

## Athlete Learning in Olympic sport

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### Abstract

High-performance sport impacts athletes beyond the physical. Coaches and coaching practice are particularly influential in shaping this learning and development. This article examines the learning identified through an inductive content analysis of eight former Olympic athletes' career narratives. Three phases of learning could be identified across the cohort: "Growing into high-performance sport", "Making sense of high-performance sport", and "(Re)shaping high-performance sport". A cultural perspective of learning, in particular the metaphor of "becoming", is employed to interpret the Olympians' learning experiences. The findings of this research indicate that athlete learning is bound by particular high-performance sporting contexts and career phases, yet impacted by the athletes' individual backgrounds and dispositions. Further, data indicate that athletes' personal development reflexively inter-twines with athletic performance and performance enhancement. Implications for coaches are to: (1) involve athletes in co-constructing their sporting cultures and training contexts; and (2) provide possibilities and support for athletes to develop personally.

**Keywords:** high-performance sport; coaches and coaching practice; athlete learning; cultural perspective of learning; learning as becoming;

## Introduction

High-performance sport shapes athletes beyond the physical. On the one hand, research points to how sporting participation teaches athletes social, cognitive, organisational and emotional competencies that are transferable to lives outside of sport (Andreu-Cabrera, 2010; Bodey, Schaumleffel, Zakrajsek, & Joseph, 2009; Waldron, 2009). On the other hand, the logic of high-performance sport, as well as the characteristics of sporting cultures, coach-athlete relationships and coaching practices, have been found to be detrimental to athletes' social development, and wellbeing. In particular, athletic participation has been linked to narrow athletic identities (Curry, 1993; Jones, Glintmeyer, & McKenzie, 2005), self-health risk behaviour (Martinsen, Bratland-Sanda, Eriksson, & Sundgot-Borgen, 2010; Waldron & Krane, 2005) and distorted self-image (Barker-Ruchti & Schubring, in press; Douglas & Carless, 2009; McMahon & Penney, 2012, 2013). While these effects may differ in severity, none are desirable, and conflict with sport organisations' goals to develop healthy, independent and generally well-rounded citizens (see for instance policies by IOC, WADA and national sports bodies).

Research on sport's effects has emerged from different disciplines and theoretical perspectives. In recent years, social theoretical and social-constructivist theories have been particularly popular. In this literature, scholars argue that dominant discourses related to scientific functionalism create outcome-oriented training environments, instrumental coaching styles and authoritarian coach-athlete relationships (Barker-Ruchti, Barker, Rynne, & Lee, 2014; Cassidy, Jones, & Potrac, 2009; Cushion & Jones, 2006; Johns & Johns, 2000). Studies employing Foucauldian and Bourdieusian perspectives have demonstrated how such characteristics normalise athletes to suit the demands of their sporting contexts, which, however, are less productive and indeed desirable, for lives outside of sport (Barker-Ruchti, 2011; Barker-Ruchti & Tinning, 2010; Denison, 2007; Hickey & Kelly, 2008; Lang, 2010; McMahon & Penney, 2012; Noble & Watkins, 2003; Shogan, 1999; Thorpe, 2005, 2009; Tomlinson & Giulianotti, 2004). Research has also looked at the micro-level of impact. Barker-Ruchti and colleagues' (2012) case study of a synchronised swimmer, McMahon and Barker-Ruchti's (2015) study examining high-performance swimming, and Christensen and colleagues' (2011) examination of youth football demonstrate that adaptation to contextual expectations occurs through understanding the workings of sport, mirroring older players, and feelings of coach recognition. Different career phases, levels of performance and athlete roles also seem to affect adaptation. Hegde and Standal (2013) point to how Paralympic sledge hockey players' learning differed between beginner and experienced players, between successful and less successful players and between captaincy and non-captaincy roles. In a similar vein, Light (2006, 2010) demonstrated how youth swimmers' and surf life savers' social, personal and cultural development occurred during their participation in various activities (e.g., training, social events, competitions) and as part of their relationships with coaches and peers. Lastly, Lund, Ravn and Christensen (2013) revealed how a high-performance synchronised trampolining duo developed reciprocally through various forms of interaction, including peer feedback and verbal cues during jumping.

