

## **Sport, Education and Society**

### **A critical analysis of the conceptualisation of ‘coaching philosophy’**

**Published: 2014**

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Word count: 7954 words

## **Abstract**

The aim of this paper was to critically review existing literature relating to, and critically analyse current conceptualisations of, ‘coaching philosophy’. The review reveals a bewildering approach to definitions, terms and frameworks that have limited explanation and reveal a lack of conceptual clarity. It is argued that rather than provide clarification and understanding the existing literature conflates coaching rhetoric and ideology with coaching philosophy and serves to reproduce existing coaching discourse rather than explain coaching practice. The paper problematises the unquestioned assumptions currently underpinning ‘coaching philosophy’; namely the overemphasis of coaches’ agency and reflexivity, the downplaying of the significance of social structure on coaches’ dispositions and the acceptance that coaching practice is an entirely conscious activity. The paper argues for an alternative philosophy of coaching that uses philosophic thinking to help coaches question existing ideology, and critically evaluate the assumptions and beliefs underpinning their practice.

**Keywords:** Coaching philosophy, philosophical enquiry, coach education, coaching, critical analysis, ideology, coaching discourse.

## **Introduction**

A coach's 'philosophy' above all else will inform their coaching (Cassidy, Jones, & Potrac, 2009; Lyle, 2002) and is argued to be central to understanding a coach's behaviour (Cassidy et al., 2009; Jenkins, 2010; Jones, Armour, & Potrac, 2004; Lyle, 2002; MaCallister, Blinde & Weiss, 2000; inter-alia). As such, 'coaching philosophy' is a topic of pre-eminence in numerous coaching books (e.g. Jenkins, 2010; Kidman & Hanrahan, 2011; Lyle, 1999; Martens, 2012; Vealey, 2005) and forms a core aspect of coach education (e.g. Cassidy et al., 2009; Gilbert & Trudel, 2005; Nelson & Cushion, 2006). The articulation of a 'coaching philosophy' and reflecting on its attributes may offer much for understanding and developing coaching practice (Cassidy et al., 2009; Jenkins, 2010). In reality, there remains a lack of engagement with this process, and this is due, in part, to what Cassidy et al. (2009) describe as "superficial and simplistic assumptions about the value of establishing and locating definitive philosophies" (p. 56).

Understandably, coaches themselves get on with the business of coaching; one does not need to be a 'philosopher of coaching' in order to be a coach. There appears little drive from coaches to understand the philosophical status of coaching, nor to have any theoretical explanation of *their* practice (Partington & Cushion, 2013). Coaches often see little value in a philosophy as they attempt to cope with more tangible aspects of coaching practice, such as session content and organisation (Nash, Sproule & Horton, 2008). Therefore, coaches tend to prefer to ground their coaching in a 'commonsense view' (Carr & Kemmis, 1986; Cushion, 2013) of experience and practice developing greater but unreflexive knowledge and understanding (Cushion, Armour & Jones, 2003). This has been conceptualised as coaches' 'practice theories' (Cassidy 2010); that is, experience and a body of informal knowledge and developed

assumptions about coaching where these assumptions are viewed as ‘taken-for-granted’ or ‘normal’ (Cassidy, 2010). As a result, the impetus for studying the basis of coaching and coaching knowledge does not come from coaches themselves (Gilbert, 2007) but from researchers ‘outside’ coaching. Consequently, whatever the theoretical complexities of understanding coaching philosophy and coaching knowledge, many of the necessary intellectual questions are bound in personal research agendas, disciplinary outcomes and competition (Cushion & Lyle, 2010). Too frequently this has resulted in a fragmented field offering confusion, conflict and misdirection (Cushion & Lyle, 2010) and is particularly the case when considering ‘coaching philosophy’.

While ‘philosophy’ is complex, diverse and difficult to define, its central concerns, issues and concepts are less so (Morgan, 2006). There are three themes that are central to philosophical enquiry: metaphysical questions that are concerned with the nature of reality (ontology), questions concerning the nature of knowledge (epistemology), and questions concerned with value (axiology) subdivided into ethics and aesthetics (Hardman & Jones, 2013; Morgan, 2006). These themes better position the argument to see, in an academic sense, the degree to which coaching has actually considered ‘philosophy’ and engaged with (or neglected) philosophic inquiry. Arguably, the ‘coaching philosophy’ literature, suffers from confusion, with a muddle of different languages used and a lack of consensus on the terms of reference. Authors often define ‘coaching philosophy’ in different ways (e.g. Bennie & O’Connor, 2010; Kidman & Hanrahan, 2011), without clear explanation of meaning or interpretation (e.g. Bennie & O’Connor, 2010; Camire, Trudel & Forneris, 2014) or without any explanation at all, assuming that they and the reader share a common understanding of the term (Cassidy, 2010) (e.g. McCallister et al., 2000; Voight & Carroll, 2006). A

central issue, therefore, is not just the complexity of philosophy or coaching, but also definitional and conceptual incoherence.

As a result, in coaching there is a limited academic sense of philosophy or actual philosophic enquiry. Instead the term ‘philosophy’ represents a sense that shares more in common with taken-for-granted everyday usage as a view of ‘how things should be’ (Green, 2000). This is well illustrated perhaps through the conversational level phrase ‘my coaching philosophy is...’ Indeed, Flew (1984) suggests this shows the use of the term in a functional sense “a matter of standing back a little from the ephemeral urgencies to take an aphoristic overview that usually embraces both value-commitments and beliefs about the general nature of things” (p.vii), and it is this approach that is common to much of the coaching literature (e.g. Bennie & O’Connor, 2010; Collins, Barber, Moore, & Laws, 2011; Collins, Gould, Lauer, & Yongchul, 2009; MaCallister et al., 2000; Nash et al., 2008; Voight & Carroll, 2006). This is unsurprising as ‘coaching philosophy’ is currently grounded in, and reflective of, coaches’ practice that, in turn, is primarily driven by self-referenced anecdotal approaches based on ‘what works’ and what is perceived to ‘gets results’ (Cushion, 2013). In reality, coaches’ ‘practice theories’ or ‘philosophies’ are a social system of beliefs, structures and practices; an ideology, a systemised influence on the social construction of knowledge (Devis-Devis, 2006). The ‘coaching philosophy’ literature has failed to subject coaches’ beliefs and justifications of existing and on-going practice to rational reconsideration, and instead conflated philosophies and ideologies. The outcome has been pseudo-principles and coaching rhetoric evidenced from coaching practice ideology reported as ‘coaching philosophies’ (e.g. Collins et al., 2011; MaCallister et al., 2000; Robbins, Houston, & Dummer, 2010; Voight & Carroll, 2006). Consequently, the ‘philosophies’ as described bear the hallmark of

particular ideologies rather than philosophies in the truest sense (Green, 2000) and the literature actually describes “a conceptually incoherent smorgasbord of esoteric positions, methodologies, and ideologies” (Grant, 2007, p.24) that does little to help academics or practitioners make sense of what underpins actions in practice.

