

# Northumbria Research Link

Citation: Hayman, Rick, Polman, Remco, Taylor, Jamie, Hemmings, Brian and Borkoles, Erika (2019) The Utility of Role Strain Theory in Facilitating our Understanding of Elite Adolescent Golfers Developmental Trajectories. *International Journal of Golf Science*, 7 (2). ISSN 2168-7595

Published by: Scholastica

URL: <https://www.golfsciencejournal.org/article/9492>  
<<https://www.golfsciencejournal.org/article/9492>>

This version was downloaded from Northumbria Research Link:  
<http://nrl.northumbria.ac.uk/id/eprint/39826/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18

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

Rick Hayman<sup>1</sup>, Remco Polman<sup>2</sup>, Jamie Taylor<sup>3</sup>, Brian Hemmings<sup>4</sup> and Erika Borkoles<sup>5</sup>

*<sup>1</sup>Department of Sport, Exercise and Rehabilitation, Northumbria University, Newcastle,  
United Kingdom*

*<sup>2</sup>School for Exercise and Nutritional Sciences, Queensland University of Technology, Brisbane,  
Australia*

*<sup>3</sup>School of Psychology, University of Central Lancashire, United  
Kingdom*

*<sup>4</sup>Faculty of Sport, Health and Applied Science, St Mary`s University Twickenham, London,  
United Kingdom*

*<sup>5</sup>School of Public Health and Social Work, Queensland University of Technology, Brisbane,  
Australia*

**Abstract**

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, recent empirical research (e.g., Van Rens, Borkoles, Farrow, Curran & Polman; Van Rens, Borkoles, Farrow & Polman, 2018) applied Role Strain Theory (Fenzel, 1989) to directly explain how adolescents elite athletes combine and cope with the competing demands of sport and education arising from the different roles they have to fulfil as developing athletes and young adults. In this study, eight adolescent international golfers, who transitioned from pre-elite to elite junior ranks, retrospectively recalled how they combined 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.

**Keywords:** Elite Junior Golfer; Role Strain Theory; Talent Pathways; Transitions.

## 1 Introduction

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

13 Over the past 30 years, there has been substantial growth and momentum in the  
14 empirical and theoretical literature identifying the process of athletes transitioning from  
15 non-elite to elite levels of sports performance (Stambulova & Ryba, 2014). This body of work  
16 provides strong evidence for how elite senior level athletes' development tends to be non-  
17 linear and idiosyncratic, with their career pathway following a succession of stages over  
18 time (Collins & MacNamara, 2012). Initial research focussed on identifying specific talent  
19 development stages (e.g., Bloom, 1985; Côté, 1999), then progressed onto exploring precise  
20 steps and pathways taken by elite athletes (e.g., Coutinho, Mesquita, Davids, Fonseca &  
21 Côté, 2016; Forsman, Blomqvist, Davids, Konttinen & Liukkonen, 2016). A comprehensive  
22 literature base which retrospectively explored the sports participation trends of elite  
23 international athletes reveals they accumulated extensive sport-specific practice over many

1 years, but also engaged in different sports during childhood and adolescence (for reviews,  
2 see Gullich et al., 2019; Rees et al., 2016).

3 Referred to by Geranosova and Ronkainen (2014, pg.53) as ‘the challenge of  
4 combining a sports career with education or work’, multiple studies in recent years have  
5 explored the dual-careers phenomenon (e.g., Baron-Thiene & Alferman, 2015; Debois,  
6 Ledon & Wylleman, 2015; Tekavc, Wylleman & Erpic, 2015). This was in direct response to  
7 increasing evidence demonstrating how aspiring elite adolescent sport performers found  
8 balancing sport training and competition demands with other life roles, including school,  
9 family, friendships, travel-time and employment, to be physically and mentally taxing  
10 (Christensen & Sorensen, 2009; Henriksen, Stambulova & Rossler, 2010; Miller & Kerr,  
11 2002).

