

SOURCES OF KNOWLEDGE ACQUISITION OF COACHES: A REVIEW OF LITERATURE

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ABSTRACT. The purpose of this study was review the existing literature on coaches' knowledge sources. The review highlighted coaches' knowledge is built from a broad range of sources. It is influenced by a complex mix of formal, non-formal, informal directed and self-directed learning experiences. However, this developmental mix for coaches is largely individualised and ad hoc. While the literature suggests the balance tends to be toward informal learning, the optimal mix of learning experiences needs to be addressed. In this respect, the researches available on coaching knowledge are limited by a tendency to focus on expert or elite coaching practitioners. This group of coaches has been shown to favour self-directed learning and therefore engage in activities to match.

Key words: learning situation, coaching science; coaching education and coaching experience.

Introduction

Coaching can be considered as a unique occupation in which coaches play multiple roles such as teacher, motivator, strategist, supervisor and character builder. Furthermore coaches perform various duties such as guiding the practice of skills, providing instruction and feedback, monitoring learning and performance and supervision (Gould, 1987). For these reasons, coaches are expected to understand and use an increasingly specialized body of knowledge (Martens, 1997). Coaches' knowledge is considered to be one of the bases for the athletes' enhancement, development and health (Durand-Bush, 1996; Jones et al., 2003), in so far as, as stated by the expert coaches studied by Abraham et al., (2006), it is not possible to teach or develop a matter without understanding it. Because of importance of coaching knowledge, research on coaching has been changing focus from coaches' behaviours and performance towards thoughts and knowledge that undergird coaches' actions (Gilbert & Trudel, 2004).

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The knowledge base in coaching can be divided into two large domains: sport—specific knowledge and general coaching knowledge (Abraham & Collins, 1998). Sport-specific knowledge includes techniques, tactics, mental skills, and physical attributes of a particular sport (Wilson, 2008). The general knowledge of coaching evolves from the nature and extent of information and facts that a person must understand to do acceptable work as a coach in any sport. This information includes steps, procedures, practices, rules, policies, theories, principles, and concepts common in the coaching field (Corso, 1992). In other words general coaching knowledge refers to the knowledge required to create optimal learning environments (Wilson, 2008). Beyond identifying the extensive knowledge base required for coaching, it is important to establish an understanding of how these coaches acquire their knowledge.

This study review and discuss the researches that focused on the avenues through which coaches learn and acquire knowledge. In order to achieve this, the review is structured around Coombs and Ahmed's (1974) conceptual framework of formal, non-formal, and informal learning.

Learning that has occurred in a formal situation is defined by Coombs and Ahmed (1974) as something that has taken place in an, institutionalised, chronologically graded and hierarchically structured educational system. Formal programs have characteristically required candidates to demonstrate prerequisites outlined in admissions guidelines, before embarking on a course that enforces compulsory attendance, standardised curricula and culminates in certification of some kind. Activities conforming to this definition of coach learning include large-scale coach certification programs developed by the governing bodies of sport and higher education courses relating to coaching and the sport sciences (Nelson et al., 2006).

Learning in informal situations has been identified as the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment (Coombs & Ahmed, 1974). Thus learning takes place in a wide variety of contexts; the majority of which occur in an informal setting beyond dedicated formal learning institutions (Brookfield, 1986; Merriam & Caffarella, 1999). Consistently, coaches learn through various avenues, including previous experiences as an athlete, informal mentoring, practical coaching experiences, and interactions with peer coaches and athletes.

In addition to the avenues already identified, other forms of informal or self-directed learning are exploring the Internet, as well as reading coaching manuals, books and journal articles and magazines. Coaches also watch educational sports science videos, footage of coaching sessions and recordings of the performances of their and other coaches' athletes.

Learning that has occurred in non-formal situations has been conceptualised as, any organised, systematic, educational activity carried on outside the framework

of the formal system to provide select types of learning to particular subgroups in the population (Coombs & Ahmed, 1974). Examples of non-formal learning include coaching conferences, seminars, workshops and clinics (Nelson et al., 2006). Although formal and non-formal learning share many similar characteristics, non-formal learning differs from the former as it tends to present a particular subgroup of a population (e.g. high-performances coaches) with alternative sources to those of the formal structured learning pathway (e.g. short courses typically focused on a specific area of interest).

