Conceptualising Sport-Coaching: Some Key Questions and Issues

Christopher Cushion and John Lyle

Recent reviews of sport coaching research (Gilbert and Trudel 2004; Rangeon et al. 2012) identified in excess of 1000 coaching-related publications. Some of this work can be traced back to the 1970s with the yearly publication rate having increased dramatically since then (Rangeon et al. 2012). An examination of this considerable landscape of coaching research reveals a bewildering range of theoretical and empirical perspectives and insights. Despite this apparent depth of empirical work, in-depth understanding of coaching as a social phenomenon and a conceptual underpinning with which to inform practice remains stubbornly absent (Abraham and Collins 2011; Côté and Gilbert 2009). Despite our research efforts we seem as far removed from consensus or clarity about the nature of coaching as ever (Cushion 2007a) and hence have no clear conceptual framework to inform practice (Lyle and Cushion 2010). Indeed, the test of the utility and value of research to a community is the extent to which its findings are (a) used as recommended practices in the preparation of practitioners, and (b) incorporated by practitioners in everyday practice (Cushion 2007b).

C. Cushion (⊠)

School of Sport Exercise and Health Sciences, Loughboroug University,

Loughboroug, UK

E-Mail: c.cushion@lboro.ac.uk

J. Lyle (⊠)

School of Sport, Leeds Beckett University,

Leeds LS6 3QS, UK

E-Mail: j.w.lyle@leedsbeckett.ac.uk

There is now considerable evidence that coaches base their coaching on feelings, intuitions, events and previous experience (e. g. Cushion et al. 2003; Trudel and Gilbert 2006) and despite some positive research examples there is no evidence for the systematic application of these, or any other findings, in the development of coaching practice or coach education (Abraham and Collins 1998, 2011; Lyle 2007) in terms of either methodology or results (Cushion 2007b). As Gilbert (2007) remarks he and his colleagues are yet to "meet a coach that referenced a coaching model (or indeed coaching research) when describing what they do". While Abraham and Collins (2011) point to limiting factors on the likelihood of effective impact by coaching research as for example, the pragmatic approach of coaches, their skepticism about coaching models and theories, and a desire for immediate impact.

Nevertheless, we should also note that a direct relationship between research and practice is an issue in many occupations. Academic research can be said to be targeted at the corpus of academic knowledge about sport coaching. It is not written specifically for practitioners. There is a need to 'translate', to make sense of the findings for practice, to examine the most effective means of incorporating the findings, and to mediate the findings with current practice. This is a task for coach developers, including coach education and professional enhancement, and requires a complementary form of research into professional practice.

With an increased volume of research devoted to sport coaching, but limited attention to translation into professional knowledge (the theory-practice gap), there is as a consequence, little apparent impact on coaching practice or coach education. Therefore, this chapter attempts to give an overview and critical evaluation of "what we currently know" about coaching. It is of course beyond the scope of this chapter to "review" coaching research in its entirety, but drilling into key issues and linking these arguments with others presented has the potential to provide a broad and comprehensive analysis of the substantive nature of current inquiry into coaching. We suggest that a critical examination of the state of the field in terms of conceptual development, research direction and evidence provides a framework with which to understand and bridge the "theory-practice gap" (Lyle and Cushion 2010).

1 Conceptual Development

Currently, the term coaching is a "catch-all" and rather imprecise construct that is assumed to refer to all manifestations of "coaching" practice (Lyle 2011; Lyle and Cushion 2010). However, coaching is not a synonym for all forms of coaching/leading/teaching/instructing, and this lack of precision is a serious barrier to

bringing an appropriate degree of order and regularity to the field. Coaching can be more usefully seen as a "family" title: it connotes a family of related roles that are linked by different degrees of engagement with the coaching process. Coaching must not be used as a shorthand term to embrace all roles, nor be used indiscriminately. In addition, it is common to imply uncritically, or assume that the family of roles are on a continuum, have an interdependent hierarchy of expertise and have more similarities than differences (Lyle 2011). This results in the "concept" of coaching having assumed such a level of genericism that it has become unhelpful (Lyle and Cushion 2010). There is confusion between role descriptors (e. g. elite performance coach), levels of certification (e. g. Level 3), the hierarchy of functional demands within the process, (e. g., analysis, planning, delivery), and the scope and range of necessary coaching competences (e.g., communication, inter-personal skills, technical knowledge). We stress that it is important not to create different sets of meanings within role, domain, function, certification and expertise. This is not simply a language issue, and terms such as leader, teacher, instructor, trainer, and coach do not confer assumed, interchangeable practices. The verbs "to coach", "to teach", and "to instruct" are not interchangeable. In fact the term "to coach" may more usefully be employed to describe a relationship and not a set of behaviours. It is clear that we require a vocabulary that is much more precise. Similarly, impoverished notions and assumptions about "learning" lead to simplistic approaches and attitudes that portray "learning" as a standard element in all coaching. We need to be more discriminating in the way we talk about and understand different types of learning, which in turn, should not be loosely associated with all coaching.