A small body of literature has examined the reflexive nature of development. Adopting a Foucauldian framework, Shogan (1999) and Tsang (2000) demonstrate that despite strong normalising forces, athlete hybridity may provide participants with possibilities to disrupt normalisation processes, which were found to create reflexive experiences. Other studies, focusing on micro-level negotiation and troubling of dominant discourses, point to how

individuals and groups resist and transform norms and values (Thorpe, 2009, 2010), interpersonal relationships (Barker, Barker-Ruchti, Rynne, and Lee, 2014b; Douglas & Carless, 2009; Purdy, Potrac, & Jones, 2008; Toner, Nelson, Potrac, Gilbourne, & Marshall, 2012) and training practices (Barker-Ruchti et al., 2014). In relation to such transformation, Barker and colleagues (2014b) found that salient life-incidents stimulate critical reflection and introversion and, through this, self-transformation. Such research points to how athletes are able to understand, challenge and change normative expectations.

The eclectic body of research shows that sport's impact on athletes is complex and dependent on situational specificities. It demonstrates that athlete learning can be a rather unquestioned adaptation, but may, at times, also involve active meaning-making and transformation. Understanding learning in its complexity is important. However, it is currently incomplete as it does not include longitudinal perspectives. Consequently, how changes to contexts, different career phases, and individual meaning-making influence learning processes and outcomes are thus minimally understood, particularly in high-performance sport (exceptions are Barker-Ruchti & Schubring, in press; Carless & Douglas, 2012; 2013).

Our study builds on the emerging body of literature of longitudinal understandings of Olympic athlete learning. In particular, it focuses on how coaches and athletes, coaching and sport settings, and athletic career phases, interrelate and affect athletes, and how over time, changes to any of these aspects shape athletes' continued learning. To do this, we consider the retrospective career accounts eight former Olympic athletes provided in semi-structured interviews and draw on the cultural understanding of learning developed by Hodkinson, Biesta and James (2008). Such theorising allows us to understand sport's impact on athletes as a continuous reflexive process of learning that is shaped by contextual factors, as well as the role of athletes and coaches within it.

### **Learning as a cultural process**

The cultural perspective of learning emerged from a large-scale examination of English further education by a group of scholars led by Phil Hodkinson from The Lifelong Learning Institute at the University of Leeds. In their pursuit to explain college, vocational and academic students' learning, the scholars developed two inter-related theoretical concepts – theory of learning cultures (TLC) and the cultural theory of learning (CTL). The former conceptualises learning contexts, while the latter theorises processes of learning. Four basic tenets characterise the two concepts. First, theory of learning cultures sees learning being proliferated and negotiated in and through practices. While Hodkinson and colleagues did not dispute that learning sites (e.g., school, workplace) have clear boundaries, “the factors that constitute the learning culture in a particular site do not” (Hodkinson, Biesta, & James, 2007, p. 35). In order to understand learning then, TLC considers practices, rather than individuals or contexts, and places these within broader social, political and economic contexts. Second, CTL assumes that learning is a continuous and ubiquitous process that occurs in relation to whom individuals are, and the relationships and practices they are involved in. Hodkinson, Biesta and James (2007) employ the metaphor of ‘becoming’. To explain their metaphor, the three scholars write that becoming occurs in any situation, but that learning opportunities depend on processes and the nature of learning, the position of individuals within contexts and finally, the backgrounds, beliefs and intentions individuals

bring with them. Third, cultural theory of learning proposes that individuals' 'baggage' and experiences creates 'horizons for action' or 'horizons for learning' (Hodkinson, 2008; Hodkinson et al., 2008; Hodkinson, Sparkes, & Hodkinson, 1996). Horizons can be understood as embodied visions that inform individuals of typical or expected ways of thinking, behaving and acting. They are visions that allow individuals to 'see' what might be possible and acceptable in terms of, for instance, educational and professional development. Within this perspective, structural factors (e.g., gender, social class), career phases, learning contexts, and individuals' positioning within them are understood to shape learning and thus result in horizons being (re-)produced in socially, culturally and politically accepted ways. Fourth, Hodkinson, Biesta and James (2007) propose that individuals are able to shape their becoming. Hence, although social and context-specific forces shape horizons in often durable ways, individuals are believed to be able to anticipate and reflect, and thus interpret, judge, and make meaning (Bloomer & Hodkinson, 2000). It is clear then, that the CTL and TLC generally challenge objectivist epistemologies, in favour of a view of learning that is practical, embodied and social.

