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The Utility of Role Strain Theory in Facilitating our Understanding of Elite Adolescent Golfers Developmental Trajectories

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Historically, research exploring athletes' experiences of combining a sports career with education or work commitments has been theoretically underpinned by the Holistic Athlete Career Model (Wylleman, De Knop, & Reints, 2011). However, Role Strain Theory (Fenzel, 1989) best explained adolescent elite golfers' experiences in this study. Eight elite junior golfers, who transitioned from pre-elite to elite adolescent ranks, retrospectively recalled their transition experiences of successfully combining multiple sport participation, family, peer, and educational roles. During childhood, these athletes reported chronic role strain, but it was low level and manageable. Role strain severity and regularity escalated during the early teenage years until the very final stages of the pre-elite transition context. It was at this point when role strain intensity and regularity subsided, primarily as a consequence of golf specialisation and formal secondary education completion. Findings provide recommendations for how best to safeguard elite junior golfers' long-term psychological and physical welfare.

INTRODUCTION

Developing sport talent is big business worldwide, with sport federations investing substantial funding to aid in detecting, selecting and nurturing gifted athletes throughout their childhood and adolescence (Abbott & Collins, 2004; Ryba, Stambulova, Ronkainen, Bundgaard, & Selanne, 2015). Across multiple sports, achieving world-class status is a major life goal for many young athletes, with many completing thousands of annual training and competition hours in pursuit of becoming an elite adult sport performer (Baker, Young, & Mann, 2017). In recent times, golf has developed into a truly global sport, with extensive appeal in terms of mass participation, sponsorship and media coverage. It also has unique characteristics in terms of its handicap system, age variability in achievement of elite senior level status and relatively small age-related decline in professional golf performance (Hellstrom, 2009).

Over the past 30 years, there has been substantial growth and momentum in the empirical and theoretical literature identifying the process of athletes

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transitioning from non-elite to elite levels of sports performance (Stambulova & Ryba, 2013). This body of work provides strong evidence for how elite senior level athletes' development tends to be non-linear and idiosyncratic, with their career pathway following a succession of stages over time (Collins & MacNamara, 2012). Initial research focussed on identifying specific talent development stages (Bloom, 1985; Côté, 1999), then progressed onto exploring precise steps and pathways taken by elite athletes (Coutinho, Mesquita, Davids, Fonseca, & Côté, 2016; Forsman, Blomqvist, Davids, Kontinen, & Liukkonen, 2016). A comprehensive literature base which retrospectively explored the sports participation trends of elite international athletes reveals they accumulated extensive sport-specific practice over many years, but also engaged in different sports during childhood and adolescence (for reviews, see Gullich et al., 2019; Rees et al., 2016).

Referred to by Geranosova and Ronkainen (2014, pg.53) as 'the challenge of combining a sports career with education or work', multiple studies in recent years have explored the dual-careers phenomenon (Baron-Thiene & Alfermann, 2015; Debois, Ledon, & Wylleman, 2015; Tekavc, Wylleman, & Erpic, 2015). This was in direct response to increasing evidence demonstrating how aspiring elite adolescent sport performers found balancing sport training and competition demands with other life roles, including school, family, friendships, travel-time and employment, to be physically and mentally taxing (Christensen & Sorensen, 2009; Henriksen, Stambulova, & Roessler, 2010; Miller & Kerr, 2002).

Adolescent years are considered critical for developing resilience, effective coping skills and healthy social, psychological and physical activity behaviours (Stambulova, Alfermann, Statler, & Côté, 2009). It is during this time when talented adolescent athletes tend to specialise and dedicate increased resources, time and attention to their primary sport (Stambulova & Wylleman, 2014). There is strong recognition of the importance of supporting adolescent athletes to attain optimal balance in this developmental stage. This evidence base recommends sufficient time is made for friends, family, school, paid and voluntary work plus other leisure pursuits, so they are more likely to experience good quality of life, well-being, and healthy adolescent development, and be less prone to injury, high stress levels, overtraining, burnout, social isolation and athletic identity foreclosure which may lead to dropout or withdrawal from sport altogether (Fraser-Thomas, Côté, & Deakin, 2008; Stambulova, Engström, Franck, Linnér, & Lindahl, 2015; Stambulova, Franck, & Weibull, 2012).

