# The significance of behavioural learning theory to the development of effective coaching practice.

## **Dave Peel**

Hartnell Training Ltd. UK, email: davidpeel09@gmail.com

#### Abstract

This paper outlines the potential significance of behaviourism and its impact on developing effective coaching practice. Its purpose is threefold: firstly, it addresses the issues resonating from the critique of behaviourism, which focuses on its limited understanding and application within the coaching community. This is interesting given the fact that many coaches and coaching manuals use these techniques almost without realising their rootedness within the behaviourist tradition. Secondly, the argument is made that if behaviourism is to be used in an informed and ethical way then an in depth understanding of its theoretical underpinnings and application as a learning theory is essential. To this end the historical development, critique and adaptation of behaviourism is outlined in order to develop this understanding within the wider coaching community. Finally, the argument is put forward that only through adopting an integrated approach to coaching practice development can the coaching discipline move forward upon a sound theoretical base. The areas that will establish this theoretical base are also highlighted in the future research that needs to be undertaken.

Key Words: behaviourism, learning theory, coaching practice, role modelling behaviour.

## Introduction

In this paper, I outline the potential significance of behaviourism and its impact on developing effective coaching practice. In the first part of the paper, I attempt to answer criticisms of behaviourist techniques by authors such as Berglas (2002), who contend that their use is dangerously limited by a lack of understanding of their development or subsequent appropriate application. The second part of the paper is aimed at demonstrating my support for the need to understand the underpinning principles of behaviourism as a learning theory. This is especially significant if its application is to be informed and ethical. This view finds support in the work of Zeus and Skiffington who suggest that it is imperative for the coach to have developed 'a general understanding of adult learning principles' (2002, p. 21). However, the criticisms leveled at behaviourism are in sharp contrast to the views of those like Peltier (2001, p.47), who suggests that "thoughtful application of behavioral principles ought to form the foundation of any healthy and productive organisation." Peltier further contends that coaches can also apply behavioural techniques to facilitate change in clients through an enhanced understanding of themselves.

In order to address the criticisms relating to how behaviourism has been developed and how it has be applied, the paper will outline the historical development of behaviourism. This is undertaken with the purpose of helping coaches, who do not currently posses an understanding of learning theory, to start to develop it. Such understanding will enhance their practice by developing an appreciation of these useful tools and techniques that have developed out of this field of study. Support is provided by Zeus and Skiffington (2000), who suggest that without this understanding coaching practice hangs in a theoretical abyss. The impact and pervasive nature of behaviourism will also be highlighted because its influence reaches into almost every aspect of coaching practice. For example, in my experience and an examination of current best practice coaching literature reveals numerous references to behaviourist techniques, i.e. purely behavioural objectives and associated feedback, which are often not labeled as such, as exemplified by Burdett (1998), Parsloe and Wray (2000), and Whitmore (2002). To complete this analysis of behaviourism a specific example of the efficacy it offers coaches will be exemplified by examining the impact of behaviour modeling.

Having developed the above understanding, I will then suggest that to incorporate behavioursim and its associated techniques within an integrated approach is the most effective use of these techniques in coaching practice. This will be evidenced through the use of two exemplars: the first will be explored through examining neuro-lingusitic programming, a set of integrated techniques currently used in a great deal of coaching practice. The second will focus more on my own experiences of being coached and the reflections that resulted from that development. I will then move on to address definitions of coaching and behaviourism in order to contextualise this debate, but first I outline the methodology adopted to undertake this paper.

## Methodology

The paper locates behaviourism within its epistemological roots by adopting a historical perspective. The psychology of learning literature and associated fields of study are used to facilitate this including the relevant coaching literature. Undertaking a literature review provides the researcher with a substantial opportunity to develop 'theoretical sensitivity', which is defined as "a personal quality of the researcher" indicating "an awareness of the subtleties of meaning of data" (Strauss and Corbin 1990, p.41). Support for this viewpoint is provided by Simon's (1994), suggestion that a review of the existing literature is an integral component of data collection and ultimately research question generation. The literature is also supported by the use of my own experience of using behavioural coaching techniques over the last 15 years and of the anecdotal experiences of other coaches I have either trained or worked with.

