Coaches' learning and sustainability in high performance sport

Steven B. Rynne* and Clifford J. Mallett

School of Human Movement Studies, The University of Queensland, Brisbane, Australia

In undertaking their complicated and multi-faceted work, high performance coaches have previously been shown to be influential in the performance of athletes. It has also been noted that high performance coaches are learners by necessity. However, what remains unclear is how coaches' learning influences their engagement in sustainable practice. This study draws on three cohorts of full-time high performance coaches employed in Olympic and professional sports throughout Australia. Semi-structured interviews were conducted face-to-face and were inductively analysed. The results revealed that the coaches were presented with a variety of opportunities to learn, with the most valued sources being 'learning on the job', 'discussions with others' and 'experience as athletes'. These unmediated learning opportunities are critiqued along with other mediated opportunities in relation to notions of sustainability. The dominance of unmediated sources of learning meant that sustainable practice was present but was not assured. Sustainable practice is also discussed in relation to the dominant models of high performance athlete development and the demands of coaching work.

Keywords: elite; mediated; unmediated; sport; workplace learning

Framing the discussion – sustainability

This paper involves a consideration of how high performance coaches develop their craft and the ways in which this development may influence the coach's engagement in sustainable practices, in relation to their athletes and the coach themselves. However, to begin with and in order to re-emphasise the approach adopted throughout this special issue it should be acknowledged that the 'folk theory' perspective of sustainability in sport has not been used. Typically, sustainability in sport is

thought of as referring to sustained high performance by individual athletes and/or teams and even more crudely as prolonged periods of winning (i.e. winning streaks and premiership-winning dynasties). In this paper, as with others throughout this special issue, the view that sustainability can be usefully thought of as being about the development and maintenance of environments and behaviours that make efficient and ethical use of resources (human and other) was adopted (Wals & Jickling, 2002). This approach is equally applicable to athletes and coaches in sport (e.g. Loland, 2006), and in this paper the aforementioned understanding of sustainability and its connections with coach learning practices are examined.

An elite level swimming coach in Sweden once likened high performance sport to bashing a bag of eggs against a wall: 'The eggs that are not broken are the ones that you can use. This is how elite sport works'. This is perhaps intentionally provocative, most notably highlighting the professional and personal implications of a lack of sustainability from the perspective of the athlete. Many athletes become 'broken' and for those who are not yet, surely there are only so many 'bashes' they can take before they too succumb. We might question why this remains a fairly dominant metaphor in high performance sport.

While there are no doubt multiple stakeholders in high performance sporting environments, when it comes to the number of 'broken eggs' it is the coach who is typically most influential. Given that coach performance and employment is often (and regularly erroneously) based on the performance of their athletes (Mallett & Côté, 2006), why do coaches persist with practices that result in athlete attrition in various forms? Several reasons might contribute to this persistence with these coaching practices; the coach believes that these practices work (at least on some level), the practices are similar to those of other coaches and are therefore acceptable, coaches can find no better way of operating and the environment expects and supports these practices (or does not appreciably reject them).

Moreover, and as alluded to above, like their athletes the coaches' sporting lives are also fragile. As opposed to a metaphor about bags of eggs, perhaps high performance coaching employment could be thought of as a game of chance where the odds of success are stacked heavily against you. Coaches in high performance sport could hardly be thought of as being completely in charge of their own destiny given that their performance is judged so publically and often harshly based on limited, imprecise and sometimes unfair criteria (Mallett & Côté, 2006).

Despite these prevailing conditions, some coaches in some sports have

no doubt managed to operate in sustainable ways. Indeed, there are many anecdotal reports across a variety of sports suggesting that high performance coaches have been able to work in efficient and ethical ways with their athletes. We might assume that these coaches have engaged in some learning in order to inform their practices and continue to reshape their programmes in the face of changing contextual demands. With these aspects in mind, the focus of the rest of this paper is on the link between how coaches learn and some conditions that may improve the chances of coaches engaging in sustainable practices. In addition, by directing attention to sustainability in relation to athletes and coaches themselves, we seek to contribute to the aim of thinking about ways of doing sport that still help us to 'select the best eggs' (to build on the metaphor offered by the Swedish swim coach), but reduce the number of broken ones, as well as 'improving the odds' for the coaches in the process.