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

1 Simultaneously nurturing an individual's sporting and personal self has been shown  
2 to be more advantageous to life-satisfaction and general well-being than a singular focus on  
3 sport alone (Henry, 2013; Lally, 2007), with increased performance more likely when  
4 achieving sport-life balance outside the elite sport environment (Acquilina, 2013). Hence,  
5 time away from rigours and day-to-day stressors of competitive sport provide high  
6 performing athletes with physical and mental rejuvenation. Attaining good quality secondary  
7 education is also crucially important in adolescent years, because transition rates from elite  
8 junior to senior levels of competition are historically low (Van Rens, Borkoles, Farrow,  
9 Curran & Polman, 2016).

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

21 Role Strain Theory (RST; Fenzel, 1989) is a widely accepted psychological theory that  
22 in previous research (e.g., Van Rens et al., 2016) has been applied to identify meaningful  
23 relationships between psychological and physical well-being and perceptions and  
24 experiences of demands placed on the elite performer when combining educational and

1 sporting commitments in adolescence. Specifically, elite adolescent sport performers'  
2 transitional experiences could be accurately investigated and to understand how role strain  
3 influences various physical, social, and psychological outcomes. RST, defined as a 'felt  
4 difficulty in fulfilling role obligations' (Goode, 1960, p.483), has been used widely across  
5 educational and organisational psychology settings to explain problems and barriers faced  
6 by individuals when fulfilling multiple role demands (Fenzel, 1989). Role strain is further  
7 defined by Goode (1960, p.483) 'as a sequence of role bargains, and as a continuing process  
8 of selection among alternative role behaviours, in which each individual seeks to reduce his  
9 role strain'.

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

18 The study by Van Rens et al., (2016) took a unique approach in sport talent  
19 development research, moving beyond the HACM framework to explore stressors  
20 associated with adolescent athletes' development. Through qualitative interviews, specific  
21 role demand related perceptions and experiences of 20 elite adolescent Australian Rules  
22 Footballers (aged 13-17) were explored and interpreted utilising RST. Consistent with the  
23 HACM, undertaking sport, school, friend, and family roles were frequently disclosed. A key  
24 study finding was that all participants frequently encountered multiple instances of role

1 ambiguity, role overload and role conflict as they pursued their ambition of transitioning to  
2 elite senior performance levels. In more recent work, Van Rens, Borkoles, Farrow and  
3 Polman (2018) provided important conceptual additions to the literature by finding all four  
4 RST components to be negatively associated with total life satisfaction of 112 junior elite  
5 Australian rules footballers.

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

17         Despite repeated calls within the sport talent development literature, studies  
18 investigating the experiences of aspiring elite adolescent athletes and how they combine all  
19 role demands are scarce (Cosh & Tulley, 2014). This is particularly noticeable within golf  
20 talent development research, which is surprising considering its appeal and status as a  
21 global sport plus age variability between current world class senior players. One of the few  
22 studies that explored this topic showed that elite adolescent golfer status in England was  
23 more likely to be achieved when early specialisation and high training volumes were  
24 delayed. In the study by Hayman, Polman, Taylor, Borkoles and Hemmings (2011),

1 participants did not start to undertake high volumes of golf-specific deliberate practice until  
2 approximately 16 years of age. Instead, they played and occasionally competed in several  
3 sports during childhood, one of which was golf. The emphasis was on a playful, fun, non-  
4 competitive player-focussed environment. It was only during the latter teenage years, once  
5 selection for county and national representative golf teams was secured, that they  
6 specialised and began undertaking high amounts of golf specific deliberate training and  
7 competition schedules.