As a result, there remains a need to differentiate definitions of the nature and purpose of coaching and ideas about coaching held by coaches themselves. Thus distinguishing between philosophical attempts to make sense of this nature and purpose (abstract, detached and rational conceptualisations) from ideologies and the discourse of coaching (Green, 2000). However, this does not mean imposing the mode of thinking practiced by the academic observer fallaciously. Indeed, “reflection upon the social is itself a thoroughly philosophical activity” (Turnbull & Antalffy, 2009, p.551) that can inform and transform practice (Cushion & Jones, 2014; Carr & Kemmis, 1986). Moreover, because definitions of coaching will depend on ‘philosophy’, and the landscape of coaching can be viewed through a variety of philosophical lenses, there remains a need to provide for both practitioners and researchers a conceptual framework and common vocabulary to interrogate ‘coaching philosophies’ and understanding, and interpreting what is observable (Cassidy, 2010).

Therefore, the purpose of this paper is to provide a critical review of the literature concerned with ‘coaching philosophy’ enabling a clear overview of where scholarship concerning coaching philosophy ‘sits’ and allowing some of the gaps, problem areas and issues presented thus far to be clearly identified and arguments developed. Indeed, through such critical analysis, this review aims to provide a basis for understanding and disentangling some of the problems that have to date plagued the study of coaching philosophy. This, in turn, makes the character and assumptions of the work more accessible and increases the capacity for critical discussion. Such

discussion lends itself to reconsider critically the ‘philosophical’ study of coaching and the study of ‘coaching philosophy’ which remain haunted and hindered by fragmented and diverse approaches, unchallenged assumptions, often esoteric debates, and inconsistent theory building based on a dearth of empirical research. This task is a necessary preliminary for meaningful empirical enquiry into coaching and coaches’ philosophies.

### **Current understanding of the term ‘coaching philosophy’**

It is argued that attempting to establish and identify a clear understanding of what underpins coaches’ actions allows a coach to utilise the practice activities that they believe is most effective for the learner in a complex coaching environment (Burton & Raedeke, 2008; Cassidy et al., 2009; Collins et al., 2009; Martens, 2012; Vealey, 2005). For many, this underpinning is defined as a ‘coaching philosophy’ made up of a collective of values, beliefs, assumptions, attitudes, principles and priorities (Kidman & Hanrahan, 2011; Nash et al., 2008). It is this ‘philosophy’ that underpins everything a coach does (e.g. Careless & Douglas, 2011; Collins et al., 2009; Voight & Carroll, 2006). Collins et al. (2009) and Camire, Trudel and Forneris (2012) have argued that coaches ‘core values’ purposefully and singularly drive coaching philosophies. Thus, practice activity and behaviour are shaped by the coaches’ own individual coaching philosophy (Careless & Douglas, 2011).

However, it is not uncommon for research to fail to define what is meant by a ‘coaching philosophy’ (e.g. McCallister et al., 2000; Voight & Carroll, 2006). In McCallister et al.’s (2000) research examining the ‘philosophies’ of youth baseball and softball coaches no clear terms or definitions are provided, and it is not clear how ‘coaching philosophy’ was defined to the participants in the study this was also the

case in Voight and Carroll (2006). Therefore, the authors of these studies assume a shared understanding of ‘coaching philosophy by their readers, while the findings are based on the coaches’ self-referenced perceptions of ‘coaching philosophy’.

Where coaching ‘philosophy’ *is* outlined it is mainly described as a set of personal values and beliefs (e.g. Burton & Raedeke, 2008; Careless & Douglas, 2011; Kidman & Hanrahan, 2011; Nash et al., 2008). While there appears consensus on these core elements, a number of studies (e.g. Bennie & O’Connor, 2010; Nash et al., 2008) discussing coaches’ values and beliefs do not explain these terms. For example, Nash et al. (2008) explored coaching philosophy by interviewing twenty-one coaches from a range of sports with different backgrounds and experience. However, the authors did not articulate their meaning of ‘coaching philosophy’, or their understanding of values or beliefs. Yet suggested that the “the development of a functional guide to coaching philosophy may be appropriate so that there is a global understanding of the term when it is used” (p.548). Similarly, Bennie and O’Connor (2010) interviewed six coaches and based on participant perceptions identified components of a ‘coaching philosophy’ that included goals, actions, and values but also described an approach to coaching underpinned by personal qualities and skills. The author’s assumed a common understanding of these terms. More recently, Camire, Trudel & Forneris (2014) provided no definition of ‘coaching philosophy’, but drew on Nash et al. (2008) in discussing values and beliefs with no further explanation. Similarly Collins et al. (2011) analysed the written statements of thirty-five coaches and used a definition of ‘coaching philosophy’ from Martens (2012, p.5) as “beliefs or principles that help achieve your objectives”, again with no explanation of terms. In addition to values and beliefs, the ‘coaching philosophy’ literature argues for including additional components to form a ‘coaching philosophy’. For example,



Kidman and Hanrahan (2011) propose ‘personal objectives’; Cassidy et al. (2009) and Martens (2012) suggest ‘principles’.

In defining a ‘coaching philosophy’ and its components, the literature appears to offer only a loose consensus rather than conceptual clarity; and within the consensus, there are few clear definitions. This is not helped by different definitions of the same terms. For example, Rokeach (1973) suggested a practice philosophy consists of beliefs (defined as a proposition or premise to be true), values (defined as an underpinning view of importance or worth of an object), attitudes and norms, whereas Burton & Raedeke (2008) suggest beliefs are “what dictate the way we view experiences in our lives” (p.4) and values are what “we hold in our lives” (p.4).