Aim of Study

This study aimed to review the qualitative researches focused on the coaches' sources of knowledge acquisitions. The authors planned to provide a greater understanding of coaches' preferences for how they learn their craft. The specific purpose of this study was to analyze the various types of coaches' learning opportunities and their contribution to coach accreditation and development.

Materials and Methods

This paper aims to review and conceptually locate qualitative literature exploring how sports coaches acquire the knowledge that underpins their professional practice according to Coombs and Ahmed's framework of formal, non-formal, and informal learning as the analytical framework.

The researchers attempt to map the existing approaches in which coach can learn and acquire appropriate knowledge to their athletic and professional development.

The review considered the relevant English language research focus on coach learning with work in relevant domains and disciplines.

The review includes published articles from a wide range of electronic database, including Sport Discus, ISI Science, ProQuest, PubMed, Elsevier, Citation Index, and ISI Social Science Citation Index and the reference list of each published research paper as well as books/book chapters, theses and dissertations. Search terms included 'coach education', 'coach learning', 'coach learning and development', 'coach and professional development', 'coach learning and education', 'source of coach knowledge' and 'coaching knowledge' 'informal learning'.

Researchers reviewed each paper independently. Results were compared and discrepancies discussed. Data were extracted using a review schema developed by the research team. In most cases, the original author's own words were used in an attempt to convey the intended meaning and to allow for more realistic comparison between studies.

Results

The training of coaches is considered central to sustaining and improving the quality of sports coaching and the ongoing process of professionalisation. To achieve this aim sports coaches participate in a range of learning opportunities that contribute to their development to varying degrees. In this article, we present our collective understanding on the varying types of learning opportunities and their contribution to coach accreditation and development.

An extensive review of literature on coaching science and coach education highlighted that coaching knowledge is built from a broad range of sources from personal coaching and playing experiences to more explicit formal, informal and non formal learning situations.

Results indicated that coaches primarily acquired knowledge and learned how to coach through coach education program (Gilbert & Trudel, 2004; Trudel & Gilbert, 2006). Abraham et al., (2006) also found that coaching courses are first source of coaches' knowledge. This result is consistent with Fleurance and Cotteaux (1999) and Irwin et al., (2004). It is speculated that coaches who have gone through coaching programs will have completed coursework from a wide array of disciplines (e. g., skill activity courses, sport psychology, pedagogy), which may facilitate the development of both sport-specific and coach-specific knowledge.

Although coach education programs seem to be valued by coaches, some researchers have shown that current formal education programs do not adequately prepare coaches for their task (Abraham & Collins, 1998; Nelson et al., 2006; Trudel & Gilbert, 2006). They founded that in contrast to formal courses, experiential sources such as learning by doing, working with experts, observing and talking to other coaches and interacting with peer coaches are more important sources than to the formal learning situations provided by the national coaching certification programs. In these researches coaches have repeatedly cited their initial coaching experiences as assistant coaches at the high school or university as major sources of knowledge (Cregan et al., 2007; Schinke et al., 1995; Trudel & Gilbert, 2006). Their findings are in accordance with previous research with youth (Gilbert & Trudel, 2005) and elite level coaches (Bloom & Salmela, 2000; Werthner & Trudel, 2006). Results of review showed that coaches learned from observing and talking to other coaches (Bloom et al., 1998; Gilbert & Trudel, 2001; Sage, 1989; Werthner & Trudel, 2006), interactions with other coaches and high level athletes (Abraham et al., 2006; Erickson, et al., 2008; Fleurance & Cotteaux, 1999; Gilbert & Trudel, 2001; Irwin et al., 2004; Jones et al., 2003; Wright et al., 2007) as well as mentoring by more experienced coaches during their careers (Bloom et al., 1998; Cregan et al., 2007; Irwin et al., 2004; Jones et al., 2004; Salmela, 1995; Trudel & Gilbert, 2006). More specifically, the acquisition of coaching knowledge through competitive sport experiences (Cregan

et al., 2007; Schinke et al., 1995), have been identified as sources coaches used to develop coaching knowledge and sport-specific knowledge. Small bodies of researches which have identified the career development patterns of expert coaches (Cregan et al., 2007; Irwin et al., 2004; Jones et al., 2003, 2004; Salmela, 1995; Schinke et al., 1995; Werthner & Trudel, 2006) have concluded that previous athletic experiences were viewed as a valuable source of coaching knowledge acquisition providing coaches with basic knowledge of their sport. Coaches always reported learning from their athletic time as another key strategy for gaining sport—specific knowledge.