The cultural perspective of learning has been employed to study educational settings (Bloomer & Hodkinson, 1999; Hodkinson, et al., 2007), professional contexts (Fuller, Hodkinson, Hodkinson, & Unwin, 2005; Hodkinson & Hodkinson, 2004; Hodkinson & Hodkinson, 2004) and different life phases (Bloomer & Hodkinson, 2000; Hodkinson, 2010; Hodkinson, Ford, Hodkinson, & Hawthorn, 2008; Hodkinson et al., 1996). Recently, the perspective has also been generative in the study of learning in high-performance sport (Barker-Ruchti & Schubring, in press; Rossi, Rynne, & Rabjohns, in press). From this body of literature, Enright and Gard (in press) have critiqued the cultural perspective by arguing that the theory is limited in capturing technological and social medial developments. Drawing on examples of photo-technological advances during the 1950s and 1960s and its relation to how professional footballers in England learned to display emotions, the authors claimed that Hodkinson and colleagues (2007) neglected to consider how technology and social/digital media practices affect and produce learning. In response, they proposed that 'flatter' metaphors such as 'network' and 'rhizome' can be better used to theorise the learning that such contexts may generate.

Despite the contention over terminology, we feel that the cultural perspective itself is flexible enough to consider the socio-technical as part of the multifaceted social, cultural, technological milieu that shapes learning. Indeed, we consider the cultural perspective useful as it demands a focus on practices, something crucial in understanding athletes' learning.

## **Research methods**

In order to examine how contextual, career phase and individual factors relate to learning over time, and how coaches might seek to influence and shape the learning of elite athletes, we analyse data that stem from a 2011 research project on Olympians' entrance into high-performance sport, progression of their athletic career, and lives after sport. A retrospective, multiple case study design (Yin, 2003) and a constructivist perspective of learning were employed in designing the study.

### ***Sampling and recruitment***

A purposeful sample (Charmaz, 2005) of recently retired Olympic athletes from four different countries was recruited. This number was envisaged because it allowed for male and female Olympians from a range of sports with varying coaching arrangements and traditions to be included within the project's organisational and financial restrictions. Specific criteria for such 'maximum variation' of sample (Flyvbjerg, 2006) included participation in the 2008 or 2010 Olympic Games, and retirement from high-performance sport. To recruit individuals that fitted our criteria, we consulted respective athlete participation lists provided by national Olympic organisations. Through online searches, personal knowledge and personal contacts, we were able to determine who had retired from sport and gather contact details. The former athletes were contacted and provided with information about the research. Consent was received from eight participants in accordance with the ethical clearance protocols of the relevant research institutions.

### ***Study participants***

The five women and three men Olympians had participated in the sports of field hockey, high-jumping, judo, kayaking, road cycling, ski jumping, softball and synchronised swimming. They had all enjoyed active childhoods and had entered high-performance sport early. Talent, early competitive success and long athletic careers (between 10 to 20 years) further characterised the participant group. Four of the eight athletes had won at least one Olympic medal each, three being gold. The others had achieved at least one top ten Olympic placing. During their careers, the former athletes completed tertiary and post-graduate education and, except for one, had gained experience in the workforce. Today, the former athletes are in their early to late thirties and have found footing in teaching, research, management, self-employment, circus performance, and university studies.

### ***Data generation***

Two semi-structured interviews (Rapley, 2004) were conducted with each participant making 16 in total. The first interview focussed on interviewees' entrance into sport, movement to high-performance levels, achievements, personal, educational and professional backgrounds, influential others and relationships, and setbacks. These interviews lasted between 90 and 120 minutes. In preparation for the second interview, the recordings were transcribed verbatim and in line with reflexive methodology (Alvesson & Skoldberg, 2000), analysed to draw out particular ways of being and important instances of change and development. The second interview asked the Olympians to describe their lives post-sport, and to reflect upon how the ways of being drawn out in the pre-analysis had changed since retirement. This approach aimed to generate further data relating to the athletes' experiences of being and becoming as a continuous process as well as their prospective views of learning. Again, the interviews lasted between 90 and 180 minutes and were transcribed as per the procedure used for the first interview. Where necessary, the transcripts were outsourced for professional translation into English.

### ***Data analysis***

Analysis for this paper built on existing constructivist interpretations of the learning referred to in the interviews (Barker et al., 2012; Barker-Ruchti et al., 2012). These interpretations showed that sport had shaped the athletes to develop dispositions such as 'being selfish', 'being submissive', 'being able to push physical and emotional limits', and 'being patient'. For the purpose of this paper, the data were scrutinised anew with a view to considering how these factors had changed over each athlete's career span. As part of this step, we