Simultaneously nurturing an individual's sporting and personal self has been shown to be more advantageous to life-satisfaction and general well-being than a singular focus on sport alone (Henry, 2013; Lally, 2007), with increased performance more likely when achieving sport-life balance outside the elite sport environment (Aquilina, 2013). Hence, time away from rigours and day-

to-day stressors of competitive sport provide high performing athletes with physical and mental rejuvenation. Attaining good quality secondary education is also crucially important in adolescent years, because transition rates from elite junior to senior levels of competition are historically low (Van Rens, Borkoles, Farrow, Curran, & Polman, 2016).

Informed by research and applied work with athletes of varying abilities, across multiple sports, Wylleman and colleagues proposed the Holistic Athlete Career Model (HACM) (2004; 2011). This model described the likely physical, psychological, psychosocial, financial, academic and vocational transitions athletes may face throughout their athletic careers. Principally, the model adopts an holistic perspective to describe athletes' sport developmental stages. It is well recognised now, with studies demonstrating significant benefits of being involved in elite sport pathways in adolescent years, such as multiple social developmental opportunities (e.g., expanded social networks and support systems), healthier lives (e.g., reduced life stress), improved cognitive functioning (e.g., positive influence upon self-regulation abilities), and financial benefits (e.g., higher employability) (Petitpas, Brewer, & Vanraalte, 2009; Pummell, Harwood, & Lavalley, 2008).

Role Strain Theory (RST) (Fenzel, 1989) is a widely accepted psychological theory that in previous research (Van Rens et al., 2016) has been applied to identify meaningful relationships between psychological and physical well-being and perceptions and experiences of demands placed on the elite performer when combining educational and sporting commitments in adolescence. Specifically, elite adolescent sport performers' transitional experiences could be accurately investigated and to understand how role strain influences various physical, social, and psychological outcomes. RST, defined as a 'felt difficulty in fulfilling role obligations' (Goode, 1960, p.483), has been used widely across educational and organisational psychology settings to explain problems and barriers faced by individuals when fulfilling multiple role demands (Fenzel, 1989). Role strain is further defined by Goode (1960, p.483) 'as a sequence of role bargains, and as a continuing process of selection among alternative role behaviours, in which each individual seeks to reduce his role strain'.

The theory focuses on four interrelated stressors: overload, conflict, underload and ambiguity arising from such role demands (Fenzel, 1989; Holt, 1982). Fenzel (1992; 2000) provided empirical evidence that role strain was frequently experienced by young adolescents when transitioning from primary to secondary school, with consequent reductions in self-esteem, self-worth and academic achievement. The study by Spencer-Dawe (2005) found combining single-parenting with employment to be a significant source of role strain for lone mothers, particularly when they worked long and inconvenient hours or held demanding positions.

The study by Van Rens et al., (2016) took a unique approach in sport talent

development research, moving beyond the HACM framework to explore stressors associated with adolescent athletes' development. Through qualitative interviews, specific role demand related perceptions and experiences of 20 elite adolescent Australian Rules Footballers (aged 13-17) were explored and interpreted utilising RST. Consistent with the HACM, undertaking sport, school, friend, and family roles were frequently disclosed. A key study finding was that all participants frequently encountered multiple instances of role ambiguity, role overload and role conflict as they pursued their ambition of transitioning to elite senior performance levels. In more recent work, Van Rens, Borkoles, Farrow, and Polman (2018) provided important conceptual additions to the literature by finding all four RST components to be negatively associated with total life satisfaction of 112 junior elite Australian rules footballers.

When applying RST within a sport context, overload would occur when demands exceed personal resources (e.g., participating regularly in several sports, all at once and/or leaving limited or insufficient time to see friends and/or complete school work) (Van Rens et al., 2016). Conflict would transpire when disagreement occurs between what an individual wishes to do and the demands imposed by others occurs (e.g., contrasting athlete, coach and parental beliefs towards prescribed training load, intensity and frequency). The underload element of RST emphasises a perceived underutilisation of an individual's capabilities and lack of challenge (e.g., frequently competing against peers of lower sporting ability). The final element of RST is ambiguity and refers to limited understanding or clarity of one's responsibilities (e.g., the mixed messages presented to young athletes about the different priorities in their sport or life).