To further muddy the waters, there is the consideration of the relationship between values and beliefs and how this is defined. For example, work on the nature of human values and beliefs suggest that a philosophy is a framework that clarifies the relationship *between* values and beliefs, where coach’s values are more deeply held and underpin their beliefs (e.g. Burton & Raedeke, 2008; Lyle, 1999; Lyle, 2002). For example, Lyle (1999) used content analysis to identify the coaching philosophies of forty-three senior coaches including twenty-four ‘values’ common to all forty-three coaches (for example, personal growth, respect for others and partnership). These, he argued, underpinned beliefs and behaviours that, in turn, characterised the coach’s practice. Conversely, other authors (e.g. Hardman & Jones, 2013; Kidman & Hanrahan, 2011) suggest that values and beliefs work *independently* of each other. In this case, a coach’s values and beliefs are related yet separately organised into a hierarchy of importance, with personal or social values taking priority (Jenkins, 2010) with variation according to the individual coach, their athletes and the social context.

Jenkins (2010) analysis adopts Rokeach's (1973) description of values where a human value system is an enduring organisation of three types of beliefs; descriptive or existential (i.e. capable of being true or false); evaluative (i.e. judged to be good or bad); prescriptive or proscriptive (i.e. some means or end of action is judged to be desirable or undesirable). These values are then split into personal and social values (self-centred or society-centred/intrapersonal or interpersonal in focus), or moral (refer mainly to modes of behaviour) and competence values. In this sense, a 'coaching philosophy' would, therefore, be a value system made up of different types of beliefs (descriptive/existential, evaluative, and proscriptive).

A recurrent theme is a failure to define clearly the terms used, whether that is of 'coaching philosophy' itself or the components thereof. Perhaps more importantly authors do not articulate if participant understanding of 'coaching philosophy' was assumed, a definition provided, or if data were collected based upon participant perceptions alone. Authors also fail to acknowledge that their own criteria and questions for identifying a coaching philosophy have a particular worldview or philosophical position (e.g. Cassidy et al., 2009). Moreover, despite values and beliefs being identified as a key part of a coaching 'philosophy' (e.g. Burton & Raedeke, 2008; Kidman & Hanrahan, 2011; Lyle, 2002) existing work does not define clearly these terms nor explicate the relationship between the two. Furthermore, aside from Jenkins (2010), authors offer little insight into how values and beliefs might be categorised, or the characteristics of such categories. Lastly, despite a plethora of book chapters and position papers, there is limited empirical research investigating coaches' values and beliefs and how these may translate into practice despite the repeated assertions of the importance of understanding 'coaching philosophy'.

## **Current research – Coaching philosophy: coaching rhetoric, ideology and discourse**

A critical question when considering the existing research is the degree to which it actually evidences a ‘coaching philosophy’? The current crop of ‘coaching philosophy’ literature is largely descriptive rather than analytical; it is uncritically accepting and describes coaches’ personal preferences (e.g. Burton & Raedeke, 2008; Vealey, 2005). In addition, although limited in number, empirical studies conducted in coaching (e.g. Nash et al., 2008; Robbins et al., 2010) tend to identify coaches’ different perceptions of philosophies. Such findings are far from philosophical in nature, and instead, are largely the reproduction of coaching rhetoric, truisms and value-laden ideologies (e.g. Bennie & O’Connor, 2010; Collins et al., 2011; Schempp, McCullick, Busch, Webster, & Mason, 2006). This research has offered little in the way of critical, philosophical analysis and has even less to say about the complex production of coaching discourse.

As a system of ideas, beliefs, values, commitments, pattern of thought, and social practice, ideology operates between individuals and structures dialectically to reproduce and maintain social characteristics (Devis-Devis, 2006). Ideology is two-fold; firstly, it functions as a shared system of symbols and social practice without which any social situation would be incomprehensible; and secondly, as a system embedded in power relationships and sedimented forms of thought in everyday life that can distort communication and understanding (Devis-Devis, 2006). Coaching is a social system of beliefs, structures and practices, and its ideologies, that appear natural, obvious and commonsense, exercise a systemised influence on the social construction of knowledge of coaches to produce a particular coaching discourse. Discourses are shaped by “beliefs and commitments, explicit ideologies, tacit world

views, linguistics and cultural systems, politics and economics, and power arrangements” (Cherryholmes, 1988, p.106). They are the prevailing “set of meanings, metaphors representations, images stories [and] statements that, in some way, together produce a particular version” of coaching (Burr, 1995, p.48). For example, commonly reported ideological coaching discourse includes: “in order to succeed, a coach needs be able to relate to players both as footballers and, more importantly, as individuals” (p.12), “any corrective feedback to players must be accompanied by a positive input” (p.14) and “effective coaching comes from watching and learning from others” (Jones et al., 2004, p.19).

Moreover, the language of sports coaching is a performance ‘discourse of expertise’ (Cassidy et al., 2009), where coaching is focused around the individual and is positioned as the development of expertise, where athletes and coaches are empowered by their goal orientation and the self-chosen means to achieve it (Johns & Johns, 2000). As a result, coaching is driven by a self-referenced anecdotal approach to practice based on ‘what works’, and a way of coaching that ‘gets results’ (Cushion, 2013). Bruner (1999) describes such implicit theories as ‘folk pedagogies’; i.e. strong views about how people learn and what is ‘good’ for them. Typically, these are based on “tradition, circumstance and external authority” (Tinning, 1988, p. 82). Coaching ideologies and dogma are the frameworks producing and reproducing ‘folk pedagogies’ (Cushion & Jones, 2014; Piggott, 2011) resulting in practice and practitioners becoming, as Piggott (2011) suggests, “dogmatic and petrified because they are protected” and resistant to “criticism from within and without” (p.8).

Coaching, then, is an ideologically determined practice, and for coaches (and researchers) is perceived as universal, rational and obvious (e.g. Nash et al., 2008; Robbins et al., 2010; Schempp et al., 2006). Coaching thus retains a tacitly understood

persistent and resilient culture where ideology endures partly because it contains elements that both coaches and researchers recognise as accurate in their experience (Eagleton, 1991). Against this backdrop, coaches are left to define their own 'coaching philosophy'. When this occurs it does so within coaching's culture (Cushion & Jones, 2014), where coaches' come to accept and value certain types of knowledge over others and perpetuate these perspectives through practice (Cushion et al., 2003). This, in turn, creates a highly contextual discourse with that imposes and enforces a 'correct way' to coach (Cushion 2013; Cushion & Jones, 2014). As a result, coaches authenticate certain types of collective knowledge with the resulting discourse giving certain practices an entrenched legitimacy (Cushion et al., 2003; cf. Cushion & Jones, 2014). Prior socialisation along with established beliefs and traditions reinforce this 'valid' image of coaching (Potrac, Jones & Cushion, 2007).