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

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

23

24

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24

## 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 (e.g., 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

1 important the interviewer builds rapport and trust with the interviewee (Patton, 2002). The  
2 lead author was previously an elite adolescent athlete. This meant they possessed  
3 contextual knowledge concerned with the demands of sport and educational commitments  
4 and were familiar with terminologies used in elite sport, which they used to aid the process  
5 of establishing a positive and empathetic bond with participants. To ensure participants felt  
6 relaxed, comfortable and at ease to share personalised and sensitive information, each  
7 interview started with an informal discussion on how they first became involved in golf. The  
8 interview schedule was pilot tested by two regional level adolescent golfers. This confirmed  
9 the wording of particular questions required simplifying and further strengthened the  
10 authors interviewing skills and techniques.

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

23           In the second stage, specific daily challenges encountered in meeting role demands  
24 were explored. Example questions included 'were there any roles you found particularly

1 challenging to accomplish' and 'how well do you think you managed your competing role  
2 demands'. To elicit richer data, detailed and in-depth supplementary probing occurred, such  
3 as 'what was your thinking behind this decision', 'how different were these experiences to  
4 previous ones' and 'when did you realise this was the case'. This flexible approach of  
5 questioning ensured participant centeredness, making it possible to follow up conversations  
6 where appropriate (Lincoln & Gubba, 1985). Every attempt was made to follow participants'  
7 stories and to understand their unique experiences and accounts of the pathways they  
8 travelled, rather than following a standardized list of questions.

### 9 **Data Analysis**

10 Each interview was audio-taped, lasted approximately 70 minutes, transcribed  
11 verbatim, scrutinised multiple times to detect significant meanings and subjected to similar  
12 thematic analysis guidelines published by Braun and Clarke (2006). Each transcript was read  
13 on several occasions by the first and fifth authors, with notes reflecting theme statements  
14 and their meanings placed within margins. The same authors then independently annotated  
15 each interview transcript with their personalised thoughts and interpretations of the data.  
16 Initial thematic coding employed a deductive approach, which is recommended for  
17 qualitative analysis when existing theories are being tested (Elo & Kyngas, 2008). Once the  
18 deductive approach was complete, an inductive approach was undertaken to ensure any  
19 additional higher order themes were included and to allow for lower order themes to  
20 emerge. Marginal differences were found between the two separate coding results, with  
21 any discrepancies discussed and agreed. Initial associations and connections based on  
22 similarities and patterns between emergent themes were made, resulting in the  
23 development of three main themes.



1 stated how as a youngster he, *“loved to spend time at the golf club at the weekends and the*  
2 *school holidays, as it allowed the chance to practice with the club professional and some of*  
3 *the older lads in the ranks”*. This fun, inviting and friendly environment captivated  
4 participants, allowing for motor skills development, learning and refinement to be  
5 progressively shaped and nurtured.

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

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

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

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

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

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

#### 10    **Escalating Role Strain Severity and Frequency in Latter Stages of Pre-elite Golf Context**

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

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

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

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

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

22        Traditionally in the world, golf has been viewed as an ‘old man’s sport’. Participants  
 23        reported increasing conflict about their own perceptions of what golf meant to them and  
 24        their peers and adults in their lives. At this stage, they were weighing up the consequences

1 of personal investment in various sports and have tried to resolve arising ambiguity and  
 2 conflict from peers, families, and coaches. They reported to feeling ‘pulled in multiple  
 3 directions’:

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

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

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

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

20 Participants recognised that their peers who were are not involved in systematic  
 21 training, such as academic, music and/or sport failed to understand the commitments  
 22 required to become an expert and/or elite performer. As their consistency of performance  
 23 and quality of golf skill levels improved, so did the demands to juggle ever increasing and  
 24 competing life roles. The nature, severity and regularity of role strain had gradually

1 intensified from the early teenage years up to the final pre-elite context. In the months  
2 leading up to golf specialisation, the negative physical and psychological outcomes started  
3 to emerge, mainly due to excessive physical, social, and cognitive demands. At this point,  
4 when experiencing high role strain, the performers started to examine what changes they  
5 needed to make to reduce the negative consequences of role demand strains.