## **Defining Coaching and Behaviourism**

Firstly my own experience of coaching leads me to support the suggestion advanced by Kilburg (1996, p. 135), who defines coaching as "a helping relationship formed between a client....and a consultant who uses a wide variety of behavioural techniques and methods." Kilburg further contends that the aim of this coaching intervention is to achieve a "mutually identified set of goals..." Although this definition was originally applied to executive coaching, I suggest that it encapsulates the main elements of coaching practice as

I see them. Support for this contention comes form Thach (2002) who argues, that this definition is very inclusive of most concepts espoused in other descriptions provided in the coaching literature as evidenced in the work of Flaherty (1999), Hargrove (1995), Goldsmith et al (2000), Judge and Cowell (1997) and Thach and Heinselman (2000).

Secondly, behaviourism, according to Reber (1985, p. 86), can be defined as an "approach to psychology which argues that the only appropriate subject matter for scientific psychological investigation is observable, measurable behaviour." The assertion that only those things that were directly observable were scientifically relevant stems from the work of the founding father of the term 'behaviourism', Watson (1930), who argued that this type of study would eventually reveal all that needed to be known about human behaviour. Hill (1990) posits that this was Watson's most significant contribution because it set the parameters of the development of behaviourism as a distinct field of study. This focus on the measurable aspects of behaviour should also resonate with those coaches who use goalsetting techniques that aim to do exactly this. Examples of this include helping coachees set SMART objectives and the NLP technique of developing 'well formed outcomes'. Both of which place emphasis on the ability to measure an observable, often exclusively behavioural, difference in performance and formulate it into a précis and specific objective as exemplified in the work of Mager (1962).

#### Locating Behaviourism within a historical perspective

Cheetham and Chivers (2001) argue that no review of the literature on learning theories could be complete without reference to the seminal work of Pavlov. Pavlov's (1927) work on classical conditioning or the linking of a stimulus, which reliably elicits a specific behavioural response, can be viewed as seminal because it provided the foundation for modern developmental psychology. Payloy also clearly demonstrated that animals could be conditioned to behave in a required way by subjecting them to otherwise neutral stimuli and thus 'conditioned - response' was discovered. Watson (1913, 1930) and Skinner (1938) then applied these principles to human behaviour. Significantly they added in additional reinforcement elements following the desired response, which demonstrated that 'operant responses', i.e. those that related to more complex everyday behaviour, could be achieved. For example, at Littala Finland, a producer of high-quality glass products, trainees are coached to repeat the same initial glass blowing task over a hundred times. Each attempt is modified and reinforced through very specific feedback from the experienced coach until it is perfect, then the trainee is coached in the same way on to the next level of complexity (Davis and Davis, 1998). Thus the process of learning is viewed as a straightforward mechanism, which is portrayed as the result of a behavioural response to some form of stimulus.

This behaviourist view of learning was expanded by Thorndike (1911, 1931), who developed a systematic learning theory incorporating the consequences of behaviour in the form of how they were reinforced. Thorndike argued that the consequences of past behaviour must have an effect on future behaviour and that recognising and strengthening the stimulus-response connection is the essence of learning. From this proposition Thorndike (1911) developed his 'Law of Effect', which stated that behaviours that were

rewarded tended to recur, while behaviours that were punished or not rewarded tended to weaken. Later, Thorndike (1931) refined his 'Law of Effect' to reflect the fact that he found that punishment did not weaken the stimulus-response connection, rather it lead subjects to avoid the situation or initiated feelings of anxiety or fear. This discovery's significance for learning was summarised by Thorndike himself as "we may increase our confidence in positive rather than negative learning and teaching" (Thorndike, 1931, p. 46).