Despite repeated calls within the sport talent development literature, studies investigating the experiences of aspiring elite adolescent athletes and how they combine all role demands are scarce (Cosh & Tulley, 2014). This is particularly noticeable within golf talent development research, which is surprising considering its appeal and status as a global sport plus age variability between current world class senior players. One of the few studies that explored this topic showed that elite adolescent golfer status in England was more likely to be achieved when early specialisation and high training volumes were delayed. In the study by Hayman, Polman, Taylor, Borkoles, and Hemmings (2011), participants did not start to undertake high volumes of golf-specific deliberate practice until approximately 16 years of age. Instead, they played and occasionally competed in several sports during childhood, one of which was golf. The emphasis was on a playful, fun, non-competitive player-focussed environment. It was only during the latter teenage years, once selection for county and national representative golf teams was secured, that they specialised and began undertaking high amounts of golf specific deliberate training and competition schedules.

Henriksen, Larsen, and Christensen (2014) qualitatively explored the experiences of a sport academy golf team in Denmark, which had limited success. It was found that the struggling environment was characterised by features that are in opposition to those of successful environments, for example, a lack of supportive training groups and role models, little understanding from non-sport environments, no integration of efforts among different parts of the environment, and an incoherent organisational culture. Finally, a study by Hellstrom (2009) found professional golfers considered a positive attitude, desire and motivation to be essential psychological qualities needed to secure tournament success.

The aim of this study was to qualitatively explore elite adolescent golf players' perceptions and experiences of combining concurrent sport, education, family and social role demands utilising RST. Findings will extend current transitional knowledge and provide talent developers, psychologists, coaches and policy makers employed within golf with practical implications for how best to safeguard their athletes' long-term physical (e.g., fewer injuries) and psychological welfare (e.g., reduced likelihood of burnout, dropout, depression and identity foreclosure).

METHOD

PARTICIPANTS

The sample comprised 8 elite English adolescent male amateur golfers (M age = 18.8, SD = 2.1) with a handicap between +2 and +4 (M handicap = +2.6, SD = 1.3) and playing experience between 6 and 12 years. Experts have been defined within the extant literature as those who compete at international and/or national levels (Helsen, Starkes, & Hodges, 1998). In this study, the term 'elite adolescent golfer' was used to categorise participants aged between 16 and 20 years who were current members of representative teams sanctioned by the English Golf Union (EGU). At the time of data collection, all were affiliated with various EGU international representative teams ranging from Under 16's to Senior Men's A Team and had experience of playing regular golf competitions across a range of standards (e.g., county, regional, national and international levels). Participants were assigned numerical pseudonyms to protect anonymity. They were all informed that they could withdraw from the study at any time without giving any reasons and provided written informed consent prior to any data collection commencing. Once institutional ethical clearance was granted, face-to-face debriefs addressing the study aims, objectives and procedures to follow were completed. Parental consent permitting their child's involvement was obtained when participants were aged under 18.

PROCEDURE

Participants affiliated with EGU Under 16's, 21's and Senior Men's A team squads were initially approached via email and telephone by the lead author to participate in the study. For all consenting participants, interviews were

undertaken at a convenient time, date and location for them. In all cases, this was within a safe, private and comfortable room within the grounds of their local golf club. When undertaking qualitative research, it is important the interviewer builds rapport and trust with the interviewee (Patton, 2002). The lead author was previously an elite adolescent athlete. This meant they possessed contextual knowledge concerned with the demands of sport and educational commitments and were familiar with terminologies used in elite sport, which they used to aid the process of establishing a positive and empathetic bond with participants. To ensure participants felt relaxed, comfortable and at ease to share personalised and sensitive information, each interview started with an informal discussion on how they first became involved in golf. The interview schedule was pilot tested by two regional level adolescent golfers. This confirmed the wording of particular questions required simplifying and further strengthened the authors interviewing skills and techniques.

