lead to a cognitive dissonance when people find themselves in a situation where their actions conflict with their beliefs or values (Aronson, 1999; Festinger 1957). For example, if an athlete invests years of effort and resources to make an Olympic team and fails to qualify, they may experience cognitive dissonance because they know that continuing to invest their time and effort is irrational, but they also want to maintain consistency with their initial investment and their belief in their potential success. In fact, athletes are bombarded with messages that their success depends on the degree to which they "believe in themselves". In such a situation, escalation of commitment can occur, where the person continues to invest more resources, such as time, money, or effort, in the hope of achieving a positive outcome, despite mounting evidence that the venture is unlikely to succeed. This escalation of commitment can further increase the cognitive dissonance experienced by the person, as they continue to justify their decisions to themselves and others, in order to maintain consistency with their initial expectations, and with their athlete identity.

Moreover, escalation of commitment and cognitive dissonance can also influence each other, creating a self-reinforcing cycle. As athletes invest more in a failing course of action, they may feel a stronger need to justify their decisions and minimize the cognitive dissonance they experience. This can lead to a heightened commitment to the course of action and further escalation of investment, resulting in even greater cognitive dissonance.

The link between escalation of commitment and cognitive dissonance highlights the complex and often irrational nature of decision-making. Understanding this link can help individuals to recognize when they may be experiencing cognitive dissonance and to avoid the escalation of commitment that can exacerbate this situation. By acknowledging the potential for cognitive dissonance and being willing to reassess their decisions and beliefs, individuals can make more rational and productive choices in both their personal and sporting lives. To serve the study's purpose, the study was guided by the following research questions:

1. How do athletes believe they successfully navigate the sport development system and advance to the professional level of sport? (beliefs about behaviors)
2. What commitments do professional athletes believe are necessary for advancement? (beliefs about commitment)
3. How do they describe their current success (or lack thereof) relative to their investment in and commitment to their sport career? (dissonance)
4. In what ways do they attempt to justify their career decisions to align their beliefs with their behaviors? (reduction of dissonance)

Methods

The ontological and epistemological assumptions underpinning the study were grounded in post-positivism (retains the idea a reality exists but acknowledges that reality is complex and shaped by social contexts). A post-positivist framework allows for a nuanced exploration of participants' perspectives, facilitating a deeper understanding of professional athletes' advancement experiences by accounting for athletes' social contexts and understanding multiple pathways to elite sport may exist (Guba & Lincoln, 1994).

Research Background

The elite athlete development system in tennis is an ideal context for examining professional athletes' perceptions and experiences of 'making it.' In addition to tennis being a popular global sport, professional tennis players represent dozens of nationalities and

compete worldwide each year (Filipcic et al., 2013). National Tennis Associations (NTAs) also invest heavily in their elite athlete development systems (Kovacs et al., 2015). Further, tennis players rank among the highest earners in professional sports (Badenhausen, 2020). And, although tennis is extremely lucrative for its greatest athletes, just one percent of all tennis professionals earn half of the available prize money (Bednall, 2015). As noted in a recent Sports Illustrated article, former men's World number 125 Noah Rubin suggested a ranking inside the World's top 150 was required to break even (Boncosky, 2022). Consequently, most professional male tennis players fail to break even and will transition directly into another occupation upon exiting the sport.

It is also important to recognize that as individual sport athletes, professional tennis players have a greater degree of freedom over the trajectory of their development compared to team sport athletes. This results in a multitude of avenues for advancement as tennis professionals are not under contractual obligation to a team and are instead responsible for hiring and compensating their own coach(es) and support team. Tennis is, therefore, an ideal setting for studying elite athletes' beliefs regarding advancement as they are in control of their own development decisions.

Data Collection and Analysis

Eleven semi-structured, in-depth interviews were conducted with players competing in an all-male, low-level professional tennis tournament in the United States. Participants competing at this level of the professional tennis tour are often ranked too low to qualify for major tennis tournaments. Participants comprised of singles players ranging from unranked to ranked inside the World's top 100, and included athletes representing England, Ireland, Mexico, and the United States. For additional participant demographics see Table 1 below.

Table 1. Participant demographics

Pseudonym	Age	Nationality	College Player (Y/N)	Ranking	Career Prize Money
Carlos	28	Mexico	Y	400–449	$123,627
Nick	26	Mexico	Y	500–549	$25,787
Kyle	19	USA	N	100–149	$280,795
Nate	21	USA	N	200–249	$117,683
Elliot	23	England	Y	600–649	$24,082
Ian	25	England	N	500–549	$95,129
Shaun	25	Ireland	Y	-	$16,248
Andy	25	USA	Y	50–99	$623,562
Cory	23	USA	Y	400–449	$21,250
Zane	23	USA	Y	350–399	$115,519
Grant	31	USA	Y	1200–1249	$32,163

Purposive sampling was adopted to select professional participants competing in the tournament. Two criteria were used in the selection process: (1) English speakers, and (2) Professional status. Not all tournament competitors were professional athletes, as student-athletes also competed. In addition to purposive sampling, snowball sampling was employed to reach other eligible participants at the same event. Participants were approached for an interview away from the tournament site, with interviews conducted in neutral locations (e.g., coffee shop, hotel foyer) to limit the impact interviews had on players' tournament preparations. Participants were informed of the study's purpose and the confidentiality

protections in place (e.g., the use of pseudonyms), with consent obtained before each interview.

