

## How Youth-Sport Coaches Learn to Coach

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Researchers have investigated how elite or expert coaches learn to coach, but very few have investigated this process with coaches at the recreational or developmental-performance levels. Thirty-six youth-sport coaches (ice hockey, soccer, and baseball) were each interviewed twice to document their learning situations. Results indicate that (a) formal programs are only one of the many opportunities to learn how to coach; (b) coaches' prior experiences as players, assistant coaches, or instructors provide them with some sport-specific knowledge and allow them to initiate socialization within the subculture of their respective sports; (c) coaches rarely interact with rival coaches; and (d) there are differences in coaches' learning situations between sports. Reflections on who could help coaches get the most out of their learning situations are provided.

In an attempt to prepare coaches for their important role in sport settings, many countries have developed their own coach-education or -certification programs. The national representative bodies or international federations in these countries can now join the International Council for Coach Education, which "believes that international collaboration and exchange can accelerate positive change in the realm of coaching development and help these coaches give athletes around the world a chance to pursue excellence" ([www.icce.ws](http://www.icce.ws)). Researchers have recently investigated how elite or expert<sup>1</sup> coaches develop their knowledge. Using interviews, Fleurance and Cotteaux (1999) studied 10 coaches from different disciplines in France; Irwin, Hanton, and Kerwin (2004) looked at 16 gymnastics coaches in England; Jones, Armour, and Potrac (2004) interviewed 8 coaches from different sports in England, Australia, and New Zealand; Salmela (1996) studied 22 coaches from team sports in Canada; and Gould, Giannini, Krane, and Hodge (1990) surveyed 130 coaches in the United States. A common finding in these studies is the disparity among the coaches as to the perceived importance of formal coach-education programs in their development of knowledge. There is an agreement, however, that other learning opportunities that stem from playing experience, mentoring, and discussions with foreign coaches play a significant role. The perceived importance of each of these less formal learning situations varies from coach to coach. Overall, these studies have shown that learning to coach at the elite level is a complex process that does not follow one specific pattern, and, therefore, coach education should not

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be strictly delivered through formal courses. As Lyle (2002) said, "Education and training depends on a mix of formal and informal provision, and understanding how learning and preparation is taking place is important in analyzing practice" (pp. 275-276).

There is a tendency to see the results of studies on elite coaches as the best coaching practice and, therefore, apply them to all coaches, including youth-sport coaches. For example, Avard (1995) suggests "It would be beneficial to teachers and coaches if systematic observation research were to focus on the behaviors of a selected winning football coach" (p. 11). Côté, Salmela, Trudel, Baria, and Russell (1995) add that "assessment of the knowledge that expert coaches use to construct their mental models could provide useful guidelines for improving the coach's development and consequently the child's or athlete's education" (p. 3). In fact, many coach-education programs were, until recently, designed using a novice-expert continuum (Trudel & Gilbert, 2006). In other words, every coach will accumulate the same coaching concepts to progress along the continuum and finally reach the elite level. In recent years, this view has been challenged (Lyle, 2002). Coach-education programs such as the one in the United Kingdom (Campbell & Crisfield, 1994; Lyle) and the one in Canada, which has just been restructured (Coaching Association of Canada, 2006), are offering specific courses to different groups of coaches to fulfill their distinct needs. This will allow coaches to specialize at a particular level. Therefore, based on the assumption that coaches at recreational and developmental-performance levels have different needs, studying how they learn and develop their knowledge is as important and relevant to the science of coaching as studying elite or expert coaches (Schinke, Bloom, & Salmela, 1995). Documenting the diverse learning situations that best contribute to youth-sport coaches' development will complement the studies that report data on the certification status of youth-sport coaches (Hansen & Gauthier, 1988; Lee, Williams, & Capel, 1989) and coaching efficacy, that is, coaches' beliefs in their coaching ability after completing a coach-education course (Feltz, Chase, Moritz, & Sullivan, 1999; Maleté & Feltz, 2000).

In general, documenting formal learning through coach-education programs could be relatively easy because it usually occurs in a structured environment. Investigating the informal learning situations that constitute "learning through experience" (Trudel & Gilbert, 2006), however, could be a challenge because they pertain to the coaches' day-to-day activities, including their interactions with others (Lemyre & Trudel, 2004). The literature on informal learning provided us with some conceptual frameworks, new terminology, and recent studies that served to delimit our investigation of how youth-sport coaches learn to coach.