In distinguishing within the family of roles there remains a threshold of competence and certification/qualification, accountability, and regulation of roles that determines their relationship. Currently, either by design or neglect, there is a tendency for all roles and levels to be embraced within "coaching". This creates an insurmountable problem, for example, when an individual with two or three days training (and no real vetting of suitability) is spoken of as being within the "profession", when in fact they have limited attachment to and engagement with coaching. There needs to be function and role clarity, and a clear threshold statement, preferably accompanied by regulation. This will lead to more clarity about the development of expertise, and appropriate education and development. Arguably, there is a threshold of engagement (cf. Lyle 2002, p. 46) that is expressed best as extended duration. For example, coaching is recognized as a series of interventions marked by longer-term goals, recognizable environments, competition, and extended preparation. These demands mean that the coach needs an extended period of education and training (i. e. depth and breadth of knowledge). These arguments,

while in a language that is current in the UK, are universal. We are also sensitive to individuals' desires to "badge" their activities as coaching. The debate is not sterile; we have been critical of much of the research being carried out under the banner of coaching (Cushion and Lyle 2010). The criticism is not of the researchers' expertise and probity but relates to the use of opportunity samples from populations that are engaged in "learning to play sport". Authors should be much more circumspect about generalizing beyond their (often unspoken) assumptions about coaching. We are also reluctant to position the argument in terms of "levels" of coaching award. However, there is some relevance here because of the likely use of such "levels" in setting thresholds for professional recognition (licensing). Using UK terminology our view (cf. Kay et al. 2008) is that Level 3 certification (undergraduate degree level equivalence) requires the extent of education and experience necessary to establish an appropriate threshold for coaches.

The coaching process is wide-ranging and multifaceted (Cushion and Lyle 2010) and adequate conceptualization creates a basis and a mechanism for its representation, and is required to underpin research and education. A conceptual schema addresses questions about terminology, purpose, variability in practice, meaning, genericism versus specificity, and domain distinctions; and these understandings form the basis of subsequent assumptions about effectiveness, expertise, and good practice prescriptions (Cushion and Lyle 2010). Conceptualization, however, is not value-free, and particular interpretations of coaching have the potential to influence our perceptions about coach education, research validity, and accountability measures. Thus, a sociological perspective (Jones 2000), a pedagogical perspective (Armour 2004), instructional perspective (Sherman et al. 1997), humanistic perspective (Kidman et al. 2005), or science of performance perspective (Johns and Johns 2000) each makes assumptions about coaching that have consequences in application. There are barriers to conceptualization that derive from coaching itself; for example, the vast range of coaching contexts. This raises a question that is crucial for the academic study of sport coaching: might or should conceptualization imply that a generic coaching process exists, i.e. is there a coaching 'core' or is there more than one concept of coaching?

Although the conceptual development and understanding of the sport coaching process has so far been limited, a promising and growing body of work exploring coaching practice, and the debate that it has stimulated, has begun to emerge (e. g., Abraham and Collins 2011; Cushion 2007a, b). This line of enquiry explicitly recognises the complexity inherent in coaching practice and demonstrates that coaching is not something that is merely "delivered" but is a dynamic activity that

engages coach and athlete (Côté and Gilbert 2009; Jones 2006). Therefore the coaching process is evident at three levels: the broad social context, then the specific social context/meaning and flow of delivery created by coach and performer (at all levels and stages of sport), and at the same time, the planned and goal-directed intention/direction/delivery from the coach (Lyle and Cushion 2010).

2 Coaching Contexts/Domains

There is a unique composition of context, goal, unforeseen circumstance, actions of athletes, meanings, management of the intervention by the coach, and social and sub-cultural expectations that render coaching susceptible to understanding and appreciation only at the level of the particular. In other words, Coaching can only be understood in a particular context or domain (Lyle and Cushion 2010). The process is distinct, and each domain or social context creates a particular set of assumptions and expectations, within which we can understand practice. Coaching is not a uni-dimensional concept and any attempt to focus on its generic nature masks its very distinctive and different forms. Coaching domains are a useful mechanism for conceptualising the aggregation of behaviours and practice that characterize coaching in different environments (Lyle 2002). A coaching domain is "a distinctive sporting milieu in which the environmental demands lead to a more or less coherent community of practice, with its attendant demands on the coach's expertise and practice" (Lyle and Cushion 2010). It is important to recognise that domains are not differentiated by a single factor but a combination of factors and, therefore, are likely to differ in a number of ways. A "starter list" might include: intensity of participation and preparation; complexity of performance components; coach recruitment, deployment and career development; interpersonal skills; value systems; specificity of competition preparation; and scale and scope of the community of practice and other social networks. The result of these distinctions is a differential demand on expertise and the practice of coaching, and the knowledge base and associated skills will differ across domains.

The arguments for distinctive perspectives on coaching are persuasive. Perhaps most persuasive is that coaches "frame" their roles and expectations within particular personal, educational, and experiential circumstances. The combination of backgrounds ensures that the coach brings a singular perspective (or set of 'frames') to coaching, and the coaches' previous playing and coaching experience reinforces their domain-constrained perspective. Trudel and Gilbert (2006) and Lyle (2002) argue that a single typology of coaching contexts is required to facilitate research within a meaningful framework, and to assist with the design of coach

education. Trudel and Gilbert review a number of classifications, characterized by terms such as community, instruction, competition, professional, volunteer and school and decided upon a typology of recreational, developmental, and elite analogous to Lyle's (2002) typology, participation, development, performance. It may also be the case that the establishment of athlete or coach models of staged development, de facto, will create coaching domains.

