

Institution: University of Cumbria
Unit of Assessment: 26 - Sport & Exercise Sciences, Leisure and Tourism
Title of case study: Interdisciplinary Psychosocial Impacts on Coaching and Coach Education
<p>1. Summary of the impact</p> <p>Since the 1990s, academics at the University have focused on coaching and coach education as a key area of interest, and have had substantial impacts on practice within these areas through an on-going process of research, dissemination and engagement. Through intrinsically applied work, the group initially employed an interdisciplinary approach to the development of the academic curriculum to train coaches and other sports practitioners through under- and postgraduate programmes. However, as engagement with practicing coaches increased, the approach increasingly moved from sport pedagogy aspects of coach education towards examining the cultural and historical perspectives of this practice, and into the psychosocial elements of coaching practice. Through a nexus of research and engagement, the group has directly influenced coaching standards and guidelines, and stimulated improvements in practice and practitioner debate. In particular, this has led to impact on UK coach education provision, for example through development of accredited coach education programmes for two national coaching agencies <i>SportsCoachUK</i> and the <i>Football Association</i> by members of the interdisciplinary research team.</p>
<p>2. Underpinning research</p> <p>Sport was established as a discipline at St Martin's College (one of the legacy institutions which became part of the University of Cumbria on its formation in 2007) in the early 1990s, with an initial focus on pedagogy, including coach education as a key theme. By 2000, the group was increasingly focused on research, and staff were operating at the interface between research and practice in coach education and sport performance.</p> <p>The initial research of this interdisciplinary group (Telfer, Huggins, Johnes) focused on the socio-historical development of sport and coaching in the UK, for example: Huggins, M. and Williams, J. (2005) <i>Sport and the English 1918-1939</i>. Routledge: London and New York.</p> <p>This provided a social-scientific foundation and impetus within the group for the subsequent practitioner development work in coach education by Telfer and Houlston. For example, Houlston's inputs into the Football Association's Level 3 Coaching Handbook (2008: see Section 4), the more recent emergence of 'Coaching Psychology' as a developmental research theme, and the re-integration of this applied research into direct engagement with coaches and stakeholder organisations (such as Houlston & Daley's invited presentation on 'Trust in Football' at the FA National Conference on Psychology for Football in Coventry, 2006).</p> <p>Dr Telfer's use and analysis of reflective practice amongst coaches (cf Knowles, Borrie & Telfer, 2005), and Dr Houlston's investigation into how the manipulation of personal attributions for behavioural outcomes or attendant cognitions effect the interpretation of an emotional state amongst performers (hence, the possibility for coaches to amend these personal attributions to promote more effective performance behaviour) formed the basis for a new research direction within the group. Dr Telfer's particular interest in reflective practice amongst coaches underpinned his practitioner workshops conducted through <i>SportsCoach UK</i> and with national governing bodies of sport (e.g. UK Athletics). His research with Knowles and Borrie (2005) explored the use of reflective practice and learning strategies within six governing body award coaching programmes. Results indicate that none of the programmes examined contained structures or processes for directly teaching or overtly nurturing reflective skills. However, almost all programmes offered a potential structure for this through completion of a coaching log or undertaking a period of mentoring.</p> <p>Through direct engagement and action research with external coach educator stakeholders, the benefits of bringing ideas from broader contemporary (social) psychology into the domain of sport coaching were identified. Whilst psychosocial concepts and theoretical paradigms relevant to coaching practice had been established for a considerable length of time in areas such as mental health psychology, they had not previously been applied within the field of sport and coaching</p>

studies. Through engagement with the action research of colleagues (Telfer and Houlston), Dr Paul Miller established a context to understand current theoretical models and practice in coaching, which was then used as a basis to further develop psychosocial approaches, including evaluation of discursive psychology in coaching and 'reflexive practice', to coach education practice. Through application of discursive psychology, ethnomethodology, actor-network theory and heuristic reasoning, this research has subsequently been able to have impact, both through practitioner-focussed publication and back into practice via the direct engagement of Dr Houlston.