In the last decade the importance of *others* has been central in many approaches aimed at explaining the learning process and the development of knowledge. Such examples are collaborative cognition (Bearison & Dorval, 2002), distributed cognition (Salomon, 1993), and the sociocultural approach (Wertsch, del Rio, & Alvarez, 1995). For Ghaye and Ghaye (2001), even the reflective process does not have "to be a solitary activity. . . . We can learn by talking to others about our practice, having it challenged, in a constructively critical manner, by our colleagues and by the children we teach; we can call this social learning" (p. 11). In a study with model youth-soccer and -ice-hockey coaches, Gilbert and Trudel (2001) found that the

coaches used a reflective-conversation approach (Schön, 1983, 1987) to solve their coaching issues, which included interacting with others to ask for advice, to jointly construct a solution, or to observe and model what the others were doing.

Learning through interactions with others is also central to Wenger's (1998) social theory of learning, which is not to be confused with Bandura's (1977) social-learning theory. The main concept of Wenger's framework is communities of practice defined as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott, & Snyder, 2002, p. 4). A community of practice distinguishes itself from other types of communities by its limited number of members (generally less than 50) who, by their frequent interactions, share and construct knowledge. Linked to the concept of communities of practice is the concept of legitimate peripheral participation, which "provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artifacts, and communities of knowledge and practice. It concerns the process by which newcomers become part of a community of practice" (Lave & Wenger, 1991, p. 29).

By applying the concepts of communities of practice and legitimate peripheral participation to the coach learning process in youth sport, one can assume that the development of knowledge is progressive and influenced by interactions with other coaches. Before playing the role of head coach, individuals will likely act as an assistant coach (peripheral) in a context in which they are welcome (legitimate) to take part in many activities regarding coaching youth sport (participation). There will be opportunities to observe and discuss with many coaches or assistant coaches who are all interested and directly involved (a community of practice of coaches) in providing children an exciting and rich sport environment. The community-of-practice framework has recently been examined in a few articles dealing with youth-sport coaches. In a position paper, Trudel and Gilbert (2004) argued that the ice hockey subculture limits the emergence of a community of practice because youth-ice-hockey coaches tend to see each other as enemies instead of colleagues working together to create a safe learning environment. Culver and Trudel (2006) conducted two studies in sport clubs (athletic and ski), and results suggest that although the instructors in each club recognized the potential to learn by sharing their knowledge, time and space to meet were important limiting factors. These three studies suggest that the presence of a facilitator or coordinator is essential to nurture a community of practice of coaches to enhance their learning situations.

In a recent study, researchers (Wright, Trudel, & Culver, 2007) identified the different learning situations in which youth-ice-hockey coaches learn to coach. This study was the first of its kind, focusing only on one sport and identifying the learning situations without documenting the learning process in depth. The researchers concluded that future research should be conducted to better understand the intricacies of the learning process in different learning situations and different sport settings. This led to the design of the current study, in which data were collected on youth-sport coaches from three sports (ice hockey, baseball, soccer) to examine in more detail the coaches' learning situations, starting with their (a) formal participation in coach-education programs; (b) experiences as players, assistant coaches, or instructors; and (c) types of interactions with others.

## Methods

### Participants

The participants were from six different sport associations (two soccer, two ice hockey, and two baseball) located in two cities. The choice of soccer, ice hockey, and baseball was based on the fact that these sports are popular at the moment in Canada (Statistics Canada, 1998), they are generally practiced outside of schools, and coaches are volunteers. The participants coached children from 7 to 16 years of age at either the recreational level (everyone is accepted, no standings) or at the developmental-performance level (only the best players are selected, statistics are kept, and standings are registered). Approval for recruiting coaches was secured from sport-association directors who then gave us the Web sites where the coaches' telephone numbers were posted. Most coaches were contacted directly by telephone, and some were recruited on site. Only three coaches declined the invitation because of time constraints. Aside from being a head coach for a youth sport team, the only sampling criterion was that the coaches have at least 2 full years of head-coach experience before their present season.

Of the 36 participants (12 in each sport), 5 were women (3 in soccer, 1 in ice hockey, and 1 in baseball). Twenty-nine participants had no professional teaching certification or degrees. Two had physical education degrees, and 5 were registered as students in a human-kinetics program. As is often the case with youth-sport coaches, many of the participants ( $n = 23$ ) had sons or daughters on their teams. Twenty-five of the 36 participants had 6 years or less of coaching experience (range = 2–25).