Rhetorical talk about generic coaching and coaches as "educators" carries the danger of fostering the acceptance of a weak definition of the role and knowledge; this also encourages a lack of discrimination about different sorts of knowledge (Lyle and Cushion 2010). By not understanding and differentiating between domains, we end up with a spurious equality for coaching and coaching knowledge. This leads to an uncritical and undiscriminating way of understanding (and delivering) coaching in different contexts. Understanding coaching practice across domains remains the cornerstone to conceptual development and engaging practitioners (Cushion 2007b). For example, how coaching impacts the subjectivities of those involved and how coaching is experienced as both a social space and a social structure offers fertile ground for conceptualising coaching (Cushion 2007b). Against this backdrop, any consideration of interaction and discourse within the coaching process, and of the coaching process itself that is devoid of domain understanding and context is both flawed and limited (Cushion and Lyle 2010). Nevertheless, we reinforce this change in emphasis in the knowledge that the central purpose of coaching (improvement of performance towards identifiable goals) and how that can be achieved, is sufficiently well understood in its domains to provide a core process against which the social construction of practice can be understood. Our thinking then should not be focused on the production of allembracing definitions, but about enquiring with greater breadth, depth and detail in order that we increase our understanding about domain-specific practice. Consequently, this has implications for how we carry out research into sport coaching.

3 Research

Coaching practice exists within a variable and dynamic environment of conflicting goals, socio-pedagogical delivery, context specificity, non-consensual values, coaching traditions, and more (Cushion and Lyle 2010). This complexity has implications for researchers and the validity and utility of their research. Indeed, re-searchers have argued that without studies specifically directed toward describing the complexity inherent in coaching, and how coaches cope with it, knowledge

informing coaching process is likely to largely remain imprecise and speculative (Saury and Durand 1998; Cushion et al. 2006). Currently, attempts to simplify coaching do not adequately represent the complexity of contexts or practice. Indeed, to date research approaches have taken an overly simplistic approach to coaching resulting in a dearth of useful research (Cushion and Lyle 2010). A fragmented or episodic approach to coaching knowledge tends to underestimate the complexity of the coaching process, and because coaching can be represented as "episodes" and therefore parts of the process described in individual terms, it is easy to overlook the degree in which the inter-relatedness and interconnectedness of coaching sustains the process (Cushion 2007a; Jones 2007). Consequently, it is easy to take an asocial, linear view of coaching. This, in turn, leads to immature or limited understanding that hides meaning but gives the illusion of a complete understanding. This hinders both genuine conceptual development and its underpinning research.

Despite a growing body of work, coaching remains relatively speaking, under-researched, with existing work "sparse, unfocussed and subjective" (LeUnes 2007, p. 403). Arguably, there are two reasons for this; first, the research agenda is too often driven by personal research interest, with coaches and coaching a convenient data set for some other issue. Second, despite a compelling argument for a "paradigm shift" there remains a predominantly narrow, reductionist, rationalistic and bio-scientific approach to coaching research (Cushion, et al. 2003, 2006; Jones et al. 2002, 2004). This is despite changes taking place in the methods employed. Gilbert and Trudel (2004) found that the balance of qualitative to quantitative research had moved from $11\,\%$ / $81\,\%$ to $28\,\%$ / $70\,\%$ between 1990 and 1993 and between 1998 and 2004 respectively. There have been moves to interview-based and observation-based research away from questionnaire studies. However, we have to be careful about generalizing across all coaching research, and about criticizing appropriately configured research for not being something that it did not set out to be. Therefore, we might be critical of the research community for paying less attention than we would like to the complexity of coaching, but we also need to address the methodological challenges that this brings. The criticism that positivism is reductionist is apt; more interpretive methodologies are able to identify the complex interweaving of personal, performance, and environmental factors, but have not as yet contributed substantively to theory building or practice prescriptions. For example, Christensen et al. (2011) (coaching and talent development), McPhail (2004) (coaching and experiences in youth sport), Cushion and Jones (2006, 2012) (coaching process and social reproduction), Poczwardowski et al. (2002) (coach athlete relationship), have uncovered detail about coaching interventions that would not have been found by other means. For example, McPhail (2004) identified coaching practices that were deemed to be time wasting or detrimental to the development of athletes and was "shocked with the level of prominence of similar incidents reoccurring" (p. 243). While Poczwardowski et al. (2002) demonstrated that coaches and players both inherit and personally author their own coaching contexts highlighting the problematic and individualistic nature of the relationships involved. Poczwardowski et al. support the notion that the coaching process, rather than being simplistic and cyclical, comprises a set of reciprocal interactions between the athlete, coach and context; a notion further developed by Cushion and Jones' work who demonstrate coaching's contribution to the production and reproduction of social structures and within a social and political milieu. While there can be no argument against the insights generated by these studies, we might also note that any aggregation of trends or findings can fall into the trap of the very cross-domain generalizations that we identified in the previous section.

It would be naïve to ignore or dismiss the contribution of all positivist coaching research, as the literature does contribute to our understanding of coaching; for example, as coach education interventions set up specifically as research projects. Conroy and Coatsworth (2006) developed a training programme for coaches to increase certain behaviours and reduce others. This research suggests that interventions can change the quality of micro interventions between coach and athlete. Conroy and Coatsworth (2006) utilised the Coach Effectiveness Training (CET) developed by Smoll and Smith as a coach behavioural intervention and devised the Penn State Coach Training Programme. This aimed to have a direct effect on coach behaviours based on Pincuss and Ansell's interpersonal theory and Ryan and Deci's self-determination theory, where the mechanism of training effects involves a process of internalisation. Experimental designs with randomized groups were used: the treatment group received the intervention, whereas the control group received a sports science training programme (injury prevention, hydration, nutrition). Pre- and postmeasures of coach behaviour for the groups found differences in the experimental group. The authors note that until more research is carried out with rigorous methodologies, conclusions about the efficacy of training for changing coach behaviours will be premature (Conroy and Coatsworth 2006). In addition, modifying coach behaviours should be aligned with reflective practice as well as mentoring in communities of practice to effect long lasting and meaningful behaviour change. It is important to note that the assumptions about coaching in research such as this is based on rationality based pedagogy, that is, coaches are viewed as knowledge givers and athletes as knowledge receivers.