One specific study explored the in-practice application of notational analysis. Whilst an increasing number of studies in recent years have explored the benefits of notational/performance analysis both for sports and the sport sciences, relatively few research publications exist that demonstrate how such analysis can inform practice or performance. The study (conducted by three members of staff from the group: Bampouras, Cronin & Miller, 2012) interviewed a sport scientist, an international coach and a former professional athlete who had extensive experience in the use of notational analysis. The research used actor-network theory (ANT) to assess the results, and indicated that, although the object and receiver of the notational analysis process, the athlete is not included within the process itself, with the coach acting as the gatekeeper.

The key research insights from the work which have influenced its impact on practice include:

- That the discursive psychological perspective is naturally applicable to coaching, given the transparently task-focused character of many naturally-occurring verbal activities in the domain. (Whilst this has been applied to emotion and accounts of success and failure in sport, this had not previously been applied to coaching).
- That this perspective can inform an approach to coaching interaction that does not draw on ontologically-problematic cognitivist assumptions regarding the relationship between thought and action.
- That ethnomethodological research can further develop and refine models of the action-context relationship in coaching science.
- That such an ethnomethodological perspective contradicts the current dominant perception of contexts in coaching activity as semi-static causal "variables".
- This challenges the typical focus on capture of authentic individual experience, and instead concentrates on the coordinative accomplishment of meaningful action in naturally-occurring situations.
- That a reflexive approach has implications as a theoretical approach to coach education and practice and in terms of coaching methodologies.
- That excluding the performer from coaching practices such as notational analysis can impact on the effectiveness of coaching, particularly through negative effects on motivation.
- That consideration of the human factors influenced by technological processes (such as notational analysis) should be taken into account within coaching practice.
- That the "availability heuristic" (Tversky & Kahneman, 1973) should be considered for practical state-of-play reasoning in largely observational sporting activities such as coaching, particularly in "gatekeeping" tasks around performance (such as talent scouting, team selection and substitution decisions by coaches), as well as officiating in high-tempo environments.

The research was conducted at University of Cumbria (and formerly at the legacy institution St Martin's College). Key researchers included:

- Hamish Telfer (Senior Lecturer in Sport Studies and Coaching 1995 to 2010).
- Dave Houlston (Principal Lecturer & Head of School of Sport 1997-2009, Director of Sport 2009 onwards)

- Paul Miller (Senior Lecturer 2007 onwards)
- David Elliott (Lecturer & Senior Lecturer 2003 onwards)
- Theodoros Bampouras (Senior Lecturer in Sport Mechanics and Performance Analysis, 2007 onwards).
- Colum Cronin (Senior Lecturer in Coaching & Sport Pedagogy 2010 onwards)
- Louise Rowe (Senior Lecturer in Sport & Exercise Psychology 2002 onwards)

3. References to the research

1. Knowles, Z.K., Borrie, A.A. and Telfer, H.H. (2005) Towards the reflective sports coach: issues of context, education and application. *Ergonomics* 48(11-14):1711-20
2. Miller, P.K. & Cronin, C. (2012). Rethinking the factuality of “contextual” factors: Towards a reflexive understanding of action-context dynamism in the theorisation of coaching. *Sport Coaching Review* 1 (2), 106-123 DOI:10.1080/21640629.2013.790166
3. Bampouras, T., Cronin, C., & Miller, P. K. (2012). Performance analytic processes in elite sport practice: An exploratory investigation of the perspectives of a sport scientist, coach and athlete. *International Journal of Performance Analysis in Sport*, 12, 468-483.
4. Miller, P. K., Rowe, L., Cronin, C., & Bampouras, T. (2012). Heuristic reasoning and the observer’s view: The influence of example-availability on ad-hoc frequency judgments in sport. *Journal of Applied Sport Psychology*, 24, 290-302.
5. Miller, P. K. (2012). Arsène didn’t see it: Coaching, research and the promise of a discursive psychology. *International Journal of Sports Science and Coaching*, 7(4), 615-628.

4. Details of the impact

Reciprocal influence between coaching body engagement and the research undertaken by the group has created a number of key impacts on coach education and coaching practice. These particularly relate to uptake of psychosocial approaches that enhance both learning and development of coaching techniques and the effectiveness of the coaching process. A consequence of the applied biomechanics engagement of Nicola Relph and John Newton with the GB Diving Squad prior to the 2012 Olympic Games was the impact it had on the behavioural responses by performers and evaluation of performance by coaches.