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

9 *“There came a stage when I just thought I can’t keep going on like this and doing*  
10 *all these different things in my life like the golf, my other sports, going out all the*  
11 *time with mates, playing other sports. It was hard but I had to decide if I wanted*  
12 *it enough and I did so I started to focus just on my golf.” (P7) (RST: overload,*  
13 *conflict)*

#### 14 **Role Strain at Early Stages of Elite Adolescent Status**

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

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

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

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

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

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

1        *other to do well golf wise which is a great positive to have.”* (RST: finding ways to  
 2        improve social functioning).

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

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

19        *“I remember just wanting some kind of protection because life at times felt like a  
 20        blur and mum helped me so much with sorting that. I knew I could rely on her.”*

21        (P1) (RST: reducing conflict and negative psychological and physical  
 22        consequences of role strain)

23        *“Since about the age of 17, my mum has become a bit like my manager. She will  
 24        sit down with me and work out all the expenses, entry fees and complete the*

1 *entry forms, flights and hotels. She even does the same for my mate and she*  
2 *saves us both so much time and hassle.”(P2) (RST: reducing overload)*

### 3 **Discussion**

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

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

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

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

1 by helping to resolve conflict with various coaches and teachers in school and sports clubs  
2 when they decided to concentrate on golf alone.

3         Extending the work of Van Rens et al., (2016; 2018), role strain arising from role  
4 bargaining and role demands continued to escalate up to the very final stages of the pre-  
5 elite transition context. The further their status and reputation grew as a national golf  
6 talent, the greater were the role demands they experienced. Instances of role overload and  
7 conflict were most frequently reported. It was at this critical athletic development period,  
8 aged 15-16 when the participants reported the highest role strain. RST was particularly  
9 useful in understanding the temporal changes of role demands and identifying a specific age  
10 and strain accumulation combined with recognition of sport achievements, which made  
11 these adolescent athletes vulnerable to poor psychosocial outcomes. Interestingly, there  
12 was no evidence for negative psychosocial outcomes in this study, as no participant  
13 contemplated dropping out of golf altogether, nor described feeling unable to sufficiently  
14 cope with escalating role strains arising from competing demands. Participants also  
15 reported to have monitored and systematically managed these role demands with  
16 significant parental and family support. This finding may be a distinguishing factor for those  
17 who successfully transition from pre-elite to elite, compared to those who are unsuccessful.  
18 However, this is a very golf specific finding, where parents were providing exceptionally high  
19 social and financial support. This finding is also contradictory to the work of Krane and  
20 Temple (2015) which highlighted how children and adolescents were more likely to dropout  
21 from competitive sport because of social pressures and competing priorities.

22         As participants gained greater experience of playing and succeeding at national level  
23 junior golf events, their approach to the sport became increasingly strategic. It was at the  
24 final pre-elite stage, with the full support of parents, extended family and close friends, that

1 decisions to specialise in golf took place, the consequences of which was to reduce or  
2 completely cease participation in extracurricular activities, such as other sports training and  
3 competitions. At the same time, participants reported a significant increase in daily golf  
4 specific deliberate practice (Ericsson, Krampe & Tesch-Romer, 1993) and diverted their  
5 freed resources to becoming elite adolescent golfers. They were successful in their role  
6 bargaining efforts and were strategic to limit the negative psychosocial consequences on  
7 their lives.

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

15         This study was not without limitations. Primarily, participant recollections were  
16 retrospective so liable to forgetfulness and bias. Furthermore, the sample was gender and  
17 sport specific, small, and homogeneous, thus limiting generalisability of findings to female  
18 athletes and other sports. The participants were also already selected to play for their  
19 country and as such have been likely to cope successfully with the role strain they  
20 experienced up to then. Finally, the failure to validate the nature of recalled data with the  
21 participants' coaches, peers and parents was a further limitation.