The interview format was designed to explore how demands arising from combining sport commitments and other roles impacted the participants and whether RST was applicable to interpret and help to gain insight into mechanisms of the emergence of role strain and subsequent psychological and physical outcomes. The lead author undertook the role of 'active listener' during each interview to assist participants in telling their unique stories in their own particular way. Participants were encouraged to talk about all their life roles, including sports, school, friends, family and other hobbies (e.g., music). The first stage of the interview explored participants' experiences of golf involvement throughout their childhood and adolescence. Follow up questions probed how they fulfilled other sport, education, extracurricular and family commitments/roles (e.g., discussions centred on what it was like having to complete school work and other sport commitments during heavy golf competition periods).

In the second stage, specific daily challenges encountered in meeting role demands were explored. Example questions included 'were there any roles you found particularly challenging to accomplish' and 'how well do you think you managed your competing role demands'. To elicit richer data, detailed and in-depth supplementary probing occurred, such as 'what was your thinking behind this decision', 'how different were these experiences to previous ones' and 'when did you realise this was the case'. This flexible approach of questioning ensured participant centeredness, making it possible to follow up conversations where appropriate (Lincoln & Gubba, 1985). Every attempt was made to follow participants' stories and to understand their unique experiences and accounts of the pathways they travelled, rather than following a standardized list of questions.

DATA ANALYSIS

Each interview was audio-taped, lasted approximately 70 minutes, transcribed

verbatim, scrutinised multiple times to detect significant meanings and subjected to similar thematic analysis guidelines published by Braun and Clarke (2006). Each transcript was read on several occasions by the first and fifth authors, with notes reflecting theme statements and their meanings placed within margins. The same authors then independently annotated each interview transcript with their personalised thoughts and interpretations of the data. Initial thematic coding employed a deductive approach, which is recommended for qualitative analysis when existing theories are being tested (Elo & Kyngas, 2008). Once the deductive approach was complete, an inductive approach was undertaken to ensure any additional higher order themes were included and to allow for lower order themes to emerge. Marginal differences were found between the two separate coding results, with any discrepancies discussed and agreed. Initial associations and connections based on similarities and patterns between emergent themes were made, resulting in the development of three main themes.

When finalised, interview extracts representing each theme were selected. The final analysis stage involved developing written accounts from identified themes. These were reviewed and redrafted several times. Five weeks post-interview, half of the sample undertook a brief ten minute member-checking telephone conversation with the first author to establish if they were satisfied that the findings to emerge were accurate reflections of their golf development (Lincoln & Gubba, 1985). In all cases, each participant corroborated their personal journey within the wider context of the finalised data set. This confirmed the effectiveness of the research team in providing adequate detail and depth of participants' transitional experiences.

RESULTS

PLEASURABLE EARLY CHILDHOOD GOLF PARTICIPATION EXPERIENCES

The interview data indicated that all participants had a happy and active upbringing, who liked to participate and compete in all the sports they pursued at the different stages of their childhood. All participants played multiple individual and team sports, at various levels and abilities. From a young age, participants found golf to be an especially pleasurable and inherently rewarding pastime. They reported their strong commitment and enjoyment of golf, including competitions, camaraderie, challenges and the personal connections it provided for them, such as mentoring through their respective golf clubs. They also felt competent and confident in their golfing ability and saw their achievements as natural rather than a result of sacrifice or hard effort.

Reflecting fondly on early golfing pursuits as young boys, they stated that their early career activities of golf consisted predominantly of free-play in gardens and neighbouring parks, as well as regular 9 or 18 hole practice games at local golf clubs with members of the clubs, adult family members and peers of similar skill levels. To illustrate, participant 6 stated how as a youngster he, *"loved to spend time at the golf club at the weekends and the school holidays,*

as it allowed the chance to practice with the club professional and some of the older lads in the ranks". This fun, inviting and friendly environment captivated participants, allowing for motor skills development, learning and refinement to be progressively shaped and nurtured.