## A critique of Behaviourism

Myers (1988) details some of the most telling critiques of behaviourism that initially emanate from its pure positivist reductionism. Firstly, behaviourism reduces all behaviour to the level of a correlation between an external stimulus and an internal response. This supposition Myers argues is faulted for ignoring the importance of cognitive psychological processes, which focuses on internal process such as perception and learning from reflection, which have a major part to play in facilitating an understanding learning. This focus on reductionism also led behaviourism to adopt a very simplistic approach to the correlation between learning and the development of language. This led Chomsky (1959) to subject behaviourism to one of its most devastating critiques, based on the capacity of humans to create never before uttered sentences. Supporting this stance Mennell (1980, p.8) argues that since "language is inseparable from social activities, Chomsky's theory of language in itself makes a telling case against the determinism of the behaviourists." Kolb (1988) also criticises behaviourism for conceptualising the environment-person relationship as being one way when in fact this is not the case. Kolb criticises behaviourism for creating empirically verifiable models of learning that are only applicable in the artificial laboratory environment.

Another important critique of behaviourism developed out of the work of Piaget (1926) and Vygotsky (1962) and became known as constructivism. Although Derry (1996) posits that there is little agreement on a universal constructivist theory of learning there is agreement on a number of common themes and issues that span this disparate spectrum of concepts (Hanley, 1994). Foremost amongst these criticisms is that, while behaviourism emphasises observable external behaviour and avoids reference to meaning, representation and thought, constructivism adopts a cognitive approach. Significantly this difference in emphasis has profound consequences for every aspect of learning theory ranging from how knowledge and skills are acquired to the relationship between the student (coachee) and teacher (coach). Supporting this contention Von Glasersfeld (1995) clearly articulates the difference in the role of the teacher (coach) between constructivism and behaviourism as respectively a 'midwife in the birth of understanding' as opposed to being 'mechanics of knowledge transfer'. Thus, as Wilson and Cole (1991) contend, constructivism must place the learner in active control of their learning through trying to solve rich and authentic problems in a real world environment.

Further supporting this critique of behaviourism, Fosnot (1996) suggests that the focus of learning should be on concept development and developing deep understanding rather than simple behaviour or skills acquisition. Learning is therefore viewed as a process of

constructing meaningful representations of one's own experiential world. This also means that educators and coaches are challenged with the need to construct a model of the conceptual worlds of students (coachees) because, argues Von Glaserfeld (1996), this could be very different from what educators (coaches) intended. Constructivism also argues that learning is affected by the interaction between individuals and their environments as evidenced in the work of Jonassen (1994) who suggests that there is a characteristic array of design principles for learning that need to be followed. Constructivism itself has been criticised for expecting too much of the learner and risking critical gaps in what is learned. Hodson and Hodson (1998, p.35), for example, argue that "it is absurdly naïve to expect (learners) to be able to invent for themselves the abstract notions such as gene, molecule and magnetic field that scientists have developed over many years."

I fully endorse these criticisms but contend that there is a danger that much of what is useful about behaviourism is viewed as being flawed and therefore not used, without thought for what coachees may gain from such interventions. Or that, as Berglas (2002) has argued, these techniques are used without an awareness of their theoretical makeup, which must limit their effective application. I would also suggest that, without developing an eclectic theoretical base incorporating numerous learning theories, developments from psychology and practitioner experiences, coaching could fall foul of the same deterministic reductionism that has haunted behaviourism. An example of this is the view that constructivism is the only learning theory that applies to coaching. This view has been attacked by Masani (2001), as having the same potential for a deterministic 'new slavery' in terms of its omnipotence that behaviourism has been criticised for during its early prominence. Consequently the rest of this paper will seek to address this issue by focusing on how behaviourism has attempted to answer these criticisms and demonstrate this adaptation through specific exemplars of behaviourism.