All interviews were conducted by two researchers; each lasted from 45–60 minutes. Audio recordings were not utilized to comply with the tournament organizer's demand. Instead, as recommended by Bachiochi and Weiner (2002), detailed hand-written notes including direct quotes were constructed during the interviews. Although both researchers took notes, one researcher directed the interview while the other researcher prioritized notetaking. Two researchers were used as this approach allowed for richer levels of notetaking and more accurate transcription efforts that could offset the lack of audio recording data. To ensure accuracy, upon completion of the interview interviewees were provided with a draft of their responses for review and comment (cf. Bryman & Cassell, 2006). Interview protocols were informed by the review of existing literature on escalation of commitment (Brockner, 1992; Staw, 1981) and Festinger's (1957) Theory of Cognitive Dissonance. Interviews were also structured with reference to athlete development pathways and the beliefs that impacted their decisions (i.e., commitment choices) along the way (e.g., initial involvement in tennis, decisions to specialize, and the attitudes and beliefs associated with transitions to higher levels of competition, particularly the professional level; cf. Green, 2005). Open ended questions were used to allow athletes to reflect on their own experiences, beliefs, and actions. As recommended by Kvale and Brinkman (2009), follow-up probing questions were utilized to encourage participants to elaborate on their answers to provide a deeper understanding of their beliefs, choices, and behaviors.

Examples of interview questions included were: 'Why and when did you decide to commit to specialize in tennis?', and 'How have you been able to sustain your participation and commitment to tennis?'. Probes were used to compare athletes' own development pathway to what they believed was 'normal' or 'usual' and to elaborate on the actions taken as they became more committed to tennis. Questions designed to further explore their commitment choices were, 'What were some of the key decisions made during your advancement to the professional level?' Followed by probes to elicit the ways in which they justified their actions.

Two researchers independently analyzed all interview notes using a deductive coding strategy (Miles et al., 2014) based on the relevant conceptual categories of athlete entrance, athlete retention, and athlete advancement (Green, 2005). Data were then examined within each of the three categories for themes related to each of the research questions. To ensure inter-coder reliability the researchers discussed categories until agreement reached acceptable levels (i.e., above 80%; Miles et al., 2014). In addition to limiting researcher bias by including multiple researchers in the data analysis, further procedures were incorporated to enhance credibility, dependability, and trustworthiness (Gerdes & Conn, 2001). On discovery of a pattern, efforts were made to seek potential rival explanations and conclusions as this can ensure researchers are considering all explanations, rather than focusing on what it is they want to find. Additionally, verification of transcripts and study interpretations were obtained via member-checking (Carlson, 2010) with all study participants agreeing with interpretations.

Results

Findings shed light on what elite tennis players believe is necessary to 'make it.' Although aspects of athletes' advancement varied, commonalities arose to explain athletes' perceptions of their successful navigation of the elite tennis development system. Findings show athletes make commitments in their youth that may appear irrational to many, as participants described upbringings that deviate from what Western societies' would

consider conventional. Our findings also suggest tennis superseded all other facets of participants' lives as early as their preteen years. Players saw commitment as necessary and reported ongoing escalation of their commitment throughout their careers. Few participants questioned their commitment, even when they admitted their professional earnings failed to support their continued participation. Rather, participants referred to strong examples of their commitment to tennis with pride. The results are presented based on Green's (2005) three essential tasks for sport and athlete development: (1) entrance, (2) retention, and (3) advancement.

Entrance

Seven participants entered tennis by the age of eight, with some participating in one-on-one coaching multiple times a week. However, all expressed participating initially as multisport athletes. As Shaun stated matter-of-factly, "I played every sport going at first." Although Cory had the earliest introduction to tennis, he too participated in other popular sports initially, "I started playing tennis by the age of three, but also played baseball and basketball."

Athletes' were most commonly introduced to tennis by family members. In some cases, tennis was a family sport, as Carlos described: "My entire family played tennis, both my father and grandfather were members of the Davis Cup team" (an international country vs. country tournament). Elliot also attributed his entrance to tennis to his family, "Both my parents played; it really is a family sport for us. My mother has coached, and my siblings also played." Exposure through family members, however, was not the only means by which participants were introduced. Ian's participation stemmed from his involvement with another racket sport, "One of the first sports I ever played was badminton. I would see people playing tennis on courts beside me, which is what got me started with tennis."

All participants entered tennis at very young ages. While most sampled multiple sports, a commitment to tennis came early for some. It was also evident that family, especially parents, were the primary architect of athletes' tennis involvement, with some athletes' parents having extensive tennis backgrounds. For these participants, tennis was part of their family identity. As Kyle put it, "It [tennis] was what we did. I thought of myself as a tennis player when I was just a little kid. Everyone in my family was a tennis player."