As participants grew older and golf performance levels progressed, so did the demands they faced to juggle the ever increasing competing roles within their daily lives, including school, other sports and friendships. In all cases, participants were fully supported by their immediate family, especially their fathers, to pursue their golf development. It was clear how parents encouraged their sons not to specialise early in golf, but instead for them to play multiple sports and pursue other physical activities. The following extracts demonstrate this:

"Mum just wanted me to be a happy child who liked playing all kinds of sports, but also doing well at school and having a good social life". (P2)

"My parents wanted the best form a young age for me and to them that meant me trying out all different sports and just being fit and healthy". (P6)

As participants got older, they started to compete at regional and national adolescent competitions. At this developmental stage, based on their accomplishments and consequent feedback, others started to see them as emerging golf talents. Progressively, the standard and frequency of golf competitions increased, even though they were still training and competing recreationally in other sports, such as football and rugby union. Participants in this period of their development tended to be younger and less physically, mentally and socially developed than other competitors in those national golf events, which participants viewed with minor unease, worry and doubt.

"I thought I was wasting my time when I suddenly started playing the older and more experienced players who could hit the ball harder and further. I totally loved golf, but I was not just completely sure if it was worth the sacrifices I had started to make." (P5) (RST: conflict, overload, ambiguity)

In this period of their development as aspiring adolescent athletes, there were no signs of significant role strain arising from their different role demands impacting on their lives. In fact, their experiences in golf were of play and under-load. However, as they chose to specialise more and more in golf, and their commitment grew to the sport, participants started to report increased role strains.

ESCALATING ROLE STRAIN SEVERITY AND FREQUENCY IN LATTER STAGES OF PRE-ELITE GOLF CONTEXT

Achieving competitive national academic exams results placed a significant

demand on participants. Academic achievements are generally viewed as very important in this developmental phase of a child by parents, teachers, relatives and peers. This period often coincides with significant development in sporting achievements too. Aspiring athletes often report poorer relationships with school teachers and friends because of the competing sport and academic demands, which can result in feelings of disheartenment, discontentment and social isolation in adolescent athletes. Indeed, this was a case for the study participants because as their golf commitments of training, travelling, and competing increased, they reported to spend significantly less time with friends and family. There was also a simultaneous increase in school work associated with national exams, which posed a significant time and commitment demand on the aspiring elite athletes. From participants' narratives, it appears that there was sometimes a lack of support for their choice of golf commitment from school teachers, coaches of their different sports, and peers:

"The school were really at the time not so bothered about the golf and they just wanted me to play in all their sports teams and as long as it did not affect that they were fine. I did have a few arguments like with the rugby and cricket teachers because I could not play as I started to need time of to play golf when it took the priority as my main sport." (P1) (RST: conflict, overload, ambiguity)

"I remember a teacher at my school basically telling me I had no choice but I had to play for his football team and that he expected me to be there no questions asked and I was scared to tell him I was supposed to have golf practice at the same time." (P8) (RST: conflict, overload, ambiguity)

As the above narratives illustrate, role strain arising from perceptions of conflict with coaches of various teams about which sport should take priority, overload of competition and training commitments and school workload demands, as well as ambiguity around which sport to invest in or prioritise in these formative years, as 'talent' was still present in all sports played. Participants discussed feeling increasingly isolated between ages 14 and 15, because they had to make important choices about role demands and the first sacrifices were made to their social lives. To illustrate this further, some discussed having to sacrifice attending social events such as visiting the cinema with friends and meals out with relatives because of golf commitments:

"The fact is that I know I made sacrifices and missed out on things when I was in the last years at school, like going out at night with friends and missing the parties and social things like that." (P3) (RST: conflict, overload)

Traditionally in the world, golf has been viewed as an 'old man's sport'. Participants reported increasing conflict about their own perceptions of what

golf meant to them and their peers and adults in their lives. At this stage, they were weighing up the consequences of personal investment in various sports and have tried to resolve arising ambiguity and conflict from peers, families, and coaches. They reported to feeling 'pulled in multiple directions':

"I could see for myself that other sports were more popular than golf, but I was never going to be one of the best in the country at football or tennis and I just liked my golf and I was improving quickly hence why I continued with it but my mates think I made the wrong choice." (P5) (RST: ambiguity, conflict)

