Response to **Modelling the Complexity of the Coaching Process**

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I have taken the opportunity to provide a conceptual reflection on the assumptions and questions posed by Chris Cushion in his paper on modelling the complexity of the coaching process. His paper is a valuable catalyst for further debate in that it summarises a number of the difficulties in modelling the coaching process. I will argue that a number of these assumptions are overstated (and perhaps sports specific) and that we need to think in terms of (at least) three models to understand the coaching process.

I would like to begin by agreeing with many of his evaluative comments about the current state of coaching process models. The fundamental claim is that models reflect an overly simplistic approach to conceptualising the coaching process and are unable to represent the complexity of the process. A tendency to episodic, cyclical, or aggregative modelling emphasizes the 'parts' rather than the whole, and the 'richer, more sophisticated' descriptions of coaching practice are not adequately captured or represented by existing models. Part of the debate is the processual or episodic nature of the coaching process. Is the coaching process appropriately conceived of as a continuous process? For a relatively small number of coaches – yes. However, for much the majority of coaches, the coaching process is a linked series of more- or less-related episodes. For participation coaches there may be relatively limited linkage. Rather than the participation/development/performance domains (that I find a very useful device), it may be more valuable to focus on the nature and extent of the process itself. The corollary might be that more than one model is required.

There is no argument about the dynamic socio-cultural context within which coaching practice is framed. An interpretive sociological paradigm emphasises the way in which individuals constantly reconstruct their interactions, values and shared sense of meaning. I'm not convinced, however, of the transfer of such a paradigm to a position that stresses 'inventive practitioners' who can legitimately be considered to be innovative as a permanent 'state of practice'. In other words, such a discourse overstates the extent to which there is a constant adaptation to novel environments. This does not deny those coaches who are genuinely innovative, but otherwise the coaches' capacity for constant adaptation is a reflection of an application of their expertise (at whatever level it might be) to the environment. The point is that this is a 'normal' state of affairs for those who deal with practice that involves a similarly fluid human/environmental mix (e.g. teachers, nurses, social workers). I will argue later that we certainly don't know enough about the professional expertise that allows coaches to cope with this dynamic, complex world. However, even where there is a need for contingency and crisis management as constant companions, much of this is deliberative (that is, can have an element of reflection and principled action).

Cushion rests his arguments upon the work of Jones and others who stress the uncertain, dynamic, complex nature of the coaching process with its contradictions: 'largely uncontrollable, incomprehensible and imbued with contradictory values'. I think that this focus on the messy nature of coaching practice has been a significant contribution to such conceptualisations. However, I'm convinced that coaching practice is much less uncontrolled (albeit requiring adaptability, contingency management and subject to the vagaries of human nature, non-linear response to training stimuli, and so on) than suggested. As a result I am much less convinced about the claim that expertise will therefore have 'limited roots in either planning or reason'. Coaching practice and coaches in athletics, cycling, rowing or gymnastics would recognise all of the substantial degrees of freedom involved in preparation and competition but would I'm sure feel that their coaching had more control and predictability that Cushion's description might imply. It will be obvious that the sports selected are individual sports and often in less actively opposed contexts. However, it raises the possibility that the interactive team sports from which examples are often taken may provide only one exemplar of coaching practice.

Part of the problem may lie in trying to model the complexity, rather than offering explanations for (a) how the coaching turns out as it does (for which rich descriptions will suffice) and (b) how coaches cope with it. We need to model the intention and then identify the factors than impact on those intentions; to seek those patterns or regularities that provide a linkage between intention and practice. These may be better dealt with as case-led scenarios. In relation to Cushion's comments, I think that it is unlikely that there are no generic rules, heuristics or patterns. The practice of expert coaches is likely to have some regularity, and we should have the capability to investigate, describe and use this to improve the same capacity in others.

One of the key factors for us to examine is the coach's management of the difference between planned expectations (even when tacit) and the variability that is evident in practice. We know that complex interactive sports, when faced with the vagaries of form, injury, personal relationships, inherent variability in performance, difficulties of individualisation, physical environment, the specificity of training stimuli – and many, many other factors – create a maelstrom of action decisions for the coach(es). However, coaches do not perceive this to be an uncontrolled environment, albeit they accept non-linear progress, significant challenges in monitoring and evaluation, and a measure of unpredictability in performance. The mistake would be to think of goals as immutable. Goals may indeed become unattainable, but coaches are well versed in the management of expectations over time.

The process is not chaotic. Stasis will emerge, and coaches find mechanisms for working with the uncertainty. This stasis is not likely to be constantly innovative or to challenge current practice. Coaches do not plan for novelty, and I suspect that further examination of their higher-order cognitive skills will show that they most often apply well-honed and trusted remedies and recipes to 'even out' the uncertainty. We should not be overly concerned that we cannot 'contain' all of the possible variety of practice within our models.

There are two general points: firstly, I'm not sure that it is helpful to adopt the position that 'we know there's a complexity out there but we cannot fully represent that character in our models of the process or how coaches cope with it.' Secondly, The problem perhaps lies in our attempts to identify a general theory of sports coaching (c.f. teaching or nursing). This may be too difficult a challenge, and modelling it is doubly difficult within the normal conventions of model representation.

At the risk of being criticised for trying to be systematic or reductionist, I suggest that we might benefit from understanding three processes: the coach's intervention activity, the socio-cultural context, and the coach's professional behaviour. I would argue that the intentional element of the coaching process is its essence and represents how coaches intend to prepare for or improve performance. There is no argument that this expert negotiation of the possibilities involves juggling interdependent performance variables, is mediated by a set of (normally) dynamic goals, requires the management of personal and interpersonal states, and sits within external and organisation constraints. The coach's practice also sits within a set of cultural and sub-cultural expectations about coaching behaviour. We can describe this context and there are numerous excellent examples of this richness of coaching practice. The issue is whether we can draw the connections between the intention and those key factors that will constrain the intentions.

Whether, within one model, we can site the core process within a series of coaching domains that differ so markedly in expectation of coaching practice is doubtful Coaches re continually reconstructing their practice and behaviour within a set of meanings and values that are shaped not only by 'technical' considerations, but also by power hierarchies, occupational expectations, and personal histories. Simplifying this is a very difficult task. We need not simplify our description of the complexity but we need to model the core process and intention; and then to apply this to a series of domains, cultures and organisational settings. We may find that there are more regularities than differences.

I think it unlikely that we can find a general theory of sports coaching, although we can describe and understand that core intention that defines the process. Modelling the process is a mechanism for enhancing that understanding. The complexity of the process is better comprehended as an outcome effect rather than part of the (relatively) rational and planned intervention activity of coaches. My fear is that in attempting to capture the complexity, we may lose the essence of the process. At this stage a more complete understanding of coaches' expertise in coping with the complexity, understanding how coaches maintain their 'intentions' model, and seeking broad regularities in domain sub-cultures and pedagogical contexts may prove to have greater impact on coach education and coaching practice than reaching for 'a model too far'.