No participants believed their introduction to tennis at a young age was unusual; nor did they report feeling forced to take up tennis. For most, it was seen as a natural extension of their early activities or a normal part of their family activities. None of the participants felt they entered the sport with the intention of becoming a professional player. However, when probed, players attributed their later successes in the sport to an early start. As Kyle expanded, "I think I'm here at my age because I started as early as I did." Clearly, this is a post-hoc attribution. The reflective nature of the interviews does not allow for an accurate understanding of players' beliefs upon taking up the sport. It is likely that these beliefs were introduced and reinforced as the athletes became more enculturated within the elite tennis subculture.

Retention

Although all sampled multiple sports, roughly half of the participants (Nate, Elliot, Ian, Cory and Grant) rapidly escalated their commitment to tennis by the age of 14. It was also evident that by 14, tennis superseded almost all other aspects of their childhood. This point was emphasized by Ian, "I took up tennis full-time at the age of 14, allowing me to play and train over 20 hours a week." Participants described full-time participation as 20 or more hours a week devoted to training and competition, rather than tennis being their sole focus.

Two participants elevated their commitment beyond their peers by relocating to high performance training centers to expedite their tennis development. As Nate explained:

> When I was 12 I moved to Florida so I could train full time. At 14, my father and coach at the time thought it would be important for me to train on red clay as it would further my tennis, so I left the U.S. and moved to an academy abroad.

When athletes believed the sacrifices they were making failed to produce sufficient progress, they altered their approach to development. As Nate stated, "Although my results while living abroad were not bad, they needed to be better to warrant my sacrifice. I moved back home not necessarily thinking about trying to turn professional, more so deciding just to stick with it." This example highlights an early hint at potentially dissonant elements. Nate, as he put it, "made insufficient progress", which could have been interpreted as a reason to scale back his commitment. Instead, he stuck with it reporting that, "Tennis is what I did. It was what I was good at." It is important to note that Nate recognized the sacrifice he had made to live abroad to improve his tennis. When pushed to think back on this decision, he had reframed the sacrifice as an important experience in his pathway to becoming professional. In fact, when asked if he would recommend that route to others, he said yes with the proviso that they were "ready". Although the initial experience had been framed in terms that suggested it was not worth the sacrifice, over time the player had reframed the experience to be consistent with his belief in the necessity of the experience – a belief reinforced by his father/coach. This was a common occurrence across interviews. Athletes were able to describe behaviors related to escalating commitment, even labeling them 'sacrifices'. Yet they reported little tension related to their choices, instead justifying their behaviors as 'normal' and 'necessary' to their tennis success. Even when players noted the negative impact of their sacrifices, they reframed them as less important as a way to reduce any dissonance they might have felt. Because these were post-hoc attributions, it could also be that players had long ago worked through the psychological tension to reduce any dissonance between their beliefs and behaviors.

Athletes' deep commitment to tennis was also apparent in their schooling. All participants withdrew from conventional schooling for at least a year (i.e., middle- and/or high-school). Two participants went as far as to end their education at age 16. As Ian shared, "Before turning 16 I was still going to school part-time. It was only once I dropped out of school that I got a top junior world ranking, getting me into junior Grand Slams." Players' decisions to withdraw were uniformly attributed to time management. As Andy explained, "As I looked to play more tennis I decided to be homeschooled. I could not dedicate enough time to school and tennis." Finding alternative means for pursuing education was the more common experience shared by participants. It was also one of the most strongly held beliefs regarding successful advancement. When probed, players seemed surprised that this would be considered unusual. As Cory stated, "This is what you do when you want to be the best. Everybody did it."

The belief that this was 'normal' and necessary seemed to be shared by the players' parents. Players reported that significant decisions about tennis and education were being made with parents, as Zane described: "I attended school until I was 16. At that point, my parents and I made the decision to go full-time with my tennis and continue my education at home." Even though this was a hugely consequential decision, no participants appeared to grapple with the decision. In recounting their decision, participants portrayed the decision as the obvious choice; one that did not need justification. In fact, players typically recounted

the positive outcomes of their choice, reducing any dissonance by seeking out and valuing information consonant with their beliefs and behaviors (cf. Simon et al., 1995).

It was equally telling what participants chose not to share. Not all participants' development went to plan, yet participants did not express doubts in continuing their tennis career, nor were they concerned with the opportunity costs of their decisions. Further, decisions were presented matter-of-factly. Noticeably absent was the perceived need to justify their decisions, even those that seem significant, such as withdrawing from school. When pressed, players could articulate aspects of traditional childhood and adolescence that were forgone (e.g., parties, non-tennis family vacations, prom, graduation, and informal time with friends), but they did not frame this as sacrifice, nor were they wistful in describing these experiences. Instead, they characterized these missed experiences as "frills" (Grant) or dismissed these as irrelevant. As Shaun put it, "I was focused on climbing the rankings, those things weren't important and would only get in my way." Nick suggested, "tennis pros are serious about their tennis. They don't waste time and energy on stuff that doesn't get them anywhere." Once again, these athletes dismiss the very idea of dissonance, even when an outside perspective might consider their actions extreme or at least inconsistent with commonly held values. When athlete identity is considered, these choices are less surprising. A strong self-identity has been associated with increased capacity to resist information that is inconsistent with their beliefs, resulting in motivated reasoning as a form of ego-defense (Carpenter, 2019).