"A couple of my friends do play golf, but I do get a lot of stick from people at school for playing it. Just things like golf is an old man's sport and why do you play golf, it is boring all you are doing is chasing a little white ball around a big field." (P8) (RST: ambiguity, conflict)

It was clear from over half of the participants' narratives that they were aware of the negative psychological outcomes of reducing role demands from romantic relationships when pursuing their golf careers. They felt that they had to make a choice between a romantic relationship and golf:

"My girlfriend at the time would always say golf is ruining our relationship and you need to decide what means more to you, me or golf, because all it seems all you want to do now is play golf. She would always go on and on saying the only people I associated with were fellow golfers." (P5) (RST: conflict; ambiguity)

Participants recognised that their peers who were not involved in systematic training, such as academic, music and/or sport failed to understand the commitments required to become an expert and/or elite performer. As their consistency of performance and quality of golf skill levels improved, so did the demands to juggle ever increasing and competing life roles. The nature, severity and regularity of role strain had gradually intensified from the early teenage years up to the final pre-elite context. In the months leading up to golf specialisation, the negative physical and psychological outcomes started to emerge, mainly due to excessive physical, social, and cognitive demands. At this point, when experiencing high role strain, the performers started to examine what changes they needed to make to reduce the negative consequences of role demand strains.

"It came to a point when I was really struggling to just get out of bed in the morning. I was tired all the time and how I was golfing more than ever was not helping." (P2) (RST: overload)

"There came a stage when I just thought I can't keep going on like this and doing all these different things in my life like the golf, my other sports, going out all the time with mates, playing other sports.

It was hard but I had to decide if I wanted it enough and I did so I started to focus just on my golf." (P7) (RST: overload, conflict)

ROLE STRAIN AT EARLY STAGES OF ELITE ADOLESCENT STATUS

By the mid teenage years, all participants in this study reconceptualised how they viewed themselves, from talented all-round sports performers with multiple sporting commitments, into young ambitious golfers intending on transitioning into elite adolescent then senior levels of golf. It was at this stage when they stopped playing other sports, making the decision to specialise in golf and freeing up crucial resources (e.g., time) that they thought were needed to achieve golfing excellence. Participants' decisions to specialise in golf significantly reduced their daily role strain levels (e.g., ambiguity in which sport to choose, conflict with significant others and physical, mental, and social overload arising from playing multiple sports) during the final intensive transition period into elite adolescent status:

"Dropping my other sports was a really big help in freeing up extra time so I could play more golf and spend time with coaches." (P4) (RST: overload, conflict, ambiguity)

"Just doing my golf made things far easier, like I was playing much more of the game without worrying about having to do my other sports stuff." (P7) (RST: overload)

At this stage of their sport development pathway, their main life goal was to become a high-level professional golfer. Golf had now taken centre stage in their lives, with education, friendships, and the family starting to take less importance. To illustrate this way of thinking, participant 2 stated *"I started working as hard as possible to become the best in the country at golf for my age. Golf just really became my life."* (RST: reducing ambiguity)

Golf specialisation created more time and reduced overload arising from role demands (e.g., training and competitions from other sports) to engage with purposeful short and long game specific deliberate practice. All participants were members of national development squads, which opened doors for them to work more closely and train with EGU performance coaches and other EGU team mates. Participants reported considerable golf performance improvements between the ages of 15 and 16, especially in their short game. They also reported significant associations with the wider EGU coaching community and players. For example, participant 3 discussed the changing dynamic of his close inner circle of friends and the subsequent impact on his life satisfaction:

"I will always have my old school mates, but I have become firm friends with lots of the guys and girls from the national (golf) teams as well as some of the coaches. We all just seem to have more plenty in common and want each other to do well golf wise which

is a great positive to have." (RST: finding ways to improve social functioning).

Unanimously, all participants spoke about how both parents, but particularly mothers, played a key role in facilitating their golf development during childhood. This support intensified at the golf specialisation stage, which also coincided with very heavy school work demand, because of national examination preparations. At this stage, their golf competitions and training commitments had also significantly increased, resulting in overload of role strain. Participants' mothers were particularly supportive in providing transportation to regional and national golf competition and training events and provided essential parental care (e.g., providing a sense of perspective after defeat) and significant financial support (e.g., payment of competition fees, hotels and travel expenses). However, there is no indication from the data of excessive parental expectations at this stage of the adolescent athletes' careers.