### Procedure

Given that people attribute meaning to their lives by the stories they tell, it was deemed appropriate for researchers studying human experiences (i.e., learning situations and experiences) to use a narrative approach (Olivier, 1998). By asking people to tell their stories we take into consideration the sociocultural context and the expectations and norms of the community, which, in turn, reveal how the actions are perceived by the people involved in the community (Ewert, 1991). Therefore, data collection consisted of two interviews with each participant. During the first interview, which took about 90 min, a narrative approach was used to ask the participants to speak about their coaching careers and their previous sport experiences. The researcher explained to the participants that the recall of their coaching career could take the form of a book, each year representing a chapter. The content of their stories were generally about (a) their previous experiences (playing, coaching, or instructing), (b) the coaching courses they took and their opinion of them, (c) when and how they obtained their head-coach position, (d) how they recruited their coaching staff, (e) the main coaching issues they faced, and (f) who they interacted with most often and for what purposes. After the first interview, the initial analysis consisted of reading and taking out the main events for each year (chapter) to construct a timeline. This analysis also served to prepare questions for the second interview. During the second interview, which lasted approximately 50 min, the timeline was presented to the participant to make sure the facts were correct. The researcher then asked questions to get more details on certain aspects that had been

mentioned during the first interview, as well as questions concerning the participant's overall coaching experience. Because this second interview was more structured, the researcher was able to collect the data needed for comparisons between sports. Both interviews were transcribed verbatim, resulting in a transcript of about 25 pages per participant. Nvivo software (Qualitative Solution and Research, 2002, version 2.0) was used for data analysis. Based on Smith and Sparkes's (2005) typology of ways to analyze narratives, we used the content-analysis approach for this article, meaning that the interview transcripts were read and passages from each interview that addressed the same topic were regrouped under a category. Because the categories were based on a review of the literature (Gilbert & Trudel, 2001; Wright et al., 2007) and were discrete, the analysis was mostly deductive and, therefore, can be called a structural analysis as opposed to an interpretational analysis (Côté, Salmela, Baria, & Russell, 1993). To ensure the reliability of the data analysis, an intracoder test was performed on 12 randomly selected interview transcripts (four for each sport). The reliability score for each of the categories was over 85%, meeting the minimum recommended levels of agreement (Miles & Huberman, 1994). Aside from the pilot study performed with 4 coaches to validate the interview guide and the member check done at the beginning of each second interview to verify the accuracy and interpretation of the data, peer-review sessions with members of the research group were organized throughout the data-collection and -analysis period (Creswell, 2003; Maxwell, 1996).

## Results

The Results section is divided into two parts. We first present the data regarding the coaches' background experiences before becoming head coaches and then the data on their first 3 years as head coaches.

### Before Becoming a Head Coach

As shown in Table 1, the ice hockey, soccer, and baseball coaches did not have the same background experiences before they started coaching their respective sport. In terms of player experience, practically all ice hockey ( $n = 12$ ) and baseball ( $n = 11$ ) coaches had played their respective sport, whereas only 7 coaches had played soccer before coaching it. Some benefits of having played the sport include basic knowledge of the game (e.g., rules, procedures, and drills to execute) and having seen coaches in action.

**Table 1 Background Experience Before Becoming a Head Coach**

	Hockey	Soccer	Baseball
Playing experience	12	7	11
Coaching or teaching experience	11	6	10
coaching other sports	5	1	6
assistant coach	6	5	9
instructor	7	1	3

*Note.* The numbers refer to the number of coaches.

When I first started coaching, of course I didn't have any experience coaching. The only experience I had was my 15 years as a soccer player. During the years, I played at a competitive level, I met a lot of coaches. Some were good, others not so good. So I could say that the experience in coaching that I had in my first year as a head coach was that I had been observing coaches that trained me for 15 years. (Soccer 1)

We observed differences in coaching or teaching experience. Before becoming head coaches, only 6 soccer coaches had previous experience coaching or teaching, compared with 11 in ice hockey and 10 in baseball. Seven ice hockey coaches had been involved as instructors in an ice hockey program. This program teaches children the basic technical skills of ice hockey (e.g., how to skate, shoot, and pass). It lasts 4 years, and during each season children have 40 hr of ice time divided into lessons and friendly games. The adults on the ice are called instructors, not coaches, because they do not have their own teams; they all teach the same group of children. During the sessions, an experienced head instructor helps the other instructors apply predetermined lesson plans. The 11 coaches (7 in ice hockey, 1 in soccer, 3 in baseball) who had the opportunity to be instructors were very pleased with this experience because it gave them a chance to get some pedagogical tips and establish good relationships with other instructors.

In the program, we consulted each other all the time and we could ask the head instructor anything because he had more experience. That is how we helped each other. . . . During all those years in the program, the instructors were almost the same each year. You established friendships and enjoyed spending time with those guys. (Hockey 7)

Finally, about half of our participants (6 in ice hockey, 5 in soccer, and 9 in baseball) were assistant coaches before being head coaches. The other coaches started directly in a head-coach position, and this experience usually led to a season filled with problems.