extracted how changes to normative expectations, athlete positioning within sporting contexts, relationships and coaching/training practices, as well as ongoing learning due to sporting achievements, status and unexpected events shaped contexts and individuals. The longitudinal perspective to this analytic step demonstrated the complexity and individual nature of learning outcomes. The analysis, however, also brought forward two common characteristics that shaped the types of learning the Olympians spoke of: (a) three career phases - 'Growing into high-performance sport'; 'Making sense of high-performance sport'; and '(Re)shaping high-performance sport'; and b) two sport organisational systems – 'Systematised sporting cultures'; and 'Undeveloped sporting cultures'. In what follows, we present and discuss the findings along the three identified phases of learning. Within each of the phases, short indented narrative blocks, each titled with the study participants' pseudonyms, describe the contextual and individual factors the Olympians referred to in the interviews. The blocks are ordered along the two sport organisational systems identified. Cycling, softball, synchronised swimming, hockey and kayaking reflected systematised sporting cultures, while high-jumping, ski-jumping, and judo were seen as undeveloped/developing (both respective to their countries). Using Hodkinson, Biesta and James' (2007) cultural understanding of learning, reflections are provided following each learning phase.

### **High-performance sporting contexts**

For all of the former athletes, entrance into high-performance sport occurred during their early to later teenage years, when most of them started to be selected for representative teams. They talked of how they enjoyed moving into high-performance sport because they loved their sports, were driven to achieve, had become included in a circle of friends, and liked going away on competitions and tournaments. Nevertheless, contexts and individual backgrounds and dispositions differed and are important to understand the participants' idiosyncratic processes of becoming. The athletes who entered systematised sporting cultures experienced coming to terms with new and diverse social and hierarchical relationships.

#### *Alice, cyclist*

Alice's high-performance sporting career started with a talent identification event at the age of 14. She subsequently discovered that she "absolutely loved [cycling]", mainly because of the speed, freedom and adrenalin. When international competitions started, this athlete was keen to achieve international success as quickly as possible. Her coaches, however, felt that she needed to "slow down", which Alice had difficulty accepting. However, she struggled with the long overseas stays. She did not enjoy staying away from her social network, and strained to find closeness with other team members.

#### *Michelle, softballer*

Michelle experienced hierarchy in her sport through coaches allocating playing positions. While highly skilled and versatile in adapting to most positions, she

described how her regular selection in representative squads surprised her. This was particularly so as she was almost always the youngest player selected into such teams.

*Monica, synchronised swimmer*

Monica chose synchronised swimming because she wanted to be involved in a 'serious' activity. From a young age, training involved long hours and was intense. A key feature that Monica faced was the coach-athlete hierarchy. Hence, swimmers were expected to follow orders and to push their physical and emotional limits. The training climate was often characterised by harsh criticism, seemingly unachievable training exercises, group punishment and manipulation.

*Nadine, hockey player*

Nadine's context was also shaped by coach authority, and a hierarchy between senior and junior players. Regarding the former, authority was demonstrated by selection procedures while coaches continually measured skin folds and weight. Regarding the latter, Nadine spoke of how she needed to handle the bullying from senior players during her initial time of training with the national team.

*Wendy, kayaker*

In contrast to the above, Wendy entered a culture of sharing, trust and cooperation. She spoke of how her parents and siblings were part of kayaking and appreciated and cultivated inclusiveness. She referred to this setting as a 'training-with-your-teammates culture'. She said that, as she had never experienced another sport or did not have "a very strong mentor outside of sport", she became "embroiled" in this culture.

For John the high-jumper, Silvio the ski jumper and Thomas, the judoka, entrance into high-performance sport was into rather small and undeveloped sporting communities. Hence, the three faced little national competition and thus enjoyed early competitive success.

*John, high-jumper*

For John, international competitions came later in his career and he was able to remain and train at home. Eventually, as others dropped away, his training community consisted of him and his father. Within this context, John was able to mould his athletic career to best suit his circumstances.

*Silvio, ski-jumper*

Silvio felt that his early national success allowed him to enter high-performance sport "too easily". Educational demands were, however, intense and he was required to continually decide how to integrate his training and international competition schedule. Partly because ski-jumping was at an early stage of professionalisation, Silvio needed to make most of these decisions himself.

### *Thomas, judoka*

Thomas' undemanding club context allowed him to continue participating in a variety of sporting activities until the age of 15, and only then decide to "quit everything to do more judo". Following this change, Thomas was keen to win and enjoyed success quickly.

The above data illustrate that Alice, Michelle, Monica, Nadine and Wendy entered sporting systems that operated as apparatuses within which all actors (including coaches and senior athletes) were working to preserve and reinforce existing synergies that were desired and perceived beneficial for the athletes (Hodkinson, Ford, Hawthorn, & Hodkinson, 2007).