The place of the high performance coach in sustainability

Given the nature of this special issue and the broad readership of this journal, it is important to provide some further detail regarding the work of high performance coaches in order to highlight the significance of sustainability in high performance sport. Accordingly, the following section will include a discussion of the centrality of coaching to athlete performance, the state of constant flux that characterises high performance coaching, the need for constant learning to underpin quality practice, and then introduce a generative framework for the consideration of coaches' learning through work.

Centrality of coaches to athletic performance

Almost without exception, the training and competition performances of high performance athletes are overseen by one or more coaches. High performance coaches assume roles related to hands-on coaching in training and competition settings, planning and coordination of athlete development processes, logistical and technical support, pastoral care and management of constraints (Côté, Salmela, Trudel, Baria, & Russell, 1995; Cushion, Armour, & Jones, 2006; Lyle, 2002; MacLean & Chelladurai, 1995; Rynne & Mallett, 2012). In undertaking this work, quality high performance coaches have been shown to be central to athlete development and performance (Durand-Bush & Salmela, 2002; Starkes & Ericsson, 2003).

Despite the generally narrow conceptualisation of the coach's influence

on performance, there are regular accounts of high performance coaching that are more humanistic in nature. In these cases it has been shown that coaches may also have a role to play in the broader empowerment of the athlete towards achieving personal goals through a facilitative interpersonal relationship (Cassidy, 2010; Cassidy, Jones, & Potrac, 2004; Lyle, 2002). So, a key point in relation to the issue of sustainability in high performance sport is that the coach is a potentially influential figure with regard to athletic performance and holistic development.

High performance sport coaching work is complex and ever-changing

High performance coaching has been described as a complex and even chaotic endeavour (Bowes & Jones, 2006; Cushion, 2007; Hagemann, Strauss, & Büsch, 2008). Part of the complexity inherent in coaching relates to the fluid nature of the activity, comprising ongoing dilemmas and decision making, and requiring constant planning, monitoring, evaluation and reaction. Furthermore, because of what is at stake in international sport, every athlete and every coach is looking for a competi- tive edge. This has meant that contemporary sport moves very fast with respect to technology (e.g. equipment, load monitoring), coaching practices (e.g. technical and tactical trends in training and competition), and paraprofessional support (e.g. psychological interventions, regeneration means, medical screenings and treatments).

Adding to the potentially pressurised situation is that high performance coaches are often held totally responsible for the competition results of their athletes. Of course these results are predominantly complex, dynamic, unpredictable and subject to intense and continuous scrutiny by fans and the media (Dawson, Dobson, & Gerrard, 2000; Potrac, Brewer, Jones, Armour, & Hoff, 2000). The obvious question becomes: is sustainability with respect to athletes and coaches even possible under the prevailing conditions in high performance sport (i.e. complicated work coupled with high stakes)? As will be built upon later, it is our view that this situation actually presents an opportunity for savvy coaches, athletes and sports with respect to learning and the gaining of competitive advantage.

Coaches must learn

It should be noted that high performance coaching is not alone in being a highly complex set of practices deployed in a rapidly changing context. However, what is somewhat unique to high performance coaching

(especially in Australia) is that the preparation and training of high performance coaches lacks any significant, formalised structure (Mallett, Trudel, Lyle, & Rynne, 2009). In the absence of such structures and in order to address the dual challenges of achieving and sustaining high performance, coaches must engage in less formal learning to inform their practice and then must continue to learn so that they might reshape their practice as the contextual demands change. Without engaging in continued and quality learning practices, coaches will condemn themselves to a future where they repeat past mistakes. They also risk opting for uninformed, short-term gains that jeopardise their own and their athletes' futures. But before going further into how learning may pro- mote high quality, sustainable practices, it is useful to consider the ways in which scholars have characterised high performance coach learning.