The single-minded focus on tennis is evidence of the escalation of players' commitment. Tennis clearly played a prominent role in the formation of their identity. Several players mentioned the salience of tennis in their life, and while they often experienced uncertainty regarding their future, they felt compelled to persist. As Cory explained: "This game is my life; my connection to it drives me to compete and to become the best I can be."

Kyle expressed similar sentiments: "It's a big part of my lifestyle, and I don't know if I can give it up. If I left the game, I would miss it, so I continue to compete no matter the cost." And finally, Grant shared: "I'll keep playing as long as my body allows and will just play doubles if need be to extend my playing career." Extraordinary levels of commitment and sacrifice were shared by all participants, which reflected their belief that advancement to professional levels was predicated on their sustained prioritization of tennis. This may or may not be true, but clearly players believe it is. This belief, along with the prominence of their tennis identity act as retention factors and facilitate further escalation of commitment. Dissonance may arise when one's experiences clash with one's cognitions (Yahya & Sukmayadi, 2020). However, in this study, players' early success (i.e., prior experience) seemed to reinforce their beliefs, which clearly impacted their commitment decisions and aligned with their behaviors.

Advancement

Participants clearly believed escalating commitments were necessary for advancement. Their advancement from beginner to the lower rungs of professional tennis reinforced these beliefs. No participants expressed regret at missing typical childhood social milestones. In effect, players trivialized what others might consider significant sacrifices, a common dissonance strategy (Simon, Greenberg, & Brehm, 1995). In fact, the degree of trivialization present in this study reflects a greater focus on the positive effects of their choices (i.e., selective exposure, Brijball, 2001) and is consistent with the salience of their attitude and belief systems.

The need to build schedules around tennis appeared critical to advancement which was so embedded in players' belief systems that it was never openly questioned. It was

instead used as a point of differentiation, as Ian intimated when discussing peers who failed to successfully advance:

> It wasn't long before the guys I played with early on started disappearing. They would not train as much, didn't give up other sports. Then they'd get frustrated when they got left behind. You knew they were never going to make it to the next level. They just weren't as dedicated.

This is consistent with the work of Aronson (1999) incorporating self-concept into the cognitive dissonance framework. This work suggests that more dissonance is aroused when an element is closely related to one's self-image (e.g., identity as a tennis professional). It is logical then to understand players' differentiation from those that didn't 'make it' as a method of reducing their dissonance by maximizing their own attitudes and beliefs.

Time and effort were the key focus of players' explanations for advancement. Every player attributed their advancement to the professional ranks to time and effort – elements of their own identity. They also used words such as, "commitment", "focus", and "sacrifice".   Interestingly, "talent" was only mentioned in terms of external recognition. For example, Zane mentioned he was labeled as talented as a young player, which motivated him to increase the time and effort he put into the sport. Clearly, external reinforcement, such as being labeled talented, encouraged further escalation of their commitment. Less obvious to the players themselves was the impact this had on elevating the salience of their tennis identity. Players consistently attributed their advancement to hard work. However, when advancement plateaued, none attributed it to a lack of time and effort, which would have been dissonant with their self-concept. Instead, they sought external elements to blame to maintain consistency between their beliefs about themselves and beliefs about their finances, a proxy for their competitive success (Yahya & Sukmayadi, 2020).

Participants attributed their advancement, as well as their continued quest to advance as professional athletes to sustained financial support. Financial support came from several sources, including sponsors and NTAs. Parents, however, were athletes' greatest financial supporters both in advancing to professional tennis and as current professionals. As Elliot explained, "As they did throughout my junior (youth) days, my parents continue to support me. I do have a few sponsors, but still rely on my parents." Those participants receiving support from NTAs were among the best performers nationally and, therefore, with NTA support were able to compete in international junior tournaments. This was the case for Ian who stated, "After competing at the biggest international events in junior tennis I had got about US$20,000 from my NTA." However, continued NTA assistance was not assured, forcing participants to seek additional funding, as Ian elaborated:

> Eventually the money ran out, so I took a break. Ever since returning to full-time tennis I have been self-funded with the exception of a private sponsor who helps out with the odd flight. I have pretty much maxed out my credit cards.

As Ian illustrates, 'making it' did not relieve athletes of financial uncertainty. Only Kyle and Andy claimed to have advanced to a position where they felt financially secure, as Kyle shared, "I don't have to worry about my budget. I am funded by my NTA, I have sponsorship contracts with equipment companies, and I have a management company who takes care of everything for me." The remaining participants had not reached financial

security and adopted several strategies for maximizing their advancement opportunities on a budget. Nick described his approach, "I don't employ a coach, I string my own rackets, I share hotel rooms with other athletes and do what I can to get by." A few participants ignored their financial circumstances, including Nate, "I never look at my checks (prize money) or bank accounts in order to focus on the game," while Elliot explained, "I don't look at the numbers, I have to think only about my performance, I don't want it to distract from my tennis." Participants felt dwelling on their finances impeded their ability to focus on tennis. This is an example of selective exposure whereby the players chose not to focus on their financial circumstances, a strategy that (intended or unintended) reduces the potential for dissonance between their attitudes, beliefs, and behaviors (Griffin, 2012).