Thus, the coaching process and coaching research, by reporting it, nourishes and maintains ideology through the imposition of language, meanings and symbolic systems that actually support certain segmented ways of understanding and ordering coaching i.e. coaching philosophies. Both coaching and coaching research appear guilty of 'misrecognising' the arbitrary nature of the culture (Cushion, 2013), and serve to reproduce existing ideology while caught in its ideological web (e.g. Camire, Trudel & Forneris, 2012; Nash et al., 2008). Moreover, existing research and coach education does not address issues related to beliefs and assumptions about coaching and learning in a meaningful way (Cushion, 2013; Nelson, Cushion & Potrac, 2011), or how these impact practice (Camire et al., 2012; Gilbert & Trudel, 2005). Far from being benign activities, coaching practice, coach education and coaching research always contain and advance values and agendas (Cushion & Jones, 2014). Indeed, rather than leading coaches and coach education in understanding underlying

‘ideologies’, existing research contributes to these issues through its perpetuation of existing coaching discourse and its lack of conceptual clarity. Consequently, the ‘coaching philosophies’ currently described are not philosophical in nature (in the sense of being abstract, detached and rational conceptualisations of coaching) (Armour, 1997), but merely what Green (2002) calls “mythical ideas regarding the supposed worth of their subject” (p.65).

### **Problematising ‘Coaching Philosophy’**

Like the wider coaching literature, the existing research concerning ‘coaching philosophy’ is as Jones, Edwards and Filho (2014) argue “starved of contextual considerations”, yet replete with hollow “complex-aware rhetoric” (p. 2). Indeed, the dominant psychologism and individualism of humanistic discourse running through the coaching literature makes a number of assumptions about coaches, coaching and coaching philosophy that remain unchallenged. These include: the assumption that knowledge and skills are neutral rather than socially and culturally constructed; experience is seen as a given and the source of authentic knowledge, and not in any way problematic; and that there is a true self which exists independently of the social realm. Consequently, ‘coaching philosophy’ is presented as a “logical chain of propositions that can be developed into a system of knowledge” (Jones et al., 2014, p.3) that, in turn, underpins and explains practice unproblematically (e.g. Grecic & Collins, 2013). The growing corpus of writing concerning ‘coaching philosophy’ fails repeatedly to take any critical standpoint toward these assumptions, nor does it question or problematise the notion of a ‘coaching philosophy’, instead providing legitimacy to the concept and defending the grounds for developing and articulating it (e.g. Cassidy et al., 2009; Lyle, 2002).

Rather than just representing ‘coaching ideology’, the literature (and coach education) instead presents and perpetuates an ideology of coaching philosophy. This ideology acts as a structure for coaching identities and is legitimised as a valid explanation for coaches’ thoughts and actions. As Althusser (1971) suggests, ideology enables coaches to reconstruct in an imaginary plane, a coherent discourse that can operate as the skyline of their lived experience, and gives shape to a social process that, in turn, helps place them in their particular social formation. Ideology has an opaque character; it impacts the rational perceptions of individuals regarding social practices and helps individual coaches articulate a normative framework and behaviour to orient their practices (Torres, 1999). Coaching philosophy, then, is itself an ideological structure, “a system of representations by which social agents express a particular mode of appraising reality, codifying information and processing practical outcomes” (Torres, 1999, p. 108).

Coaching philosophy ideology has its roots in the epistemological foundations of Cartesian rationality and assumes reflexivity, the ability to see oneself as object, as a defining characteristic where this self-awareness can generate valid knowledge (Fendler, 2003). As Fendler (2003) asserts Cartesian assumptions are enacted when the practices related to coaching philosophy express an Enlightenment-optimism about the potential for human rationality. In a Cartesian scheme of self-awareness, the self plays simultaneously the role of subject-who-reflects and the object that is reflected upon (Nadler, 1989). This notion of self-awareness in coaching philosophy ideology is extended to mean that this reflexive self has agency, has the ability to make rational choices and assumes responsibility for decisions and actions. However, conflating coaching philosophy with rational choice assumes equality for all coaches, and a level playing field of practice, thus developing a ‘coaching philosophy’

becomes formalised in instrumental terms where everyone who goes through the steps will arrive at the same place. This construction is problematic as it ignores the social beyond the interactional (Jones et al., 2014) through not recognising the effects of socialisation, power, history and culture on subjectivity, and on the ways it is possible to be aware of ourselves as subjects and objects (Fendler, 2003), while at the same time overemphasising coaches' agency, power, conscious action and reflexivity. The result is the uncritical presentation of a fixed and stable individual, a transcendent, unproblematised, self-aware and reflexive coach with a 'unique' philosophy that explains and underpins their practice.

Yet life interpretation with practical sense and objectified explanation are two distinct sides of human endeavour (Callewaert, 1999). Thus, the ideology of coaching philosophy is a contrived masquerade to manipulate agent and structure and theory and practice into one single discourse. Rather than a meta-theoretical reflexivity on coaching practice, coaching philosophy is currently misunderstood as a constitutive part of the object, the ideology of coaching philosophy would have us believe that the subjective experience and practical knowledge at work in the mind of the coach is an objectified explanation of practice (e.g. Lyle, 2002 *inter-alia*). However, subjective experience and knowledge has already been shaped by historical and cultural circumstances and ideology, and subjective perceptions are effects of historical contexts (Fendler, 1999). The relationship between the social and the individual is therefore overlooked as coaches' practice takes place in a given social context and coaches' make meaning of their existence from the sporting cultures that they inhabit, they are part of the structure, and the structure is part of them (Cushion & Jones, 2014). Thus, the individual coach alone is an inadequate unit of analysis to understand coaching, and the ideology of coaching philosophy results in the true meaning of



‘philosophy’ and the connections with social structure being overlooked. By not problematising subjective experience and the significance of ideology, coaches lose critical leverage and a means of reinterpreting and reassessing the nature of their experiences. Indeed, through the ideology of coaching philosophy, a drive to discover the ‘truth’ about practice and find coherent subjectivities results in a process that is actually disempowering.