In 2006, Penny Werthner and Pierre Trudel proposed the use of a different theoretical perspective to understand how coaches learn to coach. Drawing on the work of Moon (1999), they suggested that learning should be viewed as a process of changing conceptions as opposed to the dominant view of learning as the accumulation of knowledge. In doing so, Werthner and Trudel (2006) described three main types of learning situations: mediated, unmediated and internal. They went on to explain that mediated learning situations (e.g. coaching courses and clinics) involve materials that are decided upon and directed by a person other than the lear- ner. In somewhat of a contrast, unmediated learning situations involve the learner taking the initiative regarding what they choose to learn (e.g. choosing a book from the library or browsing a website). In this case, there is no teacher or instructor. Finally, Werthner and Trudel (2006) described a third type of learning situation – the internal. In this situation the learner reconsiders or reflects on existing ideas in the absence of any new material. While we will return to this conceptualisation of coach learning at a variety of points throughout this paper, at this stage it is sufficient to note that the individual and social contributions to learning mean that different learning situations will result for coaches even if they are from similar contexts (Werthner & Trudel, 2009). This has obvious implications for whether or not coaches are willing and/or able to adopt practices that foster sustainability.

Learning as a source of competitive advantage

We have argued elsewhere that high performance coaching is work and that the sites in which this work is undertaken might be considered as workplaces (Rynne & Mallett, 2012; Rynne, Mallett, & Tinning, 2006, 2010).

Learning in work contexts has received much scholarly attention, primarily because learning and retention of learners is seen as a core strategy for competitive advantage (Ahmed, Lim, & Loh, 2002; Sawchuk, 2011). In sporting terms, this has great significance given the industry is founded on the drive to triumph over one's competitors. Moreover, coaches who are prepared to learn how to operate in ways that are somewhat different to their colleagues, and in doing so are able to enhance the longevity and well-being of themselves and their athletes, will be well positioned to seize this advantage.

Method

Australia is considered to be a strong performer across a variety of international sports (Phillips, 2000). This is in spite of a relatively low population (in global terms) of around 23 million (Australian Bureau of Statistics, 2012). Without the massive population to strongly support the 'egg against the wall' model of high performance athlete development, Australian coaches have often been urged to operate in different ways (Green & Oakley, 2001; Gulbin, Oldenziel, Weissensteiner, & Gagné, 2010). For example, in many cases, coaches have to cope with relatively limited absolute numbers of talented athletes, geographical separation from these athletes, limited upward pressure in many domestic competitions, international experiences being cost and time prohibitive, and a somewhat complicated and volatile sporting landscape regarding policy and resourcing of sport (Gulbin, 2012). Therefore, while Australian coaches could not be considered to be a homogenous group, the experiences of Australian coaches may be generative regarding sustainability in sport.

Participants

Purposive sampling was employed with the primary criterion for inclusion being that the coaches worked full-time in a high performance sport environment. In keeping with relevant literature (e.g. Lyle, 2002; Mallett, 2013; Trudel & Gilbert, 2006), high performance sport environments were considered to be those in which the coaching is typically full-time and paid, highly organised and systematic, involves the coordination of a range of paraprofessionals, and the focus is on successful performance (including winning). An additional criterion was that the coaches must be preparing their athletes for performance at international competition.

In this paper, we draw upon data collected over a five year

period (i.e. 2007–2011), from three previous studies. Accordingly, 44 Olympic sport and professional sport coaches (five female, 39 male) from more than 20 sports were inter- viewed in the preparation of this paper. All had coached athletes/teams to international representation. However, despite working in similar contexts, there was much variation with regard to their personal histories. The average age of the cohort was 40 years (range = 23–60) and the group had an average of 21 years of coaching experience (range = 1–34). Of the 44 coaches, 28 had some form of tertiary education (e.g. undergraduate qualifications), but much of this study had been completed in non-sports related fields (e.g. business). Outside of formal tertiary study, the coaches had engaged in an average of approximately 400 hours of formal training, most generally under the auspices of coach accreditation/certification (range = 0–1150). This research adhered to strict university ethical procedures and accordingly, participation was voluntary and anonymity was assured.