22         The practical implications of this study are wide ranging. Elite adolescent golfers  
23 should be taught appropriate self-regulatory skills and provided with social and financial  
24 support by national governing bodies to help them to cope effectively and deal with role

1 strain arising from competing role demands during this important developmental stage. This  
2 is particularly important for aspiring elite adolescent athletes without strong parental and  
3 financial support. It is very important for coaches, parents, teachers, sport management  
4 teams and policy makers to be educated upon how they can better help to effectively  
5 safeguard the welfare of international adolescent athletes from excessive levels of role  
6 strain. Unfortunately, because sport is organised in a way that even coaches compete for  
7 their athletes, it might be difficult to achieve cross disciplinary collaboration from all  
8 involved in the athletes' lives. Failure to do so may prove detrimental to their future short  
9 and long term psycho-social (e.g., greater likelihood of burnout, dropout, depression,  
10 identity foreclosure) and physical health (e.g., more injuries).

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

- 1 experienced by high performing and grassroots coaches, across wide ranging sports at
- 2 contrasting periods of the season and/or their coaching careers.
- 3

1 **References**

2 Abbott, A., & Collins, D. (2004). Eliminating the dichotomy between theory and practice in  
3 talent: considering the role of psychology. *Journal of Sports Sciences*, 22, 395-408.

4  
5 Aquilina, D. (2013). A study of the relationship between elite athletes' educational  
6 development and sporting performance. *The International Journal of the History of Sport*,  
7 30, 374-392.

8  
9 Baker, J., Young, B., & Mann, D. (2017). Advances in athlete development: understanding  
10 conditions of and constraints on optimal practice. *Current Opinion in Psychology*, 16, 24-27.

11  
12 Baron-Thiene, A., & Alfermann, D. (2015). Personal characteristics as predictors for dual  
13 career dropout versus continuation: a prospective study of adolescent athletes from  
14 German elite sport schools. *Psychology of Sport and Exercise*, 21, 42-49.

15  
16 Barreiros, A., Côté, J., & Fonseca, A. (2014). From early to adult sport success: analysing  
17 athletes' progression in national squads. *European Journal of Sport Science*, 14, 178-182.

18  
19 Bjørndal, C., & Ronglan, L. (2018). Orchestrating talent development: youth players'  
20 developmental experiences in Scandinavian team sports, *Sports Coaching Review*, 7, 1-22.

21  
22 Braun, V., & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in*  
23 *Psychology*, 3, 77-101.

24

1 Christensen, M., & Sorensen, J. (2009). Sport or school? dreams and dilemmas for talented  
2 youth Danish footballers. *European Physical Education Review*, 15, 115-133.

3

4 Collins, D., & MacNamara, A. (2012). The rocky road to the top: why talent needs trauma.  
5 *Sports Medicine*, 42, 907-914.

6

7 Cosh, S., & Tulley, P. (2014). All I have to do is pass: a discursive analysis of student athletes'  
8 talk about prioritising sport to the detriment of education to overcome stressors  
9 encountered in combining elite sport and tertiary education. *Psychology of Sport and*  
10 *Exercise*, 15, 180-189.

11

12 Côté, J. (1999). The influence of the family in the development of sport. *The Sport*  
13 *Psychologist*, 13, 395-416.

14

15 Coutinho, P., Mesquita, I., Davids, K., Fonseca, A., & Côté, J. (2016). How structured and  
16 unstructured sport activities aid the development of expertise in volleyball players.  
17 *Psychology of Sport and Exercise*, 25, 51-59.

18

19 Debois, N., Ledon, A., & Wylleman, P. (2015). A lifespan perspective on the dual career of  
20 elite male athletes. *Psychology of Sport and Exercise*, 21, 15-26.