Coaching research itself may be a misnomer, as the concept of a unified academic field or consensual purpose currently does not exist. Without wishing to offer a definitive taxonomy of research fields, we can point to an emerging catalogue of

research: coaching practice, both environment and career (e. g. Jones 2007; Mallett and Côté 2006), coaches' behaviours, both intervention/delivery and interpersonal (e. g. Jowett and Poczwardowski 2007; Smith and Cushion 2006), coaches' cognitions, both decision policies and decision making (e. g. Abraham and Collins 2011; Vergeer and Lyle 2007), coaches expertise (e. g. Schempp et al. 2006), and coach education and training (e. g. Nelson et al. 2007). Gilbert and Rangeon (2011) collapse these into two areas: coach effectiveness and coach development.

Coaching research is not yet at a stage where the influence of funding agencies or publishing policies impacts the "weight of focused research". A diverse research community or "schools" have developed reflecting personal agendas that are seldom coaching specific, but driven by disciplinary or sub-disciplinary outcomes or even to enhance publishing reputation (Abraham and Collins 2011). This may be understandable in an undertheorised field, but recourse to models and theories from other fields has limited value in building a coherent conceptual or theoretical body of knowledge (Cushion 2007b). Too often, this means that the "coaching" within the research is superficial or secondary and coaching practice and its process receives less attention. While accepting that much of coaching involves inter-personal behaviour, too few research papers focus on the 'substance' of the coaching intervention and its application or adaptation. Our review of coaching research finds that few if any links between coaching practice and performance outcomes have been established. There has been limited attention to intervention research, and performance outcomes are rarely the dependent variables in such research (Cushion and Lyle 2010).

In these circumstances, "coaching" research may be characterized by distinct and fragmented categories reducing coaching in scale and scope and as unproblematic, portrayed as a matter of simplistic technical "transfer" (Cushion and Lyle 2010). Furthermore, research topics such as "coach-athlete relationships" and "decisionmaking" are self-evidently important to coaching but the methodologies used are limited in capturing the wider coaching context. Simply employing such a singular focus does not capture sufficiently coaching's dynamic and complex nature, and while an integral part of coaching, they alone do not account sufficiently for the entirety of coaching. For practitioners the impact of this "competition of importances" is confusion and a perception of research as being irrelevant and not linked to the real world (Abraham and Collins 2011; Cushion et al. 2006).

Before we investigate possible reasons for these trends, we should note that the troublesome link between the 'researched' and the 'researchable' is not particular to coaching alone. There is a methodological 'high ground' from which reductionist and single-focus studies can (rightly) be criticized. However, the authors of these criticisms have not yet been successful in replacing these studies by research

that does more than identify the complexity of practice. We stress again, first, the potential for aggregating the 'particular' may have been overestimated; we may be seeking a coaching theory that is a step too far. Second, it could be argued that the focus should be less on the complexity and more on how the coaches' expertise allows them to cope with it.

The corpus of coaching research is in some part useful, but ultimately limited. Why then do we engage in this type of research and treat the coach as the "other" to be studied (Gilbert 2007)? The answer is linked to wider epistemological issues associated with scientific enquiry. The questions coaching research has posed to date have by and large been shaped by the methods and assumptions of the positivist paradigm (Cushion et al. 2006; Lyle 1999). This is important as "paradigmatic allegiances can determine the theories, perspectives, or operationally, the theoretical frameworks that shape the research process" (MacDonald et al. 2002, p. 134). A core concept of the positivistic paradigm is reductionism, which is an attempt to understand the functioning of the whole through an analysis of its individual parts (Brustad 1997). By its nature, this approach provides a "mechanistic" guide to understanding, viewing human behaviour as measurable, causally derived and thus predictable and controllable (Smith 1989). When applied to coaching this relates to establishing causal relationships in a quest for generalizable theories. This nomothetic approach has resulted in the complexity of coaching practice and the coaching process being greatly reduced by the simplifying nature of "efficient" research design, thus stifling a more holistic understanding. Indeed, as Kahan (1999) argued over a decade ago "it would seem that due to its nomothetic pursuit", a positivist approach is "incongruous with, and insensitive to, the peculiarities of coaching and the unique conditions under which coaches act" (p. 42). Furthermore, "too many studies have adopted a quantitative survey approach (where) the need for the control of variables and reliable operationalisation of constructs has militated against a more insightful and interpretive investigation of values, behaviours and context" (Lyle 1999, p. 30). Therefore, research reduces the complexity of practice by presenting coaching in overly systematic and unproblematic ways (Jones 2007). More seriously perhaps, there persists a fundamentally flawed assumption that positivist science, with a sub-disciplinary focus, reducing coaching to episodes of neat dependent and independent variables, can account fully for coaching (Cushion 2007a). Indeed, the process of separating and specialising components of real life coaching and feeding them back to coaches in order to enhance understanding or prescribe practice, results in abstractions that clearly fail to substitute for real life coaching. From this perspective coaches are considered solely to be motivated by a narrow reductionist logic (Jones 2007) and this reinforces the concept of coaching as efficient technical transfer. It is important to