Data collection

Semi-structured interview protocols were used to collect information regarding the coaches' personal histories and to examine the learning of these coaches across their careers. These interviews took an average of 82 minutes to conduct (range = 60–110). On some occasions, these interviews took place across multiple sessions based on the availability of the participant. The interviews were transcribed verbatim, checked for accuracy and returned to the participants for member checking.

Data analysis

An interpretative analysis of the interview data was carried out following procedures outlined by Côté and colleagues (1993). The two (sometimes overlapping) phases of analysis included data organisation (creating tags) and data interpretation (creating categories). The text was divided into segments (meaning units – MUs) and then tagged with a provisional description of the topic. Categories were then created by listing and comparing such that tags with similar meanings were grouped and labelled. The categories necessarily remained flexible as they were derived from data analysis and needed adjustment as the process continued. A decision-making heuristic (Côté & Salmela, 1994) was also employed with the aim of enhancing the construction of MUs. In preparing this paper, a comparative analysis (Neuman, 2000) was undertaken.

Lessons learnt in coaching

Unmediated learning situations

In keeping with much contemporary research on coach learning (see e.g. Cushion et al., 2010; Mallett et al., 2009; Occhino, Mallett, & Rynne, 2013; Werthner & Trudel, 2009), all of the coaches in this study were able to identify a range of learning opportunities that they accessed prior to and during their current coaching work. Notably, the learning situations most often referred to by the coaches and valued most highly could all be considered to be largely unmediated, and included (in order): on the job experience, learning from peers and previous experiences as athletes.

On the job experience

On the job experience referred to learning from engaging in coaching work and was often conceptualised as development through trial and error. A quote that was indicative of the overall sentiments of this cohort came from Tom, who simply said 'you learn to be a coach by coaching'. Mitch further emphasised this point by responding 'trial and error [laughs] a lot of the times' when asked how coaches learn some of the more difficult roles that they perform. In this way, learning 'on the job' could be considered to be unmediated in nature. The perceived contribution to coach learning that this learning made varied during the coaches' careers, with the group describing periods where the value of this source was restricted (e.g. through being appointed as an assistant coach with a very narrow scope of work tasks) and enhanced (e.g. being appointed as a head coach where there was regular access to a full range of novel coaching tasks). With regard to having access to a narrow range of duties, Jack noted that he only gets to do 'the work that none of the other coaches want to do ... there is definitely a hierarchy [with respect to role allocation]'. There were also many situations where the range of coaching tasks had expanded for these coaches (and hence increased opportunities for learning). For example Billy said:

> My contribution to the programme and almost my level of standing in the programme has changed and the impact of that is that I do talk to the kids more ... and I'll now take a session. I take two sessions in a week now whereas at the beginning I didn't. I didn't write anything [i.e. develop programs], now I take two sessions and the boxing circuit.

It is important to note that when undertaken to its fullest extent, high performance coaching is extremely demanding work. Each of the coaches noted that as well as being physically present at many sessions with athletes, coaching was a fairly consuming vocation that had them constantly thinking about their work. For example, David said the following:

It's full-on, it's a full-on lifestyle … you just get worn out sometimes mate to tell you the truth. You know, you talk about coaches' burn out (laugh), you could see how coaches get burnt out, that's for sure … You just get involved, you know it's 'cause it's your passion and things … it's a constant thing … you dream about it at night fair dinkum. It's just always on your mind.

Similarly, Robert noted:

There's really no end to it, which can be really rewarding, but the risk of burnout is something that really, I guess, scares me. Being away from home for long periods is something that's, I don't think is overly conducive to that sort of work-life balance or family lifestyle. So that side of, that's what I would call a coach killer.