What participants did not say was also telling. It was evident that nine of the eleven participants were experiencing financial hardship. However, they were not perturbed by this. Maxing out credit cards, for instance, was not a cause for concern. Not one of the participants experiencing financial hardship expressed doubts or regrets. Participants did not perceive their financial position as problematic or extraordinary. And yet, all participants initially described a professional tennis career as a financially lucrative career fulfilling their dream. It is difficult to see how the belief in tennis as a financially lucrative career, and their identity having 'made it' as a professional are consistent with the behaviors associated with remaining on tour while experiencing financial hardship. This situation is clearly ripe for psychological tension or dissonance.

Players were able to describe their struggle to remain on tour, but few had an exit strategy. Although participants did not express much concern over their financial standing, their financial instability did inhibit future planning. This was explained by Grant, "I expect to play for at least two more years, but this is very much dependent on how I progress." Cory described his current struggles this way, "I'm not making enough to sustain this much longer. I am losing money, so I cut costs whenever I can. If it weren't for my parents I wouldn't be able to keep going." When asked about future plans, only two participants identified career plans beyond professional tennis. Of these two participants, only one appeared to have a rough plan in place. Elliot expected to fall back on his economics degree, while Shaun had clearly contemplated his post-tennis career more deeply, "I have a degree and make the most of networking opportunities the tour provides. I have developed relationships with tennis enthusiasts and sponsors of tournaments and hope they will be of use when the time comes." Other participants' failure to mention a career after professional tennis, even when prompted, suggested the absence of a plan. Not one player questioned the wisdom of an ongoing financial investment in their tennis career.

Players' descriptions of early career sacrifices were dismissed as "what you did if you were serious about tennis," and were often mentioned with pride. Yet they never mentioned their lack of success, instead believing that top rankings were still achievable. Prize money earned as a professional is a direct outcome of competitive success. Therefore, continued financial pressures associated with a lack of earnings clearly contradict players' beliefs in the lucrative nature of professional tennis. And yet, players neither admitted nor acknowledged this contradiction.

As youth athletes, participants' withdrawal from conventional schooling appeared critical for creating sufficient time to dedicate to athletic advancement. Further, the costs of youth athlete advancement did not abate upon 'making it' to the professional ranks. In fact, in all but two cases, participants experienced financial instability. As a result of their financial instability, participants could not plan their advancement beyond the near term. Despite their commitments to tennis, these players were at best eking out a living; at worst they were failing to earn sufficient prize money to break even or be financially

independent. Simultaneously, participants remained committed to advancing through the ranks of professional tennis. Their current status remained unquestioned; their continued commitment assured. Clearly these athletes had learned to reduce or eliminate cognitive dissonance. They managed this in several ways: (1) by externalizing their beliefs, (2) rationalizing their behaviors, and (3) trivializing the elements that they sacrificed to stay in the sport, and (4) justifying their commitment with reference to their identity.

Discussion

These data demonstrate that athletes make choices throughout their development. Those choices manifest both within and between recruitment, retention, and advancement. Further, those choices are strongly impacted by the athletes' efforts to foster consistency between their identities as athletes and the behaviors they choose, even when those choices are suboptimal for their balanced development and/or grounded in subcultural systems of belief that might otherwise seem unrealistic.

Table 2. Summary of athlete negotiation of sport development stages

Entrance
Recruitment through significant others, especially parents
Recruitment at a young age
Becoming involved seemed to be a normal extension of family life
Retention
Escalating involvement and commitment, especially by teen years
Adjust involvement to meet expectations
Sport prioritized over education
Prioritization of sport is normalized
Advancement
Trivialization of sacrifices for the sport
Build personal schedule around the sport
Increasing time and effort given to the sport
Financial commitments, even to the point of strain, by self and significant others
Acceptance of personal struggles to remain committed
Scant attention to an exit strategy

This affirms the vital roles of subculture and identity, and the essential interaction of those two, as shown in Table 2. It is not that during their development, these professional athletes face a defining moment of cognitive dissonance. Rather, the dissonance is represented in the constant and continuing challenge of making their choices consistent with their subculturally provoked identities. Their choices occur despite dissonant realities.

From the standpoint of sport development theory (Green, 2005), these findings illustrate the profound psychological challenges faced by developing athletes. Although the theory focuses primarily on sport systems, these data show substantial social and psychological interaction between athletes and the systems within which they are

embedded. Thus, a challenge for theories of sport development is to incorporate more fully athletes' psychology and the sociology of their contexts with concerns for system design and implementation.

Identity and subculture work together to enable elite athletes to resolve the dissonance between their situations and their choices as they develop. Indeed, for these athletes the choices seem essential. Once they have committed to an identity and subculturally mandated values, they experience their choices as appropriate. Dissonance remains if analyzed, but it is resolved by the athletes' understandings of who they are and the developmental context they have chosen. Cognitive dissonance remains a potential concern, but it is repeatedly resolved through the systemic underpinnings of those choices.

It is useful to recognize that in a developmental context such as the one studied here, cognitive dissonance ramifies during development. It is not that athletes face a single and defining moment of dissonance and consequent decision. Rather, it is essential that they negotiate dissonance throughout their development. This is consistent with other work demonstrating essential interactions between cognitive dissonance and self-concept (e.g., Aronson, 1999). Findings here amplify that recognition by demonstrating essential social elements, particularly subculture. In this instance, there is a very strongly developed athlete identity, which is formulated and reinforced through athletes' interactions with the subculture.