Although research has highlighted the dynamism of informal, social learning, this is not to say that coaches do not see any value in more formal and non formal learning opportunities. Many studies exist which confirm that coaches still draw information and knowledge from participation in professional clinics, seminars and workshops (Wilson, 2008; Wright et al., 2007). Coaches are most likely to attend coaching conferences to get new information. In addition, taking account of the Internet's growing popularity as a knowledge resource, coaches appear to be increasingly citing its usefulness in terms of information acquisition (Erickson et al., 2008; Lemyre et al., 2007; Wright et al., 2007). Furthermore, reading books (Abraham et al., 2006; Lemyre et al., 2007; Wright et al., 2007) and magazines (Reade et al., 2008) and watching coaching videos (Reade et al., 2008; Wright et al., 2007) have been also emphasized as valuable learning sources.

Discussion

The purpose of this study was review the literature of sport coaches' sources of knowledge acquisition from earliest sport participation to current coaching position. All the sources considered in this study were emphasized by researchers as being either important or very important to the development of coaches' knowledge indicating that they recognized a broad range of sources as valuable for coach development. Coaches acquire knowledge from their physical education program, athletic experiences, observations and interactions with other coaches, mentoring, as well as from clinics, seminars, the Internet and books. Indeed, not much difference was even found between distinct sources.

It is not surprise that most of coaches described the knowledge necessary to coach any sport in terms of what they learned from the course. Comprehensive coach education programs have been implemented in many countries to help coaches develop coaching competencies by increasing coaches' knowledge and confidence in their coaching abilities (Douge & Hastie, 1993). For example coaches acquired organizational, planning and teaching skills from their pedagogy courses. Likewise, their psychology courses helped them to be more understanding of their athletes' needs and exposed them to different ways of dealing with athlete

behavior (Wilson, 2008). However, formal coach education programs are only one of the many opportunities to learn how to coach. Aside from acquiring knowledge through teaching-oriented courses which may offer courses in their curriculum such as sport psychology, coaches acquired knowledge through their experiences. In particular, coaches learned from their mistakes and gained confidence in their decisions with each passing season.

The process of becoming an expert coach is influenced by situational coaching experiences, observations of peers. These informal learning situations allowed participants to network with other coaches and gain valuable coaching experience. Yet it is widely acknowledged that the simple accumulation of years of involvement does not guarantee that one will become an effective coach (Dodge & Hastie, 1993).

In developing this work of how coaches learn, a vital role has been given to the process of reflection in terms of how experience is transformed into coaching knowledge and competence (Gilbert & Trudel, 2001; Martens, 1997). Such reflections can often be triggered by conversations with others, which have led to claims for mentoring as an important way of increasing coaches' development. Mentoring by more experienced coaches allowed younger coaches to acquire knowledge and helped shape their coaching philosophies and beliefs (Bloom, 2002; Bloom et al., 1998).

Interactions among the coaches can provide important learning situations in which they discuss coaching issues and develop, experiment with, and evaluate strategies to resolve these issues. Results suggested that although coaches recognized the potential to learn by sharing their knowledge, time and space to meet were important limiting factors.

Athletic experiences also played an important role in both a coach's career progression and development of expert coaching knowledge such as rules of the game and the technical skills to demonstrate. Coaches accumulated hours of experience as athletes in a number of different sports.

Reading books and coaching magazine helped coaches acquire new training ideas and learn about coaching practices. According to studies, the Internet also was an important resource for both acquiring and refining their repertoire of practice drills.

Although researches have highlighted the dynamism of formal and informal, social learning, this is not to say that coaches do not see any value in non formal learning opportunities like seminars, workshops and etc. Many coaches felt they acquired valuable knowledge at these clinics, including new aspects of their sport and a basic understanding of sport science and pedagogical practices.

Generally speaking, the current review suggests that a wide variety of learning sources were available for coaches to acquire and refine their coaching skills. On the one hand both cognitive learning, which could occur through

coaching specific academic courses, experiential learning, observations and practical coaching experiences under supervised conditions were equally important in learning to become a coach, and on the other hand although reading books, using the Internet, attending in coaching clinic and seminars may not have been the most important factors in knowledge acquisition for coaches, they were still viewed as potential learning tools.

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