An important aspect of the systemised sporting cultures was the athletes' neophyte positioning within the settings (Bruner, Munroe-Chandler, & Spink, 2008; Hegde & Standal, 2013). For some, a hierarchy of positions (e.g., in relation to coaches and senior athletes) was particularly characteristic (e.g., Nadine, Monica). Their inferior positioning was reinforced by coach authority and practices of exclusion (e.g., team selection) that threatened negative consequences should they be unable to fulfil pre-set standards.

Another feature of the systematised sporting cultures was the discursive forces that acted within and on them. For Monica, Nadine, and Michelle, a particular force came from scientific functionalism. According to Cassidy, Jones and Potrac (2009), such discourses encourage coaching staff to regard athletes as machines that can be manipulated and measured, to implement selection procedures and to cultivate hierarchical coach-athlete relationships. Athletes' social and emotional wellbeing is paid little attention. For Alice and Wendy, in contrast, the dominant discursive force came from norms and values related to long-term athlete development, and sharing and cooperation respectively. While performance enhancement was still a goal, underlying assumptions created different work ethics (e.g., strategically tapered training and competition efforts for Alice, 'training-with-your teammates' for Wendy).

In contrast, John's, Silvio's and Thomas' contexts operated with much less structure, systematisation and boundaries. As their sport-specific systems were undeveloped and relied on their (and their coaches' and parents') drive and organisation, their positioning within their athletic contexts allowed (and required) more control than the 'athlete-as-novice' experienced by the other five athletes. As they were forced to establish and manage their careers to continually decide over subsequent pathways, the decisions were much more athlete-directed.

### ***Growing into high-performance sport***

'Growing into sport' involved a process of familiarisation and adaptation that Cushion (2011, p. 175) described as "becoming right to be a 'pro'". Below are accounts of this phase in each Olympian's process of becoming.

### *Alice, cyclist*

Despite needing to slow down, Alice continued to give 100% in training and at each competition she entered. This resulted in her first professional season ending in being "absolutely rooted". Further, Alice's difficulties in connecting with other cyclists



compelled her to “put up a wall”, so that people could not see her insecurities. Alice referred to flicking “a switch so that all [her problems] would go away”. Learning to function in this way allowed Alice to handle her athletic life, albeit on her own and with difficulty. The fact that she was rather self-critical in this regard, saying that “[people] wouldn’t think [that she struggled] because [she] had such early success”, indicates how Alice felt that she should have been able to handle the situation in ‘better’ ways.

*Michelle, softball player*

Her low expectations at being selected for representative teams did not give her confidence. At the beginning of her career, she felt out of her depth playing “with the legendary women that were playing that game at the time”. As she qualified for her first Olympic Games, she still was unsure of her worth and spoke of how she “broke [her] wrist [during the first game] because [she] had such angst and was so scared”. The broken wrist relieved her of having “to go out [on the pitch] again”. Indeed, Michelle recounted that it was not until the final years of her career that she learned to feel assured about her place in the national team.

*Monica, synchronised swimmer*

The coach-athlete hierarchy Monica experienced shaped her to accept an inferior position, and submit to the expectations and practices outlined to her. Her feelings of subordination not only related to the coach-athlete relationship. It was also symbolic in terms of ignoring her own emotions and physical symptoms so that she could keep pushing her limits. Monica felt that this had taught her to understand what she was “capable of putting up with in life...to endure and manage”. This subordination, Monica explained, was a disposition that would “take a while to get rid of”.

*Nadine, hockey player*

Through her experience of constant measurement, Nadine learned “professional dedication”. This was reinforced as she was once placed in the team’s “fat club”. She recalled that this was “a turning point, where [she] started to get really serious about [diet and weight]”. As she was required to reach particular weight and fitness levels, these served as focal points, which made her “obsessed with [the question of how to achieve them]”. This also resulted in Nadine becoming increasingly competitive with her teammates. As the biometrical measurements were used to determine athletes’ ‘in’ and ‘out’ statuses, questions such as “who’s got the highest beep test score?” became important. Indeed, Nadine described how subsequently she became “obsessed with success”, and driven by a “fear of failure”.

*Wendy, kayaker*

The team-oriented culture in which she had become shaped Wendy to work *for* others rather than for herself; a consequence of having been “others’ training fodder”. In retrospect, she felt that this learning had not allowed her to develop selfishness and

“looking out for number one”; ways of being that paradoxically she felt essential for kayaking success.

For John and Silvio, the high- and ski-jumpers, as well as Thomas the judoka, the autonomy they described in relation to their training and competition schedules accustomed them to being independent managers of their own careers.