When paired with the increasing structural isolation reported by players as they spent increasing time in the tennis setting, there is very real danger of identity foreclosure, a state described by Brewer and Petitpas (2017, p. 120) as one where "individuals are strongly committed to the athlete role without having engaged in exploratory behavior." However, participants articulated that they would not know what to do without sport, as sport was "their life," and took deliberate actions to eliminate opportunities to engage in exploratory behavior. In this way, athletes' behaviors may be constrained by their athlete identity (Leonard & Schmitt, 1987) or their identity may be constrained by their behaviors. Both are likely to create a potential cycle of dissonance. It is the athletes' ties to the subculture, its values, and behavioral expectations that offer the potential to reduce this dissonance by providing group support for athletes' choices and identity (McKimmie et al., 2003), filtering information available to group members to enable access to consonant information and restrict access to dissonant information (Case et al., 2005), and reinforcing athletes' trivialization strategies (Simon et al., 1995).

The influence of subcultural values and expectations on athletes' identities can be powerful, but individuals vary in the ways in which they embrace (or resist) that influence. Narrative analyses of elite athletes' discourse across an array of sports suggest that sport subcultures constrain athletes' narratives to one of three processes -- one in which participants (a) embrace the part of athlete by conforming to the dominant performance narrative, (b) resist the part of athlete by embracing actions that conflict with the dominant narrative, or (c) play the part of athlete, displaying actions aligned with the dominant narrative at times while maintaining multiple identities across multiple contexts

(Carless & Douglas, 2013). Each narrative has the potential to elicit tension when athletes experience dissonance between their cultivated narrative and their behaviors. Participants in the current study represented multiple nations and continents and diverse sport systems, yet all athletes' narratives strongly adhered to a dominant performance narrative embracing a "single-minded dedication to performance… [whereby] performance-related concerns come to infuse all areas of life while other areas are diminished or relegated" (Carless & Douglas, 2013, p. 31).

Limitations and Future Research Directions

The lack of audio recorded interviews is a limitation of the study. Although a concerted effort was made to mitigate the effect of not being able to audio record interviews, it is plausible that some information shared by participants may have been missed because of the reliance on notetaking.

The homogeneity of participants' narratives may also be a limitation that can be addressed by future research. These athletes conformed to the dominant performance narrative, and unsurprisingly expressed unquestioned belief in the existing tennis development systems and structures, even when their experiences did not deliver the performance and resulting financial success expected. None had truly altered their behaviors to change their career trajectory. All remained committed to professional tennis. Any cognitive dissonance they experienced throughout their development had been either reduced or trivialized, at least enough to persist in their tennis career. It is unlikely, however, that these athletes represent the full range of tennis players with dreams of making it to the professional ranks (cf. Carless & Douglas, 2009, 2012). Future research should seek to understand a broader range of athletes – athletes with alternative narratives, athletes in various stages of development, and athletes who have achieved success without compromising their beliefs, identities, or behaviors.

Conclusions

This study explored the developmental pathways and psychological dynamics experienced by professional tennis players as they navigate their careers. Findings illuminate the interplay between identity, subcultural values, and cognitive dissonance, highlighting how players reconcile their beliefs with their behaviors despite significant challenges. The elite tennis players in this study made profound commitments to their sport from a young age, often at the expense of traditional educational and social milestones. This commitment, deeply embedded within their subcultural frameworks, is not merely a career choice but a foundational element of their identity. Players trivialized sacrifices and normalized the dedication required by aligning their self-concept with their professional aspirations. Findings suggest that the interaction between athlete identity and subculture is crucial in understanding the persistence and resilience of athletes in the face of dissonant realities. Understanding athletes who navigate different narratives or achieve success without compromising their broader identities could provide valuable insights into more inclusive and sustainable pathways in elite sports.

References

Adent, H., & Horne, E., Martin-Cuellar, A., & Seidler, T. (2024). An investigation into how the intense nature of youth sport participation influences women's collegiate basketball players' experiences of burnout. *Journal of Amateur Sport. 10*(1), 1–23. https://doi.org/10.17161/jas.v10il.2188

Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives, 1*(2), 68–73. https://doi.org/10.1111/j.1750-8606.2007.00016.x

Aronson, E. (1999). Dissonance, hypocrisy, and the self-concept. In E. Harmon-Jones & J. Mills (Eds.), *Cognitive dissonance: Progress on a pivotal theory in social psychology* (pp. 103–126). American Psychological Association.

Bachiochi, P. D., & Weiner, S. P. (2002). Qualitative data collection and analysis. In S. Rogelberg (Ed.), *Handbook of research methods on industrial and organizational psychology* (pp. 161–183). Blackwell.