First, there was a draft and I found it very difficult because I did not know any of the players, it was my first year. The other coaches knew the children because they had followed them for a couple of years. Also, I was a bit naïve. Because I had the last draft for the players, I had the first draft for the goalies. I asked a coach for his recommendation but I found out later that he tricked me into picking one of the worst goalies. . . . The result of the draft was catastrophic, I had the worst team, the goalie was horrible and we could not manage to win. . . . I kept coaching the next year but I decided to start at the youngest level possible so there would be less pressure and I could get to know the players and the other coaches. (Hockey 10)

### **During the First 3 Years as Head Coach**

Table 2 contains the different learning situations from which coaches gained information on how to coach, as well as the different people they interacted with and for which purposes.

**Table 2 Learning Situations During the First 3 Years as Head Coach**

Ways of Gaining Information	Hockey	Soccer	Baseball
Training courses	12	10	12
Resource materials	12	11	11
Internet	6	3	3
Interactions			
assistant coaches	12	12	12
advice seeking	0	1	1
joint construction	12	8	8
task attribution	0	3	3
manager	12	8	6
mediator	7	2	0
task attribution	12	8	6
league supervisor	9	7	8
advice seeking	4	4	1
joint construction	1	3	4
evaluation	5	0	3
players	12	12	12
free discussion	12	12	12
parents	12	11	12
advice seeking	1	2	1
accessible	8	7	10
not accessible	3	2	1
friends and family members	11	9	12
advice seeking	3	5	1
joint construction	1	1	3
free discussion	7	3	8
rival coaches	9	10	12
knowledge exchange	4	5	7
knowledge exchange with few, formal with most	5	5	5
observations of other coaches	7	7	7

*Note.* The numbers refer to the number of coaches.

**Gaining Information Through Training Courses, Resource Materials, and the Internet.** The participants said that they tried to obtain as much information as possible about coaching once they got a head-coach position. One way was through the formal coach-education program, in our case, the National Coaching Certification Program (NCCP). Depending on the age and competition levels, sport associations will either require or strongly recommend that coaches take this coach-education program. Of the 36 coaches, 30 obtained their NCCP Level 1 certification during their first 3 years as head coach, and 12 of them also took Level 2. Levels 1 and 2 consist of, respectively, 15 and 19 hr of lecture on the theory of coaching and an additional 15 hr of sport-specific information (practical component).

The theoretical courses were perceived to have limited relevance because too much information was given in a short period of time. Coaches indicated that the information on topics such as muscle physiology, as well as aerobic and anaerobic

systems, was not worthwhile for them. In addition, in these theoretical courses coaches from different sports were regrouped.

When I took the course, I was very disappointed. There were two sessions during the weekend. For the first session, I was expecting to learn about the rules of the game because I did not know anything about that; I did not have any experience in soccer. But the content was not that at all. We were all coaches coming from different sports. So we all talked about our experiences but I did not need that. I needed to learn about the game. I did not want to be there all day; I most certainly did not feel like talking. The next day, we talked about aerobic and anaerobic systems,  $VO_{2max}$  and other stuff I did not understand. I was so disappointed that I left before the end of the class. (Soccer 5)

Coaches with less experience as athletes or coaches usually appreciated the practical component of the formal coach-education program because it gave them concrete information on what to do with their team and also provided an opportunity to meet other coaches in the same sport and, consequently, establish a network of colleagues.

After following this course, we were much more confident in our coaching skills. We started in a classroom and then we went on the field to apply what we learned. The applied stuff, as well as the lunch breaks, was a great way to get to know the other coaches. A lot of people recruit their assistants during these courses, that's what we did. (Baseball 10)

Coaches also tried to get information through resource materials such as library books, videos, and books obtained during seminars. Coaches with less coaching experience tended to search more for information on drills and how to develop certain technical or tactical elements. Coaches who had been assistants, instructors, or players before being head coaches tended to search for information on topics such as motivation, nutrition, and stress management.

I was never the kind of guy who read a lot but since I started to coach 4 years ago, I take the time to read. I have lots of books on psychology and motivation. One of my favorite books is written by Joseph Murphy and talks about the power of the subconscious. (Hockey 4)

Coaches were made aware of the most important books by attending conferences, talking with people in their association, using the local library, or going on the Internet. Many ice hockey coaches who had been involved in teaching programs as instructors went back to their notes and modified the drills to suit the needs of their players. After 1 or 2 years, almost every ice hockey coach had heard about the Nike seminar and manuals that provide information on basic techniques, as well as how and when game strategies and tactics should be taught, according to the age of the players. There was a similar seminar for the baseball coaches but not for the soccer coaches.