#### *John, high-jumper*

The agency experienced in a context of little institutional regulation taught John that he “was going to do [his athletic career] for [him]self and on [his] own”. John felt that this was an important lesson, because it showed him how to “prepare to be the best high-jumper in the world”. He thus became extremely diligent and committed. John realised that his prioritising of training over other aspects (e.g., studying, social events, relationships) may have been difficult for others to understand, yet, he found his dedication necessary to “go all the way”. His commitment did not change when John became a father:

Of course [having a child] changed things, but still, high-jumping was number one. But it was so natural for me and I really wanted to go through with my training and my career and realise how far I could go.

Although John was aware of the responsibilities fatherhood entailed, he explained his commitment with not wanting to have regrets later in life: “I mean, when I’m sitting there, in 10 or 15 years, I want to know that I did all that I could to go as high as possible”.

#### *Silvio, ski-jumper*

Silvio felt that his independence allowed him to confidently decide that he could pursue university education while also training and competing at the elite level. Further, when he began to study, he felt that he understood how “to learn on [his] own”. This positive dual career led him to believe that a sole focus on sport is “not making you better in jumping”.

#### *Thomas, judoka*

Thomas’s somewhat later entrance into high-performance sport was accompanied with a desire to achieve success quickly. However, a key learning experience was the importance of perfecting movement technique. Thomas did not agree with these demands, and requested that his parents move him to a club that was consistently training winning athletes. Thomas, however, remained with the technique-focused coach.

The above accounts of ‘growing into high-performance sport’ prepared the developing athletes “for the rigors of the game” (Cushion & Jones, 2006, p. 148). Despite contextual differences, the interviewees grew into their high-performance sporting contexts in ways

that enabled them to handle the expectations set within. This initial dispositional learning appeared significant for two reasons: First, the Olympians' personal backgrounds and characteristics, as well as long-term goals and drive to succeed, matched the sporting contexts. This synergy was indeed a reason for their entrance into sport (Cushion & Jones, 2006), and resulted in an efficient 'growing into' high-performance sport. Second, although Hodkinson and colleagues (2008) propose that individuals' tacit 'baggage' orientates people's actions and learning, the Olympians' experiences and existing dispositions when entering high-performance sport were limited in affecting their subsequent becoming. Indeed, as they were placed within a context of selection where they needed to please selectors (Cushion & Jones, 2006), and were of a relatively young age, there was little chance for them to understand the intricacies of high-performance sport, let alone attempt to challenge them. As a result, a particular horizon was unquestioningly adopted (for similar findings see Schubring & Thiel, 2013, 2014). Notions of 'identity tunnel' (Curry, 1993) and 'premature identity foreclosure' (Brock & Kleiber, 1994) metaphorically illustrate how their learning became bound by particular socio-cultural contexts and the sport-specific dispositions the athletes were asked to adopt.

### ***Making sense of high-performance sport***

As the Olympians' athletic careers progressed, they developed a more thorough understanding of what high-performance sport entails. This allowed them to knowingly and strategically adopt behaviours considered necessary within the sporting contexts they occupied. However, the process differed from the initial learning aimed at conforming in that it involved a conscious 'process of orientation' (Colley, James, Diment, & Tedder, 2003, p. 488) towards the specific sporting culture. The point at which the Olympians moved from the 'growing into' to the 'making sense' phase differed between them. For some, the early phase was short and understanding about what high-performance sport entailed developed quickly. Others, in contrast, took longer to move to the second phase. Nevertheless, all the participants experienced both phases in succession.

#### *Alice, cyclist*

We noted how Alice ended her first professional cycling season 'burnt-out'. With this experience, she began to see the need to "back off with [giving 100%]...[excelling all the time] and maybe to work out what is important and what is not". As she started to learn the importance of varying her labour, Alice considered her training and competition efforts more strategically.

#### *Michelle, softball player*

Michelle's low expectations had affected her confidence. Her way of coping with this deficit was to keep "things simple" and "in perspective". She did this purposefully because she did not want to be disappointed in case of poor results or de/non-selection. This allowed her to choose a "same ball, same glove" perspective, an approach she felt necessary to be able to accept the playing positions her coaches proposed. Indeed, Michelle felt that learning to approach her game in these ways "got [her] in the first Olympic team and probably the second one as well".

*Monica, synchronised swimmer*

Earlier in her career, Monica had become accustomed her to coach's domination. Yet, she accepted and respected the situation as "the only way [to] be successful". This led Monica to strategically accept her inferior position within the coach-athlete relationship and her training group.

*Nadine, hockey player*

Nadine spoke of how she began to intentionally accept and follow dietary regulation because:

You enjoy your sport. It is what it is, and you're in this bubble of elite sport, it's really not normal at all, but to you and the group of people you are with, it's normal.