stress that these arguments are not designed to claim superiority of one method or paradigm over another, but suggest that making a reductionist approach central to understanding practice is problematic in that it serves only to define coaching both narrowly and unilaterally (Cushion 2007a). A "technocratic rationality" (Schön 1983) has produced dominant but weak notions of theory-practice relations, and as such has impoverished practice (Cushion 2007a). It is these representations that produce an illusion of a "complete" understanding but in reality are weak and limited; but are viewed with irony and even cynicism by practitioners and hence fail to impact coaching practice and its professional standing (Cushion 2007a).

Our critical appraisal of the positivist paradigm is neither new nor exclusive to coaching, indeed similar critiques of technical/rational approaches to practice can be found in education (e. g. Coldwell and Simkins 2011; Devis-Devis 2006, *interalia*). Nevertheless we suggest that it contributes significantly to the failure of research to impact coaching. Indeed, this raises the issue of how much coaching research is "used" by coaches, performers, or coach educators. Although we point to the link between the dominant research paradigm and a narrow concept of coaching, we also suggest that the problem lies with the absence of other competing paradigms rather than the overstated claims of positivist research. We also acknowledge that some practitioner cynicism is attributable to both a residual "anti-intellectualism" and a disregard for any non-self-experiential research, rather than research limitations or the limitations of particular paradigms.

To a large extent coaching research is dependent on, and characterised by, design, and ultimately our research designs are hostage to our understanding, perspectives and theories (Cushion 2007b). It is important however, that debate and discussion should not become an end in itself, and "waving theory from the balcony" (MacDonald et al. 2002, p. 149) will result in the development and perpetuation of "knowers" of theory, and perhaps more significantly, the establishment of a theory-practice binary (Cushion 2007b). It is interesting to observe the ebb and flow that characterizes the development of the coaching research base. There are, as we have discussed here, pockets of empirical research that are contributing to the conceptual and intellectual development of coaching; that force us to go back and question earlier perspectives and help us form new understandings of coaching practice. This research, and the debate it engenders, has great potential to develop coaching's conceptual base and add meaningfully to coaching. Moreover, as our understanding of coaching becomes more sophisticated and a shift in the nature of coaching research occurs we should not disregard existing accumulated knowledge, but rather, consider ways to integrate new knowledge with what is already known (Cushion 2007b). It is not in the interests of coaching and its development to block or delay integrating existing contributions or ideas in establishing a more

sophisticated knowledge base (Cushion 2007b; Rink 1993). The challenge, therefore, lies in not only looking for new ways to understand coaching but also to build on existing work.

Amongst the insightful empirical work there is arguably also a large amount of "theory waving". Coaching *is* ill-defined and under theorized (Cushion and Lyle 2010) and needs to take both a critical and a reflexive stance for which theory provides the necessary "thinking tools". Indeed, the utilisation of theories from other fields should be considered as threshold concepts (Jones 2006; Toole and Louis 2002) that act as signposts to new ways of seeing and understanding (Jones 2006), rather than convenient scaffolding for isolated and un-integrated enquiry. However, too many researchers are guilty of speaking authoritatively about coach education and coaching practice based solely on the production of a well argued, but ultimately arbitrary theory. As Bourdieu reminds us, "research without theory is blind, and theory without research is empty" (Bourdieu and Wacquant 1992, p. 160). We should be cautious therefore of being indoctrinated into "seeing" coaching through the eyes of empty theory or being drawn to "theoretical tinsel" (Everett 2002, p. 58).

In addition, many "theories" or "models" are practitioner developed and seek to describe and prescribe "effective" coaching practice and while they may incorporate some theoretical aspects, they are practitioner reflections of practice. They are not empirically derived, and are atheoretical models of coaching. These have been described as "proprietary models of coaching with little or no theoretical grounding" (Grant 2007, p. 26) with "little published research underpinning their efficacy" (Palmer and Whybrow 2007, p. 8). Instead of sound empirical support, we are offered considerable and often re-used anecdotal, correlational and "opinionnaire" data. As Olson (2008) suggests this can become "circular evidence" with seemingly convincing arguments getting heavily cited thus reinforcing the circle of believers, without leading to any real evidence. Consequently, practitioner beliefs and pre-constructed facts are taken uncritically to create and represent something that is actually far more diffuse and intangible. As a result, limited or decontexualised, models, formula and schema dressed loosely in "theoretical tinsel" can ossify once framed. Indeed, such models run the risk of errors and omissions and are both limited and limiting if not critically reviewed and empirically grounded.

The world is transformed by transforming its representation (Bourdieu and Wacquant 1992) and pre-constructed theories with limited empirical evidence or basis in coaching can produce a representation that is a fiction obscuring true meaning and understanding. Empirical objects emerge and become the focus of research, yet they are ultimately arbitrary but somehow become deemed important by researchers and research agendas. There is a danger that coaching research pays inadequate attention to the issues of importance to coaching and coaching practice.

