

Institution: University of Hull
Unit of Assessment: C26: Sport and Exercise Sciences, Leisure and Tourism
Title of case study: Enhancing coaching practice in elite level sport
<p>1. Summary of the impact The research cited addresses the socio-pedagogical and psychological aspects of sports coaching. It has directly impacted policy and effective practice within elite sports clubs and National Governing Bodies of sport (NGBs) in the UK and abroad. Evidence of impact relates to coping effectiveness and stress management within elite level rugby (Rugby Football League, Rugby Football Union) and golf (English Golf Union, Professional Golfers' Association) contexts. Further afield, the socio-pedagogical research has informed core facets of progressive coach education initiatives, such as those delivered by the Gaelic Athletics Association, the Canadian Athletics Coaching Centre, and High Performance Sport New Zealand.</p>
<p>2. Underpinning research The underpinning research investigated aspects of the socio-pedagogical and psychological complexity of sports coaching practice. The socio-pedagogical research was undertaken by Dr. Paul Potrac during his employment at the University of Hull (2008-October 2013), in conjunction with Professor Robyn Jones (Cardiff Metropolitan University). The psychological aspects were conducted by researchers at the University of Hull; Dr. Adam Nicholls (Graduate Teaching Assistant, 2004-2005 and Lecturer, 2007-present), Johnny Bloomfield (Graduate Teaching Assistant, 2004-2006) and Prof. Remco Polman (Reader, 2004-2008).</p> <p>This work was stimulated by the consultation document entitled 'The Development of Coaching in the United Kingdom' (UK Sports Council, 1999), the Cunningham Report (2000) and by the formulation of 'Sports Coach UK,' which was assigned with leading the review and re-development of coach education structures and standards across the United Kingdom. These strategic developments highlighted the need for extended consideration and visibility of the sociological, pedagogical and psychological aspects of sports coaching practice within coach education schemes and ongoing Continuing Professional Development initiatives.</p> <p>The papers submitted as part of this case study respond to the above, by outlining the socio-pedagogical and psychological complexities of coaching practice, coach and athlete learning, and the psychological stress associated with elite sport. The 6 peer-reviewed published outputs (see Section 3) represent new findings and suggest alternative conceptual frameworks from which complex everyday realities of sporting practice can be understood by coach educators, coaches and athletes. Specifically, this research has highlighted that the coaching process is not linear, nor straightforward, but is instead grounded in the realities and opportunities forged from human interaction (see Potrac & Jones, 2009a, 2009b). The emphasis on the micro-political nature of coaching practice in these papers has identified the need for coaches to consider the character of their working relationships with key contextual stakeholders (this includes, administrators, coaching staff, playing staff, etc.), who frequently influence the time, space and resources available to implement coaching programmes. Equally, this research has also highlighted the political nature of coaches' engagement with formal coach education provision. In particular, it has identified some of the ways in which coaches may choose to fabricate their responses to the ideas, methods, and assessments espoused in formal coach education programmes (see Chesterfield, Potrac and Jones, 2010).</p> <p>The key insights from the psychological-based research have been both theoretical (underpinned by the theoretical framework of Lazarus) and applied in nature. The research has generally been guided by the need to understand more about the entire stress process in sport. This enquiry involves the evaluation of stressors, feeling emotions, and coping in athletes and secondly, to understand more about 'coping effectiveness' so that athletes can be taught how to maximise their coping efforts.</p> <p>To this end, numerous outputs have been published by the group in this area. Among these outputs, Nicholls et al. (2006) first reported stressors, coping strategies, and perceived coping effectiveness longitudinally among professional rugby union players during a key stage of the</p>

season. Professional rugby players reported using a variety of different coping strategies in order to manage the stressors they encountered, but the effectiveness of their coping strategies varied. Nicholls et al. (2009) expanded upon this research by examining emotions in addition to stressors, coping and coping effectiveness among professional rugby union players. Coping effectiveness was significantly lower and emotional intensity was significantly higher during competition, compared with training. However, players reported more stressors during training than matches. The findings indicated that players should be encouraged to deploy coping strategies during both training and matches. Further, maximising coping effectiveness through coping training may be the key to reducing the intensity of unpleasant emotions.

Adopting a more holistic approach than earlier investigations (Nicholls et al., 2006; 2009), by measuring both sport and non-sporting stressors, Nicholls et al. (2009) examined sources and symptoms of stress and affective states among professional rugby union players. The findings indicated that the players experienced multiple sporting and non-sporting stressors and reported negative affective states. This research provides a comprehensive representation of the stressors experienced by young professional sportsmen. The 'perspective section' of the output emphasises that coaches and applied practitioners should recognise all facets of psychological stress within professional sport, monitor stress levels throughout a season, and teach players how to manage such stressors.