For the last 5 years, I've been going to a baseball seminar. These experiences are incredible. . . . We usually are around 12 coaches from our region and there is so much valuable information given that we usually split up at the end of the weekend to discuss what we've learned. After each seminar, I can't wait to go back to my team and apply it. They even give you what I personally call the coaching bible. In there you have a section on psychology, techniques, tactics, pedagogy, drills. I even learned to calculate batting averages from that book. This seminar is by far the element from which I have learned the most for my coaching. (Baseball 7)

The data also show that some coaches used the Internet. The most common use was to order reference books or to browse through coaching Web sites.

I read a lot, mostly on psychology. My wife, for Christmas, has bought me a subscription to a Web site called coaches' corner or coaches' club. There is a lot of information on sport psychology and much more for coaches. (Hockey 1)

One soccer coach even explored a Web site where coaches around the world could chat with professional soccer coaches from England. Two coaches said that they communicated with their players and assistants using e-mail for organizational purposes. Finally, because some youth-sport associations have their own Web sites, coaches consulted these sites to get information regarding tournaments, meetings, and phone numbers of coaches and members of the association.

In regard to how head coaches interacted with others, there were commonalities among participants in the three sports. Seven categories of interactions with others were identified.

***Interactions With Assistant Coaches.*** All coaches had frequent interactions with their assistants. They not only asked the assistants for advice but they also generally worked together (joint construction) to develop strategies for solving coaching issues. The only time the head coach imposed his or her authority was when the group could not come to an agreement or if a decision had to be made quickly, such as during games.

Even though I wasn't the one with the most coaching experience, I had the last word because I was the head coach. However, I consulted my two assistants a lot, especially the second one because he had experience in coaching at the competitive level. I always kept an open ear; the three of us made most of the decisions together. But I was the one who always took the final stand. (Baseball 4)

Sometimes coaches with a lot of experience picked their assistants from among parents and assigned them a role of helper. Their tasks were to carry the equipment, follow the coach's lead, and encourage the children. These parent-assistants were not involved in developing strategies for the team because the head coach had a lot more knowledge of the game.

**Interactions With the Manager.** In ice hockey all teams had a manager who took care of administrative tasks (task attribution) and played the role of mediator between the coach and parents. The presence of a manager was less frequent in soccer ( $n = 8$ ) and in baseball ( $n = 6$ ).

**Interactions With the League Supervisor.** In all three sports coaches had the possibility to interact with a league supervisor, who was usually a more experienced peer. In ice hockey the league supervisor evaluated the strengths and weaknesses of the coaching staff. This evaluation was generally well received by the coaches. In soccer and baseball there were no formal evaluations, but some coaches interacted with their league supervisors by either asking them for advice or working with them to solve a specific coaching issue (joint construction).

As soon as something comes up, I call the association, sometimes three or four times a day. They are even starting to recognize me by my voice. Then, I get some great feedback by the members, I can better understand why things are happening a certain way in my team. (Soccer 6)

**Interactions With the Players.** Coach–athlete interactions have been referred to as “free discussions” because coaches said they make themselves available to talk with their players about anything at almost any time. Although coaches rarely seek advice or involve their athletes in their coaching discussions, some athletes’ comments might help them reflect and learn from events.

I once went to eat at my brother’s house and I took a beer. Then I went to the arena to coach my team and one of my young players told me that I smelled like beer. It had been three hours prior, but you know alcohol smells. This was the first and last time a player told me I had bad breath. Now, I never drink before games or practices and I always carry gum. (Hockey 11)

In another case, a less skilled player asked his coach why he had been benched at the end of a close game. The coach was stunned and did not know what to answer. This incident forced him to reflect on what should come first—participation or victory.

**Interactions With the Parents.** Very few coaches seek advice from parents; some even said they do not make themselves accessible to the parents. “At the beginning of the year I told them [the parents], don’t come see me for complaints. There is a manager, that’s what he is there for” (Hockey 5).

Because managers are less present in baseball ( $n = 6$ ), however, coaches have to interact directly with the parents. This situation does not seem to be problematic as long as the team plays at the recreational level in which the sport is taken less seriously.

I usually coach at the lower competitive levels, so I receive a lot of feedback from parents. They tell me things such as how to approach their child and to what type of activities they respond better. So it’s very informative, not so much critical. You know, at that level, parents and coach alike know that the goal is

for kids to learn about baseball, stay fit, and have fun while doing it. A lot of parents see baseball as a hobby contrary to hockey where they aspire for their kids to play in the National Hockey League. (Baseball 2)

***Interactions With Friends and Family Members.*** Among the people with whom coaches interact, friends and family members seem to play an important role, although they are not directly related to the team. Coaches will usually ask them for advice or engage in free discussions to talk about any topic related to youth sport or to express their frustrations.