So while there are opportunities to learn through engagement in coaching work, the demands of the role may be in direct opposition with notions of sustainability (at least in relation to the coaches themselves).

Discussions with others

With regard to discussions with others, the coaches indicated that they benefited greatly from being able to discuss coaching practice with a variety of other personnel, including other coaches within and outside their sports and paraprofessionals (e.g. sport scientists, sport psychologists, strength and conditioning coaches). For example, Robert said that he benefited from 'informal conversations or discussions with different coaches. [This] can be from a range of sports or support staff' because he reported that it 'challenges my thinking ... I could be generalising but coaches seem to be real thinkers ... So I feel I've really developed my thinking skills in my time here'. Despite the presence of opportunities to challenge established conventions, this source of learning could still be best thought of as an unmediated learning situation. This source of learning was felt to make an increasing contribution to coach

development as their careers progressed but access to this source was highly variable. Previous empirical research has demonstrated that learning affordances in workplaces are shaped by workplace hierarchies, group affiliations, personal relations, workplace cliques, cultural practices, race, gender, language skills, worker or employment status and social norms (Billett, 2004). This was no different for the coaches in this study, with the interview data highlighting the existence of work- place structures, hierarchies and policies, which resulted in varied access for different coaches. For example, in the majority of cases, the coaches had access to sport science support based on the tiered natures of their programmes within the broader organisations in which they worked. High priority programmes were allocated significant access to sport science personnel, while lower priority programmes received less access. This dramatically affected the likelihood of coaches being able to spend time discussing their coaching work with these individuals. It should also be noted that the decision about the 'tier' of their sport programme was completely out of the coaches' control.

Experience as an athlete

Experience as an athlete was generally thought to be an important source of learning for the high performance coaches, especially early in their careers. For example, Geoff said that he 'probably developed [his] own techniques to start off with based on what [he] knew as an athlete'. However, it was not just technical aspects that the coaches reportedly valued regarding their previous experiences:

> I remember the time I was an athlete and I was fortunate enough to work with coaches who've been that particular way. Who've been there for me and make things work for me and so I'm trying to just sort of replicate from what I know I felt a good coach should do. (Jenny)

Giving further indication of the potential relevance of previous experience to sustainable coaching, Jenny went on to say that she tried to model her coaching on aspects that she liked in her previous coaches, such as:

> Asking feedback off the athletes. And trying to be as involved in their lives as you have to be so, for example, my routine was always that when they come to training, the first thing is, I have to know how they're going. I have to know what's going on. "How was work?

Did anyone give you a hard time? Are you happy? Are you unhappy? What's the girlfriend doing?", that type of stuff.

Jenny also noted that her personal desire to get to know and appreciate her athletes in a rather holistic fashion was borne out of her own joy at having some coaches seek to understand her as a person and her frustration with coaches who appeared to have no interest beyond her performance outcomes when she was an elite athlete.

Mediated learning situations

It is worthwhile noting that there were only a few sources mentioned by the coaches that could be considered to be mediated learning situations. While accessed by virtually all of the coaches, formal coach certification/accreditation programmes were considered to be relatively low impact regarding the coaches' practice. This finding is in keeping with previous research suggesting that while there are some benefits to coach certification programmes, the overall impact is somewhat limited with regard to high performance coaching craft (Lynch & Mallett, 2006). In contrast, while not all coaches accessed formal tertiary education related to sport coaching practice, those that did reported that it was of utmost importance to their high performance coaching practices. Werthner and Trudel (2009) noted in their study that regardless of the degree and country in which it was obtained, coaches valued tertiary study and viewed it as being instrumental to their learning as coaches.