21

22 Elo, S., & Kyngas, H. (2008). The qualitative analysis process. *Journal of Advanced Nursing*,  
23 62, 107-115.

24

- 1 Ericsson, K. A., Krampe, R., & Tesch-Romer, C. (1993). The role of deliberate practice in the  
2 acquisition of expert performance. *Psychological Review*, 100, 363-406.
- 3
- 4 Fenzel, L. (1989). Role strains and the transition to middle school: longitudinal trends and  
5 sex differences. *Journal of Early Adolescence*, 9, 211-226.
- 6
- 7 Fenzel, L. (1992). The effect of relative age on self-esteem, role strain, grade point average,  
8 and anxiety. *The Journal of Early Adolescence*, 12, 253-266.
- 9
- 10 Fenzel, L. (2000). Prospective study of changes in global self-worth and strain during the  
11 transition to middle school. *Journal of Early Adolescence*, 20, 93-116.
- 12
- 13 Fraser-Thomas, J., Côté, J., & Deakin, J. (2008). Examining adolescent sport dropout and  
14 prolonged engagement from a developmental perspective. *Journal of Applied Sport  
15 Psychology*, 20, 318-333.
- 16
- 17 Forsman, H., Blomqvist, M., Davids, K., Konttinen, N., & Liukkonen, J. (2016). The role of  
18 sport-specific play and practice during childhood in the development of adolescent Finnish  
19 team sport athletes. *International Journal of Sports Science & Coaching*, 11, 69-77.
- 20
- 21 Geraniosova, K., & Ronkainen, N. (2014). The experience of dual career through Slovak  
22 athletes eyes. *Physical Culture and Sport Studies and Research*, 14, 53-64.
- 23
- 24 Goode, W. (1960). A theory of role strain. *American Sociological Review*, 25, 483-496.

1 Hayman, R., Polman, R., Taylor, J., Borkoles, E., & Hemmings, B. (2011). Development of  
2 elite adolescent golfers. *Talent Development and Excellence*, 3, 249-261.

3

4 Gullich, A., Hadry, L., Kuncheva, L., Laing, S., Barlow, M., Evans, L., Rees, T., Abernethy, B.,  
5 Côté, J., Warr, C., & Wraith, L. (2019). Developmental biographies of Olympic super and elite  
6 athletes: a multidisciplinary pattern recognition analysis. *Journal of Expertise*, 2, 23-46.

7

8 Helsen, W., Starkes, J., & Hodges, N. (1998) Team sports and the theory of deliberate  
9 practice. *Journal of Sport and Exercise Psychology*, 20, 12-34.

10

11 Hellstrom, J. (2009). Psychological hallmarks of skilled golfers. *Sports Medicine*, 39, 845-855.

12

13 Henriksen, K., Stambulova, N., & Roessler, K. (2010). Successful talent development in track  
14 and field: considering the role of the environment. *Scandinavian Journal of Medicine and  
15 Science in Sports*, 20, 122-132.

16

17 Henriksen, K., Larsen, C., & Christensen., M. (2014). Looking at success from its opposite  
18 pole: the case of a talent development golf environment in Denmark. *International Journal  
19 of Sport and Exercise Psychology*, 12, 134-149.

20

21 Henry, I. (2013). Athlete development, athlete rights and athlete welfare: a European Union  
22 perspective. *The International Journal of the History of Sport*, 30, 356-373.

23

1 Holt, R. (1982). Occupational stress. In L. Goldberger, & S. Brezniz (Eds,) *Handbook of Stress:*  
2 *Theoretical and Clinical Aspects* (pp. 419-444). New York: Free Press.

3

4 Krane, J., & Temple, V. (2015). A systematic review of dropout from organized sport among  
5 children and youth. *European Physical Education Review*, 21, 114-131.

6

7 Lally, P. (2007). Identity and athletic retirement: a prospective study. *Psychology of Sport*  
8 *and Exercise*, 8, 85-99.

9

10 Lincoln, Y., & Gubba, E. (1985). *Naturalistic Inquiry*. London: Sage.

11

12 Miller, P., & Kerr, G. (2002). Conceptualising excellence: past, present and future. *Journal of*  
13 *Applied Sport Psychology*, 14, 140-153.