#### Attempts to answer the critique of Behaviourism

Many behaviourists made efforts to address criticisms of behaviourism and develop theory and practice that would mitigate the deficiencies highlighted above. This led to the beginning of attempts to combine behaviourist and cognitive principles based on an acceptance that people do not simply respond to stimuli but also act on beliefs, express attitudes and strive towards goals (Hill 1990). Most notable amongst these psychologists were Tolman (1959) and Bolles (1972) who still maintained that there was a link between stimuli and behavioural responses. More important than this suggestion was the fact that Tolman (1959) and Bolles (1972) also argued that this link was affected by a range of intervening variable or cognitive processes. The significance of this movement was profound because it opened the door for the development of an integrative approach, which could utilise the best of both of these disciplines.

More recently a number of psychologists have tried to integrate behavioural and cognitive psychology principles more successfully. For example Bandura (1977, 1986), a staunch proponent of behaviour modeling and other behavioural techniques, has developed a 'social learning' theory. This theory views learning as a continuous, dynamic and

reciprocal interaction between individuals, which in turn affects their attributes, values and behaviour. An example of how this theory is applied in practice can be seen in the United States Special Forces training programmes for Parachute jumping which takes place throughout the country. These programmes are based on observing an 'expert' carry out 'safe jumps' and talk about it in detail before the trainees do the same and receive one to one coaching (David and Davis, 1998). Additionally, Gagne' and Briggs (1979) also adopted a similar integrative approach to Bandura and developed a system of task analysis, which includes training domains such as 'cognitive strategy', 'intellectual skills', as well as less cerebral domains such as 'motor skills'. These authors suggest that each of these domains will require a different developmental approach.

## The 'new' Behaviourism applied

A concrete example of behaviourism applied directly to higher-level training, as a result of Bandura' (1977) work, is behaviour or role modelling. The terms are used interchangeably. This uses techniques such as "goal setting" and "self-reinforcement" to help people acquire the characteristics of a competent role model. Further elements of modelling can also be found in role play exercises and other kinds of behaviour simulation suggests Peltier (2001). The principles of modeling are outlined by Geroy et al (1998), Crouch (1997), Horsfall (1996), Alder (1992) and Zenger (1991), as a combination of 'skills based training' and a variety of other facilitative techniques including discussion, demonstration and feedback. Geroy et al (1998), further suggest that these techniques provide the opportunity to identify, and if appropriate, help individuals to change their values. This can have a greater impact on behaviour than changing skill levels alone. Supporting the significance of modeling is the work of Pescuric and Byham (1996), who suggest that modeling provides the most effective means of skills development and behavioural change that is currently available.

I now explore coaching tools and techniques that attempt to integrate a range of learning theory presuppositions into their practice.

#### An integrative approach to coaching

An example of a technique that uses such an integrative approach is neuro-linguistic programming (NLP) developed by Bandler and Grinder (1979). NLP has its roots firmly anchored in a cognitive-behavioural approach to human psychology and draws on a range of methods including, hypnosis and other therapeutic interventions (Peltier, 2001). NLP has many dimensions including modelling to modify behaviour as discussed above. Additionally it also incorporates visualisation to alter mental states and behavioural anchoring, which is a technique that employs both stimulus and reinforcement. Many coaches, including myself, use these techniques on a regular basis as part of their coaching practice repertoire. This is because they are viewed as very useful in helping coachees overcome barriers to learning (Pope, 1995).

Further, NLP techniques can also help coachees develop personal effectiveness and selfmotivation (Harris, 1992; Kamp, 1991; and Knight, 1995). Pope (1995) also argues that it can be an invaluable tool for trainers and coaches, in helping them to overcome their trainees' learning blocks. Additionally, O'Connor and Lages (2004) argue that coaches who do not incorporate a full range of NLP techniques in their practice run the risk of being left behind in terms of their own professional development and coaching mastery. NLP is not without its critics and probably its greatest current limitation is that there is little empirical evidence to support or contest its claims of effectiveness (Cheetham and Chivers, 2001).