There has been direct influence on practitioner approaches to coach education; for example, Dr Houlston led the development and delivery of 5 levels of *Psychology for Football* for the Football Association between 2002 and 2013, which related to the approaches identified in the research. Hamish Telfer was engaged by *SportsCoachUK* and the *Football Association* to lead on the promotion of ethical practice in coaching. Further uptake of these approaches has been supported through formal practitioner dissemination via national coaching manuals and coach education involvement with leading sport agencies in the UK. For example, Houlston’s work in social-cognitive psychology led to his substantial contribution (across three chapters) to the Football Association’s Level 3 Coaching Handbook, now in its third edition, which is utilised in the training of all FA/UEFA Level 3 football coaches in England:

- Houlston D.R (2008) *Learning and Coaching Styles*. In Soper R (Ed) The FA Level 3 Coaching Handbook (3rd Edition), Chapter 3, 11-18. Leeds: Coachwise.
- Houlston D.R (2008) *Match and Player Analysis*. In Soper R (Ed) The FA Level 3 Coaching Handbook (3rd Edition), Chapter 7, 33-42. Leeds: Coachwise.
- Houlston D.R (2008) *Mental Preparation for Football*. In Soper R (Ed) The FA Level 3 Coaching Handbook (3rd Edition), Chapter 12, 83-94. Leeds: Coachwise.

Impact case study (REF3b)

These chapters reflect Dr Houlston's expertise in transferring social-psychological understanding into the coach education domain. A critical aspect of the development of this body of work was the adoption of a contextual approach to coach education that moved from practice to theory and back into practice (from football to psychology to football) through the engagement undertaken with key stakeholders and the research undertaken at Cumbria. For example, the utility of reflective practice, particularly through recognition by coaches that the perceptions of others are often framed round social cognitions (e.g. the attributions of a performer following a performance outcome). For many coaches, this is a unique experience and moves beyond the more traditional cognitive-behavioural approaches to coach-performer interventions, and includes an emphasis on the development and analysis of communication skills and practice behaviours. The counter-cognitive reasoning employed in this engagement is eminently recognisable in Miller (2012) and Miller and Cronin (2012), demonstrating the interplay between action research engagement, stakeholder publications and academic publication. Through the coaching handbook, this approach has been applied directly in the training of UK and European football coaches throughout the assessment period.

As a consequence of these research informed insights for practice, Dr Houlston is a Psychology Consultant to the Football Association, disseminating insights from the sport psychology realm in a direct manner, via the training of high-level coaches, as well as via publications. In 2010, Dr Houlston utilised the reflective practice studies by his colleague Telfer in the design and delivery of a new Coaching Psychology programme for FA/UEFA Advanced Licence football coaches, most recently delivered in three sessions Spring to Summer 2013. Additionally, Dr Houlston is also the author of the FA's Level 2 Coaching Handbook (2009; 3rd Edition) and wrote the 'Coaching Psychology' chapter for the new FA/UEFA Level 4 Coaching Handbook (2012). These directly influence coach education and implementation of coaching techniques in practice, as core texts for the FA/UEFA texts.

Within a wider coaching context, the research of Bampouras, Cronin and Miller has introduced an experiential dimension to the investigation of performance analysis in sport via insights from Actor-Network theory. Published in mid-2012, and disseminated through key practitioner orientated publications, the research has already begun to stimulate online debate among practitioners and sport coaches, causing reflection on practice and changes to approach, as exemplified by practitioner blogs.

5. Sources to corroborate the impact

The research has informed national courses in coach education:

<http://eventspace.thefa.com/FALearning/participant/arrangement.aspx?id=26441>

An example of stimulating practitioner debate:

<http://perthhorse5.blogspot.co.uk/2012/09/critique-of-article-from-international.html>

Contacts to corroborate the impact:

- Research Manager (Psychology) for the Football Association, to corroborate the application of the approach at the FA through engagement with Dr Houlston.
- Professor of Elite Performance & Coaching, University of South Wales (also psychology consultant at the Football Association), to corroborate Dr Houlston's contribution to the coaching psychology materials for the FA.
- Senior Football Development Manager at the Aspire Academy for Sports Excellence; formerly Head of Player Development and Research at the Football Association, until August 2013), to corroborate Dr Houlston's involvement in developing the psychological coaching programme.