The ideology of coaching philosophy also assumes that practice is an entirely conscious activity and available for reflexive scrutiny. However, only a small part of human experiences is retained in consciousness with experiences become sedimented (Berger & Luckmann, 1966) and coaching practices originally learned as part of a conscious process, become remembered as a habitual response (Cushion & Jones, 2014). Lessons are absorbed that become so ingrained they are forgotten in any conscious sense (Jarvie & Maguire, 1994) therefore coaches have learned and acquired a set of practical cultural competencies, including a social identity; these are dispositions that operate “below the level of consciousness and language, beyond the reach of introspective scrutiny and control by the will” (Bourdieu, 1984, p.466). Coaching practice, therefore, is not *wholly* consciously organised or orchestrated, as Jenkins argues (2002); there is a practical sense and/or logic “a mastery acquired by experience of the game, and one which works outside conscious control” (Bourdieu, 1990, p.13). Practical logic is fluid and indeterminate and not accomplished on the basis of normative models, coaching is therefore an improvisatory practice (Cushion & Jones, 2014). As a result, it would be a mistake to see coaches’ actions as entirely conscious. Moreover, as practice is rooted in both past and present positions and experience, as well as being located in social structure external to them, coaches’ espoused values and beliefs are more likely simplified statements of interpretation

rather than the actual cause of their thoughts and actions (Hodkinson & Hodkinson, 2004). Yet, the ‘coaching philosophy’ literature is unanimous in agreeing that coaches possess the capacity to identify, understand and articulate the determinants of their practice in its entirety; that is, that coaches do possess the capacity to function as entirely conscious and reflexive beings.

Currently, coaches appear to identify with the ideology of ‘coaching philosophy’, but in this sense, it could be argued that it is neither coaching nor philosophy. Yet, if a person does not have a ‘coaching philosophy’, then they cannot be a true coach (e.g. Cassidy et al., 2009; Lyle, 2002; Nash et al., 2008). The descriptive language produced acts to normalise *how* a coach should be (e.g. Jenkins, 2010; Lyle, 2002, inter-alia). Culturally and ideologically driven descriptors correlate the ideology and culture with certain coaching activities and practices, the language sets up certain expectations about behaviour and practice, the descriptors connect coaching to identity, constructing language to understand and identify self; and the descriptors by omission obliterate alternative perceptions that are not based on prevailing dominant culture or ideology (Cushion, 2013). As a result, the existing research defends and promotes the legitimacy of the ideology while offering little insight, either implicitly or empirically, into the objectivities and subjectivities that produce and reproduce coaching practice.

However, coaching philosophy, or rather, philosophical contemplation can provide coaches with the tools to deconstruct who they think they are and the social conditions that govern their development and existence. Such a reflexive process should expose the social and cultural embeddedness and taken-for-granted assumptions in which the coach is located, and encourage alternative readings of the text of experience (Tennant, 1999). Philosophy and philosophic thinking therefore

offers a means of enlightening coaches about the ideology of ‘coaching philosophy’ and the limits on their thinking and practice.

### **Philosophy of coaching – the role of philosophic enquiry**

All practical activities are guided by theory; coaching is a performed social practice that can only be understood by reference to the framework of thought in terms of which practitioners make sense of what they are doing (Carr & Kemmis, 1986; Brookbank & Magill, 2007). As Carr and Kemmis (1986) argue, “the assumption that all ‘theory’ is non-practical and all ‘practice’ is non-theoretical is entirely misguided” (p.113). The coaches’ role is the product of existing and ongoing negotiations about coaching where coaching norms provide an overriding, powerful, and historical view of what coaches *should* do and what coaching *should* look like (Cushion, 2013; Cushion et al., 2003; Light, 2004). This results in the development of a set of beliefs, attitudes, and expectations about coaching and the nature of a ‘philosophy’. Though acquired in a subconscious manner, rather than ‘taught theoretical practice’, this is still a prescribed way of thinking that remains informed by assumptions (Carr & Kemmis, 1986) that have axiological, ontological and epistemological underpinnings. Thus, coaches’ (and some researchers) understanding of an apparent theory-practice gap is instead illustrative of a lacking in critical appraisal of the adequacy of concepts, beliefs and assumptions about coaching incorporated within prevailing practice theories. Therefore, by subjecting beliefs and justifications of existing and on-going practice to abstract rational and detached (i.e. philosophical) reconsideration, theory can in fact inform and transform practice by informing and transforming the ways in which practice is experienced and understood (Carr & Kemmis, 1986; Cushion, 2013; Cushion & Jones, 2014). As Carr and Kemmis (1986) argue, the transition is not from

theory to practice as such, but rather from irrationality to rationality, from ignorance and habit to knowledge and reflection.

Rather than simply reciting them, unpacking assumptions and beliefs emancipates practitioners from their dependence on habit and tradition by providing them with resources to enable reflection and to critically examine the inadequacies of different conceptions of practice (Carr & Kemmis, 1986). However, as Cushion (2013) argues, this is largely beyond existing conceptions of coach education (Nelson et al., 2011), which is additive (grafting new ‘skills’/knowledge onto an existing repertoire) rather than critically transformative (deconstructing taken-for-granted beliefs, assumptions, knowledge and habits, and rebuilding practice) (Thompson & Zueli, 1999). Therefore, coaches are not engaged in meaningful reflection about their underlying beliefs but instead evidence pragmatic practice utilitarianism (Grant, 2007). Such an uncritical approach leaves coaching closed to objective enquiry around the outcomes (intended and unintended) of adopted methodologies. Moreover, coaches, coach educators and sports organizations have a tendency to ‘cherry pick’ ideas that fit these unchallenged ‘beliefs’, while rejecting or resisting others that are more challenging (Jones et al., 2014; Light & Evans, 2010; Roberts, 2011). The resulting application of pseudo-principles and coaching myths are not only evidenced in coaching practice ideology but are also included in coach education ideologies and rhetoric (e.g. Roberts, 2011); and become affirmed and reproduced through the uncritical reporting of ‘coaching philosophy’ (e.g. Jones et al., 2004; c.f. Cushion, 2013).