Her analogy of sport as a 'bubble' captured how she had come to understand her sporting culture as meaningful within its boundaries.

*Wendy, kayaker*

Wendy's embodiment of 'training-with-your teammates' culture caused her to consider herself as training fodder. She began to understand this towards the end of her career when she was not selected for the national team, despite achieving required results. Hence, she began to strategically place her own training needs before those of others.

*John, high-jumper*

As part of his individualised career, John learned early that he was talented and could, with the right effort, go far. This realisation was important for him to pursue his goal of seeing how "high [he] could jump".

*Silvio, ski-jumper*

Silvio's easy entrance into elite sport did not spare him from performance difficulties. After his first Olympic Games, he struggled because, as Silvio termed it, he was "busy with too many details". As he left a winter season early, he realised that "something needed to change". Silvio referred to this phase as a turning point, where he began to learn how he could be an athlete in sport, and somebody else outside it. This understanding related to the realisation that "mental training is always connected to physical training" and how tuning in and out of sport would give him "a lot of peace...[and] a lot of strength".

*Thomas, judoka*

The demands Thomas experienced regarding perfecting movement technique taught him that one can "get better every day" and that this could be an enjoyable process. This allowed him to learn something every day, "not always physically, but on different

personal levels” as well. To Thomas, this realisation was a key disposition that motivated him to stay in high-performance sport for over 20 years.

The above examples of gaining “the feel for the game” (Hodkinson et al., 2008, p. 40) indicate that athletes are not just “helpless and totally at the mercy of social forces”, but learn to understand what is required of them (Cushion, 2011, p. 172). Indeed, sport provided the athletes with possibilities to create understanding that made sense to them at the time. In contrast to the ‘growing-into sport’ phase of learning, where contextual and coach-specific aspects were key, the making sense phase of learning did not seem to be as affected by coaches and coaching. Rather, this phase was characterised by athletes’ conscious acceptance of the sporting culture they encountered. However, this “thinking with” (Hodkinson et al., 2008, p. 40) their sporting cultures can be considered problematic for two reasons: First, the above examples illustrate how the athletes were shaped by “regimes of truth” (Chapman, 1997, p. 206; Jones et al., 2005), or a ‘bubble’, as Nadine termed it. This naturalisation of a ‘regime’ leaves little room for athletes to resist problematic (coaching) practices. Second, through the understanding gained, athletes’ conscious consolidation with sporting cultures can ‘become habitual’ (Sayer, 2005, p. 28). For some of the athletes in this study, this ‘habituation’ (Noble & Watkins, 2003) had significant negative consequences, both for their personal and their athletic development (e.g., Monica becoming submissive, Nadine becoming motivated through measurements, Wendy having become training fodder).

### ***(Re)shaping high-performance sport***

The third phase of learning relates to the participants reflecting upon and transforming (coaching) practices, situations and relationships. Such shaping and reshaping differs from the previous examples of strategic adaptation as it occurs despite or in contrast to dominant contextual norms and values, training practices and/or relationships. Hodkinson, Biesta and James (2007) suggest that such agency to re-shape horizons is possible when a current status quo does not make sense any longer. For example;

#### *Michelle, softball player*

In contrast to her previous experiences of playing positions allocated to her, Michelle described how during her final career phase, she chose the position she wanted to qualify for. In contrast to the dominant ways of being in her sport (and sport more generally), this involved her “spelling out to [her new coach]” what she needed. This initiative came after she had spent time away from her sport due to shoulder surgery, but also, as Michelle said, because she felt she had come to “know who [she] was and what [she] needed”. This knowledge gave her the confidence she lacked earlier in her career.

#### *Nadine, hockey player*

Nadine had experienced a degree of bullying from senior players as an athlete. Here, the more senior players “would say stuff and deliberately try to physically hurt you”. Nadine naturally felt threatened yet needed to handle such behaviour because “you really have to be accepted by your peers”. Yet, Nadine found herself questioning her

fellow team players and wondered whether she “really wanted to be there and whether [she had] to be like that to get to the top”. Through these reflections Nadine learned that she could remain “who [she] is and still be successful”. While this realisation did not come overnight, she knew that she would not treat incoming players in this way, even though she might also feel a “bit threatened” by them. Consequently, she welcomed younger players, a behaviour that was then shared by her fellow senior players. The atmosphere changed into a more pleasant one.