I have two brothers who are very involved in youth sport because they have children. Of course I did consult them and they gave me valuable advice. I gained from their experiences and from others' as well, such as friends of mine who are physical education teachers. These conversations helped me a lot, even if, in some cases, it was only to vent frustrations. It is nice to see that others have had similar experiences. (Soccer 4)

In cases where friends or family members are very close to the coach and know the team very well, it is possible to find a joint construction; that is, they could build strategies together to solve coaching issues.

***Interactions With Rival Coaches.*** Interactions between rival coaches are of particular interest because coaches can learn a lot from their peers, but because of the inherent competitive aspect in sport, coaches are usually careful not to lose their edge by sharing too much knowledge. Most of the 16 coaches who said they liked to exchange coaching knowledge with other coaches were involved at the recreational level.

Yes, in our association we help each other. For example, some coaches of lower categories ask me to help them during their practices. Usually these coaches are parents who took the team because nobody else would; so they are a bit overwhelmed. Also, other coaches ask me to help their catcher because I played that position all the way to triple A. However, I must say that with coaches from rival teams who are from other cities, it depends, as some are very competitive, so I don't really approach them. (Baseball 1)

As coaches moved to a more competitive level, they tended to be more formal with most rival coaches, meaning they exchanged few words at the beginning or at the end of each game and demonstrated sportsmanship through the traditional handshake. To compensate for the absence of sharing knowledge with their rivals, some coaches observed them in an attempt to steal information.

I do a lot of spying when I go to tournaments. By other coaches, I learn new things because every coach has a different philosophy. For example, through observation, I learned new warm up techniques. Coaching is being able to steal from other coaches. You take what you like and what you find relevant for your team. (Soccer 3)

## Discussion

The results pertaining to the ice hockey coaches are very similar to what was found by Wright and colleagues (2007) in their study with 35 youth-ice-hockey coaches. Furthermore, similar to the results found in studies on elite or expert coaches (Fleurance & Cotteaux, 1999; Gould et al., 1990; Irwin et al., 2004; Jones et al., 2004; Salmela, 1996), the development of youth-sport coaches' knowledge goes far beyond participation in formal coach-education programs. According to our findings, youth-sport coaches usually register for these formal courses during their first year as head coach. Therefore, the main source of reference for coaches to train their team during their first year was their previous playing experience, if they had any. This experience provided them with basic knowledge such as the rules of the game and the technical skills needed to do demonstrations during practices. Puren (1988) explained that the law of isomorphism typically leads instructors to spontaneously reproduce in their practice what occurred in their own training.

The difference in playing experience found between the ice hockey and baseball coaches and the soccer coaches can be explained by the fact that ice hockey and baseball are a more integral part of the Canadian culture than soccer is (Guay, 1990; Marsh, 2004; Statistics Canada, 1998). In the future, however, there might no longer be a discrepancy because soccer has become very popular among children in North America (Soccer Industry Council of America, 1997). We can assume that in a few years most soccer coaches will also have a background as players.

Regarding previous coaching experience, only a few coaches ( $n = 12$ ) had a chance to coach in other sports before coaching ice hockey, baseball, or soccer. This can probably be explained by the fact that most participants were coaching because of their children's involvement in the sport and not because they wanted to make a career out of it. This appears to be common in youth sport (Gilbert & Trudel, 2001; Spallanzani, 1988; Weiss & Sisley, 1984). If one also considers the fact that nearly half of the participants had not been assistant coaches before being head coaches, it seems that the sport structure has not developed a tradition of providing coaches with the possibility of being a legitimate peripheral participant, even though this could facilitate their integration. Being a legitimate peripheral participant puts the individual in a learning context with low pressure and limited responsibilities while giving him or her an opportunity to observe more experienced peers and interact with them (Lave & Wenger, 1991).

In ice hockey, however, more than half of the coaches had been instructors in a specific teaching program. Even if this was not direct coaching experience, it at least provided an introduction to the basic notions of teaching and to a repertoire of drills. This program also allowed them to interact with others and develop friendships. Thus, when instructors decided to follow their sons or daughters by taking the lead of a team, their knowledge acquired through an instructing program and their coaching network would likely facilitate the transition (Lemyre & Trudel, 2004).

It is important to notice that the coaches' previous experiences as players, assistant coaches, or instructors provided opportunities to not only develop sport-specific knowledge but also socialize within the subculture to learn how things should be done (Cushion, Armour, & Jones, 2003). Gilbert, Côté, and Mallett (2006) noted that the high school coaches in their sample benefited from having "accumulated thousands of hours of 'pre-coaching' experience while competing in organized sport as athletes" (p. 72).