However, it could be suggested that this lack of work from researchers and in coach education is in part due to the difficulty of identifying the often implicit, ontological, epistemological beliefs and axiological, ethical values deeply embedded

within coaches. However, rather than being comprehensive, the literature remains largely superficial and descriptive, while philosophical questions that can be the most “complex and frustrating of all” (Hardman & Jones, 2013, p.105) are just not posed (e.g. Martens, 2012; McCallister et al., 2000; Kidman & Hanrahan, 2011; Voight & Carroll, 2006). A more philosophical approach suggests more in-depth exploration relating to axiology, which include values of importance; ethics which include moral values; ontology which include beliefs about the nature of existence, including a core set of features to coaching that provide personal significance and a central source of meaning; self-understanding, social expression and self-esteem to that person (Hardman & Jones, 2013); and epistemological assumptions that include beliefs on the nature of knowledge (Light, 2008). All coaches’ practice narratives contain underpinning ontological and epistemological beliefs that informs their assumptions about learning that, in turn, influences the types of coaching methods and practice activities used (Jones et al., 2004; Light, 2008).

There is a need for an empirical philosophical understanding to support coach education and coaches (Collins et al., 2009; Hardman & Jones, 2013; Jenkins, 2010). Philosophical reflection can help establish a rationale for action and provide the tools to deal with questions in a clear and justified way (Drewe, 2000). While recognising the problems with making the tacit explicit, coaches themselves can be encouraged to use philosophical ‘tools’ to develop a more coherent and sophisticated understanding of their own coaching and coaching in general (Hardman & Jones, 2013).

The methodology used most frequently to attempt this process has been coach interviews (e.g. Bennie & O’Connor, 2010; Camire et al., 2012; Jones et al., 2004; MaCallister et al., 2000; Nash et al., 2008; Robbins et al., 2010) with the research tending to investigate elite coaches in performance contexts (e.g. Collins et al., 2009;

Jones et al., 2004; Voight & Carroll, 2006). Researchers have also utilised questionnaires (e.g. Debanne & Laffaye, 2013; Pratt & Eitzen, 1989) and document analysis of personal statements or reflective writing (e.g. Collins et al., 2011; Lyle, 2002; Schempp et al., 2006) to attempt to understand coaches' perceptions of their practice and their 'philosophy'. In addition, in addressing its research questions the coaching philosophy research has tended to use single rather than multiple or mixed method research designs (i.e. Bennie & O'Connor, 2010; Careless & Douglas, 2011; Collins et al., 2011; Nash et al., 2008; Robbins et al., 2010; Voight & Carroll, 2006).

Irrespective of methodology however, all authors assume that coaches' values, beliefs and practices are entirely conscious entities and infer that coaches consciously construct and live out their philosophies; while elite coaches appear to be sampled on the inference (e.g. Cassidy et al., 2009; Nash et al., 2008) that more experience brings more capacity for reflexivity. While acknowledging that often coaches do not have sufficient philosophical understanding to articulate the values underpinning their thoughts and actions (Lyle, 2002), researchers present a paradox, assuming that 'expert' coaches naturally become more reflexive but continue to stress the need to 'trigger' coaches internal conversations through questioning (e.g. Cassidy et al., 2009; Nash et al., 2008) without articulating the assumptions underpinning such questions.

There is a recognition in the literature that beliefs are framed over time, often early in the life course and are inextricably linked to biography (Armour, 2004; Cassidy et al., 2009). As a result, linking practice to biography, that includes a temporal element, seems an important methodological step (Armour, 2004). To this end, the use of story telling and the identification of critical incidents have been advocated (Careless & Douglas, 2011; Jenkins, 2010). Moreover, Bourdieu (2000, p. 50) insisted that in order to 'encounter' rather than reassemble the social, we should

move close to the site of practice and production, social practice, cannot be understood without an appreciation of practice itself (Cushion & Jones, 2014). In teaching, Green (1998) argued that “if we wish to understand teachers’ ‘philosophies’ of PE, then we must study them not as abstract philosophical systems of ideas, but rather as practical, everyday ‘philosophies’ which provide practical guides to action as well as a justification for those actions” (p. 141). While Tsangaridou and O’Sullivan (2003) go on to suggest, “the only way to determine teacher’s theories-in-use may be through observations of these professional practices” (p.133). However, practice, as a visible social phenomenon, cannot be understood outside of time and any adequate analysis of practice must treat temporality as a central feature (Jenkins, 2002). These arguments suggest that any philosophic investigation must be conducted over time (i.e. longitudinally), be based in-situ (grounded in practice), and use a range of methods to highlight and attempt to move beyond coaches’ subjective perceptions.

### **Some conclusions**

Hardman and Jones (2013) remain the only scholars to acknowledge and integrate legitimate philosophical thinking into a discussion concerning ‘coaching philosophy’. They recognise that philosophy is more complex than a selection of statements concerning the circumstances and dilemmas of coaching practice (Hardman & Jones, 2013). Through the portrayal of the objective nature of philosophical thought the authors challenge the commonly accepted depiction of coaches’ philosophies as entirely subjective and counter coaches’ claims of ‘exclusivity’. However, the authors paint a utopian picture of coaching philosophy that privileges the ideas of morality, and this work remains a philosophical discussion rather than empirical philosophical enquiry. Of the empirical work carried there remains significant conceptual

incoherence and confusion where “coaches notions of their philosophies appear more ideological than philosophical” (Cassidy et al., 2009, p.58). In addition, this paper has attempted to problematise the assumptions underlying coaching philosophy and instead argued that what is currently presented as coaching philosophy is itself an ideology. Coaching scholars are culpable in producing and reproducing this ideology as research repeatedly legitimises coaching philosophy as a valid unproblematised explanation of coaches’ thoughts and action. This ideology overemphasises coaches’ agency and conscious action and reflexivity, while underestimating the significance of social structure on coaches’ dispositions and the degree to which practice is unconscious.