In the current study, the most discussed benefit of tertiary study was being able to understand and having the confidence to engage with others in more generative ways. Louise indicated that her studies helped her in finding answers to practical questions: 'It's just made me know where it is, where to find it and who to speak to and not be so, not that you're scared to approach anyone but just that you, you know you feel more comfortable in approaching people'. This gives a strong indica- tion of the way that tertiary study served to increase the coaches' feelings of compe- tence and self-efficacy. Another benefit, and one that is highly relevant regarding sustainability in sport, was a broadening of the coach's mind and improvements in thought processes. For example, Daniel said, 'obviously the study for me, like I've never done any study of that side and that's just opened my mind up now'.

Internal learning situations

Much of whether or not a coach experienced considerable learning was

influenced by how they viewed themselves in relation to their coaching work. For example, Lucas suggested that: 'I'm more receptive and open to ideas. From anyone ... And I don't mind being different. I think different is good. I think change is great'. In a similar way, when asked about where this drive to learn comes from, Damian responded:

> What drives it? … This is like a personal thing, like obviously, it's also the way you perceive yourself ... I'm probably very self-critical, like there's always a chance to reflect … you kind of go back and say what could you have done better.

This connects well with the notion of internal learning situations, whereby Damian might be more likely to engage in such situations than a coach with a less reflective attitude. However, an important issue that served to limit learning through internal situations is related to the nature of high performance coaching work. As noted previously, when undertaken to its fullest extent, high performance coaching work is a complex and extremely challenging task. Several of the coaches expressed frustration at their own inability to achieve some 'cognitive space' for reflection. For example, Robert offered the following:

> I really would like to have more time to reflect on what I'm doing, so that I'm able to keep a detailed journal or log of what I'm doing, to make sure that I've got good notes to move forward with in terms of, I don't want to just forget a conversation that I've had with someone.

Similarly, Jenny said in frustration, 'I sometimes think "geez, I need to just get away from the daily work and lock myself in somewhere and just think"'. Sharon also lamented that 'you don't really get any down time to assess where you're at'. How- ever, unlike many of her contemporaries, Sharon was prepared to admit, 'I probably could have created opportunities to do that, but I'd rather be hands on and in there'. This brings us to an important point – that in many cases there is a choice involved, but the degree to which this choice is viable or desirable is most likely a function of the individual's personal orientation and the prevailing climate of the sport.

Different learning situations and the implications for sustainability

While there were a variety of learning situations reported by the

coaches in this study, it is important to note that the three most important sources of learning related to unmediated learning situations: on the job experience, discussions with others and experiences as an athlete. Each of these can be briefly considered with regard to the implications for sustainability. This will be followed by a discussion of the other learning situations reported.

First, with regard to learning from engaging in coaching work, the nature of the tasks that they were exposed to meant that the coaches had opportunities to either enhance or impede sustainability for themselves and their athletes. Coaches may make 'mistakes' with athletes (i.e. thwart sustainability), but if they were sufficiently reflective and engaged in subsequent internal learning situations, they reported that they were generally able to avoid similar errors in the future. While this may be cold comfort for the athletes early in a coach's career, it is more likely to support the sustainable engagement of athletes in sport later. It should also be re-emphasised that the development of sustainable practices is predicated on the coach's ability to learn from these errors and adjust their practice. The scope of their learning is also based upon the range of tasks they had access to, with some coaches fulfilling highly specialised and somewhat restricted roles. It should be noted, however, that the majority of coaches were involved in full-time head coaching work. For these head coaches, it was clear that while there was the potential for significant learning via the myriad of tasks they undertook as part of their work, the threat of burnout was ever-present. For the coaches themselves (as exemplified by David's and Robert's comments), the issue of sustainability in their practices was an important concern.

Second, the coaches reported that learning through discussions with others allowed them to identify the practices of other coaches and support personnel that led to adaptive athlete behaviours and positive relationships within and between groups of personnel. Through subsequent discussions, these positive practices had the potential to be affirmed if they were features of their current work or included in the future. Alternatively, poor practice by other coaches and paraprofessionals often acted as a stimulus for coach thought, reflection and planned future action. It must be noted that for generative discussions to occur (in relation to both positive and negative approaches), the coach had to have access to personnel and practice, had to have established rapport and trust with the people they were talking with, and had to be able to engage critically with their own practice and the practice of others. All of these conditions were less than assured as this source was unmediated and the coaches' access to personnel and resources was often based on a system

of 'tiering' outside of the coaches' direct influence.