3. References to the research

Socio-pedagogical research outputs

Chesterfield, G., Potrac, P., & Jones, R. (2010). Studentship and impression management in an advanced soccer coach education award. *Sport, Education, & Society*, 15 (3), 299-314. (Impact factor 1.172; Web of Science (WoS) 6 citations, Google Scholar (GS) 23 citations).

Potrac, P., & Jones, R. (2009a). Micro-political workings in semi-professional football. *Sociology of Sport Journal*, 26 (4), 557-577. (Impact factor 1.127; GS 16 citations).

Potrac, P., & Jones, R. (2009b). Power, conflict, and collaboration co-operation: Towards a micro-politics of coaching. *Quest*, 61, 223-236. (Impact factor 0.614; WoS 15, GS 25 citations).

Psychological research outputs

Nicholls, A. R., Holt, N. L., Polman, R. C. J., & Bloomfield, J. (2006). Stressors, coping, and coping effectiveness among professional rugby union players. *The Sport Psychologist*, 20, 314-329. (Impact factor 1.018; WoS 30, GS 49 citations).

Nicholls, A. R., Jones, C. R., Polman, R. C. J., & Borkoles, E. (2009). Acute sport-related stressors, coping, and emotion among professional rugby union players during training and matches. *Scandinavian Journal of Medicine & Science in Sports*, 19, 113-120. (Impact factor 3.214, WoS 15, GS 30 citations).

Nicholls, A. R., Backhouse, S. H., Polman, R. C. J., & McKenna, J. (2009). Stressors and affective states among professional rugby union players. *Scandinavian Journal of Medicine & Science in Sports*, 19, 121-128. (Impact factor 3.214; WoS 30, GS 35 citations).

4. Details of the impact

Canadian Athletics Coaching Centre (CACC); 2009-ongoing:

The cited research has supported the development and incorporation of critical ideas concerning the micro-politics of sports coaching into coach development workshops, clinics, mentorships and conferences for all track and field coaches in Canada, including high performance pathways. In this way, the cited research has contributed to the CACC's strategic plan to develop coaches who can better recognise and address the complex, political and highly contextual nature of practice. The Director of CACC (source no.1) reports improved coach-athlete relationships and performance changes as a direct consequence of improved coaching practice.

Impact case study (REF3b)

“My decision to have a strand related to the sociological aspects of effective coaching behaviour is a direct result of the research conducted by Dr. Potrac ...In terms of direct impact on practice due to being exposed to these ideas, I have seen a significant change in how the track and field coaches based here at the University of Alberta act and behave as coaches everyday.”

Gaelic Athletics Association (GAA); 2009-ongoing:

The cited research has informed the course content at various levels of the coach education structure (including 1,100 elite level coaching awards) provided by the GAA – involving delivery to over 45,000 coaches since 2008 (source no.2). The research has been used to underpin GAA coach educator workshops (source no.3) that consider the ambiguity, pathos, and politics inherent in the relationship between coach educators, learners, education courses and coaching practice. In addition, it has also been integral to the content of the new Coach¹⁰ Coach Education Scheme. This national level coach education entails the delivery of new courses improving the practical, technical, and social competencies of coaches operating at all levels of Gaelic sports in Ireland. The Education Officer, responsible for the enhancement of the coach education programmes of the GAA, reports on the positive coach feedback on the issues of social interaction and the constructive pedagogical relationships between coaches, athletes and other stakeholders.

“the cited papers have had, and will continue to have, a significant impact on my work in my role as Education Officer and the learning and development of our coaches and coach educators. The ways in which these papers problematise practice and pedagogical endeavours has helped us not only enhance the content of our coaching curricula across all levels, but also some of the ways in which are coach educators seek to engage with coach learners.”

High Performance Sport (HPS) New Zealand; (2011-ongoing):

The cited research has informed the course content provided by HPS New Zealand in its Coach Accelerator Programme, an elite 3-year multi-sport coaching scheme. This on-going intervention seeks to “accelerate the development of outstanding coaches, capable of coaching athletes to become World and/or Olympic champions” (HPS, New Zealand, 2011). The research is used to strengthen the selected HPS coaches’ engagement with, and critical reflection upon, the micro-political nature of their practice during the 10 compulsory residential learning camps that are a feature of this programme. The Coach Accelerator Manager (source no.4), comments,

“I believe that the theoretical and conceptual underpinnings of their research has significantly influenced the continued evolution of the programme, and many of the coaches have reported that their work has resonated with them most closely as they continue to coach their respective athletes and teams at the highest level.”