## References

- Althusser, L. (1971) Ideology and Ideological State Apparatuses, in: B. Brewster (Eds) *Lenin and Philosophy* (London, Monthly Review Press), 170-186.
- Armour, K. (1997) Developing a personal philosophy on the nature and purposes of physical education: life history reflections of physical education teachers at Citylimits high school, *European Physical Education Review*, 3(1), 68-82.
- Armour, K. M. (2004) Coaching pedagogy, in: R. L. Jones, K. M. Armour & P. Potrac (Eds) *Sports coaching cultures* (London, Routledge), 94-115.
- Bennie, A. & O'Connor, D. (2010) Coaching philosophies: perceptions from professional cricket, rugby league and rugby union players and coaches in Australia, *International journal of sports science and coaching*, 5, 309-320.
- Berger, P. & Luckmann, T. (1966) *The Social Construction of reality: A Treatise in the Sociology of Knowledge* (London, Penguin).
- Bourdieu, P. (1984) *Distinction: A Social Critique of the Judgement of Taste* (Cambridge Mass, Harvard University Press).
- Bourdieu, P. (1990) *The Logic of Practice* (Stanford CA, Stanford University Press).
- Bourdieu, P. (2000) *Pascalian meditations* (Cambridge, Polity Press).
- Brockbank, A. & Magill, I. (2007) *Facilitating reflective learning in higher education* (2<sup>nd</sup> Edn) (London, Open University Press).
- Bruner, J. (1999) Folk pedagogies, in: B. Leach & B. Moon (Eds) *Learners and pedagogy* (London, Paul Chapman), 4-20.
- Burr, V. (1995) *An Introduction to Social Constructionism* (London, Routledge).
- Burton, D. & Raedeke, T. D. (2008) *Sport psychology for coaches* (Illinois, Human Kinetics).

- Callewaert, S. (1999) Philosophy of education, Frankfurt critical theory, and the sociology of Pierre Bourdieu, in, T. Popokewitz & L. Fendler (Eds) *Critical Theories in Education: Changing Terrains of Knowledge and Politics* (New York, Routledge), 117-144.
- Camire, M., Trudel, P. & Forneris, T. (2012) Coaching and transferring life skills: Philosophies and strategies used by model high school coaches, *The Sport Psychologist*, 26, 243-260.
- Camire, M., Trudel, P. & Forneris, T. (2014) Examining how model youth sport coaches learn to facilitate positive youth development, *Physical Education and Sport Pedagogy*, 19, 1-17.
- Carless, D. & Douglas, K. (2011) Stories as personal coaching philosophy, *International Journal of Sport Science & Coaching*, 6, 1-12.
- Carr, W. & Kemmis, S. (1986) *Becoming critical: education, knowledge and action research* (London, Falmer Press).
- Cassidy, T. (2010) Understanding athlete learning and coaching practice: Utilising 'practice theories' and 'theories of practice', in: J. Lyle & C. Cushion (Eds) *Sports Coaching professionalization and Practice* (London, Churchill Livingstone Elsevier), 177-192.
- Cassidy, T., Jones, R. & Potrac, P. (2009) *Understanding sports coaching: The social, cultural and pedagogical foundations of coaching practice* (2nd Edn) (London, Routledge).
- Cherryholmes, C. (1988) *Power and Criticism: Post-structural Investigations in Education* (New York, Teachers College Press).

- Collins, K., Barber, H., Moore, K. & Laws, A. (2011) The first step: Assessing the coaching philosophies of pre service coaches, *Journal of research in health, physical education, recreation, sport & dance*, 6, 21-29.
- Collins, K., Gould, D., Lauer, L. & Yongchul, C. (2009) Coaching life skills through Football: Philosophical beliefs of outstanding high school football coaches, *International Journal of Coaching Science*, 3, 1-26.
- Cushion, C. J. (2013) Applying Game Centered Approaches in coaching: a critical analysis of the 'dilemmas of practice' impacting change, *Sports Coaching Review*, 2(1), 61-76.
- Cushion, C., Armour, K. M. & Jones, R. L. (2003) Coach education and continuing professional development: experience and learning to coach, *Quest*, 55, 215-230.
- Cushion, C. J. & Jones, R. L. (2014) A Bourdieusian analysis of cultural reproduction: Socialisation and the 'hidden curriculum' in professional football, *Sport Education & Society*, 19(3), 276-298.
- Cushion, C. & Lyle, J. (2010) Conceptual development in sports coaching, in: J. Lyle & C. Cushion (Eds) *Sports Coaching professionalization and Practice* (London, Churchill Livingstone Elsevier), 1-14.
- Debanne, T. & Laffaye, G. (2013) Coaches' beliefs and knowledge training programs used by French professional coaches to increase ball-throwing velocity in elite handball players, *International Journal of Sports Science & Coaching*, 8(3), 557-569.
- Devis-Devis, J. (2006) Socially critical research perspectives in physical education, in: D. Kirk, D. Macdonald, & M. O'Sullivan (Eds) *The handbook in physical education* (London, Sage), 37-58.

- Bergmann Drewe, S. (2000) An examination of the relationship between coaching and teaching, *Quest*, 52, 79-88.
- Eagleton, T. (1991) *Ideology: An introduction* (London, Verso).
- Fendler, L. (2003) Teacher reflection in a hall of mirrors: Historical influences and political reverberations, *Educational Researcher*, 32(3), 16-25.
- Fendler, L. (1999) Making trouble: Prediction, agency and critical intellectuals, in: T. Popokewitz & L. Fendler (Eds.) *Critical Theories in Education: Changing Terrains of Knowledge and Politics* (New York, Routledge), 169-190.
- Flew, A. (1984) Preface, in: A. Flew (2<sup>nd</sup> Eds) *A Dictionary of Philosophy* (London, Pan Books Ltd), vii–xi.
- Gilbert, W. (2007) Modelling the complexity of the coaching process: A commentary, *International journal of sports science and coaching*, 2, 417.
- Gilbert, W. D. & Trudel, P. (2005) Learning to coach through experience: conditions that influence reflection, *Physical educator*, 62, 32-43.
- Grant, A.M. (2007) Past, present future: the evolution of professional coaching and coaching psychology, in: S. Palmer & A. Whybrow (Eds) *Handbook of Coaching Psychology* (London, Routledge), 23-39.
- Grecic, D. & Collins, D. (2013) The epistemological chain: practical applications in sports, *Quest*, 65, 151-168.
- Green, K. (1998) Philosophies, Ideologies and the Practice of Physical Education, *Sport, Education and Society*, 3, 125-143.
- Green, K. (2000) Exploring the everyday ‘philosophies’ of PE teachers from a sociological perspective, *Sport, Education and society*, 5(2), 109-129.
- Green, K. (2002) PE Teachers in their figurations: A sociological analysis of everyday ‘philosophies’, *Education, Sport and Society*, 7, 65-83.