14

15 Park, S., Lavallee, D., & Tod, D. (2013). Athletes' career transition out of sport: a systematic  
16 review. *International Review of Sport and Exercise Psychology*, 6, 22-53.

17

18 Patton, M. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks, Sage.

19

20 Pink, M., Saunders, J., & Stynes, J. (2015). Reconciling the maintenance of on-field success  
21 with off-field player development: a case study of a club culture within the Australian  
22 football league. *Psychology of Sport and Exercise*, 21, 98-108.

23

- 1 Rees, T., Hardy, L., Gullich, A., Abernethy, B., Côté, J., Woodman, T., Laing, S., & Warr, C.  
2 (2016). The great british medallists project: a review of current knowledge on the  
3 development of the world's best sporting talent. *Sports Medicine*, 46, 1041-1058.  
4
- 5 Ryba, T., Stambulova, N., Ronkainen, N., Bundgaard, J., & Selanne, H. (2015). Dual career  
6 pathways of transnational athletes. *Psychology of Sport and Exercise*, 21, 125-134.  
7
- 8 Smith, J. (1995). Semi-structured interviewing and qualitative analysis. In J. Smith, R. Harre &  
9 L. Van Langenhove (Eds), *Rethinking Methods in Psychology* (pp. 9-26). London: Sage.  
10
- 11 Spencer-Dawe, E. (2005). Lone mothers in employment: seeking rational solutions to role  
12 strain. *Journal of Social Welfare and Family Law*, 27, 251-264.  
13
- 14 Stambulova, N., & Wylleman, P. (2014). Athletes' career development and transitions. In A.  
15 Papaioannou & D. Hackfort (Eds.), *Routledge Companion to Sport and Exercise Psychology*  
16 (pp. 605-621). London: Routledge.  
17
- 18 Stambulova, N., Alfermann, D., Statler, T., & Côté, J. (2009). ISSP position stand: career  
19 development and transition of athletes. *International Journal of Sport and Exercise*  
20 *Psychology*, 7, 395-412.  
21
- 22 Stambulova, N., Franck, A., & Weibull, F. (2012). Assessment of the transition from junior to  
23 senior sports in swedish athletes. *International Journal of Sport & Exercise Psychology*, 10, 1-  
24 17.

1 Stambulova, N., Engström, C., Franck, A., Linnér, L., & Lindahl, K. (2015). Searching for an  
 2 optimal balance: dual career experiences of Swedish adolescent athletes. *Psychology of*  
 3 *Sport and Exercise*, 21, 4-14.

4

5 Tekavc, J., Wylleman, P., & Erpic, S. (2015). Perceptions of dual career development among  
 6 elite level swimmers and basketball players. *Psychology of Sport and Exercise*, 21, 27-41.

7

8 Van Rens, F., Borkoles, E., Farrow, D., Curran, T., & Polman, R. (2016). Development and  
 9 initial validation of the role strain questionnaire for junior athletes (RSQ-JA). *Psychology of*  
 10 *Sport and Exercise*, 24, 168-178.

11

12 Van Rens, F., Borkoles, E., Farrow, D., & Polman, R. (2018). Domain specific life satisfaction  
 13 in the dual careers of junior elite football players: the impact of role strain. *Journal of*  
 14 *Clinical Sport Psychology*, 12, 302-315.

15

16 Wylleman, P., & Lavallee, D. (2004). A developmental perspective on transitions faced by  
 17 elite athletes. In M. Weiss (Ed.), *Developmental Sport and Exercise Psychology: A Lifespan*  
 18 *Perspective* (pp. 507-527). Morgantown, WV: Fitness Information technology.

19

20 Wylleman, P., De Knop, P., & Reints, A. (2011). Transitions in competitive sports. In N. L. Holt  
 21 & M. Talbot (Eds.), *Lifelong Engagement in Sport and Physical Activity: Participation and*  
 22 *Performance across the Lifespan* (pp. 63-76). New York, NY: Routledge.