Parents were reported to have encouraged their sons to work hard, be well prepared and to enjoy playing golf regardless of the level of engagement and competition standards. Participants highly valued their mothers' role in their early elite careers and saw them as sources of significant support, which appeared to help them to attenuate the frequency and severity of role strain encountered:

"I remember just wanting some kind of protection because life at times felt like a blur and mum helped me so much with sorting that. I knew I could rely on her." (P1) (RST: reducing conflict and negative psychological and physical consequences of role strain)

"Since about the age of 17, my mum has become a bit like my manager. She will sit down with me and work out all the expenses, entry fees and complete the entry forms, flights and hotels. She even does the same for my mate and she saves us both so much time and hassle." (P2) (RST: reducing overload)

DISCUSSION

It is well established how international junior athletes encounter multiple stressors during their careers as they undertake daily life roles, including sport, school and social life (Pink, Saunders, & Stynes, 2015; Van Rens et al., 2016). Empirical evidence also confirms that a balanced approach to the dual-career of adolescent sport performers will result in satisfactory educational progress, life satisfaction and well-being (Stambulova et al., 2015; Van Rens et al., 2018). This exploratory study extended current sport transitions and dual-career research by utilising RST to investigate perceptions and experiences of strain arising from competing role demands of adolescent elite golfers (Fenzel, 1989).

Previous research found that RST further explained the challenges elite adolescent athletes face and how it affected their psychosocial and physical

development (Van Rens et al., 2016). Similarly, in this study, we applied RST to gain further insight into the relationship between perceptions and experiences of role demands on psychosocial functioning of elite adolescent golfers. Initially, all participants reported positive experiences in early childhood, playing multi-sports and competing locally at grassroots levels, across several sports (Bjørndal & Ronglan, 2018). However, as existing research highlighted (Christensen & Sorensen, 2009; Debois et al., 2015; Henriksen et al., 2010), a broad range of stressors, which are intuitively linked with elite adolescent athletes and their dual-careers also started to appear at age 14-15 in this study. Examples include limited time to complete school work due to excessive training, competition and travel demands and cognitive demand caused by injury, performance plateaus and excessive expectation of self and others (Christensen & Sorensen, 2009; Van Rens et al., 2016, 2018).

From an early age, golf played a particularly important role in the lives of the participants, with all picking the game up quickly without early exposure to golf specialisation and the sacrificing of other interests. They also reported to have enjoyed golf participation more so than other sports. As participants' annual golf performance levels improved steadily during childhood and early teenage years, so did the task of managing the volume and competing role demands from sport participation (e.g., representing various school sports teams) and non-sport specific sources (e.g., completing formal education requirements). Participants in this study continued experimenting with several sport and non-sport roles, each of which became additional sources of role strain with the potential to impact negatively upon their golf development. It was at this stage of their lives when they first experienced occasional low level role strain.

Up to age 14 and 15, participants in this study were successful in managing role strain arising from the competing role demands in this very developmentally demanding period of their lives, indexed by their continued participation in high level golf. There was evidence for increasing role ambiguity just before they decided to pursue an elite golfing career. This ambiguity was due to initially being afraid to voice their choices to their teachers and coaches, probably due to the uncertainty of the consequences of their choices. However, in this study, this stage would mark the start of conscious role bargaining and the stage when they started to articulate the roles they would choose to pursue to. Naturally, the immediate families and especially the participants' parents were very much aware and in support of helping their adolescents to clarify this role bargaining process and help them to negotiate and bargain to achieve a smooth transition to concentrating on a single sport, which was golf in this case. The parents helped them to gradually reduce their role overload by helping to resolve conflict with various coaches and teachers in school and sports clubs when they decided to concentrate on golf alone.