Clearly to establish coaching as an autonomous academic field we need to do more than uncritically accept and apply theories from other disciplines; there is an overwhelming need for our own evidence based theories and concepts. Indeed, regardless of the method or approach adopted to engage with coaching and coaching practice, conceptual development and understanding needs to be grounded in coaching practice and empirically supported. In the meantime as the research evidence grows and we attempt to fill the theoretical and conceptual void and establish the relevance of our work to practitioners, we should be mindful of the real threat of being overly influenced or colonised from other fields (Cushion 2007b).

4 Conclusions

This chapter deliberately has taken a critical stance about coaching and research. We have attempted to focus on higher-order matters that are relevant to conceptualising coaching. While drawn from evidence and practice in sports coaching we would argue that similar issues are apparent in other coaching fields. There is a body of literature that has contributed to the debate on conceptualising coaching and a consensus seems to be emerging around its complexity, social and dynamic context, and competing goals and values. However it is always easier to identify shortcomings, particularly in an ill-defined field of study, than to take the next step of theory. There is a very significant challenge in marrying subject and object, of reconciling intention and practice, of layering social and organisational context with personal and inter-personal histories. It is easier to identify the need for management, accommodation and coordination than to describe and explain how the coach copes with this. There seems no doubt that coaches are faced with a dynamic set of interdependent circumstances and we might assume that expert coaches, even in the demanding arena of intensive elite-level sport, are able to cope with this. It does not seem too presumptive a leap to imagine that these demands are perceived, organised, and solved within a set of capacities that we might term expertise. The social and environmental context provides a layer of contingency that requires a continuous process of accommodation, integration and coordination between goals and actuality. We have stressed that the image of coaching as a "transfer of technical knowledge" does not do justice to the coaching role. Nevertheless, it should not be forgotten that there is a technical element to the role that circumscribes practice as *sport* coaching. The expertise of the coach not only depends on this technical knowledge, but the effectiveness of the coach depends on a capacity to achieve performance improvement in the context of all of the other factors involved. This produces two layers of expertise: the "how and why" that connotes coping strategies and decision-making, and the craft-based "how" that expresses itself in communication, feedback, planning and so on. The obvious corollary to this concept of coaches' expertise is that it provides difficult methodological challenges to the researcher.

Conceptualizations of coaching are related inextricably to coaching research. However research is failing adequately to describe coaching practice, failing to deal with coaching effectiveness, relying on satisfaction studies in lieu of performance outcomes, failing to have an impact on coach education, and unable to devise appropriate intervention studies. In addition, coaching domains are not recognised for their specificity although this is less evident, although not yet theorised. A paradigm shift is required both to reflect the complexity of the role and practice and adequately to enquire into it. Sadly these criticisms have remained pertinent for over a decade (see Lyle 2002). Academic writing about coaching is increasing in scale and the "coverage" is spreading. However, this does not seem to be the result of conceptual agreement or a consensual or coordinated agenda, but instead is characterised by personal agendas and methodological comfort, rather than practitioner problems and application. At this stage of the development of the field, we need to be concept and theory building, but not losing sight of the danger of isolation from the practitioner community.

It is clear that the myriad of "coaching" roles does not stand up to either conceptual or empirical scrutiny. Understanding coaching across domains and fields remains the cornerstone to conceptual development and engaging practitioners (Cushion 2007b). "Coaching" is acknowledged as crucial in many fields and across domains, and it exists (happily) without academic consensus. Currently, different approaches to coaching offer a range of models and approaches, with different definitions, different assumptions and different emphasis. It is clear that we need to identify the 'core' of coaching. There is a utility in drawing on relevant theoretical resources from other "similar" fields, but also a compelling need to develop our conceptual understanding of the coaching 'core'. The point here is to not be overly critical or negative, but to promote a healthy scepticism to current coaching conceptualisations and approaches (and those advocating them) that present coaching "truths", and suggest a more considered and cautious approach to constructing. developing and re-constructing our understanding and representation of the 'core'. A lack of evidence and theoretical underpinning encourages weak notions of theory-practice relations, and as such has, and will, continue to impoverish practice and develop simplistic attitudes. This, also helps construct a weak and limited basis for a professional identity that continues to disadvantage both coaching and its professional standing (Cushion 2007a). We need to recognise that professionalisation and professional credibility exists only within limited forms of mature and complex practice.

Coaches deal with ill-defined problems and practice is subject to high levels of variability and uncertainty. Indeed, the constraints of practice may be context specific or common to all coaches, but we know little about them and how they operate (Cushion 2007b; Saury and Durand 1998). As coaching scholars there remains a real danger that isolated paradigm debate and a forced retreat to disciplinarity (Kirk and McDonald 2001) will lead to a polarisation of the field and marginalise coaching research and its conceptual development further from practice (Cushion 2007b). If we are to stay close to its social, dynamic and complex nature a more sophisticated understanding of coaching practice needs to be developed. As Marx argued, "all social life is essentially practical. All the mysteries that lead theory toward mysticism find their rational solution in human practice and in the comprehension of this practice" (1963, p. 84). Indeed, authentic analysis of coaching practice *in-situ* (in collaboration with coaches), not driven by arbitrary theory or personal research agendas, has the potential to provide the empirical tools to understand and connect with coaches' and athletes' individual and collective work.