Almost all the coaches in the present study completed the first level of coach certification through the Canadian coach-education program, and their appreciation of the program was mixed. Although these courses can be very informative, large-scale coach-education programs usually fail to cover complex contextual factors (Douge & Hastie, 1993; Potrac, Brewer, Jones, Armour, & Hoff, 2000). As found in other studies (Gilbert & Trudel, 1999; Wright et al., 2007), many of the coaches favored the practical sport-specific courses over the courses that focused on the theory of coaching. Although the impact of such formal training programs can be seen as limited when compared with the learning that occurs from engaging in informal learning situations, studies have shown that they can increase coaching efficacy (Malete & Feltz, 2000).

One third of the coaches in this study used the Internet. It would be interesting to see if this ratio will increase as sport associations start building Web sites (Hamilton, 1997) to enable coaches to access information regarding major sporting events, team statistics, phone numbers, and so on. The limited literature on the use of the Internet by youth-sport coaches (Wright et al., 2007) suggests that they are using the Internet to stay in contact with their association, share administrative information with their assistants and players, and locate Web sites on which they can access a database of drills. They rarely participate in threaded discussion forums, however. They would "if they could have a sense of whom they were talking to, preferring to discuss with other coaches than kids, parents, or outsiders" (Wright et al., 2007).

Regarding the role of others, results show that coaches interacted with many people once they were in a head-coach position. This supports Cushion et al.'s (2003) position that "much of what a new coach learns is through ongoing interactions in the practical coaching context, as well as a variety of informal sources" (p. 217). Even at the recreational and developmental-performance levels, interactions among the coaching staff (coaches, assistant coaches, and manager) can provide important learning situations in which they discuss coaching issues and develop, experiment with, and evaluate strategies to resolve these issues (Gilbert & Trudel, 2001).

Coaches tried to avoid interacting with parents because parents tended to put too much pressure on them and the children. To ensure that the parents' voices were heard, however, the coaches often attributed the role of mediator to the team manager. This means of communication between coaches, managers, and parents has been highlighted in some studies (Strean, 1995) and recommended by others (Gilbert, Gilbert, & Trudel, 2001). As found in the study by Gilbert and Trudel (2001), coaches interacted with friends and family members to share information and to vent their frustrations. This learning opportunity does not appear to have been the focus of any studies, although it seems important because many youth-sport coaches rely on it.

The importance of the role played by mentors has been discussed by many researchers, particularly in studies with coaches at the elite level (Bloom, Durand-Bush, Schinke, & Salmela, 1998; Cushion et al., 2003; Saury & Durand, 1998). The data in the present study show that in their first years of coaching, many youth-sport coaches have access to some kind of mentoring. In general, coaches who consulted with their league supervisor found the exercise useful for answering their questions or getting feedback. Without being opposed to this type of support for youth-sport coaches, Trudel and Gilbert (2004) saw some limits. Through this mentor-apprentice approach, the individual growth of the coach is possible but

perhaps at the expense of working with other coaches. These authors think that too much emphasis on mentoring programs will lead coaches to work in isolation instead of working with the other coaches in their league to solve common problems and thereby create a fun and fair play environment for children. The present study shows that coaches, specifically those involved in competitive leagues, already have the tendency to not share their knowledge with other coaches. Why should it be otherwise? The sport culture does not facilitate collegiality (Cassidy, Jones, & Potrac, 2004), and in a sport such as ice hockey, and probably in other sports, as well, coaches of other teams are often seen as enemies and not colleagues (Trudel & Gilbert, 2004). In this context, not interacting directly with the opponent is an unwritten rule, and being a skilled “thief” to steal ideas, drills, and so on is a necessity to learn from other coaches.

The results of the present study suggest that there are no communities of practice of youth-sport coaches because coaches do not interact on a regular basis to share their knowledge and discuss common coaching issues. Instead, there are many isolated coaching teams. An analogy might be many cells representing different teams with, at the center of each cell, a coach who interacts on a regular basis with his or her assistant coach, team manager, and, on occasion, with friends, family members, or a league supervisor or mentor (Trudel & Gilbert, 2004). Future research should examine whether it is possible to create an environment for coaches in which they will feel safe learning together by sharing their knowledge and experiences derived from different learning situations. One way to do this would be to help coaches create a community of practice (Wenger et al., 2002); however, as Culver and Trudel (2006) demonstrated, a consultant or coordinator might be necessary to facilitate this process.