#### *Wendy, kayaker*

Transformative learning came in response to Wendy not being selected for the national team despite achieving the required results. As she became free of institutional regulation, she changed her career strategies for the sole purpose of her own performance enhancement. This included organising a training partner that would ‘press’ her performance, a personal coaching and support team, and a tailor-made boat (in addition to taking citizenship of another country). She was subsequently selected for the upcoming Games (for her adopted country) and achieved a top ten placing.

#### *Thomas, judoka*

Despite appreciating the training process, Thomas aimed to achieve Olympic success. When favourite to do so, he was eliminated in the first fight of the Games. This surprise loss caused Thomas to consider his motivation for judo success. He realised that “it can’t be because of [winning]”. Thomas described his reflections as a “huge step as a person”, a spiritual turning point through which he learned humility. He went as far as to say that he is “actually glad that [he lost at those Olympic Games], because if [he] would have won, [he] would have thought that [he] was the best...and that those who do not do well were shit”. At the following Olympic Games, Thomas excelled.

The above examples of (re)shaping high-performance sport demonstrate how athletes may modify their horizons (Hodkinson, Biesta, and James 2008) at points in their careers when their previously inscribed visions no longer ‘make sense’. Learners may reflect and consciously monitor their selves and conduct, which may promote sense-making *and* transformation. Moving within or into other contexts and dissonances may provide individuals with opportunities to change their positioning and/or acquire dispositions that allow further agency in shaping their becoming. With relevance to our data, changes to positions within sport (e.g., movement from junior to senior players), negative experiences (e.g., hockey player being bullied), movement to other (non-sporting) settings (e.g., softball player being injured) and unexpected events (e.g., kayaker not being selected, judoka being beaten in first round) stimulated reflection and (self-)critical questions that transformed the athletes’ horizons for action (Barker et al., 2014b; Curry, 1993; Hodkinson, 2008; Hodkinson et al., 2008). These new visions provided the athletes with an extended repertoire of possible ways of being.

As the acquired ways of being altered the athletes' horizons, the synergy between them and context(s) changed. The impact these re-orientations had differed - for Michelle, it affected the relationship with her coach; for Nadine, it affected the relationship with junior players; for Wendy and Thomas, the impact was related to their approach to sport. Regardless of effect, the athletes' personal and athletic development was affected, and in their cases, enhanced.

## **Conclusion and implications**

In this paper, we explored the longitudinal learning experiences of eight former high-performance athletes. In presenting the three identified phases of learning, we demonstrated how learning is situational, unique and relational, and changes over the course of an athletic career. Indeed, while learning at the beginning of the high-performance career was characterised by athletes wanting to conform, once they had gained some experience, their becoming predominantly took the form of strategic orientation. This bound their agency and generally served to reproduce the learning cultures they occupied. In a third phase of dispositional learning, four athletes demonstrated how they were able to resist, shape and reshape themselves, the practices they were a part of, and their learning thereafter. These new perspectives changed their 'horizons for action', and allowed them to actively shape their approach to sport, their relationships with coaches and training practices.

The cultural perspective adopted in this study provided a useful yet potentially limiting perspective. Earlier in this paper, we acknowledged a number of these possible shortcomings. In addition, by framing this study in relation to CTL and TLC, the results are as open to criticism as the original theorisings themselves (e.g., in relation to the unintentional perpetuation of dualisms). Lastly, the conduct of research in high-performance sport is also potentially problematic. For example, while this study examined phases and types of learning over career spans, the impact of high-performance sport remains partially understood (Rynne & Mallett, 2014). The implication being that future research examining how sporting context, athletes and coaching interact and affect learning over time, should seek to further the explicit connections between learning and performance in the top echelons of sport.

Despite these issues, we contend that the findings of this article extend existing knowledge about learning in high-performance sport in two ways: First, much previous research has either predominantly focused on sport's influence on athletes or examined how athletes can shape their performance or careers. The findings here alternatively provide an integrated perspective of the reflexive macro-micro relation of learning. Second, existing research has argued for coaches and coaching practice to holistically develop athletes. Our findings add to this body of literature by empirically demonstrating how dispositional learning affects athletic learning and performance.

We subsequently propose two ways coaches can stimulate dispositional learning for personal and athletic gain: (1) Actively construct sporting cultures and training contexts *with* athletes. The Olympians of this study spoke of a rather passive dispositional learning process when entering high-performance sport that affected subsequent learning in some problematic ways. We thus find it important for athletes to not only understand the nature of their high-performance sport as quickly as possible, but to be able to negotiate this

context together with responsible actors (i.e., coaches); and (2) Provide possibilities and support for athletes to develop personally. Here, athletes should be supported by coaches individually so that the dispositional learning they are likely to experience can be exploited for their personal development *and* athletic performance.

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