Extending the work of Van Rens et al., (2016; 2018), role strain arising from

role bargaining and role demands continued to escalate up to the very final stages of the pre-elite transition context. The further their status and reputation grew as a national golf talent, the greater were the role demands they experienced. Instances of role overload and conflict were most frequently reported. It was at this critical athletic development period, aged 15-16 when the participants reported the highest role strain. RST was particularly useful in understanding the temporal changes of role demands and identifying a specific age and strain accumulation combined with recognition of sport achievements, which made these adolescent athletes vulnerable to poor psychosocial outcomes. Interestingly, there was no evidence for negative psychosocial outcomes in this study, as no participant contemplated dropping out of golf altogether, nor described feeling unable to sufficiently cope with escalating role strains arising from competing demands. Participants also reported to have monitored and systematically managed these role demands with significant parental and family support. This finding may be a distinguishing factor for those who successfully transition from pre-elite to elite, compared to those who are unsuccessful. However, this is a very golf specific finding, where parents were providing exceptionally high social and financial support. This finding is also contradictory to the work of Krane and Temple (2015) which highlighted how children and adolescents were more likely to dropout from competitive sport because of social pressures and competing priorities.

As participants gained greater experience of playing and succeeding at national level junior golf events, their approach to the sport became increasingly strategic. It was at the final pre-elite stage, with the full support of parents, extended family and close friends, that decisions to specialise in golf took place, the consequences of which was to reduce or completely cease participation in extracurricular activities, such as other sports training and competitions. At the same time, participants reported a significant increase in daily golf specific deliberate practice (Ericsson, Krampe, & Tesch-Romer, 1993) and diverted their freed resources to becoming elite adolescent golfers. They were successful in their role bargaining efforts and were strategic to limit the negative psychosocial consequences on their lives.

Golf specialisation also afforded greater opportunities for them to spend time in high quality training facilities, where EGU national coaches were located. From this period onwards, all their individual and collective efforts were focused towards becoming an elite golfer. Other roles such as being a sibling, friend, family member and boyfriend were minimised mostly with the acceptance and support from these significant others. Role strain was also mediated by greater financial and mentoring support from parents and coaches and by the completion of formal educational requirements.

This study was not without limitations. Primarily, participant recollections were retrospective so liable to forgetfulness and bias. Furthermore, the sample was gender and sport specific, small, and homogeneous, thus limiting

generalisability of findings to female athletes and other sports. The participants were also already selected to play for their country and as such have been likely to cope successfully with the role strain they experienced up to then. Finally, the failure to validate the nature of recalled data with the participants' coaches, peers and parents was a further limitation.

The practical implications of this study are wide ranging. Elite adolescent golfers should be taught appropriate self-regulatory skills and provided with social and financial support by national governing bodies to help them to cope effectively and deal with role strain arising from competing role demands during this important developmental stage. This is particularly important for aspiring elite adolescent athletes without strong parental and financial support. It is very important for coaches, parents, teachers, sport management teams and policy makers to be educated upon how they can better help to effectively safeguard the welfare of international adolescent athletes from excessive levels of role strain. Unfortunately, because sport is organised in a way that even coaches compete for their athletes, it might be difficult to achieve cross disciplinary collaboration from all involved in the athletes' lives. Failure to do so may prove detrimental to their future short and long term psycho-social (e.g., greater likelihood of burnout, dropout, depression, identity foreclosure) and physical health (e.g., more injuries).

Although golf talent development research is still in its relative infancy, the study findings provide some important conceptual additions to the literature and a firm foundation on which future research may build. Longitudinal research employing a variety of research techniques, including semi-structured interviews, self-report diaries and the Role Strain Questionnaire for Junior Athletes (Van Rens et al., 2016), is warranted. This would enable day-to-day feelings and experiences of aspiring elite male and female adolescent athletes, fulfilling dual-careers, across multiple team and individual sports, including golf, to be tracked and monitored over time. Future research should also specifically target know ages of transition, which in golf appears to be 14 to 15 years of age. Findings of such studies may enable to identify any key differences between those who are successful and unsuccessful in making the transition from pre-elite to elite sport performance. There is also a need to explore how role bargaining occurs and what are the negative consequences if unsuccessful. Future research could also monitor role strain levels experienced by high performing and grassroots coaches, across wide ranging sports at contrasting periods of the season and/or their coaching careers.

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