- Hardman, A. R. & Jones, C. R. (2013) Ethics for coaches, in: R.L. Jones, M. Hughes & K. Kingston (2<sup>nd</sup> Eds) *An introduction for sports coaching: connecting theory to practice* (London: Routledge), 113-130.
- Hodkinson, P. & Hodkinson, H. (2004) The significance of individuals' dispositions in workplace learning: a case study of two teachers, *Journal of Education and Work*, 17(2), 167-182.
- Jarvie, G. & Maguire, J. (1994) *Sport and leisure in social thought* (London, Routledge).
- Jenkins, R. (2002) *Pierre Bourdieu* (Rev Eds) (London, Routledge).
- Jenkins, S. (2010) Coaching Philosophy, in: J. Lyle & C. Cushion *Sports Coaching: Professionalisation and practice* (London, Churchill Livingstone Elsevier), 233-242.
- Johns, D. P. & Johns, J. (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, 219-234.
- Jones, R., Armour, K. & Potrac, P. (2004) *Sports coaching cultures: from practice to theory* (London, Routledge).
- Jones, R. L., Edwards, C. & Filho, I. A. T. V. (2014) Activity theory, complexity and sports coaching: An epistemology for a discipline, *Sport Education and Society*, <http://dx.doi.org/10.1080/13573322.2014.895713>.
- Kidman, L. & Hanrahan, S. J. (2011) *The Coaching Process* (3<sup>rd</sup> Edn) (London, Routledge).
- Light, R. (2004) Coaches' experiences of games sense: Opportunities and challenges, *Physical Education & Sport Pedagogy*, 9, 115–131.

- Light, R. (2008) Complex learning theory - Its epistemology and its assumptions about learning: implications for physical education, *Journal of Teaching in Physical Education*, 27, 21-37.
- Light, R. L. & Evans, J. R. (2010) The impact of game sense pedagogy on elite level Australian rugby coaches' practice; a question of pedagogy, *Physical Education and Sport Pedagogy*, 15, 103-115.
- Lyle, J. (1999) Coaching philosophy and coaching behaviour, in: N. Cross & J. Lyle (Eds) *The coaching process* (Oxford, Butterworth-Heinemann), 25-46.
- Lyle, J. (2002) *Sports Coaching Concepts: A framework for coaches' behaviour* (London, Routledge).
- MaCallister, S. G., Blinde, E. & Weiss, W. M. (2000) Teaching values and implementing philosophies: Dilemmas of the youth sport coach, *Physical Educator*, 57, 33-45.
- Martens, R. (2012) *Successful coaching* (4<sup>th</sup> Eds) (Illinois, Human Kinetics).
- Morgan, J. M. (2006) Philosophy and physical education, in: D. Kirk, D. Macdonald & M. O'Sullivan (Eds) *The handbook in physical education* (London, Sage), 97-108.
- Nadler, S. M. (1989) *Arnauld and the Cartesian Philosophy of Ideas* (Princeton, Princeton University Press).
- Nash, C. S., Sproule, J. & Horton, P. (2008) Sport coaches perceived role frames and philosophies, *International journal of sport science and coaching*, 3, 539-554.
- Nelson, L. J. & Cushion, C. J. (2006) Reflection in coach education: The case of the national governing body coaching certificate, *Sport psychologist*, 20, 174-183.
- Nelson, L., Cushion, C. & Potrac, P. (2011) Enhancing the provision of coach education: The recommendations of UK coaching practitioners, *Physical*

*Education and Sport Pedagogy*, 1-15.

Partington, M. & Cushion, C. J. (2013) An investigation of the practice activities and coaching behaviours of professional top-level youth soccer coaches, *Scandinavian Journal of Medicine & Science in Sports*, 23, 374-382.

Piggott, D. (2011). Coaches' experiences of formal coach education: A critical sociological investigation, *Sport Education and Society*, 17(4), 535-554.

Potrac, P., Jones, R. & Cushion, C. (2007) The coaching behaviours of top-level English soccer coaches: A preliminary investigation, *Soccer in Society*, 8, 33-49.

Pratt, S. R. & Eitzen, D. S. (1989) Differences in coaching philosophies between male coaches of male and female basketball teams, *International review for the sociology of sport*, 24(2), 151-159.

Roberts, S. J. (2011) Teaching games for understanding: The difficulties and challenges experienced by participation cricket coaches. *Physical Education and Sport Pedagogy*, 16(1), 33-48.

Robbins, J. E., Houston, E. & Dummer, G. M. (2010) Philosophies and expectations of wheelchair and stand-up collegiate basketball coaches, *Journal of Sport Behavior*, 33, 42-62.

Rokeach, M. (1973) *The nature of human values* (New York, The Free Press).

Schempp, P. G., McCullick, B. A., Busch, C. A., Webster, C. A. & Mason, I. (2006) The self-monitoring of expert sport instructors, *International journal of sport science and coaching*, 1, 25-35.

Tennant, M. (1999) Lifelong learning as a technology of self, in: K. Illeris (Eds) *Contemporary Theories of Learning* (London, Routledge), 147-158.

- Tinning, R. (1988) Student teaching and the pedagogy of necessity, *Journal of Teaching in Physical Education*, 7(2), 82-89.
- Thompson, C. & Zeuli, J. (1999) The frame and the tapestry: Standards-based reform and professional development, in: L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (San Francisco: Jossey-Bass), 341–375.
- Torres, C. A. (1999) Critical theory and political sociology of education: Arguments, in: T. Popkewitz & L. Fendler (Eds) *Critical Theories in Education: Changing Terrains of Knowledge and Politics* (New York, Routledge), 87-116.
- Tsangaridou, N. & O’Sullivan, M. (2003) Physical education teachers’ theories of action and theories-in-use, *Journal of Teaching in Physical Education*, 22(2), 132-153.
- Turnbull, N. & Antalffy, N. (2009) Grounding sociological studies of science, sociologically: Bourdieu's sociology of science, *Sociological Review*, 57, 547-566.
- Vealey, R. (2005) *Coaching for the inner edge* (Morgantown, Fitness information technology).
- Voight, M. & Carroll, P. (2006) Applying Sport psychology philosophies, principles and practices onto the gridiron: USC football coach Pete Carroll, *International Journal of Sports Science & Coaching*, 1, 321-331.