My second exemplar of an integrative approach revolves around my own experience of being coached using a process developed by the Oxford School of Coaching and Mentoring (2002). This process involved both face to face coaching and a resource guide to help my development progress. Both processes adopted an integrative approach throughout my period of being coached and also coaching others as part of the programme. Exemplifying this focus was the fact that learning was located directly within the broad concept of experiential learning, which is based on the common-sense view that ideas are constantly being formed and reformed by life experiences. At its theoretical core lies Kolb's (1984) learning cycle, which draws heavily on the work of Dewey (1938), Lewin (1935) and Piaget (1926).

Additionally, Honey and Mumford's (1986) adaptation of the Kolb model in which the learner moves from 'having an experience' to 'reviewing the experience' to 'concluding from the experience' to 'planning the next steps' was also heavily focused on and used as a coaching practice review technique with my own coach. This approach has come in for criticism from Schlesinger (1996), who argues that, while the elements of both the Kolb and Honey and Mumford cycles are relevant, learners in practice jump between these elements in complex ways. Thus learning is much more fragmented, and often more chaotic, than the cycles suggest. This was validated by my own experience of using this approach as a reflective tool for developing my own professional expertise. This approach was also integrated with a specific 'goal setting' and 'reinforcement' process that was used by my coach to feedback on my practice issues and reinforce the adoption of good coaching practice. This is an example of the explicit use of two techniques, namely goal setting and reinforcement via feedback, which Baker and Buckley (1996) contend are firmly rooted in the practice of behaviourism. My own experience, and the experience of the people I coached during this process was that the integration of the cognitive experiential Kolb approach and the more behavioural goal setting and feedback was very effective. In isolation however, these techniques could have lost much of the impact that they actually had through their purposeful integration.

## Conclusion

In conclusion, this analysis has aimed to provide coaches with an understanding of the significance of behaviourism on their everyday coaching practices. It has also tried to locate the use of the techniques that emerged out of behaviourism within a historical perspective thus providing coaches with the possibility of better understanding the appropriateness of their application and also addressing Berglas's (2001) critique of the coaching profession *per se*.

A critique of behaviourism was then undertaken encompassing the constructivist approach to learning as an exemplar of how this approach has had to adapt. The result of this adaptation has been the emergence of an integrative approach to learning and coaching practice that started with the use of behaviour modeling. My own experience of using NLP techniques and the Oxford School of Coaching and Mentoring professional development process has also been used as examples of integration. Consequently my own reflections on using these processes has served to reinforce my belief that an integrative approach to coaching practice development is the most appropriate way forward.

## **Future research**

Cheetham and Chivers (2001) argue that one area that needs more empirical research is that of the effectiveness of integrative techniques like NLP. NLP currently relies too heavily on anecdotal evidence put forward by practitioners of this discipline. Effective coaching practice needs to be grounded in the development of a sound methodology based on research evidence (Cox and Ledgerwood, 2003) – something that is yet to be established in the case of NLP. Additionally much more research needs to be undertaken to identify the correlation between the impact of coaching feedback and its associated improvement in performance as highlighted by the work of Baker and Buckley (1996). For without establishing the research base to validate this causal link the efficacy of coaching practice itself can be called into question. Finally further research needs to address the fact that there is no universally accepted model or theory of adult learning as applied to the field of coaching practice which must be developed if coaching practice is to continue to evolve. It is my view that this needs to be an integrative approach rather than the disparate, personal agenda based and consequently adversarial myriad of approaches that is presently advocated.

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Dave Peel has 15 years experience of coaching and mentoring business executives and management consultants in both the private and public sectors. He specialises in coaching SME owner-managers in personal and business performance and policy development. Dave is also Director of executive coaching and mentoring programme development with Hartnell Training Ltd who specialise in supporting corporate change initiatives through coaching and mentoring interventions. Dave holds an M.Sc. in Training and is currently completing an M.A. in Coaching and Mentoring Practice at Oxford Brookes University.