Third, the experience of the coaches as athletes provided opportunities to consider sustainable coaching practices. Jenny's comment about knowing the athlete in a more holistic way is reflective of this. However, the heavy dependence on previous experience when developing coaching craft suggests that there is the chance of a fairly uncritical reproduction of practices, as has been found in a number of previ- ous studies (e.g. Eraut, 2004; Jones, Armour, & Potrac, 2002). Indeed, the potential for improved sustainability certainly relies upon the nature of the coach's experiences as an athlete and their subsequent capacity to engage in internal learning situations.

While these unmediated learning situations are the most highly regarded by these high performance coaches, there is a degree of variability with regard to what is learnt and the possible implications for sustainability. Given the undirected and variable nature of this learning, in combination with the strong potential for the uncritical reproduction of dominant practices, some questions remain about the promotion of sustainable practices in high performance coaching. Despite these issues, the more formal mediated learning situations reported by coaches (tertiary study in particular), represented an opportunity for the promotion of sustainable coaching practices that were generally left to chance in the unmediated situations. Through engagement in tertiary study for example, coaches reported gaining improved critical thinking skills, greater confidence in interacting with paraprofessionals, and a greater appreciation for the research that underpins much coaching practice. These are all in keeping with the calls from Wals and Jickling (2002) for greater diversity of thought in supporting sustainable practice. As will be noted in the next section, engaging with tertiary study presented opportunities for some of the coaches to challenge taken-for-granted practices in their sport in order to adopt a more humanistic form of coaching. Similarly, a diversity of thought was alluded to in the internal learning situations reported by the coaches. The comments from Lucas and Damian particularly highlighted the desire for the coaches to reflect upon and improve their practices and their willingness to 'be different'. Of course, achieving the 'cognitive space' to sufficiently and effectively engage in this form of learning was problematic, primarily because of the extremely demanding nature of high performance coaching work. This presents challenges to sustainability on a number of fronts.

Sustainability for athletes and coaches

Despite there currently being few assurances regarding the direction and

intensity of high performance coach learning in a general sense, this study presents strong examples of where learning had enhanced sustainability. This was particularly the case with regard to coach approaches to athlete engagement. A key realisation that many of the coaches had come to through their development was that pastoral care was an important aspect of high performance coaching work:

> You're trying to be another parent to a lot of these kids … the family put some of that responsibility onto you to try and encourage their kid to get something out of the sport, but also to develop some life skills. (Ian)

Assistance provided by the coaches also included the care and rehabilitation of injured athletes: 'My athlete had a huge accident … and when I saw [the athlete] in hospital, I found that really hard … you kind of wonder if it's worth it. That was very upsetting' (Melissa). Overall, the coaches acted in ways that demonstrated care for their athletes in much broader settings than the competition and training arena. In doing so, it is argued that the coaches are more likely to be engaging in efficient and ethical practice in relation to their athletes.

This type of efficient and ethical coaching has been identified in contemporary literature, but connections can be made with analogous forms of coaching that have their origins much further in the past. As noted elsewhere (e.g. Aanstoos, 2003; Lyle, 2002; Mallett & Rynne, 2010; Potrac et al., 2000), humanistic thought and the notion of holism dates back to the Ancient Greeks, was resurrected in the Renaissance period and is included in much ancient and contemporary Eastern thinking (Buddhism, Hinduism). In essence, and in relation to sport coaching, the humanistic approach is one that is person-centred and emphasises the empowerment of the individual towards achieving personal goals in ways that respect the athlete as an emotional, political, social, spiritual and cultural being (Cassidy et al., 2004; Lyle, 2002; Potrac et al., 2000). Performing under the guidance of coaches who have learnt to coach in this way will enhance sustainability for athletes as they are more likely to be engaged in facilitative interpersonal relationships towards negotiated goals, as opposed to being metaphorically 'bashed against the wall' along with their athletic peers. So while much of the learning of the high performance coaches was unmediated, most had achieved some understanding of more sustainable practice. Perhaps this is related to working in the Australian context, where the relatively low population means that those coaches who engage in more sustainable practices are

able to 'survive' and sometimes flourish.