## Practical Implications

To conclude, we want to use these results to reflect on the appropriateness of the current approaches to help youth-sport coaches develop their knowledge. Contrary to elite coaches who can benefit from working with sport-science specialists (Lyle, 2002), including sport psychologists who “assist coaches in self-exploration with a nonjudgmental attitude, to determine what feeling, thought, want or behavior is interfering with a coach’s effectiveness” (Giges, Petitpas, & Vernacchia, 2004, p. 439), youth-sport coaches are often left to work on their own in isolation (Gilbert & Trudel, 2005). We argue that, until now, the learning situations available to youth-sport coaches to develop their knowledge have been limited and counterproductive in certain aspects. A central assumption of our argument is that coaches at the recreational and developmental-performance levels should be working together to provide children with a sport environment “ideally characterized by the intention to be values-based and oriented to youth development with the strong involvement of parents and volunteers within the community” (Canadian Centre for Ethics in Sport, 2004, p. 6).

At the moment, youth-sport coaches’ learning through the acquisition of knowledge is, in part, ensured by the certification they obtain through formal coach-education programs; however, one can argue that this acquisition of knowledge does not ensure competency on the field. As demonstrated in our study and previous ones, as well, these programs are useful for providing some information

but cannot fulfill all of the coaches' needs. So, in a practical world, what should be done? In an effort to compensate for the shortcomings of these programs, some sport federations have tried to implement mentoring programs. For example, in 2001 Hockey Canada implemented a program called the National Coach Mentorship Program. Unfortunately, the success of this mentoring program has, as far as we know, never been documented, and the program does not seem to be active anymore (Hockey Canada). None of the ice hockey coaches in our study made reference to this specific mentoring program, but many of them indicated that they had access to a supervisor appointed by their local sport association or their league. Our results also show that the possibility for coaches to learn by interacting with others is far from optimal because of the coaches' tendency to limit their interactions to those with their manager and assistant coaches who, in many cases, have limited coaching knowledge. We should, however, be cautious before criticizing coaches for their lack of knowledge sharing. Our traditional approach to the development of coaches might have contributed to this reality. As indicated by Trudel and Gilbert (2004), "the existing training courses for coaches as well as the mentoring programs tend to reinforce this situation because the focus is to foster the individual coach development and not the sharing of information between coaches" (p. 170).

We believe that the actual approach to developing youth-sport coaches needs to be redefined using the principles postulated in the community-of-practice conceptual framework (Wenger, 1998). In so doing, efforts will be made to develop a structure whereby, before becoming a head coach, an individual will be a legitimate peripheral participant in the local sport structure and gradually, and likely more successfully, ease his or her way into a head-coach position. This will also set the stage for many formal and informal encounters between coaches from the same organization and from others to occur. Through these encounters, coaches will negotiate what type of coaching and learning situations are required at their level of competition; in other words, they will create knowledge. Participation in any formal coach-education program will become an opportunity to bring new knowledge to the group instead of an opportunity to surpass the other coaches. Cultivating a community of practice is not easy, however, and recent studies in the field of sport suggest that without a facilitator or coordinator (Culver & Trudel, 2006), coaches will not change their habits. Who could play that role of support to coaches? Possibly sport psychology consultants, but, to be effective, these people will have to be versatile. For example, they will need to possess a good understanding of the sport subculture because some coaches will have prior experience as a player, assistant coach, or instructor in an initiation program and have access to sport-specific material, whereas others do not. Second, these facilitators will need to be familiar with the concept of community of practice and how to nurture it (Wenger et al., 2002). Third, consultation skills will certainly have to be mastered. Although the approach we are suggesting emphasizes coaches working as a group, that is not to say that the coaches' individual needs should not be considered. Youth-sport coaches also need to develop some skills to help them deal with problems such as communication and team organization (Gilbert et al., 2001).

At this point in the research on youth-sport coach education it is difficult to be more specific about what the exact tasks of these support people who will nurture the learning of coaches will be or how we should name them—consultant, facilitator, mentor, supervisor, or performance coach. But if we follow the principles that

guide a community of practice, the presence of that person in the sport structure should not be imposed on coaches but should be negotiated with the coaches and the other actors.

## Note

1. In the coaching literature, the difference between the expressions *elite coaches* and *expert coaches* is not always obvious because both terms have been used to identify research participants selected using the same criteria (Bloom, Durand-Bush, & Salmela, 1997; Irwin, Hanton, & Kerwin, 2004). Generally speaking, elite coaches tends to refer to coaches involved at the higher coaching level, the others being the recreational and the developmental-performance levels (see Trudel & Gilbert, 2006, for a definition and a summary of the studies conducted at each level). *Expert coaches* describes a characteristic of the coaches and is often used to contrast with novice coaches. Three of the most common criteria used to select expert coaches are the coach's winning record, involvement at the national or international level, and 10 years or 10,000 hr of coaching experience (Côté et al., 1995; d'Arripe-Longueville, Fournier, & Dubois, 1998; Schinke et al., 1995). When these criteria are used, all expert coaches are elite coaches, but not all elite coaches are expert coaches.

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