References

- Abraham, Andrew, & Collins, Dave (1998). Examining and extending research in coach development. *Quest*, *50*(1), 59–79.
- Abraham, Andrew, & Collins, Dave (2011). Taking the next step: Ways forward for coaching science. *Quest*, 63(4), 366–384.
- Armour, Kathleen (2004). Coaching pedagogy. In: Robyn L. Jones, Kathleen Armour & Paul Potrac, *Sports coaching cultures: from practice to theory* (pp. 94–115). London: Routledge.
- Bourdieu, Pierre, & Wacquant, Loïc J. D. (eds.) (1992). *An invitation to reflexive sociology*. Chicago: Chicago University Press.
- Brustad, Robert J. (1997). A critical-postmodern perspective on knowledge development in human movement. In: Juan-Miguel Fernández-Balboa (ed.), *Critical postmodernism in human movement, physical education, and sport* (pp. 87–98). State University of New York, Albany,
- Christensen, Mette K., Laursen, Dan N., & Sorensen, Jan K. (2011). Situated learning in youth elite football: A case study among talented male under-18 football players. *Physical Education and Sport Pedagogy*, *16*(2), 163–178.
- Coldwell, Mike, & Simkins, Tim (2011). Level models of continuing professional development evaluation: A grounded review and critique. *Professional Development in Education*, 37(1), 143–157.
- Conroy, David E., & Coatsworth, J. Douglas (2006). Coach training as a strategy for promoting pos-itive social development. The Sport Psychologist, 20(2), 128–144.
- Côté, Jean, & Gilbert, Wade (2009). An integrative definition of coaching effectiveness and expertise. *International Journal of Sports Science and Coaching*, 4(3), 307–323.

- Cushion, Chris J. (2007a). Modelling the complexity of the coaching process. *International Journal of Sports Science and Coaching*, 2(4), 395–401.
- Cushion, Chris J. (2007b). Modelling the complexity of the coaching process: a response to commentaries. *International Journal of Sport Science and Coaching*, 2(4), 427–433.
- Cushion, Chris J., Armour, Kathleen M., & Jones, Robyn L. (2003). Coach education and continuing professional development: experience and learning to coach. *Quest*, 55(3), 215–230.
- Cushion, Chris J., Armour, Kathleen M., & Jones, Robyn L. (2006). Locating the coaching process in practice models: models "for" and "of" coaching. *Physical Education and Sport Pedagogy*, 11(1), 83–99.
- Cushion, Chris J., & Jones, Robyn L. (2006). Power, discourse and symbolic violence in professional youth soccer: The case of Albion FC. Sociology of Sport Journal, 23(2), 142–161.
- Cushion, Chris J., & Jones, Robyn L. (2012). A Bourdieusian analysis of cultural reproduction: Socialisation and the "hidden curriculum" in professional football. Sport, Education & Society, doi:10.1080/13573322.2012.666966.
- Cushion, Chris J., & Lyle, John (2010). Conceptual development in sports coaching. In: John Lyle & Chris Cushion, *Sports coaching professionalization and practice* (pp. 1–13). London: Elsevier.
- Devis-Devis, José (2006). Socially critical research perspectives in physical education. In: David Kirk, Doune MacDonald & Mary O'Sullivan (eds.), *The Handbook of Physical Education* (pp. 37–58). London: Sage.
- Everett, Jeffery (2002). Organisational research and the praxeology of Pierre Bourdieu. *Organisational Research Methods*, 5(1), 56–80.
- Gilbert, Wade (2007). Modelling the complexity of the coaching process: A commentary. *International Journal of Sports Science and Coaching*, 2(4), 427–433.
- Gilbert, Wade, & Rangeon, Sandrine (2011). Current directions in coaching research. *Revista Iberoamericana de Psicologia del Ejercicio y el Deporte*, 6(2), 217–236.
- Gilbert, Wade, & Trudel, Pierre (2004). Analysis of coaching science research published from 1970–2001. *Research Quarterly for Exercise and Sport*, 75(4), 388–399.
- Grant, Anthony M. (2007). Past, Present and Future: The Evolution of Professional Coaching and Coaching Psychology. In: Stephen Palmer & Alison Whybrow (eds.), *Handbook of coaching psychology: A guide for practitioners* (pp. 25–39). London: Routledge.
- Johns, David P., & Johns, Jennifer S. (2000). Surveillance, subjectivism and technologies of power: An analysis of the discursive practice of high-performance sport. *International Review for the Sociology of Sport*, 35(2), 219–234.
- Jones, Robyn L. (2000). Towards a sociology of coaching. In: Robyn L. Jones & Kathleen M. Armour (eds.), *The sociology of sport: theory and practice* (pp. 33–43). London: Addison Wesley Longman.
- Jones, Robyn L. (2006). How can educational concepts inform sports coaching? In: Robyn L. Jones (ed.), The Sports Coach as Educator: Re-conceptualising sports coaching. London: Routledge.
- Jones, Robyn L. (2007). Coaching redefined: an everyday pedagogical endeavour. Sport, Education and Society, 12(2), 159–174.
- Jones, Robyn L., Armour, Kathleen M., & Potrac, Paul (2002). Understanding the coaching process: a framework for social analysis. *Quest*, 54(1), 34–48.