Badenhausen, K. (2020, May 29). *The world's highest-paid athletes 2020: Behind the numbers.* Forbes. https://www.forbes.com/sites/kurtbadenhausen/2020/05/29/the-worlds-highest-paid-athletes-2020-behind-the-numbers/?sh=7fe51ef553f0

Bartholomew, K. J., Ntoumanis, N., & Thogersen-Ntoumani, C. (2009). A review of controlling motivational strategies from a self-determination theory perspective: Implications for sports coaches. *International Review of Sport and Exercise Psychology, 2*(2), 215–233. https://doi.org/10.1080/17509840903235330

Barriopedro, M., López de Subijana, C., Muniesa, C., Ramos, J., Guidotti, F., & Lupo, C. (2019). Retirement difficulties in Spanish athletes: *The importance of the career path. Sport, Exercise, and Performance Psychology, 8*(4), 387–400. https://doi.org/10.1037/spy0000136

Bednall, J. (2015, January 29). *Gap between the haves and have nots in tennis continues to widen.* The Daily Telegraph. https://www.dailytelegraph.com.au/sport/tennis/gap-between-the-haves-and-have-nots-in-tennis-continues-to-widen/news-story/92ee170afae1131414bcecc2ce1f8560.

Brewer, B. W., & Petitpas, A. J. (2017). Athletic identity foreclosure. *Current Opinion in Psychology, 16*, 118–122. https://doi.org/10.1016/j.copsyc.2017.05.004

Brijball, S. (2001). Cognitive dissonance: the adoption of dissonance reduction strategies. *SA Journal of Industrial Psychology, 27*(1), 17-24.

Brockner, J. (1992). The escalation of commitment to a failing course of action: Toward theoretical progress. *Academy of Management Review, 17*(1), 39–61. https://doi.org/10.5465/amr.1992.4279568

Brouwers, J., Sotiriadou, P., & De Bosscher, V. (2015). An examination of the stakeholders and elite athlete development pathways in tennis. *European Sport Management Quarterly, 15*(4), 454–477. https://doi.org/10.1080/16184742.2015.1067239

Campbell, K., & Parcels, J. (2013). *Selling the dream: How hockey parents and their kids are paying the price for our National obsession.* Penguin.

Carless, D., & Douglas, K. (2009). 'We haven't got a seat on the bus for you' or 'all the seats are mine': narratives and career transition in professional golf. *Qualitative research in sport and exercise, 1*(1), 51-66. https://doi.org/10.1080/19398440802567949

Carless, D., & Douglas, K. (2016). Stories of success: Cultural narratives and personal stories of elite and professional athletes. In *Coaching for Performance: Realising the Olympic Dream* (pp. 61-72). Routledge.

Carless, D., & Douglas, K. (2013). "In the boat" but "selling myself short": Stories, narratives, and identity development in elite sport. *The Sport Psychologist, 27*(1), 27-39. https://doi.org/10.1123/tsp.27.1.27

Carlson, J. A. (2010). Avoiding traps in member checking. *Qualitative Report, 15*(5), 1102–1113.

Carpenter, C. J. (2019). Cognitive dissonance, ego-involvement, and motivated reasoning. *Annals of the International Communication Association, 43*(1), 1–23. https://doi.org/10.1080/23808985.2018.1564881

Case, D. O., Andrews, J. E., Johnson, J. D., & Allard, S. L. (2005). Avoiding versus seeking: the relationship of information seeking to avoidance, blunting, coping, dissonance, and related concepts. *Journal of the Medical Library Association*, *93*(3), 353-362.

Casper, J. M., & Andrew, D. P. (2008). Sport commitment differences among tennis players on the basis of participation outlet and skill level. *Journal of Sport Behavior, 31*(3), 201–219.

Coakley, J. (1992). Burnout among adolescent athletes: A personal failure or social problem? *Sociology of Sport Journal, 9*(3), 271–285. https://doi.org/10.1123/ssj.9.3.271

Cosh, S., & Tully, P. J. (2014). "All I have to do is pass": A discursive analysis of student athletes' talk about prioritizing sport to the detriment of education to overcome stressors encountered in combining elite sport and tertiary education. *Psychology of Sport and Exercise, 15*(2), 180–189. https://doi.org/10.1016/j.psychsport.2013.10.015

Côté, J. (1999). The influence of the family in the development of talent in sport. *The Sport Psychologist, 13*(4), 395–417. https://doi.org/10.1123/tsp.13.4.395

Cowden, R. G., Anshel, M. H., & Fuller, D. K. (2014). Comparing athletes' and their coaches' perceptions of athletes' mental toughness among elite tennis players. *Journal of Sport Behavior, 37*(3), 221.

DiFiori, J. P., Benjamin, H. J., Brenner, J. S., Gregory, A., Jayanthi, N., Landry, G. L., & Luke, A. (2014). Overuse injuries and burnout in youth sports: a position statement from the American Medical Society for Sports Medicine. *British Journal of Sports Medicine, 24*(1), 3–20. https://doi.org/10.1097/JSM.0000000000000060

Donnelly, P., & Young, K. (1988). The construction and confirmation of identity in sport subcultures. *Sociology of Sport Journal*, *5*(3), 223-240. https://doi.org/10.1123/ssj.5.3.223

Donnelly, P., Young, K., Yiannakis, A., & Melnick, M. J. (2001). The construction and confirmation of identity in sport subcultures. In A. Yiannakis & M. J. Melnick (Eds.), *Contemporary issues in sociology of sport*, (pp. 399-412). Human Kinetics.

Eather, N., Fray, L., & Gore, J. (2020). Who wants to be a sportsperson? Student aspirations for sporting careers. *Sport, Education and Society, 25*(9), 1072–1085. https://doi.org/10.1080/13573322.2019.1679104

Festinger, L. (1957). *A theory of cognitive dissonance.* Row, Peterson and Company.