However, while it was found that athlete sustainability may be enhanced through coaches learning to adopt more humanistic approaches, there is far less surety regarding sustainable practices in relation to the coaches themselves. Coaching employment is generally volatile with 'forced mobility' (due to regular dismissals) considered to be an inseparable part of high performance coaching (Hanin, 2007; Mielke, 2007). Indeed, the coaches in this study were acutely aware of their precarious situations: 'You've got to have a head coach because boards want to fire some- one and that's a simple fact of life' (Lucas). An argument might be made that the learning that coaches engage in could conceivably improve their chance of securing and maintaining employment through improved adaptability, greater awareness of how they are being evaluated and improved likelihood of athlete success. However, the issue remains that coaches are generally evaluated publically and on criteria that are generally poorly defined and often out of the direct control of the coaches (Mallett & Côté, 2006).

Conclusion

The very public performance objectives and the 'win at all costs' ethos that permeates much high performance sport seems at direct odds with the notion of sustainability adopted in this paper. The fundamentally zero-sum nature of sport competitions means that success for one athlete or team implies failure for others; it is simply not possible for all teams to be successful at the same time (Sloane, 2007). Given the prevailing environment in sport coaching, it is perhaps not all that surprising that some coaches will continue to 'break as many eggs' as they need to in order to find the best performer.

However, while high performance sport outcomes may appear to be at odds with sustainability, the fast-paced and ever-changing nature of sport at the top level may actually encourage learning and facilitate sustainable practices (at least with respect to how coaches engage athletes). The experiences of the coaches as athletes and through their previous coaching work, in combination with the contributions of para- professionals, tertiary study and personal reflection, meant that there were consider- able opportunities to learn. However, the dominance of unmediated sources of learning meant that while sustainable practice was often present, it was not assured.

The coaching cohorts involved in this study were able to describe aspects of their coaching that could be considered to be sustainable in

relation to how they work with athletes. What remains, however, is the adoption of a strong position regarding how coaches themselves might be more sustainable. The coaches in this study had relatively little insight into how coaching could become more sustainable within the current constraints of high performance sport. Indeed, a number of interviewees joked about their impending downfall with respect to being sacked and/or burning out. Previous research has suggested that a starting point may be to promote the view that coach performance should be based on more than winning and losing (Côté & Gilbert, 2009; Lyle, 2002; Mallett & Côté, 2006). Perhaps this could be tied to sustainable athletic development in relation to humanistic forms of coaching practice (Cassidy et al., 2004; Lyle, 2002) and/or in relation to adaptive outcomes for athletes (e.g. 4Cs – Côté, Bruner, Erickson, Strachan, & Fraser-Thomas, 2010). This consideration might at least provide coaches with more certainty and clarity regarding their performance. Beyond this, it would be useful to further examine the scope of work that high performance coaches engage in in order to consider the ways in which coaches might work in more sustainable ways.

In conclusion, it is proposed that in relation to athletes and coaches themselves, sustainability may be seen more as an ethic, attitude and way of understanding coaching as opposed to a prescription. Moreover, it is in keeping with the discussions of humanistic coaching that hold this form to be ideological and aspirational in nature (Cassidy et al., 2004; Lyle, 2002; Mallett & Rynne, 2010). Finally, it should be acknowledged that while coaches are influential figures, they are not the sole determinant of sustainable practices; they are best considered a necessary but not sufficient ingredient.

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