- Jones, Robyn L., Armour, Kathleen, & Potrac, Paul (2004). Sports coaching cultures: from practice to theory. London: Routledge.
- Jowett, Sophia, & Poczwardowski, Artur (2007). Understanding the coach-athlete relationship. In: Sophia Jowett & David Lavallee (eds.), *Social psychology in sport* (pp. 3–13). Champaign: Human Kinetics.
- Kahan, David (1999). Coaching behaviour: a review of the systematic observation research literature. *Applied Research in Coaching and Athletics Annual*, 14, 17–58.
- Kay, Tess, Armour, Kathleen M., & Cushion, Chris J. et al. (2008). Are we missing the coach for 2012? Report to the Sportnation Panel. Leicestershire, Loughborough University.
- Kidman, Lynn, Thorpe, Rod, & Hadfield, David (2005). *Athlete centered coaching: developing inspired and inspiring people*. Christchurch, Innovative Print Communications.
- Kirk, David, & McDonald, Doune (2001). The social construction of PETE in Higher Education: Towards research agenda. *Quest*, 53(4), 440–456.
- LeUnes, Arnold (2007). Modelling the complexity of the coaching process: A commentary. *International Journal of Sports Science and Coaching*, 2(4), 403–406.
- Lyle, John (1999). The Coaching process: an overview. In: Neville Cross & John Lyle (eds.), *The coaching process: principles and practice for sport* (pp. 3–24). Oxford: Butterworth-Heinemann.
- Lyle, John (2002). Sports coaching concepts: a framework for coaches' behaviour. London: Routledge.
- Lyle, John (2007). A review of the research evidence for the impact of coach education. Internation-al Journal of Coaching Science 1(1), 17–34
- Lyle, John (2011). What is a coach and what is coaching? In: Ian Stafford (ed.), *Coaching children in sport* (pp. 5–16). London: Routledge.
- Lyle, John, & Cushion, Chris (2010). Narrowing the field; some key questions for sports coaching. In: John Lyle & Chris Cushion (eds.), *Sports coaching professionalization and practice* (pp. 243–252). London, Elsevier.
- MacDonald, Doune, Kirk, David, Metzler, Michael, Nilges, Lynda M., Schempp, Paul, & Wright, Jan (2002). It's all very well in theory: theoretical perspectives and their applications in contemporary pedagogical research. *Quest*, 54(2), 133–156.
- Mallett, Cliff, & Côté, Jean (2006). Beyond winning and losing: guidelines for evaluating high performance coaches. *The Sport Psychologist*, 20(2), 213–218.
- Marx, Karl (1963). Karl: Selected writings in sociology and social philosophy. Ed. by Maximilien Rubel & T. B. Bottomore. Harmondsworth: Penguin.
- McPhail, Ann (2004). Athlete and researcher: Undertaking and pursuing ethnographic study in a sports club. *Qualitative Research*, 4(2), 227–245.
- Nelson, Lee J., Cushion, Chris J., & Potrac, Paul (2007). Formal, Nonformal and Informal Coach Learning. *International Journal of Sport Science and Coaching*, 1(3), 247–259.
- Olson, Paul O. (2008). A review of assumptions in executive coaching. *Coaching Psychologist*, 4(3), 151–159.
- Palmer, Stephen, & Whybrow, Alison (2007). Coaching Psychology: An Introduction. In: Stephen Palmer & Alison Whybrow (eds.), *Handbook of coaching psychology: A guide for practitioners* (pp. 1–20). London: Routledge.
- Poczwardowski, Artur, Barott, James E., & Henschen, Keith P. (2002). The athlete and coach: their relationship and its meaning. Results of an interpretive study. *International Journal of Sport Psychology*, *33*(1), 116–140.

- Rangeon, Sandrine, Gilbert, Wade, & Bruner, Mark (2012). Mapping the world of coaching science: A citation network analysis. *Journal of Coaching Education*, 5(1), 83–108.
- Rink, Judith E. (1993). Teacher education: A focus on action. Quest, 45(3), 308–320.
- Saury, Jacques, & Durand, Marc (1998). Practical knowledge in expert coaches: on-site study of coaches in sailing. Research Quarterly in Exercise and Sport, 69(3), 254–266.
- Schempp, Paul G., McCullick, Bryan, & Mason, Ilse S. (2006). The development of expert coaching. In: Robyn Jones (ed.), *The Sports Coach as Educator: Reconceptualising Sports Coaching* (pp. 145–161). London: Routledge.
- Sherman, Cheyne A., Crassini, Boris, Maschette, Wayne, & Sands, Rob (1997). Instructional sport psychology: a reconceptualisation of sports coaching as sports instruction. *International Journal of Sport Psychology*, 28(2), 103–125.
- Smith, John K. (1989). The nature of social and educational inquiry: empiricism versus interpretation. Norwood, N.J.: Ablex.
- Smith, Matt, & Cushion, Chris J. (2006). An investigation of the in-game behaviours of professional, top-level youth soccer coaches. *Journal of Sport Sciences*, 24(4), 355–366.
- Schön, Donald A. (1983). The reflective practitioner: how professionals think in action. New York: Basic Books.
- Toole James C., & Louis, Karen S. (2002). The role of professional learning communities in international education. In: Kenneth E. Leithwood, & Philip Hallinger (eds.), Second International Handbook of Education Leadership and Administration. London: Kluwer.
- Trudel, Pierre, & Gilbert, Wade (2006). Coaching and coach education In: David Kirk, Mary O'Sullivan & Doune McDonald (eds.), *Handbook of research in physical education* (pp. 516–539). London: Sage, London.
- Vergeer, Ineke, & Lyle, John (2007). Mixing methods in assessing coaches' decision-making. *Research Quarterly for Exercise and Science*, 78(3), 225–235.