Filipcic, A., Panjan, A., Reid, M., Crespo, M., & Sarabon, N. (2013). Tournament structure and success of players based on location in men's professional tennis. *Journal of Sports Science & Medicine, 12*(2), 354–361.

Gerdes, D., & Conn, J. (2001). A user-friendly look at qualitative research methods. *Physical Educator, 58*(4), 183–190.

Green, B. C. (2001). Leveraging subculture and identity to promote sport events. *Sport Management Review, 4*(1), 1-19. https://doi.org/10.1016/S1441-3523(01)70067-8

Green, B. C. (2005). Building sport programs to optimize athlete recruitment, retention, and transition: Toward a normative theory of sport development. *Journal of Sport Management, 19*(3), 233–253. https://doi.org/10.1123/jsm.19.3.233

Griffin, E. A. (2012). *A first look at communication theory* (8th ed.). McGrawHill, Inc.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Sage

Hayhurst, D. (2014, May 14). *An inside look into the harsh conditions of minor league baseball*. Bleacher Report. https://bleacherreport.com/articles/2062307-an-inside-look-into-the-harsh-conditions-of-minor-league-baseball

Horne, E., Woolf, J., & Green, C. (2022). Relationship dynamics between parents and coaches: Are they failing young athletes?. *Managing Sport and Leisure*, *27*(3), 224-240. https://doi.org/10.1080/23750472.2020.1779114

Jayanthi, N. A., LaBella, C. R., Fischer, D., Pasulka, J., & Dugas, L. R. (2015). Sports-specialized intensive training and the risk of injury in young athletes: A clinical case-control study. *The American Journal of Sports Medicine, 43*(4), 794–801. https://doi.org/10.1177/0363546514567298

Kovacs, M. S., Mundie, E., English, D., Bramblett, J., Kovacs, M. J., & Hosek, R. (2015). How did the top 100 professional tennis players (ATP) succeed: An analysis of ranking milestones. *Journal of Medicine and Science in Tennis, 20*(2), 50–57.

Kvale, S., & Brinkman, S. (2009). *Learning the craft of qualitative research interviewing.* Sage.

Lally, P. S., & Kerr, G. A. (2005). The career planning, athletic identity, and student role identity of intercollegiate student athletes. *Research Quarterly for Exercise and Sport, 76*(3), 275–285. https://doi.org/10.1080/02701367.2005.10599299

Leonard, W. M., & Schmitt, R. L. (1987). Sport-identity as a side bet: Towards explaining commitment from an interactionist perspective. *International Review for the Sociology of Sport, 22*(4), 249- 261. https://doi.org/10.1177/101269028702200403

Malina, R. M. (2010). Early sport specialization: Roots, effectiveness, risks. *Current Sports Medicine Reports, 9*(6), 364–371. https://doi.org/10.1249/JSR.0b013e3181fe3166

McKimmie, B. M., Terry, D. J., Hogg, M. A., Manstead, A. S., Spears, R., & Doosje, B. (2003). I'm a hypocrite, but so is everyone else: Group support and the reduction of cognitive dissonance. *Group Dynamics: Theory, research, and practice*, 7(3), 214-224.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.

Ryba, T. V. (2017). Cultural sport psychology: a critical review of empirical advances. *Current Opinion in Psychology, 16*(1), 123–127. https://doi.org/10.1016/j.copsyc.2017.05.003

Ryder, A., Lower-Hoppe, L., Storti, K. L., Hsaio, R., Turner, B., Bayles, M. P., & McKee, K. (2021). Specialization versus diversification: Impact of female youth sport experiences. *Journal of Sport Behavior*, *44*(1), 120-140.

Simon, L., Greenberg, J., & Brehm, J. (1995). Trivialization: the forgotten mode of dissonance reduction. *Journal of Personality and Social Psychology, 68*(2), 247–260. https://doi.org/10.1037/0022-3514.68.2.247

Sotiriadou, P., Brouwers, J., De Bosscher, V., & Cuskelly, G. (2017). The role of interorganizational relationships on elite athlete development processes. *Journal of Sport Management, 31*(1), 61–79. https://doi.org/10.1123/jsm.2016-0101

Staw, B. M. (1981). The escalation of commitment to a course of action. *Academy of Management Review, 6*(4), 577-587. https://doi.org/10.5465/amr.1981.4285694

Weinberg, R. S. & Butt, J. (2014). Goal-setting and performance. In A. Papaioannou & D. Hackfort (Eds.), *Routledge Companion to Sport and Exercise Psychology: Global Perspectives and fundamental concepts* (pp. 343-355): Routledge.

Woolf, J., Berg, B. K., Newland, B. L., & Green, B. C. (2016). So you want to be a fighter? Institutional work and sport development processes at an elite mixed martial arts gym. *Journal of Sport Management, 30*(4), 438–452. https://doi.org/10.1123/jsm.2014-0301

Yahya, A. H., & Sukmayadi, V. (2020). A review of cognitive dissonance theory and its relevance to current social issues. *MIMBAR: Jurnal Sosial Dan Pembangunan*, *36*(2), 480-488.