A number of sporting organisations (including the English Golf Union, Professional Golfers' Association [source no.5] and Hong Kong Rugby Union) have applied the psychological research findings to coaching practice and elite development programmes. Two specific examples are detailed below;

Rugby Football League (RFL): (2012-ongoing)

The RFL “Embed the Pathway” (EtP) programme was established in 2012. This inaugural project (based on a major audit conducted by the RFL), is aimed at the development of players aged 12-16 years. In particular, this programme aims to develop playing standards by improving coach education (including psychological preparation) and curriculum delivery. The audit by the RFL revealed that “effective psychological coping” is one of the most important factors, along with skill acquisition, which often determines player transition from academy to professional status. As such, the cited research on stress and coping, and numerous other published outputs by Nicholls and colleagues within professional rugby union, has been instrumental in the development of the EtP programme. The Head of Performance Services at the RFL (source no. 6) emphasises the integration of research into coaching development practice,

“The research by Dr. Nicholls has been implemented into the Embed the Pathway

Impact case study (REF3b)

programme by incorporating psychological skills into training sessions. We have incorporated many of his findings by training coaches in how to teach coping strategies, so that players are deploying coping strategies whilst on the field in training and matches to help them perform better when stressed.”

The research findings have been disseminated to all senior academy staff of the 12 professional RFL Super League clubs (source no.7). The provision of psychological care to athletes is a factor that will now contribute to whether clubs retain their academy accreditation. The National Player Development Manager will be assessing the ongoing impact of this work.

Rugby Football Union (RFU); (2006-ongoing)

The cited research has informed the coaching of both rugby union players and coaches. The research identified effective coping strategies, which have subsequently been incorporated by an RFU Academy Coach and the England Saxons Head Coach. This individual is responsible for the coaching of kicking across the RFU, from age group international players to England first team players (source no. 8) and for managing the England Saxons teams.

“The aforementioned research has impacted my coaching in a number of ways. In relation to kicking, since reading the papers in which Nicholls identified effective coping strategies (Nicholls et al., 2005; 2006, 2009; Nicholls & Polman, 2007), I have incorporated these strategies into players’ pre-kick routines. For example, I teach players specific coping strategies and encourage them to use them in their kicking routines.”

This research has also impacted on the professional development and coaching practices of RFU specialist kicking coaches;

“A part of my job involves mentoring and running coaching sessions to other specialist kicking coaches within England. When delivering these sessions I now include elements of psychology, particular on coping skills that were identified by Nicholls in his research during the pre-kicking phase. This enables other specialist kicking coaches to include psychology in their coaching too and I know it has been very successful in the development of players.”

Furthermore, a report in the Rugby Football Union’s technical journal revealed how the findings of (Nicholls et al. 2009) were presented to other coaches and how the club used this information to provide additional support to their younger players (Source no.9).

5. Sources to corroborate the impact

1. Director, Canadian Athletics Coaching Centre, W1-34 Van Vliet Centre, University of Alberta, Edmonton, AB T6G 2H9, Canada.
2. Education Officer, Gaelic Athletics Association, Croke Park, Dublin 3, Ireland.
3. Dr. Potrac, P. (2012). Invited Presentation. Coach education: People, practices and pedagogies. Gaelic Athletic Association, 15th September, Croke Park, Dublin, Ireland.
4. Coach Accelerator Manager, High Performance Sport New Zealand. ASB Sports Centre, 72 Kemp Street, Kilbirnie, Wellington 6022, New Zealand.
5. Dr. Nicholls, A. R. (2008). Stress and coping in golf. The Annual Teaching and Coaching Conference of the Professional Golfers' Association, 7-8th May 2008, Ricoh Arena, Coventry, UK.
6. Head of Player Development, Rugby Football League, Red Hall, Red Hall Lane, Leeds. LS17 8NB.
7. Dr. Nicholls, A. R. (2012). Invited Oral Presentation to Super League Academy Directors. Stress and Coping in Rugby. 12th December 2012, John Smith’s Stadium, Huddersfield, UK.
8. RFU Academy Coach/ England Saxons Head Coach. Rugby Football Union, Rugby House, Twickenham Stadium, 200 Whitton Road, Twickenham, Middlesex, TW2 7BA.
9. Luffman, M., & Nicholls, A. R. (2008). Sources and symptoms of stress and affective states among academy players. Rugby Football Union Technical Journal.